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COOPERATION
Theme 6 – Environment (Including Climate Change)

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202955	EuroSITES	Integration and enhancement of key existing European deep-ocean observatories	CP-FP	266
244242	EO-MINERS	Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation	CP-FP-SICA	267
244166	ImpactMin	Impact Monitoring of Mineral Resources Exploitation	CP-FP-SICA	268
265113	GMOS	Global Mercury Observation System	CP-IP-SICA	269
211578	e-SOTER	Regional pilot platform as EU contribution to a Global Soil Observing System	CP-FP	270
212545	AEGOS	African-European Georesources Observation System	CSA-SA	271
226740	EnviroGRIDS	Building Capacity for a Black Sea Basin Observation and Assessment System supporting Sustainable Development	CP-IP-SICA	272
244172	GEONetCab	GEO Network for Capacity Building	CSA-SA	273
244176	SEOCA	GEO capacity building initiative in Central Asia	CSA-SA	274
265176	BalkanGEONet	Balkan GEO Network – Towards Inclusion of Balkan Countries into Global Earth Observation Initiatives	CSA-CA	275
265282	OBSERVE	Strengthening and development of Earth Observation activities for the environment in the Balkan area	CSA-CA	276

212921	CEOP-AEGIS	Coordinated Asia-European long-term Observing system of Qinghai – Tibet Plateau hydro-meteorological processes and the Asian-monsoon systEm with Ground satellite Image data and numerical Simulations	CP-FP-SICA	277
211307	DevCoCast	GEONETCast for and by Developing countries	CSA-SA	278

Research Area
Assessment Tools for Sustainable Development

212345	PRIMA	Prototypical Policy Impacts on Multifunctional Activities in rural municipalities	CP-FP	279
212304	TESS	Transactional Environmental Support System	CP-FP	280
243826	LIAISE	Linking Impact Assessment Instruments to Sustainability Expertise	NOE	281
265170	ERMITAGE	Enhancing Robustness and Model Integration for The Assessment of Global Environmental Change	CP-FP	282
213091	SUST-RUS	Spatial-economic-ecological model for the assessment of sustainability policies of Russia	CP-FP-SICA	283
211759	IN-STREAM	INtegrating MainSTREAM Economic Indicators with those of Sustainable Development	CP-FP	284
226494	GEO FAIR TRADE	GEOTRACEBILITY FAIR TRADE	BSG-CSO	285
227065	OPEN: EU	One Planet Economy Network: Europe	BSG-CSO	286
226589	PASSO	Participatory Assessment of Sustainable Development indicators on good governance from the Civil Society perspective	CSA-SA	287
265134	CREEA	Compiling and Refining Environmental and Economic Accounts (CREEA)	CP-FP	288
212236	POPP	Policies to promote sustainable consumption patterns (POPP)	CP-FP	289
227030	CONVERGE	Rethinking Globalisation in the light of Contraction and CONVERGEnce	CP-FP	290
227055	GLOBIS	Glibalisation Informed by Sustainable Development	CP-FP	291
227042	SustainableRIO	Sustainable development reflexive inputs to world organisation	CP-FP	292
244065	POLICYMIX	Assessing the role of economic instruments in policy mixes for ecosystem services and biodiversity conservation (POLICYMIX)	CP-FP	293
265310	CRISP	CReating Innovative Sustainability Pathways	CP-FP	294
265191	InContext	InContext: Individuals in Context: Supportive Environments for Sustainable Living	CP-FP	295
265155	LOCAW	Low Carbon at Work: Modelling agents and organisations to achieve transition to a low carbon Europe	CP-FP	296
212457	CSOContribution2 SCP	Partnering to Enhance Civil Society Organisations' Contribution to Research in Sustainable Consumption & Production	CSA-SA	297
212269	CSS	Civil Society for Sustainability	BSG-CSO	298
213106	ENCI-LowCarb	European Network engaging CIvil society in Low Carbon scenarios	CSA-SA	299
212237	ESDinds	The Development of Indicators & Assessment Tools for CSO Values-based projects in Education for Sustainable Development (ESD)	BSG-CSO	300
211662	SustainergyNet	Integrating civil, scientific and stakeholder knowledge towards African sustainable energy policy	CSA-CA	301
226456	AWARE	How to achieve sustainable water ecosystems management connecting research, people and policy makers in Europe	CSA-CA	302
226744	BESSE	Brokering Environmentally Sustainable Sanitation for Europe	CP-FP	303

226814	PRIMUS	Policies and Research for an Integrated Management of Urban Sustainability	CSA-CA	304
226915	PSI-connect	Policy Science Interactions: connecting science and policy through innovative knowledge brokering	CP-FP	305
244103	CORPUS	Enhancing connectivity Between Research and Policymaking in Sustainable Consumption	CP-FP	306
244024	PACHELBEL	POLICY ADDRESSING CLIMATE CHANGE AND LEARNING ABOUT CONSUMER BEHAVIOUR AND EVERYDAY LIFE	CP-FP	307
244035	SPIRAL	SCIENCE-POLICY INTERFACES FOR BIODIVERSITY: RESEARCH, ACTION, AND LEARNING	CP-FP	308
265144	VISION RD4SD	Producing s shared vision on how to harness Research & Development for Sustainable Development	CSA-CA	309
265287	FOODLINKS	Knowledge brokerage to promote sustainable food consumption and production: linking scientists, policymakers and civil society organisations	CP-FP	310
265297	RESPONDER	linking RESearch and POlicy making for managing the contradictions of sustaiNable consumption anD Economic gRowth	CP-FP	311

Dissemination and horizontal activities

226919	ComEnvir	Communicating environmental impacts on water quality, availability and use	CSA-SA	312
226521	ORCHESTRA	Organising dissemination on Results of projects on Chemical Evaluation, Spreading Techniques for Risk Assessment	CSA-SA	313
244156	SPRING	Scoping China's Environmental Research Excellence and major Infrastructure: Foresight, Potentials, and Roadmaps	CSA-SA	314
265308	STEP-WISE	Science, Technology and Policy interfacing using WISE-RTD	CSA-SA	315
265309	STREAM	STREAM	CSA-SA	316
265167	WaterDiss2.0	Dissemination and uptake of FP water research results	CSA-SA	317
226517	E-URAL	European Union and RussiA Link for S&T co-operation in the area of the environment	CSA-SA	318
244250	CONGRESS	Conservation Genetic Resources for Effective Species Survival	CSA-SA	319
244114	KNOSSOS	KNOwledge from Science to SOcitieS	CSA-SA	320
244164	MarineTT	European Marine Research Knowledge Transfer and Uptake of Results	CSA-SA	321
244089	mountain.TRIP	Mountain Sustainability: Transforming Research into Practice, regional development, new communication tools	CSA-SA	322
265275	ENVIMPACT	Increasing the impact of Central-Eastern European environment research results through more effective dissemination and exploitation	CSA-CA	323
265352	PROCEED	PROmotion and coordination of environmental research in Central and Eastern Europe for a sustainable Development with the support of the Enterprise Europe Network	CSA-CA	324
212494	ENV-NCP-TOGETHER	Environment NCPs cooperating to improve their effectiveness	CSA-CA	325

Activity Code: ENV.2007.1.1.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Thermohaline Overturning - at Risk?

Proposed EC Grant: 9.275.955 €

Abstract:

THOR will establish an operational system that will monitor and forecast the development of the North Atlantic THC on decadal time scales and access its stability and the risk of a breakdown in a changing climate. Together with pre-existing data sets, ongoing observations within the project will allow precise quantitative monitoring of the Atlantic THC and its sources. This will, for the first time, allow an assessment of the strength of the Atlantic THC and its sources in a consistent manner and will provide early identification of any systematic changes in the THC that might occur. Analysis of palaeo observations covering the last millennium and millennium time scale experiments with coupled climate models will be carried out to identify the relevant key processes and feedback mechanisms between ocean, atmosphere, and cryosphere. In THOR, the combined effect of various global warming scenarios and melting of the Greenland ice sheet will also be thoroughly assessed in a coupled climate model. Through these studies and through the assimilation of systematic oceanic observations at key locations into ocean circulation models, THOR will forecast the development of the Atlantic THC and its variability until 2025, using global coupled ocean-atmosphere models. THOR will also assess induced climate implications of changes in the THC and the probability of extreme climate events with special emphasis on the European/North Atlantic region. THOR builds upon techniques, methods and models developed during several projects funded within FP5 and FP6 as well as many nationally funded projects. The project will contribute to Global Monitoring for Environment and Security (GMES), to Global Observing Systems such as to the Global Ocean Observing system (GOOS), and to the International Polar Year (IPY).

Partners:

N	Partner Legal Name	Country
1	University of Hamburg	DE
2	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
3	Met Office	UK
4	Université Pierre et Marie Curie	FR
5	Universitetet i Bergen	NO
6	The University of Reading	UK
7	European Centre for Medium-Range Weather Forecasts	UK
8	Leibniz Institute of Marine Sciences at the University of Kiel	DE
9	Royal Netherlands Meteorological Institute	NL
10	Danish Meteorological Institute	DK
11	Fiskirannsoknarstovan	FO
12	FINNISH INSTITUTE OF MARINE RESEARCH - MERENTUTKIMUSLAITOS	FI
13	Marine Research Institute	IS
14	Stichting Koninklijk Nederlands Instituut voor Onderzoek der Zee	NL
15	The Secretary of State fir Environment, Food and Rural Affairs acting through the Centre for Environment, Fisheries and Aquaculture Science	UK
16	Scottish Association for Marein Science	UK
17	Natural Environment Research Council	UK
18	Stockholms universitet	SE
19	Nansen Environmental and Remote Sensing Center	NO
20	Centre National de la Recherche Scientifique	FR
21	Commissariat a l'Energie Atomique	FR

Activity Code: ENV.2008.1.1.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 51

Title: Ice2sea - estimating the future contribution of continental ice to sea-level rise

Proposed EC Grant: 9.994.844 €

Abstract:

The melting of continental ice (glaciers, ice caps and ice sheets) is a substantial source of current sea-level rise, and one that is accelerating more rapidly than was predicted even a few years ago. Indeed, the most recent report from Intergovernmental Panel on Climate Change highlighted that the uncertainty in projections of future sea-level rise is dominated by uncertainty concerning continental ice, and that understanding of the key processes that will lead to loss of continental ice must be improved before reliable projections of sea-level rise can be produced. The ice2sea programme will draw together European and international partners, to reduce these uncertainties. We will undertake targeted studies of key processes in mountain glacier systems and ice caps (e.g. Svalbard), and in ice sheets in both polar regions (Greenland and Antarctica) to improve understanding of how these systems will respond to future climate change. We will improve satellite determinations of continental ice mass, and provide much-needed datasets for testing glacier-response models. Using newly developed ice-sheet/glacier models, we will generate detailed projections of the contribution of continental ice to sea-level rise over the next 200 years, and identify thresholds that commit the planet to long-term sea-level rise. We will deliver these results in forms accessible to scientists, policy-makers and the general public, which will include clear presentations of the sources of uncertainty. The ice2sea programme will directly inform the ongoing international debate on climate-change mitigation, and European debates surrounding coastal adaptation and sea-defence planning. It will leave a legacy of improved understanding of key cryospheric processes affecting development of the Earth System and the predictive tools for glacier-response modelling, and it will train a new generation of young European researchers who can use those tools for the future benefit of society.

Partners:

N	Partner Legal Name	Country
1	Natural Environment Research Council	UK
2	Alfred-Wegener-Institut für Polar und Meeresforschung	DE
3	CSC - Tieteelinen Laskenta Oy	FI
4	Danish Meteorological Institute	DK
5	DTU-Space, Danmarks Tekniske Universitet	DK
6	Geological Survey of Denmark and Greenland	DK
7	Institute of Earth Sciences, University of Iceland	IS
8	Universiteit Utrecht	NL
9	Centre National de la Recherche Scientifique	FR
10	Met Office	UK
11	University of Oslo	NO
12	Université Libre de Bruxelles	BE
13	Universita' degli Studi di Urbino	IT
14	University of Bristol	UK
15	The University of Edinburgh	UK
16	Vrije Universiteit Brussel	BE
17	University of Copenhagen, Niels Bohr Institute	DK
18	University of Liège (Department of Geography)	BE
19	University of Zurich	CH
20	University of Silesia	PL
21	Centro de Estudios Científicos	CL
22	Ente per le Nuove tecnologie, l'Energia e l'Ambiente	IT
23	Norwegian Polar Institute	NO

Activity Code: ENV.2009.1.1.1.1 **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Climate change - Learning from the past climate

Proposed EC Grant: 6.647.909 €

Abstract:

In Past4Future we propose to combine multidisciplinary palaeoclimate records from ice cores, marine cores, speleothems, pollen and other records with focus on a global distribution of the records to reconstruct climate change and variability during the present interglacial and the last interglacial. The records will be combined in integrated analyses aided by proxy modeling and assimilation, to gain understanding of the climate processes involved in the dynamics of the interglacial climates. Earth system models (ESM) including physical and biogeochemical processes will be applied to simulate the past and present interglacial climate, confront and intercompare the simulations with climate changes as observed from the palaeodata to both advance the models and our understanding of the dynamics and predictability of the climate system. Focus will be on the most recent two interglacial periods, as these provide the highest resolved most-comprehensive data records. Moreover the last interglacial represent a situation where the mean state was warmer than at present in large regions due to orbital forcing, thereby allowing testing climate system sensitivity to constrain projections of potential future ice sheet, sea-level, circulation and biogeochemical changes. The data and earth system model results will be used to reduce the current large uncertainties in our capabilities to project future global and regional warming especially in relation to sea level changes, sea ice changes and thermohaline circulation changes. The Past4Future program will draw together a world leading team of European and international partners in a concerted effort to advance our knowledge on the causes, processes and risks of abrupt changes in warm periods, such as the one expected in the next century. The program will inform the international debate on climate system stability and the dissemination of results will be targeted to both citizens and governmental and non-governmental stakeholders.

Partners:

N	Partner Legal Name	Country
1	Københavns Universitet	DK
2	UNIFOB AS	NO
3	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
4	AARHUS UNIVERSITET	DK
5	UNIVERSITAET BERN	CH
6	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
7	UNIVERSITAT AUTONOMA DE BARCELONA	ES
8	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
9	UNIVERSITY OF BRISTOL	UK
10	UNIVERSITE CATHOLIQUE DE LOUVAIN	BE
11	UNIVERSITAET BREMEN	DE
12	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
13	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
14	COMMISSARIAT ENERGIE ATOMIQUE CEA	FR
15	UNIVERSITY COLLEGE LONDON	UK
16	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
17	ALFRED-WEGENER-INSTITUT FUER POLAR- UND MEERESFORSCHUNG	DE
18	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK
19	PAGES (Past Global Changes)	CH
20	GEOTOP	CA
21	EAST CHINA NORMAL UNIVERSITY ECNU	CN
22	UNIVERSITY OF OTTAWA	CA

Activity Code: ENV.2007.1.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: megaCITY - Zoom for the ENvironment

Proposed EC Grant: 2.915.000 €

Abstract:

We will determine the air pollution distribution and change in and around hotspots over the last decade from extensive satellite and in-situ observations and we will employ a series of different scale models in order to analyze the impacts of air pollution hot spots on regional and global air quality including potential future changes for various climate scenarios. Focus is on ozone and particulate matter with chemical and physical characterization, and their precursors. The Eastern Mediterranean (Istanbul, Athens, Cairo), the Po Valley, the BeNeLux region, the Pearl River Delta in China (with megacities Guangzhou and Hong Kong) and the hot and polluted European summer 2003 are chosen for intensive case studies. The consortium includes groups from China, Turkey, Greece and Italy, in addition to France, Germany, UK and Norway, with experts on the observations, emission data and models. A set of chemical transport models which connect all the most important spatial and temporal scales will be developed and used to quantify how the observed air pollution arises. The models and emission inventories will be evaluated, errors identified and improved on the urban, regional and global spatial scales. Climate change may cause changes in air pollution in and around hotspots, and hotspot pollution can change precipitation and temperature/albedo. These feedbacks will be studied in scale-bridging model systems based on global climate model scenarios, and in a coupled high resolution chemistry-climate model. The model systems evaluated in the project will be applied to analyse mitigation options in and around hotpots, also taking into account climate change. Best available technologies and sectoral changes will be studied. Several partners have key roles in the technical underpinning of policy. They will ensure that the improved emission inventories, scale-bridging model systems and the systematic observational evidence will have a significant, broad and lasting impact.

Partners:

N	Partner Legal Name	Country
1	Meteorologisk insitutt	NO
2	Peking University	CN
3	Centre National de la Recherche Scientifique	FR
4	Institut National de l'Environnement Industriel et des Risques	FR
5	Universitaet Bremen	DE
6	Rhenish Institute for Environmental Research at the University of Cologne	DE
7	Forschungszentrum Juelich GmbH	DE
8	University of Crete	EL
9	Consiglio Nazionale Delle Ricerche	IT
10	Norsk Institutt for Luftforskning	NO
11	Universitetet i Oslo	NO
12	Institute of Marine Sciences-Middle East Technical University	TR
13	University of Leicester	UK

Activity Code: ENV.2007.1.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Megacities: Emissions, urban, regional and Global Atmospheric POLlution and climate effects, and Integrated tools for assessment and mitigation

Proposed EC Grant: 3.399.000 €

Abstract:

The MEGAPOLI project brings together leading European research groups, state-of-the-art scientific tools and key players from third countries to investigate the interactions among megacities, air quality and climate. MEGAPOLI will bridge the spatial and temporal scales that connect local emissions, air quality and weather with global atmospheric chemistry and climate. The main objectives are: (i) to assess impacts of megacities and large air-pollution hot-spots on local, regional and global air quality, (ii) to quantify feedbacks among megacity air quality, local and regional climate, and global climate change, (iii) to develop improved integrated tools for prediction of air pollution in megacities. In order to achieve these objectives we will: - Develop and evaluate integrated methods to improve megacity emission data; - Investigate physical and chemical processes starting from the megacity street level, continuing to the city, regional and global scales; - Assess regional and global air quality impacts of megacity plumes; - Determine the main mechanisms of regional meteorology/climate forcing due to megacity plumes; - Assess global megacity pollutant forcing on climate; - Examine feedback mechanisms including effects of climate change on megacity air quality; - Develop integrated tools for prediction of megacity air quality; - Evaluate these integrated tools and use them in case studies; - Develop a methodology to estimate the impacts of different scenarios of megacity development on human health and climate change; - Propose and assess mitigation options to reduce the impacts of megacity emissions. We will follow a pyramid strategy of undertaking detailed measurements in one European major city, Paris, performing detailed analysis for 12 megacities with existing air quality datasets and investigate the effects of all megacities on climate. The results will be disseminated to authorities, policy community, researchers and the other megacity stakeholders.

Partners:

N	Partner Legal Name	Country
1	Danish Meteorological Institute	DK
2	Foundation for Research and Technology - Hellas	EL
3	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
4	ARIANET S.r.l.	IT
5	Aristotle University of Thessaloniki	EL
6	Centre National de la Recherche Scientifique	FR
7	Finnish Meteorological Institute	FI
8	European Comimission DG Joint Research Center	IT
9	The Abdus Salam International Center for Theoretical Physics	IT
10	King's College London	UK
11	Stiftelsen Nansen Senter for Fjernmaaling – Nansen Environmental and Remote Sensing Center	NO
12	Norsk institutt for luftforskning	NO
13	Paul Scherrer Institut	CH
14	Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO	NL
15	Met Office	UK
16	University of Hamburg	DE
17	Helsingin yliopisto	FI
18	UNIVERSITY OF HERTFORDSHIRE	UK
19	Universität Stuttgart	DE
20	World Meteorological Organization	CH
21	Charles University, Prague, Faculty of Mathematics and Physics	CZ
22	Leibniz Institute for Tropospheric Research	DE
23	The Chancellor, Masters and Scholars of the University of Cambridge	UK

Activity Code: ENV.2008.1.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Reconciliation of essential process parameters for an enhanced predictability of arctic stratospheric ozone loss and its climate interactions.

Proposed EC Grant: 3.499.913 €

Abstract:

The extent of polar stratospheric ozone loss – often referred to as the “Ozone Hole” – is significantly influenced by climate change, and in turn, stratospheric ozone has been recognized as an important component in the climate system. To accurately quantify the effects of climate change on stratospheric ozone and the related feedback mechanisms, as well as to make reliable predictions of future ozone loss and the so-called recovery date, a correct representation of all relevant processes is indispensable. However, a number of gaps in the understanding of these processes still exist. The issues where the lack of understanding is most palpable are (a) the catalytic ClOx/BrOx chemistry, (b) chlorine activation on cold stratospheric aerosol, (c) NAT nucleation mechanisms, and (d) mixing and transport of processed air to lower latitudes. The RECONCILE project sets out to address all these issues using a comprehensive approach that includes laboratory and field experiments together with microphysical and chemical transport modelling. RECONCILE will produce and test reliable parameterisations of the key processes in Arctic stratospheric ozone depletion and bridge these to large scale chemistry climate models (CCMs), thereby greatly enhancing their ability to realistically predict the future evolution of Arctic stratospheric ozone loss and the interaction with climate change.

Partners:

N	Partner Legal Name	Country
1	Forschungszentrum Juelich GmbH	DE
2	The Chancellor, Masters and Scholars of the University of Cambridge	UK
3	Deutsches Zentrum für Luft- und Raumfahrt, e.V.	DE
4	Alfred-Wegener-Institute für Polar- und Meeresforschung	DE
5	Eidgenoessische Technische Hochschule Zuerich	CH
6	Norwegian Institute for Air Research	NO
7	Centre National de la Recherche Scientifique	FR
8	Johann Wolfgang Goethe Universität Frankfurt am Main	DE
9	Max-Planck-Society for the Advancement of Sciences e.V.	DE
10	Centre Suisse d'Electronique et de Microtechnique SA – Recherche et Développment	CH
11	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
12	Central Aerological Observatory	RU
13	Ruprechts-Karls-Universitaet Heidelberg	DE
14	Forschungszentrum Karlsruhe GmbH	DE
15	Eotvos Lorand University	HU
16	Stratosphere-M,Ltd.	RU
17	Jet Propulsion Laboratory	US
18	Met Office, for and behalf of the Secretary of State for the Defence of the United Kingdom, Great Britain and Northern Ireland	UK

Activity Code: ENV.2008.1.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Stratospheric ozone: Halogen Impacts in a Varying Atmosphere

Proposed EC Grant: 3.500.000 €

Abstract:

SHIVA aims to reduce uncertainties in present and future stratospheric halogen loading and ozone depletion resulting from climate feedbacks between emissions and transport of ozone depleting substances (ODS). Of particular relevance will be studies of short and very short-lived substances (VSLS) with climate-sensitive natural emissions. We will perform field studies of ODS production, emission and transport in understudied, but critical, regions of the tropics using ship, aircraft and ground-based instrumentation. We will parameterise potential climate sensitivities of marine and terrestrial emissions based on inter-dependencies derived from our own field studies, and surveys of ongoing work in this area. We will study the chemical transformation of ODS during transport from the surface to the tropical tropopause layer (TTL), and in the stratosphere, using a combination of aircraft and balloon observations together with process-oriented meso-scale modelling. These investigations will be corroborated by space-based remote sensing of marine phytoplankton biomass as a proxy for the ocean-atmosphere flux of ODS. From this the first systematic global emission inventory of VSLS ODS will be established to allow construction of future-climate scenarios. The impact of climate-sensitive feedbacks between transport and the delivery of ODS to the stratosphere, and their lifetime within it, will be studied using tracer observations and modelling. Further global modelling will assess the contribution of all ODS, including VSLS (which have hitherto normally been excluded from such models) to past, present and future ozone loss. Here, the sensitivity of natural ODS emissions to climate change parameters will be used in combination with standard IPCC climate model scenarios in order to drive measurement-calibrated chemical transport model (CTM) simulations for present and future stratospheric ozone; to better predict the rate, timing and climate-sensitivity of ozone-layer recovery.

Partners:

N	Partner Legal Name	Country
1	Ruprecht-Karls-Universitaet Heidelberg	DE
2	Univeristy of East Anglia	UK
3	JOHANN WOLFGANG GOETHE UNIVERSITAET FRANKFURT AM MAIN	DE
4	Alfred-Wegener-Institute für Polar- und Meeresforschung	DE
5	Belgian Institute for Space Aeronomy	BE
6	The Chancellor, Masters and Scholars of the University of Cambridge	UK
7	Leibniz Institut für Meereswissenschaften an der Universität Kiel, IFM-GEOMAR	DE
8	Centre National de la Recherche Scientifique	FR
9	University of Leeds	UK
10	Norwegian institute for air quality	NO
11	Universität Bremen	DE

Activity Code: ENV.2010.1.1.2-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Pan-European Gas-AeroSol-climate interaction Study

Proposed EC Grant: 6.999.999 €

Abstract:

The Pan-European Gas-AeroSOls-climate interaction Study (PEGASOS) European large scale integrating project brings together most of the leading European research groups, with state-of the-art observational and modeling facilities to:(1) Quantify the magnitude of regional to global feedbacks between atmospheric chemistry and a changing climate and to reduce the corresponding uncertainty of the major ones.(2) Identify mitigation strategies and policies to improve air quality while limiting their impact on climate change.The project is organized into four scientific Themes designed to optimize the integration of methodologies, scales, and ultimately our understanding of air quality and climate interactions:(I) Anthropogenic and biogenic emissions and their response to climate and socio-economy(II) Atmospheric interactions chemical and physical processes

(III) Regional and global links between atmospheric chemistry and climate change(IV) Air quality in a changing climate: Integration with policyPEGASOS will bridge the spatial and temporal scales that connect local surface-air pollutant exchanges, air quality and weather with global atmospheric chemistry and climate. Our major focus for air quality will be Europe including effects of changes in pollutant emissions elsewhere and the time horizon for the study will be the next 50 years. During the project we will provide improved process understanding in areas of major uncertainty for better quantification of feedbacks between air quality and a changing climate. We will present, for the first time, a fully integrated analysis of dynamically changing emissions and deposition, their link to tropospheric chemical reactions and interactions with climate, and emerging feedbacks between chemistry-climate and surface processes. We will target both local and regional scales, taking into account chemistry and climate feedbacks on the global scale.

Partners:

N	Partner Legal Name	Country
1	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
2	FORSCHUNGSZENTRUM JUELICH GMBH	DE
3	HELSINGIN YLIOPISTO	FI
4	UNIVERSITY OF LEICESTER	UK
5	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
6	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
7	Eidgenössische Technische Hochschule Zürich	CH
8	LUNDS UNIVERSITET	SE
9	WAGENINGEN UNIVERSITEIT	NL
10	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
11	Københavns Universitet	DK
12	WEIZMANN INSTITUTE OF SCIENCE	IL
13	METEOROLOGISK INSTITUTT	NO
14	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
15	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
16	ILMATIETEEN LAITOS	FI
17	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
18	PAUL SCHERRER INSTITUT	CH
19	STOCKHOLMS UNIVERSITET	SE
20	UNIVERSITY OF LEEDS	UK
21	LEIBNIZ INSTITUT FUER TROPOSPHAERENFORSCHUNG e.V.	DE
22	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
23	AS Airel	EE
24	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
25	Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer	NL
26	UNIVERSITE JOSEPH FOURIER GRENOBLE 1	FR

Activity Code: ENV.2010.1.1.2-2 **Funding Scheme:** CSA-CA **Duration (Months):** 48

Title: Atmospheric Composition Change: the European Network-Policy Support and Science

Proposed EC Grant: 998.352 €

Abstract:

Fragmentation of research efforts, lack of a shared scientific vision and insufficient availability of research tools, shared databases, etc., is a major limitation for the understanding of atmospheric composition change over Europe under a changing climate, and the consequent inadequate transfer of prospects to the decision makers for future policies. The ACCENT-Plus project builds on the successful efforts of the Network of Excellence ACCENT which, over the past six years, has brought together the atmospheric science community engaged in global change and air pollution studies. The integration efforts within the ACCENT Network have produced a stronger cohesion of the community, including research groups from the new EU Member States and have facilitated the engagement of a new generation of scientists who have started their career in the collaborative environment promoted by ACCENT. ACCENT-Plus aims at extending the breath of the previous ACCENT phase to reach out to the policy community, facilitating the transfer of research results into policy/decision making. A prerequisite to reach this goal is to continue fostering the coordination and integration of the European science community, associating with this new effort all partners and associates of the previous ACCENT phase. We already have at this stage the endorsement of 85 previous partners/associates from 29 countries. Joint research programming, contribution to the international research agenda, access to information, training/mobility activities and facilitation in the use of research infrastructures will be key elements of ACCENT-Plus to preserve and enhance the excellence of European research in an ERA context, to produce integrated assessment and synthesis of scientific results and to connect science and policy making by transferring to the decision makers the important links between air quality and climate change and the prospects and benefits of co-control policies.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
3	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
4	UNIVERSITAET BREMEN	DE
5	WEIZMANN INSTITUTE OF SCIENCE	IL
6	Universita' degli Studi di Urbino Carlo Bo	IT
7	PAUL SCHERRER INSTITUT	CH
8	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
9	UNIVERSITY OF LEICESTER	UK

Activity Code: ENV.2007.1.1.3.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: European Project on Ocean Acidification

Proposed EC Grant: 6.549.000 €

Abstract:

The overall goal of the European Project on Ocean Acidification (EPOCA) is to fill the numerous gaps in our understanding of the effects and implications of ocean acidification. EPOCA aims to document the changes in ocean chemistry and biogeography across space and time. Paleo-reconstruction methods will be used on several archives, including foraminifera and deep-sea corals, to determine past variability in ocean chemistry and to tie these to present-day chemical and biological observations.

EPOCA will determine the sensitivity of marine organisms, communities and ecosystems to ocean acidification. Molecular to biochemical, physiological and ecological approaches will be combined with laboratory and field-based perturbation experiments to quantify biological responses to ocean acidification, assess the potential for adaptation, and determine the consequences for biogeochemical cycling. Laboratory experiments will focus on key organisms selected on the basis of their ecological, biogeochemical or socio-economic importance. Field studies will be carried out in systems deemed most sensitive to ocean acidification. Results on the chemical, biological and biogeochemical impacts of ocean acidification will be integrated in biogeochemical, sediment and coupled ocean-climate models to better understand and predict the responses of the Earth system to ocean acidification. Special special attention will be paid to the potential feedbacks of the physiological changes in the carbon, nitrogen, sulfur and iron cycles. EPOCA will assess uncertainties, risks and thresholds ("tipping points") related to ocean acidification at scales ranging from sub-cellular, to ecosystem and from local to global. It will also assess pathways of CO2 emissions required to avoid these thresholds and describe the state change and the subsequent risk to the marine environment and Earth system should these emissions be exceeded.

Partners:

N	Partner Legal Name	Country
1	Centre National de la Recherche Scientifique	FR
2	Universitetet i Bergen	NO
3	Leibniz Institut für Meereswissenschaften	DE
4	Natural Environment Research Council	UK
5	Alfred-Wegener-Institut für Polar- und Meeresforschung	DE
6	The Chancellor, Masters and Scholars of the University of Cambridge	UK
7	Commissariat à l'Energie Atomique	FR
8	Plymouth Marine Laboratory	UK
9	Scottish Association for Marine Science	UK
10	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
11	Marine Biological Association	UK
12	Göteborgs universitet	SE
13	Stichting Koninklijk Nederlands Instituut voor Onderzoek der Zee	NL
14	Utrecht University	NL
15	Koninklijke Nederlandse Akademie van Wetenschappen - Nederlands Instituut voor Ecologie	NL
16	Sir Alister Hardy Foundation for Ocean Science	UK
17	GKSS-Forschungszentrum Geesthacht GmbH	DE
18	Universität Bern	CH
19	Université Libre de Bruxelles	BE
20	Philippe Saugier international educational projects	FR
21	Vrije Universiteit Amsterdam	NL
22	Swiss Federal Institute of Technology Zürich	CH
23	The Marine Research Institute	IS
24	University of Southampton	UK
25	University of Plymouth Marine Institute	UK
26	Intergovernmental Oceanographic Commission of UNESCO	FR
27	University of Bristol	UK

28	International Atomic Energy Agency	AT

Activity Code: ENV.2008.1.1.3.1. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: The terrestrial Carbon cycle under Climate Variability and Extremes – a Pan-European synthesis

Proposed EC Grant: 3.312.754 €

Abstract:

The aim of this project is to achieve an improved knowledge of the terrestrial carbon cycle in response to climate variability and extremes, to represent and apply this knowledge over Europe with predictive terrestrial carbon cycle modelling, to interpret the model predictions in terms of vulnerability of the terrestrial – in particular soil – carbon pools and give according advice to EU climate and soil protection policies. This objective will be achieved by integrating three major types of recent and new solid scientific carbon cycle data, from: (i) soil process studies, (ii) a network of established ecosystem manipulation experiments, and (iii) long-term observations spanning several times-scales (e.g. eddy covariance data, tree rings and growth, crop yields, long-term remote sensing data on soil moisture and vegetation activity and soil carbon inventories). The integration will be reached by establishing a consistent and harmonized data base and by confronting the terrestrial carbon cycle models with the multiple data sets within a Bayesian model identification and improvement procedure. Specific model development concerning processes affected by extreme events (e.g. soil carbon destabilization, tree growth response incl. lag effects and mortality) will be included and followed by model testing and improvement against the data made available in the project. The improved models will simulate terrestrial processes relevant to carbon balance and soil erosion at pan- European scale using regionalized climate scenarios with explicit inclusion of extreme climatic events. Since we are using several climate scenarios and an ensemble of models we will be able to characterize the uncertainties in prediction coming from models and climate scenarios. We will interpret the empirical evidence from the observational work and the model simulations in a framework of vulnerability assessment and disseminate and discuss results with stakeholders at EU level.

Partners:

N	Partner Legal Name	Country
1	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
2	Commissariat à l'Energie Atomique	FR
3	COnsiglio Nazionale delle Ricerche	IT
4	Eidgenössische Technische Hochschule Zürich	CH
5	Institut National de la Recherche Agronomique	FR
6	Potsdam-Institut für Klimafolgenforschung e.V.	DE
7	UNIVERSITEIT ANTWERPEN	BE
8	The University Court of the University of Aberdeen	UK
9	Univeristà degli Studi della Tuscia	IT
10	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
11	Cranfield University	UK
12	Technical University of Denmark	DK
13	Institutul de Cercetari si Amenajari Silvice	RO
14	International Institute for Applied Systems Analysis	AT
15	Instituto Nacional de Investigación y Tecnología Agraria y Alimentaria	ES
16	Met Office, for and on behalf of the Secretary of State for the Defence of the United Kingdom, Great Britain and Northern Ireland	UK
17	Martin-Luther-Universität Halle-Wittenberg	DE
18	Natural Environment Research Council	UK
19	Sveriges Lantbruksuniversitet	SE
20	University of Innsbruck	AT
21	Vereniging voor Christelijk Hoger Onderwijs Wetenschappelijk Onderzoek en Patientenzorg	NL
22	Swiss Federal Research Institute WSL	CH

Activity Code: ENV.2009.1.1.3.1 **Funding Scheme:** CP-IP **Duration (Months):** 42

Title: Greenhouse gas management in European land use systems

Proposed EC Grant: 6.648.710 €

Abstract:

The GHG-Europe project aims to improve our understanding and capacity for predicting the European terrestrial carbon and greenhouse gas (GHG) budget by applying a systematic, comprehensive and integrative approach. GHG-Europe quantifies the annual to decadal variability of the carbon and GHG budgets of terrestrial ecosystems in EU27 plus Switzerland and in six data-rich European regions via data-model integration, diagnostic and predictive modelling. Models are calibrated by multi-site observations. Research includes CO2, CH4 and N2O in forests, croplands, grasslands, shrublands, peatlands and soils. Via an integrated approach, GHG Europe scales up consistently from local to regional and continental scale via scale dependent error propagation and systematic quantification of uncertainties, model validation at different scales and top-down verification by atmospheric inversion models. At regional and European scale lateral C transport by land use, trade and rivers are included.Variability in C and GHG budgets is attributed to natural (climate) and anthropogenic drivers (N deposition, land use, past and present management) by synthesis of past and emerging experiments, targeted observations in hot spots and hot moments and model sensitivity analyses. For this purpose, observations are extended to under-sampled regions and ecosystems with likely high importance for the European C budget: forests and land use change in Eastern Europe and Mediterranen shrublands. The future vulnerability of carbon pools and risks of positive feedbacks in the climate-carbon system are assessed by scenario analyses with biophysical models and by integrating feedbacks with socio-economic changes and EU climate and land use policies. GHG-Europe uses a bidirectional interaction with stakeholders to provide regular and timely scientific advice targeted to the emerging needs of the UNFCCC process and for implementing post-2012 climate commitments in Europe.

Partners:

N	Partner Legal Name	Country
1	JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LANDLICHE RAUME, WALD UND FISCHEREI	DE
2	COMMISSARIAT ENERGIE ATOMIQUE CEA	FR
3	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
4	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
5	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	UK
6	UNIVERSITA DEGLI STUDI DELLA TUSCIA	IT
7	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
8	ALTERRA B.V.	NL
9	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
10	Eidgenössische Technische Hochschule Zürich	CH
11	INSTITUTUL DE CERCETARI SI AMENAJARI SILVICE (ICAS)	RO
12	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
13	AKADEMIA ROLNICZA IM AUGUSTA CIESZKOWSKIEGO W POZNANIU	PL
14	TECHNISCHE UNIVERSITAET MUENCHEN	DE
15	UNIVERSITEIT ANTWERPEN	BE
16	FUNDACION CENTRO DE ESTUDIOS AMBIENTALES DEL MEDITERRANEO	ES
17	HELSINGIN YLIOPISTO	FI
18	Bundesforschungs-und Ausbildungszentrum für Wald, Naturgefahren und Landschaft	AT
19	FONDAZIONE EDMUND MACH	IT
20	DANMARKS TEKNISKE UNIVERSITET	DK
21	STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND	NL
22	EUROPEAN FOREST INSTITUTE	FI
23	ILMATIETEEN LAITOS	FI
24	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH	AT
25	Autonomous Province of Bolzano/Bozen South Tyrol - Forest Departement	IT
26	RIJKSUNIVERSITEIT GRONINGEN	NL
27	SVERIGES LANTBRUKSUNIVERSITET	SE

28	SUOMEN YMPARISTOKESKUS	FI
29	UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN	IE
30	Københavns Universitet	DK
31	UNIVERSITAET INNSBRUCK	AT
32	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
33	UNIVERSIDAD DE GRANADA	ES
34	WAGENINGEN UNIVERSITEIT	NL
35	Università degli Studi di Udine	IT
36	RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG.	DE
37	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
38	Centre Tecnologic Forestal de Catalunya	ES
39	UNIVERSIDAD DE CASTILLA - LA MANCHA	ES
40	METEO-FRANCE	FR
41	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE

Activity Code: ENV.2010.1.1.3-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Changes in carbon uptake and emissions by oceans in a changing climate

Proposed EC Grant: 6.999.906 €

Abstract:

CARBOCHANGE will provide the best possible process-based quantification of net ocean carbon uptake under changing climate conditions using past and present ocean carbon cycle changes for a better prediction of future ocean carbon uptake. We will improve the quantitative understanding of key biogeochemical and physical processes through a combination of observations and models. We will upscale new process understanding to large-scale integrative feedbacks of the ocean carbon cycle to climate change and rising carbon dioxide concentrations. We will quantify the vulnerability of the ocean carbon sources and sinks in a probabilistic sense using cutting edge coupled Earth system models under a spectrum of emission scenarios including climate stabilisation scenarios as required for the 5th IPCC assessment report. The drivers for the vulnerabilities will be identified. The most actual observations of the changing ocean carbon sink will be systematically integrated with the newest ocean carbon models, a coupled land-ocean model, an Earth system model of intermediate complexity, and fully fledged Earth system models through a spectrum of data assimilation methods as well as advanced performance assessment tools. Results will be optimal process descriptions and most realistic error margins for future ocean carbon uptake quantifications with models under the presently available observational evidence. The project will deliver calibrated future evolutions of ocean pH and carbonate saturation as required by the research community on ocean acidification in the EU project EPOCA and further projects in this field. The time history of atmosphere-ocean carbon fluxes past, present, and future will be synthesised globally as well as regionally for the transcontinental RECCAP project. Observations and model results will merge into GEOSS/GEO through links with the European coordination action COCOS and will prepare the marine branch of the European Research Infrastructure ICOS.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITETET I BERGEN	NO
2	VitusLab	DK
3	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
4	COMMISSARIAT A L' ENERGIE ATOMIQUE	FR
5	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
6	ALFRED-WEGENER-INSTITUT FUER POLAR- UND MEERESFORSCHUNG	DE
7	LEIBNIZ-INSTITUT FUER MEERESWISSENSCHAFTEN AN DER UNIVERSITAET KIEL	DE
8	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
9	UNIVERSITAET BREMEN	DE
10	HAFRANNSOKNASTOFNUNIN	IS
11	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
12	INSTITUT NATIONAL DE RECHERCHE HALIEUTIQUE	MA
13	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
14	STIFTELSEN NANSEN SENTER FOR FJERNMAALING	NO
15	UNIFOB AS	NO
16	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
17	UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA	ES
18	GOETEBORGS UNIVERSITET	SE
19	Eidgenössische Technische Hochschule Zürich	CH
20	UNIVERSITAET BERN	CH
21	MET OFFICE	UK
22	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
23	PLYMOUTH MARINE LABORATORY	UK
24	UNIVERSITY OF BRISTOL	UK
25	UNIVERSITY OF EAST ANGLIA	UK
26	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
27	TRUSTEES OF PRINCETON UNIVERSITY	US

Activity Code: ENV.2008.1.1.4.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Comprehensive Modelling of the Earth system for better climate prediction and projection

Proposed EC Grant: 7.922.981 €

Abstract:

The European integrating project COMBINE brings together research groups to advance Earth system models (ESMs) for more accurate climate projections and for reduced uncertainty in the prediction of climate and climate change in the next decades. COMBINE will contribute to better assessments of changes in the physical climate system and of their impacts in the societal and economic system. The proposed work will strengthen the scientific base for environmental policies of the EU for the post-2012 climate negotiations.COMBINE proposes to improve ESMs by including key physical and biogeochemical processes to model more accurately the forcing mechanisms and the feedbacks determining the magnitude of climate change in the 21st century. For this purpose the project will incorporate carbon and nitrogen cycle, aerosols coupled to cloud microphysics and chemistry, proper stratospheric dynamics and increased resolution, ice sheets and permafrost in current Earth system models. COMBINE also proposes to improve initialization techniques to make the best possible use of observation based analyses of ocean and ice to benefit from the predictability of the climate system in predictions of the climate of the next few decades. Combining more realistic models and skilful initialization is expected to reduce the uncertainty in climate projections.Resulting effects will be investigated in the physical climate system and in impacts on water availability and agriculture, globally and in 3 regions under the influence of different climate feedback mechanisms. Results from the comprehensive ESMs will be used in an integrated assessment model to test the underlying assumptions in the scenarios, and hence to contribute to improved scenarios. COMBINE will make use of the experimental design and of the scenarios proposed for IPCC AR5. Therefore the project will be able to contribute to the AR5, by its relevant research and by the contribution of experiments to the IPCC data archives.

Partners:

N	Partner Legal Name	Country
1	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
2	Met Office, for and on behalf of the Secretary of State for the Defence of the United Kingdom, Great Britain and Northern Ireland	UK
3	Centre National de la Recherche Scientifique	FR
4	Centro Euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
5	METEO-FRANCE	FR
6	Koninklijk Nederlands Meterologisch Instituut	NL
7	Universitetet i Bergen	NO
8	Danish Meteorological Institute	DK
9	European Centre for Medium-Range Weather Forecasts	UK
10	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	CH
11	Ilmatieteen Laitos (Finnish Meteorological Institute)	FI
12	Milieu en Natuurplanbureau	NL
13	Swedish Meteorological and Hydrological Institute	SE
14	Wageningen Universiteit	NL
15	Helsingin yliopisto	FI
16	Centre Europeen de Recherche et de Formation Avancee en Calcul Scientifique	FR
17	Université Catholique de Louvain	BE
18	University of Bristol	UK
19	Universitaet Kassel	DE
20	Technical University of Crete	EL
21	Cyprus Research and Education Foundation	CY
22	Instituto Nacional de Pesquisas Espaciais	BR

Activity Code: ENV.2009.1.1.4.1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: EU Cloud Intercomparison, Process Study and Evaluation Project

Proposed EC Grant: 3.500.000 €

Abstract:

Cloud feedbacks remain the largest source of uncertainty in projections of future climate. They are also a major contributor to uncertainty in other feedbacks (e.g., surface albedo, carbon cycle) in the Earth System. Through interactions with the large-scale circulation, cloud processes also contribute to synoptic circulations and regional climate. They are therefore critical to the prediction of future changes in precipitation patterns, climate variability and extreme events.The central objective of EUCLIPSE is to reduce the uncertainty in the representation of cloud processes and feedbacks in the new generation of Earth System Models (ESMs), in support of the IPCC's fifth assessment report. Novel, process-oriented evaluations of clouds in present-day and future climate simulations made by the leading European ESMs will identify the cloud types and processes responsible for the spread in climate sensitivity and future precipitation changes across the models, and for deficiencies in the simulation of the present-day climate. The new diagnostics and metrics developed in EUCLIPSE will inform targeted sensitivity experiments to isolate the processes responsible for cloud feedback uncertainty.In EUCLIPSE, four distinct communities will work together across a set of integrated work packages over a four-year period: the observational community will provide state-of-the-art measurements from ground- and space-based active and passive remote sensing; the numerical weather prediction community will provide analyses of short timescale model biases induced by cloud processes; the cloud modeling community will provide fine-scale models as an additional tool for understanding cloud behavior in a changing climate; finally, the climate modeling community will synthesize the physical understanding and observational constraints identified by the other communities to improve the representation and assessment of cloud processes in ESMs and so improve the predictive skill of ESMs.

Partners:

N	Partner Legal Name	Country
1	KONINKLIJK NEDERLANDS METEOROLOGISCH INSTITUUT (KNMI)	NL
2	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
3	Met Office, for and on behalf of the Secretary of State for the Defence of the United Kingdom, Great Britain and Northern Ireland	UK
4	Centre National de la Recherche Scientifique	FR
5	ACADEMYOFATHENS	EL
6	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS	UK
7	Delft University of Technology	NL
8	METEO-FRANCE	FR
9	STOCKHOLMS UNIVERSITET	SE
10	EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH	CH
11	UNIWERSYTET WARSZAWSKI	PL
12	Jet Propulsion Laboratory	US
13	Deutsches Klimarechenzentrum GmbH	DE

Activity Code: ENV.2010.1.1.4-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Climate Local Information in the Mediterranean region: Responding to User Needs

Proposed EC Grant: 3.490.085 €

Abstract:

CLIM-RUN aims at developing a protocol for applying new methodologies and improved modeling and downscaling tools for the provision of adequate climate information at regional to local scale that is relevant to and usable by different sectors of society (policymakers, industry, cities, etc.). Differently from current approaches, CLIM-RUN will develop a bottom-up protocol directly involving stakeholders early in the process with the aim of identifying well defined needs at the regional to local scale. The improved modeling and downscaling tools will then be used to optimally respond to these specific needs. The protocol is assessed by application to relevant case studies involving interdependent sectors, primarily tourism and energy, and natural hazards (wild fires) for representative target areas (mountainous regions, coastal areas, islands). The region of interest for the project is the Greater Mediterranean area, which is particularly important for two reasons. First, the Mediterranean is a recognized climate change hot-spot, i.e. a region particularly sensitive and vulnerable to global warming. Second, while a number of countries in Central and Northern Europe have already in place well developed climate service networks (e.g. the United Kingdom and Germany), no such network is available in the Mediterranean. CLIM-RUN is thus also intended to provide the seed for the formation of a Mediterranean basin-side climate service network which would eventually converge into a pan-European network. The general time horizon of interest for the project is the future period 2010-2050, a time horizon that encompasses the contributions of both inter-decadal variability and greenhouse-forced climate change. In particular, this time horizon places CLIM-RUN within the context of a new emerging area of research, that of decadal prediction, which will provide a strong potential for novel research.

Partners:

N	Partner Legal Name	Country
1	AGENZIA NAZIONALE PER LE NUOVE TECNOLOGIE,L'ENERGIA E LO SVILUPPO ECONOMICO SOSTENIBILE	IT
2	THE CYPRUS RESEARCH AND EDUCATIONAL FOUNDATION	CY
3	METEO-FRANCE	FR
4	THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS	IT
5	Fundació Privada Institut Català de Ciències del Clima	ES
6	NATIONAL OBSERVATORY OF ATHENS	EL
7	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
8	Tourisme Territoires Transports Environnement Conseil	FR
9	PLAN BLEU POUR L'ENVIRONNEMENT ET LE DEVELOPPEMENT EN MEDITERRANNEE	FR
10	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
11	UNIVERSITY OF EAST ANGLIA	UK
12	Groupe de rechercehe sur la variabilité du climat et l'Homme en Tunisie	TN
13	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
14	Meteorological and Hydrological Service of Croatia	HR
15	THE UNIVERSITY SYSTEM OF MARYLAND FOUNDATION, INC.	US
16	UNIVERSIDAD DE CANTABRIA	ES
17	Groupe d'Etudes et de Recherche sur les Energies Renouvelables et l'Environnement	MA

Activity Code: ENV.2010.1.1.4-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Enabling CLimate Information Services for Europe - ECLISE

Proposed EC Grant: 3.410.044 €

Abstract:

Climate and climate change has high impact on society. Better understanding and improved prediction skills of future weather and climate is vital to protect lives, goods and infrastructures. Different sectors of society and infrastructure are more or less designed to accommodate the current level of climate variability. The prospect of a changing climate necessitates adapting these designs. To prevent high costs, it is of paramount importance that the most reliable and accurate climate information is used to underpin the development of new adaptation strategies. In response to this need, climate scientists, in close cooperation with climate impact specialists, have started to generate and provide information on future climate projections, aimed at supporting adaptation policies. These efforts are often organized at a national level and, at present, differ considerably in the methods used and the level of user involvement. It has been recognized (WMO-WCC3, EU White paper on Adaptation) that coordination of climate services at an international level would greatly advance the benefits of climate science for adaptation policies. This effort must find a way to deal with the strong local nature of climate impacts and adaptation needs.The central objective of ECLISE is to take the first step towards the realisation of a European Climate Service. ECLISE is a European effort in which researchers, in close cooperation with users, develop and demonstrate local climate services to support climate adaption policies. It does so by providing climate services for several climate-vulnerable regions in Europe, organized at a sectorial level: coastal defence, cities, water resources and energy production. Furthermore, ECLISE will define, in conceptual terms, how a pan-European Climate Service could be developed in the future, based on experiences from the aforementioned local services and the involvement of a broader set of European decision makers and stakeholders.

Partners:

N	Partner Legal Name	Country
1	KONINKLIJK NEDERLANDS METEOROLOGISCH INSTITUUT (KNMI)	NL
2	SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT	SE
3	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
4	WAGENINGEN UNIVERSITEIT	NL
5	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
6	UNIVERSITETET I BERGEN	NO
7	METEOROLOGISK INSTITUTT	NO
8	INSTITUTUL NATIONAL DE HIDROLOGIE SI GOSPODARIRE A APELOR	RO
9	INSTITUTUL DE GEOGRAFIE	RO
10	TECHNICAL UNIVERSITY OF CRETE	EL
11	UNIVERSITY OF NEWCASTLE UPON TYNE	UK

Activity Code: ENV.2007.1.1.5.1. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Bridging the gap between adaptation strategies of climate change impacts and European water policies

Proposed EC Grant: 956.967 €

Abstract:

The Project WaterClimate is aimed as the first step on the analysis and synthesis of data and information on the likely (known, assumed, expected, modelled, forecasted, predicted, estimated etc.) water related impacts of the changes of the climate with special regard to their risk and to the urgency of getting prepared to combat these changes and their impacts. The Project will identify all adaptation strategies that were developed in Europe and also globally for handling (preventing, eliminating, combating, mitigating) the impacts of global climate changes on water resources and aquatic ecosystems, including all other water related issues of the society and nature. Research needs in the field of 'climate impact on the water cycle and water users' will be identified with special regard to enable the ranking of adaptation action in the light of the magnitude of impact on water resources and the urgency of the action needed. The most important output of the project will be the identification of gaps that would hinder the implementation of the EU water policy in combating climate impacts on water.

Partners:

N	Partner Legal Name	Country
1	VITUKI, Environmental Protection and Water Management Research Institute	HU
2	University of Debrecen, ATC,Faculty of Technology	HU
3	Consiglio Nazionale delle Ricerche	IT
4	University of Osnabrück	DE
5	National Institute of Marine Geology and Geoecology	RO
6	GEONARDO Environmental Technologies	HU
7	Universitaet Wien	AT
8	University of Leicester	UK
9	Slovenský hydrometeorologický ústav	SK
10	SOGREAH CONSULTANTS SAS	FR
11	Malta Resources Authority	MT

Activity Code: ENV.2008.1.1.5.1. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics

Proposed EC Grant: 3.488.760 €

Abstract:

The proposal addresses Topic ENV.2008.1.1.5.1 “Addressing deforestation in tropical areas: greenhouse gas emissions, socio-economic drivers and impacts, and policy options for emissions reduction”. The overall goal of the project is to contribute to the development and evaluation of mechanisms and the institutions needed at multiple levels for changing stakeholder behaviour to slow tropical deforestation rates and hence reduce GHG emissions. This will be achieved through enhancing our understanding of the social, cultural, economic and ecological drivers of forest transition in selected case study areas in Southeast Asia, Africa and South America. This understanding will facilitate the identification and assessment of viable policy options addressing the drivers of deforestation and their consistency with policy approaches on avoided deforestation, such as Reduced Emissions from Deforestation and degradation (REDD), currently being discussed in UNFCCC and other relevant international fora. At the same time, ways of improving the spatial quantification of land use change and the associated changes in GHG fluxes will be developed, thereby improving the accounting of GHG emissions resulting from land use change in tropical forest margins and peatlands. This will allow the analysis of scenarios of the local impacts of potential international climate change policies on GHG emission reductions, land use, and livelihoods in selected case study areas, the results of which will be used to develop new negotiation support tools for use with stakeholders at international, national and local scales to explore a basket of options for incorporating REDD into post-2012 climate agreements. The project will provide a unique link between international policy-makers and stakeholders on the ground who will be required to change their behaviour regarding deforestation, thereby contributing to well-informed policy-making at the international level.

Partners:

N	Partner Legal Name	Country
1	Macaulay Land Use Research Institute	UK
2	Université catholique de Louvain	BE
3	Vrije Universiteit, independent entity of	NL
4	Georg-August-Universität Göttingen Stiftung Öffentlichen Rechts	DE
5	International Centre for Research in Agroforestry (also called World Agroforestry Centre)	KE
6	Center for International Forestry Research	ID
7	International Institute of Tropical Agriculture	NG
8	International Center for Tropical Agriculture	CO
9	Indonesian Soil Research Institute	ID
10	Research Centre for Forest Ecology and Environment	VN
11	Insitute of Agricultural Research for Development	CM
12	Instituto Nacional de Investigación Agraria	PE

Activity Code: ENV.2009.1.1.5.1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Climate change predictions in Sub-Saharan Africa: impacts and adaptations

Proposed EC Grant: 3.496.234 €

Abstract:

Africa is probably the most vulnerable continent to climate change and climate variability and shows diverse range of agro-ecological and geographical features. Thus the impacts of climate change can be very high and will greatly differ across the continent, and even within countries. There is a urgent need for the most appropriate and up-to-date tools to better understand and predict climate change, assess its impact on African ecosystems and population, and develop the correct adaptation strategies. In particular the current proposal will focus on the following specific objectives: 1- Develop improved climate predictions on seasonal to decadal climatic scales, especially relevant to SSA; 2- Assess climate impacts in key sectors of SSA livelihood and economy, especially water resources and agriculture; 3- Evaluate the vulnerability of ecosystems and civil population to inter-annual variations and longer trends (10 years) in climate; 4- Suggest and analyse new suited adaptation strategies, focused on local needs; 5- Develop a new concept of 10 years monitoring and forecasting warning system, useful for food security, risk management and civil protection in SSA; 6- Analyse the economic impacts of climate change on agriculture and water resources in SSA and the cost-effectiveness of potential adaptation measures. This objectives will be achieved by an integrated working approach that involves 9 European, 8 African and 1 International Organization.

Partners:

N	Partner Legal Name	Country
1	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
2	LUNDS UNIVERSITET	SE
3	COMMISSARIAT ENERGIE ATOMIQUE CEA	FR
4	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
5	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
6	Centre Tecnologic Forestal de Catalunya	ES
7	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
8	CENTRE DE COOPERATION INTERNATIONAL EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT	FR
9	FOOD AND AGRICULTURE ORGANISATION OF THE UNITED NATIONS FAO	IT
10	Stichting Onderzoek Wereldvoedselvoorziening van de Vrije Universiteit	NL
11	UR2PI	CG
12	UNIVERSITY OF CAPE TOWN	ZA
13	Bunda College of Agriculture	MW
14	University of Lomé	TG
15	Agricultural Research Corporation	SD
16	IGAD CENTRE FOR CLIMATE PREDICTION AND APPLICATION	KE
17	CSIR - Crops Research Institute	GH
18	Centre d'Etude, de Recherche et de Production en Information pour l'Environment et le Développement Durable	BF

Activity Code: ENV.2010.1.1.5-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: MEDiterranean Sea Acidification under changing climate

Proposed EC Grant: 3.490.179 €

Abstract:

Increases of atmospheric CO2 and associated decreases in seawater pH and carbonate ion concentration this century and beyond are likely to have wide impacts on marine ecosystems including those of the Mediterranean Sea. Consequences of this process, ocean acidification, threaten the health of the Mediterranean, adding to other anthropogenic pressures, including those from climate change. Yet in comparison to other areas of the world ocean, there has been no concerted effort to study Mediterranean acidification, which is fundamental to the social and economic conditions of more than 400 million people living along its coastlines and another 175 million who visit the region each year.The MedSeA project addresses ecologic and economic impacts from the combined influences of anthropogenic acidification and warming, while accounting for the unique characteristics of this key region. MedSeA will forecast chemical, climatic, ecological-biological, and socio-economical changes of the Mediterranean driven by increases in CO2 and other greenhouse gases, while focusing on the combined impacts of acidification and warming on marine shell and skeletal building, productivity, and food webs. We will use an interdisciplinary approach involving biologists, earth scientists, and economists, through observations, experiments, and modelling. These experts will provide science-based projections of Mediterranean acidification under the influence of climate change as well as associated economic impacts. Projections will be based on new observations of chemical conditions as well as new observational and experimental data on the responses of key organisms and ecosystems to acidification, which will be fed into existing ocean models that have been improved to account for the Mediterranean´s fine-scale features. These scientific advances will allow us to provide the best advice to policymakers who must develop regional strategies for adaptation and mitigation.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAT AUTONOMA DE BARCELONA	ES
2	UNIVERSITE DE PERPIGNAN	FR
3	BAR ILAN UNIVERSITY	IL
4	HELLENIC CENTRE FOR MARINE RESEARCH	EL
5	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
6	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
7	PLYMOUTH MARINE LABORATORY	UK
8	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
9	UNIVERSITY OF PLYMOUTH	UK
10	ALFRED-WEGENER-INSTITUT FUER POLAR- UND MEERESFORSCHUNG	DE
11	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	IT
12	NACIONALNI INSTITUT ZA BIOLOGIJO	SI
13	INSTITUT NATIONAL DE RECHERCHE HALIEUTIQUE	MA
14	National Institute of Oceanography and Fisheries	EG
15	University of Sfax	TN
16	ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE OGS	IT
17	COMMISSARIAT A L' ENERGIE ATOMIQUE	FR

Activity Code: ENV.2007.1.1.5.2. **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Assessment of Climatic change and impacts on the Quantity and quality of Water

Proposed EC Grant: 6.495.000 €

Abstract:

As the evidence for human induced climate change becomes clearer, so too does the realization that its effects will have impacts on natural environment and socio-economic systems. Some regions are more vulnerable than others, both to physical changes and to the consequences for ways of life. The proposal will assess the impacts of a changing climate on the quantity and quality of water in mountain regions. Modeling techniques will be used to project the influence of climatic change on the major determinants of river discharge at various time and space scales. Regional climate models will provide the essential information on shifting precipitation and temperature patterns, and snow, ice, and biosphere models will feed into hydrological models in order to assess the changes in seasonality, amount, and incidence of extreme events in various catchment areas. Environmental and socio-economic responses to changes in hydrological regimes will be analyzed in terms of hazards, aquatic ecosystems, hydropower, tourism, agriculture, and the health implications of changing water quality. Attention will also be devoted to the interactions between land use/land cover changes, and changing or conflicting water resource demands. Adaptation and policy options will be elaborated on the basis of the model results.Specific environmental conditions of mountain regions will be particularly affected by rapidly rising temperatures, prolonged droughts and extreme precipitation. The methodological developments gained from a European mountain focus will be used to address water issues in regions whose economic conditions and political structures may compromise capacities to respond and adapt, such as the Andes and Central Asia where complex problems resulting from asymmetric power relations and less robust institutions arise. Methodologies developed to study European mountains and their institutional frameworks will identify vulnerabilities and be used to evaluate a range of policy options.

Partners:

N	Partner Legal Name	Country
1	University of Geneva	CH
2	Agroscope Reckenholz-Taenikon	CH
3	AGENZIA REGIONALE PER LA PROTEZIONE AMBIENTALE DEL PIEMONTE	IT
4	Agenzia Regionale per la Protezione dell'Ambiente della Valle d'Aosta	IT
5	Universität für Bodenkultur Wien - University of Natural Resources and Applied Life Sciences, Vienna	AT
6	Centro de Estudios Avanzados en Zonas Áridas	CL
7	Centro de Estudios Cientificos	CL
8	METEO-FRANCE / Centre National de Recherches Météorologiques	FR
9	INSTITUTO TORCUATO DI TELLA	AR
10	CESI RICERCA SpA	IT
11	CETEMPS Center of Excellence of University of L'Aquila	IT
12	Centre National de la Recherche Scientifique	FR
13	Centre National de la Recherche Scientifique	FR
14	Consejo Superior de Investigaciones Cientificas	ES
15	Compagnia Valdostana delle Acque - Compagnie Valdotaine des Eaux S.p.A.	IT
16	ENEL Produzione S.p.a.	IT
17	Eidgenössische Technische Hochschule Zürich	CH
18	Fondazione Montagna Sicura - Fondation Montagne Sûre	IT
19	The Abdus Salam International Centre for Theoretical Physics	IT
20	Consiglio Nazionale delle Ricerche (CNR)	IT
21	Institut Universitaire Kurt Bösch	CH
22	Institute of Water Problems & Hydropower National Academy of Sciences of the Kyrgyz Republic	KG
23	Laboratoire de Glaciologie et Geophysique de l'Environnement CNRS	FR
24	Commissariat à l'Energie Atomique	FR
25	Monterosastar S.r.l.	IT
26	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
27	Ente Parco Nazionale Gran Paradiso	IT

28	Politecnico di Milano	IT
29	Universität Bern	CH
30	The University of Birmingham	UK
31	University of Fribourg	CH
32	University of Geneva	CH
33	UNEP/DEWA/GRID Europe	CH
34	Graduate Institute of International Stuides	CH
35	Laboratoire d'Ecologie et de Biologie Aquatique, Université de Genève	CH
36	UNIVERSITAET GRAZ	AT
37	University of Dundee	UK

Activity Code: ENV.2008.1.1.5.2. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Arctic Tipping Points

Proposed EC Grant: 4.998.322 €

Abstract:

The broad interdisciplinary consortia assembled in the Arctic Tipping Points (ATP) project will be managed (WP1) to identify the elements of the Arctic marine ecosystem likely to show abrupt changes in response to climate change, and establish the levels of the corresponding climate drivers inducing the regime shift for these tipping elements. ATP will evaluate the consequences of crossing those tipping points, and the associated risks and opportunities for economic activities dependent on the Arctic marine ecosystem. Historical records of Arctic climate change and projections of future changes in Arctic sea climate and ice systems are compiled (WP2), and time series of Arctic ecosystem components analysed using novel statistical tools to detect regime shifts and ecological thresholds and tipping points, and evaluate their sensitivity to climatic forcing (WP3). Experimental manipulations and comparative analyses across broad climatic ranges will be used to detect climatic thresholds and tipping points of Arctic organisms and ecosystems, using genome-wide analyses to develop genomic markers of climate-driven stress useful as early-warning indicators of the proximity of tipping points (WP4). A biological-physical coupled 3 D model will be used to generate future trajectories of Arctic ecosystems under projected climate change scenarios and to identify their consequences for the Arctic ecosystem (WP5). The impacts of abrupt changes in the Arctic ecosystems for activities of strategic importance for the European Arctic and the associated impacts on employment and income will be elucidated, and policies and legislative frameworks to adapt and mitigate these impacts will be analysed (WP 6). The effectiveness of possible alternative, post-Kyoto policies and stabilization targets in avoiding climate-driven thresholds in the Arctic ecosystem will be examined, and the results and projections will be conveyed to policy makers, economic sectors and the public in general (WP7).

Partners:

N	Partner Legal Name	Country
1	University of Tromsø	NO
2	Consejo Superior de Investigaciones Cientificas	ES
3	Akvaplan-niva AS	NO
4	SINTEF Fiskeri og havbruk AS	NO
5	Aarhus Universitet	DK
6	Institute of Oceanology Polish Academy of Sciences	PL
7	University of Cambridge	UK
8	Université Pierre et Marie Curie - Paris 6	FR
9	Centre of Marine Sciences	PT
10	Shirshov Institute of Oceanology, Russian Academy of Sciences	RU
11	Greenland Institute of Natural Resources	GL

Activity Code: ENV.2009.1.1.5.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Climate Induced Changes on the Hydrology of Mediterranean Basins: Reducing Uncertainty and Quantifying Risk through an Integrated Monitoring and Modeling System

Proposed EC Grant: 3.149.757 €

Abstract:

With regard to the objectives specified in ENV-2009.1.1.5.2, modeling capabilities must be improved and appropriate tools developed to advance the capability to assess climate effects on water resources and uses. The project consortium will employ a combination of novel field monitoring concepts, remote sensing techniques, integrated hydrologic (and biophysical) modeling and socioeconomic factor analyses to reduce existing uncertainties in climate change impact analysis and to create an integrated quantitative risk and vulnerability assessment tool. Together, these will provide the necessary information to design appropriate adaptive water resources management instruments and select suitable agricultural practices under climate change conditions. The integrated risk and vulnerability analysis tool will also enable assessment of risks for conflict-inducing actions, e.g. migration. The improved models, new assessment tools, and their results will be evaluated against current methodologies. Improvements will be communicated to stakeholders and decision makers in a transparent, easy-to-understand form, enabling them to utilize the new findings in regional water resource and agricultural management initiatives as well as in the design of mechanisms to reduce potential for conflict (linkage to SSH-2009.4.2.1).

Partners:

N	Partner Legal Name	Country
1	LUDWIG-MAXIMILIANS-UNIVERSITAET MUENCHEN	DE
2	Agris Sardegna - Agenzia per la Ricerca in Agricoltura	IT
3	CHRISTIAN-ALBRECHTS-UNIVERSITAET ZU KIEL	DE
4	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
5	Centre de recherches et des technologies des eaux	TN
6	CINFAI	IT
7	CENTRO DI RICERCA, SVILUPPO E STUDI SUPERIORI IN SARDEGNA	IT
8	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
9	FORSCHUNGSZENTRUM JUELICH GMBH	DE
10	GEBZE YUKSEK TEKNOLOJI ENSTITUSU	TR
11	Institut national de la recherche scientifique	CA
12	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH	AT
13	UNIVERSITE D'ANGERS	FR
14	Islamic University of Gaza	PS
15	UNIVERSITA DEGLI STUDI DI PADOVA	IT
16	UNIVERSITA DEGLI STUDI DI TRENTO	IT
17	Zagazig University	EG
18	VISTA Geowissenschaftliche Fernerkundung GmbH	DE
19	Bayerische Forschungsallianz gemeinnützige GmbH	DE

Activity Code: ENV.2009.1.1.5.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Water Availability and Security in Southern EuRope and the Mediterranean

Proposed EC Grant: 2.934.287 €

Abstract:

The WASSERMed project will analyse, in a multi-disciplinary way, ongoing and future climate induced changes in hydrological budgets and extremes in southern Europe, North Africa and the Middle East under the frame of threats to national and human security. A climatic and hydrological component directly addresses the reduction of uncertainty and quantification of risk. This component will provide an interface to other climatologic projects and models, producing climate change scenarios for the Mediterranean and Southern Europe, with special emphasis on precipitation. Five case studies will be considered: 1) Syros Island (Greece), 2) Sardinia Island (Italy), 3) Merguellil watershed (Tunisia), 4) Jordan river basin, and 5) the Nile River system (Egypt). The case studies are illustrative and represent situations which deserve special attention, due to their relevance to national and human security. Furthermore, impacts on key strategic sectors, such as agriculture and tourism, will be considered, as well as macroeconomic implications of water availability in terms of regional income, consumption, investment, trade flows, industrial structure and competitiveness. WASSERMed is an interdisciplinary project, which overall aims at all three targets of the call, through the integration of climate change scenarios, holistic water system modelling and interdisciplinary impact assessment, with three main contributions: a) Integration of climate change scenarios, holistic water system modelling. This provides results for reduction of uncertainties of climate change impacts on hydrology in the identified regions; b) Interdisciplinary approach, coupling macroeconomic implications and technical indicators. This provides a better assessment of climate effects to water resources, water uses and expected security risks; c) Proposal of specific adaptation measures for key sectors of the Mediterranean economy. This provides better basis for achieving water security.

Partners:

N	Partner Legal Name	Country
1	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
2	THE UNIVERSITY OF EXETER	UK
3	CENTRO INTERNAZIONALE DI ALTI STUDI AGRONOMICI MEDITERRANEI - ISTITUTO AGRONOMICO MEDITERRANEO DI BARI	IT
4	CLU srl	IT
5	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
6	UNIVERSIDAD POLITECNICA DE MADRID	ES
7	National Center for Agricultural Research and Extension	JO
8	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
9	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
10	Environment & Climate Research Institute	EG
11	Institut National Agronomique de Tunisie	TN

Activity Code: ENV.2007.1.1.5.3. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: A Europe-South America Network for Climate Change Assessment and Impact Studies in La Plata Basin

Proposed EC Grant: 3.359.000 €

Abstract:

The CLARIS LPB Project aims at predicting the regional climate change impacts on La Plata Basin (LPB) in South America, and at designing adaptation strategies for land-use, agriculture, rural development, hydropower production, river transportation, water resources and ecological systems in wetlands. In order to reach such a goal, the project has been built on the following four major thrusts. First, improving the description and understanding of decadal climate variability is of prime importance for short-term regional climate change projections (2010-2040). Second, a sound approach requires an ensemble of coordinated regional climate scenarios in order to quantify the amplitude and sources of uncertainties in LPB future climate at two time horizons: 2010-2040 for adaptation strategies and 2070-2100 for assessment of long-range impacts. Such coordination will allow to critically improve the prediction capacity of climate change and its impacts in the region. Third, adaptation strategies to regional scenarios of climate change impacts require a multi-disciplinary approach where all the regional components (climate, hydrology, land use, land cover, agriculture and deforestation) are addressed in a collaborative way. Feedbacks between the regional climate groups and the land use and hydrology groups will ensure to draw a first-order feedback of future land use and hydrology scenarios onto the future regional climate change. Fourth, stakeholders must be integrated in the design of adaptation strategies, ensuring their dissemination to public, private and governmental policy-makers. Finally, in continuity with the FP6 CLARIS Project, our project will put a special emphasis in forming young scientists in European institutes and in strengthening the collaborations between European and South American partners. The project is coordinated with the objectives of LPB, an international project on La Plata Basin that has been endorsed by the CLIVAR and GEWEX Panels.

Partners:

N	Partner Legal Name	Country
1	Institut de recherche pour le développement	FR
2	University Of East Anglia	UK
3	Leibniz-Centre for Agricultural Landscape Research e.V.	DE
4	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
5	Centro Euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
6	Alma Mater Studiorum Università di Bologna	IT
7	Universidad de Castilla-La Mancha, Vicerrectorado de Investigación	ES
8	Swedish Meteorological and Hydrological Institute	SE
9	Instituto NAcional de Pesquisas Espaciais	BR
10	Instituto de Astronomia, Geofisica e Ciencias Atmosfericas da USP	BR
11	Universidade Federal de Santa Catarina	BR
12	UNIVERSIDADE FEDERAL DO PARANÁ	BR
13	Consejo Nacional de Investigaciones Científicas y Técnicas	AR
14	Universidad de Buenos Aires	AR
15	INSTITUTO NACIONAL DE TECNOLOGIA AGROPECUARIA	AR
16	Instituto Nacional del Agua	AR
17	Universidad de la República	UY
18	Centre National de la Recherche Scientifique	FR
19	CESI RICERCA SpA	IT

Activity Code: ENV.2007.1.1.6.1. **Funding Scheme:** CP-FP **Duration (Months):** 30

Title: Full Costs of Climate Change

Proposed EC Grant: 3.499.999 €

Abstract:

There is increasing interest in the economics of climate change to: (1) inform the policy debate on long-term targets and mitigation policies, (2) provide important information on the costs of inaction (the economic effects of climate change), and (3) assess the costs and benefits of adaptation. The objectives of this proposal are to advance knowledge across all three areas, i.e. for the full economic costs of climate change. This proposal will:1. Identify and develop consistent scenarios for climate change and socio-economic development, including mitigation scenarios; 2. Quantify in physical terms, and value as economic costs, the effects of future climate change (the 'costs of inaction') under different future scenarios (as developed above) for the EU and other major negotiator countries. It will also address the 'costs of adaptation'. It will quantify and value the 'benefits' that adaptation can achieve in reducing the 'costs of inaction', assessed using the same detailed dis-aggregated analysis with benefits analysed in terms of physical effects and monetary terms. This will allow the estimation of the costs and benefits of adaptation, and the 'residual costs of climate change' after adaptation.3. Expand the analysis of the costs of climate change to cover the most important catastrophic events (major events / climate discontinuities) and major socially contingent effects. This will use scenario analysis to model these events in terms of physical effects and economic damages for the first time. 4. Update the mitigation (abatement) costs of greenhouse gas (GHG) emission reductions, consistent with medium and long-term reduction targets / stabilisation goals for the mitigation scenarios (linked to the scenarios above). This will include (induced) technological change and include non CO2 greenhouse gases and sinks and recent abatement technologies.5. Quantify the ancillary air quality benefits of mitigation policies, using a spatially detailed dis

Partners:

N	Partner Legal Name	Country
1	AEA Technology plc	UK
2	Commission of the European Communities - Joint Research Centre	BE
3	Danish Meteorological Institute	DK
4	Potsdam Institute for Climate Impact Research	DE
5	University of Southampton	UK
6	Fondazione Eni Enrico Mattei	IT
7	International Institute for Applied System Analysis	AT
8	Metroeconomica Ltd	UK
9	INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS	EL
10	Katholieke Universiteit Leuven	BE
11	SEI Oxford Office Ltd	UK
12	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
13	Universidad Politecnica de Madrid	ES
14	Paul Watkiss Associates Limited	UK
15	Economic and Social Research Institute	IE
16	Centre National de la Recherche Scientifique	FR
17	London School of Hygiene and Tropical Medicine	UK
18	Zentrum für Europäische Wirtschaftsforschung GmbH (ZEW) Mannheim	DE
19	University of the Aegean	EL
20	University of East Anglia	UK
21	Univerzita Karlova v Praze	CZ
22	The Energy and Resources Institute	IN
23	Energy Research Institute	CN

Activity Code: ENV.2008.1.1.6.1. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: HighNoon: adaptation to changing water resources availability in northern India with Himalayan glacier retreat and changing monsoon pattern

Proposed EC Grant: 3.311.756 €

Abstract:

The hydrological system of Northern India is based on two main phenomena, the monsoon precipitation in summer and the growth and melt of the snow and ice cover in the Himalaya, also called the “Water Tower of Asia”. However, climate change is expected to change these phenomena and it will have a profound impact on snow cover, glaciers and its related hydrology, water resources and the agricultural economy on the Indian peninsula (Singh and Kumar, 1996, Divya and Mehrotra, 1995).It is a great challenge to integrate the spatial and temporal glacier retreat and snowmelt and changed monsoon pattern in weather prediction models under different climate scenarios. Furthermore, the output of these models will have an effect on the input of the hydrological models. The retreat of glaciers and a possible change in monsoon precipitation and pattern will have a great impact on the temporal and spatial availability of water resources in Northern India. Besides climate change, socio-economic development will also have an influence on the use of water resources, the agricultural economy and the adaptive capacity. Socio-economic development determines the level of adaptive capacity. It is a challenge to find appropriate adaptation strategies with stakeholders for each of the sectors agriculture, energy, health and water supply by assessing the impact outputs of the hydrological and socio-economical models. The principal aim of the project is to assess the impact of Himalayan glaciers retreat and possible changes of the Indian summer monsoon on the spatial and temporal distribution of water resources in Northern India and to provide recommendations for appropriate and efficient response strategies that strengthen the cause for adaptation to hydrological extreme events.

Partners:

N	Partner Legal Name	Country
1	Alterra b.v.	NL
2	The Energy and Resources Institute	IN
3	Met Office	UK
4	University of Salford	UK
5	Indian Institute of Technology Delhi(Foundation for Innovation and Technology Transfer)	IN
6	University of Fribourg, Department of Geosciences	CH
7	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
8	Indian Institute of Technology, Kharagpur	IN
9	Nagoya University	JP

Activity Code: ENV.2009.1.1.6.1 **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Climate change integrated assessment methodology for cross-sectoral adaptation and vulnerability in Europe

Proposed EC Grant: 3.149.677 €

Abstract:

CLIMSAVE will develop and apply an integrated methodology for stakeholder-led, climate change impact and vulnerability assessment that explicitly evaluates regional and continental scale adaptation options, and cross-sectoral interactions between the key sectors driving landscape change in Europe (agriculture, forests, biodiversity, coasts/floodplains, water resources, tourism, urban development and transport). A range of sectoral meta-models will be linked within a common assessment platform that is user-friendly, interactive and web-based to allow the rapid reproduction of climate change impacts by stakeholders themselves. The meta-models will be derived from detailed state-of-the-art models which represent the latest results on impacts of, and vulnerability to, climate change and which are appropriate for multi-scale spatially explicit impact studies. Indicator metrics, which translate the outputs from the integrated models into ecosystem services outcomes, will create a standardised approach across sectors ensuring comparability in quantifying impacts and vulnerability. The integrated assessment platform will use these metrics to identify hotspots of climate change vulnerability and provide the ability to assess adaptation strategies for reducing these vulnerabilities, in terms of their cost-effectiveness and cross-sectoral benefits and conflicts. Methods for reducing uncertainties and increasing the transparency of model and scenario assumptions will be implemented to inform the development of robust policy responses. A series of professionally facilitated workshops will identify stakeholder needs and test an innovative methodology for participatory scenario development specifically geared towards interactive climate change impact and adaptation assessment. Two sets of three workshops at two levels (European and regional) will ensure that the CLIMSAVE methodologies work at different scales and provide for continuity of engagement and mutual learning.

Partners:

N	Partner Legal Name	Country
1	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UK
2	Fundatia pentru Tehnologia Informatiei Aplicata in Mediu, Agricultura si Schimbari Globale	RO
3	Prospex bvba	BE
4	ESSRG Kft.	HU
5	CRANFIELD UNIVERSITY	UK
6	CENTRO DE INVESTIGACION ECOLOGICA YAPLICACIONES FORESTALES CONSORCIO	ES
7	UNIVERSITAET KASSEL	DE
8	MENDELOVA ZEMEDELSKA A LESNICKA UNIVERZITA V BRNO	CZ
9	University of the Aegean-Research Unit	EL
10	Dr Robert TINCH	BE
11	SERI - NACHHALTIGKEITSFORSCHUNGS UND -KOMMUNIKATIONS GmbH	AT
12	THE UNIVERSITY OF EDINBURGH*	UK
13	LUNDS UNIVERSITET	SE
14	AARHUS UNIVERSITET	DK
15	WAGENINGEN UNIVERSITEIT	NL
16	UNIVERSITY OF SOUTHAMPTON	UK
17	Institute of Environment and Sustainable Development in Agriculture, Chinese Academy of Agricultural Sciences	CN
18	University of the Sunshine Coast	AU
19	Victoria University Centre for Strategic Economic Studies	AU
20	National Center for Atmospheric Research	US

Activity Code: ENV.2009.1.1.6.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Methodology for Effective Decision-making on Impacts and AdaptaTION (MEDIATION)

Proposed EC Grant: 3.142.954 €

Abstract:

Assessment of climate change impacts, vulnerability and adaptation requires a combination of generic and context-specific knowledge. Currently, the availability of such knowledge in Europe is fragmented and incomplete. MEDIATION addresses this challenge through six activities: (i) analysis of the decision-making context; (ii) inventory, review and improvement of methods and metrics for impacts and vulnerability analysis; (iii) likewise for costing of impacts and adaptation options; (iv) development of an overarching integrated methodology; (v) development of a flexible, interactive common platform for knowledge sharing; and (vi) dissemination of this knowledge and training. The components of the project will be connected in an iterative fashion, using case studies which combine selected regional, sectoral and cross-sectoral characteristics and policy questions. The consortium combines eleven top European scientific institutions with a high reputation and long experience in impacts, vulnerability and adaptation research and assessment. They represent different regions in Europe with contrasting vulnerabilities, cover the wide array of disciplinary and interdisciplinary knowledge required to assess sectoral and cross-sectoral vulnerabilities, already participate in numerous related European and national research programmes, and have extensive expertise in science-policy interactions. The project will establish an Advisory Group of key international scientific experts and climate change policy makers to strengthen the scientific basis of the project as well as the policy relevance. In addition to scientific innovation, MEDIATION aims at supporting national and international policy development through targeted interactions, including the UNFCCC process (notably the Nairobi Work Programme), and the EU White Paper process, the latter by systematically addressing the components of the 3rd pillar of the EU Green Paper related to knowledge development and sharing.

Partners:

N	Partner Legal Name	Country
1	ALTERRA B.V.	NL
2	European Climate Forum	DE
3	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
4	European Communiny represented by the European Commission – Directorate General Joint Research Centre	BE
5	Potsdam Institut für Klimafolgenforschung	DE
6	The Regional Environmental Center for Central and Eastern Europe	HU
7	SEI OXFORD OFFICE LTD,	UK
8	Suomen ympäristökeskus	FI
9	UNIVERSITA' DEGLI STUDI DI FIRENZE	IT
10	Universidad Politécnica de Madrid	ES
11	WAGENINGEN UNIVERSITEIT	NL

Activity Code: ENV.2010.1.1.6-1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Impacts of Reducing Emissions from Deforestation and Forest Degradation and Enhancing Carbon Stocks

Proposed EC Grant: 3.149.969 €

Abstract:

At COP15 in Copenhagen one outcome was a commitment to develop a mechanism for reducing greenhouse gas emissions from deforestation and forest degradation and enhancing carbon stocks (REDD+). There is, however, only a limited research basis for such a mechanism particularly with regard to the need for understanding and monitoring the impact of REDD+ activities on climate effectiveness, cost efficiency, equity and co-benefits. I-REDD+ will approach these challenges from a truly interdisciplinary perspective. The overall objective will be to obtain an improved understanding of how the implementation of REDD+ mechanisms may 1) reduce emissions of GHG and maintain or enhance existing stocks of carbon in vegetation and soil of various land cover types; 2) impact livelihoods and welfare of local farming communities and differences between communities; 3) impact biodiversity conservation, and 4) provide a realistic framework for monitoring, reporting and verification of REDD+, including the importance of governance and accountability at multiple levels. To complement other research initiatives we propose to work in the uplands of Southeast Asia in the 'Heart of Borneo', Kalimantan, Indonesia, and in the northern parts of Lao PDR and Vietnam, and Yunnan in Southwest China. Rapid land use transitions from forest and shifting cultivation to other, more intensive land use systems and widespread forest degradation are occurring in these areas, making the potential for REDD+ particularly pronounced. Moreover, REDD+ may considerably impact on local economies, because of the high population densities in the region. The partners in I-REDD+ are leading research institutions in Europe and Southeast Asia, international research organizations, an NGO and an SME. The consortium has a strong emphasis on local dissemination and capacity development in order to ensure that project results influence REDD+ policy development at local, national and global level.

Partners:

N	Partner Legal Name	Country
1	Københavns Universitet	DK
2	LEIBNIZ INSTITUT FUER AGRARENTWICKUNG IN MITTEL- UND OSTEUROPA	DE
3	HUMBOLDT-UNIVERSITAT ZU BERLIN	DE
4	UNIVERSITY OF EAST ANGLIA	UK
5	THE UNIVERSITY OF EDINBURGH	UK
6	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
7	UNIVERSITAET BERN	CH
8	Kunming Institute of Botany of Chinese Academy of Sciences	CN
9	Center for Agricultural Research and Ecological Studies	VN
10	National University of Laos	LA
11	Yayasan WWF-Indonesia	ID
12	Center for International Forestry Research	ID
13	INTERNATIONAL CENTRE FOR RESEARCH IN AGROFORESTRY	KE
14	Nordisk Fond for Miljø og Udvikling	DK

Activity Code: ENV.2008.1.1.6.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Implications and risks of engineering solar radiation to limit climate change

Proposed EC Grant: 999.152 €

Abstract:

The overall goal of this project is to significantly increase the level of knowledge about the feasibility and implications of novel options (or "geoengineering concepts"), proposed recently to limit climate change. Among these possibilities, a deliberate manipulation of the radiative budget of the Earth may allow a counterbalancing of the effects of continued greenhouse gas emissions on global temperature, but may also result in undesirable side effects for crucial parts of the Earth system and humankind. Three complex climate models will be used to quantify the effectiveness and side effects of such geoengineering concepts aiming at a reduction of the incoming solar radiation. Simulations of a climate modified through geoengineering will be performed based on IPCC type future emission scenarios. Economic modelling will be used to link benefits and side effects of the studied geoengineering concepts. The results of the study will be discussed with the scientific community, policy- and law-related communities and interested non-governmental organizations (NGOs).

Partners:

N	Partner Legal Name	Country
1	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
2	Commissariat à l'Energie Atomique	FR
3	Universitetet i Oslo	NO
4	Center for International and Environmental Research - Oslo	NO

Activity Code: ENV.2009.1.1.6.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: European responses to climate change: deep emissions reductions and mainstreaming of mitigation and adaptation

Proposed EC Grant: 3.149.708 €

Abstract:

EU action on climate change is now focused on accelerating mitigation efforts, while seeking to reduce risks associated with climate change impacts. To achieve the multiple goals of cutting greenhouse gas emissions, reducing vulnerability to climate impacts, and building mitigative and adaptive capacities, climate action needs to be mainstreamed across all EU policy sectors. As the scale of European policy grows, mitigation and adaptation need increasingly to be integrated. These policies have strong international dimensions. The RESPONSES project addresses EU policy challenges by: developing new global low emissions scenarios, placing EU efforts in a global context; building an approach for assessing EU policies against mitigation and adaptation objectives and for developing alternative policy options; applying this framework in five EU policy sectors (water and agriculture, biodiversity, regional development/infrastructure, health and energy), linked by a set of cross-sectoral integrative activities; and synthesizing the results to new policy strategies. The main outputs of the project will be: a set of global low emission scenarios, differentiated by key countries; options and strategies for integrating mitigation and resilience to climate impacts into EU policies; a validated strategic climate assessment approach. The RESPONSES consortium brings together seven leading European research institutes working on climate change scenarios, modelling, analysis and policy, combining the necessary disciplinary and sectoral expertise. Chinese, Indian and US partners and associates will also participate in the project. The consortium builds on partners' experience in other EU and national projects, including the ADAM project, and will foster close relationships with policymakers. Research outputs will be of direct relevance to the IPCC and to post-2012 international negotiations, as well as supporting implementation of the forthcoming EU White Paper on Adaptation.

Partners:

N	Partner Legal Name	Country
1	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
2	UNIVERSITY OF EAST ANGLIA	UK
3	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
4	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU	NL
5	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
6	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
7	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
8	Institute of Policy and Management (IPM), Chinese Academy of Sciences	CN
9	The Energy and Resources Institute	IN

Activity Code: ENV.2010.1.1.6-2 **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Knowledge transfer and research needs for preparing mitigation/adaptation policy portfolios

Proposed EC Grant: 961.467 €

Abstract:

The proposal's aims are the development of policy portfolios of adaptation/mitigation actions and the prioritization of research needs and gaps for 12 countries (Albania, Armenia, Azerbaijan, Bulgaria, Estonia, Kazakhstan, Moldova, Romania, Russian Federation, Turkey and Ukraine characterized as developing /emerging economies)The aims achievement is based on the following work packages (WP) corresponding to the project's main objectives, Evaluation of available data and information (WP1), Choice and implementation of models (WP2), Scenarios and policy portfolios (WP3) Evaluation of policy portfolios (WP4), Prioritization of research gaps and needs (WP5), Dissemination–Common activities (WP6), Management (WP7)The overall strategy is based on the Development (WP1, WP2, WP3), Transfer (WP6), Evaluation, and Implementation (WP4) of knowledge to high quality personnel (75 scientists) from the aforementioned countries while the research needs and gaps (WP5) will be identified and registered. A Steering Committee and a Scientific Committee will supervise the quality of knowledge transfer. A total number of 92 scientists from 14 countries (plus Austria and Greece) will be involved (at least 20 professors, 28 postdoc, 17 postgraduate and 75 senior researchers). The knowledge transfer (training) includes a combination of tele-teaching and in-situ seminar (total duration 15months, 4months tele-teaching and 1 week final seminar) plus the provision of the necessary means (software licenses, etc).The dissemination activities include a newsletter (more than 12500 recipients in 160 countries), a main website and 15 linked websites (14 countries plus BSEC), official presentations (ad hoc visits) to the Ministerial Meetings and relevant Working Groups (Environment, Energy) of the Black Sea Economic Cooperation Organization (BSEC), a concluding conference, scientific articles, editions and local presentations.The project's duration is 36 months and the budget 956,331.00 €

Partners:

N	Partner Legal Name	Country
1	National and Kapodistrian University of Athens-Energy Policy and Development Centre	EL
2	National Observatory of Athens	EL
3	Institut fuer Hoehere Studien	AT
4	TUBITAK Marmara Research Center	TR
5	Energy Strategy Centre	AM
6	University of Belgrade-Faculty of Mining and Geology	RS
7	Institute of Power Engineering of the Academy of Sciances of Moldova	MD
8	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
9	Finance Academy under the Government of the Russian Federation	RU
10	Institutul de Studii si Proiectari Energetice	RO
11	Polytechnic University of Tirana	AL
12	Scientific-Resaerch Institute"Geotechnological Problems of Oil, Gas and Chemistry"	AZ
13	Black Sea Regional Energy Centre	BG
14	Institute for Energy Saving and Energy Management	UA
15	Scientific-Product Company KAZHIMINVEST	KZ
16	TALLINNA TEHNIKAULIKOOL	EE

Activity Code: ENV.2007.1.1.6.3. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Climate Change - Terrestrial Adaption and Mitigation in Europe

Proposed EC Grant: 3.499.518 €

Abstract:

The project will assess the impacts of agricultural, climate, energy, forestry and other associated land-use policies, considering the resulting feed-backs on the climate system. Geographically explicit biophysical models together with an integrated cluster of economic land-use models will be coupled with regional climate models to assess and identify mitigation and adaptation strategies in European agriculture and forestry. The role of distribution and pressures from socio-economic drivers will be assessed in a geographically nested fashion. Crop/trees growth models operating on the plot level as well as on continental scales will quantify a rich set of mitigation and adaptation strategies focusing on climatic extreme events. The robustness of response strategies to extreme events will further be assessed with risk and uncertainty augmented farm/forest enterprise models. Bioenergy sources and pathways will be assessed with grid level models in combination with economic energy-land-use models. The results from the integrated CC-TAME model cluster will be used to provide: quantitative assessments in terms of cost-efficiency and environmental effectiveness of individual land-use practices; competitive LULUCF mitigation potentials taking into account ancillary benefits, trade-offs and welfare impacts, and policy implications in terms of instrument design and international negotiations. The proposed structure of the integrated CC-TAME model cluster allows us, to provide an evaluation of policy options at a great level of detail for EU25(27) in a post-Kyoto regime, as well as to offer perspectives on global longer-term policy strategies in accordance with the principles and objectives of the UNFCCCC. Close interactions with policymakers and stakeholders will ensure the policy relevance of CC-TAME results.

Partners:

N	Partner Legal Name	Country
1	International Institute for Applied Systems Analysis	AT
2	Universität für Bodenkultur Wien - University of Natural Resources and Applied Life Sciences Vienna	AT
3	Universität Hamburg	DE
4	Institut National de la Recherche Agronomique	FR
5	JOANNEUM RESEARCH Forschungsgesellschaft mbH	AT
6	Center for Ecological Research and Forestry Applications	ES
7	Comenius University	SK
8	Výskumný ústav pôdoznalectva a ochrany pôdy	SK
9	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE	BE
10	EuroCARE GmbH	DE
11	Technical University of Denmark	DK
12	The University Court of The University of Aberdeen	UK
13	Finnish Forest Research Institute	FI
14	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE

Activity Code: ENV.2008.1.1.6.3. **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: Policy Options to engage Emerging Asian economies in a post-Kyoto regime

Proposed EC Grant: 971.518 €

Abstract:

Developing countries are reluctant to make any binding commitment as their per capita emissions are low and climate abatement measures conflict with their main priorities on socio-economic development. The question is if there is a way to simultaneously provide sufficient energy (which is also the main source of GHG emissions), to support poverty alleviation and economic growth and achieve sufficient emission reductions. Finding an answer is the main aim of this project. It may be possible with a combination of policies and measures encompassing from international level to national level supported by committed international cooperation to achieve both the goals together.The main focus of the study is on India and China. The primary objective is to develop a portfolio of policy options including both international and national policies as well as institutional frameworks for international cooperation for these two emerging economies to engage them in climate protection measures under a post-2012 regime. By applying an integrated modeling framework, the study will explore possible multiple pathways which may exist for these countries to contribute into international climate initiatives without compromising their national development priorities. Specific objectives are, 1) developing country-specific integrated modeling framework to analyse policies and identify multiple pathways to achieve socio-economic and climate targets; 2) identifying/designing international climate polices in post-Kyoto regime for future commitments and participations of emerging economies (India and China); 3) designing national polices (in socio-economic sectors, energy and environment) compatible with the global climate targets; 4) designing and quantifying as much as possible the international co-operations needed to make the participation in a post-2012 regime acceptable at least in economic terms; 5) disseminating the results to potential users for use in future negotiations.

Partners:

N	Partner Legal Name	Country
1	Chalmers tekniska hoegskola AB	SE
2	Netherlands Environmental Assessment Agency	NL
3	Indian Institute of Management, Ahmedabad	IN
4	Tsinghua University	CN
5	The Kiel Institute for the World Economy	DE
6	The Center for Energy and Environmental Policy Research(CEEP), Institute of Policy and Management(IPM), Chinese Academy of Sciences(CAS)	CN
7	Institute of Economic Growth, Delhi	IN

Activity Code: ENV.2009.1.1.6.3 **Funding Scheme:** CSA-SA **Duration (Months):** 18

Title: Climate Change and Marine Ecosystem Research Results

Proposed EC Grant: 991.365 €

Abstract:

Although there is no certainty regarding the precise nature and rate of future climate change, even the most moderate scenarios predict a continuing change of the marine environment, with associated major environmental and social impacts. To prepare society for the necessary mitigation and adaptation measures, the awareness of citizens to research results, both certainties and uncertainties, in this specific area should be raised.During the last years, much new information has been gathered in large EU-funded research, but to date this information has not been synthesized nor has it become an important part of public knowledge. The aim of this proposal is to make a synthesis of EU research results on the impacts of climate change on the marine environment and to make this knowledge and its socio-economic consequences better known to European citizens and society at large.Together with expert representatives of major Networks of Excellence, large EU projects and research networks, we will produce a state-of-the-art overview of European research results on the effects of climate change on marine environment. An up-to-date overview of public knowledge and perception on the effects of climate change on marine environments and their socio-economic consequences will be produced by means of polls and questionnaires. The results will be used to identify the main issues to be addressed and the best practices to be used during the outreach activities.Enhancement of public knowledge on climate change impacts on the marine environment, including the socio-economic consequences, will be achieved by means of challenging and innovative tools such as an interactive Pan-European conference at the end of 2010 and a high-quality internet-based portal within an e-learning platform. These outreach activities will build upon recent experience as has been gathered within EU-funded research to communicate with European citizens on impacts of climate change on marine ecosystems.

Partners:

N	Partner Legal Name	Country
1	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
2	FONDATION EUROPEENE DE LA SCIENCE	FR
3	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
4	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
5	DANMARKS METEOROLOGISKE INSTITUT	DK
6	PLYMOUTH MARINE LABORATORY	UK
7	UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
8	UNIVERSITA POLITECNICA DELLE MARCHE	IT
9	HELLENIC CENTRE FOR MARINE RESEARCH	EL
10	NATIONAL UNIVERSITY OF IRELAND, GALWAY	IE
11	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL
12	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
13	UNIVERSITY OF EAST ANGLIA	UK
14	SOPAB BREST SA	FR
15	SIR ALISTER HARDY FOUNDATION FOR OCEAN SCIENCE	UK
16	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
17	UNIVERSITETET I TROMSOE	NO

Activity Code: ENV.2009.1.1.6.4 **Funding Scheme:** CSA-CA **Duration (Months):** 48

Title: CIR²CLE ERA-Net Climate Impact Research & Response Coordination for a Larger Europe2nd Generation ERA-Net: Science meets Policy

Proposed EC Grant: 1.999.331 €

Abstract:

Climate Change is one of the most important issues facing the world in the 21st century and challenges all four (ecological, economical, social and cultural) dimensions of sustainable development. Europe takes a leading role in the necessary response to these challenges. Severe impacts are unavoidable and European adaptation strategies must be supported by a coherent base of knowledge on its key vulnerabilities and response options. Such a base can only be generated by European, national and regional policy-relevant research. It is CIR²CLE`s prime objective to contribute to those efforts by aligning and networking national and regional research programmes and funding organisations. CIR²CLE will support a common agenda on related research needs and share good practices on adaptation with decision makers, thus contributing to the envisaged Clearing House Mechanism at EU level.CIR²CLE (CSA-CA) ERA-Net builds on the experience of previous coordinating and support actions (i.e. CIRCLE CA and SSA) and will develop its activities through a now enlarged network of 24 countries and regions.A flexible work plan will LEAD the consortium to identify policy-relevant Climate Change Impacts, Adaptation and Vulnerability (CCIAV) research needs and DESIGN its transnational research agenda and cooperation activities. CIR2CLE will coordinate and FUND transnational joint research initiatives including joint calls and will furthermore SHARE developed knowledge on key CCIAV research outcomes with decision-makers at all relevant scales.CIR²CLE ERA-Net will contribute to the development of European and national Climate Change response frameworks (e.g. European and National Adaptation Strategies) by facilitating research outputs tailor-made to their needs.International cooperation with non-European countries (e.g. developing countries) as well as the involvement of new EU Member States and candidate countries will be particularly encouraged throughout CIR²CLE's lifetime.

Partners:

N	Partner Legal Name	Country
1	FUNDACAO DA FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA	PT
2	UMWELTBUNDESAMT GMBH	AT
3	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	PT
4	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
5	MINISTERE DE L'ECOLOGIE, DE L'ENERGIE, DU DEVELOPPEMENT DURABLE ET DE L'AMENAGEMENT DU TERRITOIRE	FR
6	MINISTERIO DE CIENCIA E INNOVACION	ES
7	SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT	SE
8	Stichting Kennis voor Klimaat	NL
9	SUOMEN AKATEMIA	FI
10	NATURVARDSVERKET	SE
11	ENVIRONMENTAL PROTECTION AGENCY OF IRELAND	IE
12	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
13	Mariolopoulos-Kanaginis Foundation for Environmental Sciences	EL
14	FORSKNINGSRADET FOR MILJO, AREELA NAERINGAR OCH SAMHAELLSBYGGANDE	SE
15	KORNYEZETVEDELMI ES VIZUGYI MINISZTERIUM	HU
16	Dirección Xeral de I+D+i. Consellería de Innovación e Industría. Xunta de Galicia	ES
17	TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	TR
18	Eesti Teadusfond	EE
19	Israel Ministry of Environmental Protection	IL
20	Eigen Vermogen Flanders Hydraulics	BE
21	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK

Activity Code: ENV.2010.1.2.1-1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Health, environmental change and adaptive capacity: mapping, examining and anticipating future risks of water-related vector-borne diseases in eastern Africa

Proposed EC Grant: 3.378.786 €

Abstract:

The HEALTHY FUTURES project is motivated by concern for the health impacts of environmental changes. HEATHLY FUTURES aims to respond to this concern through construction of a disease risk mapping system for three water-related high-impact VBDs (malaria, Rift valley fever and schistosomiasis) in Africa, accounting for environmental/climatic trends and changes in socio-economic conditions to predict future risk. Concentrating on eastern Africa as a study area, HEALTHY FUTURES comprises a comprehensive, inter-disciplinary consortium of health, environment, socio-economic, disease modelling and climate experts in addition to governmental health departments. To achieve its aims, HEALTHY FUTURES will deploy a bottom-up, end-user/stakeholder-focused approach combining field-, laboratory- and library-based research.

Partners:

N	Partner Legal Name	Country
1	THE PROVOST FELLOWS & SCHOLARS OF THE COLLEGE OF THE HOLY AND UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN	IE
2	THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS	IT
3	UNIVERSITAET SALZBURG	AT
4	SVERIGES METEOROLOGISKA OCH HYDROLOGISKA INSTITUT	SE
5	UNIVERSITY OF NAIROBI	KE
6	AquaTT UETP Ltd	IE
7	International Livestock Research Institute	KE
8	National University of Rwanda	RW
9	UNIVERSITY OF YORK	UK
10	Vector Control Division - Ministry of Health	UG
11	KENYA MEDICAL RESEARCH INSTITUTE	KE
12	TRAC Plus	RW
13	UNIVERSITY OF CAPE TOWN	ZA
14	UNIVERSITY OF DURHAM	UK
15	THE UNIVERSITY OF LIVERPOOL	UK

Activity Code: ENV.2007.1.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 60

Title: Health Effects of Indoor Pollutants: Integrating microbial, toxicological and epidemiological approaches

Proposed EC Grant: 2.756.000 €

Abstract:

Healthy housing and good indoor air quality are important goals of public health.However, biological indoor pollution due to dampness, moisture and mold is an emerging environmental health issue, as recognized in EU indoor air policy documents. Prevalence of dampness is remarkable, and may still increase due to demands of energy savings and extreme weather periods and floods associated with climate change. The exposure may lead to long-term impacts such as asthma. The documentation is strong on association between building mold and health, but the causative agents and disease mechanisms are largely unknown, which impedes recognition of a mold-affected patient in health care. Efficient control and regulation are hampered by the insufficient understanding of these causalities. Understanding of the links between building practices and health is lacking. There is an urgent need for European-wide knowledge to form a basis for establishing building-associated criteria for healthy indoor environments.The aim of this proposal is to clarify the health impacts of indoor exposures on children and adults by providing comprehensive exposure data on biological and chemical factors in European indoor environments, and by combining this information with extensive health data obtained from a field study and from existing population cohorts. Modern microbiological, toxicological and immunological techniques will be used that allow the revealing of the links between the harmful exposures and long term impacts on health, and the mechanisms behind. Data on determinants and distributions of indoor microbial agents will be provided for development of avoidance measures and other dissemination for stakeholders. The study networks experts on environmental epidemiology, microbiology, immunology, toxicology and building sciences. They cover the multidisciplinary field needed for adequate risk assessment. This approach has been successfully applied in the previous research.

Partners:

N	Partner Legal Name	Country
1	Kansanterveyslaitos (National Public Health Institute)	FI
2	Universiteit Utrecht	NL
3	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
4	GSF-Forschungszentrum fuer Umwelt und Gesundheit, GmbH	DE
5	University of Kuopio	FI
6	Universität für Bodenkultur Wien - University of Natural Resources and Applied Life Sciences, Vienna	AT
7	Lunds Universitet	SE

Activity Code: ENV.2008.1.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 60

Title: Risk of brain cancer from exposure to radiofrequency fields in childhood and adolescence

Proposed EC Grant: 3.499.748 €

Abstract:

The rapid worldwide increase in mobile phone use in adolescents and, more recently, children has generated considerable interest in the possible health effects of exposure to radio frequency (RF) fields. The current project aims to assess the potential carcinogenic effects of childhood and adolescent exposure to RF and ELF from mobile telephones on tumours of the central nervous system. The study will include over 1,900 cases of malignant and benign brain tumours aged 10 to 24 years and their respective controls from 11 countries. 1,400 of these cases, from 7 European countries and Israel, will be collected within this grant application. The rest of the cases will be recruited, at no expense to the project, from Australia, Canada and New Zealand.The project will build upon the methodological experience (both in terms of exposure assessment and epidemiological design) collected within the INTERPHONE study. Particular attention will be paid to issues of: potential selection bias related to the very low response rates of population-based controls – by selecting hospitalized controls with specific diagnoses, representative of the general population and unrelated to mobile phone use –; and potential recall errors – by validating questionnaire responses with the help of network operators and repeat questionnaires. Improved exposure indices for RF will be derived taking into account spatial distribution of energy in the brain at different ages; ELF from the phones will also be considered, as well as other important sources of EMF in the general environment of young people.The proposed age range is the most cost efficient to answer the question (because of latency) of brain cancer risk from exposure in childhood and adolescence. The timing of the project is optimal (2009-2010/11) because of the increasing prevalence of heavy use among adolescents and, in the last 5-10 years, children, without hands-free kits, particularly in Southern European countries and Israel.

Partners:

N	Partner Legal Name	Country
1	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
2	Fundació IMIM	ES
3	Universiteit Utrecht	NL
4	FRANCE TELECOM SA	FR
5	Health Protection Agency	UK
6	Medical Center of the Ludwig-Maximilians-University of Munich	DE
7	Medizinische Universität Wien/Medical University of Vienna	AT
8	Università degli Studi di Torino	IT
9	Centre National de la Recherche Scientifique	FR
10	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, SPECIAL ACCOUNT FOR RESEARCH GRANTS	EL
11	Gertner Institute for Epidemiology & Health Policy Research	IL
12	R. Samuel McLaughlin Centre for Population Health Risk Assessment	CA
13	Monash University	AU
14	University of Auckland	NZ

Activity Code: ENV.2009.1.2.1.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Impact of climate change on the fate, transport and risk management of viral pathogens in water

Proposed EC Grant: 2.423.073 €

Abstract:

The use of hydrological models to determine the effects of climate change on the variation in viral flux, and therefore in risk associated with viral disease comprises a novel approach to the management of water-related disease. Tools developed in previous EU Projects will be used to conduct case studies on four selected sites (in Sweden, Spain, Hungary and Brazil) vulnerable to climate change (principally rainfall events), and the empirical baseline data accrued will be used in mathematical models constructed to estimate changes in exposure under defined conditions. Exposure levels will then be used to estimate risk of disease associated with such changes.Tools will include novel methods for processing of sewage, effluent and water samples, for quantitative detection of the target viruses, and for the determination of the source (human or animal) of viral pollution. Models will be adapted from existing epidemiological models for viral disease in the community, or will be generated de novo as required. Bacterial faecal indicator analysis will permit the determination of relationships between virus levels and water quality standards, and also between changes in virus concentration in water and risk to public health activities, such as bathing in polluted water or consumption of shellfish.The use of hydrological models to determine the effects of climate change on the variation in viral flux, and therefore in risk associated with viral disease comprises a novel approach to the management of water-related disease. Tools developed in previous EU Projects will be used to conduct case studies on four selected sites (in Sweden, Spain, Hungary and Brazil) vulnerable to climate change (principally changes in the timing and magnitude of rainfall events), and the empirical baseline data accrued will be used in mathematical models constructed to estimate changes in exposure under defined conditions. Exposure levels will then be used to estimate risk of disease associat

Partners:

N	Partner Legal Name	Country
1	ABERYSTWYTH UNIVERSITY	UK
2	UNIVERSITAT DE BARCELONA	ES
3	Velindre National Health Service Trust	UK
4	UNIVERSITY OF PATRAS	EL
5	UMEA UNIVERSITET	SE
6	Fundação Oswaldo Cruz (Fiocruz) - Instituto Oswaldo Cruz (IOC)	BR
7	ORSZAGOS KORNYEZETEGESZSEGUGYI INTEZET	HU
8	Fundacio Privada Institut Catala de Ciencias del Clima	ES
9	Centers for Disease Control and Prevention	US

Activity Code: ENV.2007.1.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Contaminant mixtures and human reproductive health - novel strategies for health impact and risk assessment of endocrine disrupters

Proposed EC Grant: 3.499.602 €

Abstract:

Disruption of hormonal signalling in fetal life can irreversibly affect human development and reproductive health at a later age. Of considerable concern in Europe is a decline in male semen quality and a high prevalence of congenital malformations and hormone-dependent cancers. Although it appears plausible that environmental chemicals with endocrine activity may be involved in the causation of these disorders, there is no evidence for adverse effects of individual substances at relevant human exposure levels. However, there are indications that combinations of chemicals play a cumulative role. CONTAMED aims to explore the hypothesis that combined exposure to endocrine disrupting chemicals in fetal life may lead to adverse delayed impacts on human reproductive health. To achieve this goal, CONTAMED will combine epidemiological approaches with laboratory science. The work plan for CONTAMED is organised in three major strands focusing on human studies, animal models and in vitro assays including metabolomics. The project will deliver new epidemiological insights into associations between cumulative exposure and reproductive health, improved toxicological risk assessment for the anticipation of reproductive effects of chemicals, validated biomarkers for cumulative exposures and new mechanistic information about the ways in which chemicals may disrupt sexual differentiation during development. CONTAMED will provide the knowledge necessary to set the scene for Europe-wide human health impact studies of cumulative exposures to endocrine active chemicals and their possible role in the deterioration of reproductive health in Europe. Finally, the project will analyze the implications of new scientific findings for the European Environment and Health Action Plan and the Community Strategy for Endocrine Disrupters.

Partners:

N	Partner Legal Name	Country
1	The School of Pharmacy, University of London	UK
2	National Food Institute, Danish Technological University	DK
3	University of Sussex	UK
4	UNIVERSIDAD DE GRANADA	ES
5	Erasmus university Medical Center	NL
6	GREEN Tox GmbH	CH
7	Faust und Backhaus Environmental Consulting GbR	DE
8	University of Bristol	UK

Activity Code: ENV.2007.1.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Developmental effects of environment on reproductive health

Proposed EC Grant: 3.499.034 €

Abstract:

The multidisciplinary research teams in this consortium have played lead roles in establishing that fetal and childhood periods are vulnerable to environmental disruption leading to common reproductive disorders. This proposal will investigate: (1) connections between normal/abnormal perinatal reproductive development and maturation of reproductive function at puberty and in adulthood; (2) systemic gene-environment interactions underlying reproductive disorders taking account of genetic susceptibility, multiple exposures (e.g. mixtures of environmental chemicals) and their timing (perinatal, peripubertal, adult); (3) connection between perinatal reproductive development and later obesity/metabolic disorders. To achieve this we will utilize large cohorts generated in previous EU projects and collect new data from these on reproductive maturation and adult function. Existing genomic and proteomics data, exposure data for >100 potentially toxic environmental chemicals, lifestyle, dietary and medical history information will be analysed using integrative systems biology approaches to pinpoint critical (interacting) factors influencing development. Established animal models will be used to test putative mechanisms by analysing the roles of neuroendocrine regulation, intrauterine growth, time windows of reproductive development, metabolic balance and xenobiotic metabolism. Toxicogenomics, proteomics and metabolomics results from these studies will identify pathways for study in the human cohorts. The overall aim is to create new cause-effect frameworks and knowledge networks to refine research in this critical area and to identify novel biomarkers of exposure and disease. The proposed studies will facilitate prediction and prevention of reproductive disorders and provide large new datasets and exposure-outcome information to improve environmental risk assessment and risk management.

Partners:

N	Partner Legal Name	Country
1	University of Turku	FI
2	Rigshospitalet	DK
3	Medical Research Council	UK
4	UNIVERSIDAD DE CÓRDOBA	ES
5	Université de Rennes 1	FR
6	Institute of Experimental Morphology and Anthropology with Museum - Bulgarian Academy of Sciences	BG
7	Danmarks Tekniske Universitet (Technical University of Denmark)	DK
8	Ecole Nationale Vétérinaire de Nantes	FR
9	University of Rochester	US

Activity Code: ENV.2007.1.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Reproductive effects of environmental chemicals in females

Proposed EC Grant: 2.924.083 €

Abstract:

It is increasingly evident that in-utero exposure to environmental chemicals (ECs), including endocrine disrupting compounds (EDCs) and heavy metals, disturbs reproductive development in wildlife, domestic species and humans. Current thinking is that exposure to ECs is part of the mechanism driving increasing incidences of reproductive dysfunction in males and females, the latter characterised by statistics such as the 2% annual increase in EU breast cancer rates. Studies on a wide range of ECs, including phthalates, PCBs and dioxins, suggest the whole female reproductive tract is sensitive to chemical perturbation. However, many studies have focused on single or small numbers of ECs on short-lived rodent species at high doses. These exposure modalities have no relationship with normal human exposure. We will use a long-lived species, mono-ovulating, the sheep, with a pattern of gestational development similar to humans, exposed long-term to a broad range of ECs at low/environmental concentrations. This will provide a real-life model for human exposure. We will investigate follicle formation, oocyte maturation, ovaries, uteri and mammary glands in fetal sheep exposed in-utero and in adult offspring. Selected ECs preferentially concentrated in fetal tissues will be investigated using sheep and mouse models, the latter primarily for mechanistic studies. Our scale of investigation will encompass epigenetic right up to transgenerational effects of exposure and will utilise cutting-edge methodologies including proteomics, transcriptomics and organotypic cultures. To ensure we understand the link with human reproductive development, we will investigate EC-sensitive genes and proteins identified in the animal models in normal second trimester human fetuses and culture of fetal human ovaries with ECs identified as potential key chemicals in the animal models. This study will establish the potential risks of environmental chemicals on human female reproductive development.

Partners:

N	Partner Legal Name	Country
1	The University Court of The University of Aberdeen	UK
2	Macaulay land Use Research Institute	UK
3	Institut National de la recherche Agronomique	FR
4	Martin Luther University Halle-Wittenberg	DE
5	University of Nottingham	UK
6	Università degli Studi di Milano	IT

Activity Code: ENV.2008.1.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Arctic Health Risks: Impacts on health in the Arctic and Europe owing to climate-induced changes in contaminant cycling

Proposed EC Grant: 3.499.095 €

Abstract:

Long-range transport of contaminants to the Arctic, the resulting exposures observed in Arctic human populations, and impacts of such exposures on human health have been the subject of considerable work in recent years, providing a baseline against which to compare future developments.Global climate change has the potential to remobilize environmental contaminants and alter contaminant transport pathways, fate, and routes of exposure in human populations. The Arctic is particularly sensitive to climate change and already exhibits clear impacts. Thus, research into contaminant exposure and its effects on human health in the Arctic, in comparison with other exposed populations in Europe, presents an opportunity to gain insight into changes that may later impact other areas.The influence of climate change on contaminant spreading and transfer and the resultant risk to human populations in the Arctic and other areas of Europe will be studied by:1)
affect the long-range transport and fate of selected groups of contaminants, and possible implications for the re-distribution of contaminants (geographically and between relevant environmental media). This will involve modelling, utilizing the information base that exists on the distribution of such contaminants in the Arctic and other areas of Europe;2)
that changing pathways and climatic conditions will have on contaminant uptake and transfer within food webs, leading to foods consumed by humans. This will involve experimental work, process studies and targeted analytical studies, the latter focussed on supporting the modelling work and process studies related to human exposure to contaminants; 3)
human health, aimed at determining how climate-mediated changes in the environmental fate of selected groups of contaminants will result in changes in exposure of human populations, in the Arctic and in selected areas of Europ

Partners:

N	Partner Legal Name	Country
1	Arctic Monitoring and Assessment Programme	NO
2	Stockholms universitet	SE
3	Aarhus Universitet	DK
4	Alfred-Wegener-Institut für Polar- und Meeresforschung	DE
5	Lancaster University	UK
6	University Centre in Svalbard	NO
7	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
8	IVL Swedish Environmental Research Institute Ltd	SE
9	University of Oulu	FI
10	Norsk institutt for luftforskning	NO
11	Jožef Stefan Institute	SI
12	O.A.Sys - Ocean Atmosphere Systems, Dres. Karcher, Kauker, Schnur GbR	DE
13	Max Planck Institute for Chemistry	DE
14	Swiss Federal Insitute of Technology	CH
15	Masaryk University	CZ
16	Norwegian Institute of Public Health	NO
17	University of Tromsø	NO
18	Northwest Public Health Research Center (Russian Ministry of Health and Sciences)	RU
19	Environment Canada, Aquatic Ecosystem Protection Research Division	CA
20	Arctic Ecosystem Health Freshwater Institute, Department of Fisheries and Oceans	CA
21	Health Canada, Safe Environments Programme Environmental Health	CA

Activity Code: ENV.2008.1.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Climate change, Environmental contaminants and Reproductive health

Proposed EC Grant: 2.377.753 €

Abstract:

The research project investigates the possible impact of global climate change on reproductive health in Arctic and three local European populations. The key questions to be addressed are, first, how may climate change impact on human exposure to widespread environmental contaminants and, second, how may contaminants impact on occurrence of reproductive disorders as sensitive indicators of health? To provide affirmative answers to these questions the proposal will (i) identify and describe mechanisms by which a changing climate may affect the exposure of arctic and other human populations to contaminants through change in chemical use and emissions, delivery to the arctic ecosystem as well as processing within the arctic physical environment and human food chain. This work relies on modeling of existing data(ii) expand the existing knowledge database on human exposure to polybrominatedbiphenylethers, perfluorinated surfactants and phthalates by analyses of 1200 biobanked serum samples collected in a EU FP5 project (iii) increase the limited knowledge on links between human exposure to contaminants and reproductive health. This work relies on a large existing parent-child-cohort, where a follow-up survey provide new data that are fed into risk assessment(iv) perform reviews of experimental and epidemiological literature to identify critical reproductive effects and exposure-response data for selected compounds as input to the risk assesment(v) integrate data on relative climate induced changes in contaminant mobility and distribution and links between contaminant exposure and reproductive health into a risk evaluation providing insight into possible future risk scenarios related to global climate change

The project draws upon a network of experts in climate modelling and in experimental, epidemiological and risk assessment methodologies and builds upon four established cohorts in Greenland, Sweden, Warsaw and Ukraine.

Partners:

N	Partner Legal Name	Country
1	Aarhus University Hospital, Århus Sygehus	DK
2	Lunds universitet	SE
3	Governing Council of the University of Toronto	CA
4	Greenland Institute of Natural Resources	GL
5	National Institute of Hygiene	PL
6	Kharhiv State Medical University	UA
7	Ente per le Nuove tecnologie, l'Energia e l'Ambiente	IT
8	National Institute for Public Health and the Environment	NL

Activity Code: ENV.2009.1.2.1.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Quantifying Weather and Climate Impacts on Health in Developing Countries

Proposed EC Grant: 3.499.403 €

Abstract:

One of the most dramatic and immediate impacts of climate variation is that on disease, especially the vector-borne diseases that disproportionally affect the poorest people in Africa. Although we can clearly see that, for example, an El Nino event triggers Rift Valley Fever epidemics, we remain poor at understanding why particular areas are vulnerable and how this will change in coming decades, since climate change is likely to cause entirely new global disease distributions. This applies to most vector borne disease. At the same time, we do not know currently the limit of predictability of the specific climate drivers for vector-borne disease using state-of-the-art seasonal forecast models, and how best to use these to produce skilful infection-rate predictions on seasonal timescales.The QWeCI project thus aims to understand at a more fundamental level the climate drivers of the vector-borne diseases of malaria, Rift Valley Fever, and certain tick-borne diseases, which all have major human and livestock health and economic implications in Africa, in order to assist with their short-term management and make projections of their future likely impacts. QWeCI will develop and test the methods and technology required for an integrated decision support framework for health impacts of climate and weather. Uniquely, QWeCl will bring together the best in world integrated weather/climate forecasting systems with heath impacts modelling and climate change research groups in order to build an end-to-end seamless integration of climate and weather information for the quantification and prediction of climate and weather on health impacts in Africa.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF LIVERPOOL	UK
2	CENTRE DE SUIVI ECOLGIQUE	SN
3	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
4	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS.	UK
5	Fundació Privada Institut Català de Ciències del Clima	ES
6	THE ABDUS SALAM INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS	IT
7	International Livestock Research Institute	KE
8	Institut Pasteur de Dakar	SN
9	Kwame Nkrumah University of Science and Technology (KNUST)	GH
10	Universite Cheikh Anta Diop	SN
11	University of Malawi (Polytechnic & College of Medicine)	MW
12	UNIVERSITAET ZU KOELN	DE
13	UNIVERSITY OF PRETORIA	ZA

Activity Code: ENV.2008.1.2.1.3. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: European Network on Noise And Health

Proposed EC Grant: 993.852 €

Abstract:

This proposal puts forward plans to establish a research network of experts on noise and health in Europe. This network will establish future research directions and policy needs in Europe. The network will review the existing literature on environmental noise exposure and health focussing on the consolidation of existing state of the art knowledge and the identification of gaps in the evidence and future research needs and hypotheses to be tested. In the network we will train junior researchers in noise and health through setting up an exchange network across Europe. The network will focus on noise exposure assessment in health studies in order to build more complex analytical models of noise and health effects that take into account moderating factors including the joint effects of air pollution and noise. A specific function of the network will be to establish communication between researchers on noise and researchers on air pollution. We will improve the measurement of health outcomes relevant to noise research and strengthen the available methodologies for future research, by extending analyses on existing research taking advantage of the large EU-funded RANCH and HYENA studies and relevant national studies. We will develop novel designs for research on noise and health to provide to the EU a new strategy for the development of noise and health research in the future. We will disseminate the results to the EU, to national governments, to fellow researchers, and other stakeholders.

Partners:

N	Partner Legal Name	Country
1	Queen Mary and Westfield College	UK
2	Azienda Unita Sanitaria Locale Roma E	IT
3	Federal Environment Agency (Umweltbundesamt)	DE
4	BERRY ENVIRONMENTAL LTD	UK
5	Stockholms universitet	SE
6	Universiteit Gent	BE
7	AGENZIA REGIONALE PER LA PROTEZIONE AMBIENTALE DEL PIEMONTE	IT
8	Universitaet Stuttgart	DE
9	Forschungsgesellschaft für Arbeitsphysiologie und Arbeitsschutz e.V.	DE
10	Karolinska Institutet	SE
11	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU	NL
12	Manchester Metropolitan University	UK
13	Centre for Built Environment, University of Gävle	SE
14	Imperial College of Science, Technology and Medicine	UK
15	EUROPEAN COMMISSION, DIRECTORATE GENERAL JOINT RESEARCH CENTRE, INSTITUTE FOR HEALTH AND CONSUMER PROTECTION	BE
16	Institute of Transport Economics	NO
17	Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO (Established by law)	NL
18	Institut National de Recherche sur les Transports et leur Sécurité	FR
19	Cardiff University	UK
20	University of Belgrade School of Medicine	RS
21	Helmholtz Zentrum München,German Research Center for Environmental Health (GmbH)	DE
22	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
23	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
24	Medizinische Universität Innsbruck	AT
25	Agenzia Regionale per la Protezione Ambientale della Toscana	IT
26	Adam Mickiewicz University	PL
27	Deutsches Zentrum fuer Luft- und Raumfahrt e.V.	DE
28	Memolix Environmental Consultants	IT
29	Technische Universität Berlin	DE

Activity Code: ENV.2008.1.2.1.4. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Genomics biomarkers of environmental health

Proposed EC Grant: 3.500.000 €

Abstract:

This project concerns the first large-scale application of the full range of –omics technologies in a population study aiming ata) the discovery and validation of novel biomarkers predictive of increased risks of a number of chronic diseases,b) the exploration of the association of such biomarkers with environmental exposures, including high-priority pollutants and emerging exposures, andc) the discovery and validation of biomarkers of exposure to the above and other high-priority environmental exposures.The project will utilise three existing prospective cohorts. Cancer-related -omics biomarkers will be developed using a case-control study nested within 2 cohorts which contain biosamples collected prior to disease diagnosis, exposure and followup health information. Biomarkers will be compared in 600 breast cancer cases, 300 NHL cases and equal numbers of matched controls, to evaluate their risk predictivity. Biomarkers of chronic diseases which establish themselves in early childhood but persist into adult life will be evaluated using a mother-child cohort. Biosamples collected from 600 children at birth and at ages 2 and 4 years will be analysed and results compared with clinical indices obtained at age 4. Thanks to the availability of repeat samples, collected over a wide range of time intervals, the intra-individual variation of biomarkers and their relationship with disease progression will be evaluated.Biomarker search will utilize state-of-the-art metabonomics, epigenomics, proteomics and transcriptomics, in combination with advanced bioinformatics and systems biology tools. It will also include technical validation of -omics technology's utilisation with biobank samples. Exposure assessment will utilize exposure biomarkers, questionnaires, modelling and GIS technology. Additional data on exposure, biomarkers (including SNP data) and health indices, available through other projects, will be utilised, thus generating substantial added value.

Partners:

N	Partner Legal Name	Country
1	National Hellenic Research Foundation	EL
2	Maastricht University	NL
3	Imperial College of Science, Technology and Medicine	UK
4	Umeå University	SE
5	Centro per lo Studio e la Prevenzione Oncologica	IT
6	University of Crete	EL
7	Universiteit Utrecht	NL
8	Istituto Superiore di Sanità	IT
9	National Public Health Institute	FI
10	University of Leeds	UK

Activity Code: ENV.2008.1.2.1.4. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: The development, validation and implementation of human systemic Toxic Equivalencies (TEQs) as biomarkers for dioxin-like compounds

Proposed EC Grant: 2.706.034 €

Abstract:

Chlorinated dioxins and biphenyls (PCBs) commonly occur in the human food chain and can still be detected at levels that might cause long term health effects. Exposure to dioxin-like compounds involves a complex mixture with a common mechanism of action involving endocrine, developmental, carcinogenic, immuno and neurological effects. Risk assessment is done with an additive model for mixture toxicity. Based on this the Toxic Equivalency (TEQ) concept was developed as a biomarker for exposure and risk. TEQs are the sum of congener-specific toxic equivalency factors (TEFs) multiplied by the concentration in a matrix, e.g. blood. TEF values are a composite quantitative value from a range of biomarkers that are congener and endpoint specific. Present human TEQs have been derived from oral administration experiments providing 'intake' TEFs. Regulatory authorities frequently use 'intake' TEQs for blood and tissues considering it a biomarker for exposure or effect. Experimental evidence shows that using 'uptake' TEQs as 'systemic' biomarkers may lead to misinterpretation of risks. Therefore, development and validation of 'systemic' TEFs and TEQs as biomarkers is necessary. Major objectives of SYSTEQ are: i) establish 'systemic' TEFs and TEQs, ii) identify novel quantifiable biomarkers with newest molecular methods, e.g. genetic fingerprinting profiles, iii) extra focus on effects in peripheral lymphocytes as biomarkers, iv) identify differences between humans and experimental species. The 'systemic' TEFs and TEQs from SYSTEQ will be used in conjunction with results of the completed EU PCBRISK project, in which two populations from Slovakia with very different exposure were studied. Individual blood levels and different biomarkers are already available. Results of SYSTEQ are also going to be used to establish international consensus values of 'systemic' TEFs at WHO level, facilitating the global use of 'systemic' TEQs as biomarkers of effect and exposure.

Partners:

N	Partner Legal Name	Country
1	Universiteit Utrecht	NL
2	Umea University	SE
3	Karolinska Institutet	SE
4	Universitaet Kaiserslautern	DE
5	Veterinary Research Institute	CZ
6	World Health Organization	CH
7	Slovenska zdravotnicka univerzita v Bratislave	SK

Activity Code: ENV.2008.1.2.1.5. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: The impact of climatic and environmental factors on personal ultraviolet radiation exposure and human health

Proposed EC Grant: 3.497.619 €

Abstract:

We will determine the adverse and beneficial health effects of personal UVR exposure and their relationships with climatic and environmental factors that modify the solar UVR spectrum. Date and time stamped personal electronic wristwatch dosimeters will be worn to measure individual UVR exposure over extended periods. Satellite and ground station data will be gathered to establish terrestrial UVR spectral irradiance, cloud, albedo, ozone and aerosol data, at the locations and times of exposure.These dosimeters will be used in field studies in working, water, beach and snow situations in four different countries, including studies with children. The personal dosimetric data combined with diary, ground station and satellite data will show the influence of behaviour, meteorological, environmental and cultural factors on individual UVR exposure doses. The interaction between the personal exposure parameters and the satellite and ground station data will enable the development of a humanized radiative transfer model to assess the future impact of climate change on UVR exposure. This is in contrast to previous models that assume exposure to a given fraction of ambient UVR. We will also determine the effect of UVR exposure on DNA damage and immunity in field conditions. Furthermore, the relationship between UVR exposure and vitamin D status will be determined, thus enabling a direct correlation between important risk and benefit biomarkers. We will also determine the spectral relationship between erythema, UVR-induced immunosuppression and vitamin D status. These studies will determine the value of erythema as a biological weighing function for UVR related health outcomes. Finally, we will perform a systematic review of a wide range of health outcomes from UVR exposure, and integrate our personal UVR exposure and modelling data into existing epidemiological data to estimate measurement error and any effects on current UVR dose response relationships and health outcome.

Partners:

N	Partner Legal Name	Country
1	King's College London	UK
2	Bispebjerg Hospital	DK
3	Medical University of Lodz	PL
4	Karolinska Institutet	SE
5	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
6	University of Veterinary Medicine	AT
7	Health Protection Agency	UK
8	Danish Meteorological Institute	DK

Activity Code: ENV.2008.1.2.1.6. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: ENVIRONMENTAL HEALTH RISKS IN EUROPEAN BIRTH COHORTS

Proposed EC Grant: 919.424 €

Abstract:

The overall aim of ENRIECO is to advance our knowledge on specific environment and health causal relationships in pregnancy and birth cohorts by providing support to exploitation of the wealth of data generated by past or ongoing studies funded by the EC and national programmes. Specific objectives are to make inventories of birth cohorts, assure quality and interoperability of exposure, health and exposure-response data, obtain data access, build databases, conduct analysis, make recommendations for data collection in the future to improve environment-health linkages and information, and disseminate the information. The project will bring together over 30 pregnancy and birth cohorts and information on around 250,000 newborns, infants and children from across Europe. The outcome will be structuring and consolidation of often fragmented data from various studies undertaken throughout Europe and will improve the knowledge base for FP 7 Cooperation Work Programme 2008: Environment (including climate change) environment and health linkages. Data regarding environment-health causal relationships will be more readily available in a form useful for policy makers.

Partners:

N	Partner Legal Name	Country
1	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
2	Institut National de la Santé et de la Recherche Médicale	FR
3	Universiteit Utrecht	NL
4	Helmholtz Zentrum München,German Research Center for Environmental Health (GmbH)	DE
5	Institut National de la Santé et de la Recherche Médicale	FR
6	University of Crete	EL
7	Karolinska Institutet	SE
8	Charité - Universitätsmedizin Berlin	DE
9	Aarhus University Hospital, Aarhus Sygehus	DK

Activity Code: ENV.2009.1.2.2.1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Transport related Air Pollution and Health impacts – Integrated Methodologies for Assessing Particulate Matter

Proposed EC Grant: 6.915.744 €

Abstract:

TRANSPHORM brings together leading air quality and health researchers and users to improve the knowledge of transport related airborne particulate matter (PM) and its impact on human health and to develop and implement assessment tools for scales ranging from city to Europe. Over four years, TRANSPHORM will aim to develop and implement an integrated methodology to assess the health impacts of PM air pollution covering the whole chain from emissions to disease burden. The objectives will be:(i) To improve our understanding of transport sources of size-resolved and speciated PM air pollution including non-exhaust, shipping, aviation and railways;(ii) To improved emission factors of ultrafine particle number (PN0.1) and mass fractions of PM1, PM2.5 and PM10 for key transport sources;(iii) To conduct targeted measurements in Rotterdam, Helsinki and Thessaloniki for source apportionment, exposure assessment and model evaluation;(iv) To quantify exposure to airborne PM in urban environments resulting from traffic, road, shipping, rail and aviation;(v) To improve and integrate air quality dispersion and exposure models for urban and regional scales including long-range transport;(vi) To develop new concentration-response (CRF) linking long and short-term ambient residential exposure to size-resolved and speciated PM with key health endpoints;(vii) To develop and implement integrated assessment tool to investigate and analyse the whole chain of processes for selected cities and Europe;(viii) To incorporate micro-environmental PM concentrations, time-activity patterns, and estimates of internal dose into the health impact assessment;(ix) To conduct integrated health assessment of selected European cities;(x) To design and implement mitigation and adaptation strategies for European and international policy refinement and development;(xi) To exploit the results of TRANSPHORM through global dissemination and interactions with stakeholders.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF HERTFORDSHIRE HIGHER EDUCATION CORPORATION	UK
2	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
3	UNIVERSITEIT UTRECHT	NL
4	NORSK INSTITUTT FOR LUFTFORSKNING	NO
5	ILMATIETEEN LAITOS	FI
6	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
7	TRANSPORT & MOBILITY LEUVEN NV	BE
8	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
9	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
10	INSTITUTE OF OCCUPATIONAL MEDICINE	UK
11	IVL SVENSKA MILJOEINSTITUTET AB	SE
12	KANSANTERVEYSLAITOS	FI
13	METEOROLOGISK INSTITUTT	NO
14	HELMHOLTZ ZENTRUM MUENCHEN DEUTSCHES FORSCHUNGSZENTRUM FUER GESUNDHEIT UND UMWELT GMBH	DE
15	KAROLINSKA INSTITUTET	SE
16	DANMARKS METEOROLOGISKE INSTITUT	DK
17	IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE	UK
18	FUNDACIO CENTRE DE RECERCA EN EPIDEMIOLOGIA AMBIENTAL - CREAL	ES
19	INSTITUTE OF PHYSICS	LT
20	UNIVERSITAET STUTTGART	DE
21	URM - Útvar rozvoje hl.mesta Prahy	CZ

Activity Code: ENV.2010.1.2.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: On the reduction of health effects from combined exposure to indoor air pollutants in modern offices

Proposed EC Grant: 2.867.596 €

Abstract:

Modern offices usually have several sorts of electronic equipment and other dominant heat sources indoors, making them almost unaffected by local climatic conditions. Air conditioning and mechanical ventilation coupled with the often excessive levels of artificial lighting, require high levels of energy. At the European Union (EU) level, the Directive 91/2002, (EPBD), is a major step towards rational energy use. An important issue to consider regards IAQ. It is anticipated that developments in the field of energy use in offices will lead to its reduction through various strategies, including comfort/health standards and ventilation levels. In such a context and given the technological evolution of the functions and services accomplished in offices, it is time to address the issue of IAQ in offices. The participants of this proposal are fully aware of the issues described above and, particularly, of the difficulties to launch solid policies on IAQ, both generally and specifically in offices, related simultaneously to ventilation, energy and health. The uncertainties that justify those difficulties are derived from the lack of information regarding the toxicity of a number of compounds that pollute indoor air. Furthermore, the lack of knowledge of their indoor concentrations and exposures in the current conditions means that the real impact of these compounds on IAQ, comfort/ health and productivity in offices is unknown. The overall objective of the OFFICAIR proposal is twofold. Firstly, to establish a framework that will provide new knowledge in terms of databases, modelling tools and assessment methods towards an integrated approach in assessing the health risk from indoor air pollution, focusing on modern office buildings. Secondly, to support current EU policies, such as, the Thematic Strategy on Air Pollution and the European Environment and Health Strategy and Action Plan.

Partners:

N	Partner Legal Name	Country
1	EIDIKOS LOGARIASMOS KONDYLION EREUNAS PANEPISTIMIOU DYTIKIS MAKEDONIAS (UNIVERSITY OF WESTERN MACEDONIA)	EL
2	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
3	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE
4	DET NATIONALE FORSKNINGSCENTER FORARBEJDSMILJO	DK
5	UNIVERSITY OF YORK	UK
6	UNIVERSITA DEGLI STUDI DI MILANO	IT
7	INSTITUTO DE ENGENHARIA MECANICA	PT
8	KING'S COLLEGE LONDON	UK
9	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
10	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT	FR
11	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
12	ACCIONA INFRAESTRUCTURAS S.A.	ES
13	EÖTVÖS LORÁND TUDOMÁNYEGYETEM	HU

Activity Code: ENV.2007.1.2.2.2. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: European Study of Cohorts for Air Pollution Effects

Proposed EC Grant: 5.858.974 €

Abstract:

European policy making is hampered by considerable uncertainty about the magnitude and nature of the impacts of long term exposure to air pollution on human health. ESCAPE is a collaboration of more than 30 European cohort studies including some 900,000 subjects. It is aimed at quantifying health impacts of air pollution and at reducing uncertainty. ESCAPE will also test new hypotheses on specific health effects of air pollution. ESCAPE will focus on effects of within-city, within-area and within-country contrasts in air pollution, and so will enable Europe to remain at the cutting edge worldwide for further development and application of methods which have been largely pioneered here. ESCAPE will make measurements of airborne particulate matter and nitrogen oxides in selected regions in Europe. It will measure the chemical composition of the collected particles and it will store samples for future chemical and toxicological analyses. Escape will focus on four categories of cohort studies: 1. Pregnancy outcome and birth cohort studies; 2. Studies on respiratory disease in adults; 3. Studies on cardiovascular disease in adults; 4. Studies on cancer incidence and mortality. ESCAPE responds to a specific FP7 call for a large collaborative project in the Environment and Health program. The call asks for research within existing cohorts among children as well as elderly adults as sensitive groups, and it asks to consider the role of other environmental exposures such as noise, and of biomarkers and gene-environment interactions. Whereas ESCAPE will focus, as requested, on air pollution and to a lesser extent traffic noise exposures, studies have been included which contain a wealth of data on other exposures (e.g., drinking water contaminants), on biomarkers and on genetics.ESCAPE will actively engage stakeholder organisations and policy makers so that results can be swiftly translated to support policy development and implementation.

Partners:

N	Partner Legal Name	Country
1	Utrecht Universiteit	NL
2	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
3	University of Crete	EL
4	Azienda Unità Sanitaria Locale Roma E	IT
5	University of Basel	CH
6	Fundació Centre de Recerca en Epidemiologia Ambiental	ES
7	Imperial College of Science, Technology and Medicine	UK
8	The University of Manchester	UK
9	GSF - Forschungszentrum fuer Umwelt und Gesundheit, GmbH	DE
10	Institut für Umweltmedizinische Forschung	DE
11	University of Duisburg-Essen	DE
12	University of Ulm	DE
13	Danish Cancer Society	DK
14	Norwegian Institutute of Public Health	NO
15	Karolinska Institutet	SE
16	Umea University	SE
17	Institut de Veille Sanitaire	FR
18	Institut National de la Santé et de la Recherche Médicale	FR
19	National Public Health Institute	FI
20	Vytautas Magnus University (VMU)	LT
21	National Institute of Environmental Health	HU
22	Institute of Occupational Medicine	UK
23	National Insitute for Public Health and the Environment	NL
24	Medical Research Council	UK
25	National Taiwan University	TW

Activity Code: ENV.2009.1.2.2.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Sound Exposure and Risk Assessment of Wireless Network Devices

Proposed EC Grant: 2.989.605 €

Abstract:

Public exposure to electromagnetic fields in the radio frequency spectrum has increased dramatically in the last two decades. Although research has mainly focused on the exposure and health risk evaluations of cellular networks and mobile phones in recent years, studies on the effects of the pervasive and prolonged EMF exposure on human health due to the exponential growth of wireless network device usage in homes, offices and schools are lacking.The proposed project SEAWIND aims (1) to provide a comprehensive assessment of the incident field exposure in typical living scenarios such as in homes, offices and classrooms by installed wireless local area networks (WLAN or WiFi) or wireless metropolitan area networks (WMAN or WiMAX), body-mounted and body-worn wireless personal area networks (WPAN) and WLAN devices, and specific wireless applications in industry, e.g., novel RFID logistic applications; (2) to numerically determine the induced fields in the human body using a set of models representing the human population; and (3) to screen potential biological sensitivities at the molecular, developmental and functional levels in cells. The necessary technology will also be developed to accurately assess the exposures for device compliance testing and to accurately assess in situ exposures. The comprehensive risk assessment will be based on the findings of this project, addressing the specificity of the exposure of wireless networks combined with the current body of literature on biological interactions of EMF covering the entire radio-frequency spectrum. A comparison to other exposures such as cellular mobile devices, base stations, TV, Radio, etc will also be included.

Partners:

N	Partner Legal Name	Country
1	Foundation for Research on Information Technologies in Society	CH
2	INTERDISCIPLINARY INSTITUTE FOR BROADBAND TECHNOLOGY	BE
3	AALBORG UNIVERSITET	DK
4	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
5	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
6	UNIVERSITAET BASEL	CH
7	DIALOGIK GEMEINNUETZIGE GESELLSCHAFT FUER KOMMUNIKATIONS- UND KOOPERATIONSFORSCHUNG mbH	DE
8	Schmid & Partner Engineering AG	CH

Activity Code: ENV.2010.1.2.2-2 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Fate and effects of cytostatic pharmaceuticals in the environment and the identification of biomarkers for and improved risk assessment on environmental exposure

Proposed EC Grant: 2.583.033 €

Abstract:

CytoThreat addresses the need to assess the risks of pharmaceuticals released in the environment, focusing on cytostatic drugs because they are highly hazardous compounds due to their genotoxic properties which may cause unexpected long term effects. Their release in the environment may lead to systemic ecological effects and increased cancer incidence, reduced fertility and malformations in the offspring in humans. The occurrence, distribution and fate of selected widely used cytostatics in different aquatic matrices, their acute and chronic toxicity and impact on the stability of the genetic material in a variety of aquatic organisms representing different trophic levels is addressed to provide data sets necessary for scientifically based risk assessment. Special emphasis is put on the combined effects of environmentally relevant mixtures. A combination of state-of-the art analytical chemistry, in vivo and in vitro systems, and 'OMICS' technologies is applied. In vivo studies with zebrafish models aim at identifying linkages between the genomic profiles, exposure conditions and adverse effects in vertebrates to identify molecular biomarkers for adverse effects of specific groups of cytostatics to be used as diagnostic markers and for predicting synergistic effects of combined exposures. Comparative in vitro genotoxicity and transcriptomic studies with zebrafish and human derived cells will provide additional information for the extrapolation of toxicological data to humans. Comparisons with the hazardous effects of other groups of pharmaceuticals will provide knowledge on the magnitude of the problem. CytoThreat will generate new knowledge on environmental and health risks of cytostatics and provide objective arguments for recommendations and regulations. Partners form 5 member states and 2 associated countries with complementary expertise in analytical chemistry, aquatic and genetic toxicology, and genomics and bioinformatics are involved.

Partners:

N	Partner Legal Name	Country
1	NACIONALNI INSTITUT ZA BIOLOGIJO	SI
2	INSTITUT JOZEF STEFAN	SI
3	MEDIZINISCHE UNIVERSITAET WIEN	AT
4	SZENT ISTVAN EGYETEM	HU
5	SECONDA UNIVERSITÀ DEGLI STUDI DI NAPOLI	IT
6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
7	Institut za medicinska istrazivanja i medicinu rada	HR
8	Institute for Multidisciplinary Research	RS
9	RR&CO. Knowledge Centre Ltd.	SI

Activity Code: ENV.2010.1.2.2-2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Ecological and human health risk assessments of antibiotics and anti-cancer drugs found in the environment.

Proposed EC Grant: 2.798.900 €

Abstract:

A consortium of world-class scientists from both academia and industry has been assembled to assess the risks to wild animals and humans posed by environmental exposure to pharmaceuticals. Their expertise will be supplemented by an advisory group consisting of representatives of all stakeholders. This project will concentrate on two classes of human pharmaceuticals, namely antibiotics and anti-cancer drugs, because there are good reasons for thinking that these could be of particular concern. In order to conduct sound risk assessments, including providing estimates of uncertainty, it will be necessary to obtain accurate data on both exposure concentrations and effects levels. Hence, new data on both environmental concentrations and effects on aquatic organisms will be produced during the project. The comparative sensitivities of embryos and adults will be determined, and used to reduce uncertainty in the risk assessments. The stable transformation products of the selected pharmaceuticals will also be investigated. All stakeholders and beneficiaries will be represented in the project, so that results are rapidly and reliably transferred to all interested parties. A prototype web-based classification system will be developed during the project with the intention of enabling all EU citizens to make their own informed decisions about the risk posed by human pharmaceuticals to their health and to the health of the environment. The results will able EU regulators and policy makers to make better informed decisions on the issue of pharmaceuticals in the environment.

Partners:

N	Partner Legal Name	Country
1	BRUNEL UNIVERSITY	UK
2	ASSOCIATION POUR LA RECHERCHE ET LE DEVELOPPEMENT DES METHODES ET PROCESSUS INDUSTRIELS - ARMINES	FR
3	GOETEBORGS UNIVERSITET	SE
4	STICHTING KATHOLIEKE UNIVERSITEIT	NL
5	IVL SVENSKA MILJOEINSTITUTET AB	SE
6	UNIVERSITAETSKLINIKUM FREIBURG	DE
7	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
8	ECOLE DES HAUTES ETUDES EN SANTE PUBLIQUE	FR
9	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
10	ECOLOGIC INSTITUT gemeinnützige GmbH	DE
11	INSTITUT FUR SOZIAL OKOLOGISCHE FORSCHUNG GMBH	DE
12	DANMARKS TEKNISKE UNIVERSITET	DK
13	ANJOU RECHERCHE	FR

Activity Code: ENV.2009.1.2.3.1 **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: European coordination action on human biomonitoring

Proposed EC Grant: 3.999.000 €

Abstract:

This proposal has been elaborated by a consortium of 35 partners coming from 27 European countries and including scientists, government institutions and authorities, NGOs and industry. The main goal is to develop a coherent approach to HBM in Europe as requested by ACTION 3 of the EU Environment and Health Action Plan through coordination of ongoing and planned HBM activities. The project will exploit existing and planned HBM projects and programmes of work and capabilities in Europe. The consortium will investigate what is needed to advance and improve comparability of HBM data across Europe. Work prepared under DG Research and DG Environment activities dealing with development, validation and use of novel biomarkers including non-invasive markers and effect markers will be exploited. Through close collaboration with similar initiatives in the field of Health - such as the EU Health Examination Survey - appropriate economies and efficiencies will be assessed. Key issues such as Ethics and human Biobanks will be addressed.The project will deliver a number of key outputs including: 1. of Concept and/or Demonstration project assessing the feasibility of a coordinated approach, including strategies for data interpretation & integration with environmental and health data. 2. dissemination of information, results and key messages to all stakeholders from the public to policy makers 3. capacity building will aim to promote knowledge and experience exchange and development in the field of HBM within Europe A common understanding within all parties involved on the potential of HMB in supporting and evaluating current/future policy making (including e.g. REACH) and for environmental health awareness raising will be promoted This project aim is to significantly advance the process towards a fully operational, continuous, sustainable and scientifically sound EU HBM programme.

Partners:

N	Partner Legal Name	Country
1	BiPRO GmbH	DE
2	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
3	UMWELTBUNDESAMT	DE
4	INSTITUTO DE SALUD CARLOS III	ES
5	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE
6	HEALTH PROTECTION AGENCY HPA	UK
7	Institut de veille sanitaire	FR
8	Københavns Universitet	DK
9	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
10	INSTITUT JOZEF STEFAN	SI
11	BGFA - Research Institute of Occupational Medicine, German Social Accident Insurance, Ruhr-University Bochum	DE
12	Environmental Health Sciences International	NL
13	Federale Overheidsdienst Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu	BE
14	UMWELTBUNDESAMT GMBH	AT
15	CENTRUL DE MEDIU SI SANATATE (ENVIRONMENTAL HEALTH CENTER)	RO
16	VYTAUTO DIDZIOJO UNIVERSITETAS	LT
17	Institute for Medical Research and Occupational Health	HR
18	Laboratoire National de Santé	LU
19	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU	NL
20	ETHNIKO IDRYMA EREVNON	EL
21	STATE GENERAL LABORATORY	CY
22	Associação para Investigação e Desenvolvimento da Faculdade de Medicina / Instituto de Medicina Preventiva	PT
23	KAROLINSKA INSTITUTET	SE
24	Cefic	BE
25	NASJONALT FOLKEHELSEINSTITUTT	NO
26	Tervise Arengu Instituut	EE

27	ISTITUTO SUPERIORE DI SANITA	IT
28	National Institute of Environmental Health	HU
29	Swiss Office of Public Health	CH
30	Urad verejného zdravotníctva SR	SK
31	INSTYTUT MEDYCYNY PRACY NOFERA	PL
32	STATNI ZDRAVOTNI USTAV	CZ
33	Health Services Executive	IE
34	Health and Environment Alliance	BE
35	National Institute for Health and Welfare - Terveyden ja hyvinvoinnin laitos	FI

Activity Code: ENV.2010.1.2.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Bystanders, Residents, Operators and WorkerS Exposure models for plant protection products

Proposed EC Grant: 1.999.510 €

Abstract:

The BROWSE proposal is focussed directly and precisely on all the requirements of the call text. Specifically, it will:- Review, improve and extend the models currently used in the risk assessment of plant protection products (PPPs) to evaluate the exposure of operators, workers, residents and bystanders. - Use the new and improved exposure models to contribute to the implementation of Regulation 1107/2009 on authorisation of PPPs, replacing Directive 91/414/EC.- Use the new and improved exposure models to contribute to the implementation of the Thematic Strategy on the Sustainable Use of Pesticides.- Involve all relevant stakeholders and end-users and take full account of relevant gender issues in developing the exposure models and policy tools. The workplan is aligned with these key objectives. In addition, several key cross-cutting themes are established to ensure their consistent and integrated treatment throughout the project. These are: exposure scenarios, volatilisation, transfer coefficients, statistical modelling and calibration, and data management. Key stakeholder groups will be represented on the project Advisory Panel as well as participating directly via consultations and workshops, and in surveys to obtain new data on practices and sociobehavioural and gender factors influencing exposure. Models for key exposure scenarios covering different regions of the EU will be developed in order of priority based on consultation with stakeholders, implemented as user-friendly software, and tested with end-users. Project outputs will be delivered through established networks with end-users in EU and national authorities, national training organisations, the pesticide industry, and relevant trade unions and NGOs. The consortium is superbly equipped to address the project objectives, including international leading experts on every aspect and long experience in both the science and the regulatory aspects of exposure assessment.

Partners:

N	Partner Legal Name	Country
1	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
2	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
3	BENAKI PHYTOPATHOLOGICAL INSTITUTE	EL
4	The Arable Group	UK
5	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
6	UNIVERSITEIT GENT	BE
7	UNIVERSITA CATTOLICA DEL SACRO CUORE	IT
8	WAGENINGEN UNIVERSITEIT	NL

Activity Code: ENV.2007.1.2.3.1. **Funding Scheme:** CSA-CA **Duration (Months):** 60

Title: Coordination of national environment and health research programmes - Environment and health ERA-NET

Proposed EC Grant: 2.000.000 €

Abstract:

It is estimated that around 20% of the burden of disease in industrialized countries can be attributed to environmental factors, and the magnitude of the problem is perceived by the majority of Europeans. The assessment of health impacts is based mostly on scarce exposure data and limited information on the relationship between exposure and health. There is, therefore, a need to strengthen research in this area and to develop methods and tools which will improve the comparability of data. Member States have developed skills and expertise using different mechanisms to fund environment and health research. The scientific boundaries created by the remits of different funding organisations have frequently acted as a disincentive to collaborative working. Although aims are towards relevance and efficiency, the results remain dispersed and not of actual support for policy-making. Therefore, results of the studies in ERA-ENVHEALTH will lead to the proposal of a coherent set of proposed priorities, implementation of joint activities, and common calls. ERA-ENVHEALTH, by bringing together 21 participants from 11 countries, will contribute to establish collaboration among the different funding organisations of environmental and public health research communities.

Partners:

N	Partner Legal Name	Country
1	agence francaise de securite sanitaire de l environnement et du travail	FR
2	Agence de l'Environnement et de la Maîtrise de l'Energie	FR
3	Ministère de l'écologie du développement et de l'aménagement durables	FR
4	Belgian Federal Science Policy Office	BE
5	Federal Public Service Health, Food Chain Safety and Environment	BE
6	ENVIRONMENTAL PROTECTION AGENCY	IE
7	Agenzia per la Protezione dell'Ambiente e per i Servizi Tecnici	IT
8	Agenzia Regionale per la Protezione Ambientale delle Toscana	IT
9	Naturvårdsverket	SE
10	Ministerie van Volkshuisvesting Ruitelijke Ordening en Milieu	NL
11	National Institute for Public health and the Environment	NL
12	Úrad verejného zdravotníctva Slovenskej republiky	SK
13	Ministerstvo zdravotníctva Slovenskej republiky	SK
14	Slovenská zdravotnícka univerzita	SK
15	Environment Agency of England and Wales	UK
16	Natural Environment Research Council	UK
17	Israeli Ministry of Health	IL
18	Umweltbundesamt (Federal Environment Agency)	DE
19	Consiglio Nazionale delle Ricerche	IT
20	Agenzia Regionale Prevenzione e Ambiente dell'Emilia Romagna	IT
21	Nofer Institute of Occupational Medicine	PL

Activity Code: ENV.2007.1.2.3.2. **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: HEalth Risk from Environmental Pollution Levels in Urban Systems

Proposed EC Grant: 1.400.000 €

Abstract:

HEREPLUS will:1) Develop risk maps relating to human health, and O3 and PM concentrations using the ArcGis approach, taking into account existing and validated epidemiological models, for selection of important and problematic large European urban areas such as Rome, Madrid, Dresden, Athens; 2) Improve the knowledge of the potential role of different urban vegetation types for mitigating the O3 and PM pollution levels, and provide best practices regarding the selection of no-VOCs emitting species and management of large green areas located in different neighbouring urban areas; 3) Furnish guidelines for municipal managers and administrators deputed to establish urban-environmental measures which combine risk maps, urban vegetation as a sink for ozone and PM, and minimization of sanitary costs, all based on results and knowledge achieved by the project activities as a whole. These guidelines will take the form of best practices recommendations and designs for municipal laws that may be used as a base-line for municipal administrations; 4) Disseminate guidelines and best practice indications at a European level, through international workshops and a conclusive report.Specific cardio-respiratory disease, such as asthma, bronchitis, COPD exacerbation, ischemic heart disease, and the morbidity and mortality for these diseases, associated to O3 and PM, will be considered in HEREPLUS. HEREPLUS will produce the above mentioned risk maps starting from pre-existent environmental and health data, by development of new epidemiological and statistical approach, also in support for the implementation of Global Earth Observation System of Systems (GEOSS) initiative and the Environment and Health Action Plan.

Partners:

N	Partner Legal Name	Country
1	Consorzio Sapienza Innovazione	IT
2	Università degli Studi di Roma La Sapienza	IT
3	Technische Universität Dresden	DE
4	European Commission, Directorate General Joint Research Centre, Institute for Health and Consumer Protection	BE
5	Academy of Athens	EL
6	Centro de Investigaciones Energéticas Medioambientales y Tecnológicas	ES
7	University of Belgrade School of Medicine	RS
8	University of Keele	UK

Activity Code: ENV.2010.1.2.3-2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Public health impacts in URban environments of Greenhouse gas Emissions reduction strategies

Proposed EC Grant: 3.416.333 €

Abstract:

The project will examine the health impacts of greenhouse gas (GHG) reduction policies in urban settings in Europe, China and India, using case studies of 3-4 large urban centres and three smaller urban centres. Sets of realistic interventions will be proposed, tailored to local needs, to meet published abatement goals for GHG Emissions for 2020, 2030 and 2050.Mitigation actions will be defined in four main sectors: power generation/industry, household energy, transport and food and agriculture. The chief pathways by which such measures influence health will be described, and models developed to quantify changes in health-related 'exposures' and health behaviours. Models will include ones relating to outdoor air pollution, indoor air quality and temperature, physical activity, dietary intake, road injury risks and selected other exposures.Integrated quantitative models of health impacts will be based on life table methods encompassing both mortality and morbidity outcomes modelled over 20 year time horizons. Where possible, exposure-response relationships will be based on review evidence published by the Comparative Risk Assessment initiative or systematic reviews. Uncertainties in model estimates will be characterized using a mathematical framework to quantify the influence of uncertainties in both model structure and parameter estimates. Particular attention will be given to economic assessments, both in terms of behavioural choices/uptake of various forms of mitigation measure (with new surveys to address evidence gaps), and in terms of health benefits and costs calculated from societal, health service and household perspectives. A decision analysis framework will be developed to compare different mitigation options.Experts and user groups will be consulted to define the mitigation questions to be examined, and the results will be discussed in consultative workshops scheduled for the final months of the project.

Partners:

N	Partner Legal Name	Country
1	LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE	UK
2	Arup International Consultants (Shanghai) Co. Ltd.	CN
3	BC3 Basque Centre for Climate Change - Klima Alddaketa Ikergai	ES
4	UNIVERZITA KARLOVA V PRAZE	CZ
5	FONDAZIONE ENI ENRICO MATTEI	IT
6	India Institute of Technoilogy, Delhi	IN
7	Peking University	CN
8	University of Belgrade	RS
9	UNIVERSITY COLLEGE LONDON	UK

Activity Code: ENV.2007.1.3.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Morphological Impacts and COastal Risks induced by Extreme storm events

Proposed EC Grant: 3.499.954 €

Abstract:

The project is specifically targeted to contribute to the development of a probabilistic mapping of the morphological impact of marine storms and to the production of early warning and information systems to support long-term disaster reduction.A review of historical storms that had a significant impact on a representative number of sensitive European sites will be undertaken. The nine sites are selected according to wave exposure, tidal regime and socio-economical pressures. They include outmost regions of the European Union at the border with surrounding states (e.g. the area of the Gibraltar Strait, the Baltic and Black Sea).All data will be compiled into in a homogeneous database of occurrence and related socio-economic damages, including the following information on the characteristics of the storms, on their morphological impacts, on the damages caused on society, on the Civil Protection schemes implemented after the events.Monitoring of selected sites will take place for a period of one year to collect new data sets of bathymetry and topography using state-of-the-arts technology (Lidar, ARGUS, Radar, DGPS). The impact of the storms on living and non-living resources will be done using low-cost portable GIS methods.

Numerical models of storm-induced morphological changes will be tested and developed, using both commercial packages and developing a new open-source morphological model. The models will be linked to wave and surge forecasting models to set-up a real-time warning system and to implement its usage within Civil Protection agencies. The most important product of the project will be the conception of Storm Impact Indicators (SIIs) with defined threshold for the identification of major morphological changes and flooding associated risks. Finally, the results of the project will be disseminated as risk maps through an effective Web_GIS system.

Partners:

N	Partner Legal Name	Country
1	Consorzio Ferrara Ricerche	IT
2	Agenzia Regione Emilia Romagna Prevenzione e Ambiente	IT
3	Regione Emilia Romagna - Servizio Geologico, Sismico e dei Suoli	IT
4	Universidade do Algarve	PT
5	Fundação da Faculdade de Ciências da Universidade de Lisboa	PT
6	Universidad de Cadiz	ES
7	BRGM	FR
8	International Marine and Dredging Consultance	BE
9	UNIVERSITY OF PLYMOUTH	UK
10	Uniwersytet Szczecinski	PL
11	Institute of Oceanology - Bulgarian Academy of Sciences	BG
12	Stichting Waterloopkundig Laboratorium	NL
13	Delft University of Technology	NL
14	Natural environment Research Council - Proudman Oceanographic Laboratory	UK

Activity Code: ENV.2008.1.3.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Seismic Hazard Harmonization in Europe

Proposed EC Grant: 3.200.000 €

Abstract:

SHARE will deliver measurable progress in all steps leading to a harmonized assessment of seismic hazard – in the definition of engineering requirements, in the collection and analysis of input data, in procedures for hazard assessment, and in engineering applications. SHARE will create a unified framework and computational infrastructure for seismic hazard assessment and produce an integrated European probabilistic seismic hazard assessment (PSHA) model and specific scenario based modeling tools. The SHARE results will deliver long-lasting structural impact in areas of societal and economic relevance, they will serve as a reference for the Eurocode 8 application, and will provide homogeneous input for the correct seismic safety assessment for critical industry, such as the energy infrastructures and the re-insurance sector. SHARE will cover the whole European territory, the Maghreb countries in the Southern Mediterranean and Turkey in the Eastern Mediterranean.

Partners:

N	Partner Legal Name	Country
1	Eidgenössische Technische Hochschule Zürich	CH
2	GeoForschungsZentrum Potsdam	DE
3	Istituto Nazionale di Geofisica e Vulcanologia	IT
4	Université Joseph Fourier Grenoble 1	FR
5	Università degli Studi di Pavia	IT
6	Aristotle University of Thessaloniki	EL
7	Bureau de Recherches Géologiques et Minières	FR
8	Centre de Recherche en Astronomie, Astrophysique et Géophysique	DZ
9	Instituto Superior Tecnico	PT
10	Bogazici University-Kandilli Observatory and Earthquake Research Institute	TR
11	Laboratório Nacional de Engenharia Civil, I.P.	PT
12	Middle East Technical University	TR
13	MONTENEGRO SEISMOLOGICAL OBSERVATORY (Seizmološki zavod Crne Gore)	ME
14	Natural Environment Research Council	UK
15	National Institute for Earth Physics	RO
16	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
17	Stiftelsen NORSAR	NO
18	Royal Observatory Of Belgium	BE

Activity Code: ENV.2009.1.3.1.1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Forest fires under climate, social and economic changes in Europe, the Mediterranean and other fire-affected areas of the world

Proposed EC Grant: 6.178.337 €

Abstract:

Fire regimes result from interactions between climate, land-use and land-cover (LULC), and socioeconomic factors, among other. These changed during the last decades, particularly around the Mediterranean. Our understanding of how they affected fire regime in the past is limited. During this century temperatures, drought and heat waves will very likely increase, and rainfall decrease. These and further socioeconomic change will affect LULC. Additional areas will be abandoned due to being unsuitable for agriculture or other uses. Fire danger and fire hazard are very likely to increase, affecting fire regimes. FUME will learn from the past to understand future impacts. Mod. 1 we will study how LULC and socioeconomics changed and how climate and weather affected fire in dynamically changing landscapes. Fires will be mapped throughout Europe to determine hazard burning functions for LULC types. Since climate has changed, an attempt to attribute (sensu IPCC) fire regime change to climate, differentiating it from socioeconomic change, will be made. Mod. 2 will produce scenarios of change (climate, including extremes, land-use land-cover, socioeconomics, vegetation) for various emissions pathways and three time-slices during this century. With these and results from Mod.1, models and field experiments projected impacts on fire-regime and vegetation vulnerabilities will be calculated, including climate extremes (drought, heat-waves). Mod. 3 will investigate adaptation options in fire- and land-management, including restoration. Fire prevention and fire fighting protocols will be tested/developed under the new conditions to mitigating fire risks. A company managing fire will be a key player. Costs and policy impacts of changes in fire will be studied. Research will focus on old and new fire areas, the rural interface, whole Europe and the Mediterranean, including all Mediterranean countries of the world. Users will be involved in training and other activities.

Partners:

N	Partner Legal Name	Country
1	UNIVERSIDAD DE CASTILLA - LA MANCHA	ES
2	FUNDACION CENTRO DE ESTUDIOS AMBIENTALES DEL MEDITERRANEO	ES
3	UNIVERSITA DEGLI STUDI DELLA TUSCIA	IT
4	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
5	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
6	FUNDACAO DA FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA	PT
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
9	UNIVERSITA DEGLI STUDI DI SASSARI	IT
10	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
11	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
12	PANEPISTIMIO IOANNINON	EL
13	LUNDS UNIVERSITET	SE
14	UNIVERSIDAD DE CANTABRIA	ES
15	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
16	ILMATIETEEN LAITOS	FI
17	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
18	Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies	ES
19	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
20	TECNOLOGÍAS Y SERVICIOS AGRARIOS, S.A.	ES
21	Instituto Superior de Agronomia	PT
22	CENTRE FOR EUROPEAN POLICY STUDIES	BE
23	Université F. Abbas de Sétif	DZ
24	Institut National de Recherches en Génie Rural, Eaux et Forêts	TN
25	National Meteorological Service Morocco	MA
26	Southwest Anatolia Forestry Research	TR

27	South African National Biodiversity Institute	ZA
28	US FOREST SERVICE - PACIFIC SOUTHWEST RESEARCH STATION	US
29	Arizona Board of Regents for and on behalf of Northern Arizona University	US
30	The University of Arizona	US
31	US Geological Service, Western Ecological Research Center	US
32	University of Wollongong	AU
33	Universidad Austral de Chile	CL

Activity Code: ENV.2007.1.3.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 30

Title: Enhancing resilience of communities and territories facing natural and na-tech hazards

Proposed EC Grant: 1.388.634 €

Abstract:

Since a long time vulnerability is a key concept in disaster literature. Nevertheless the majority of studies and grants have been allocated to hazards related research, neglecting the influence of vulnerability of exposed systems on the death toll and losses in case of natural or man made disasters.There is the need to better identify and measure also the ability of menaced and affected communities and territorial systems to respond. This is the starting point of the ENSURE project.The overall objective of ENSURE is to structure vulnerability assessment model(s) in a way that different aspects of physical, systemic, social and economic vulnerability will be integrated as much as possible in a coherent framework. The ENSURE approach starts from the recognition that for all considered hazards most of damages and most of vulnerabilities arise from the territory, including artefacts, infrastructures and facilities. They may well represent its material skeleton: physical vulnerability is therefore entirely "contained" at a territorial level. Other vulnerabilities, such as systemic, economic and social have interactions with the territory, but cannot be entirely determined at a territorial level.The project will start by assessing the state of the art in different fields related to various vulnerability aspects as they have been tackled until today in Europe and internationally. The core of the project consists in integrated models comprising already existing models to assess vulnerability and develop new ones for those aspects that have been neglected until now.The research objective is therefore to achieve progress with respect to each individual sector of vulnerability and to enhance the capability of assessing interconnections among them in a dynamic way, identifying driving forces of vulnerability, that make communities change for the good or for the worse as far as their ability to cope with extreme events is concerned.

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	Università degli Studi di Napoli Federico II	IT
3	International Institute for Geo-information Science and Earth Observation	NL
4	Université de Genève	CH
5	HAROKOPIO UNIVERSITY OF ATHENS	EL
6	Tel Aviv University	IL
7	Middlesex University Higher Education Corporation	UK
8	T6 Ecosystems srl	IT
9	Politecnico di Milano	IT
10	Potsdam Institut für Klimafolgenforschung	DE

Activity Code: ENV.2007.1.3.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Methods for the improvement of Vulnerability Assessment in Europe

Proposed EC Grant: 2.083.427 €

Abstract:

MOVE will create knowledge, frameworks and methods for the assessment of vulnerability to natural hazards in Europe. It will use indices and indicators to help improve societal and environmental resilience. Floods, temperature extremes, droughts, landslides, earthquakes, wildfires and storms will be studied. Emphasis will be placed on clear, capable measurement and accounting for uncertainties. MOVE will identify gaps in existing methodologies. It will produce a conceptual framework that is independent of scale and hazard type. It analyse physical (technical), environmental, economic, social, cultural and institutional vulnerability. These will be measured for specific hazards and at different geographical scales. Methodologies will be tested in case study regions on vulnerable elements and appropriate hazard types. Case studies will enable the availability and quality of existing data at sub-national (NUTS 3-5) and local scales to be examined. MOVE will evaluate statistical data (for cities, from EUROSTAT, etc.) and remote sensing information. The case studies will integrate and combine economic damage and social vulnerability methods. The generic framework, data analysis and applicability tests will result in a standard approach to vulnerability assessment in Europe. Stakeholders will be consulted systematically in order to understand their needs and to enable MOVE to draw attention to the practical value of its methodologies. There will be six work-packages. First, terms will be defined and gaps in existing methodologies identified. Next, a generic framework will be developed, with variants for particular scales, hazards and situations. Thirdly, the methods will be applied to case studies. The fourth and fifth packages will develop co-operation processes with stakeholders and ensure that the framework and the methods are disseminated for the benefit of European citizens. Project co-ordination will occupy the final package.

Partners:

N	Partner Legal Name	Country
1	Università degli Studi di Firenze	IT
2	BRGM	FR
3	Paris-Lodron-Universität Salzburg	AT
4	Europäische Akademie Bozen / Accademia Europea Bolzano	IT
5	ATLAS Innoglobe Tervezö és Szolgáltató Kft.	HU
6	King's College Londion	UK
7	Stiftelsen Norges Geoteckniske Institutt	NO
8	Rupprecht Consult Forschung und Beratung GmbH	DE
9	Centre Internacional de Mètodes Numèrics en Enginyeria	ES
10	UNITED NATIONS UNIVERSITY Institute for Environment and Human Security	DE
11	Universität Dortmund	DE
12	Faculdade de Letras da Universidade do Porto	PT
13	Universität Wien	AT

Activity Code: ENV.2008.1.3.2.1. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Social Capacity Building for Natural Hazards: Toward More Resilient Societies

Proposed EC Grant: 910.000 €

Abstract:

The main objectives of CapHaz-Net are to identify and assess existing practices and policies for social capacity building in the field of natural hazards and to elaborate strategies and recommendations for activities to enhance the resilience of European societies to the impacts of natural hazards. This will be achieved by bringing together different scientific disciplines and by enhancing and fostering communication between researchers, policy-makers and practitioners from across Europe. CapHaz-Net focuses on synthesising and integrating knowledge and perspectives from five topics: risk perception, social vulnerability, risk communication, risk education, risk governance. These are central for developing social capacities of societies and communities for natural hazards. For each topic, main perspectives, actions and initiatives are identified and assessed that can improve capacity building. The project is structured in three phases: In a first phase key studies and initiatives will be identified and assessed within each of the main topics, achieved through literature review work and thematic meetings. The outcome will be a living document representing the state of the art and providing initial suggestions on how to improve societies' capacity building. In the second phase these results will be down-scaled in particular regional contexts and evaluated in respect of local experiences and existing practices and tools, achieved through a series of regional hazard workshops. The network will consider three geographical areas representing different natural hazards types. During these workshops best practices and chances of improved legal tools and strategies but also gaps of knowledge are identified and assessed. In the final phase, the network will integrate findings and develop recommendations that provide a synthesis concerning specific steps to improve social capacity building of European societies' facing natural hazards and give guidance for future research.

Partners:

N	Partner Legal Name	Country
1	Helmholtz-Zentrum für Umweltforschung GmbH - UFZ	DE
2	Istituto di Sociologia Internazionale di Gorizia	IT
3	Middlesex University Higher Education Corporation	UK
4	Universitat Autonoma de Barcelona	ES
5	Scientific Research Centre of the Slovene Academy of Sciences and Arts	SI
6	Swiss Federal Institute WSL	CH
7	DIALOGIK gemeinnützige Gesellschaft für Kommunikations-und Kooperationsforschung mbH	DE
8	Lancaster University	UK

Activity Code: ENV.2009.1.3.2.1 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Costs of Natural Hazards

Proposed EC Grant: 899.487 €

Abstract:

Cost assessments of damages of natural hazards supply crucial information to policy development in the fields of natural hazard management and adaptation planning to climate change. There exists significant diversity in methodological approaches and terminology in cost assessments of different natural hazards and in different impacted sectors. ConHaz provides insight into cost assessment methods, which is needed for an integrated planning and overall budgeting, and to prioritise policies. To strengthen the role of cost assessments in natural hazard management and adaptation planning, existing approaches and best practices as well as knowledge gaps are identified. ConHaz has three key objectives. The first objective is to compile state-of-the-art methods and terminology as used in European case studies, taking a comprehensive perspective on the costs of natural that includes droughts, floods, storms, and alpine hazards. ConHaz also considers various impacted economic sectors such as housing, industry and transport, and non-economic sectors such as health and nature. It will consider single and multi-hazards, leading to direct, indirect and intangible costs. ConHaz moreover looks at costs and benefits of risk-prevention and emergency response policies. The second objective of ConHaz is to evaluate the compiled methods. The analysis addresses theoretical issues, such as the principal assumptions that underlie economic valuation of damage types, as well as practical issues, such as the qualifications needed for data collection and quality assurance. ConHaz also looks at the reliability of the end result by considering the accuracy of cost predictions and best-practice-methods of validation. A central issue of the evaluation is to compare available methods with end-user needs. The third objective of ConHaz is to synthesize the results and give recommendations according to current best practice as well as to resulting research needs.

Partners:

N	Partner Legal Name	Country
1	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
2	UNIVERSITAET INNSBRUCK	AT
3	Société de mathématiques appliquées aux sciences humaines (SMASH)	FR
4	Middlesex University Higher Education Corporation	UK
5	Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum	DE
6	UNIVERSITA DEGLI STUDI DI FERRARA	IT
7	UNIVERSITAT AUTONOMA DE BARCELONA	ES
8	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL

Activity Code: ENV.2010.1.3.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Knowledge-based approach to develop a cULTUre of Risk prevention

Proposed EC Grant: 3.225.879 €

Abstract:

The extreme consequences of recent catastrophic events have highlighted that risk prevention still needs to be improved to reduce human losses and economic damages. The KULTURisk project aims at developing a culture of risk prevention by means of a comprehensive demonstration of the benefits of prevention measures. The development of a culture of risk prevention requires the improvement of our: a) memory and knowledge of past disasters; b) communication and understanding capacity of current and future hazards; c) awareness of risk and d) preparedness for future events. In order to demonstrate the advantages of prevention options, an original methodology will be developed, applied and validated using specific European case studies, including transboundary areas. The benefits of state-of-the-art prevention measures, such as early warning systems, non-structural options (e.g. mapping and planning), risk transfer strategies (e.g. insurance policy), and structural initiatives, will be demonstrated. In particular, the importance of homogenising criteria to create hazard inventories and build memory, efficient risk communication and warning methods as well as active dialogue with and between public and private stakeholders, will be highlighted. Furthermore, the outcomes of the project will be used to efficiently educate the public and train professionals in risk prevention. KULTURisk will first focus on water-related hazards as the likelihood and adverse impacts of water-related catastrophes might increase in the near future because of land-use and/or climate changes. In particular, a variety of case studies characterised by diverse socio-economic contexts, different types of water-related hazards (floods, debris flows and landslides, storm surges) and space-time scales will be utilised. Finally, a generalisation of the methodology will be implemented to transfer the KULTURisk approach to different types of natural hazards, such as earthquakes and forest fires.

Partners:

N	Partner Legal Name	Country
1	UNESCO-IHE INSTITUTE FOR WATER EDUCATION	NL
2	UNIVERSITA DEGLI STUDI DI BRESCIA	IT
3	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS	UK
4	UNIVERZA V LJUBLJANI	SI
5	EIDGENOESSISCHE FORSCHUNGSANSTALT WSL	CH
6	CONSORZIO PER LA GESTIONE DEL CENTRO DI COORDINAMENTO DELLE ATTIVITA DI RICERCA INERENTI IL SISTEMA LAGUNARE DI VENEZIA	IT
7	KING'S COLLEGE LONDON	UK
8	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
9	Autorità di bacino dei Fiumi Isonzo, Tagliamento, Livenza, Piave, Brenta-Bacchiglione	IT
10	UNIVERSITY OF BRISTOL	UK
11	Willis Limited	UK

Activity Code: ENV.2009.1.3.2.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Systemic Seismic Vulnerability and Risk Analysis for Buildings, Lifeline Networks and Infrastructures Safety Gain

Proposed EC Grant: 3.500.000 €

Abstract:

SYNER-G is research project which has the following main goals: (1) To elaborate appropriate, in the European context, fragility relationships for the vulnerability analysis and loss estimation of all elements at risk, for buildings, building aggregates, utility networks (water, waste water, energy, gas), transportation systems (road, railways, harbors) as well as complex medical care facilities (hospitals) and fire-fighting systems. (2) To develop social and economic vulnerability relationships for quantifying the impact of earthquakes. (3) To develop a unified methodology, and tools, for systemic vulnerability assessment accounting for all components (structural and socio-economic) exposed to seismic hazard, considering interdependencies within a system unit and between systems, in order to capture the increased loss impact due to the interdependencies and the interactions among systems and systems of systems.The methodology and the proposed fragility functions will be validated in selected sites (urban scale) and systems and it will implemented in an appropriate open source and unrestricted access software tool. Guidelines will be prepared and the results and outputs will be disseminated in Europe and world wide with appropriate dissemination schemes.SYNER-G is integrated across different disciplines with an internationally recognized partnership from Europe, USA and Japan. The objectives and the deliverables are focused to the needs of the administration and local authorities, which are responsible for the management of seismic risk, as well as the needs of the construction and insurance industry.URL: http://www.vce.at/SYNER-G

Partners:

N	Partner Legal Name	Country
1	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
2	VCE Holding GmbH	AT
3	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
4	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
5	STIFTELSEN NORGES GEOTEKNISKEINSTITUTT	NO
6	UNIVERSITA DEGLI STUDI DI PAVIA	IT
7	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
8	MIDDLE EAST TECHNICAL UNIVERSITY	TR
9	AMRA - ANALISI E MONITORAGGIO DEL R ISCHIO AMBIENTALE SCARL	IT
10	UNIVERSITAET KARLSRUHE (TECHNISCHE HOCHSCHULE)	DE
11	UNIVERSITY OF PATRAS	EL
12	Willis Limited	UK
13	The Board of Trustees of the University of Illinois	US
14	Kobe University	JP

Activity Code: ENV.2010.1.3.3-1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Improved Drought Early Warning and FORecasting to strengthen preparedness and adaptation to droughts in Africa

Proposed EC Grant: 3.499.194 €

Abstract:

The principal aim of the DEWFORA proposal is to develop a framework for the provision of early warning and response to mitigate the impact of droughts in Africa. The proposal has been built to achive three key targets:1. Improved monitoring: by improving knowledge on drought forecasting, warning and mitigation, and advancing the understanding of climate related vulnerability to drought – both in the current and in the projected future climate.2. Prototype operational forecasting: by bringing advances made in the project to the pre-operational stage through development of prototype systems and piloting methods in operational drought monitoring and forecasting agencies.3. Knowledge dissemination: through a stakeholders platform that includes national and regional drought monitoring and forecasting agencies, as well as NGO's and IGO's, and through capacity building programmes to help embed the knowledge gained in the community of African practitioners and researchers.To achieve these targets, the DEWFORA consortium brings together leading research institutes and universities; institutes that excel in application of state-of-the-art science in the operational domain; operational agencies responsible for meteorological forecasting, drought monitoring and famine warning; and established knowledge networks in Africa. The consortium provides an excellent regional balance, and the skilled coordinator and several partners have worked together in (European) research projects, implementation projects and capacity building programmes, thus building efficiently on previous and ongoing projects in Europe and Africa.The main impact of DEWFORA will be to increase the effectiveness of drought forecasting, warning and response. DEWFORA will provide guidance on how and where drought preparedness and adaptation should be targeted to contribute to increased resilience and improved effectiveness of drought mitigation measures.

Partners:

N	Partner Legal Name	Country
1	STICHTING DELTARES	NL
2	UNESCO-IHE INSTITUTE FOR WATER EDUCATION	NL
3	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS	UK
4	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
5	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
6	Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum	DE
7	UNIVERSIDAD POLITECNICA DE MADRID	ES
8	Mediterranean Agronomic Institute of Zaragoza / International Centre for Advanced Mediterranean Agronomic Studies	ES
9	FACULDADE DE ENGENHARIA DA UNIVERSIDADE DO PORTO	PT
10	Ministry of Water Resources and Irrigation - Nile Forecast Center	EG
11	STICHTING WETLANDS INTERNATIONAL	NL
12	Dinder Center for Environmental Research	SD
13	IGAD CNETRE FOR CLIMATE PREDICTION AND APPLICATION	KE
14	UNIVERSIDADE EDUARDO MONDLANE	MZ
15	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
16	WR Nyabeze and Associates	ZA
17	INSTITUT AGRONOMIQUE ET VETERINAIRE HASSAN II	MA
18	WaterNet Trust	BW
19	Hydraulics Research Institute	EG

Activity Code: ENV.2007.1.3.3.1. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Mitigate and assess risk from volcanic impact on terrain and human activities

Proposed EC Grant: 3.498.938 €

Abstract:

In EU countries, volcanic risks assessment and management are tackled through scientific knowledge and monitoring, although there is still a need for integration between all risk management components. For international cooperation partner countries (ICPCs), the risk management depends on local situations but is often less favourable. Therefore, following UN International Strategy for Disaster Reduction recommendations and starting from shared existing knowledge and practices, the MIA-VITA project aims at developing tools and integrated cost effective methodologies to mitigate risks from various hazards on active volcanoes (prevention, crisis management and recovering). Such methodology will be designed for ICPCs contexts but will be helpful for European stakeholders to improve their experience in volcanic risk management. The project multidisciplinary team gathers civil defence agencies, scientific teams (earth sciences, social sciences, building, soil, agriculture, Information Technologies and telecommunications) and an IT private company. The scientific work will focus on:1) risk assessment methodology based on a multi-risk approach developed at Mt Cameroon by one of the partners in cooperation with Cameroonian institutions2) cost efficient monitoring tools designed for poorly monitored volcanoes (satellite & gas analysis & volcano-seismology)3) improvement in terms of vulnerability assessment (people, buildings and biosphere)4) socio-economic surveys to enhance community resilience5) Integrated information system (data organisation and transfers, communications) taking advantage of GEONETCast initiativeResults will be achieved with help from local scientists and stakeholders in Africa (Cameroon, Cape Verde), in Asia (Indonesia, Philippines) and will be validated on a European volcano (Montserrat). The objectives will be reached through sharing/transfer of know-how, through scientific and technological developments, and through dissemination/training.

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA	IT
3	Instituto Superior Tecnico	PT
4	UMR 8591 Laboratoire de Géographie Physique	FR
5	Norwegian Institute for Air Research	NO
6	Kell s.r.l.	IT
7	Instituto de Engenharia de Sistemas e Computadores - Investigação e Desenvolvimento em Lisboa	PT
8	Universität Hohenheim	DE
9	The Chancellor, Masters and Scholars of the University of Cambridge	UK
10	Direction de la Défense et de la Sécurité Civile	FR
11	Dipartimento della Protezione Civile	IT
12	Instituto Nacional de Meteorologia e Geofísca	CV
13	MINISTERE DE L'INDUSTRIE, MINES, DEVELOPPEMENT TECHNOLOGIQUE	CM
14	Center For Volcanology and Geological Hazard Mitigation	ID
15	Philippine Institute of Volcanology and Seismology	PH

Activity Code: ENV.2008.1.3.3.1. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Living with landslide risk in Europe: Assessment, effects of global change, and risk management strategies

Proposed EC Grant: 6.610.000 €

Abstract:

SafeLand will develop generic quantitative risk assessment and management tools and strategies for landslides at local, regional, European and societal scales and establish the baseline for the risk associated with landslides in Europe, to improve our ability to forecast landslide hazard and detect hazard and risk zones. The scientific work packages in SafeLand are organised in five Areas: Area 1 focuses on improving the knowledge on triggering mechanisms, processes and thresholds, including climate-related and anthropogenic triggers, and on run-out models in landslide hazard assessment; Area 2 does an harmonisation of quantitative risk assessment methodologies for different spatial scales, looking into uncertainties, vulnerability, landslide susceptibility, landslide frequency, and identifying hotspots in Europe with higher landslide hazard and risk; Area 3 focuses on future climate change scenarios and changes in demography and infrastructure, resulting in the evolution of hazard and risk in Europe at selected hotspots; Area 4 addresses the technical and practical issues related to monitoring and early warning for landslides, and identifies the best technologies available both in the context of hazard assessment and in the context of design of early warning systems; Area 5 provides a toolbox of risk mitigation strategies and guidelines for choosing the most appropriate risk management strategy. Maintaining the database of case studies, dissemination of the project results, and project management and coordination are defined in work packages 6, 7 and 8.

Partners:

N	Partner Legal Name	Country
1	Norges Geotekniske Institutt	NO
2	UNIVERSITAT POLITECNICA DE CATALUNYA	ES
3	AMRA Scarl	IT
4	Bureau de Recherches Géologiques et Minières	FR
5	Università degli Studi di Firenze	IT
6	International Institute for Applied Systems Analysis	AT
7	European Community represented by the European Commission – Directorate General JRC	BE
8	Fundación Agustín de Betancourt	ES
9	Aristotle University of Thessaloniki	EL
10	UNIVERSITA DEGLI STUDI DI MILANO - BICOCCA	IT
11	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
12	Centro euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
13	Studio Geotecnico Italiano srl	IT
14	Università degli Studi di Salerno	IT
15	International Institute for Geo-information Science and Earth Observation	NL
16	Eidgenössische Technische Hochschule Zurich	CH
17	Université de Lausanne	CH
18	C.S.G. S.r.l. Centro Servizi di Geoingegneria	IT
19	Centre National de la Recherche Scientifique	FR
20	King's College London	UK
21	Geological Survey of Austria	AT
22	Ecole Polytechnique Fédérale de Lausanne	CH
23	TRL Limited	UK
24	Geological Institute of Romania	RO
25	Geological Survey of Slovenia	SI

Activity Code: ENV.2009.1.3.3.1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Collaborative research on flood resilience in urban areas

Proposed EC Grant: 3.490.198 €

Abstract:

Collaborative research on flood resilience in urban areas (CORFU) is an interdisciplinary international project that will look at advanced and novel strategies and provide adequate measures for improved flood management in cities. The differences in urban flooding problems in Asia and in Europe range from levels of economic development, infrastructure age, social systems and decision making processes, to prevailing drainage methods, seasonality of rainfall patterns and climate change trends. Our vision is that this project will use these differences to create synergies that will bring new quality to flood management strategies globally. Through a 4-year collaborative research programme, the latest technological advances will be cross-fertilised with traditional and emerging approaches to living with floods.The overall aim of CORFU is to enable European and Asian institutions to learn from each other through joint investigation, development, implementation and dissemination of strategies that will enable more scientifically sound management of the consequences of urban flooding in the future. Flood impacts in urban areas – potential deaths, damage to infrastructure and health problems and consequent effects on individuals and on communities – and possible responses will be assessed by envisaging different scenarios of relevant drivers: urban development, socio-economic trends and climate changes. The cost-effectiveness of resilience measures and integrative and adaptable flood management plans for these scenarios will be quantified.CORFU is structured in six Work Packages. WP1 will look at drivers that impact on urban flooding. WP2 will enhance methodologies and tools for flood hazard assessment based on urban flood modelling. WP3 will improve, extend and integrate modern methods for flood impact assessment. WP4 will aim to assess and enhance existing flood risk management strategies. WP5 will disseminate the outputs. WP6 will co-ordinate the project.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF EXETER	UK
2	DHI INSTITUT FOR VAND OG MILJO FORENING	DK
3	TECHNISCHE UNIVERSITAET HAMBURG-HARBURG	DE
4	Université de Nice-Sophia Antipolis	FR
5	INDIAN INSTITUTE OF TECHNOLOGY BOMBAY	IN
6	AREP VILLE	FR
7	Institute of Water Modelling	BD
8	Beijing University of Technology	CN
9	China Academy of Urban Planning and Design	CN
10	beijing municipal institute of city planning and design	CN
11	CETaqua, Centro Tecnológico del Agua, Fundación privada	ES
12	Hydrometeorological Innovative Solutions S.L.	ES
13	CRANFIELD UNIVERSITY	UK
14	Dura Vermeer Groep NV	NL
15	Hamburgisches WeltWirtschaftsInstitut gemeinnützige GmbH (HWWI)	DE

Activity Code: ENV.2008.1.3.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: IMproving Preparedness and RIsk maNagemenT for flash floods and debriS flow events

Proposed EC Grant: 3.280.000 €

Abstract:

The aim of IMPRINTS is to contribute to reduce loss of life and economic damage through the improvement of the preparedness and the operational risk management for Flash Flood and Debris Flow [FF/DF] generating events, as well as to contribute to sustainable development through reducing damages to the environment. To achieve this ultimate objective the project is oriented to produce methods and tools to be used by emergency agencies and utility companies responsible for the management of FF/DF risks and associated effects. Impacts of future changes, including climatic, land use and socioeconomic will be analysed in order to provide guidelines for mitigation and adaptation measures. Specifically, the consortium will develop an integrated probabilistic forecasting FF/ DF system as well as a probabilistic early warning and a rule-based probabilistic forecasting system adapted to the operational use by practitioners. These systems will be tested on five selected flash flood prone areas, two located in mountainous catchments in the Alps, and three in Mediterranean catchments. The IMPRINTS practitioner partners, risk management authorities and utility company managers in duty of emergency management in these areas, will supervise these tests. The development of such systems will be carried out using and capitalising the results of previous and ongoing research on FF/DF forecasting and warning systems, in which several of the partners have played a prominent role. One major result of the project will be a operational prototype including the tools and methodologies developed under the project. This prototype will be designed under the premise of its ultimate commercialization and use worldwide. The consortium, covering all the actors involved in the complex chain of FF & DF forecasting, has been carefully selected to ensure the achievement of this. Specific actions to exploit and protect the results and the intellectual property of the partners have been also defined.

Partners:

N	Partner Legal Name	Country
1	Universitat Politècnica de Catalunya	ES
2	Federal Office of Meteorology and Climatology MeteoSwiss	CH
3	European Commission - Joint Research Centre	BE
4	Lancaster University	UK
5	Swiss Federal Institute for Forest, Snow and Landscape Research WSL	CH
6	Wageningen Universiteit	NL
7	CETaqua, Centro Tecnológico del Agua, Fundación privada	ES
8	Consorzio inter-Universitario per la previsione e prevenzione dei Grandi RIschi	IT
9	University of KwaZulu-Natal	ZA
10	Servei Meteorològic de Catalunya	ES
11	Hydrometeorological Innovative Solutions S.L.	ES
12	Service Central d'Hydrométéorologie et d'Appui à la Prévision des Inondations, Ministry of Ecology, Sustainable Development and Planning	FR
13	Agència Catalana de l'Aigua	ES
14	Department Bau und Umwelt Kanton Glarus	CH
15	Verzasca SA	CH
16	Azienda Elettrica Ticinese	CH
17	Autorità di Bacino Regionale Destra Sele	IT
18	Empresa de Gestión Medioambiental S.A.	ES

Activity Code: ENV.2007.1.3.3.3. **Funding Scheme:** CSA-SA **Duration (Months):** 18

Title: An Exercise to Assess Research Needs and Policy Choices in Areas of Drought

Proposed EC Grant: 1.500.889 €

Abstract:

In recent years large parts of Europe suffered from extreme drought, a phenomenon that likely will become more frequent and more severe, as predicted by the climate models. This will lead to significant socio-economic and environmental impacts and associated damages. There is therefore an urgent need to develop a roadmap toward a European Drought Policy, in accordance with the EU-Water Framework Directive (WFD) and related EU Legislation and Actions. The aim is to mitigate and to adapt to droughts, and hence reduce the risks they pose in Europe.XEROCHORE SA compiles a roadmap that comprises of: 1) a state-of-the-art review and identification of the research gaps in the natural system, in impact assessment, in policy-making and in integrated water resources management, and 2) an assessment of the possible impacts of droughts and guidance on appropriate responses for stakeholders. An extended network of experts will gather inputs for the roadmap through focussed workshops, round table discussions, which integrate the various aspects, and a concluding conference. A Core Group will guide and facilitate the discussion and synthesis process, and eventually write the integrated roadmap. The project network consists of over 80 organizations including research institutes, universities, ministries, water management organizations, stakeholders, consultants, international organizations and programmes. It includes key members of the European Drought Centre and the WFD-CIS Working Group on Water Scarcity and Drought and representatives from overseas and neighbourhood countries, in particular around the Mediterranean Basin. The large number of organizations covering different aspects and geographic regions guarantee that all drought aspects will be covered. The drought network will be embedded in the already-existing European Drought Centre to reach the wider scientific and to provide research advice and policy support to the EC beyond the lifetime of this action.

Partners:

N	Partner Legal Name	Country
1	Fondazione Eni Enrico Mattei	IT
2	Wageningen Universiteit	NL
3	Water Management Center GbR	DE
4	Universitetet i Oslo	NO
5	Ministero dell'Ambiente e della Tutela del Territorio e del Mare	IT
6	Ministerio de Medio Ambiente	ES
7	Natural Environment Research Council	UK
8	National Technical University of Athens (NTUA)	EL
9	DG Joint Research Centre, European Commission	IT
10	Centre National du Machinisme Agricole, du Genie Rural, des eaux et des Forets	FR
11	The International Union for Conservation of Nature and Natural Resources	CH

Activity Code: ENV.2010.1.3.4-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: New Multi-HAzard and MulTi-RIsK Assessment MethodS for Europe

Proposed EC Grant: 3.395.961 €

Abstract:

Across Europe, people suffer losses not just from single hazards, but also from multiple events in combination. In both their occurrence and their consequences, different hazards are often causally related. Classes of interactions include triggered events, cascade effects, and rapid increases of vulnerability during successive hazards. Effective and efficient risk reduction, therefore, often needs to rest on a place-based synoptic view.MATRIX will tackle multiple natural hazards and risks in a common theoretical framework. It will integrate new methods for multi-type assessment, accounting for risk comparability, cascading hazards, and time-dependent vulnerability. MATRIX will identify the conditions under which the synoptic view provides significantly different and better results— or potentially worse results—than established methods for single-type hazard and risk analysis. Three test cases (Naples, Cologne and the French West Indies), and a “virtual city” will provide MATRIX with all characteristic multi-hazard and multi-risk scenarios. The MATRIX IT-architecture for performing, analysing and visualising relevant scenarios will generate tools to support cost-effective mitigation and adaptation in multi-risk environments.MATRIX will build extensively on the most recent research on single hazard and risk methodologies carried out (or ongoing) in many national and international research projects, particularly those supported by DG Research of the European Commission. The MATRIX consortium draws together a wide range of expertise related to many of the most important hazards for Europe (earthquakes, landslides, volcanic eruptions, tsunamis, wildfires, winter storms, and both fluvial and coastal floods), as well as expertise on risk governance and decision-making. With ten leading research institutions (nine European and one Canadian), we also include end-user partners: from industry, and from the European National Platforms for Disaster Reduction.

Partners:

N	Partner Legal Name	Country
1	Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum	DE
2	AMRA - ANALISI E MONITORAGGIO DEL R ISCHIO AMBIENTALE SCARL	IT
3	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
4	STIFTELSEN NORGES GEOTEKNISKEINSTITUTT	NO
5	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
6	Aspinall Consulting Ltd	UK
7	Karlsruher Institut fuer Technologie	DE
8	TECHNISCHE UNIVERSITEIT DELFT	NL
9	Eidgenössische Technische Hochschule Zürich	CH
10	Instituto Superior de Agronomia	PT
11	Deutsches Komitee Katastrophenvorsorge e.V.	DE
12	UNIVERSITY OF BRITISH COLUMBIA	CA

Activity Code: ENV.2010.2.1.1-1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Africa at meso-scale: Adaptive and integrated tools and strategies on natural resources management

Proposed EC Grant: 3.344.999 €

Abstract:

Threats to the environment and natural resources, coupled with poor management, have serious implications for both poverty reduction and sustainable economic development. Degrading natural resources in Africa therefore result in an inreased vulnerability of the poor as a result of ecosystem stress, competition for space, soaring food and energy prices, climate change and demographic growth. Nowadays, it is widely accepted that reversing these trends asks for integrated management frameworks. Despite the availability of many tools, expertise, strategies, local practices and indigenous knowledge, the concept of INRM has hardly been brought into practice and the building blocks of INRM (see description acronym) in many cases still need to be integrated. AFROMAISON will make use of what is available regarding INRM and will contribute to a better integration of the the components of INRM. In view of the decentralization policy in Africa, we aim to focus on the operational requirements of INRM for sub-national (or meso-scale) authorities and communities.The main outputs of AFROMAISON are a toolbox, short-term to long-term strategies, quick wins (much gains with little effort) and operational strategies for adaptation to global change. In order to enhance the potential impact, we will put strong efforts in integrated capacity building and a solid dissemination strategy. In order to do so, we will integrate tools, frameworks, strategies and processes for landscape functioning, livelihood & socio-economic development (incl. vulnerability to global change), local knowledge, institutional strenghtening and improved interaction between sectors, scales and communities. For the development of concrete operational strategies for adaptation to global change, AFROMAISON will focus on the three groups of tools: strategies for restoration and adaptation (including sustainable landscape intensification), economic tools and incentives for INRM and tools for spatial planning. The too

Partners:

N	Partner Legal Name	Country
1	Soresma NV	BE
2	INTERNATIONAL CENTRE FOR RESEARCH IN AGROFORESTRY	KE
3	Institute of Natural Resources	ZA
4	Observatoire du Sahara et du Sahel	TN
5	UNESCO-IHE INSTITUTE FOR WATER EDUCATION	NL
6	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
7	STICHTING WETLANDS INTERNATIONAL	NL
8	INTERNATIONAL WATER MANAGEMENT INSTITUTE IWMI	LK
9	UNIVERSITE DE GENEVE	CH
10	Fondation 2iE	BF
11	CENTRE DE COOPERATION INTERNATIONAL EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT	FR
12	UNIVERSITY OF KWAZULU-NATAL	ZA
13	Altenburg & Wymenga ecologisch onderzoek B.V.	NL
14	Mountains of the Moon University	UG

Activity Code: ENV.2010.2.1.1-2 **Funding Scheme:** CP-IP **Duration (Months):** 54

Title: Visions Of LANd use Transitions in Europe

Proposed EC Grant: 6.997.102 €

Abstract:

VOLANTE aims to develop a new European land management paradigm, providing an integrated conceptual and operational platform which allows policy makers to develop pro-active and context-sensitive solutions to the challenges for the future, rather than to react on largely autonomous external land systems developments. Objective of VOLANTE is to provide European policy and land management with critical pathways defining the band width of possible land management policies for future European land use. Policy options will therefore be identified in time and space and their consequences in terms of states of the land system (provisioning of ecosystem goods and services) will be evaluated, leading to a ROADMAP FOR FUTURE LAND RESOURCES MANAGEMENT IN EUROPE.To realise this, VOLANTE is designed in three Modules to gain better understanding of the PROCESSES underpinning land use change in Europe, to exploit ASSESSMENT tools that are capable of identifying critical pathways for land management in a variety of environmental and management regimes across Europe, and to provide insight into the role of land management decisions on future sustainability: VISIONS.VOLANTE brings together researchers with experience and expertise on land use change at various spatial and temporal scales enabling a focus on vision development. Module Processes identifies land use change and the processes causing these, testing unproven hypotheses by extensively using the experience gained in earlier projects and studying crucial missing links. Problem orientation is the basis for the Module Assessment, which will narrow down the infinite spectrum of policy decisions possible. Module Visions establishes interaction with decision makers at regional and European level, to enhance an evidence based and problem oriented science-policy interface. A special, professional and consistent effort will be made to gather the views of a broad set of stakeholders and to include them in all steps of the

Partners:

N	Partner Legal Name	Country
1	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
2	THE UNIVERSITY OF EDINBURGH	UK
3	UNIVERSITAET KLAGENFURT	AT
4	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
5	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
6	Københavns Universitet	DK
7	EUROPEAN FOREST INSTITUTE	FI
8	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
9	University of the Aegean-Research Unit	EL
10	UNIVERSITATEA DIN BUCURESTI	RO
11	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
12	HUMBOLDT-UNIVERSITAT ZU BERLIN	DE
13	AARHUS UNIVERSITET	DK
14	PROSPEX BVBA	BE

Activity Code: ENV.2008.2.1.2.1. **Funding Scheme:** CP-IP **Duration (Months):** 54

Title: Groundwater and dependent Ecosystems: NEw Scientific basIS on climate change and land-use impacts for the update of the EU Groundwater Directive

Proposed EC Grant: 6.997.200 €

Abstract:

Groundwater resources are facing increasing pressure from consumptive uses (irrigation, water supply, industry) and contamination by diffuse loading (e.g. agriculture) and point sources (e.g. industry). This cause major threat and risks to our most valuable water resource and on ecosystems dependent on groundwater. New information is need on how to better protect groundwaters and groundwater dependent ecosystems (GDE) from intensive land-use and climate change. The impacts of land-use changes and climate changes are difficult to separate as they partly result in similar changes in the ecosystems affected. The effects are highly interwoven and complex. The EU groundwater directive (GWD) and the water framework directive (WFD) provide means to protect groundwater (GW) aquifers from pollution and deterioration. At present, the maximum limits for groundwater pollutant concentrations have been set for nitrate and various pesticides. Also, water of sufficient quality and quantity should be provided to ecosystems dependent on groundwater. The European aquifers differ by their geology, climate, and threats to aquifers. This must be considered when general guidelines for management of these systems are developed. The concept of the present proposal is to base the research on different relevant aquifer sites in various European countries to test scientific issues and find new results to important problems. Seven WP are foreseen:WP1 Case studies on impacts and threats to GWs and GDEs WP2 Groundwater dynamics, re-charge and water balance WP3 Leaching to groundwater aquifers from different land-uses WP4 Groundwater dependent ecosystems: groundwater-surface water interaction WP5 Modelling processes in groundwater systems WP6 Concepts, scenarios and risk assessment WP7 Co-ordination

Partners:

N	Partner Legal Name	Country
1	Bioforsk-Norwegian Institute for Agricultural and Environmental Research	NO
2	University of Oulu	FI
3	Joanneum Research Forschungsgesellschaft mbH	AT
4	Swiss Federal Institute of Technology Zurich (ETH)	CH
5	Luleå University of Technology	SE
6	UNIVERSITATEA DIN BUCURESTI	RO
7	GIS-GEOINDUSTRY, s.r.o.	CZ
8	Institut National de la Recherche Agronomique	FR
9	Alterra b.v.	NL
10	Helmholtz Zentrum München - German Research Center for Environmental Health (GmbH)	DE
11	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
12	AGH University of Science and Technology	PL
13	Università Cattolica del Sacro Cuore	IT
14	University of Kent	UK
15	IGEM Danismanlik Organizasyon Arastirma Ltd Sti	TR
16	UNIVERSIDAD POLITÉCNICA DE VALENCIA	ES
17	Democritus University of Thrace, Department of Environmental Engineering	EL
18	Cracow University of Technology	PL
19	University of Neuchâtel	CH
20	UNIVERSITY OF FERRARA	IT
21	ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS-RESEARCH CENTER	EL
22	University of Dundee	UK
23	University of Zagreb - Faculty of Mining, Geology and Petroleum Engineering	HR
24	Helmholtz-Zentrum für Umweltforschung GmbH - UFZ	DE
25	Sveriges Meteorologiska och Hydrologiska Institut	SE

Activity Code: ENV.2009.2.1.2.1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Adaptive Strategies to Mitigate the Impacts of Climate Change on European Freshwater Ecosystems

Proposed EC Grant: 6.998.419 €

Abstract:

Understanding how freshwater ecosystems will respond to future climate change is essential for the development of policies and implementation strategies needed to protect aquatic and riparian ecosystems. The future status of freshwater ecosystems is however, also dependent on changes in land-use, pollution loading and water demand. In addition the measures that need to be taken to restore freshwater ecosystems to good ecological health or to sustain priority species as required by EU Directives need to be designed either to adapt to future climate change or to mitigate the effects of climate change in the context of changing land-use. Generating the scientific understanding that enables such measures to be implemented successfully is the principal focus of REFRESH. It is concerned with the development of a system that will enable water managers to design cost-effective restoration programmes for freshwater ecosystems at the local and catchment scales that account for the expected future impacts of climate change and land-use change in the context of the WFD and Habitats Directive. At its centre is a process-based evaluation of the specific adaptive measures that might be taken to minimise the consequences of climate change on freshwater quantity, quality and biodiversity. The focus is on three principal climate-related and interacting pressures, increasing temperature, changes in water levels and flow regimes and excess nutrients, primarily with respect to lowland rivers, lakes and wetlands because these often pose the most difficult problems in meeting both the requirements of the WFD and Habitats Directive. REFRESH will advance our fundamental and applied science in 5 key areas: i) understanding how the functioning of freshwater ecosystems is affected by climate change; ii) new indicators of functional response and tools for assessing vulnerability; iii) modelling ecological processes; iv) integrated modelling; and v) adaptive management.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITY COLLEGE LONDON	UK
2	AARHUS UNIVERSITET	DK
3	THE UNIVERSITY OF READING	UK
4	SUOMEN YMPARISTOKESKUS	FI
5	UNIVERSITAET DUISBURG-ESSEN	DE
6	ALTERRA B.V.	NL
7	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
8	SVERIGES LANTBRUKSUNIVERSITET	SE
9	THE MACAULAY LAND USE RESEARCH INSTITUTE	UK
10	UNIVERSITEIT UTRECHT	NL
11	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
12	MIDDLE EAST TECHNICAL UNIVERSITY	TR
13	FORSCHUNGSVERBUND BERLIN E.V.	DE
14	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
15	STICHTING DELTARES	NL
16	UNIVERSITAET FUER BODENKULTUR WIEN	AT
17	Biologicke centrum AV CR, v. v. i.	CZ
18	EESTI MAAULIKOOLESTONIAN UNIVERSITY OF LIFE SCIENCES	EE
19	UNIVERSITAT DE BARCELONA	ES
20	UNIVERSITY OF PATRAS	EL
21	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
22	NORWEGIAN INSTITUTE FOR AGRICULTURAL AND ENVIRONMENTAL RESEARCH - BIOFORSK	NO
23	NORSK INSTITUTT FOR VANNFORSKNING	NO
24	Trent University	CA
25	Griffith University	AU

Activity Code: ENV.2010.2.1.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Evaluating Economic Policy Instruments for Sustainable Water Management in Europe

Proposed EC Grant: 3.472.438 €

Abstract:

Economic policy instruments (EPI) have received widespread attention over the last three decades, and have increasingly been implemented to achieve environmental policy objectives. However, whereas EPI have been successfully applied in some policy domains (such as climate, energy and air quality), their application to tackle water management issues (drought/water scarcity, floods, water quality control) are beset by many practical difficulties. EPI-Water sets to assess the effectiveness and the efficiency of Economic Policy Instruments in achieving water policy goals, and to identify the preconditions under which they complement or perform better than alternative (e.g. regulatory or voluntary) policy instruments.Using a common multi-dimensional assessment framework, the project will compare the performance of single economic instruments or their apposite combinations with the performance otherwise achievable with regulatory (command & control) interventions (such as water restriction/rationing, licensing or permitting), persuasive instruments or voluntary commitments.Furthermore the project will identify remaining research and methodological issues that need to be addressed, in particular with regards to the further development and use of national accounting, for supporting the design, implementation and evaluation of EPI in the field of water management.

Partners:

N	Partner Legal Name	Country
1	FONDAZIONE ENI ENRICO MATTEI	IT
2	ACTeon sarl	FR
3	ECOLOGIC INSTITUT gemeinnützige GmbH	DE
4	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
5	WAGENINGEN UNIVERSITEIT	NL
6	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
7	FUNDACION IMDEA AGUA	ES
8	UNIVERSITAT DE VALENCIA	ES
9	MIDDLESEX UNIVERSITY HIGHER EDUCATION CORPORATION	UK
10	AARHUS UNIVERSITET	DK
11	BUDAPESTI CORVINUS EGYETEM	HU

Activity Code: ENV.2007.2.1.2.2. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Enhancing the role of wetlands in integrated water resources management for twinned river basins in EU, Africa and South-America in support of EU Water Initiatives

Proposed EC Grant: 2.386.849 €

Abstract:

The general objective of the project is to develop a methodological framework for the sustainable management and development of freshwater wetlands with the aim to contribute to the global fight against poverty, insecurity, climate change, pollution and ecological degradation. The methodology will focus on providing solutions for:• More sustainable local livelihood for people living on or influenced by wetlands, with emphasizes on drinking water, sanitation, security and sustainable land uses, while not deteriorating environmental functions. • Integrating wetlands into national, international water management policies/plans. Integrating wetlands into existing or envisaged river basin management plans (RBMPs). • Resolving potential conflicts that might emerge among the different objectives.The project will work on 'twinned' case study wetlands from Europe, Africa and South-America. Management solutions will be worked out for this wetlands with the aim of enhancing their drinking water supply, sanitation and livelihood functions, while sustaining (and improving if possible) their ecological values. Knowledge and experiences gained from these case studies will be summarized in general guidelines.Stakeholder participation, capacity building and dissemination will be essential elements of the project in order to ensure the optimal utilization of project results.

Partners:

N	Partner Legal Name	Country
1	Environmental Protection and Water Management Research Institute	HU
2	Soresma NV	BE
3	Potsdam Institute for Climate Impact Research	DE
4	WasserKluster Lunz- biologische station GmbH	AT
5	UNESCO-IHE Institute for Water Education	NL
6	Stichting Wetlands International	NL
7	National Water and Sewerage Corporation, Uganda	UG
8	International Water Management Institute	LK
9	Escuela Superior Politécnica del Litoral	EC

Activity Code: ENV.2008.2.1.2.2. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Coordinating Twinning partnerships towards more adaptive Governance in river basins

Proposed EC Grant: 999.023 €

Abstract:

Over the past years, the EU has funded several projects that undertook research on specific integrated water resources management (IWRM) issues in case studies carried out on twinned river basins from Europe and from developing countries. The aim of Twin2Go now is to review, assess, synthesize and consolidate the outcomes of these projects in order to make them transferable and applicable to other basins, and to disseminate the project results effectively to relevant authorities, stakeholders and end-users. This will contribute to the overall goal to underpin the implementation of IWRM in line with the targets of the EU Water Initiative. In order to achieve this aim, Twin2Go will elaborate a methodology that allows comparative analysis and synthesis of the outcomes of the diverse projects. The consolidated outcomes will feed into best practice guidelines for the adoption and implementation of sustainable water resources management plans. To ensure up-take of the research results in water resources management practice and political decision making, all synthesis activities will involve stakeholders from the projects and basins and synthesis results will be effectively disseminated to all relevant levels of target groups including high level decision makers in water policy. In its effort, Twin2Go will focus its activities on the thematic priority 'adaptive water governance in the context of climate change' and cluster past and ongoing twinning projects along their target regions (Latin America, Africa, NIS, South and South East Asia).Through its co-ordinating activities, Twin2Go will bring together participants and lead partners from past and ongoing projects as well as international water networks. This will allow increasing the output and benefit of ongoing research by consolidating results, exploiting synergies and thus build up the critical mass that will promote uptake of research results and reaching audiences at a higher level of decision making.

Partners:

N	Partner Legal Name	Country
1	University of Osnabrück	DE
2	Adelphi Research	DE
3	VITUKI - Environmental Protection and Water Management Research Institute	HU
4	Soresma NV	BE
5	DHI	DK
6	Friedrich-Schiller-University Jena	DE
7	Independent Non-commercial Organization Environmental Policy Research and Consulting	RU
8	Chiang Mai University	TH

Activity Code: ENV.2007.2.1.2.3. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Mediterranean Intermittent River Management

Proposed EC Grant: 3.499.783 €

Abstract:

The implementation of the WFD in catchments with temporary rivers presents a significant challenge for watershed managers. The MIRAGE project will, for the first time, comprehensively investigate the applicability of specific management options under the characteristic flush and drought conditions of temporary streams. Through investigations in seven basins, MIRAGE will provide a framework for managing the many Mediterranean water bodies dominated by temporary waters.MIRAGE will deploy a multi-scale approach to improve understanding of temporary river responses to hydrologic, biogeochemical and sediment transport events. The principal research and project objectives of MIRAGE are to(1) provide an applicable and transferable set of reference conditions for temporary streams, specifically linking terrestrial and aquatic ecology;(2) determine effects of dry periods on accumulation and transformation of nutrients, sediments and hazardous substances on land and in river channels, at selected sites with test catchments.(3) specify and test measures to support achieving good ecological and water quality status including the integration of up- and downstream management. This will be done initially for the two mirror basins Candelaro (Italy) and Evrotas (Greece) in close cooperation with local water management organisations;(4) support the implementation of the WFD and the development of strategies for integrated water resources management for Mediterranean river basins, generalising from the Mirror Basins on the basis of modern ecohydrology concepts, in the context of characterising runoff regimes and flood responses on a regional basis. Five other Mediterranean catchments, including one in Morocco, will be used as the primary focus for this work;The transfer of experience and the establishment of common guidelines is then seen as a significant support for WFD implementation across the region.

Partners:

N	Partner Legal Name	Country
1	Leibniz Universität Hannover	DE
2	TECHNICAL UNIVERSITY OF CRETE	EL
3	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE	BE
4	Consiglio Nazionale delle Ricerche	IT
5	Consejo Superior de Investigaciones Cientificas	ES
6	Universitat de Barcelona	ES
7	UNIVERSIDAD DE MURCIA	ES
8	Université de Montpellier 2	FR
9	University of Leeds	UK
10	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
11	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
12	IMAR-INSTITUTO DO MAR	PT
13	Hellenic Centre for Marine Research	EL
14	Faculty of Sciences and Technology	MA
15	Autorità di Bacino della Puglia	IT
16	PREFECTURE OF LAKONIA	EL

Activity Code: ENV.2008.2.1.2.3. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Water bodies in Europe: Integrative Systems to assess Ecological status and Recovery

Proposed EC Grant: 6.985.893 €

Abstract:

WISER will support the implementation of the Water Framework Directive (WFD) by developing tools for the integrated assessment of the ecological status of European surface waters (with a focus on lakes and coastal/transitional waters), and by evaluating recovery processes in rivers, lakes and coastal/transitional waters under global change constraints. The project will (1) analyse existing data from more than 90 databases compiled in previous and ongoing projects, covering all water categories, Biological Quality Elements (BQEs) and stressor types and (2) perform targeted field-sampling exercises including all relevant BQEs in lakes and in coastal/transitional waters. New assessment systems will be developed and existing systems will be evaluated for lakes and coastal/transitional waters, with special focus on how uncertainty affects classification strength, to complete a set of assessment methodologies for these water categories. Biological recovery processes, in all water categories and in different climatic conditions, will be analysed, with focus on mitigation of hydromorphological and eutrophication pressures. Large-scale data will be used to identify linkages between pressure variables and BQE responses. Specific case studies, using a variety of modelling techniques, will address selected pressure-response relationships and the efficacy of mitigation measures.The responses of different BQEs and different water categories to human-induced degradation and mitigation will be compared, with special focus on response signatures of BQEs within and among water categories. Guidance for the next steps of the intercalibration exercise will be given by comparing different intercalibration approaches.Stakeholders will be included from the outset, by building small teams of stakeholders and project partners responsible for a group of deliverables, to ensure the applicability and swift implementation of results.

Partners:

N	Partner Legal Name	Country
1	Universitaet Duisburg-Essen	DE
2	Norsk institutt for vannforskning	NO
3	Natural Environment Research Council	UK
4	Fundación AZTI - AZTI Fundazioa	ES
5	University of Hull	UK
6	Aarhus University	DK
7	Centre National du Machinisme agricole, du Génie Rural, des Eaux et Forêts	FR
8	Sveriges Lantbruksuniversitet	SE
9	European Community represented by the European Commission – Directorate General Joint Research Centre	BE
10	Institute of Environmental Protection	PL
11	Forschungsverbund Berlin e.V	DE
12	Suomen ympäristökeskus	FI
13	Consejo Superior de Investigaciones Científicas	ES
14	Alterra b.v.	NL
15	Universitaet fuer Bodenkultur Wien - University of Natural Resources and Applied Life Sciences Vienna	AT
16	Eesti Maaülikool	EE
17	University College London	UK
18	Consiglio Nazionale delle Ricerche	IT
19	Stichting Deltares	NL
20	IMAR- INSTITUTO DO MAR	PT
21	Institute of Oceanology, Bulgarian Academy of Sciences	BG
22	The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin (hereinafter called TCD)	IE
23	UNIVERSITY OF SALENTO	IT
24	Bournemouth University Higher Education Corporation	UK
25	Universita' degli Studi di Milano	IT

Activity Code: ENV.2007.2.1.2.4. **Funding Scheme:** CSA-SA **Duration (Months):** 42

Title: Vital and viable services for natural resource management in Latin America

Proposed EC Grant: 850.000 €

Abstract:

VIVACE is based on two conceptual pillars: on the one side innovative technical concepts for vital and viable services, and on the other, integrated analytical approaches and decision support tools. These two pillars are based on the emerging concepts for natural resource management emphasising reuse and recycling. They will be centred on peri-urban water management, but will include organic solid waste management, and agricultural water management. The “restricted biosphere” where VIVACE will test their tools is represented by rapidly developing urban or small town areas in Latin America, together with their rural/natural surroundings. The systems boundaries will be set on a case specific basis in such a way that the mutual impacts of water extraction and wastewater/waste disposal can be assessed. In each case study, VIVACE will analyse the impact of existing resource management practices (within the considered sectors) on the economic development in the region. This will allow the evaluation of the potential of proposed innovative concepts for safeguarding and or fostering economic development in a restricted biosphere. Integrated analytical approaches for decision support and strategic planning will then be developed and tested, with particular focus on tools for integrated and participatory assessment of these aspects. In this perspective, the two primary objectives of VIVACE will be: To explore the existing potential and constraints of integrated resource planning, thereby contributing to the implementation of the Framework Programmes and the preparation of future Community research and technological development policy. To interact with a wide range of societal actors (SMEs, civil society organisations and their networks, small research teams and research centres) in the activities of the thematic areas of the Cooperation programme.

Partners:

N	Partner Legal Name	Country
1	Universität für Bodenkultur, Wien	AT
2	Lettinga Associates Foundation	NL
3	Politecnico di Bari	IT
4	Instituto Internacional de medio Ambiente y Desarrollo- America Latina	AR
5	Instituto Nacional del Agua	AR
6	Insatituto Mexicano de Tecnología del Agua	MX

Activity Code: ENV.2008.2.1.3.1. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Prevention and Restoration Actions to Combat Desertification. An Integrated Assessment.

Proposed EC Grant: 976.965 €

Abstract:

The general objective of PRACTICE is to link S & T advances and traditional knowledge on prevention and restoration practices to combat desertification with sound implementation, learning and adaptive management, knowledge sharing, and dissemination of best practices. Specific objectives are:1. To create an international platform of long-term monitoring sites for assessing and investigating practices to combat desertification. 2. To develop integrated evaluation tools to assess the cost-effectiveness of practices to combat desertification, taking into account changes in both biophysical and socio-economic properties, by synergistically exploiting the recent advances on assessment and evaluation methodologies and approaches.3. To assess prevention and restoration practices to combat desertification for croplands, rangelands and woodlands, considering the impacts on socio-economic status, soil functions, biodiversity, and ecosystem services.4. To identify and document best practices to combat desertification considering multiple purposes at different spatial (local to global) scales, and to establish cost-effective thresholds for the various management alternatives.5. To develop education material and translational science strategies, and implement innovative participatory approaches to link science to society, to share and transfer evaluation methods and best practices, addressing and involving stakeholders at all levels, from farmers to local organisations, to national and international bodies.

Partners:

N	Partner Legal Name	Country
1	FUNDACION CENTRO DE ESTUDIOS AMBIENTALES DEL MEDITERRANEO	ES
2	UNIVERSIDAD DE ALICANTE	ES
3	Università degli Studi di Sassari. Centro interdepartamentale di Ateneo-NRD Nucleo Ricerca Desertificazione	IT
4	Remote Sensing Department, FB VI Geography/Geosciences, University of Trier	DE
5	Centro Euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
6	Aristotle University of Thessaloniki	EL
7	University of Aberdeen	UK
8	Fundación Universidad Empresa de la Región de Murcia	ES
9	Dryland Research Center at BioCEenter Klein Flottbeck, University Hamburg	DE
10	Liga a para Protecçao da Natureza	PT
11	Ben-Gurion University of the Negev	IL
12	North-West University	ZA
13	Northeast Normal University	CN
14	INSTITUTO DE ECOLOGIA Y BIODIVERSIDAD	CL
15	UNIVERSIDAD AUTONOMA DE NUEVO LEON	MX

Activity Code: ENV.2009.2.1.3.1 **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Soil Transformations in European Catchments

Proposed EC Grant: 6.974.573 €

Abstract:

SoilTrEC proposes to develop an integrated model of soil processes that describes key soil functions. These functions are defined in the EC Soil Thematic Strategy as essential ecosystem services for the well-being and economic success of the EU. The key science advances are to develop, from first-principles, computational models that integrate soil erosion, solute transport, carbon dynamics and food web dynamics within an open-source modelling framework. This framework will provide the platform, together with existing GIS capacity, for a prototype simulator at EU-scale to assess soil threats and evaluate approaches to mitigation. This physical-based modelling will be integrated with new advances in decision support developed from life cycle and economic assessment methodologies for natural resources. A key conceptual advance of this project is to quantify soil stocks, their formation, loss and functions within the context of the earth's Critical Zone. This encompasses the terrestrial environment from the top of the biosphere's tree canopy to the bedrock delineating the lower bounds of freshwater aquifers. SoilTrEC will link 4 EU field sites that describe key stages within the life cycle of soil formation, its productive use and degradation. Existing data sets will be augmented with targeted process studies in order to provide the data sets to validate the integrated model of soil processes. These process studies will be integrated with results from additional EU, USA and Chinese field sites to compare soil processes and rates as they vary with lithology, climate and land use. These sites and their teams will be integrated through shared results and an international research training programme into a global network of Critical Zone Observatories. This programme of research will engage very actively with stakeholders involved in the practical management of land, and will draw strongly on the advice and guidance of international leaders in soil sustainability.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF SHEFFIELD	UK
2	Institute of Soil Science "Nikola Poushkarov"	BG
3	TECHNICAL UNIVERSITY OF CRETE	EL
4	STICHTING DELTARES	NL
5	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
6	HASKOLI ISLANDS	IS
7	WAGENINGEN UNIVERSITEIT	NL
8	UNIVERSITAET FUER BODENKULTUR WIEN	AT
9	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
10	Eidgenössische Technische Hochschule Zürich	CH
11	CESKA GEOLOGICKA SLUZBA	CZ
12	INSTITUTE OF SOIL SCIENCE CHINESE ACADEMY OF SCIENCES	CN
13	The Pennsylvania State University	US
14	SVERIGES LANTBRUKSUNIVERSITET	SE
15	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR

Activity Code: ENV.2009.2.1.3.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Land and Ecosystem Degradation and Desertification: Assessing the Fit of Responses

Proposed EC Grant: 3.062.042 €

Abstract:

LEDDRA aims to advance the comprehensive study of the socio-environmental fit of responses to land and ecosystem degradation and desertification (LEDD) in various contexts. It adopts the ecosystem approach and an integrated methodology with continuous feedbacks between theory, methods and applications. It focuses on response assemblages (combinations of response types and prevailing environmental, socio-economic and institutional conditions that contribute to or detract from sustainable land management and societal welfare), the associated costs and benefits to diverse stakeholders, barriers to and opportunities for adoption, and knowledge transfer processes. Optimal response assemblages comprise coordinated, mutually supportive and complementary measures that preserve the ecological and the community resilience of affected areas. LEDDRA develops the theory of responses to LEDD, in general, and in cropland, grazing land and forests/shrubland, in particular, and the study of knowledge transfer for diverse stakeholder types. It negotiates the links between land degradation, ecosystem services decline and biodiversity change, the links between biophysical and human determinants, welfare impacts, and responses to drought (drought preparedness). It improves existing and develops new integrated methodologies for assessing the impacts and fit of various types of responses to LEDD and the socio-ecological vulnerability of affected regions, and for identifying response assemblages in different European and other cultural-institutional contexts drawing on applications in selected sites in EU and ICPC countries. It analyzes the policy context to offer recommendations for policy and land management actions at the international, EU and national levels. To better organize, show case, disseminate and add value to project results, a web-based information system will be developed to make findings accessible to a wide range of stakeholders with different levels of expertise.

Partners:

N	Partner Legal Name	Country
1	University of the Aegean-Research Unit	EL
2	AGRICULTURAL UNIVERSITY OF ATHENS	EL
3	3D - Environmental Change	NL
4	UNIVERSITY OF PLYMOUTH	UK
5	Osservatorio MEDES - Osservatorio Mediterraneo per lo studio delle Soluzioni dei Problemi Economici delle Aree a Rischio Desertificazione	IT
6	UNIVERSITA DEGLI STUDI DELLA BASILICATA	IT
7	ECOLOGIC - INSTITUT FUER INTERNATIONALE UND EUROPAEISCHE UMWELTPOLITIK gGmbh	DE
8	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
9	Changjiang River Scientific Research Institute	CN
10	INSTITUT AGRONOMIQUE ET VETERINAIRE HASSAN II	MA
11	UNIVERSITAT DE VALENCIA	ES

Activity Code: ENV.2009.2.1.3.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 60

Title: Understanding and combating desertification to mitigate its impact on ecosystem services

Proposed EC Grant: 3.499.379 €

Abstract:

UNDESERT aims at combatting desertification and land degradation in order to mitigate their impacts on ecosystem services, and following on human livelihoods. The West African region is central for understanding desertification and degradation processes, which are already severe and widespread as a consequence of climate change and human impact. An improved understanding of the effects of desertification and degradation processes is obtained on a local to regional scale by integrating remote sensing information with sound field data on biodiversity and soil as well as socioeconomic and climate data. On this basis decision support models and tools will be developed and introduced to natural resource managers. UNDESERT also includes two very practical aspects, 1) restoration through tree plantations, which will be certified for CO2 marketing as the first restoration site in West Africa, 2) ecosystem management based on scientific data and best practices developed in close collaboration between scientists and local communities. As a demand driven project, UNDESERT activities will be implemented by employing 17 young PhD students, who will receive training to enhance future capacities to manage risks and uncertainties in the frame of future demographic and climatic changes. The scientific results will be used to combat desertification and degradation directly and will be transferred to international programs in order to contribute to the implementation of relevant international strategies, initiatives and commitments of the EU and African countries.

Partners:

N	Partner Legal Name	Country
1	AARHUS UNIVERSITET	DK
2	Universite Abdou Moumouni	NE
3	UNIVERSITE CHEIKH ANTA DIOP DE DAKAR	SN
4	JOHANN WOLFGANG GOETHE UNIVERSITAET FRANKFURT AM MAIN	DE
5	Senckenberg Forschungsinstitut und Naturmuseum Frankfurt	DE
6	Universite de Ouagadougou	BF
7	Universite polytechnique de Bobo-Dioulasso	BF
8	UNIVERSITE D ABOMEY CALAVI UAC	BJ
9	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE

Activity Code: ENV.2007.2.1.4.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Conflicting demands of land use, soil biodiversity and the sustainable delivery of ecosystem goods and services in Europe

Proposed EC Grant: 3.475.774 €

Abstract:

European soil biodiversity is pivotal for delivering food, fiber and biofuels and carbon storage. However, the demand is greater than the amount of soil available, as production of biofuels competes with areas for food production and nature. Moreover, intensified land use reduces soil biodiversity and the resulting ecosystem services. SOILSERVICE will value soil biodiversity through the impact on ecosystem services and propose how these values can be granted through payments. SOILSERVICE will combine interdisciplinary empirical studies and soil biodiversity surveys to construct soil food web models and determine effects of changing soil biodiversity on stability and resilience of carbon, nitrogen and phosphorus cycling, as well as assess consequences for outbreaks of pests or invasive species. SOILSERVICE will link ecological and economic models to develop a system for valuing soil biodiversity in relation to ecosystem services. Objectives:•
services during different pressure of land use and changes in soil biodiversity.•
what spatial and temporal scales soil biodiversity and soil ecosystem services are vulnerable to disturbance.•
processes that indicate when ecosystems are approaching the limits of their natural functioning or productive capacity.

• Establishing methods to determine and predict sustainability of ecosystem services at different types of land use•
scenarios to identify economical and social drivers of how land use such as biofuel production and land abandonment can influence soil biodiversity and ecosystem services over European scale.•
results on which services are at threat and mitigating changes in soil biodiversity to achieve a sustainable use of soils.Our results contribute to a European knowledge-based competitive economy and to a future EU directive on soils.

Partners:

N	Partner Legal Name	Country
1	Lunds universitet	SE
2	Swedish Institute for Food and Agricultural Economics	SE
3	Netherlands Institute of Ecology of the Royal Dutch Academy of Arts and Sciences	NL
4	Justus-Liebig-University of Giessen	DE
5	Wageningen Universiteit	NL
6	Helsingin yliopisto	FI
7	Copenhagen University	DK
8	Lancaster Universty	UK
9	The University of Reading	UK
10	Aristotle University of Thessaloniki	EL
11	Biology Centre Academy of Sciences of the Czech Republic v.v.i.	CZ

Activity Code: ENV.2008.2.1.4.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Biodiversity of Freshwater Ecosystems: Status, Trends, Pressures, and Conservation Priorities

Proposed EC Grant: 6.465.411 €

Abstract:

Global and continental patterns and determinants of most freshwater taxonomic groups are poorly known, compared to those for terrestrial species. This missing information seriously handicaps effective conservation planning of freshwater biodiversity, and the services that depend on it. Thus, increased efforts are needed to evaluate, complement, integrate, and analyse the available quantitative data on freshwater biodiversity patterns, and on how freshwater biodiversity responds to environmental pressures at global, European, and local scales. BioFresh, through building a freshwater biodiversity information portal, will bring together and make publicly available the vast amount of information that does exist, but is widely dispersed, and effectively inaccessible to policy makers and planners. BioFresh will provide spatially-explicit information on status and trends of freshwater biodiversity, and the services that it supports. By conducting research on past and present impacts of, and interactions between stressors on freshwater biodiversity, the project will improve our understanding of future responses of freshwater biodiversity and its services to climate and socioeconomic pressures at global, continental and local scales. It ultimately aims at providing a coherent scientific foundation by which freshwater biodiversity can be incorporated more explicitly into international environmental agreements in general, and the EU-Water Framework Directive in particular, as well as other related policy instruments such as the Habitats Directive. In addition to supporting policy makers, the project findings and outputs will be disseminated widely in a variety of ways, to strengthen public awareness on the importance of freshwater biodiversity.

Partners:

N	Partner Legal Name	Country
1	Forschungsverbund Berlin e.V	DE
2	Royal Belgian Institute of Natural Sciences	BE
3	Universitaet fuer Bodenkultur Wien - University of Natural Ressources and Applied Life Sciences Vienna	AT
4	International Center for Living Aquatic Resources Management	MY
5	Institut de recherche pour le développement	FR
6	Universitaet Duisburg-Essen	DE
7	International Union for Conservation of Nature and Natural Resources	CH
8	The Chancellor, Masters and Scholars of the University of Oxford	UK
9	Universitat de Barcelona	ES
10	Helmholtz - Zentrum für Umweltforschung GmbH - UFZ	DE
11	University College London	UK
12	Eidgenössische Anstalt für Wasseraufbereitung, Abwasserreinigung und Gewässerschutz	CH
13	Université Claude Bernard Lyon 1	FR
14	Universite Paul Sabatier	FR
15	Ecologic - Institute for International and European Environmental Policy gGmbH	DE
16	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
17	University of Debrecen	HU
18	Naturhistoriska riksmuseet	SE
19	Centre for Cartography of fauna and flora	SI

Activity Code: ENV.2009.2.1.4.1 **Funding Scheme:** CP-FP **Duration (Months):** 60

Title: Status and Trends of European Pollinators

Proposed EC Grant: 3.500.000 €

Abstract:

Pollinators form a key component of European biodiversity, and provide vital ecosystem services to crops and wild plants. There is growing evidence of declines in both wild and domesticated pollinators, and parallel declines in plants relying upon them. STEP will document the nature and extent of these declines, examine functional traits associated with particular risk, develop a Red list of endangered European pollinators and lay the groundwork for future pollinator monitoring programmes. We will also assess the relative importance of potential drivers of such change, including climate change, habitat loss and fragmentation, agrichemicals, pathogens, alien species, light pollution, and their interactions. We will measure the ecological and economic impacts of declining pollinator services and floral resources, including effects on wild plant populations, crop production and human nutrition. STEP will review existing and potential mitigation options, providing novel tests of their effectiveness across Europe. Our work will build upon on existing datasets and models, complemented by spatially-replicated campaigns of field research to fill gaps in current knowledge. We will integrate our findings in a policy-relevant framework, creating Evidence-based Decision Support tools. We will also establish communication links to a wide range of stakeholders across Europe and beyond, including policy makers, beekeepers, farmers, academics and the general public. Taken together, our research programme will make great steps towards improving our understanding of the nature, causes, consequences and potential mitigation of declines in pollinator services at local, national, continental and global scales.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF READING	UK
2	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
3	SVERIGES LANTBRUKSUNIVERSITET	SE
4	ALTERRA B.V.	NL
5	AARHUS UNIVERSITET	DK
6	UNIVERSITY OF LEEDS	UK
7	UNIVERSITAET BAYREUTH	DE
8	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
9	EIDGENOSSISCHES VOLKSWIRTSCHAFTSDEPARTEMENT	CH
10	SUOMEN YMPARISTOKESKUS	FI
11	LUNDS UNIVERSITET	SE
12	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
13	TARTU ULIKOOL	EE
14	Pensoft Publishers Ltd	BG
15	UNIVERSITAET BERN	CH
16	University of Novi Sad Faculty of Sciences	RS
17	UNIVERSITE DE MONS-HAINAUT.	BE
18	UNIWERSYTET JAGIELLONSKI.	PL
19	Università di Pisa	IT
20	University of the Aegean-Research Unit	EL

Activity Code: ENV.2010.2.1.4-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Functional significance of forest biodiversity in Europe

Proposed EC Grant: 6.989.407 €

Abstract:

FunDivEUROPE (FUNctional significance of forest bioDIVersity in EUROPE) proposes to quantify the effects of forest biodiversity on ecosystem function and services in major European forest types in the main bioclimatic regions of Europe. FunDivEUROPE will be based on four scientific platforms and seven cross-cutting Work Packages.The project will combine a global network of tree diversity experiments (Experimental Platform) with a newly designed network of observational plots in six focal regions within Europe (Exploratory Platform). Additionally, the project will integrate an in-depth analysis of inventory-based datasets of existing forest monitoring networks to extend the scope to larger spatial and temporal scales (Inventory Platform). FunDivEUROPE will thus combine the strengths of various scientific approaches to explore and quantify the significance of forest biodiversity for a very large range of ecosystem processes and ecosystem services. Using modeling and state-of-the-art techniques for quantitative synthesis, the project will integrate information gained from the different platforms to assess the performance of pure and mixed species stands under changing climate. In addition to the three research platforms, FunDivEUROPE will set up a Knowledge Transfer Platform in order to foster communication, aggregation and synthesis of individual findings in the Work Packages and communication with stakeholders, policy makers and the wider public. The information gained should thus enable forest owners, forest managers and forest policy makers to adapt policies and management for sustainable use of forest ecosystems in a changing environment, capitalizing on the potential effects of biodiversity for ecosystem functioning. The experiences gained within FunDivEUROPE will finally allow contributing to the development of the European Long-Term Ecosystem Research Network, complementing existing forest observation and monitoring networks.

Partners:

N	Partner Legal Name	Country
1	ALBERT-LUDWIGS-UNIVERSITAET FREIBURG	DE
2	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
3	UNIVERSITAET FUER BODENKULTUR WIEN	AT
4	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
5	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
6	FORSTLICHE VERSUCHS- UND FORSCHUNGSANSTALT BADEN-WUERTTEMBERG	DE
7	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
8	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
9	Metsantutkimuslaitos	FI
10	MARTIN-LUTHER-UNIVERSITAET HALLE-WITTENBERG	DE
11	NATIONAL AGRICULTURAL RESEARCH FOUNDATION.	EL
12	ROYAL HOLLOWAY AND BEDFORD NEW COLLEGE	UK
13	SVERIGES LANTBRUKSUNIVERSITET	SE
14	UNIVERSIDAD DE ALCALA	ES
15	UNIVERSITAET BERN	CH
16	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK
17	Københavns Universitet	DK
18	UNIVERSITA DEGLI STUDI DI FIRENZE	IT
19	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
20	UNIVERSITEIT GENT	BE
21	UNIVERSITAET LEIPZIG	DE
22	UNIVERSITY STEFAN CEL MARE SUCEAVA	RO
23	UNIWERSYTET WARSZAWSKI	PL
24	UNIVERSITAET ZUERICH	CH

Activity Code: ENV.2007.2.1.4.2. **Funding Scheme:** CP-FP **Duration (Months):** 60

Title: Palm harvest impacts in tropical forests

Proposed EC Grant: 3.145.880 €

Abstract:

Tropical forests harbour thousands of useful plants which are harvested and used in subsistence economies or traded in local, regional or international markets. The effect on the ecosystem is little known, and the forests' resilience is badly understod. Palms are the most useful group of plants in tropical American forests and we will study the effect of extraction and trade of palms on forest in the western Amazon, the Andes and the Pacific lowlands. We will determine the size of the resource by making palm community studies in the different forest formations and determine the number of species and individuals of all palm species. The genetic structure of useful palm species will be studied to determine how much harvesting of the species contributes to genetic erosion of its populations, and whether extraction can be made without harm. We then determine how much palms are used for subsistence purposes by carrying out quantitative, ethnobotanical research in different forest types and then we study trade patterns for palm products from local markets to markets which involve export to other countries and continents. Palm populations are managed in various ways from sustainable ones to destructive harvesting; we will study different ways in which palms are managed and propose sustainable methods to local farmers, local governments, NGOs and other interested parties. Finally we will study national level mechanism that governs extraction, trade and commercialization of palm products, to identify positive and negative policies in relation to resilience of ecosystems and use this to propose sustainable policies to the governments. The results will be diseminated in a variety of ways, depending on need and stake holders, from popular leaflets and videos for farmers, reports for policy makers to scientific publication for the research community. The team behind the proposal represents 10 universities and research institutions in Europe and northwestern South America.

Partners:

N	Partner Legal Name	Country
1	Aarhus Universitet	DK
2	Institut de Recherche pour le Développement	FR
3	Real Jardín Botánico de Madrid	ES
4	Freie Universität Berlin	DE
5	Royal Botanic Gardens, Kew	UK
6	Universidad Mayor de San Andrés	BO
7	Universidad Nacional Mayor de San Marcos	PE
8	Pontificia Universidad Católica del Ecuador	EC
9	Universidad Nacional de Colombia	CO
10	Dansk Institut for Internationale Studier og Menneskerettigheder	DK

Activity Code: ENV.2010.2.1.4-2 **Funding Scheme:** CSA-CA **Duration (Months):** 48

Title: Cooperation and shared strategies for biodiversity research programmes in Europe

Proposed EC Grant: 1.999.600 €

Abstract:

Biodiversity loss and ecosystem degradation are major scientific and societal challenges. Addressing them and providing scientific support to policy requires a coherent research framework, with coordinated strategies and programmes at the regional and international levels, which are the relevant scales for many biodiversity issues.By networking 21 funding agencies from 15 countries, BiodivERsA2 aims to strengthen the ERA on biodiversity. Building on the experience of the ERA-Net BiodivERsA, but with a wider, more balanced network, BiodivERsA2 will promote a strategy for biodiversity research, in partnership with other players in the field, and will organize joint funding to better integrate biodiversity science.The objectives are to:-develop an efficient agenda-setting mechanism, based on a continuously developed strategy linking existing international agendas with national and institutional priorities-instate a recurrent, well-identified funding scheme for transnational biodiversity research projects-play an active role in the processes and interfaces to inform policy and users-prepare the establishment of a sustainable, independent funding platform for biodiversity researchThe project has 6 Work Packages. WP1 will promote networking and sharing of best practice, ensuring the rapid integration of new members and the adoption of a framework for joint calls. WP2 will analyse the landscape and cooperate with stakeholders identifying research needs, with science-policy interfaces and with relevant infrastructure programmes. Using outputs of WP1&2, WP3 will produce a roadmap for joint funding and implement 3 calls within the project time span. These activities will ultimately create the conditions for the network to become a sustainable funding platform for European biodiversity research, which will be fostered by WP4. WP5 will develop and implement a communication strategy and enhance project web-products. WP6 deals with coordination and management.

Partners:

N	Partner Legal Name	Country
1	Fondation française pour la recherche sur la biodivsersité	FR
2	FONDS ZUR FÖRDERUNG DER WISSENSCHAFTLICHEN FORSCHUNG	AT
3	SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE	BE
4	National Science Fund of Bulgaria - ???? "?????? ???????????"	BG
5	SIHTASUTUS EESTI TEADUSFOND	EE
6	AGENCE NATIONALE DE LA RECHERCHE	FR
7	MINISTERE DE L'ECOLOGIE, DE L'ENERGIE, DU DEVELOPPEMENT DURABLE ET DE L'AMENAGEMENT DU TERRITOIRE	FR
8	Deutsches Zentrum für Luft- und Raumfahrt e. V.	DE
9	DEUTSCHE FORSCHUNGSGEMEINSCHAFT	DE
10	KORNYEZETVEDELMI ES VIZUGYI MINISZTERIUM	HU
11	Lietuvos mokslo taryba	LT
12	NEDERLANDSE ORGANISATIE VOOR WETENSCHAPPELIJK ONDERZOEK	NL
13	NORGES FORSKNINGSRAD	NO
14	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	PT
15	MINISTERIO DE CIENCIA E INNOVACION	ES
16	FORSKNINGSRÅDET FÖR MILJÖ, AREELLA NÄRINGAR OCH SAMHÄLLSBYGGANDE	SE
17	NATURVARDSVERKET	SE
18	MINISTRY OF AGRICULTURE AND RURAL AFFAIRS	TR
19	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
20	JNCC SUPPORT CO LBG	UK
21	Natural Environment Research Council	UK

Activity Code: ENV.2007.2.1.4.3. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 42

Title: Highland aquatic resources conservation and sustainable development

Proposed EC Grant: 1.455.676 €

Abstract:

Project partner will complete a detailed multidisciplinary situation analysis of highland aquatic resources, focused on values, livelihoods, conservation issues and wise-use options at five sites in Asia (Guangzhou, China; Uttarakhand and West Bengal, India and northern and central Vietnam). Factors assessed will include biodiversity and ecosystem services, including provisioning, regulating, supporting and cultural services. Livelihood strategies of households dependent on ecosystem services derived from highland aquatic resources, in particular poor, food-insecure and vulnerable people, will be assessed within a sustainable livelihoods framework and opportunities to enhance such livelihoods assessed. Institutional features, including local, national and international policy and legislation, trajectories of change, stakeholder values associated with highland aquatic resources and areas of conflict will be assessed. Stakeholder participation will be critical to ensure new knowledge is accessible for collective decision-making and development of policies for the equitable use and conservation; methods and indicators for participatory monitoring and evaluation of ecosystem services and biodiversity will be developed. Action plans will then be formulated with stakeholders to: monitor the health of highland aquatic resources; develop and promote wise-use, and where necessary livelihoods diversification, to enhance poor livelihoods and conservation; integrate sustainable and wise-use, livelihoods diversification and conservation with watershed management priorities throughout the region. Action plans will be implemented by stakeholders at four sites displaying high biodiversity in Asia and the ecosystem, livelihoods and institutional impacts assessed through participatory monitoring and evaluation. Best practices aimed at conserving biodiversity and sustaining ecosystem services will be communicated to potential users to promote uptake and enhanced policy formulation.

Partners:

N	Partner Legal Name	Country
1	University of Essex	UK
2	Centre for the Development of Human Initiatives	IN
3	Institute of Environmental Studies and Wetland Management	IN
4	Research Institute for Aquaculture No. 1	VN
5	GB Pant Institute of Himalayan Environment & Development	IN
6	IUCN - The World Conservation Union	CH
7	Roskilde University	DK
8	FishBase Information and Research Group, Inc.	PH
9	South China Agricultural University	CN
10	University of Stirling	UK

Activity Code: ENV.2007.2.1.4.3. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 30

Title: Hunting for Sustainability

Proposed EC Grant: 2.929.304 €

Abstract:

Biodiversity conservation increasingly takes place outside protected areas in multiple-use landscapes. Success in achieving biodiversity objectives is closely linked to the extent to which conservation can be integrated with the cultural, social and economic objectives and aspirations of people. Beliefs, perceptions, attitudes and preferences about biodiversity are central to the decisions made by individuals and groups about natural resource management. In this project we will use hunting as a “lens” through which to examine the wider issue of how people interact with biodiversity. Hunting provides a valuable case study in the use of biodiversity because it involves tens of millions of people globally, it is conducted across a wide range of land tenure and use systems, and it is an important source of revenue and protein, particularly in developing countries. Hunting is embedded in social structures and cultural patterns and has a key role in conflicts over natural resource management around the world. Our multidisciplinary team will assess the social, cultural, economic and ecological functions and impacts of hunting across a range of contexts in Europe and Africa. Our study systems fall across economic gradients from the richest to the poorest countries and encompass environments from the Arctic to the Equator. We seek to understand what influences attitudes to hunting, how these attitudes influence and determine individual and societal behaviour in relation to hunting, and finally, how hunting behaviour influences biodiversity. Consequently, we will integrate social, economic and ecological scientific disciplines and engage with a diverse selection of stakeholders to develop novel approaches to the mitigation of natural resource conflicts involving hunting. Finally, our results will be interpreted in respect to current and future EU policy on hunting and biodiversity conservation and contribute to the global debate about the sustainable use of biodiversity.

Partners:

N	Partner Legal Name	Country
1	Macaulay Land Use Research Institute	UK
2	Frankfurt Zoological Society	DE
3	Tanzania Wildlife Research Institute	TZ
4	Oromia Agriculture and Rural Development Bureau	ET
5	Universitat Autonoma de Barcelona	ES
6	Consejo Superior de Investigaciones Cientificas	ES
7	University of Llubljana	SI
8	University of Zagreb	HR
9	Norsk Institutt for Naturforskning	NO
10	Umea University	SE
11	Imperial College of Science, Technology and London	UK
12	University of Stirling	UK

Activity Code: ENV.2007.2.1.4.3. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Sustainable Livelihoods and Biodiversity in Riparian Areas in Developing Countries

Proposed EC Grant: 2.418.160 €

Abstract:

LiveDiverse (LD) will develop new knowledge on the interactions between human livelihood and biodiversity in riparian and aquatic contexts in four developing countries (Vietnam, India, South Africa, Costa Rica). It has a strong emphasis on dissemination and the constructive engagement of a broad selection of social groups and their governmental and non-governmental representatives. The analysis of biodiversity values, sustainable use and livelihoods (biodiversity governance) within the project adopts vulnerability as a unifying concept, taking the point of departure in the concepts of biodiversity and livelihood vulnerability. Vulnerability will be considered from a combination of bio-physical, socio-economic and cultural/spiritual perspectives, where human ability to conserve and husband biodiversity while at the same time achieving sustainable livelihoods is of vital importance. The analyses of areas will analyse vulnerability in terms of biophysical, socio-economic- legal, and cultural/spiritual issues. Maps of these three perspectives will then be constructed in each case study and incorporated into a GIS system. These maps will identify biodiversity and livelihood 'hot-spots', that is, places where there is a high risk (according to natural science criteria), and a low capability (according to the socio-economic, law and policy criteria). Finally, biodiversity and livelihood scenarios will be developed. These scenarios will take into account the main perspectives; biological diversity risk, socio economic ability and cultural perceptions to cope with effects of this risk. Working in a 15-year perspective, the scenarios will examine future possible trends, threats and developments in order to formulate strategies and policy to meet the needs of both biodiversity and livelihoods.

Partners:

N	Partner Legal Name	Country
1	Linköpings universitet	SE
2	National Institute for Agricultural Planning and Projection	VN
3	Society for Promoting Participative Ecosystem Management	IN
4	South African Council for Science and Industrial Research	ZA
5	Universidad Nacional Costa Rica	CR
6	Institute for Environmental Studies - Vrije Universiteit Amsterdam	NL
7	University of Dundee	UK
8	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE	BE

Activity Code: ENV.2010.2.1.4-3 **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Developing a Knowledge Network for EUropean expertise on biodiversity and ecosystem services to inform policy making economic sectors

Proposed EC Grant: 998.719 €

Abstract:

Knowledge about biodiversity and ecosystem services is well advanced in the European scientific community, as demonstrated by many excellent projects and their scientific impact. However, on the global as well as the European scale, there is a failure to communicate the knowledge gained into the policy-making process and society as a whole. Such communication efforts, must ensure that all relevant knowledge is accessible and that all existing biodiversity research communities and other knowledge holders are involved in a network structure that is linked to decision making bodies. The overall objective of the project is thus to develop a recommended design for a scientific biodiversity Network of Knowledge (NoK) to inform policy-makers and other societal actors. This network shall be open, transparent, flexible, equally accessible to all, independent, be scientifically- and evidence-based and have a robust structure. It will develop links to relevant clients to support the science-society interface in Europe and beyond.To achieve this, the project brings together expertise from all major biodiversity research fields (in the consortium and beyond). Beginning with mapping the biodiversity knowledge landscape in Europe (WP1), the project will develop a prototype NoK, involving a wide number of institutions and networks in biodiversity research and policy (WP2). This prototype will then be used as a vehicle to carry out case studies in relevant policy fields (agriculture, biodiversity conservation, marine issues) in order to test and trial its functioning and effectiveness (WP3). The experience gained will be evaluated by an additional expert group within the project (WP4) in order to provide input for developing a recommended design for a potential future Network of Knowledge (WP5). WP6 takes care of project management, and will ensure international cooperation and the proper communication with potential clients of the network and the research community.

Partners:

N	Partner Legal Name	Country
1	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	INSTITUT ROYAL DES SCIENCES NATURELLES DE BELGIQUE	BE
4	CLIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental	PT
5	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
6	Fondation française pour la recherche sur la biodivsersité	FR
7	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
8	UNIVERSITAET WIEN	AT
9	STIFTELSEN NORSK INSTITUTT FOR NATURFORSKNING	NO
10	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
11	MTA OKOLOGIAI ES BOTANIKAI KUTATOINTEZETE	HU
12	Stichting Europees Centrum voor Natuurbescherming	NL
13	BANGOR UNIVERSITY	UK
14	EIGEN VERMOGEN VAN HET INSTITUUT VOOR NATUUR- EN BOSONDERZOEK	BE
15	UMWELTBUNDESAMT GMBH	AT
16	SUOMEN YMPARISTOKESKUS	FI
17	Botanical, Environmental & Conservation Consultants Ltd	IE
18	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE

Activity Code: ENV.2008.2.1.4.4. **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Securing the Conservation of biodiversity across Administrative Levels and spatial, temporal, and Ecological Scales

Proposed EC Grant: 6.995.640 €

Abstract:

Our capacity to effectively sustain biodiversity across spatial and temporal scales is an essential component of European environmental sustainability. Anthropogenic and environmental pressures on biodiversity act differently at different scales. Consequently, effective conservation responses to these threats must explicitly consider the scale at which effects occur, and therefore it is crucial that administrative levels and planning scales match the relevant biological scales.The SCALES project will provide the scientific and policy research needed to guide scale-dependent management actions. It will assess and model the scaling properties of natural and anthropogenic processes and the resulting scale-dependencies of the impacts of these pressures on various levels of biodiversity from genes to ecosystem functions. To facilitate these assessment methods for upscaling and downscaling biodiversity data will be reviewed and improved. SCALES will further evaluate the effectiveness of management and policy responses to biodiversity loss in terms of their scale-relevance and will develop new tools for matching their scales to relevant biological scales. Finally, a resulting methodological and policy framework for enhancing the effectiveness of European biodiversity conservation across scales will be developed and tested. This framework focuses on networks of protected areas and regional connectivity. This framework will be disseminated to a wide range of relevant users via a web based support tool kit (SCALE-TOOL) and by means of further dissemination channels, such as conferences, publications, and the mass media.

Partners:

N	Partner Legal Name	Country
1	Helmholtz - Zentrum für Umweltforschung GmbH - UFZ	DE
2	University of the Aegean	EL
3	THE UNIVERSITY OF READING	UK
4	Charles University in Prague	CZ
5	ARISTOTLE UNIVERSITY OF THESSALONIKI	EL
6	UNIVERSITY OF LEEDS	UK
7	Centre National de la Recherche Scientifique	FR
8	Jagiellonian University Cracow	PL
9	Lunds Universitet	SE
10	Natural Environment Research Council	UK
11	SUOMEN YMPÄRISTÖKESKUS	FI
12	Median S.C.P.	ES
13	Pensoft Publishers Ltd.	BG
14	Universität Bayreuth	DE
15	Helsingin yliopisto	FI
16	University of TartuÜlikooli	EE
17	Muséum national d'Histoire naturelle	FR
18	Universitaet Bern	CH
19	Fundacao da Faculdade de Ciencias e Tecnologia da Universidade Nova de Lisboa	PT
20	Applied Environmental Decision Analysis, A Commonwe	AU
21	Eidgenössische Technische Hochschule Zürich	CH
22	Centre for Cartography of fauna and flora	SI
23	Centre Tecnològic Forestal de Catalunya	ES
24	Institute for European Environmental Policy	UK
25	Sveriges Lantbruksuniversitet	SE
26	Vilniaus Universiteto Ekologijos Institutas	LT
27	Stiftelsen norsk institutt for naturforskning	NO
28	University of Debrecen	HU

Activity Code: ENV.2010.2.1.4-4 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Ecological Function and Biodiversity Indicators in European Soils

Proposed EC Grant: 6.999.930 €

Abstract:

The strategic goal of EcoFINDERS is to provide the EC with tools to design and implement soil strategies aimed at ensuring sustainable use of soils, including: Characterisation of European soil biodiversity; Determination of relations between soil biodiversity, soil functions and ecosystem services; Design of policy-relevant and cost-effective indicators for monitoring soil biodiversity. The project will i) Develop and standardise tools and procedures to measure microbial and faunal diversity; ii) Describe the diversity of soil organisms (microbes and fauna), decipher their interactions through foodwebs and determine the role they play in soils functions and ecosystem services (nutrient cycling, carbon storage, water retention, soil structure regulation, resistance to pests and diseases, and regulation of above-ground diversity); iii) Establish cost-effective bioindicators for measuring sustainability of the microbial and faunal diversity and their associated functions (using a combination of metrics and meta-analysis); iv) Evaluate the economic value of ecosystem services, the added value of these bioindicators; v) Develop and implement effective communication strategies to engage the European public around issues associated with the sustainability of soil biodiversity. The overall concept of the project is to develop and integrate the following activities: i) Decipher the links between soil biodiversity, activities, functioning and ecosystem services; ii) Combine three types of approach: observation, experimentation, and computation; iii) Assess the impact of environmental conditions; iv) Integrate information on microbes, fauna and plant communities and analyse how these compartments interact. The general hypotheses are: changes in soil biodiversity indicate the direction and rate of changes in soil functions and associated ecosystem services; application of cost-effective bioindicators brings an economic added value to sustainable soil management.

Partners:

N	Partner Legal Name	Country
1	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	AARHUS UNIVERSITET	DK
4	ECT Oekotoxikologie GmbH	DE
5	UNIVERSITAET ZU KOELN	DE
6	INRA TRANSFERT S.A.	FR
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	LUNDS UNIVERSITET	SE
9	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL
10	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU part of the Dutch State	NL
11	SVERIGES LANTBRUKSUNIVERSITET	SE
12	TEAGASC - AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY	IE
13	IMAR- INSTITUTO DO MAR	PT
14	UNIVERSITA DEGLI STUDI DI TORINO	IT
15	UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN	IE
16	THE UNIVERSITY COURT OF THE UNIVERSITY OF ABERDEEN	UK
17	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK
18	LANCASTER UNIVERSITY	UK
19	WAGENINGEN UNIVERSITEIT	NL
20	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
21	Prognosticky ustav Slovenskej akademie vied	SK
22	China Agricultural University	CN

Activity Code: ENV.2008.2.2.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Monitoring and Evaluation of Spatially Managed Areas (MESMA)

Proposed EC Grant: 6.568.846 €

Abstract:

The increasing pressures upon the marine realm call for a well planned approach of further spatial development of this area. An ecosystem-based approach to fisheries, the increasing demand for sustainable energy, coastal defense systems, building materials and safe transport routes and the need to protect habitats and species all compete for the same valuable space. At the same time climate change will alter the composition and functioning of marine ecosystems, calling for a robust approach of future spatial planning that also takes cross boundary developments into account. MESMA will supply innovative methods and integrated strategies for governments, local authorities, stakeholders and other managerial bodies for planning and decision making at different local, national and European scales. This will also comprise an easy accessible information system to gain support from politicians, stakeholders and the public in general for difficult (inter)national decisions that will be needed for sustainable use and protection of this vulnerable area. This data system, containing information on the distribution of habitats and species, economic values and benefits and human uses and its effects will also be an interface between science, policy and decision makers. MESMA will supply strategic tools for sustainable development of European seas and coastal areas. The major challenge is to combine an optimized use with a sustained ecosystem of high quality, taking into account ecological and economic differences. By studying and comparing different national situations and solutions from a selected number of sites throughout Europe and by determining common features and differences, including the socio-economic settings and requirements, an integrated toolbox that can be applied on both a European and a regional scale will be made available.

Partners:

N	Partner Legal Name	Country
1	Wageningen IMARES B.V.	NL
2	University College London	UK
3	Senckenbergische Naturforschende Gesellschaft	DE
4	UNIVERSITEIT GENT	BE
5	Hellenic Centre for Marine Research	EL
6	Institute of oceanology, Bulgarian Academy of Sciences	BG
7	Institute of Marine Research	NO
8	National University of Ireland, Cork. University College Cork	IE
9	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
10	Fundación AZTI - AZTI Fundazioa	ES
11	Ministry for Rural Affairs and the Environment	MT
12	Technical University of Denmark	DK
13	The Secretary of State for Environment, Food & Rural Affairs acting through the Centre for Environment, Fisheries & Aquaculture Science	UK
14	Heriot-Watt University	UK
15	Eigen Vermogen van het Instituut voor Landbouw en Visserij Onderzoek	BE
16	Stichting Deltares	NL
17	Norsk Institutt for Vannforskning	NO
18	Netherlands Organisation for Applied Scientific Research	NL

Activity Code: ENV.2009.2.2.1.1 **Funding Scheme:** CP-IP **Duration (Months):** 42

Title: Options for Delivering Ecosystem-Based Marine Management

Proposed EC Grant: 6.500.000 €

Abstract:

The overall aim of the ODEMM project is to develop a set of fully-costed ecosystem management options that would deliver the objectives of the Marine Strategy Framework Directive, the Habitats Directive, the European Commission Blue Book and the Guidelines for the Integrated Approach to Maritime Policy. This will be achieved by: (i) providing a comprehensive knowledge base to support policy for the development of sustainable and integrated management of European marine ecosystems; (ii) developing Operational Objectives to achieve the High-Level Policy Objectives set by the MSFD and the HD, and with reference to the proposed Maritime Policy; (iii) identifying Management Options (individual management tools and combinations of tools) to meet the Operational Objectives; (iv) providing a risk assessment framework for the evaluation of Management Options and to assess the risk associated with the different options; (v) conducting a cost-benefit analysis of a range of Management Options using appropriate techniques; (vi) identifying stakeholder opinions on the creation of governance structures directed towards implementation of the ecosystem approach, and to elaborate different scenarios for changing governance structures and legislation to facilitate a gradual transition from the current fragmented management approach towards fully integrated ecosystem management; (vii) documenting the steps necessary for the transition from the current fragmented management scheme to a mature and integrated approach, and providing a toolkit that could be used to evaluate options for delivering ecosystem-based management; and (viii) communicating and consulting on the outcomes of the project effectively with policy makers and other relevant user groups.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF LIVERPOOL	UK
2	HELLENIC CENTRE FOR MARINE RESEARCH	EL
3	A.O. KOVALEVSKIY INSTITUTE OF BIOLOGY OF SOUTHERN SEAS	UA
4	AALBORG UNIVERSITET	DK
5	Institute of Marine Sciences - Middle East Technical University	TR
6	Scottish Agricultural College	UK
7	National Institute for Marine Research and Development "Grigore Antipa"	RO
8	Wageningen IMARES	NL
9	National Institute of Oceanography-Israel Oceanographic & Limnological Reasearch	IL
10	Sea Fisheries Institute	PL
11	University of Thessaly	EL
12	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
13	Marine Law and Ocean Policy Research Services Limited	IE
14	WAGENINGEN UNIVERSITEIT	NL
15	Institute of Oceanology, Bulgarian Academy of Sciences	BG
16	SUOMEN YMPARISTOKESKUS	FI

Activity Code: ENV.2010.2.2.1-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: European Union Basin-scale Analysis, Synthesis and Integration (EURO-BASIN)

Proposed EC Grant: 6.996.407 €

Abstract:

EURO-BASIN is designed to advance our understanding on the variability, potential impacts, and feedbacks of global change and anthropogenic forcing on the structure, function and dynamics of the North Atlantic and associated shelf sea ecosystems as well as the key species influencing carbon sequestering and ecosystem functioning. The ultimate goal of the program is to further our capacity to manage these systems in a sustainable manner following the ecosystem approach. Given the scope and the international significance, EURO-BASIN is part of a multidisciplinary international effort linked with similar activities in the US and Canada. EURO-BASIN focuses on a number of key groups characterizing food web types, e.g. diatoms versus microbial loop players; key species copepods of the genus Calanus; pelagic fish, herring (Clupea harengus), mackerel (Scomber scombrus), blue whiting (Micromesistius poutassou) which represent some of the largest fish stocks on the planet; piscivorous pelagic bluefin tuna (Thunnus thynnus) and albacore (Thunnus alalunga) all of which serve to structure the ecosystem and thereby influence the flux of carbon from the euphotic zone via the biological carbon pump. In order to establish relationships between these key players, the project identifies and accesses relevant international databases and develops methods to integrate long term observations. These data will be used to perform retrospective analyses on ecosystem and key species/group dynamics, which are augmented by new data from laboratory experiments, mesocosm studies and field programs. These activities serve to advance modelling and predictive capacities based on an ensemble approach where modelling approaches such as size spectrum; mass balance; coupled NPZD; fisheries; and “end to end” models and as well as ecosystem indicators are combined to develop understanding of the past, present and future dynamics of North Atlantic and shelf sea ecosystems and their living marine resources.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAET HAMBURG	DE
2	UNIVERSITAET BREMEN	DE
3	DANMARKS TEKNISKE UNIVERSITET	DK
4	FUNDACION AZTI/AZTI FUNDAZIOA	ES
5	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
6	HAFRANNSOKNASTOFNUNIN	IS
7	Morski Instytut Rybacki w Gdyni	PL
8	PLYMOUTH MARINE LABORATORY	UK
9	UNIVERSITY OF EAST ANGLIA	UK
10	AARHUS UNIVERSITET	DK
11	HAVFORSKNINGSINSTITUTTET	NO
12	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
13	SIR ALISTER HARDY FOUNDATION FOR OCEAN SCIENCE	UK
14	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
15	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
16	UNIVERSITY OF STRATHCLYDE	UK
17	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
18	Høgskolen i Bodø	NO
19	UNIFOB AS	NO
20	INSTITUTO ESPANOL DE OCEANOGRAFIA	ES
21	COLLECTE LOCALISATION SATELLITES SA	FR
22	SWANSEA UNIVERSITY	UK
23	MIDDLE EAST TECHNICAL UNIVERSITY	TR

Activity Code: ENV.2007.2.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: European Eels in the Atlantic: Assessment of Their Decline

Proposed EC Grant: 2.634.712 €

Abstract:

Eels play an important socioeconomic and ecological role in many European countries. Recruitment failure has contributed to a halving of catches from 40,000t in the last three decades to less than 20,000t today. The EU's Eel Recovery Plan aims to maximize silver eel production and escapement to the sea to maintain the stock's reproductive potential. However, very little is known about the contribution of eels of different European river systems to successful recruitment because almost nothing is known about the life of silver eels once they escape to the sea. We propose a research initiative to investigate the ecology and environmental dependencies of European eels during their spawning migration. Archival tags that detach from their eel hosts and communicate stored data via satellite will be used to determine migration routes, migration success and habitat preferences of different stock components. The information will be integrated with studies on eels in riverine and estuarine habitats, and leading edge biochemical techniques, to determine the most important eel habitats to conserve to enhance and conserve eel stocks in the UK and across Europe

Partners:

N	Partner Legal Name	Country
1	The Secretary of State for Environment, Food and Rural Affairs acting through the Centre for Environment, Fisheries and Aquaculture Science	UK
2	Tecnical University of Denmark	DK
3	Norwegian Institute for Nature Research	NO
4	Central Fisheries Board	IE
5	Marine Institute	IE
6	Institut Françai de Recherche pour l'Exploration de la Mer	FR
7	Cemagref	FR
8	Fiskeriverket	SE
9	Muséum National d'Histoire Naturelle,	FR
10	Laboratoire de Mathématiques Appliquées (CNRS UMR 5142)	FR
11	Laboratoire de Biologie et d'Ecologie Tropicale et Mediterranenne UMR 5244 CNRS-EPHE-UPVD	FR
12	Museo Nacional de Ciencias Naturales - Consejo Superior de Investigaciones Cientificas	ES

Activity Code: ENV.2007.2.2.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Advancing understanding of Atlantic Salmon at Sea: Merging Genetics and Ecology to resolve Stock-specific Migration and Distribution patterns

Proposed EC Grant: 3.499.762 €

Abstract:

Over the past two decades, an increasing proportion of North Atlantic salmon are dying at sea during their oceanic feeding migration. The specific reasons for the decline in this important species are as yet unknown, however, climate change is likely to be an important factor. In some rivers in the southern part of the salmons range, wild salmon now face extinction. This is in spite of unprecedented management measures to halt this decline. Arguably the greatest challenge in salmon conservation is to gain insight into the spatial and ecological use of the marine environment by different regional and river stocks, which are known to show variation in marine growth, condition, and survival. Salmon populations may migrate to different marine zones, whose environmental conditions may vary. To date it has been impossible to sample and identify the origin of sufficient numbers of wild salmon at sea to enable this vital question to be addressed. SALSEA-Merge will provide the basis for advancing our understanding of oceanic-scale, ecological and ecosystem processes. Such knowledge is fundamental to the future sustainable management of this key marine species. Through a partnership of 9 European nations the programme will deliver innovation in the areas of: genetic stock identification techniques, new genetic marker development, fine scale estimates of growth on a weekly and monthly basis, the use of novel high seas pelagic trawling technology and individual stock linked estimates of food and feeding patterns. In addition, the use of the three-dimensional Regional Ocean Modelling System, merging hydrography, oceanographic, genetic and ecological data, will deliver novel stock specific migration and distribution models. This widely supported project, provides the basis for a comprehensive investigation into the problems facing salmon at sea. It will also act as an important model for understanding the factors affecting survival of many other important marine species.

Partners:

N	Partner Legal Name	Country
1	Institute of Marine Research	NO
2	Marine Institute	IE
3	THE SCOTTISH MINISTERS ACTING THROUGH FISHERIES RESEARCH SERVICES	UK
4	Norwegian Institute for Nature research	NO
5	University of Exeter	UK
6	University College Cork	IE
7	Queen's University Belfast	UK
8	University of Wales Swansea	UK
9	Technical University of Denmark	DK
10	Institute of Freshwater Fisheries	IS
11	University of Turku	FI
12	UNIVERSITY OF OVIEDO	ES
13	GENINDEXE	FR
14	Finnish Game and Fisheries Research Institute	FI

Activity Code: ENV.2008.2.2.1.2. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Hotspot Ecosystem Research and Man's Impact on European seas

Proposed EC Grant: 7.998.955 €

Abstract:

The HERMIONE project is designed to make a major advance in our knowledge of the functioning of deep-sea ecosystems and their contribution to the production of goods and services. This will be achieved through a highly interdisciplinary approach (including biologists, ecologists, microbiologists, biogeochemists, sedimentologists, physical oceanographers, modelers and socio-economists) that will integrate biodiversity, specific adaptions and biological capacity in the context of a wide range of highly vulnerable deep-sea habitats. Gaining this understanding is crucial, because these ecosystems are now being affected by climate change and impacted by man through fishing, resource extraction, seabed installations and pollution. To design and implement effective governance strategies and management plans we must understand the extent, natural dynamics and interconnection of ocean ecosystems and integrate socio-economic research with natural science. The study sites include the Arctic, North Atlantic and Mediterranean and cover a range of ecosystems including cold-water corals, canyons, cold and hot seeps, seamounts and open slopes and deep-basins. The project will make strong connections between deep-sea science and user needs. HERMIONE will enhance the education and public perception of the deep-ocean issues also through some of the major EU aquaria. These actions, together with GEOSS databases that will be made available, will create a platform for discussion between a range of stakeholders, and contribute to EU environmental policies.

Partners:

N	Partner Legal Name	Country
1	Natural Environment Research Council	UK
2	Institut Français de Recherche pour l'Exploitation de la Mer	FR
3	Stichting Koninklijk Nederlands Instituut voor Zeeonderzoek	NL
4	Universitat de Barcelona	ES
5	Hellenic Centre for Marine Research	EL
6	Leibniz-Institut für Meereswissenschaften	DE
7	Consiglio Nazionale delle Richerche	IT
8	Alfred-Wegener-Institut für Polar- und Meeresforschung	DE
9	UNIVERSITETET I TROMSOE	NO
10	National University of Ireland, Galway	IE
11	Friedrich-Alexander Universitaet Erlangen-Nuremberg	DE
12	Universiteit Gent	BE
13	Consejo Superior de Investigaciones Cientificas	ES
14	Consorzio Nazionale Interuniversitario per le Scienze del Mare	IT
15	Max-Planck-Gesellschaft zur Forderung der Wissenschaften e. V.	DE
16	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
17	Instituto Hidrografico	PT
18	Jacobs University Bremen gGmbH	DE
19	Universitaet Bremen	DE
20	Cardiff University	UK
21	HAVFORSKNINGSINSTITUTTET (INSTITUTE OF MARINE RESEARCH)	NO
22	GOETEBORGS UNIVERSITET	SE
23	University of Southampton	UK
24	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN.	NL
25	The University Court of the University of Aberdeen	UK
26	The University of Liverpool	UK
27	Scottish Association for Marine Science	UK
28	Universidade de Aveiro	PT
29	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
30	P.P.SHIRSHOV INSTITUTE OF OCEANOLOGY - RUSSIAN ACADEMY OF SCIENCES	RU

31	United Nations Environment Programme - World Conservation Monitoring Centre	UK
32	Universidade dos Açores	PT
33	MEDIAN SCP	ES
34	ArchimediX, Möckl & Munzel Gesellschaft bürgerlichen Rechts (GbR)	DE
35	University of Thessaly	EL
36	University College Cork	IE
37	National Marine Aquarium	UK
38	Costa Edutainment SpA - Acquario di Genova	IT

Activity Code: ENV.2010.2.2.1-2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Development of global plankton data base and model system for eco-climate early warning

Proposed EC Grant: 3.476.469 €

Abstract:

GreenSeas shall advance the quantitative knowledge of how planktonic marine ecosystems, including phytoplankton, bacterioplankton and zooplankton, will respond to environmental and climate changes. To achieve this GreenSeas will employ a combination of observation data, numerical simulations and a cross-disciplinary synthesis to develop a high quality, harmonized and standardized plankton and plankton ecology long time-series, data inventory and information service. The focus will be on capturing the latitudinal gradients, biogeographical distributions and provinces in the planktonic ecosystem from the Arctic, through the Atlantic and into the Southern Ocean. It will build on historical data-sets, and ongoing multidisciplinary ocean planktonic ecosystem monitoring programs, enhanced where possible with an emphasis on the Southern Ocean. GreenSeas will also enhance international cooperative links with other plankton monitoring and analysis surveys around the globe. The heart of the GreenSeas concept is establishing a 'core' service following the open and free data access policy implemented in the Global Monitoring for Environment and Security (GMES) programme. Using state-of-the-art web-based data delivery systems the 'core' service will make available both new and historical plankton data and information products along with error-quantified numerical simulations to a range of users. Connecting with 'downstream' services GreenSeas will moreover offer ecosystem assessment and indicator reports tailored for decision makers, stakeholders and other user groups contributing in the policy making process. Finally, knowledge transfer will be guaranteed throughout the project lifetime, while the legacy of the GreenSeas database web-server will be maintained for at least 5 years beyond the project lifetime.

Partners:

N	Partner Legal Name	Country
1	STIFTELSEN NANSEN SENTER FOR FJERNMAALING	NO
2	PLYMOUTH MARINE LABORATORY	UK
3	UNIFOB AS	NO
4	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
5	Murmansk Marine Biological Institute	RU
6	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
7	UNIVERSITY OF CAPE TOWN	ZA
8	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
9	Universidade Federal do Rio Grande	BR

Activity Code: ENV.2009.2.2.1.2 **Funding Scheme:** CSA-CA **Duration (Months):** 48

Title: Towards integrated European marine research strategy and programmes

Proposed EC Grant: 1.999.934 €

Abstract:

This proposal is intended to take into account the ongoing and previous integrating initiatives,(AMPERA,marinERA, Marifish...) so as to constitute a stable and durable structure for coordination and integration of national and regional marine and maritime research programmes with then major goal of provide a clear reply to the need for developing and implementing common researchstrategies and programmes related to the European sea basins.For this purposes, SEAS ERA will bring together ,through several mechanisms, the four european sea basins working within two different levels: regional and pan european; this work structure will enable to harmonise common priorities and needs in marine and maritime research while respecting diversities between regions.

Partners:

N	Partner Legal Name	Country
1	MINISTERIO DE CIENCIA E INNOVACION	ES
2	SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE	BE
3	MINISTRY OF EDUCATION AND SCIENCE.	BG
4	AGENCE NATIONALE DE LA RECHERCHE	FR
5	MINISTRY OF FOOD, AGRICULTURE AND FISHERIES, DANISH FOOD INDUSTRY AGENCY	DK
6	FORSCHUNGSZENTRUM JUELICH GMBH	DE
7	General Secretariat for Research and Technology, Hellenic Ministry of Development	EL
8	THE ICELANDIC CENTRE FOR RESEARCH	IS
9	MARINE INSTITUTE	IE
10	MINISTERO DELL'UNIVERSITA E DELLA RICERCA	IT
11	Norges forskningsrad (Research Council of Norway)	NO
12	MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY	MT
13	FUNDACAO PARA A CIENCIA E A TECNOLOGIA	PT
14	NEDERLANDSE ORGANISATIE VOOR WETENSCHAPPELIJK ONDERZOEK	NL
15	TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	TR
16	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
17	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
18	FONDATION EUROPEENNE DE LA SCIENCE	FR
19	CENTRUL NATIONAL DE MANAGEMENT PROGRAME	RO
20	KYIV STATE CENTER FOR SCIENTIFIC TECHNICAL AND ECONOMIC INFORMATION	UA
21	GEORGIA NATIONAL SCIENCE FOUNDATION	GE

Activity Code: ENV.2007.2.2.1.3. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Assessment of the interaction between corals, fish and fisheries, in order to develop monitoring and predictive modelling tools for ecosystem based management in the deep waters of Europe and beyond

Proposed EC Grant: 6.500.000 €

Abstract:

In 2006, the UN General Assembly Resolution (AL61/L38) called upon fisheries management organisations worldwide to: i) assess the impact of bottom fishing on vulnerable marine ecosystems, ii) identify/map vulnerable ecosystems through improved scientific research/data collection, and iii) close such areas to bottom fishing unless conservation and management measures were established to prevent their degradation. In European deep waters, in addition, there is now a need to establish monitoring tools to evaluate the effectiveness of closed areas for the conservation of biodiversity and fish and their impact on fisheries. Currently the tools necessary to achieve these management goals are wholly lacking. CoralFISH aims to support the implementation of an ecosystem-based management approach in the deep-sea by studying the interaction between cold-water coral habitat, fish and fisheries. CoralFISH brings together a unique consortium of deep-sea fisheries biologists, ecosystem researchers/modellers, economists and a fishing industry SME, who will collaborate to collect data from key European marine eco-regions. CoralFISH will: i) develop essential methodologies and indicators for baseline and subsequent monitoring of closed areas, ii) incorporate fish into coral ecosystem models to better understand coral fish-carrying capacity, iii) evaluate the distribution of deepwater bottom fishing effort to identify areas of potential interaction and impact upon coral habitat, iv) use genetic fingerprinting to assess the potential erosion of genetic fitness of corals due to long-term exposure to fishing impacts, v) construct bio-economic models to assess management effects on corals and fisheries to provide policy options, and vi) produce as a key output, habitat suitability maps both regionally and for OSPAR Area V to identify areas likely to contain vulnerable habitat. The latter will provide the EU with the tools to address the issues raised by the UNGA resolution.

Partners:

N	Partner Legal Name	Country
1	National University of Ireland Galway	IE
2	Institute of Marine Research	NO
3	Marine Research Institute (Hafrannsóknastofnunin)	IS
4	Institut Français de Recherche pour l'Exploitation de la Mer	FR
5	Instituto do Mar - Centro dos Acores	PT
6	Hellenic Centre for Marine Research	EL
7	Consorzio Nazionale Interuniversitario per le Scienze del Mare	IT
8	Koninklijke Nederlandse Akademie van Wetenschappen - Nederlands Instituut voor Ecologie	NL
9	Zoological Society of London, Institute of Zoology	UK
10	Universitetet i Tromsø	NO
11	The University Court of The University of Aberdeen	UK
12	Stichting Koninklijk Nederlands Instituut voor Onderzoek der Zee	NL
13	O'Malley Fisheries	IE
14	Friedrich-Alexander-Universität Erlangen-Nürnberg	DE
15	National University of Ireland, Cork . University College Cork	IE
16	Universitaet Bremen	DE

Activity Code: ENV.2008.2.2.1.3. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Knowledge-based Sustainable Management for Europe's Seas

Proposed EC Grant: 5.764.200 €

Abstract:

Europe's four regional seas (Baltic, Black, Mediterranean and NE Atlantic) have suffered severe environmental degradation due to human pressure. Existing measures to manage pressures have proven inadequate and the EC has responded by proposing a new policy (Maritime Strategy Blue Book) and environmental legislation (Marine Strategy Directive), both currently close to adoption. These instruments rely on the Ecosystem Approach, a management paradigm that encompasses humans and the supporting ecosystem. But the science base for this approach needs strengthening and practical tools must be developed and tested for policy implementation. In particular, criteria for assessing costs and benefits of management actions are poorly developed, particularly in the complex marine environment where multiple uses and management conflicts are common. The KnowSeas consortium will strengthen the science base for managing Europe's seas through the practical application of systems thinking. It will work at the two scales envisaged for emergent EU policy: the Regional Sea Scale and Member State Economic Exclusive Zones (EEZs). We have developed a new approach of Decision Space Analysis to investigate mismatches of scale. Knowledge created through the FP6 European Lifestyles and Marine Ecosystems project, augmented with necessary new studies of climate effects, fisheries and maritime industries - in EEZ case studies - will provide a basis for assessing changes to natural systems and their human causes. New research will examine and model economic and social impacts of changes to ecosystem goods and services and costs and benefits of various management options available through existing and proposed policy instruments. Institutional and social analysis will determine conflicts of interest and examine governance as well as stakeholder values and perceptions. Our research will develop and test an assessment toolbox through regional liaison groups and a multisectoral Project Advisory Board.

Partners:

N	Partner Legal Name	Country
1	University of Plymouth	UK
2	Alfred-Wegener-Institut fuer Polar- und Meeresforschung	DE
3	Stockholms universitet	SE
4	The Secretary of State for Environment, Food & Rural Affairs acting through the Centre for Environment, Fisheries & Aquaculture Science	UK
5	Institute for Atmospheric Pollution of the Italian National Research Council	IT
6	Consejo Superior de Investigaciones Cientificas	ES
7	Consejo Superior de Investigacions Científicas	ES
8	Deltares	NL
9	Envision Management Ltd	UK
10	EUCC - The Coastal Union	NL
11	GKSS-Forschungszentrum Geesthacht GmbH	DE
12	Institute for European Environmental Policy	UK
13	Instituto do Mar	PT
14	Institute of Oceanology, Bulgarian Academy of Sciences	BG
15	Koninklijke Nederlandse Akademie van Wetenschappen (Royal Netherlands Academy of Arts and Sciences)	NL
16	University of Padua	IT
17	Megapesca Lda	PT
18	Middle East Technical University	TR
19	Norsk institutt for luftforskning	NO
20	Sir Alister Hardy Foundation for Ocean Science	UK
21	Scottish Association for Marine Science	UK
22	University of Southern Denmark	DK
23	Morski Instytut Rybacki, Sea Fisheries Institute	PL
24	Suomen ympäristökeskus	FI
25	Université de Bretagne Occidentale	FR
26	National University of Ireland, Cork . University College Cork	IE

27	University of East Anglia	UK
28	Universitetet i Bergen	NO
29	Università Ca' Foscari di Venezia	IT
30	University of Bath	UK
31	Vereniging voor christelijk hoger onderwijs, wetenschappelijk onderzoek en patiëntenzorg	NL

Activity Code: ENV.2009.2.2.1.3 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: Towards an Integrated Marine and Maritime Science Community

Proposed EC Grant: 998.455 €

Abstract:

The 'Aberdeen plus interest group' joined forces with the 'Venice Platform group' to take further steps in integrating the marine, maritime and coastal research sectors in Europe. The goal is to establish a sustainable and long-lasting partnership forum ("European Marine and Maritime Forum"), based on shared interests and shared leadership, and to test it on regional seas and pan-European basis. The process will contribute to developing interactions between partners (the research community, industry, regional authorities, civil society and other stakeholders) starting from regional scales to broader issues shared with EU-neighbouring countries. This, being in line with the European Strategy for Marine and Maritime Research, will underpin the future integrated EU Maritime Policy. The action will be supported by the already established key structures and will constitute a Forum which will be an operationally open structure.

Partners:

N	Partner Legal Name	Country
1	International Council for the Exploration of the Sea	DK
2	EUCC - The Coastal Union	NL
3	European Council for Maritime Applied R&D Association	BE
4	FONDATION EUROPEENNE DE LA SCIENCE	FR
5	Commission Internationale pour l'Exploration Scientifique de la mer Méditerranée (CIESM)	MC
6	European Aquaculture Technology and Innovation Platform	BE
7	European Fisheries and Aquaculture Organisation	FR
8	HELLENIC CENTRE FOR MARINE RESEARCH	EL
9	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL
10	Community of European Shipyards Associations asbl	BE

Activity Code: ENV.2010.2.2.1-3 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Integration of European marine research networks of excellence - Euromarine

Proposed EC Grant: 999.916 €

Abstract:

EuroMarine is a coordination action that seeks to develop and implement an agreed framework for the long-lasting and durable co-operation between research institutions that were partners in FP6 marine Networks of Excellence in order to achieve further integration of marine research in Europe. Particular areas for cooperation will be: research programming, joint development and use of data bases, training and mobility of researchers, joint programming and use of research infrastructures. The objective is to provide an agreed frame for strong institutional commitment to this durable collaboration. The ultimate aim will be the sustainable integration of marine research and a significant contribution to the structure of the ERA.

Partners:

N	Partner Legal Name	Country
1	GOETEBORGS UNIVERSITET	SE
2	CENTRO DE CIENCIAS DO MAR DO ALGARVE	PT
3	CLIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental	PT
4	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
5	DANMARKS TEKNISKE UNIVERSITET	DK
6	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
7	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
8	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
9	MARINE BIOLOGICAL ASSOCIATION OF THE UNITED KINGDOM	UK
10	STAZIONE ZOOLOGICA ANTON DOHRN	IT
11	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
12	RIJKSUNIVERSITEIT GRONINGEN	NL
13	UNIVERSITEIT GENT	BE
14	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
15	UNIVERSITAET BREMEN	DE
16	Dr. Johanna B. Wesnigk	DE
17	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL

Activity Code: ENV.2007.2.2.1.4. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Marine Ecosystem Evolution in a Changing Environment

Proposed EC Grant: 6.500.000 €

Abstract:

MEECE is a scientific research project which aims to use a combination of data synthesis, numerical simulation and targeted experimentation to further our knowledge of how marine ecosystems will respond to combinations of multiple climate change and anthropogenic drivers. With an emphasis on the European Marine Strategy (EMS), MEECE will improve the decision support tools to provide a structured link between management questions and the knowledge base that can help to address those questions. A strong knowledge transfer element will provide an effective means of communication between end-users and scientists.

Partners:

N	Partner Legal Name	Country
1	Plymouth Marine Laboratory	UK
2	UNIFOB AS	NO
3	Universitaet Hamburg	DE
4	Fundación AZTI - AZTI Fundazioa	ES
5	AlMa Mater Studiorum Università di Bologna Centro interdipartimentale per la ricerca sulle scienze ambientali	IT
6	Wageningen IMARES B.V.	NL
7	The Secretary of State for Food, Environment, and Rural Affairs acting through the Centre for Environment, Fisheries and Aquaculture Science	UK
8	Natural Environment Research Council	UK
9	Institut de Recherche pour le Développement	FR
10	Technical University of Denmark, Danish Institute for Fisheries Research	DK
11	Institute of Marine Research	NO
12	INSTITUTE OF MARINE SCIENCES, MIDDLE EAST TECHNICAL UNIVERSITY	TR
13	Hellenic Centre for Marine Research	EL
14	Centre National de la Recherche Scientifique	FR
15	Sir Alister Hardy Foundation for Ocean Science	UK
16	Università del Piemonte Orientale, DiSAV	IT
17	Klaipeda university	LT
18	Bolding & Burchard Hydrodynamics	DK
19	Instituto Español de Oceanografía	ES
20	Commissariat à l'énergie atomique	FR

Activity Code: ENV.2009.2.2.1.4 **Funding Scheme:** CP-IP-SICA **Duration (Months):** 48

Title: People for Ecosystem Based Governance in Assessing Sustainable Development of Ocean and Coast

Proposed EC Grant: 6.999.684 €

Abstract:

Many efforts have been deployed for developing Integrated Coastal Zone Management in the Mediterranean and the Black Sea. Both basins have, and continue to suffer severe environmental degradation. In many areas this has led to unsustainable trends which have impacted on economic activities and human well being. An important progress has been made with the launch of the ICZM Protocol for the Mediterranean Sea in January 2008. The ICZM Protocol offers, for the first time in the Mediterranean, an opportunity to work in a new way, and a model that can be used as a basis for solving similar problems elsewhere, such as in the Back Sea.The aim of PEGASO is to build on existing capacities and develop common novel approaches to support integrated policies for the coastal, marine and maritime realms of the Mediterranean and Black Sea Basins in ways that are consistent with and relevant to the implementation of the ICZM Protocol for the Mediterranean. PEGASO will use the model of the existing ICZM Protocol for the Mediterranean and adjust it to the needs of the Black Sea through three innovative actions:- Constructing an ICZM governance platform as a bridge between scientist and end-user communities, going far beyond a conventional bridging. The building of a shared scientific and end users platform is at the heart of our proposal linked with new models of governance.

- Refine and further develop efficient and easy to use tools for making sustainability assessments in the coastal zone (indicators, Accounting methods and models, scenarios). They will be tested and validated in a multi-scale approach for integrated regional assessment.- Implementation of a Spatial Data Infrastructure (SDI), following INSPIRE Directive, to organize and standardize spatial data to support information sharing on an interactive visor, to make it available to the ICZM Platform, and to disseminate all results of the project to all interested parties.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAT AUTONOMA DE BARCELONA	ES
2	UNIVERSIDAD PABLO DE OLAVIDE	ES
3	PLAN BLEU POUR L'ENVIRONNEMENT ET LE DEVELOPPEMENT EN MEDITERRANNEE	FR
4	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
5	ACRI Etudes et Conseils	MA
6	UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION -UNESCO	FR
7	Priority Actions Programme Regional Activity Centre	HR
8	INTERNATIONAL UNION FOR CONSERVATION OF NATURE	ES
9	THE UNIVERSITY OF NOTTINGHAM	UK
10	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
11	UNIVERSITA CA' FOSCARI DI VENEZIA	IT
12	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
13	UNIVERSITE DE GENEVE	CH
14	HELLENIC CENTRE FOR MARINE RESEARCH	EL
15	AKDENIZ KIYI VAKFI	TR
16	INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE DELTA DUNARII	RO
17	University Mohammed V-Agdal	MA
18	Association de Réflexion, d'Echanges et d'Actions pour l'Environnement et le Développement	DZ
19	National Institute of Oceanography and Fisheries	EG
20	UNIVERSITY OF BALAMAND	LB
21	MARINE HYDROPHYSICAL INSTITUTE - UKRAINIAN NATIONAL ACADEMY OF SCIENCES	UA
22	Institut National des Sciences et Technologies de la Mer	TN
23	Fondation Sansouïre	FR
24	National Authority for Remote Sensing and Space Sciences	EG

Activity Code: ENV.2009.2.2.1.5 **Funding Scheme:** CP-IP-SICA **Duration (Months):** 48

Title: Future of Reefs in a Changing Environment (FORCE): An ecosystem approach to managing Caribbean coral reefs in the face of climate change

Proposed EC Grant: 6.474.632 €

Abstract:

The Future of Reefs in a Changing Environment (FORCE) Project partners a multi-disciplinary team of researchers from Europe and the Caribbean to enhance the scientific basis for managing coral reefs in an era of rapid climate change and unprecedented human pressure on coastal resources. The overall aim is to provide coral reef managers with a toolbox of sustainable management practices that minimise the loss of coral reef health and biodiversity. An ecosystem approach is taken that explicitly links the health of the ecosystem with the livelihoods of dependent communities, and identifies the governance structures needed to implement sustainable development. Project outcomes are reached in four steps. First, a series of experimental, observational and modelling studies are carried out to understand both the ultimate and proximate drivers of reef health and therefore identify the chief causes of reef degradation. Second, the project assembles a toolbox of management measures and extends their scope where new research can significantly improve their efficacy. Examples include the first 'coral-friendly' fisheries policies that balance herbivore extraction against the needs of the ecosystem, the incorporation of coral bleaching into marine reserve design, and creation of livelihood enhancement and diversification strategies to reduce fisheries capacity. Third, focus groups and ecological models are used to determine the efficacy of management tools and the governance constraints to their implementation. This step impacts practical reef management by identifying the tools most suited to solving a particular management problem but also benefits high-level policy-makers by highlighting the governance reform needed to implement such tools effectively. Lastly, the exploitation and dissemination of results benefits from continual engagement with practitioners. The project will play an important and measurable role in helping communities adapt to climate change in the Caribbean.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF EXETER	UK
2	Integrated Marine Management Ltd.	UK
3	UNIVERSITY OF NEWCASTLE UPON TYNE	UK
4	UNIVERSITEIT VAN AMSTERDAM	NL
5	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
6	Wageningen IMARES	NL
7	WAGENINGEN UNIVERSITEIT	NL
8	Stichting Koninklijke Rotterdamse Diergaarde	NL
9	Carmabi	AN
10	VEREIN ZUR FOERDERUNG DER WISSENSCHAFTLICHEN FORSCHUNG IN DER FREIEN HANSESTADT BREMEN E.V.	DE
11	BAR ILAN UNIVERSITY	IL
12	University of Costa Rica	CR
13	The University of the West Indies	BB
14	UNIVERSIDAD NACIONAL AUTONOMA DE MEXICO	MX
15	El Colegio de la Frontera Sur	MX
16	Centro de Ecologia Marina de Utila	HN
17	University of Miami	US
18	United States National Oceanic and Atmospheric Administration	US

Activity Code: ENV.2007.2.2.1.6. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Coordination Action for Research Activities on Life in Extreme Environments

Proposed EC Grant: 1.199.587 €

Abstract:

Life in Extreme Environments (LEXEN) is an emerging area of research in which Europe has considerable expertise but a relatively fragmented research infrastructure. The science of such environments has enormous relevance for our knowledge of the diversity and environmental limits of microbial, plant and animal life and the novel strategies employed for survival and growth. Such studies are essential in understanding how life established on the early Earth and in assessing the possibilities for life on other planetary bodies. These environments are also a rich source of novel exploitable compounds. The Work Programme identifies a need for better coordination of LEXEN research and CAREX aims to address this need by developing a clearly identifiable, dynamic and durable community. Establishing this community will encourage greater inter-disciplinarity and increasing knowledge of extreme environments. It will provide a target for young career scientists and allow a more focussed dialogue with other science areas, with funding agencies, with industrial groups and with international organisations outside Europe. CAREX deliverables will include a strategic roadmap for European LEXEN research (including enabling technologies), diverse opportunities for knowledge transfer, standardisation of methodologies, encouragement and support for early career scientists and a network of links to relevant organisations. These deliverables together with improved community networking, supported by newsletters, promotional leaflets, a series science publications and an interactive web portal, will help consolidate the community and its identity. Outcomes will be facilitated through science/technology workshops, diverse forums, field/laboratory protocol intercomparisons, a summer school and individual grants to facilitate knowledge transfer. CAREX has evolved with the key players from the highly successful ESF “Investigating Life in Extreme Environments” initiative .

Partners:

N	Partner Legal Name	Country
1	Natural Environment Research Council	UK
2	Centre National de la Recherche Scientifique	FR
3	Consiglio Nazionale delle Ricerche	IT
4	Deutsches Zentrum für Luft- und Raumfahrt e. V.	DE
5	Fondation Européenne de la Science	FR
6	Institut Français de Recherche pour l'Exploitation de la Mer	FR
7	Institute of Botany, Academy of Sciences of the Czech Republic	CZ
8	Centro de Astrobiología-Instituto Nacional de Técnica Aeroespacial	ES
9	Matis ohf.	IS

Activity Code: ENV.2009.2.2.1.6 **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: The Deep Sea & Sub-Seafloor Frontier

Proposed EC Grant: 1.000.000 €

Abstract:

The Deep Sea and Sub-Seafloor Frontier project (DS³F) provides a pathway towards sustainable management of oceanic resources on a European scale. It will develop subseafloor sampling strategies for enhanced understanding of deep-sea and subseafloor processes by connecting marine research in life and geosciences, climate and environmental change, with socio-economic issues and policy building. Subseafloor drilling and sampling provide two key aspects for understanding how deep-sea ecosystems presently function and how they may respond to global change: (a) an inventory of current subsurface processes and biosphere, and their links to surface ecosystems, utilising seafloor observation and baseline studies and (b) a high resolution archive of past variations in environmental conditions and biodiversity. For both aspects, an international effort is needed to maximise progress by sharing knowledge, ideas and technologies, including mission-specific platforms to increase the efficiency, coverage and effectiveness of subseafloor sampling and exploration.The deep biosphere has been discovered only within the past two decades and comprises a major new frontier for biological exploration. We lack fundamental knowledge about biomass distribution, diversity and physiological activity of deep biosphere communities at life's extremes, and their impact on seafloor and deep sea ecosystems. Similarly, the geodynamic processes fuelling biological activity, and how these processes impinge upon the emission of geofuels, hydrocarbon formation and other resources including seafloor ecosystems, need to be understood.This Coordination & Support Action will develop the most efficient use of subseafloor sampling techniques and existing marine infrastructure to study the geosystem, its effects on the deep biosphere and marine ecosystems, and provide a comprehensive "white paper" and an open access web portal for a sustainable use of the oceans and a Maritime Policy.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAET BREMEN	DE
2	AARHUS UNIVERSITET	DK
3	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
4	ISTITUTO NAZIONALE DI GEOFISICA E VULCANOLOGIA	IT
5	INSTITUT DE PHYSIQUE DU GLOBE DE PARIS	FR
6	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
7	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
8	UNIVERSITAT DE BARCELONA	ES
9	UNIVERSITETET I TROMSOE	NO

Activity Code: ENV.2007.2.2.1.8. **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: CASPIAN ENVIRONMENTAL AND INDUSTRIAL DATA & INFORMATION SERVICE

Proposed EC Grant: 800.697 €

Abstract:

CASPINFO is aiming at improving of cooperation between marine scientists, oil & gas industry and governments in the Caspian Sea region through: Initiation and establishment of a co-operative Caspian Sea, trans-national partnership (Data & Information Network consisting of representatives of marine environmental data & information centres/services, governmental stakeholders, oil & gas industries and commercial oriented data brokerages), that will strengthen the quality, service and overall performance of marine environmental and industrial data & information management, both on regional, national and international level. Development and establishment of an Internet based Caspian Data & Information Service to improve the implementation of integrated (environmental, industrial and administrative) management information, and to provide a tool for effective exchange of information, accessibility of data & and information, and communication; Development of marketing and business opportunities and strategies for commercial industrial and environmental data for sustainable exploitation of these partly commercial and partly non-commercial data: the extra challenge of the project is to deal with a mix of commercial and non commercial data. CASPINFO will result in: Improved and sustainable data & information exchange between (public and private) environmental, industrial and governmental stakeholders within the Caspian Sea region. Direct involvement of the main data and information stakeholders

Partners:

N	Partner Legal Name	Country
1	Mariene Informatie Service 'MARIS' BV	NL
2	Sumgayit Center for Environmental Rehabilitation	AZ
3	Institute of Geography	AZ
4	«INSTITUTE of GEOGRAPHY» Center of sciences about the Earth, metallurgy and enrichment » Committee of a science of the Ministry of Education and a science of Re	KZ
5	Caspian Environment Programme, Programme Coordination Unit	IR
6	State oceanographic Institute	RU
7	Severtsov Institute of Ecology and Evolution	RU
8	P.P.Shirshov Institute of oceanology Russian Academy of Sciences	RU
9	State Institution “Caspian Marine Scientific Research Center”	RU
10	Institute of Environmental Geoscience RAS	RU
11	JSC Geo Hazar	RU
12	Black Sea Commission	TR
13	Hellenic National Oceanographic Data Centre, Hellenic Centre for Marine Research	EL
14	Consiglio Nazionale delle Ricerche	IT
15	State Oil Company of Azerbaijan Republic	AZ
16	Joint Stock Company National Company KazMunaiGas	KZ
17	Dagestan University	RU
18	Moscow State University, Faculty of Geography, dept. of Cartography and Geoinformatics	RU
19	Intergovernmental Oceanographic Commission of UNESCO	FR

Activity Code: Ocean.2010-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Arctic Climate Change, Economy and Society

Proposed EC Grant: 10.998.027 €

Abstract:

The Arctic is engaged in a deep climatic evolution. This evolution is quite predictable at short (year) and longer scales (several decades), but it is the decadal intermediate scale that is the most difficult to predict. This is because the natural variability of the system is large and dominant at this scale, and the system is highly non linear due to positive and negative feedback between sea ice, the ocean and atmosphere.Already today, due to the increase of the GHG concentration in the atmosphere and the amplification of global warming in the Arctic, the impacts of climate change in the region are apparent, e.g. in the reduction in sea ice, in changes in weather patterns and cyclones or in the melting of glaciers and permafrost. It is therefore not surprising that models clearly predict that Artic sea ice will disappear in summer within 20 or 30 years, yielding new opportunities and risks for human activities in the Arctic. This climatic evolution is going to have strong impacts on both marine ecosystems and human activities in the Arctic. This in turn has large socio-economic implications for Europe. ACCESS will evaluate climatic impacts in the Arctic on marine transportation (including tourism), fisheries, marine mammals and the extraction of hydrocarbons for the next 20 years; with particular attention to environmental sensitivities and sustainability. These meso-economic issues will be extended to the macro-economic scale in order to highlight trans-sectoral implications and provide an integrated assessment of the socio-economic impact of climate change. An important aspect of ACCESS, given the geostrategic implication of Arctic state changes, will be the consideration of Arctic governance issues, including the framework UNCLOS (United Nations Convention for the Law of the Sea). ACCESS dedicates a full work package to integrate Arctic climate changes, socioeconomic impacts and Arctic governance issues.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
2	O.A. SYS - OCEAN ATMOSPHERE SYSTEMS GMBH	DE
3	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
4	INSTITUT FUR WELTWIRTSCHAFT	DE
5	WWF International Arctic Programme	NO
6	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK
7	ALFRED-WEGENER-INSTITUT FUER POLAR- UND MEERESFORSCHUNG	DE
8	Dr-Ing.Joachim Schwarz	DE
9	NOFIMA MARIN AS	NO
10	HAMBURGISCHE SCHIFFBAU-VERSUCHSANSTALT GMBH	DE
11	NORSK POLARINSTITUTT	NO
12	METEOROLOGISK INSTITUTT	NO
13	FastOpt GmbH	DE
14	THE SCOTTISH ASSOCIATION FOR MARINE SCIENCE	UK
15	KUNGLIGA VETENSKAPSAKADEMIEN	SE
16	P.P. SHIRSHOV INSTITUTE OF OCEANOLOGY OF RUSSIAN ACADEMY OF SCIENCES	RU
17	IMPaC Offshore Engineering GmbH	DE
18	UNIVERSITAT POLITECNICA DE CATALUNYA	ES
19	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
20	ARCTIC AND ANTARCTIC RESEARCH INSTITUTE OF ROSHYDROMET - STATE RESEARCH CENTER OF RUSSIAN FEDERATION	RU
21	ECONOMIC AND SOCIAL RESEARCH INSTITUTE	IE
22	LAPIN YLIOPISTO	FI
23	SINTEF FISKERI OG HAVBRUK AS	NO
24	CICERO SENTER KLIMAFORSKNING STIFTELSE	NO
25	STIFTELSEN SINTEF	NO

Activity Code: Ocean.2010-2 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Vectors of Change in Oceans and Seas Marine Life, Impact on Economic Sectors

Proposed EC Grant: 12.484.835 €

Abstract:

Marine life makes a substantial contribution to the economy and society of Europe. VECTORS will elucidate the drivers, pressures and vectors that cause change in marine life, the mechanisms by which they do so, the impacts that they have on ecosystem structures and functioning, and on the economics of associated marine sectors and society. VECTORS will particularly focus on causes and consequences of invasive alien species, outbreak forming species, and changes in fish distribution and productivity. New and existing knowledge and insight will be synthesised and integrated to project changes in marine life, ecosystems and economies under future scenarios for adaptation and mitigation in the light of new technologies, fishing strategies and policy needs. VECTORS will evaluate current forms and mechanisms of marine governance in relation to the vectors of change. Based on its findings, VECTORS will provide solutions and tools for relevant stakeholders and policymakers, to be available for use during the lifetime of the project. The project will address a complex array of interests comprising areas of concern for marine life, biodiversity, sectoral interests, regional seas, and academic disciplines as well as the interests of stakeholders. VECTORS will ensure that the links and interactions between all these areas of interest are explored, explained, modelled and communicated effectively to the relevant stakeholders. The VECTORS consortium is extremely experienced and genuinely multidisciplinary. It includes a mixture of natural scientists with knowledge of socio-economic aspects, and social scientists (environmental economists, policy and governance analysts and environmental law specialists) with interests in natural system functioning. VECTORS is therefore fully equipped to deliver the integrated interdisciplinary research required to achieve its objectives with maximal impact in the arenas of science, policy, management and society.

Partners:

N	Partner Legal Name	Country
1	PLYMOUTH MARINE LABORATORY	UK
2	THE UNIVERSITY COURT OF THE UNIVERSITY OF ST ANDREWS	UK
3	ACONDICIONAMIENTO TARRASENSE ASSOCIACION	ES
4	CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LE SCIENZE DEL MARE	IT
5	JOHANN HEINRICH VON THUENEN-INSTITUT, BUNDESFORSCHUNGSINSTITUT FUER LANDLICHE RAUME, WALD UND FISCHEREI	DE
6	UNIVERSITY COLLEGE DUBLIN, NATIONAL UNIVERSITY OF IRELAND, DUBLIN	IE
7	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
8	TARTU ULIKOOL	EE
9	WAGENINGEN UNIVERSITEIT	NL
10	STICHTING DELTARES	NL
11	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
12	UNIVERSITY OF HULL	UK
13	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
14	National Institute of Oceanography - Israel Oceanographic & Limmological Research	IL
15	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
16	AALBORG UNIVERSITET	DK
17	UNIVERSITA DI PISA	IT
18	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
19	FONDAZIONE ENI ENRICO MATTEI	IT
20	UNIVERSITAET HAMBURG	DE
21	DANMARKS TEKNISKE UNIVERSITET	DK
22	Gollaschconsulting	DE
23	UNIVERSITE DE BRETAGNE OCCIDENTALE	FR
24	BANGOR UNIVERSITY	UK
25	KLAIPEDOS UNIVERSITETAS	LT
26	HELLENIC CENTRE FOR MARINE RESEARCH	EL
27	INSTYTUT OCEANOLOGII - POLSKIEJ AKADEMII NAUK	PL

28	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL
29	SIR ALISTER HARDY FOUNDATION FOR OCEAN SCIENCE	UK
30	UNIVERSITA DEGLI STUDI DI PAVIA	IT
31	INSTITUT SUPERIEUR DES SCIENCES AGRONOMIQUES, AGROALIMENTAIRES, HORTICOLES ET DU PAYSAGE	FR
32	UNIVERSITE DE ROUEN	FR
33	Community of European Shipyards Associations asbl	BE
34	UNIVERZA V LJUBLJANI	SI
35	ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE OGS	IT
36	INSTITUT FUER OSTSEEFORSCHUNG WARNEMUENDE AN DER UNIVERSITAET ROSTOCK	DE
37	AARHUS UNIVERSITET	DK

Activity Code: Ocean.2010-3 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Sub-seabed CO2 Storage: Impact on Marine Ecosystems (ECO2)

Proposed EC Grant: 10.500.000 €

Abstract:

The ECO2 project sets out to assess the risks associated with the storage of CO2 below the seabed. Carbon Capture and Storage (CCS) is regarded as a key technology for the reduction of CO2 emissions from power plants and other sources at the European and international level. The EU will hence support a selected portfolio of demonstration projects to promote, at industrial scale, the implementation of CCS in Europe. Several of these projects aim to store CO2 below the seabed. However, little is known about the short-term and long-term impacts of CO2 storage on marine ecosystems even though CO2 has been stored sub-seabed in the North Sea (Sleipner) for over 13 years and for one year in the Barents Sea (Snøhvit). Against this background, the proposed ECO2 project will assess the likelihood of leakage and impact of leakage on marine ecosystems. In order to do so ECO2 will study a sub-seabed storage site in operation since 1996 (Sleipner, 90 m water depth), a recently opened site (Snøhvit, 2008, 330 m water depth), and a potential storage site located in the Polish sector of the Baltic Sea (B3 field site, 80 m water depth) covering the major geological settings to be used for the storage of CO2. Novel monitoring techniques will be applied to detect and quantify the fluxes of formation fluids, natural gas, and CO2 from storage sites and to develop appropriate and effective monitoring strategies. Field work at storage sites will be supported by modelling and laboratory experiments and complemented by process and monitoring studies at natural CO2 seeps that serve as analogues for potential CO2 leaks at storage sites. ECO2 will also investigate the perception of marine CCS in the public and develop effective means to disseminate the project results to stakeholders and policymakers. Finally, a best practice guide for the management of sub-seabed CO2 storage sites will be developed applying the precautionary principle and valuing the costs for monitoring and remediation.

Partners:

N	Partner Legal Name	Country
1	LEIBNIZ-INSTITUT FUER MEERESWISSENSCHAFTEN AN DER UNIVERSITAET KIEL	DE
2	PLYMOUTH MARINE LABORATORY	UK
3	NORSK INSTITUTT FOR VANNFORSKNING	NO
4	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
5	UNIVERSITETET I BERGEN	NO
6	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
7	CHRISTIAN-ALBRECHTS-UNIVERSITAET ZU KIEL	DE
8	UNIVERSITETET I TROMSOE	NO
9	KONSORTIUM DEUTSCHE MEERESFORSCHUNG e.V.	DE
10	ALFRED-WEGENER-INSTITUT FUER POLAR- UND MEERESFORSCHUNG	DE
11	INSTITUT FUER OSTSEEFORSCHUNG WARNEMUENDE AN DER UNIVERSITAET ROSTOCK	DE
12	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
13	ISTITUTO NAZIONALE DI OCEANOGRAFIA E DI GEOFISICA SPERIMENTALE OGS	IT
14	UNIVERSITAET STUTTGART	DE
15	STATOIL PETROLEUM AS	NO
16	DET NORSKE VERITAS AS	NO
17	UNIVERSITY OF SOUTHAMPTON	UK
18	INSTITUT FUR WELTWIRTSCHAFT	DE
19	THE UNIVERSITY OF EDINBURGH	UK
20	UNIVERSITEIT GENT	BE
21	HERIOT-WATT UNIVERSITY	UK
22	GOETEBORGS UNIVERSITET	SE
23	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
24	STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND	NL
25	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
26	UNIWERSYTET GDANSKI	PL
27	Grupa LOTOS	PL

Activity Code: ENV.2007.2.1.5.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: sustainaBle uRban plannIng Decision support accountinG for urban mEtabolism

Proposed EC Grant: 3.100.000 €

Abstract:

Like any living system, urban communities consume material and energy inputs, process them into usable forms, and eliminate the wastes from the process. This can be seen as "metabolism" of industry, commerce, municipal operations, and households. Understanding the pattern of these energy and material flows through a community's economy provides a systemic reading of the present situation for goal and objective setting and development of indicators for sustainability. At present, planning policies often reflect the logic of the market. They would better reflect a vision of urban development, in which environmental and social considerations are fully embedded in spatial planning policies at all steps of the policy cycle from problem identification and policy design through to the implementation and ex-post evaluation stages. Therefore, the widespread inclusion of sustainability objectives in urban planning at all scales (from regional to site level) is necessary, providing the opportunity for the incorporation of bio-physical sciences knowledge into the planning process on a routine basis. To this end, the proposed project BRIDGE (sustainaBle uRban plannIng Decision support accountinG for urban mEtabolism) aims at bridging the gap between bio-physical sciences and urban planners and to illustrate the advantages of accounting for environmental issues on a routine basis in design decisions. BRIDGE will provide the means to quantitative estimate the various components of the urban metabolism (observation of physical flows and modelling), the means for quantitative estimate their impacts (socio-economic and environmental impact assessments and indicators), as well as the means for resource optimisation in urban fabric (support the decision making in urban planning). BRIDGE will focus on the interrelation between energy and material flows and urban structure.

Partners:

N	Partner Legal Name	Country
1	Foundation for Research and Technology - Hellas	EL
2	King's College London	UK
3	Consiglio Nazionale delle Ricerche	IT
4	Instutut Ekologii Terenów Uprzemyslowionych	PL
5	UNIVERSIDAD POLITECNICA DE MADRID	ES
6	Universidade do Aveiro	PT
7	UBAS	CH
8	The Provost, Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth, near Dublin (hereinafter callled TCD)	IE
9	Helsingin yliopisto	FI
10	National and Kapodistrian University of Athens	EL
11	Centro Euro-Mediterraneo per i Cambiamenti Climatici S.c.a.r.l.	IT
12	Météo France, Centre National de Recherches Météorologiques	FR
13	ALTERRA BV	NL
14	UNIVERSITY OF SOUTHAMPTON	UK

Activity Code: ENV.2007.2.1.5.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Sustainable Urban Metabolism for Europe

Proposed EC Grant: 2.867.960 €

Abstract:

Societies in their urban (and also non-urban) segments, are extracting materials and energy from their natural environment, processing these flows, eventually accumulating portions of them as stocks and, in the end, deleting them into the environment as wastes, emissions or deliberate discharges. Urban settlements – cities – are a specific type of stocks in the metabolism of societies, and the way these cities are being built and operated has a substantial influence on the quantities and qualities of material and energy flows needed to sustain their existence.In SUME, the urban metabolism shall be understood as a metaphor for our societies' way of dealing with its natural environment. With global climate change, limited resources and sources of energy, the question of how a healthy level of metabolic exchange with the environment can be achieved is gaining a dramatic new actuality. It is the question of how existing urban areas shall be transformed and new cities or expansions should be planned – to be researched in SUME with a truly comprehensive approach. The concept of urban metabolism, as understood and applied in SUME, will be including all relevant flows (material, energy, waste etc.), and – as link to future planning – consider the influence of the various urban spatial forms and ways of urban restructuring on the levels and qualities of the flows. In order to search for a reduced extraction of resources and energies, new criteria for planning and governing of urban development will be needed. The urban metabolism approach will be tested as a guideline for such knowledge and methodological improvement. As a comprehensive approach, the concept of metabolism also is scrutinizing the effects of investment, asking if an intensified use of flows for the renewal of urban structures will pay off in the future by lowering the levels of material/energy flows over time, thus attempting to make urban metabolisms more sustainable.

Partners:

N	Partner Legal Name	Country
1	Austrian Institute for Regional Studies and Spatial Planning	AT
2	Faculdade de Engenharia da Universidade do Porto	PT
3	Nordregio - Nordic Centre for Spatial Development	SE
4	FOUNDATION FOR RESEARCH AND TECHNOLOGY-HELLAS	EL
5	University of Newcastle upon Tyne	UK
6	Delft University of Technology	NL
7	Klagenfurt University, Faculty for Interdisciplinary Studies	AT
8	Insitute of Automation, China Academy of Sciences	CN
9	Warsaw School of Economics (Department of Local Government and Development)	PL

Activity Code: ENV.2009.2.1.5.1 **Funding Scheme:** CP-IP-SICA **Duration (Months):** 48

Title: SOLUTIONS for ENVIRONMENTAL CONTRASTS in COASTAL AREAS

Proposed EC Grant: 6.159.120 €

Abstract:

Urban settlements, following the economic crisis of the 70s, entered in a process ofregional and urban restructuring to gain a new image at the international level. As a result of the renewed economic success new flows of permanent, semi-permanent, temporary and daily “human mobility” followed: (i) for consumption (leisure and tourism), (ii) for production (economic migration). The world competition among metropolitan areas highlighted the essential importance of natural and cultural resources. The proposal considers the effects of human mobility on urban settlement growth and restructuring in coastal areas where (i) environment is more fragile and space limited, (ii) every phenomenon is more concentrated and (iii) effects on natural and cultural environment are more acute. Problems are multiplied since the climate change affecting environmental parameters - as sea levels - augments risks of flooding, propagation of pollutants, dislocation of a great number of settlers.Controlling and reducing unwanted consequences is contributing to growing conflicts among stakeholders. An integrated ecosystem approach incorporating social, economic and naturaldisciplines is essential in understanding and dealing with the complex and dynamic problemsfacing the coastal city environments.The proposal intends to: (i) identify conflicts, (ii) analyze their quantitative and qualitative effects on the environment, (iii) create models to synthesize the complexity of the different social, economic and environmental systems, (iv) compare the priority of each typology through taxonomy. Outcomes include (i) elaboration of an analysis methodology, (ii) creating tools for appropriate policies, (iii) scenario building, (iv) dissemination–exploitation of results for users’ needs.The project will analyse 8 metropolitan areas of global importance and 8 of local importance in European and Asian countries (Belgium, Portugal, Italy, Sweden, United Kingdom, Israel, India, and Vietnam)

Partners:

N	Partner Legal Name	Country
1	CONSORZIO SAPIENZA INNOVAZIONE	IT
2	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
3	VRIJE UNIVERSITEIT BRUSSEL	BE
4	Faculdade de letras da Universidade de Lisboa	PT
5	LONDON METROPOLITAN UNIVERSITY	UK
6	THE HEBREW UNIVERSITY OF JERUSALEM.	IL
7	GOETEBORGS UNIVERSITET	SE
8	University of Pune, Science and Technology Park	IN
9	Institute of Marine Environment and Resources	VN

Activity Code: ENV.2010.2.1.5-1 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: CLimate change and Urban Vulnerability in Africa

Proposed EC Grant: 3.494.581 €

Abstract:

The social and economic impact of natural disasters in emerging economies and developing countries is growing. Many African countries have fragile economies unable to absorb the shocks caused by natural disasters enhanced by the increasing vulnerability of rapidly expanding urban areas. Climate change is likely to rapidly exacerbate this situation. The overall objective of CLUVA is to develop methods and knowledge to be applied to African cities to manage climate risks, to reduce vulnerabilities and to improve coping capacity and resilience towards climate changes. CLUVA will explore these issues in selected African cities (Addis Ababa, Dar es Salaam, Douala, Ougadougou, St.Louis). The project aims at improving the capacity of scientific institutions, local councils and civil society to cope with climate change. CLUVA will assess the environmental, social and economic impacts and the risks of climate change induced hazards expected to affect urban areas (floods, sea-level rise, storm surges, droughts, heat waves, desertification, storms and fires) at various time frames. The project will develop innovative climate change risk adaptation strategies based on strong interdisciplinary components. CLUVA will be conducted by a balanced partnership of European and African partners. The 7 European partners will bring together some of EU's leading experts in climate, quantitative hazard and risk assessment, risk management, urban planners and social scientists. The 6 African partners from South Africa and from the Universities of the selected cities cover a similar range of expertises, making possible an effective integrated research effort. The project is structured in 6 WorkPackages dealing with climate change and impact models (WP1), multiple vulnerability (WP2), urban planning and governance as key issues to increase the resilience (WP3), capacity building and dissemination (WP4), coordination of the activities in the selected cities (WP5) and project management (WP6).

Partners:

N	Partner Legal Name	Country
1	AMRA - ANALISI E MONITORAGGIO DEL R ISCHIO AMBIENTALE SCARL	IT
2	Københavns Universitet	DK
3	THE UNIVERSITY OF MANCHESTER	UK
4	TECHNISCHE UNIVERSITAET MUENCHEN	DE
5	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
6	CENTRO EURO-MEDITERRANEO PER I CAMBIAMENTI CLIMATICI SCARL	IT
7	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
8	NORSK INSTITUTT FOR BY- OG REGIONFORSKNING	NO
9	Université Gaston Berger	SN
10	UNIVERSITE DE YAOUNDE I	CM
11	UNIVERSITE DE OUAGADOUGOU	BF
12	ARDHI UNIVERSITY	TZ
13	EIABC_AAU	ET

Activity Code: ENV.2008.2.1.6.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Models for Adaptive Forest Management

Proposed EC Grant: 6.961.073 €

Abstract:

The project MOdels for AdapTIVE forest Management (MOTIVE) will evaluate the consequences of the intensified competition for forest resources given climate and land use change. The project focuses on a wide range of European forest types under different intensities of forest management. In particular, MOTIVE examines impacts with respect to the disturbance regimes determining forest dynamics. MOTIVE seeks to develop and evaluate strategies that can adapt forest management practices to balance multiple objectives under changing environmental conditions. The evaluation of different adaptive management systems will take place within a scenario analysis and a regional landscape framework. A wide range of possible scenarios will be taken into account on different time scales. The main forest types in Europe for the most important bioclimatic regions will be covered and the most important goods and services delivered by Eurpean forests will be assessed using the most up to date models. The ultimate objective of the MOTIVE project is to provide insights, data and tools to improve policymaking and adaptive forest resource management in the face of rapidly changing climatic and land-use conditions. In order to reach its objectives, MOTIVE is organized into six scientific work packages in addition to a management-oriented work package : Baseline trends and possible futures for the EU. Development of improved models for Adaptive Forest Management. Testing and evaluating management options and risks. Evaluating and selecting good adaptive forest management strategies. Improved decision support in adaptive forest management. Stakeholder/Decision maker interaction and Dissemination. One of the main deliverables of MOTIVE will be an Adaptive Forest Management toolbox. The toolbox will provide up-to-date methods for planning and decision making in AFM to the decision maker (forest resource manager, policy maker) for actual use in strategic and tactical forest management planning

Partners:

N	Partner Legal Name	Country
1	Forest Research Institute of Baden-Wuerttemberg	DE
2	Alterra BV	NL
3	Swiss Federal Research Institute WSL	CH
4	Swiss Federal Institute of Technology	CH
5	University of Copenhagen	DK
6	Universität für Bodenkultur Wien	AT
7	European Forest Institute	FI
8	Albert-Ludwigs-University Freiburg	DE
9	Centro de Estudos Florestais – Instituto Superior de Agronomia – Technical University of Lisbon	PT
10	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
11	University Stefan cel Mare Suceava	RO
12	University of Joensuu	FI
13	Sveriges Lantbruksuniversitet	SE
14	Forestry Commission Research Agency	UK
15	Potsdam Institute for Climate Impact Research e.V.	DE
16	Center for Ecological Research and Forestry Applications	ES
17	IFER - Institute of Forest Ecosystem research, Ltd.	CZ
18	University of Forestry, Bulgaria	BG
19	Foreco Technologies S.L	ES
20	Pensoft Publishers Ltd.	BG

Activity Code: ENV.2009.2.1.6.1 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: FIRE-SMART. FOREST AND LAND MANAGEMENT OPTIONS TO PREVENT UNWANTED FOREST FIRES

Proposed EC Grant: 920.000 €

Abstract:

Forest fire prevention involves a complex implementation. Because of the broad spectrum of activities included, prevention can be designed and performed at different scales, involving a great variety of institutions. Still, hardly ever legislation regulates the inclusion of fire prevention activities as part of forest management plans. Nevertheless, prevention is actually performed, although the lack of planning and coordination reduces the efficiency of prevention measures. Furthermore, it is suspected that often those practices lack solid foundations, and that are not site and species or stand type specific. FireSmart objective is to make a significant contribution to the prevention of unwanted forest fires. To this purpose the Consortium will retrieve, from institutions operating at several scales, the fire prevention theories and practices currently in use in the Mediterranean Europe. This information will be analysed meticulously in order to evaluate the strengths and weaknesses involved in fire prevention taking into account socio-economic, institutional and legislative aspects. The analysis will lead to the assessment of the existing different options to overcome the actual difficulties and to the subsequent elaboration recommendations and practical guidelines for stakeholders involved in the entire sustainable management chain of silviculture. Finally, using findings obtained in along the project, the Consortium will elaborate the strategic roadmap that will point the path to follow in the future. The present project makes particular emphasis in the dissemination which will be organised around a project Web Page, two workshops and a final Seminar. The Consortium forsees the need to maintain the Web page alive after the project and proposes a feasible solution for the future of this Web page, which will play a crucial role for the connection and exchange of information between stakeholders.

Partners:

N	Partner Legal Name	Country
1	GMV AEROSPACE AND DEFENCE SA	ES
2	Ambiente Italia s.r.l.	IT
3	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
4	CONFEDERATION EUROPEENNE DES PROPRIETAIRES FORESTIERS ASBL	LU
5	ENTRENAMIENTO E INFORMACION FORESTAL S.L.	ES
6	Forestis _ Associação Florestal de Portugal	PT
7	INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARIA Y ALIMENTARIA	ES
8	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE

Activity Code: ENV.2009.2.1.6.2 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: Forest ecosystem genomics research: supporting Transatlantic Cooperation

Proposed EC Grant: 991.206 €

Abstract:

The main aim of FoResTTraC is to prepare future coordinated research plans, via a strategic research roadmap, between Europe and North America regarding adaptation of forest trees to climate changes, linking different disciplines: ecology, genetics, genomics and evolution. FoResTTraC brings together a critical mass of research expertise in these disciplines on both sides of the Atlantic with 6 leading European partners, 3 American and 2 Canadian partners. For the time being, large scale genomics projects have been conducted in "parallel" between North America and Europe, lacking in cooperative exchanges and interactions. The leading institutions coordinating these projects are partners of FoResTTraC to ensure that the current state–of–art research is represented in the project. FoResTTraC will deliver a mapping of current research capacity and state of the art research in forest ecosystem genomics, a validated research roadmap regarding adaptation to climate change, a set of joint science plans, a collection of genomic resources preparing future whole genome sequencing of ecologically and economically important tree species. All project outcomes will be validated during the project by a wide group of stakeholders from Europe and North America and will be disseminated widely via the project website and key dissemination.

Partners:

N	Partner Legal Name	Country
1	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
2	AUSTRIAN RESEARCH CENTERS GMBH - ARC	AT
3	International Plant Genetic Resources Institute	IT
4	INRA TRANSFERT S.A.	FR
5	INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARIA Y ALIMENTARIA	ES
6	North Carolina State University	US
7	Northern Arizona University	US
8	OULUN YLIOPISTO	FI
9	University of British Columbia	CA
10	Regents University of California at Davis	US
11	Université Laval	CA

Activity Code: ENV.2007.3.1.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Water in Industry, Fit-for-UseSustainable Water Use in Chemical, Paper, textile and Food Industry

Proposed EC Grant: 9.650.000 €

Abstract:

Sustainable water use in industry is the goal of AquaFit4Use, by a Cross-sectorial, integrated apporach. The overall objectives are: The development and implementation of new, reliable, cost-effective technologies, tools and methods for sustainable water supply, use and discharge in the main water consuming industries in order to Significantly reduce water use, mitigate environmental impact and produce and apply water qualities in accordance with industrial own specifications (fit - for - use) from all possible sources, and contributing to a far-going closure of the water cycle in a economical, sustainable and safe way while improving their product quality and process stability.The 4 pillars of the project are Industrial Water Fit-for-use, Integrated water resource management, Strong industrial participation and Cross-sectoral technologies and approach. Waster fit-for-use is the basis for sustainable water use; the integrated approach a must. Tools will be developed to define and control water quality. The heart of AquaFit4Use however is the development of new cross-sectorial technologies, with a focus at biofouling and scaling prevention, the treatment of saline streams, disinfection and the removal of specific substances. Intensive co-operation between the industries, the knowledge and the technologies developed in this project will be broadly transferred and implemented. This AquaFit4Use proposal is based on the work of the Working group 'Water in Industry"of the ÉU Water Platform WSSTP; 40 % of the project partners of AquaFit4Use were involved in this working group. The expected impacts of AquaFit4Use are: A substantial reduction of fresh water needs (20 to 60%) and effluent discharge if industries. Integrating process technologies for further closing the water cycles. Improved process stability and product quality in the different sectors and strengthening the competitiveness of the European Water Industry

Partners:

N	Partner Legal Name	Country
1	Nederlandse Organisatie voor toegepast natuurwetenschappelijk onderzoek TNO	NL
2	Papiertechnische Stiftung	DE
3	Universidad Complutense de Madrid	ES
4	Flemish Institute for Technological Research	BE
5	Centro de Estudios e Investigaciones Tecnicas de Gipuzkoa	ES
6	VEOLIA ENVIRONNEMENT	FR
7	Univerza v Maribor, Fakulteta za strojništvo	SI
8	Ente per le Nuove Tecnologie l'Energia e l'Ambiente	IT
9	Holmen Paper	SE
10	NESTLE WATERS MANAGEMENT AND TECHNOLOGY	FR
11	Perstorp Specialty Chemicals AB	SE
12	DHI	DK
13	Conservas Hijos de Manuel Sánchez Besarte S.A.	ES
14	Asistencia Tecnológica Medioambiental S.A.	ES
15	sappi Maastricht B.V.	NL
16	Delta NV	NL
17	TNO	PT
18	Unilever Research and Development Vlaardingen B.V.	NL
19	vermicon	DE
20	EnviroChemia Polska sp.zo.o.	PL
21	Wedeco GmbH	DE
22	MOSTforWATER	BE
23	BASF Antwerpen NV	BE
24	Tekstina d.d., Tekstilna industrija Ajdovščina	SI
25	Svilanit, d.d.	SI
26	Aquatest a.s.	CZ
27	Alpro UK Ltd	UK
28	Smurfit Kappa C.D. Haupt Papier- und Pappenfabrik GmbH & Co.KG	DE

Activity Code: ENV.2008.3.1.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 56

Title: Development of rehabilitation technologies and approaches for multipressured degraded waters and the integration of their impact on river basin management

Proposed EC Grant: 6.584.695 €

Abstract:

Within the AQUAREHAB project, different innovative rehabilitation technologies for soil, groundwater and surface water will be developed to cope with a number of hazardous (nitrates, pesticides, chlorinated and aromatic compounds, mixed pollutions,…) within heavily degraded water systems. The technologies are activated riparian zones/wetlands; smart biomass containing carriers for treatment of water in open trenches; in-situ technologies to restore degraded surface water by inhibiting influx of pollutants from groundwater to surface water; multifunctional permeable barriers and injectable Fe-based particles for rehabilitation of groundwater. Methods will be developed to determine the (long-term) impact of the innovative rehabilitation technologies on the reduction of the influx of these priority pollutants towards the receptor. A connection between the innovative technologies and river basin management will be worked out. In a first stage of the project, the technologies and integration of their impact in river basin management will be developed in three different river basins (Denmark, Israel, Belgium). In a second stage, the generic approaches will be extrapolated to one or two more river basins. One of the major outcomes of the project will be a generic river basin management tool that integrates multiple measures with ecological and economic impact assessments of the whole water system. The research in the project is focussed on innovative rehabilitation strategies to reduce priority pollutants in the water system whereas the generic management tool will include other measures related to flood protection, water scarcity and ecosystem health, The project will aid in underpinning river basin management plans being developed in EU Member States, and will demonstrate cost effective technologies that can provide technical options for national and local water managers, planners and other stakeholders (drinking water companies, industry, agriculture,

Partners:

N	Partner Legal Name	Country
1	Flemish Institute for Technological research	BE
2	Katholieke Universiteit Leuven	BE
3	Geological Survey of Denmark and Greenland	DK
4	Helmholtz Zentrum München – Deutsches Forschungszentrum für Gesundheit und Umwelt	DE
5	CTM Centre Tecnologic	ES
6	Technische Universiteit Delft (Delft University of Technology)	NL
7	Sapion bvba	BE
8	Isodetect GmbH	DE
9	Universitaet Stuttgart	DE
10	Wageningen Universiteit	NL
11	Ben-Gurion University of the Negev	IL
12	Masarykova Univerzita	CZ
13	UNESCO-IHE Institute for Water Education	NL
14	The University of Sheffield	UK
15	Politecnico di Torino	IT
16	Höganäs AB (Publ.)	SE
17	University of Copenhagen	DK
18	Institut National de l'Environnement Industriel et des Risques	FR
19	Environmental Institute, s.r.o.	SI

Activity Code: ENV.2009.3.1.1.1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: PREPARED “ENABLING CHANGE”

Proposed EC Grant: 6.994.802 €

Abstract:

IPCC climate change scenarios have a global perspective and need to be scaled down to the local level, where decision makers have to balance risks and investment costs. Very high investments might be a waste of money and too little investment could result in unacceptable risk for the local community. PREPARED is industry driven, 12 city utilities are involved in the project and the RDT carried out is based on the impacts of climate change the water supply and sanitation industry has identifed as a challenge for the years to come. The result of PREPARED will be an infrastructure for waste water, drinking water and storm water management that will not only be able better cope with new scenarios on climate change but that is also managed in a optimal way. We will have complexes monitoring and sensor systems, better integration and handling of complex data, better exploitation of existing infrastructures through improved real time control, new design concepts and guidelines for more flexible and more robust infrastructures. PREPARED will involve the local community in problem identification and in jointly finding acceptable system solutions, that are supported by all, through active learning processes. Activities and solutions in PREPARED will be based on a risk assessment and risk management approach for the whole urban water cycle, through the development of innovative Water Cycle Safety Plans. Other innovations are sensors and models that will enable faster and better actions on changes and new design rules for more resilient design. We will combine European knowledge with valuable knowledge from Australia and the USA, to make the European Water sector more competitive. This to enable our industrial partners to export the products developed in PREPARED to other regions of the world, thus contributing to the Lisbon Goals but also to the MDGs. To ensure this exploitation the PREPARED consortium consist of more than 50% industrial partners and is demand driven.

Partners:

N	Partner Legal Name	Country
1	KIWA WATER RESEARCH BV	NL
2	DHI INSTITUT FOR VAND OG MILJO FORENING	DK
3	STIFTELSEN SINTEF	NO
4	Kompetenzzentrum Wasser Berlin gGmbH	DE
5	INSTITUT NATIONAL DES SCIENCES APPLIQUEES DE LYON	FR
6	International Water Association	UK
7	UNIVERSITY OF BRADFORD	UK
8	THE UNIVERSITY OF EXETER	UK
9	CETAQUA, CENTRO TECNOLOGICO DEL AGUA	ES
10	Iride Acqua Gas S.p.A.	IT
11	TUBITAK Marmara Research Center	TR
12	INSTYTUT EKOLOGII TERENOW UPRZEMYSLOWIONYCH	PL
13	LABORATORIO NACIONAL DE ENGENHARIA CIVIL	PT
14	UNIVERSITAET INNSBRUCK	AT
15	Crimean Scientific and Research Center of Institute of Hydraulic Engineering and Land Reclamation of the Ukrainian Academy of Agricultural Sciences	UA
16	NIVUS GmbH	DE
17	scan Messtechnik	AT
18	Krüger A/S	DK
19	Aquateam - Norwegian Water Technology Centre AS	NO
20	IWW RHEINISCH WESTFAELISCHES INSTITUT FUR WASSERFORSCHUNG GEMEINNUETZIGE GMBH	DE
21	Clavegueram de Barcelona, S.A.	ES
22	Berliner Wasserbetriebe AöR	DE
23	Gemeente Eindhoven	NL
24	Mediterranea delle Acque S.p.A.	IT
25	ISTANBUL WATER AND SEWERAGE ADMINISTRATION	TR
26	Przedsiebiorstwo Wodociagów i Kanalizacji sp z o.o.	PL
27	EPAL - Empresa Portuguesa das Águas Livres, SA	PT

28	Communaute urbaine de Lyon	FR
29	Oslo kommune, Vann- og avløpseteten	NO
30	Crimean Republican Enterprise “Simferopol Drinking Water Supply and sewerage Company”	UA
31	Aarhus Water and Wastewater	DK
32	Dwr Cymru Welsh Water	UK
33	Seattle Public Utilities	US
34	Melbourne Water Corporation	AU
35	Monash University	AU

Activity Code: ENV.2010.3.1.1-1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Transitions to the Urban Water Services of Tomorrow

Proposed EC Grant: 6.991.664 €

Abstract:

The European project initiative TRUST will produce knowledge and guidance to support TRansitions to Urban Water Services of Tomorrow, enabling communities to achieve sustainable, low-carbon water futures without compromising service quality. We deliver this ambition through close collaboration with problem owners in ten participating pilot city regions under changing and challenging conditions in Europe and Africa. Our work provides research driven innovations in governance, modelling concepts, technologies, decision support tools, and novel approaches to integrated water, energy, and infrastructure asset management. An extended understanding of the performance of contemporary urban water services will allow detailed exploration of transition pathways. Urban water cycle analysis will include use of an innovative systems metabolism model, derivation of key performance indicators, risk assessment, as well as broad stakeholder involvement and an analysis of public perceptions and governance modes. A number of emerging technologies in water supply, waste and storm water treatment and disposal, in water demand management and in the exploitation of alternative water sources will be analysed in terms of their cost-effectiveness, performance, safety and sustainability. Cross-cutting issues include innovations in urban asset management and water-energy nexus strengthening. The most promising interventions will be demonstrated and legitimised in the urban water systems of the ten participating pilot city regions. TRUST outcomes will be incorporated into planning guidelines and decision support tools, will be subject to life-cycle assessment, and be shaped by regulatory considerations as well as potential environmental, economic and social impacts. Outputs from the project will catalyse transformatory change in both the form and management of urban water services and give utilities increased confidence to specify innovative solutions to a range of pressing challenges.

Partners:

N	Partner Legal Name	Country
1	IWW RHEINISCH WESTFALISCHES INSTITUT FUR WASSERFORSCHUNG GEMEINNUTZIGE GMBH	DE
2	KWR WATER B.V.	NL
3	LABORATORIO NACIONAL DE ENGENHARIA CIVIL	PT
4	NTNU - NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET	NO
5	FACHHOCHSCHULE NORDWESTSCHWEIZ	CH
6	UNIVERSIDAD POLITECNICA DE VALENCIA	ES
7	THE UNIVERSITY OF BIRMINGHAM	UK
8	CRANFIELD UNIVERSITY	UK
9	THE UNIVERSITY OF EXETER	UK
10	STIFTELSEN SINTEF	NO
11	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
12	INSTITUTO SUPERIOR TECNICO	PT
13	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
14	ANJOU RECHERCHE	FR
15	International Water Association	UK
16	Ingenieurgesellschaft Prof. Dr. Sieker mbH	DE
17	Breivoll Inspection Technologies as	NO
18	HR WALLINGFORD LTD	UK
19	YDREAMS - INFORMATICA S.A.	PT
20	Addition Projectos e Servicos de Informatica Lda	PT
21	S.T.E.P. Consulting GmbH	DE
22	CWT Clean Tec AG	DE
23	Canal de Isabel II	ES
24	Scottish Water	UK
25	Schiphol Group	NL
26	Enìa S.p.A.	IT
27	S.C. APA NOVA BUCURESTI S.A.	RO

28	OSLO KOMMUNE	NO
29	AdP - Águas de Portugal, Serviços Ambientais, S.A.	PT
30	Hamburger Wasserwerke GmbH (HWW)	DE
31	Stichting Waternet	NL

Activity Code: ENV.2007.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Floating Sensorised Networked Robots for Water Monitoring

Proposed EC Grant: 2.929.813 €

Abstract:

Water is one of our most precious and valuable resources. It is important to determine how to fairly use, protect and preserve water. New strategies and new technologies are needed to assess the chemical and ecological status of water bodies and to improve the water quality and quantity. The relatively recent progress in micro-electronics and micro-fabrication technologies has allowed a miniaturization of sensors and devices, opening a series of new exciting possibilities for water monitoring. Moreover, robotics and advanced ICTbased technology can dramatically improve detection and prediction of risk/crisis situations, providing new tools for the global management of the water resources. The HydroNet proposal is aimed at designing, developing and testing a new technological platform for improving the monitoring of water bodies based on a network of autonomous, floating and sensorised mini-robots, embedded in an Ambient Intelligence infrastructure. Chemo- and bio-sensors, embedded in the mobile robots will be developed and used for monitoring in real time physical parameters and pollutants in water bodies. Enhanced mathematical models will be developed for simulating the pollutants transport and processes in rivers, lakes and sea. The unmanaged, self-assembling and self-powered wireless infrastructure, with an ever-decreasing cost per unit, will really support decisional bodies and system integrators in managing water bodies resources. The robots and sensors will be part of an Ambient Intelligence platform, which will integrate not only sensors for water monitoring and robot tasks execution, but also communications backhaul systems, databases technologies, knowledge discovery in databases (KDD) processes for extracting and increasing knowledge on water management. Following the computation on stored data, feedback will be sent back to human actors (supervisors, decision makers, industrial people, etc.) and/or artificial actuators, in order to perform actions.

Partners:

N	Partner Legal Name	Country
1	Scuola Superiore Sant'Anna	IT
2	SYNAPSIS - SOCIETA' A RESPONSABILITA' LIMITATA	IT
3	University of Science of Central Switzerland, Lucerne School of Engineering and Architecture	CH
4	Jožef Stefan Institute	SI
5	Lumex-marketing JSC	RU
6	Norsk institutt for luftforskning	NO
7	Univerza v Ljubljani	SI
8	The Hebrew University of Jerusalem	IL
9	Inštitut za fizikalno biologijo d.o.o.	SI
10	RoboTech srl	IT

Activity Code: ENV.2010.3.1.1-2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Marketable sludge derivatives from sustainable processing of wastewater in a highly integrated treatment plant

Proposed EC Grant: 3.456.872 €

Abstract:

This project researches, develops and demonstrates a toolkit of novel processes together with market development for advanced sludge-derived products and integration methodologies that can be applied to a range of wastewater treatment plants based on a typical municipal scenario. Supporting economic and life cycle assessment of the resulting gains in energy efficiency and conversion of renewable carbon, together with an implementation strategy based on a product mix with optimal value, will inform step changes that contribute to achieving more secure and sustainable sludge treatment and management practices in Europe while reducing pressure on natural resources and reliance on manufactured fertilisers. Addressing key sludge management issues in the context of EU climate change mitigation and energy policies, the project concentrates on novel processes for sludge volume reduction, more efficient treatment and downstream processing for high quality sludge derivatives together with application protocols and assessment of the pathogen risk and long term soil impact for greater public confidence. Using an integrated approach with emphasis on the whole wastewater treatment system, the project promises innovative system solutions that have the potential to achieve up 20% annual carbon savings for the water industry by 2020 and ultimately could deliver up to 15,791,131 tCO2e pa savings for Europe. Composing of 14 partners including 7 SMEs from industry, academia and Government establishments, the Consortium is a balanced mix of highly qualified and committed individuals that are well-placed to tackle the technical challenges, disseminate the results and to exploit the €17.5 billion market for new environmental equipment that will be opened up by the project.

Partners:

N	Partner Legal Name	Country
1	UNITED UTILITIES WATER PLC	UK
2	Nijhuis Water Technology b.v.	NL
3	WATERLEAU Group N.V.	BE
4	TEAGASC - AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY	IE
5	HIPSITEC, S.A.	ES
6	UNIVERSIDAD DE OVIEDO	ES
7	Compañía para la gestión de los residuos sólidos de Asturias, S.A.	ES
8	CRANFIELD UNIVERSITY	UK
9	Harper Adams University College	UK
10	AHDB-HGCA	UK
11	Carrs Fertilisers	UK
12	Sustainable Resource Solutions Limited	UK
13	Valsave Engineered Solutions Ltd	UK
14	Specialty Fertilizer Products	US

Activity Code: ENV.2010.3.1.1-2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Novel processing routes for effective sewage sludge management

Proposed EC Grant: 3.456.989 €

Abstract:

The Routes project is addressed to discover new routes in wastewater and sludge treatment which allow:a) to prepare sludge for agricultural utilization by transforming it in a very clean and stabilized product regarding the presence of organic micropollutants (conventional and emerging ones) and of heavy metals, and with respect to hygienic aspects and to phytotoxicity;b) to minimize sludge production by innovative solutions which can be based on different approaches, i.e.: i) metabolic uncoupling where the free energy released by electrons transport is dissipated in heat, in the activation of alternative metabolic routes or in the accumulation of polymeric products, ii) the use of microbial fuel cells, iii) the use of sequencing batch biofilter granular reactor (SBBGR), iiii) the integration of a side-stream process in membrane bioreactors;c) to promote recovery of valuable materials from anaerobic digestion, i.e. biopolymers as polyhydroxyalkanoates and fertilizers;d) to reclaim phosphorus from inert residues of thermal processes;e) to set up and prove at practical scale novel technologies for sludge disposal (wet oxidation, pyrolysis) as sustainable alternative to nowadays the most used incineration;f) to minimize energy pumping by adjusting solid concentration, on a practical installation where sludge is pumped from the production site to a centralized plant.The general objective of the Routes proposal is therefore to set up a panel of different solutions to be applied in different conditions and circumstances, strictly following the waste hierarchy of the Directive 08/98 on waste. The above solutions will be studied either in laboratory or at practical scale, depending on the maturity of the technology, in order to provide to the Commission and the technical and scientific community applicable solutions and new routes for sludge management, also based on the best integration between the water and sludge treatment lines.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	Consorzio Interuniversitario Nazionale "La Chimica per l'Ambiente" (INCA)	IT
3	UNIVERSITA DEGLI STUDI DI BRESCIA	IT
4	EIDGENOESSISCHE ANSTALT FUR WASSERVERSORGUNG ABWASSERREINIGUNG UND GEWAESSERSCHUTZ	CH
5	Bundesanstalt fuer Gewaesserkunde	DE
6	Akademia Techniczno-Humanistyczna w Bielsku-Bialej	PL
7	Uniwersytet Przyrodniczy w Lublinie	PL
8	UNIVERSITE DE REIMS CHAMPAGNE-ARDENNE	FR
9	UNIVERSITAT DE BARCELONA	ES
10	CHALMERS TEKNISKA HOEGSKOLA AB	SE
11	3V GREENEAGLE SPA	IT
12	PYROMEX AG	CH
13	VERMICON AKTIENGESELLSCHAFT	DE
14	ECT OEKOTOXIKOLOGIE GMBH	DE
15	AnoxKaldnes AB	SE
16	Atemis GmbH	DE
17	MEDITERRANEA DELLE ACQUE S.p.A.	IT
18	Agriculture and Agri-Food Canada	CA

Activity Code: ENV.2008.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Water Detoxification Using Innovative vi-Nanocatalysts

Proposed EC Grant: 1.705.584 €

Abstract:

The concept of the project is based on the development of innovative nanostructured UV-Visible photocatalysts for water treatment and detoxification by using doped TiO2 nanomaterials with visible light response. The project aims at an efficient and viable water detoxification technology exploiting solar energy and recent advances in nano-engineered titania photocatalysts and nanofiltration membranes for the destruction of extremely hazardous compounds in water. To this aim, the UV-vis responding titania nanostructured photocatalysts will be stabilized on nanotubular membranes of controlled pore size and retention efficiency as well as on carbon nanotubes exploiting their high surface area and unique electron transport properties to achieve photocatalytically active nanofiltration membranes. This will be the crucial component for the fabrication of innovative continuous flow photocatalytic-disinfection-membrane reactors for the implementation of a sustainable and cost effective water treatment technology based on nanoengineered materials. Comparative evaluation of the UV-visible and solar light efficiency of the modified titania photocatalysts for water detoxification will be performed on specific target pollutants focused mainly on cyanobacterial toxin MC-LR and endocrine disrupting compounds (EDC) in water supplies as well as classical water pollutants such us phenols, pesticides and azo-dyes. Particular efforts will be devoted on the analysis and quantification of degradation products. The final goal is the scale up of the photocatalytic reactor technology and its application in lakes, tanks and continuous flow systems for public water distribution.

Partners:

N	Partner Legal Name	Country
1	National Center for Scientific Research Demokritos	EL
2	OSMO SISTEMI S.R.L.	IT
3	Innovative Research and Technology ltd	UK
4	Universidad de Las Palmas de Gran canaria	ES
5	Faculdade de Engenharia da Universidade do Porto	PT
6	Nantes University	FR
7	University of Cincinnati	US

Activity Code: ENV.2008.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Monolithic reactors structured at the nano and micro levels for catalytic water purification

Proposed EC Grant: 1.950.097 €

Abstract:

This project aims at the preparation and testing of catalyst supported on structured reactors (ceramic and metallic honeycomb monoliths, metallic filters, carbon cloth) coated with nanocarbon materials (NCM), namely carbon nanofibers (CNF) and carbon nanotubes (CNT). This structured catalytic reactor will be used for catalytic water purification. Every partner responsible for testing the monoliths will focus on a different pollutant (Nitrates, organic matter…) and catalytic process (hydrogenation, oxidation) depending on the particular expertise of every partner. The properties of monolithic reactor coated with NCM, e.g. thin catalyst layer and mesoporosity, enable the control of the diffusion path and enhance the diffusion of reactant to catalytic sites. The objective is to achieve, via the use of monoliths coated with NCM, an intensification of the catalytic process in terms of improved selectivity, robustness, stability and performance while reducing energy requirements and by-product generation with respect to the catalytic process using conventional reactors, as e.g. trickled bed or slurry

Partners:

N	Partner Legal Name	Country
1	Consejo Superior de Investigaciones Científicas	ES
2	Norwegian University of Science and Technology	NO
3	Universidad Politecnica de Valencia	ES
4	Faculdade de Engenharia da Universidade do Porto	PT
5	JSC Norta	LT
6	University of Bath	UK
7	JKR-Catalyse	CH
8	MEL Chemicals, a division of Magnesium Elektron Limited	UK
9	Anjou recherche	FR

Activity Code: ENV.2008.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Development of intensified water treatment concepts by integrating nano- and membrane technologies

Proposed EC Grant: 1.930.806 €

Abstract:

The Nametech project harnesses benefits of nanotechnology be to bring about improvements in membrane filtration for advanced water treatment. The general objective is to strengthen the European membrane market by making nanotechnology available to large scale European membrane manufacturers. A unique feature of the project is the knowledge transfer between the experienced membrane manufacturer Norit and the coating expert and new-comer to the membrane field Agfa Gevaert.The S&T focus is on the use of nano-structured materials to alter the physical and chemical properties of polymeric ultrafiltration membranes and thereby improving the filtration performance at macroscale installations.The project aims at adapting commercial nanoparticles such as TiO2 and Ag for the modification of UF membranes to reduce fouling, and thus improve its permeability (i.e. Technology Path 1). In Technology Path 2 and 3, the potential of using active nanoparticles, such as bionano-catalysts, in combination with membranes is examined to remove micropollutants, and thus improving the water quality. A specific novelty is the development of an integrated permeate channel concept, whereby the nanoparticles are embedded in 3D textiles, functioning as membrane support and permeate channel. The nanoparticles will be deposited on the membrane surface or embedded in the membrane (mixed matrix). The S&T challenges regarding the modification of the nanoparticles, the deposition of the nanoparticles on membrane surface as well as the production of nano-activated membranes (NAMs) will be addressed in WP 1, 2 and 3. The newly developed NAMs will be tested at laboratory scale (WP 4) before selecting the most promising concept for testing at pilot scale (WP 5). The activities will be complemented by a toxicological study and the application of LCA to assess the environmental impacts (WP 6). The high industrial involvement puts a strong focus the exploitation strategies and handling IPR issues (WP 7).

Partners:

N	Partner Legal Name	Country
1	Flemish Institute for Technological Research	BE
2	Rheinisch-Westfälische Technische Hochschule Aachen	DE
3	Netherlands Organisation for Applied Scientific Research TNO	NL
4	University of Manchester	UK
5	Norit Process Technology B.V.	NL
6	Agfa-Gevaert	BE
7	Consorzio Venezia Ricerche	IT
8	Technical University of Liberec	CZ
9	Aquatest a.s.	CZ
10	Suez Environnement - CIRSEE	FR

Activity Code: ENV.2008.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Advanced bipolar membrane processes for remediation of highly saline waste water streams

Proposed EC Grant: 1.163.159 €

Abstract:

NEW ED aims at closing industrial water cycles and reducing the amount of waste water streams with highly concentrated salt loads stemming from a broad range of industrial production processes by exploiting the waste components (salts) and transforming them to valuable products. This will be achieved by developing new nanoporous bipolar membranes for electrodialysis (ED), a new membrane module concept and by integrating this new technology into relevant production processes.

The bipolar membrane process produces acids and bases from their corresponding salts by dissociating water at the interface within the bipolar membranes. However, BPMED so far has been applied only in niche markets due to limitations of the current state of membrane and process development. Major drawbacks of the classic BPMED process are low product purity, limited current density and formation of metal hydroxides at or in the bipolar membrane. The objective of this project is to overcome these limitations by developing a new bipolar membrane and membrane module with active, i.e. convective instead of diffusive water transport to the transition layer of the bipolar membranes, where water dissociation takes place. The key feature of the innovative new bipolar membranes is a nano- to micro-porous and at the same time ion conducting intermediate transition layer, through which water is convectively transported from the side into the transition layer. The porous transition layer may have either the character of a cation or an anion exchanger. Several promising intermediate layer materials together with different monopolar ion-exchange layers will be tested and characterized. Membrane manufacturing and new module concepts will be investigated to exploit the full potential of the new bipolar membrane technique. Integration of the developed membranes and modules into relevant production processes is an essential part of the project. Applications to be investigated are a number of large-scale i

Partners:

N	Partner Legal Name	Country
1	Rheinisch-Westfälische Technische Hochschule	DE
2	FuMA-Tech Gesellschaft für funktionelle Membranen und Anlagentechnologie mbH	DE
3	University of Twente	NL
4	Ben-Gurion University of the Negev	IL
5	PRAYON S.A.	BE
6	BAYER MaterialScience AG	DE

Activity Code: ENV.2008.3.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Water Treatment by Molecularly Imprinted Materials

Proposed EC Grant: 2.491.362 €

Abstract:

The present “WATERMIM” proposal is focused on the advancement and optimization of the MIP technology in order to produce functional materials with well-defined morphologies with respect to pore structure and selectivity for water treatment applications. The project aims at the elimination of the random distribution and the uneven accessibility of receptor sites in the volume of the imprinted material that is crucial for its performance. Such novel materials will immediately gain practical relevance, especially, due to their increased selectivity and superior stability under long and harsh technical conditions. The simultaneous optimization of the imprinting efficiency, polymer membrane morphology and separation conditions will enable the development of a truly molecular selective water purification process, based on affinity interactions that would have a large application impact on the water treatment industry. All types of synthetic organic compounds (i.e., triazines, pharmaceutical compounds and endocrine disruptors) are considered target compounds in the WATERMIM project. More specifically, the present project aims at the following S&T objectives: Selection of template molecules and synthesis of functional monomers. Optimization of molecularly imprinted polymer (MIP) composition by computational design techniques and combinatorial screening. Synthesis of well-defined MIP nanoparticles and microgels. Production of novel composite membranes utilizing preformed MIP nanoparticles. Production of composite filters both on organic and inorganic supports via novel grafting techniques.Synthesis of molecularly imprinted membranes (MIMs) for molecular sensor applications. Separation and catalytic decomposition of the pollutants.Advanced monitoring of the target compounds. Benchmark testing of the produced MIMs for water purification.

Partners:

N	Partner Legal Name	Country
1	Centre for Research and Technology Hellas	EL
2	Lund University	SE
3	Cranfield University	UK
4	University of Kalmar	SE
5	University of Dortmund	DE
6	Universitat Stuttgart	DE
7	Johann Heinrich von Thünen-Institute	DE
8	KeraNor AS	NO
9	MIP Technologies AB	SE

Activity Code: ENV.2010.3.1.1-3 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Capacity-Linked water supply and sanitation improvement for Africa's peri-urban and Rural Areas

Proposed EC Grant: 1.989.826 €

Abstract:

There are a large number of small communities and towns in Africa that suffer from severe problems with water supply and sanitation. Small communities in rural areas and peri-urban areas of small towns have comparable settlement structures in which reuse of water and use of sanitation products can be utilized. However, there is only limited local capacity to adopt, implement and operate integrated water supply and sanitation. CLARA's overall objective is to strengthen the local capacity in the water supply and sanitation sector.From a technological point of view, existing low cost technologies for decentralized water supply and sanitation systems shall be assessed and adapted for African conditions with the focus on reducing risks in use and reuse of water and sanitation products, and providing demand oriented water quality. Based on these technological improvements and the experiences from the FP6 projects ROSA and NETSSAF, a simplified planning tool for integrated water supply and sanitation systems for small communities and peri-urban areas shall be developed that incorporates the key factors for success, i.e. operation and maintenance issues and reuse potential, form the beginning of the planning process, and that can be tailored to available local capacities.This simplified integrated CLARA planning tool shall then be tested and evaluated in different geographical African regions to incorporate different economic, cultural and social boundary conditions. For the communities participating in the planning process, application documents will be prepared as a final output that serve as basis to ask for funding of their implementation plans for integrated water supply and sanitation.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITAET FUER BODENKULTUR WIEN	AT
2	VEREIN ZUR FOERDERUNG DES TECHNOLOGIETRANSFERS AN DER HOCHSCHULE BREMERHAVEN E.V.	DE
3	EcoSan Club Consulting KG	AT
4	BIOAZUL	ES
5	Harvard School of Public Health	US
6	CENTRE DE BIOTECHNOLOGIE DE SFAX - CBS	TN
7	Egerton University	KE
8	Water Research Commission	ZA
9	Centre Régional pour l'Eau Potable et l'Assainissement à faible coût	BF
10	Office National de lEau Potable	MA
11	Arba Minch University	ET
12	Arba Minch Water Supply and Sewerage Enterprise	ET
13	Arba Minch Town Municipality	ET
14	Engan New Mayet Compost Production Youth Association	ET
15	Wubet le Arba Minch Solid Collectors Association	ET
16	Arba Minch Health Center	ET

Activity Code: ENV.2010.3.1.1-3 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Water, Sanitation and Hygiene Technologies

Proposed EC Grant: 1.587.925 €

Abstract:

The water and sanitation sector is not short of new and emerging technologies, but hardly any have been adopted into national strategies in Sub-Saharan Africa, nor have they been widely taken up by private enterprise. The contribution of new technologies to MDG targets appears therefore to have been minimal in the last 20 years. A key constraint to reaching the sector targets therefore appears to be the lack of systems to assess the potential of a technology and lack of ability to take new appropriate technologies to scale effectively. WASHTech seeks to address the problem through research on an innovatory process for assessing the potential and sustainability of a wide range of new technologies, and for designing successful strategies for scaling up.The overall development objective is for more effective investment in new technologies to achieve MDG targets. The project (WASHTECH) objective is to strengthen sector capacity to make effective investment in new technologies, through development of a framework which assesses the potential of new technologies introduced into innovative de-centralised systems. The project objective would be achieved through research producing two levels of outputs. The first level of outputs will consist of a widely applicable Technology Assessment Framework (TAF) and process that will provide a simple system and criteria for evaluating new technologies and their performance, identifying sustainability issues, and analysing approaches to introduction, innovation, diffusion and scaling up, including establishing of the required capacities in the three countries,: Burkina Faso, Ghana and Uganda. The second level of outputs depends on the TAF development and capacity building. They define strategies for innovation and scaling up, and the time-span and process needed to achieve successful up-take and sustainability.These outputs are both of direct use to the sector and are also an indication of the value and application of the framework

Partners:

N	Partner Legal Name	Country
1	Stichting IRC International Water and Sanitation Centre	NL
2	CRANFIELD UNIVERSITY	UK
3	Skat Foundation	CH
4	WaterAid	UK
5	Centre Régional pour l'Eau Potable et l'Assainissement à faible coût	BF
6	Training, Research and Networking Development	GH
7	Kwame Nkrumah University of Science and Technology	GH
8	Network for Water and Sanitation-Uganda	UG

Activity Code: ENV.2010.3.1.1-4 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 60

Title: Water Harvesting for Rainfed Africa: investing in dryland agriculture for growth and resilience

Proposed EC Grant: 1.999.313 €

Abstract:

WAHARA will take a transdisciplinary approach to develop innovative, locally adapted water harvesting solutions with wider relevance for rainfed Africa. Water harvesting technologies play a key role in bringing about an urgently needed increase in agricultural productivity, and to improve food and water security in rural areas. Water harvesting technologies enhance water buffering capacity, contributing to the resilience of African drylands to climate variability and climate change, as well as to socio-economic changes such as population growth and urbanisation. To ensure the continental relevance of project results, research will concentrate on four geographically dispersed study sites in Tunisia, Burkina Faso, Ethiopia and Zambia, covering diverse socio-economic conditions and a range from arid to sub-humid climates. The project emphasizes: i) participatory technology design, i.e. selecting and adapting technologies that have synergies with existing farming systems and that are preferred by local stakeholders, yet tap from a global repertoire of innovative options; ii) sustainable impact, i.e. technologies that combine multiple uses of water, green and blue water management, and integrated water and nutrient management. Using models, water harvesting systems will be designed for maximum impact without compromising downstream water-users, contributing to sustainable regional development; iii) integration and adaptability, i.e. paying attention to the generic lessons to be learned from local experiences, and developing guidelines on how technologies can be adapted to different conditions; and iv) learning and action, i.e. a strategy will be developed to enable learning and action from successes achieved locally: a. within a region, to upscale from water harvesting technologies to water harvesting systems, and b. across regions, promoting knowledge exchange at continental scale.

Partners:

N	Partner Legal Name	Country
1	STICHTING DIENST LANDBOUWKUNDIG ONDERZOEK	NL
2	UNIVERSITY OF LEEDS	UK
3	MetaMeta Holding B.V.	NL
4	INSTITUT DES REGIONS ARIDES	TN
5	Institute de l'Environnement et de Researches Agricoles	BF
6	Oromia Water Works Design & Supervision Enterprise	ET
7	Golden Valley Agricultural Research Trust	ZM
8	WAGENINGEN UNIVERSITEIT	NL

Activity Code: ENV.2010.3.1.1-4 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Water Harvesting Technologies Revisited: Potentials for Innovations, Improvements and Upscaling in Sub-Saharan Africa

Proposed EC Grant: 1.999.930 €

Abstract:

The WHaTeR project aims to contribute to the development of appropriate water harvesting techniques (WHTs). These WHTs should be sustainable under dynamic global and regional pressure, and strengthen rainfed agriculture, improve rural livelihood and increase food production and security in Sub-Saharan Africa. In total 3 European and 5 African organisations will be involved; namely VU University Amsterdam (The Netherlands), Newcastle University (United Kingdom), Stockholm Resilience Centre (Sweden), University of Kwazulu Natal (South Africa), Sokoine University (Tanzania), Southern and Eastern Africa Rainwater Network (Kenya), National Institute for Environment and Agricultural Research (Burkina Faso) and Action for Development (Ethiopia). Project activities will be divided over 13 Work Packages. The first Work Package covers project management and the second comprises a situation analysis - through revisits to water harvesting sites in 15 African countries studied previously by participating organisations . The next four Work Packages focus on detailed research and technology development activities on cross-cutting themes (environmental sustainability; technology development; livelihood improvement; uptake and upscaling; and global and regional impact) and will be conducted together with four country-based Work Packages (in Burkina Faso, Ethiopia, South Africa and Tanzania). One Work Package will concentrate on stakeholder communication and outreaching activities, and the final Work Package consists of a synthesis, and production of guidelines for WHTs. The project will spend an estimated 75% of the budget on RTD, 17% on other costs related to stakeholder workshops and outreaching and 8% on project management. The expected impacts of the project comprise technology support for farmers, development of stakeholder communication networks, innovative water harvesting systems, tools for impact assessment, upstream-downstream land use, and policy support for integrated wa

Partners:

N	Partner Legal Name	Country
1	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
2	UNIVERSITY OF KWAZULU-NATAL	ZA
3	UNIVERSITY OF NEWCASTLE UPON TYNE	UK
4	Sokoine University of Agriculture	TZ
5	STOCKHOLMS UNIVERSITET	SE
6	WORLD AGROFORESTRY CENTRE - ICRAF	KE
7	Institute de l'Environnement et de Researches Agricoles	BF
8	ACTION FOR DEVELOPMENT	ET

Activity Code: ENV.2007.3.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Integrated system of data collection technologies for mapping soil properties

Proposed EC Grant: 3.401.260 €

Abstract:

The multidisciplinary DIGISOIL consortium intends to integrate and improve in situ and proximal measurement technologies for the assessment of soil properties assessment and soil degradation indicators, going from the sensing technologies to their integration and their application in (digital) soil mapping (DSM). In addition, our SMEs experience will allow to take into account the feasibility of such developments based on economical constraints, reliability of the results and needs of the DSM community. In order to assess and prevent soil degradation and to benefit from the different ecological, economical and historical functions of the soil in a sustainable way, there is an obvious need for high resolution and accurate maps of soil properties. The core objective of the project is to explore and exploit new capabilities of advanced geophysical technologies for answering this societal demand. To this aim, DIGISOIL addresses four issues covering technological, soil science and economic aspects: (i) the validation of geophysical (in situ, proximal and airborne) technologies and integrated pedo-geophysical inversion techniques (mechanistic data fusion) (ii) the relation between the geophysical parameters and the soil properties, (iii) the integration of the derived soil properties for mapping soil functions and soil threats, (iv) the evaluation, standardisation and sub-industrialization of the proposed methodologies, including technical and economical studies.

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	Institut National de la Recherche Agronomique	FR
3	University Catholique de Louvain	BE
4	Forschungszentrum Juelich GmbH	DE
5	DG Joint Research Centre	IT
6	Geological Institute of Romania	RO
7	University of Pannonia	HU
8	ABEM Instrument AB	SE
9	GALILEO AVIONICA SpA	IT
10	Università degli Studi di Firenze	IT

Activity Code: ENV.2007.3.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Interactions between soil related sciences - Linking geophysics, soil science and digital soil mapping

Proposed EC Grant: 3.420.623 €

Abstract:

As formulated in the Thematic Strategy for Soil Protection prepared by the European Commission soil degradation is a serious problem in Europe. The degradation is driven or exacerbated by human activity and has a direct impact on water and air quality, biodiversity, climate and human life-quality. High-resolution soil property maps are one major prerequisite for the specific protection of soil functions and restoration of degraded soils as well as sustainable land use, water and environmental management. However, the currently available techniques for (digital) soil mapping still have deficiencies in terms of reliability and precision, the feasibility of investigation of large areas (e.g. catchments and landscapes) and the assessment of soil degradation threats at this scale. A further quandary is the insufficient degree of dissemination of knowledge between the scientific community, relevant authorities and prospective users and deficiencies in standardisation.The focus of the iSOIL project is on improving fast and reliable mapping of soil properties, soil functions and soil degradation threats. This requires the improvement as well as integration of geophysical and spectroscopic measurement techniques in combination with advanced soil sampling approaches, pedometrical and pedophysical approaches. An important aspect of the project is the sustainable dissemination of the technologies and concepts developed. For this purpose guidelines will be written and published. Furthermore, the results will be implemented in national and European soil databases. The present state of technologies and future perspectives will also be transferred to authorities, providers of technologies (SMEs), and end users through workshops at regional level, international conferences and publications throughout the duration of the project.

Partners:

N	Partner Legal Name	Country
1	Helmholtz - Zentrum für Umweltforschung GmbH - UFZ	DE
2	Geophysical Institute at the Bulgarian Academy of Sciences	BG
3	Allied Associates Geophysical Ltd.	UK
4	Allsat GmbH network+services	DE
5	Crop Research Institute	CZ
6	Czech University of Life Sciences of Prague	CZ
7	Eijkelkamp Agrisearch Equipment from which Eijkelkamp Training & Consultancy is a part	NL
8	European Committee of Standardization	BE
9	Geo-Infometric GmbH	DE
10	European Commission - DG Joint Research Centre, Institute for Environment and Sustainability	IT
11	Forschungszentrum Juelich GmbH	DE
12	The Soil Company BV	NL
13	University of Bern	CH
14	University of Cranfield	UK
15	Christian-Albrechts-Universität zu Kiel	DE
16	University of Padova	IT
17	University of Tübingen	DE
18	University of Wageningen / Alterra	NL
19	JOANNEUM RESEARCH Forschungsgesellschaft mbH	AT

Activity Code: ENV.2008.3.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Using MicroBes for the REgulation of heavy metaL mobiLity at ecosystem and landscape scAle: an integrative approach for soil remediation by geobiological processes

Proposed EC Grant: 2.337.421 €

Abstract:

The overall goal of UMBRELLA is to use microorganisms to develop cost-efficient and sustainable measures for soil remediation at heavy metal contaminated sites throughout Europe. This will be facilitated by research in microbiology, plant uptake and (hydro)geochemistry centers on the study of microbial influence on metal biogeochemical cycles and their impact for use in soil and water protection. The technologies developed provide a speed-up of existing bioremediation techniques and will provide a tool-box to end-users with microbes for remediation actions in different European climatic, geological and biological setting which will allow low-cost, sustainable, on-site bioremediation of metal contaminations. At the same time, the introduction of a concerted, internationalized education of interdisciplinary trained PhD students across Europe will ascertain a long-lasting, sustainable education profile with relevance to soil remediation. The involvement of government agencies is focussing on the possibility to provide governments with fused guidelines for soil and water protection in a way that overcomes the practises of separated agencies by focussing on ecotoxicological risks resulting from metal contamination on-site as well as by transport through water paths in ground water and international water ways. Dissemination of results will be ensured by international congresses and publications. The management of an integrative, multi-partner consortium ensures the applicability by combination of eight sites across Europe in one modeling approach which will cover Northern, Southern, Middle and Eastern European sites to guarantee future applicability across Europe.

Partners:

N	Partner Legal Name	Country
1	Friedrich-Schiller-Universtät Jena	DE
2	Ente per le Nuove Tecnologie, l'Energia el'Ambiente	IT
3	Bangor University	UK
4	Luleå University of Technology	SE
5	University of Bucharest	RO
6	Jagiellonian University	PL
7	University of Vienna	AT
8	Forschungszentrum Dresden-Rossendorf e.V.	DE
9	Örebro University	SE
10	University of Valladolid	ES
11	University of Cagliari	IT
12	University of Wales Aberystwyth	UK
13	E.GE.CO. Soluzioni Ambientali srl	IT
14	Kwazar Corporation Sp. z o.o.	PL
15	City Council of Chrzanów	PL

Activity Code: ENV.2008.3.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Sustainable Soil Upgrading by Developing Cost-effective, Biogeochemical Remediation Approaches

Proposed EC Grant: 3.394.922 €

Abstract:

UPSOIL aims to achieve a breakthrough in in-situ remediation through an innovative technological perspective taking into account the physical properties and the biogeochemical reactivity of the soil as well as the contaminants.To this end UPSOIL will develop robust technologies for fast, cost-effective, integrated source zone and plume treatment. These are designed to result both in timely reached restored soil functions and associated risk levels, and a maximal use of the natural soil rehabilitation potential at a longer term. UPSOIL thus supports soil function preservation and faster restoration and sustainable redevelopment of European regions and cities that carry the burden of historical soil contamination. Accompanying goals are to broaden the market of soil remediation for SMEs and to build confidence with regulators in adopting sustainable in-situ remediation as the preferable approach for soil restoration. UPSOIL will focus on soils with organic contaminants while addressing effects on metal mobilization, aiding in the remediation of the most pressing soil pollution cases in Europe. Within the UPSOIL perspective, smart coupling of technologies is one approach to optimise remediation with respect to cost, time and soil sustainability. In addition, highly innovative techniques (to be patented) will be developed. These include the automatic targeting of the injection of the remedial agent, and the use of specifically developed selective remedial agents that preferably react with the contaminant and not with the soil matrix. UPSOIL joins strong partners from different EU regions that form a balanced mix of scientific knowledge groups, applied science experience, and practical input through SMEs and contractors that also secure testing of the technologies develop in real field site situations and a further market application of the developed knowledge.

Partners:

N	Partner Legal Name	Country
1	FUNDACION LABEIN	ES
2	Flemish Institute for Technological Research	BE
3	Stichting Deltares	NL
4	Wageningen Universiteit	NL
5	Instytut Ekologii Terenow Uprzemyslowionych	PL
6	National R&D Institute for Industrial Ecology	RO
7	Swedish Geotechnical Institute	SE
8	Enacon s.r.o	CZ
9	Ecorem Baltija UAB	LT
10	DEKONTA, a.s	CZ
11	Przedsiebiorstwo Oczyszczania Wód i Ziemi POWIZ Ltd.	PL
12	EJLSKOV A/S	DK
13	Rehabilitacion de Suelos S.L	ES
14	BIUTEC-Biotechnologie und Umwelttechnologie Forschungs- und Entwicklungsgesellschaft mbH	AT
15	Geotecnia y Cimientos S.A	ES

Activity Code: ENV.2007.3.1.2.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Contaminant-specific isotope analyses as sharp environmental-forensics tools for site characterisation, monitoring and source apportionment of pollutants in soil

Proposed EC Grant: 2.099.958 €

Abstract:

Conventional remediation-monitoring programmes, i.e. analysis of contaminant and metabolite concentrations over time and space, often provide inconclusive assessments due to inability to resolve among mixing of several contaminant sources, degradation, dispersion and other redistribution processes. The iSoil objective is to firmly establish concentration-independent contaminant-specific isotope analysis (CSIA) as a novel, user-friendly and powerful tool for both degradation monitoring and source apportionment of organic contaminants in soil.The balanced iSoil consortium with world-leading CSIA research groups, progressive remediation-focused and analytical services companies and experienced software enterprises will enable a) applications of multiple CSIA systems (13C/12C, 2H/1H, 15N/14N and 37Cl/35Cl) for improved site-specific characterization and monitoring of microbial and abiotic degradation, b) applications of CSIA “isotopic fingerprinting” (14C/12C, 2H/1H, 37Cl/35Cl, and 81Br/79Br) for source apportionment of both regional diffuse and locally mixed contamination scenarios (i.e., environmental forensics) and, c) emphasis on development and demonstration of web-based commercial software to aid soil managers in sampling and interpretation of CSIA results. The CSIA concept provides a well-defined and improved tool to for assessment and monitoring of the 3.5 mill contaminated soil sites in EU. Application of multi-element CSIA enables enhanced power to resolve between the many co-occurring processes. CSIA-based DEGRADATION MONITORING answers to Call Topic “improved tools for site characterization and monitoring of contaminated soils including chemical analysis”. CSIA-based SOURCE APPORTIONMENT answers to Call Topic “development of tools for detection of local, primary, or secondary sources”.

Partners:

N	Partner Legal Name	Country
1	Stockholms universitet	SE
2	Tyréns AB	SE
3	ALS Laboratory Group	SE
4	Hellenic Centre for Marine Research	EL
5	Eidgenössische Technische Hochschule Zürich	CH
6	Masaryk University	CZ
7	Earth Tech CZ s.r.o.	CZ
8	Politechnika Lodzka (Technical University of Lodz)	PL
9	University of Bristol	UK
10	FQS Poland Sp. z o.o.	PL
11	MakoLab M. i K. Sopek Spolka Jawna	PL

Activity Code: ENV.2007.3.1.2.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Model driven Soil Probing, Site Assessment and Evaluation

Proposed EC Grant: 3.397.609 €

Abstract:

Conventional techniques for site characterization are time consuming, cost intensive, and do not support decision making. Therefore, new techniques for step by step site characterization strategy with smart feed back loops are necessary. These will be able to support a future “soil framework directive”. Advanced geophysical site characterization techniques combined with new types of vegetation analysis will be developed. Based on these non-invasive surveys, the extension of sources, contamination levels (THP, BTEX, PAH, CHC, explosives, heavy metals and radio nuclides) and soil heterogeneities will be localized first. Hot spots will then be investigated by new direct push probing systems integrated with geophysical & hydrogeological methods and combined with chemical & isotopic contaminant analysis for source localization and identification (environmental forensics). The actually occurring bioprocesses, such as contaminant degradation or precipitation/mobilization processes, will be assessed using biosensors, in situ microcosms, and stable isotope and biomarker analysis. These new techniques and tools will be evaluated against best practice of conventional methods. Therefore, they will be applied at fully equipped and characterized European reference sites available in the project and will be provided to consultants and SME´s for application. Integrated statistical analysis and modelling at different stages of the step by step approach will result in an improved view of soil and subsurface contamination and will provide a sound basis for risk assessment and decision.

Partners:

N	Partner Legal Name	Country
1	Helmholtz - Zentrum für Umweltforschung GmbH - UFZ	DE
2	Università degli Studi di Padova	IT
3	Battelle Memorial Institute, Battelle Geneva Research Centre	CH
4	Consiglio Nazionale delle Ricerche	IT
5	Danmarks Tekniske Universitet	DK
6	Earth Tech CZ s.r.o.	CZ
7	Forschungszentrum Juelich GmbH	DE
8	Lancaster University	UK
9	Aarhus Universitet	DK
10	Queens University Belfast, School of Planning, Architecture and Civil Engeneering	UK
11	Université catholique de Louvain	BE
12	La Sapienza Università di Roma CERI	IT
13	Saint-Petersburg State University	RU
14	CREATEC	IT
15	Christian-Albrechts-Universität zu Kiel	DE

Activity Code: ENV.2007.3.1.2.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Soil Contamination: Advanced integrated characterisation and time-lapse Monitoring

Proposed EC Grant: 3.177.095 €

Abstract:

This project is aimed at improving current methods for monitoring contaminant distribution and biodegradation in the subsurface. Currently proven methods (based on invasive sampling of soil, soil water and gaseous phase) are unable to provide sufficiently accurate data with high enough resolution. Resulting in inability to assess of bioremediation progress and quantification of the processes involved in such bioremediation at field sites. Consequently, present assessment strategies to decide on optimal remediation approach, including design of monitoring systems, and evaluation of degradation progress, are severely flawed by uncertainty. Geophysical time-lapse measurements in combination with novel ground truthing methods give the possibility to determine: absolute contamination levels, spatial spreading, and reduced concentrations of contaminants in a heterogeneous environment. Geophysical methods of data acquisition alone are presently unable to provide absolute levels of biodegradable contamination concentrations. We aim to make improvements of fundamental constitutive relations between soil physical and degradation activity parameters and geophysically measurable parameters. Despite current improvements, there is a strong need to test these theories in practical field situations. Our project is dedicated to improving both site contamination assessment and the monitoring of bioremediation processes, and changes in soil environmental conditions. We suggest combining improved conventional soil monitoring techniques with state-of-the-art geophysical approaches. Partners in the project range from microbiologists to geophysicist, all with working experience from contaminated sites. Process studies involving lysimeters, and testing of the combination of technologies at two field sites are the major aims of the project. Focus on practical field situations and strong communication with stake-holders and SMEs will ensure high relevance for society.

Partners:

N	Partner Legal Name	Country
1	The Norwegian Institute for Agricultural and Environmental Research	NO
2	AMRA scarl	IT
3	POLITECNICO DI TORINO	IT
4	Wageningen University	NL
5	Friedrich-Schiiller-Universität Jena	DE
6	Lancaster University	UK
7	The National Research-Development Institute for Environmental Protection - ICIM Bucharest	RO
8	Research Institute for Soil Science and Agricultural Chemistry of the Hungarian Academy of Sciences	HU
9	Umweltanalytische Mess-Systeme GmbH	DE
10	IRIS Instruments	FR

Activity Code: ENV.2008.3.1.3.1. **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Towards Zero Waste in Industrial Networks

Proposed EC Grant: 6.159.927 €

Abstract:

The first work package will define a common vision on zero-waste entrepreneurship within the first 6 months. The mythos Individual Producer Responsibility will be investigated if it can become the all-healing-solution in electronics industry as well as how this concept can be applied to other industrial sectors. WP2 concentrates on new technological developments, WP3 on waste prevention methodologies and strategies and WP4 will adapt existing software tools supporting waste prevention. All this knowledge will be then formalised into an innovative production model for resource-use optimisation and waste prevention in WP5. This preparatory work will enable the 9 industrial case studies in Work package 6 that forms the core of the ZeroWIN project with more than half of the total budget. These case studies will be used to prove that the ZeroWIN approach can meet at least 2 of the stringent targets of the call. WP7 closely monitors and validates the improvements by quantitative assessment. WP 8 investigates the implications to policy and formulates recommendations. Finally WP9 will disseminate the results of ZeroWIN as broad as possible and WP10 ensures the efficient operation of the ZeroWIN project.By concentrating on industrial networks in the automotive, construction, electronics and photovoltaic industries ZeroWIN will address • nearly 3 million companies (of which 80% are SMEs)• with more than 2,8 trillion € turnover and a value creation of more than 800 billion €• with more than 20 million employees• creating about 40% or more than 400 million tons of industrial waste• using as much as 50% of all materials extracted from the earth´s crust• generating about 40% of all energy use and about 35% of all greenhouse gas emissions.The ZeroWIN consortium has 29 partners from 10 countries (AT, DE, ES, FR, HU, IE, PL, PT, RO, UK), dominated by industry - 3 large companies (one of which is the electronics cluster in the Basque region) and 13 SMEs.

Partners:

N	Partner Legal Name	Country
1	Austrian Society for Systems Engineering and Automation	AT
2	ASOCIACIÓN DE INDUSTRIAS DE LAS TECNOLOGÍAS ELECTRONICAS Y DE LA INFORMACIÓN DEL PAÍS VASCO	ES
3	bauserve GmbH	DE
4	BIO Intelligence Service	FR
5	Centro de Estudos, Informação e Formação para o Ambiente	PT
6	Flection Germany GmbH	DE
7	FUNDACION GAIKER	ES
8	S.C. Greentronics Srl	RO
9	Hewlett Packard Ltd	UK
10	Institut Européen d'Administration des Affaires	FR
11	Institute for Economic Promotion of the Austrian Federal Economic Chamber; Wirtschaftsförderungsinstitut - International Know-how Transfer	AT
12	MicroPro Multimedia Computer Systems Ltd.	IE
13	PE INTERNATIONAL GmbH	DE
14	Remade South-East Ltd.	UK
15	Saft S.A.	FR
16	Technische Universität Berlin	DE
17	The Regional Environmental Center for Central and Eastern Europe	HU
18	Trama TecnoAmbiental S.L.	ES
19	tricom GmbH	DE
20	United Nations University - Vice Rectorate for Europe	DE
21	University College for the Creative Arts	UK
22	University of Limerick	IE
23	Universität für Bodenkultur Wien - University of Natural Resources and Applied Life Sciences, Vienna	AT
24	University of Southampton	UK
25	UP Umweltanalytische Produkte GmbH	DE
26	VfJ Werkstätten GmbH	DE
27	WAMECO S.C. Ryszard szpadt, Wojciech Gornikowski	PL

28	Wilding Butler Construction Ltd	UK
29	Wroclaw University of Technology	PL

Activity Code: ENV.2009.3.1.3.1 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: INTEGRATED WASTE MANAGEMENT IN WESTERN AFRICA

Proposed EC Grant: 999.917 €

Abstract:

Most of African countries are struggling towards development and improving their living conditions. An appropriate waste management structure at a national and regional level is a milestone that must be achieved in order to improve living standards, health and environment.The situation in many countries is that the obvious lack of a functional waste management system brings perennial garbage problems such as inefficient garbage collection, poor public compliance to waste segregation, uncontrolled open burning, and tolerated presence of open dumpsites. Furthermore valuable resources are lost due to inefficient or non-existing recycling systems. The establishment of an efficient waste management and recycling system contributes to enhancing the resource efficiency of these countries and thus supports a sustainable development in the long-term.The present Coordination Action will seek the establishment of Integrated Solid Waste Management systems (ISWM) in Western Africa. ISWM systems combine waste streams, waste collection, treatment and disposal methods, with the objective of achieving environmental benefits, economic optimization and societal acceptability.For the achievement of the project objectives, a solid waste management expert and research co-ordination platform will analyze the current situation in the targeted countries (Ghana, Nigeria, Senegal and Ivory Coast), identifying main gaps and constraints of any type (technological, sociological, organisational, etc.) and selecting suitable management systems. According to the results obtained, including inputs from authorities and policy makers in participatory workshops, the consortium will provide valuable guidelines and recommendations to be used in the future implementation of developed strategies such as National and Regional Action Plans on solid waste management. The project will also build local capacities through workshops and seminars where relevant stakeholders must be involved.

Partners:

N	Partner Legal Name	Country
1	VEREIN ZUR FOERDERUNG DES TECHNOLOGIETRANSFERS AN DER HOCHSCHULE BREMERHAVEN E.V.	DE
2	BIOAZUL	ES
3	EIDGENOESSISCHE MATERIALPRUEFUNGS- UND FORSCHUNGSANSTALT	CH
4	SVERIGES LANTBRUKSUNIVERSITET	SE
5	OEKO-INSTITUT E.V. - INSTITUT FUER ANGEWANDTE OEKOLOGIE	DE
6	FUNDACION GAIKER	ES
7	TECHNISCHE UNIVERSITAET BERLIN	DE
8	UNITED NATIONS UNIVERSITY INSTITUTE FOR ENVIRONMENT AND HUMAN SECURITY	DE
9	ENDA Tiers Monde	SN
10	Commune de Matam	SN
11	Institut Africain de Gestion Urbaine	SN
12	Zoomlion Ghana Ltd	GH
13	United nation University-Institute for natural Resources in Africa	GH
14	Kwame Nkrumah University of Science and Technology	GH
15	Basel Convention Regional Coordinating Centre fro Africa	NG
16	Environmental Law Research Institute	NG
17	Global Digital Solidarity Fund	NG
18	Universite Abobo-Adjame	CI
19	CENTRE FOR ENVIRONMENT AND DEVELOPMENT FOR THE ARAB REGION AND EUROPE	EG
20	Influential Inputs cc T/A Icando	ZA

Activity Code: ENV.2010.3.1.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Advanced Technologies for the Production of Cement and Clean Aggregates from Construction and Demolition Waste

Proposed EC Grant: 3.346.843 €

Abstract:

The recycling of end-of-life concrete into new concrete is one of the most interesting options for reducing worldwide natural resources use and emissions associated with the building materials sector. The production of the cement used in concrete, for example, is responsible for at least 5% of worldwide CO2 emissions. On-site reuse of clean silica aggregate from old concrete saves natural resources and reduces transport and dust, while the re-use of the calcium-rich cement paste has the potential to cut carbon dioxide emissions in the production of new cement by a factor of two. In order to achieve this goal, a new system approach is studied in which automatic quality control assesses and maintains high standards of concrete demolition waste from the earliest stage of recycling, and novel breaker/sorting technology concentrates silica and calcium effectively into separate fractions at low cost (Figure 1.1). Finally, the smaller calcium-rich fraction, which is typically also rich in fine organic residues, is converted into new binding agents by thermal processing, and mixed with the aggregate into new mortar. Next to technological advances, certification and design guidelines are developed to use the recycle concrete in a responsible and optimal way. The project aims to develop three innovative technologies for recycling end-of-life concrete, integrate them with state-of-the-art demolition and building processes and procedures, and test the new system approach on two Dutch concrete towers involving 70,000 tons of concrete. A special feature of this large case study is a new type of government contract which links the recycling of the towers to the re-use of the recycled materials in new buildings. The results of the project will be used to determine which kinds of strategies and policies are most effective to facilitate an efficient transition towards optimal value recovery from Construction and Demolition Waste and sustainable building.

Partners:

N	Partner Legal Name	Country
1	TECHNISCHE UNIVERSITEIT DELFT	NL
2	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
3	AKADEMIA GORNICZO-HUTNICZA IM. STANISBAWA STASZICA W KRAKOWIE	PL
4	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
5	BARCELONA SUPERCOMPUTING CENTER - CENTRO NACIONAL DE SUPERCOMPUTACION	ES
6	UNIVERSITEIT LEIDEN	NL
7	DANMARKS TEKNISKE UNIVERSITET	DK
8	Strukton Civiel bv	NL
9	Theo Pouw BV	NL
10	HeidelbergCement AG	DE
11	Holcim Group Support Ltd	CH
12	DV SRL	IT
13	Laser 2000 Benelux CV	NL
14	Inashco	NL

Activity Code: ENV.2010.3.1.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Innovative Strategies for High-Grade Material Recovery from Construction and Demolition Waste

Proposed EC Grant: 3.362.408 €

Abstract:

The main goal of the IRCOW project is to develop and validate upgraded technological solutions to achieve an efficient material recovery from C&D waste by considering a life cycle perspective. The innovation beyond the state-of-the-art will focus on: 1. Developing new approaches and models aimed at raising the rate of reuse components.2. Developing and adapting recycling technology with the overall purpose of improving the quality of C&D recycled materials: recycled aggregates, wood, plastics, granular gypsum from mixed streams and emerging waste materials.3. Developing high grade construction products by using C&D recycled materials; not only those related to the stony fraction, but also the other fractions where there is currently a strong knowledge gap. 4. Demonstrating results under real conditions with the aim of providing potential stakeholders with information on the global performance. 5. Setting the basis for specific European policies on C&D waste aiming at fostering a high and efficient level of material recovery. To accomplish IRCOW objectives, the project is structured into six work packages and 4 in-field case studies performed within the RTD work packages. Three of the work packages focus on the development of new management schemes, separation technologies and products that are needed to significantly increase the reuse and recycling rates of C&W waste in the EU. The outcomes of the three technological work packages will be assessed and validated from an economic, environmental and toxicological point of view, by using both Life Cycle Assessment tools and case studies throughout Europe. The involvement of industrial stakeholders (both industrial companies and associations from the construction and recycling sector), and national and regional authorities ensures the relevance and applicability of the project results. Moreover, the stakeholders will be involved in deriving recommendations for changes in policies aiming to remove obsta

Partners:

N	Partner Legal Name	Country
1	FUNDACION LABEIN	ES
2	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE
3	IVL SVENSKA MILJOEINSTITUTET AB	SE
4	INSTYTUT EKOLOGII TERENOW UPRZEMYSLOWIONYCH	PL
5	ACCIONA INFRAESTRUCTURAS S.A.	ES
6	D'APPOLONIA SPA	IT
7	TiTech GmbH	DE
8	DERRIBOS PETRALANDA, S.L.	ES
9	Ingenieurbüro Trinius	DE
10	Conenor Ltd.	FI
11	ATON-HT SPOLKA AKCYJNA	PL
12	Brijsse Minerals & Recycling bvba	BE

Activity Code: ENV.2007.3.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Recovered Paper Sorting with Innovative Technologies

Proposed EC Grant: 2.868.969 €

Abstract:

SORT IT is a European research project proposing to the call “New Technologies for Waste Sorting” in the 7th Research Framework Programme of the European Union. The project will provide the technology for paper recovery from various collection systems. Future sorting shall provide secondary raw materials with high yield and quality from unsorted waste streams as well as from separately collected streams. SORT IT will provide a breakthrough in sensor based sorting. New sensor technologies will allow improved identification of unwanted materials as well as characterisation of the final output from recovered paper sorting. Combined image analysis, colour measurement and near-infrared sensor units will enable secure identification of materials and paper converting. Chemometrics will allow detailed characterisation of the sorted raw materials and provide the information on the optimal future utilisation.SORT IT includes the research and development on improved separation of unwanted materials. State-of-the-art sorting equipment as well as new and improved solutions will be assessed for establishing the highest possible sorting efficiency. This will lead to significant increase in yield and a further improved purity of recovered paper.SORT IT contributes to lowering the environmental impacts in paper related processes. Improved quantities and controlled quality of recovered paper will reduce resource use in transportation, stock preparation, papermaking and further processing. The impacts of sorting will be evaluated in a complete Life Cycle study package, including costing and social studies.

Partners:

N	Partner Legal Name	Country
1	Papiertechnische Stiftung	DE
2	Centre Technique de l'Industrie des Papiers, Cartons et Celluloses	FR
3	STFI-Packforsk AB	SE
4	Universitatea Tehnica “Gheorghe Asachi” din Iasi	RO
5	INSTITUTO TECNOLÓGICO DEL EMBALAJE TRANSPORTE Y LOGÍSTICA	ES
6	Bumaga BV	NL
7	Bollegraaf Recycling Machinery	NL
8	EVK DI Kerschhaggl GmbH	AT
9	Rauch Recycling Dienstleistungs GmbH	AT
10	VRANCART S.A. ADJUD	RO
11	GREGOIRE SA	FR
12	Norske Skog	NO
13	RTT Systemtechnik GmbH	DE
14	Papeles y Cartones de Europa S.A.	ES

Activity Code: ENV.2007.3.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Magnetic Sorting and Ultrasound Sensor Technologies for Production of High Purity Secondary Polyolefins from Waste

Proposed EC Grant: 2.831.000 €

Abstract:

The European consumption of plastics increased from 24,6 Mtons in 1993 to 39,7 Mtons in 2003 and its growth rate exceeds that of the economy as a whole. At the same time, polymer recyclers and manufacturing industries have a problem buying feed materials and secondary polymers of sufficient volume and quality, as a result of the pull of China and India on all raw material resources. The alternative of using more primary plastics has a range of environmental impacts and needs more resources (about two kg oil for one kg plastic). The polymer resources in complex wastes, such as WEEE, household waste and ASR (ACEA: 7.5 million tons of shredder residue in the EU17 in 2002), are largely unused, because of the problem to produce high-purity products from such sources at acceptable costs. Today just one million out of 14 million ton polyolefin's yearly sold in Europe is being recycled. W2Plastics aims to develop cost-effective and clean technology based on Magnetic Density Separation (MDS) and Ultrasound process control to recover high-purity polyolefin's from complex wastes. A substantial effort is spent on making the new technologies fit in between the state-of-the-art technology of waste processors and the demands of the compounding and manufacturing industries by defining standards and best practices as well as effective quality-control tools (hyperspectral imaging). The integrated set of technologies and standards aims at changing the status of complex wastes to a resource of high-purity polyolefin's for a wide range of industries. The development of such technology is in line with the European legislation (COM/2001/0031, 99/31/EC, 2000/53/EC, 2002/96/EC, 2003/108/EC) aiming at fostering the development environmental friendly technologies to reduce the environmental impact of human activities, to protect the environment, to minimize depletion of resources and to promote at the same time) business opportunities and improved competitiveness of European industry and SMEs

Partners:

N	Partner Legal Name	Country
1	Delft University of Technology	NL
2	Dipartimento di Ingegneria Chimica Materiali e Ambiente - Università di Roma	IT
3	Technical University of Denmark	DK
4	Universitatea Transilvania din Brasov	RO
5	Barcelona Supercomputing Center	ES
6	Budapest University of Technology and Economics - Advanced Vehicles and Vehicle Control Knowledge Center	HU
7	AKG Polymers bv	NL
8	Bakker Magnetics B.V.	NL
9	Recycling Avenue vof	NL
10	Alcufer Ipari Kereskedelmi és Szolgáltató Kft.	HU
11	S.C. Urban S.A. Ramnicu Valcea	RO
12	Oldelft BV	NL
13	DV srl	IT

Activity Code: ENV.2008.3.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: High added value materials from waste tyre gasification residues

Proposed EC Grant: 3.349.993 €

Abstract:

This project is focused on the waste tyres recycling and promotes a thermal process mainly devoted to the production of ceramic materials.The disposal of waste tyres represents a relevant problem within the waste management strategy of the European Community and, despite the attempts of reusing waste tyre in many different ways, a relevant fraction (nearly 23%) is still landfilledPyrolysis and gasification are a promising way for alternative high-efficiency material and energy production, since both the processes provide a gaseous and a liquid fraction easily usable as fuels or chemical sources. Nevertheless, besides these encouraging preliminary remarks, the experiences on both pilot and industrial scale have shown that without a valuable exploitation of the solid by-product (char), the whole economic balance of the process is not advantageous and therefore the process is not sustainable.The gasification/pyrolysis treatment of waste tyres, apart from a high hydrogen rich syngas, brings to a very high carbon-rich char fraction, which has been tested in the past as a semi-reinforcing filler for new tyres or as an active carbon. Nevertheless, despite the recent technological advances, it is still unclear whether there is a market demand for this product.On these bases, the main idea of the proposal consists in redirecting the gasification process towards the material recycling, by coupling a second thermal process, dedicated to the plasma synthesis of silicon carbide, to the preliminary waste tyres gasification:The overall strategy of the project's workplan mainly consists of three levels:a.The development of a sustainable recycling process for the waste tyre treatments, with the final construction of a prototype plantb.The sustainability assessment, in terms of impact analyses on economical, ecological and social aspectsc.The market requirements analysis and the future perspectives in view of potential stakeholders, and the diffusion of the results

Partners:

N	Partner Legal Name	Country
1	Ente per le Nuove tecnologie, l'Energia e l'Ambiente	IT
2	European Tyre Recycling Association	FR
3	Rheinisch-Westfälische Technische Hochschule Aachen	DE
4	The Scientific and Technological Research Council of Turkey Marmara Research Center Energy Institute	TR
5	Pirelli Ambiente Renewable Energy spa	IT
6	Elastrade S.r.l.	IT
7	INSTITUTE OF MATERIALS AND ENVIRONMENTAL CHEMISTRY, CRC-HAS	HU
8	FEBE ECOLOGIC - Studio Associato di Consulenza e Formazione Ambientale Sara Balazs & Associati	IT
9	CoMeTas A/S	DK
10	SICAV S.r.l.	IT

Activity Code: ENV.2010.3.1.3-2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Bottom Up selection, collection and management of URBAn waste

Proposed EC Grant: 2.158.953 €

Abstract:

The aim of the BURBA project is to develop an automatic system to be used for intelligent waste management. The system consists of intelligent waste containers and an IT tool for waste collection and transport management, including RFID's (Radio Frequency Identification) ability to reliably identify individual receptacles, users, single marked items or waste categories, and cell-phone-based LBS' (location-based service) ability to allow an easy identification of the geographical position of the most suitable waste container and to improve its utilization by the citizen (the closest one to user actual position, not full, adequate for that waste category, etc). The BURBA rugged system is integrated into "intelligent waste containers" with capacities of 600 litres and over, for urban and industrial waste collection. It includes electronics for data transmission, for quantity and quality of waste measurement and a power pack that may be recharged using environmental energy scavenging. The foreseen IT tool will exploit the collected data in the frame of an advanced Waste Management concept. It will manage appropriately position and time of collection and optimize truck fleet path and queuing to waste disposal plants (for example incinerators that need continuous adequate feeding in quantity and quality); as well as the differential waste disposal to feed recycling facilities. It will compute service metrics and parameters for decision making and resources allocation. It will so far contribute to improve the management of the waste transport vehicles fleet, to minimise transportation path and diminish fuel expenditures as well as to optimise gain of disposal plants and service to citizens and industrial companies avoiding overfilled containers. Additional features of the platform are the support to rapid deployment of the containers on demand having the possibility to track their position and to redirect and reschedule the waste collection activities.

Partners:

N	Partner Legal Name	Country
1	D'APPOLONIA SPA	IT
2	POLITECNICO DI MILANO	IT
3	Acorde Technologies S.A.	ES
4	Ridgeback S.A.S. di Paolo Barattini	IT
5	TEKEVER - TECNOLOGIAS DE INFORMACAO, S.A.	PT
6	Comune di Camogli	IT
7	Ayuntamiento de Santander	ES
8	Shanghai Tongji FARUN Environmental Sanitation Equipment &Engineering Co., Ltd.	CN

Activity Code: ENV.2009.3.1.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Nanoparticle Fate Assessment and Toxicity in the Environment

Proposed EC Grant: 2.497.100 €

Abstract:

Concept: NanoFATE has been conceived to fill knowledge and methodological gaps currently impeding sound assessment of environmental risks posed by engineered nanoparticles (ENPs). Our vision is to assess environmental fate and risk of ENPs from high-volume products for which recycling is not an option; namely; fuel additive, personal care and antibacterial products. Two market ENPs from each product (CeO2, ZnO, Ag of varying size, surface and core chemistries) will be followed through their post-production life cycles i.e. from environmental entry as “spent product”, through waste treatment to their final fates and potential toxic effects. This will test the applicability of current fate and risk assessment methods and identify improvements required for a scientific assessment of ENPs at an early stage.Objectives: Such systematic study of the environmental fate and toxicity of selected ENPs will entail addressing 9 S&T objectives:1: Design, tagging and manufacture of ENPs2: Analysis of ENP interactions with abiotic and biotic entities3: Generating predictive models for ENP exposure in waters and sludge-amended soils4: Studying the fate and behaviour of ENPs through wastewater treatment5: Determining acute and chronic ecotoxicity6: Assessing effects of physico-chemical properties on ENP bioavailability7: Defining mechanisms of uptake, internal trafficking, and toxicity8: Developing spatial RA model(s)9: Improving understanding of ENP risksMethodology: The work plan is designed to progress beyond the state-of-the-art through focused workpackages. While some objectives are delivered in single WPs, good cross WP integration will secure the key objectives of delivering new methods for quantifying ENP risks.Impact: NanoFATE will provide robust tools, techniques and knowledge needed by stakeholders to understand and communicate risks associated with different ENPs, including their environmental interactions and toxicity.

Partners:

N	Partner Legal Name	Country
1	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
2	VERENIGING VOOR CHRISTELIJK HOGER ONDERWIJS WETENSCHAPPELIJK ONDERZOEK EN PATIENTENZORG	NL
3	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UK
4	UNIVERSIDADE DE AVEIRO	PT
5	FAUST UND BACKHAUS ENVIRONMENTAL CONSULTING GBR	DE
6	NanoTrade s.r.o.	CZ
7	UNIVERSITA DEGLI STUDI DEL PIEMONTE ORIENTALE AMEDEO AVOGADRO	IT
8	INSTYTUT WYSOKICH CISNIEN POLSKIEJ AKADEMII NAUK	PL
9	CARDIFF UNIVERSITY	UK
10	Amepox Enterprise Ltd	PL
11	GOETEBORGS UNIVERSITET	SE
12	INSTITUT SYMLOG	FR

Activity Code: ENV.2009.3.1.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Life Cycle of Nanoparticle-based Products used in House Coating

Proposed EC Grant: 2.400.100 €

Abstract:

NanoHOUSE intends to create a holistic and prospective view on the Environmental Health and Safety (EHS) impacts of nanoproducts used in house building, namely paints and coatings. The latter are using relatively high amounts of Engineered NanoParticles (ENPs) such as nano-Ag and nano-TiO2 which will be investigated. A new Life Cycle Thinking (LCT) approach will be developed gathering two complementary aspects: Investigation of risks and opportunities during the product life cycle as well as Life Cycle Analysis (ISO 14040). LCT will collect information on EHS impacts throughout all life cycle stages of the nanoproducts, identifying the data gaps which will guide the research work. NanoHOUSE will generate reliable scientific information for the missing data and will develop appropriate methods to analyze the potential EHS impacts of nanoproducts.NanoHOUSE first task will be to quantify the actual sources of ENPs during the use and ageing of actual coatings (weathering, renovation, demolition and final disposal). The project will then characterize the environmental compartments significantly impacted by ENPs released from nanoproducts, measure ENPs concentrations and states in those compartments, and investigate their fate in order to increase the knowledge regarding exposure to ENPs with a view to reducing the risks. NanoHOUSE will study the environmental behaviour and the toxicological effects of actually released ENPs (“aged” ENPs) and compare them with pristine ENPs. Finally, NanoHOUSE will improve the solutions for end of life treatments regarding ENPs release in the environment.Main outcomes of the project will be a scientific risk evaluation of nanoproducts used in building, solutions to improve their competitive and sustainable development by decreasing their potential to release ENPs, and contributions to standard tests for their certification. The NanoHOUSE consortium involves 5 research/academic partners and 4 industrial manufacturers of which 1 SME.

Partners:

N	Partner Legal Name	Country
1	COMMISSARIAT ENERGIE ATOMIQUE CEA	FR
2	EIDGENOESSISCHE MATERIALPRUEFUNGS- UND FORSCHUNGSANSTALT	CH
3	CONSORZIO VENEZIA RICERCHE	IT
4	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
5	UNIVERSITE JOSEPH FOURIER GRENOBLE 1	FR
6	MATERIS PAINTS ITALIA	IT
7	GFC Chimica s.r.l.	IT
8	AkzoNobel Coatings S.A.	FR
9	PPG Europe B.V.	NL

Activity Code: ENV.2009.3.1.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Toxicological impact of nanomaterials derived from processing, weathering and recycling of polymer nanocomposites used in various industrial applications

Proposed EC Grant: 2.438.000 €

Abstract:

The main goal of this project will be to obtain the toxicological profile of nanomaterials included in polymer nanocomposites used in the automotive sector during their life cycle. The toxicological profile will be based in the physical and chemical changes of the nanomaterials during the artificial aging/weathering process of the nanocomposites. This exhaustive evaluation includes the selection of adequate digestion and extraction methods to separate the nanomaterials from the polymeric matrix. Optimization of these methods will facilitate the development of recycling techniques that will be applied in the end-stage of polymer nanocomposites. In vitro viability studies will be carried out in human cellular lines to determine the toxicity of the raw nanomaterials. These studies will be focused in nanomateriales widely used in the automotive industry (reinforcement of polymers for light composites) such as carbon nanotubes, nanoclays and metal oxide nanoparticles.

Partners:

N	Partner Legal Name	Country
1	ACONDICIONAMIENTO TARRASENSE ASSOCIACION	ES
2	Research and Development of Carbon Nanotubes S.A.	EL
3	CATALAN INSTITUTE OF NANOTECHNOLOGY	ES
4	POLYRISE SAS	FR
5	L'UREDERRA, FUNDACION PARA EL DESARROLLO TECNOLOGICO Y SOCIAL	ES
6	DHI FORENING	DK
7	LAVIOSA CHIMICA MINERARIA SPA	IT
8	LATI INDUSTRIA TERMOPLASTICI SPA	IT

Activity Code: ENV.2009.3.1.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Development of sustainable solutions for nanotechnology-based products based on hazard characterization and LCA

Proposed EC Grant: 2.497.100 €

Abstract:

Objective of the NanoSustain project is to develop innovative solutions for the sustainable design, use, recycling and final treatment of nanotechnology-based products This will be achieved by a comprehensive data gathering and generation of relevant missing data, as well as their evaluation and validation, for specific nanoproducts or product groups in relation to their human health and environmental hazards and possible impacts that may occur during after-production stages. Although production of nanomaterials is rapidly increasing, our knowledge about possible health and environmental effects associated with these materials is still rather poor. This lack of knowledge calls for more research. Due to their small size, nanoparticles behave different than their chemical analogues. They can be taken up easily and in a unique way with possible adverse effects in man and organisms. Assessing their hazard is complex and needs new approaches and a close international cooperation. NanoSustain will address the questions, (1) how and to what degree society and the environment will be exposed to nanomaterials and associated products, and (2) where do these particles end up? Expected results will improve our present knowledge on the impact and fate of these particles after entering economic and natural cycles. NanoSustain has mobilized the critical mass of expertise, resources and skills to tackle this complex issue. Based on results from hazard characterization, impact assessment and LCA, we will explore on a lab-scale new solutions for the design of selected nanomaterials and associated products and their sustainable use, recycling and final treatment. As the concerned nanotech industry will actively participate in the planned project, NanoSustain will set the ground for the development of new sustainable products and industrial applications, and hence help to strengthen competitiveness of the European nanotechnology industry.

Partners:

N	Partner Legal Name	Country
1	NordMiljö AB	SE
2	INSTITUTE OF NANOTECHNOLOGY	UK
3	DET NATIONALE FORSKNINGSCENTER FORARBEJDSMILJO	DK
4	VALTION TEKNILLINEN TUTKIMUSKESKUS	FI
5	UNIVERSITAET BREMEN	DE
6	VENETO NANOTECH SCPA	IT
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	KAUNO TECHNOLOGIJOS UNIVERSITETAS	LT
9	NATIONAL INSTITUTE FOR RESEARCH AND DEVELOPMENT IN MICROTECHNOLOGIES	RO
10	Nanologica AB	SE
11	Nanogate AG	DE
12	UPM-Kymmene Oyj	FI
13	Amroy Europe Ltd	FI

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: Advanced Fluorinated Materials for High Safety, Energy and Calendar Life Lithium Ion Batteries

Proposed EC Grant: 3.526.000 €

Abstract:

The focus of the project is on the development of fluorinated electrolyte/separator and binders in combination with active electrodes (anode LiC6 and cathode: LiNixMn2-xO4 - 4,7V) for high performing, safe and durable Li batteries. The main deliverables of the project are the development of cell prototypes capacity > 10 A.h on which performance assessment will be conducted. The AMELIE prototype performances will be assessed towards the following objectives for EV and PHEV applications: high specific energy: cells >200 Wh/kg, improved life time: > 1000 cycles, 80% DOD for EV applications, High calendar life: > 10 years, high recyclability / recovery/ reuse: battery components 85% recycled and improved competitiveness: <500 €/kWh on prototype paving the way for mass production cost <150€/ kWh.The utilization of higher performing “inactive” organic materials (polymers and ionomers) will enable to reduce the amount of the same materials while increasing the energy and power densities of the battery, and consequently decreasing the cost per kWh of the final battery. In addition, the reuse of the components will contribute to the cost reduction of the battery.To take up these challenges, academic and private organisations have partnered up in the AMELIE consortium.As the developments in this field are extremely interconnected, improved Lithium ion batteries for automotive sector can be manufactured only by the synergistic optimisation of all their components: active materials and binders for electrodes, gel polymers, lithium salts and solvents for the ionic conductors. Although innovative materials are a key lever of such improvements, the cell design will be essential for both improved performances and safety.

Partners:

N	Partner Legal Name	Country
1	SOLVAY SOLEXIS S.P.A.	IT
2	INSTITUT POLYTECHNIQUE DE GRENOBLE	FR
3	ERAS labo	FR
4	UNIVERSITA DEGLI STUDI DI BOLOGNA	IT
5	WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTER	DE
6	Kiev National University of Technology and Design	UA
7	RECUPYL SAS	FR
8	TEMIC Automotive Electric Motors GmbH	DE
9	COMMISSARIAT A L' ENERGIE ATOMIQUE	FR
10	RENAULT s.a.s. represented by GIE REGIENOV	FR
11	VOLVO TECHNOLOGY AB	SE
12	PRAYON S.A	BE

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: Advanced, High Performance, Polymer Lithium Batteries for Electrochemical Storage

Proposed EC Grant: 3.332.300 €

Abstract:

This project aims to the development at an initial industrial level of an advanced, lithium ion battery for efficient application in the sustainable vehicle market. The basic structure of this battery involves a lithium-metal (tin)-carbon, Sn-C, alloy anode, a lithium nickel manganese oxide, LiNi0.5Mn1.5O4, cathode and a ceramic-added, gel-type membrane electrolyte. This battery is expected to meet the target of the topic that calls for innovative developments of lithium-based, automotive energy storage technologies improving energy density, cycle life, cost, sustainability and safety. To confirm this expectation, a strong European consortium exploiting the complementary experience of various interconnected unities, involving academic laboratories and industrial companies, has been established. The academic partners will address the work on the optimization of the basic, electrochemical properties of the electrode and electrolyte materials, while the industrial partners will focus on the determination of battery key aspects, such as: i) the value of energy density under a large size capacity configuration, ii) the definition of the safety by abuse test procedure protocols, iii) the overall cost, iv) the environmental sustainability and v) the recycling process. It is expected that these combined efforts will lead to the industrial production of a battery having an energy density of the order of 300 Wh/kg, a cost considerably lower than batteries already on the market, environmental compatibility and highly reduced safety hazard. In synthesis, this project compares well with others in progress worldwide for the development of lithium batteries directed to an efficient application in the sustainable vehicle market.

Partners:

N	Partner Legal Name	Country
1	CONSORZIO SAPIENZA INNOVAZIONE	IT
2	CHALMERS TEKNISKA HOEGSKOLA AB	SE
3	CHEMETALL GMBH	DE
4	ENI S.p.A.	IT
5	ETC Battery and FuelCells Sweden AB	SE
6	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT
7	SAES GETTERS S.P.A.	IT
8	Stena Metall AB	SE
9	ZENTRUM FUER SONNENENERGIE- UND WASSERSTOFF-FORSCHUNG, BADEN-WUERTEMBERG	DE

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: DEVELOPMENT OF HIGH ENERGY/HIGH POWER DENSITY SUPERCAPACITORS FOR AUTOMOTIVE APPLICATIONS

Proposed EC Grant: 3.974.600 €

Abstract:

Supercapacitors are essential in electric vehicles for supplying power during acceleration and recovering braking energy. High power and sufficient energy density (per kilo) are required for both an effective power system but also to reduce weight. There are several issues to achieve a high performance/low weight power system that need to be addressed by various groups of scientists and engineers in an integrated framework. In this proposal, we have assembled a multidisciplinary Consortium of leading researchers, organisations, highly experienced industrialists, and highly active SMEs to tackle the problems. As a result, we are aiming at developing supercapacitors of both high power and high energy density at affordable levels by the automotive industry, and of higher sustainability than many current electrochemical storage devices. These targets will be achieved by integrating several novel stages: (a) computer simulations to optimise the power system and the design of the supercapacitor bank for different supercapacitor models, representing the different supercapacitor cells to be developed and tested in this project; (b) we shall use carbon-based electrodes to reduce the amount of rare and expensive metals; (c) we shall use electrolytes of high operating voltage to increase both power and energy density, although the problem is that they have large ions that reduce the effective surface area of porous electrodes due to low diffusivity; (d) in this case, innovative electrode structures will be developed based on combinations of high surface area/large pore activated carbon electrodes and low resistance carbon fibrous materials or carbon nanotubes; graphene will also be investigated.(e) novel methodologies will be developed to integrate the innovative electrode materials in the fabrication process for manufacturing large supercapacitors. These will be tested both at small-scale, and in realistic electric car test rig tests, and be cost and life-cycle-assessed.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITY OF SURREY	UK
2	MAST CARBON INTERNATION LTD	UK
3	NCSR DEMOKRITOS	EL
4	BAYER TECHNOLOGY SERVICES GMBH	DE
5	CENTRO RICERCHE FIAT SCPA	IT
6	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
7	OERLIKON GRAZIANO s.p.a.	IT
8	Karlsruher Institut fuer Technologie	DE
9	ABSL POWER SOLUTIONS	UK

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: Graphene-based Electrodes for Application in Supercapacitors

Proposed EC Grant: 3.584.300 €

Abstract:

For vehicle applications, it is desirable to have devices with high energy density, high power density, long cycle and shelf life, and low cost. Supercapacitors are considered one of the newest innovations in the field of electrical energy storage. In hybrid electric vehicle, supercapacitors can be coupled with fuel cells or batteries to deliver the high power needed during acceleration as well as to recover the available energy during regenerative braking. To design a supercapacitor for a specific application that requires high energy density or high power density or both, proper electrode materials and a suitable electrolyte are to be chosen. The combination of graphene and graphene-based material as electrode materials, and the use of room temperature ionic liquids (RTILs) may exhibit excellent performance in supercapacitors. Graphene based materials can be obtained by a bottom-up approach in a more controllable fashion. The enhanced capacitive behaviour of this material may be obtained by the proper alignment of graphene sheets as well as the interconnected nanoscale channels. However, these studies are still at the primary stage, and further studies are necessary. The ElectroGraph project follows a technology driven approach. It is thus obvious that the development of both electrode materials as well as the electrolyte solutions is required in order to optimize the overall performance of the supercapacitor.The main novelty of the technical development is the optimised production of graphene with its properties specifically defined and adjusted for application as electrode material in energy storage devices. This would be achieved through defining of processing parameters to tailor-made graphene with a specific surface area, size and corresponding electrical properties is a new consideration.The ElectroGraph will use an integrated approach in development of both electrode materials as well as the electrolyte solutions as required for optimising the overa

Partners:

N	Partner Legal Name	Country
1	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
2	Danubia NanoTech sro	SK
3	INSTITUTE OF OCCUPATIONAL MEDICINE	UK
4	THE PROVOST FELLOWS & SCHOLARS OF THE COLLEGE OF THE HOLY AND UNDIVIDED TRINITY OF QUEEN ELIZABETH NEAR DUBLIN	IE
5	CENTRO RICERCHE FIAT SCPA	IT
6	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
7	THE UNIVERSITY OF NOTTINGHAM	UK
8	UNIVERSITE PARIS DIDEROT - PARIS 7	FR
9	Maxwell Technologies SA	CH

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 48

Title: High energy density Li-ion cells for traction

Proposed EC Grant: 3.950.500 €

Abstract:

The research described in this proposal aims to develop a new Li-ion cell for traction purposes with the following characteristics: High energy density of at least 200 Wh/kg; Low costs i.e., a maximum of 150 Euro/kWh; Improved safety. Although the Li-ion cell appears to be the most appropriate technology to meet these goals, considerable research and development is required. For example, the much-used LiFePO4 cells cannot reach the energy density criterion, and in addition, LiFePO4 is patented, which hampers worldwide commercialisation. Many other materials are either too expensive or do not meet current safety, environmental standards (e.g., cobalt in LiCoO2). Thus, we propose a shift from carbon to the much higher capacity silicon-based anodes, and from cobalt-based to iron and/or manganese/nickel-based cathodes, and to use novel electrolyte salts. To successfully develop a European Li-ion technology, the R&D will start at the anode side, i.e. Si, with a LiFePO4-C material at the cathode side. This requires a new electrode formulation with respect to binder, electrolyte salt, solvent, and composition. The change in formulation at the anode and electrolyte allows for a change in the cathode materials – and a series of both novel (e.g., fluorosulfates, LiFeSO4F) and more established systems, will be investigated. New synthetic routes are proposed, along with an extensive characterization program. Scale-up, testing and benchmarking of optimum formulations will be performed. The outcome will be a newly developed cell, manufactured and tested by end-users. The new cell consists of i) a newly formulated Si-negative electrode, ii) newly designed low cost salts, and iii) modified positive electrodes. To achieve these goals, the consortium includes renowned universities and knowledge institutes; a SME battery producer and the car industry as end-users. Thus, the composition of the consortium covers the whole spectrum of R&D, manufacturing and testing.

Partners:

N	Partner Legal Name	Country
1	TECHNISCHE UNIVERSITEIT DELFT	NL
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE	FR
3	UPPSALA UNIVERSITET	SE
4	KEMIJSKI INSTITUT	SI
5	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE	UK
6	POLITECHNIKA WARSZAWSKA	PL
7	VOLVO TECHNOLOGY AB	SE
8	RENAULT s.a.s. represented by GIE REGIENOV	FR
9	Spijkstaal Elektro B.V.	NL
10	GAIA Akkumulatorenwerke GmbH	DE
11	COMMISSARIAT A L' ENERGIE ATOMIQUE	FR
12	ZENTRUM FUER SONNENENERGIE- UND WASSERSTOFF-FORSCHUNG, BADEN-WUERTEMBERG	DE
13	ÖSTERREICHISCHES FORSCHUNGS- UND PRÜFZENTRUM ARSENAL GES.M.B.H.	AT

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: Lithium-Air Batteries with split Oxygen Harvesting and Redox processes

Proposed EC Grant: 2.931.000 €

Abstract:

LABOHR aims to develop Ultra High-Energy battery systems for automotive applications making use of lithium or novel alloy anodes, innovative O2 cathode operating in the liquid phase and a novel system for harvesting O2 from air, which can be regenerated during their operative life without need of disassembling. LABOHR has 5 key objectives: (i) development of a green and safe electrolyte chemistry based on non-volatile, non-flammable ionic liquids (ILs); (ii) use of novel nanostructured high capacity anodes in combination with ionic liquid-based electrolytes; (iii) use of novel 3-D nanostructured O2 cathodes making use of IL-based O2 carriers/electrolytes with the goal to understand and improve the electrode and electrolyte properties and thus their interactions; (iv) development of an innovative device capable of harvesting dry O2 from air; and (v) construction of fully integrated rechargeable lithium-Air cells with optimized electrodes, electrolytes, O2-harvesting system and other ancillaries. Accordingly, LABOHR aims to overcome the energy limitation for the application of the present Li-ion technology in electric vehicles with the goal to: 1- perform frontier research and breakthrough work to position Europe as a leader in the developing field of high energy, environmentally benign and safe batteries and to maintain the leadership in the field of ILs; 2- develop appropriate electrolytes and nanostructured electrodes which combination allows to realize ultra-high energy batteries; 3- develop a battery system concept as well as prototypes of the key components (cell and O2-harvesting device) to verify the feasibility of automotive systems with: A) specific energy and power higher than 500 Wh/kg and 200 W/kg; B) coulombic efficiency higher than 99% during cycling; C) cycle life of 1,000 cycles with 40% maximum loss of capacity, cycling between 90% and 10% SOC; and D) evaluate their integration in electric cars and renewable energy systems.

Partners:

N	Partner Legal Name	Country
1	WESTFAELISCHE WILHELMS-UNIVERSITAET MUENSTER	DE
2	TEL AVIV UNIVERSITY	IL
3	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
4	Kiev National University of Technologies and Design	UA
5	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
6	UNIVERSITY OF SOUTHAMPTON	UK
7	SAES GETTERS S.P.A.	IT
8	CHEMETALL GMBH	DE
9	AVL LIST GMBH	AT
10	VOLKSWAGEN AG	DE
11	EUROPEAN RESEARCH SERVICES GMBH	DE

Activity Code: ENV.2010.3.1.3-3 **Funding Scheme:** CP **Duration (Months):** 36

Title: Development of novel SOlid MAterials for high power Li polymer BATteries (SOMABAT). Recyclability of components.

Proposed EC Grant: 3.700.900 €

Abstract:

SOMABAT aims to develop more environmental friendly, safer and better performing high power Li polymer battery by the development of novel breakthrough recyclable solid materials to be used as anode, cathode and solid polymer electrolyte and new alternatives to recycle the different components of the battery. This challenge will be achieved by using new low-cost synthesis and processing methods in which it is possible to tailor the different properties of the materials. Development of different novel synthetic and recyclable materials based carbon based hybrid materials, novel LiFePO4 and LiMnPO4 based nanocomposite cathode with a conductive polymers or carbons, and highly conductive electrolyte membranes with porous architecture based on fluorinated matrices with nanosized particles and others based on a series of polyphosphates and polyphosphonates polymers will respond to the very ambitious challenge of adequate energy density (above 220 Wh/kg at charge rate of 5C), lifetime i.e. 4000 cycles) and safety.An assessment and test of the potential recyclability and revalorisation of the battery components developed will allow the development of a more environmental friendly Li polymer battery in which a 50 % weight of the battery will be recyclable and a reduction of the final cost of the battery up to 150 €/KWh. The consortium has made up with experts in the field and complementary in terms of R&D expertise and geographic distribution.

Partners:

N	Partner Legal Name	Country
1	ASOCIACION INSTITUTO DE TECNOLOGIAELECTRICA	ES
2	UNIVERSITE DE LIEGE	BE
3	Kompetenzzentrum - Das virtuelle Fahrzeug Forschungsgesellchaft mbH	AT
4	Kiev National University of Technologies and Design	UA
5	Institutul de Chimie Timisoara al Academiei Romane	RO
6	Cleancarb	LU
7	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
8	RECUPYL	FR
9	Accurec Recycling GmbH	DE
10	Lithium Balance A/S	DK
11	CELAYA EMPARANZA Y GALDOS SA	ES
12	Dow Europe GmbH	CH

Activity Code: ENV.2007.3.1.3.3. **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: Integrated Sustainable Solid Waste Management in Asia

Proposed EC Grant: 989.524 €

Abstract:

The general inadequate, when existing, methods of collection and disposal of solid waste in most Asian cities are causing important environmental and social harms, as human diseases spreading, environmental pollution and ground and water pollution.In order to raise awareness, promote an adequate waste collection and treatment system and the economic growth of this activity sector in a technological efficient and sustainable way, new waste management systems must be established, which also take into account the informal sector. This integrated approach should comprise technical, environmental, legal, socio-economic and financial aspects, involving the key actors at different levels to ensure an effective implementation. The proposed project aims to bring together experts and stakeholders in the field of solid waste management in Asian developing countries and Europe. The project will promote international cooperation between research organisations, universities, and social and governmental stakeholders in a European and Asian context (local waste processors, local municipalities and policy makers, local NGOs representatives, etc).A solid waste management expert and research co-ordination platform, and an expertise network, will be established in order to co-ordinate, assess and guide suitable research and strategic activities with the aim of identifying aspects like cost-effective treatment and sorting technologies, environmental impacts, gaps in technical knowledge and socio-economic and policy barriers to further execution. The network will also propose directions for futures research and for local implementation.The general aim of the proposed network will be to develop a variety of innovative, adaptable and replicable approaches to a more efficient solid waste management, integrating appropriate low-cost and efficient technologies with community-based management and their relevant governance, institutional frameworks and socio-economic constraints.

Partners:

N	Partner Legal Name	Country
1	Verein zur Förderung des Technologietransfers an der Hochschule Bremerhaven e. V.	DE
2	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
3	Wageningen University	NL
4	Stichting WASTE	NL
5	BIOAZUL S.L.	ES
6	Winrock International India	IN
7	The Energy and Resources Institute	IN
8	Centre for Environmental Studies, Anna University	IN
9	National Engineering Services Pakistan (Pvt.) Ltd.	PK
10	Khulna University of Engineering and Technology	BD
11	Dhaka City Corporation	BD
12	Tsinghua University-Department of Environmental Science and Engineering	CN
13	China Association of Environmental Protection Industries	CN
14	Joint Graduate School of Energy and Environment at King Mongkut´s University of Technology Thonburi	TH
15	Asian Institute of Technology	TH
16	Center for Environmental Technology and Management	VN
17	Department of Environment Phnom Penh Municipality	KH
18	Royal University of Phnom Penh	KH
19	Demographic Institute at the Faculty of Economics University of Indonesia	ID
20	Solid Waste Management Association of the Philippines	PH
21	School of Urban and Regional Planning, University of the Philippines	PH
22	International Solid Waste Association	DK
23	Construction and Development Corporation	PH
24	ZKK Foundation, Inc.	PH

Activity Code: ENV.2008.3.1.4.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Life Cycle Assessment of Environment-Compatible Flame Retardants (Prototypical case study)

Proposed EC Grant: 3.158.010 €

Abstract:

Brominated flame retardants (BFRs) will be phased out because of their environmental hazards. Less toxic alternatives appear to be available already but comprehensive information on their possible toxicological effects are lacking. ENFIRO offers a prototypical case study on substitution options for BFRs resulting in a comprehensive dataset on viability of production and application, environmental safety, and a complete life cycle assessment. Dissemination will ensure the project results to arrive at policymakers' desks. The ENFIRO consortium is a unique collaboration between industries, SME's and universities with a wide variety of scientific disciplines.ENFIRO will contribute to the phasing out of BFRs as proposed in the European Water Framework Directive. The approach and the results of ENFIRO will be useful for similar substitution studies, e.g. in REACH.

Following a study on literature and industrial information, and prioritizing , three flame retardant (FR)/product combinations will be selected (e.g. metal-based FRs, phosphorous-based and nanoclay-based FRs in printed circuit boards, paints and foam). These will be studied for environmental and toxicological risks, and for viability of industrial implementation, i.e. production of the FR, fire safety and application of the FR into products (electronics, furniture, paints, foams, etc.). All information from these tests will be used for a risk assessment. The outcome of that assessment will, together with socio-economic information be used in a complete life cycle assessment. The project will follow a pragmatic approach, avoiding final recommendations on environment-compatible substitution options that would not be viable for implementation by industry. A Substitution Information Exchange Forum with members representing FR users (large industries) has been invited to guide this project.

Partners:

N	Partner Legal Name	Country
1	Vrije Universiteit Amsterdam	NL
2	University of Ulster	UK
3	Clariant Produkte Deutschland GmbH	DE
4	IRIS Vernici s.r.l.	IT
5	Consorzio per la promozione dei prodotti vernicianti PROCOAT	IT
6	IVAM UvA BV	NL
7	Stockholms universitet	SE
8	Universiteit Utrecht	NL
9	Swerea IVF AB	SE
10	Universiteit van Amsterdam	NL
11	Callisto Productions Ltd	UK
12	ITRI Innovation Limited	UK

Activity Code: ENV.2010.3.1.4-1 **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: Boosting Best Available Techniques in the Mediterranean Partner Countries

Proposed EC Grant: 943.365 €

Abstract:

BAT4MED is a 30-month project, whose main objective is to ensure a higher level of environmental protection of the Mediterranean region, minimising the negative impacts associated to the activity key industrial sectors.To that aim, the possibilities for and impact of diffusion of the EU Integrated Pollution Prevention and Control approach to the Mediterranean Partner Countries (MPC) will be assessed and the implementation of Best Available Techniques in the national environmental programmes will be promoted and supported. BAT4MED aims to help implement the EU Technologies Action Plan by supporting the transfer and uptake of environmental technologies in developing countries. Industrial pollution processes account for a considerable share of the overall pollution in the Mediterranean region. Though awareness of environmental issues related to industrial pollution has notably grown in the last decades, pollution monitoring shows that the positive results have hardly been achieved. The goal of the project justifies its transnational dimension, since pollution in the Mediterranean has a global dimension and cannot be tackled separately by each single country.The project brings together 8 organisations from 6 different countries,4 organisations from 3 EU Member States (Spain,Belgium,Italy),3 from 3 MPC (Egypt,Tunisia,Morocco) and 1 international organisation based in Egypt to build mutual understanding through established networking in industrial pollution prevention and control. Firstly, BAT4MED will analyse the industrial context in the MPC to select the most promising sectors with the highest environmental benefit potential.Secondly, a methodology for BAT assessment will be designed and applied and BAT will be selected for each identified sector taking into account local conditions. Lastly, an analysis of potential convergence of MPC policies with the EU-approach will be carried out. The project has an ambitious set of awareness creation & dissemination activities.

Partners:

N	Partner Legal Name	Country
1	Instituto Andaluz de Tecnología	ES
2	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE
3	SCUOLA SUPERIORE DI STUDI UNIVERSITARI E DI PERFEZIONAMENTO SANT'ANNA	IT
4	AGENCIA DE RESIDUS DE CATALUNYA	ES
5	Egyptian Environmental Affairs Agency	EG
6	Tunis International Centre for Environmental Technologies	TN
7	Centre Marocain de Production Propre	MA
8	CENTRE FOR ENVIRONMENT AND DEVELOPMENT FOR THE ARAB REGION AND EUROPE	EG

Activity Code: ENV.2010.3.1.4-2 **Funding Scheme:** CSA-CA **Duration (Months):** 48

Title: ERA-NET ON ECO-INNOVATION - Boosting eco-innovation through joint cooperation in research and dissemination

Proposed EC Grant: 1.999.988 €

Abstract:

Eco-innovations (EI), i.e. “green” technologies, processes, products and services have an increasing impact for the global competitiveness of European industry. To reach a worldwide leading position, it needs to boost the implementation of EI in industry, especially in SMEs. The ERA-Net on EI will support research and dissemination in the field of EI.The success of EI is determined by criteria that will be promoted through multi-level and systemic approach, considering the social, economic, political and technological context. To promote the development and implementation of EI in Europe, following activities will be performed: (1) Pooling of Europe’s most relevant research and innovation programmes; (2) Developing a networking platform for information exchange on activities related to EI research in Europe and broadening the network, and (3) Creating a common research funding platform. Supported by 25 partners, the ERA-Net is built on 4 work packages: Strategy & network development, leader SenterNovem (NL); Joint calls, leader ANR (FR); Other joint activities, leader MATIMOP-ISERD (IL); Management & Dissemination, leader Juelich (DE).The ERA-Net aims to support research, innovation and environmental policy makers with best practices for funding EI. Researchers will also profit from facilitated access to transnational research.The development of common metrics for the ex-ante assessment will help to take the whole life cycle of a project / programme into account. Activities for a better EI transfer from research to industry and market will be performed: e.g. assessing the role of information technology and of integrated concepts like ‘green technology parks’.The public awareness of the ERA-Net and EI will be promoted via target-group selected tools and active interaction with stakeholders and/or expert networks.

Partners:

N	Partner Legal Name	Country
1	FORSCHUNGSZENTRUM JUELICH GMBH	DE
2	BUNDESMINISTERIUM FUER BILDUNG UND FORSCHUNG	DE
3	AGENCE DE L'ENVIRONNEMENT ET DE LA MAITRISE DE L'ENERGIE	FR
4	AGENCE NATIONALE DE LA RECHERCHE	FR
5	Swiss federal office for the environment	CH
6	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
7	ENVIRONMENTAL PROTECTION AGENCY OF IRELAND	IE
8	Finpiemonte S.p.A	IT
9	FONDS NATIONAL DE LA RECHERCHE	LU
10	FORSKNINGSRÅDET FÖR MILJÖ, AREELLA NÄRINGAR OCH SAMHÄLLSBYGGANDE	SE
11	IHOBE SOCIEDAD PUBLICA DE GESTION AMBIENTAL	ES
12	INSTITUUT VOOR DE AANMOEDIGING VAN INNOVATIE DOOR WETENSCHAP EN TECHNOLOGIE IN VLAANDEREN	BE
13	Kommunalkredit Public Consulting	AT
14	MATIMOP, ISRAELI INDUSTRY CENTER FOR RESEARCH & DEVELOPMENT	IL
15	MINISTERIO DE CIENCIA E INNOVACION	ES
16	MINISTRY OF EDUCATION AND SCIENCE.	BG
17	Danish Minestry of the Environment - Environmental Protection Agency	DK
18	MINISTRSTVO ZA VISOKO SOLSTVO, ZNANOST IN TEHNOLOGIJO	SI
19	NARODOWE CENTRUM BADAN I ROZWOJU	PL
20	REGIONE PIEMONTE.	IT
21	SENTERNOVEM	NL
22	TEKES-TEKNOLOGIAN JA INNOVAATIOIDEN KEHITTAEMISKESKUS	FI
23	The Technology Strategy Board	UK
24	TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	TR
25	Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer	NL

Activity Code: ENV.2007.3.1.5.1. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Low Resource consumption buildings and constructions by use of LCA in design and decision making

Proposed EC Grant: 841.650 €

Abstract:

LoRe-LCA aims to coordinate activities regarding the application of LCA in the European construction sector, focusing on comparing and improving the functional units used for LCA for whole buildings, improving the possibilities to compare results for different alternatives during design stage, and for comparison of results for different buildings. The project focuses on harmonisation and use of LCA-methods in design and decision-making for reaching overall goals of reduced resource consumption. The main objectives are:1. Analyse the potential and restrictions of the European building regulations framework to influence the resource consumption in construction, and to derive policy recommendations on energy, pollution prevention, landfill, waste, etc,2.Collect and compare assessment methods of environmental performance used in different countries, with emphasis on LCA methods, to facilitate meaningful evaluation and communication to stakeholders including the public. 3. Support the standardisation activities of CEN TC350 and other initiatives by taking into account the different approaches and local specificities which exist and provide input to European harmonisation activities. 4. Encourage the use of LCA methodologies by dissemination to the relevant actors in the design and construction process.5. Resolve methodological problems related to the scope and limits of the system under study by defining needs and objectives of different user groups, hereunder defining functional units and performance indicators, for instance for health and indoor climate, to ensure comparability.6. Facilitate comparisons and scenarios to improve decision making at the design stage and provide guidelines on the use of benchmarking data.7. Establish best practices for use of LCA in design and decision, analysing case studies and looking at products and the building/construction as a whole.8. Implement the use of open standards to facilitate use of LCA tools in design

Partners:

N	Partner Legal Name	Country
1	SINTEF - Stiftelsen for industriell og teknisk forskning ved Norges tekniske høgskole	NO
2	Association pour la Recherche et le Développement des Méthodes et Processus Industriels	FR
3	Fundación CIRCE - Centro de Investigación de Recursos y Consumos Energéticos	ES
4	Interdisziplinäres Forschungszentrum für Technik, Arbeit und Kultur	AT
5	Sofia Energy Centre	BG
6	EMI Non-profit Company for Quality Control and Innovation in Building	HU
7	Ecofys Netherlands B.V	NL

Activity Code: ENV.2008.3.1.5.1. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: PoroElastic Road SUrface: an innovation to Avoid Damages to the Environment

Proposed EC Grant: 3.377.086 €

Abstract:

Low-noise road surfaces are recognized as a cost-effective tool for traffic noise abatement. The best performance can be achieved by optimizing surface texture and porosity. That way, a bottom line of a 3dB lifetime average reduction with respect to ordinary asphalt has been reached. Any progress must resort to another noise-relevant characteristic i.e. elasticity by which the noise due to tyre vibrations can be suppressed. A recently completed European project has shown that, in order to be effective, the elasticity of the road surface must be in the same range as that of the tyre itself. This explains why previous attempts of incorporating a little rubber in an asphalt mix failed to produce significant noise reductions. The solution consists of a fully rubberized, porous compound: a so-called “PoroElastic Road Surface” (PERS). Trials in Japan and Sweden have demonstrated vehicle noise reduction close to 10 dB. However, that promising technology is not ready for application. The following problems have to be solved: resistance to wear and tear, adhesion to the base, winter maintenance, mechanical behaviour and the following have to be clarified: rolling resistance, skid resistance, frost behaviour, fire hazard, workability and production/laying processes including workers safety. The project aims at developing a durable, cost-effective PERS using scrapped tyres, which would benefit the environment by contributing to abating traffic noise and vibrations but also helping to solve the problem of over 3 million tons of used tyres being dumped or burned every year in the 27 MS. One will take advantage of Swedish and Japanese experience. The former country is represented in the Consortium while the latter will be represented in an External Reference Group. Five countries including two NMS will host the experimental sites and test different variants of mixes and construction methods. One will also analyze the global, possibly positive impact on CO2 emissions.

Partners:

N	Partner Legal Name	Country
1	Centre de Recherches Routières	BE
2	Statens Väg- och Transportforskningsinstitut	SE
3	Danish Road Directorate, Danish Road Institute	DK
4	NCC Roads A/S	DK
5	SLOVENIAN NATIONAL BUILDING AND CIVIL ENGINEERING INSTITUTE	SI
6	Instytut Badawczy Drog i Mostow	PL
7	Politechnika Gdanska	PL
8	Dura Vermeer Divisie Infra BV	NL
9	European Tyre Recyclers Association	FR
10	HET Elastomertechnik GmbH	DE
11	Laboratoire Central des Ponts et Chaussées	FR
12	Katholieke Universiteit Leuven	BE

Activity Code: ENV.2008.3.1.5.1. **Funding Scheme:** CP-FP **Duration (Months):** 27

Title: SUSTAINABLE REFURBISHMENT OF BUILDING FACADES AND EXTERNAL WALLS

Proposed EC Grant: 2.652.602 €

Abstract:

SUSREF will develop new sustainable technologies for refurbishment of external walls.SUSREF is based on the premise that 1) Refurbishment of external walls is one of the most efficient ways of reducing environmental impacts from European building stock. 2) European building sector is facing huge refurbishment requirements; refurbishment of external walls is among the most urgent tasks. 3) Although there are technological solutions, the risks and optimal solutions are not understood. 4) External walls have an extensive effect on building performance and several aspects have to be taken into account when developing new concepts: a) effect on energy consumption, b) building physical behaviour and durability, c) good integration with building structure, details and building services, d) effect on indoor environment, e) aesthetics. 5) Urgent needs of refurbishment are not only faced in the EU but also in neighbouring areas. Development of functional and environmentally efficient technologies would support the European industry to export projects and the neighbouring areas to adopt sustainable technologies.SUSREF will 1) identify the foreseen needs to refurbish building envelops in the EU in order to understand the significance in terms of environmental and economic impacts and business potentials; 2) develop a systemized methods to manage the functional performance of solutions. Analyse technologies from the view point of building physics, comfort and durability. Consider different challenges in different parts of Europe in terms of present climate and foreseen risks of its changes, technological and cultural-historic issues; 3) develop systemized methods for consideration of energy and environmental performance of external walls; 4) develop sustainable product and project concepts; 5) disseminate results for building industry, standardisation bodies, and policy-makers and authorities in terms of technological knowledge, guidelines and recommendations.

Partners:

N	Partner Legal Name	Country
1	VALTION TEKNINEN TUTKIMUSKESKUS	FI
2	Stiftelsen SINTEF	NO
3	Vahanen Oy	FI
4	Cardiff University	UK
5	Building Research Establishment	UK
6	Fundacion Labein	ES
7	Grupo Repair	ES
8	Oneka Arquitectura S.L.	ES
9	Sustainable Gwynedd Gynaladwy Cyf	UK
10	Ehituskonstrueerimise ja Katsetuste OU	EE
11	Trondheim og omegn boligbyggelag	NO

Activity Code: ENV.2009.3.1.5.1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Technologies for the cost-effective Flood Protection of the Built Environment

Proposed EC Grant: 3.498.992 €

Abstract:

The principal aim of FloodProBE is to provide cost-effective means for the flood protection and damage mitigation in urban areas. To this end, FloodProBE will develop, test and disseminate technologies, methods, concepts and tools for risk assessment and mitigation, focussing particularly on the adaptation of new and existing buildings (retrofitting) and on infrastructure networks.The three main elements addressed by FloodProBE are (a) the vulnerability of critical infrastructure and high-density value assets, being the main originators of direct and indirect flood damage, (b) the reliability of urban flood defences by improving understanding and assessment of failure processes that have proven to be critical in recent flood events and (c) construction technologies and concepts for flood-proofing buildings and infrastructure networks to increase the flood-resilience of the urban system as well as for retrofit and repair of flood defences in the most economic and cost beneficial manner. The afore-mentioned elements will be integrated into state-of-the-art flood risk management strategies and will be developed, tested and validated via pilot study sites.A wide range of stakeholders will be involved in the project from the outset through an Associate Partner programme and by an external Advisory Board. This involvement will provide guidance on the project programme to directly meet industry needs, whilst also facilitating international dissemination, supporting uptake and implementation of project deliverables.The primary impact of FloodProBE will be a significant increase in the cost-effectiveness (i.e. performance) of investments in newly developed and existing flood protection and flood resilience measures. This will be achieved by focusing the research on “risk hotspots”, i.e. weak links in flood defence system performance and vulnerable assets, that, if damaged, cause very large direct and indirect adverse consequences (e.g. infrastructure networks).

Partners:

N	Partner Legal Name	Country
1	STICHTING DELTARES	NL
2	HR WALLINGFORD LTD	UK
3	CENTRE NATIONAL DU MACHINISME AGRICOLE, DU GENIE RURAL, DES EAUX ET DES FORETS	FR
4	STIFTELSEN SINTEF	NO
5	EIVP	FR
6	Regionální Environmentální Centrum, CR	CZ
7	OXFORD BROOKES UNIVERSITY	UK
8	Dura Vermeer Groep NV	NL
9	ACCIONA INFRAESTRUCTURAS S.A.	ES
10	Samui Design & Management Ltd	UK
11	MOSTOSTAL WARSZAWA SA	PL
12	LABORATOIRE CENTRAL DES PONTS ET CHAUSSEES	FR
13	DeltaSync BV	NL

Activity Code: ENV.2009.3.1.5.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Smart Resilience Technology, Systems and Tools

Proposed EC Grant: 3.489.657 €

Abstract:

The programme, involving leading European organisations, will develop innovative smart technology, systems and implementation tools. The project is set out into six main work packages:WP1 – Management: controlling the operation, scientific excellence and finance of the consortium.WP2 – FRe technology: developing innovative and smart technology and products, based on extending current products and introducing smart systems that rely less on manual intervention. The emphasis is on cost effective solutions. The WP will develop guidance and standards for FRe technology that could be adopted by standards organisations as harmonised standards. WP3 – FRe systems: developing the concept of flood resilient systems in the urban environment through the use of case studies in seven partner countries. FRe systems are the combination of FRe technology and the urban environment within which they sit. The FRe systems can range from individual building and infrastructure level to whole cities.WP4 – FRe implementation: considering how to implement FRe technology and systems in practice. It will consider appropriate tools and develop a decision support system.WP5 – Integration: bringing together the theory and practical research in WP2 – WP4, the intention is to demonstrate how FRe technology, systems and implementation can work in practice. The involvement of relevant stakeholders through national support groups will be essential.WP6 – Dissemination: a range of dissemination activities are planned within the project. A project web site will host an information platform. National and international conferences will disseminate the research results and create impact amongst stakeholders. A manual of FRe technology, systems and implementation tools will be produced.The project partners have already cooperated for more than three years in COST Action C22 – Urban Flood Management and are therefore well placed to successfully undertake this project.

Partners:

N	Partner Legal Name	Country
1	BUILDING RESEARCH ESTABLISHMENT LTD	UK
2	TECHNISCHE UNIVERSITAET HAMBURG-HARBURG	DE
3	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT	FR
4	The University of Manchester	UK
5	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
6	Dion. Toumazis & Associates	CY
7	ECOLE NATIONALE DES PONTS ET CHAUSSEES	FR
8	TECHNISCHE UNIVERSITEIT DELFT	NL
9	UNIVERSIDAD POLITECNICA DE MADRID	ES
10	Leibniz Institute of Ecological and Regional Development (IOER)	DE

Activity Code: ENV.2010.3.1.5-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Flexible Processes and Improved Technologies for Urban Infrastructure Construction Sites

Proposed EC Grant: 3.244.452 €

Abstract:

More than 50% of bridges in European cities are older than 40 years and bridges are a vital part of the infrastructure. Bridge managers are currently dealing with a large number of structurally deficient, obsolete bridges. The need to maintain, renew, strengthen and upgrade this part of the infrastructure will increase dramatically in the near future. PANTURA has bridges as its focal point. It is, however, important to stress that the approach proposed here can be applied to all infrastructure projects. The aims are to improve highly flexible off-site production processes, create resource-efficient construction sites, improve technologies and tools for bridge construction in densely populated areas and enhance communication between local authorities and construction companies. The main benefits of PANTURA are relevant to the Work Programme and are as follows: a) equip authorities, stakeholders and experts with a comprehensive instrument (methods, tools and techniques) to prepare and perform bridge construction, maintenance, repair and renovation processes in the most effective and efficient way, in the shortest possible time, with the most efficient, sustainable use of resources and with zero disturbance and disruption for the urban environment and urban life of the inhabitants, b) reduce lifecycle costs, i.e. the more efficient use of public funds by saving a significant amount of time and money, c) use new materials to increase off-site industrial production, technical innovations and new markets for SMEs and d) improve benchmarking systems to promote a performance-based, innovative, creative construction industry.PANTURA applies research based on a multidisciplinary, holistic approach and promotes innovative yet practical solutions, while covering the entire lifecycle process. PANTURA aims to realise these objectives by taking current research on construction processes, ICT tools and infrastructure technologies one step further.

Partners:

N	Partner Legal Name	Country
1	CHALMERS TEKNISKA HOEGSKOLA AB	SE
2	GOBIERNO DE CANARIAS. CONSEJERÍA DE OBRAS PUBLICAS Y TRANSPORTE. DIRECCIÓN GENERAL DE INFRAESTRUCTURA VIARIA. ÁREA DE CARRETERA	ES
3	Darellsoffice B.V.	NL
4	DEMO Consultants B.V.	NL
5	AICE Consulting Srl	IT
6	MOSTOSTAL WARSZAWA SA	PL
7	NCC Construction Sverige AB	SE
8	STIFTELSEN SINTEF	NO
9	BANVERKET, SWEDISH NATIONAL RAIL ADMINISTRATION	SE
10	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
11	GEMEENTE VAN ROTTERDAM	NL
12	ACCIONA INFRAESTRUCTURAS S.A.	ES

Activity Code: ENV.2007.3.1.5.2. **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: PERFORMANCE INDICATORS FOR HEALTH, COMFORT AND SAFETY OF THE INDOOR ENVIRONMENT

Proposed EC Grant: 1.600.000 €

Abstract:

The aim of PERFECTION is to help enable the application of new building design and technologies that improve the impact of the indoor built environment on health, comfort, feeling of safety and positive stimulation. The project concept consists of the following components:- the inventory of current standards, regulations, technologies and ongoing and recent research activities and policies related with optimal indoor environment- analysis of current indoor performance indicators and their applicability positioned within a generic framework, and identifying areas where new indicators for health and safety should be developed- experiences from use cases of building design and technologies exploiting the indicators in different building types- development of a decision support tool to guide the use of correct indicators for a given context- identification of incentives and barriers for the wide use of performance indicators- a roadmap and recommendations for building design and technologies, and support for policies- a wide dissemination of findings through an extensive expert network.The project is carried out at an EU scale and the project results will reach every EU country. More than 40 experts from over 30 countries and representing industry, academia and research were carefully selected to the PERFECTION team to ensure the needed depth and width. The network consists of experts from various domains that are in the focus of the call, such as indoor health issues, acoustics, universal design, performance metrics and tools, sustainable design and construction, etc. The PERFECTION project will organize 5 events all across Europe and will produce a quality publication - showcase of a number of case studies across all EU-27 countries, whereby the impact of innovative and well defined technologies as well as policies on specific buildings will be presented in a user friendly way.

Partners:

N	Partner Legal Name	Country
1	Belgian Building Reseach Institute	BE
2	Valtion teknillinen tutkimuskeskus	FI
3	APINTECH LTD	EL
4	Czech Technical University in Prague	CZ
5	Association pour la Recherche et le Développement des Méthodes et Processus Industriels	FR
6	Bauphysikbüro Prof. Kornadt und Partner	DE
7	Interdisciplinary Center for Technological Analysis and Forecasting	IL
8	Istituto Superiore sui Sistemi Territoriali per l'Innovazione	IT
9	Technische Universiteit Eindhoven	NL
10	ASM Centrum Badan i Analiz Rynku sp. Z O.O.	PL
11	Building Research Establishment	UK

Activity Code: ENV.2009.3.1.5.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: OPEN HOUSE - Benchmarking and mainstreaming building sustainability on the EU based on transparency and openness (open source and availability) from model to implementation.

Proposed EC Grant: 3.498.732 €

Abstract:

The overall objective of OPEN HOUSE is to develop and to implement a common European transparent building assessment methodology, complementing the existing ones, for planning and constructing sustainable buildings by means of an open approach and technical platform. OPEN HOUSE will develop a transparent approach able to emerge collectively in an open way across the EU. This approach will be communicated to all stakeholders and their interaction and influence on the methodology will be assured in a democratic way.The baseline will be existing standards (both CEN/TC 350 and ISO TC59/SC17), the EPBD Directive and its national transpositions, and methodologies for assessing building sustainability at international, European and national level.

Partners:

N	Partner Legal Name	Country
1	ACCIONA INFRAESTRUCTURAS S.A.	ES
2	Architects' Council of Europe	BE
3	APPLIED INDUSTRIAL TECHNOLOGIES LTD	EL
4	Ove Arup & Partners International Ltd.	UK
5	Basque Government- Housing Department	ES
6	BOUYGUES CONSTRUCTION	FR
7	City of Warsaw	PL
8	SLOVENSKI GRADBENI GROZD - GIZ	SI
9	D'APPOLONIA SPA	IT
10	Deutsche Gesellschaft für Nachhaltiges Bauen	DE
11	Electricite de France SA	FR
12	Eidgenössische Technische Hochschule Zürich	CH
13	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
14	Instytut Techniki Budowlanej	PL
15	MOSTOSTAL WARSZAWA SA	PL
16	SP Technical Research Institute of Sweden	SE
17	Vivienda y Suelo de Euskadi, S.A	ES
18	Gradbeni inštitut ZRMK	SI

Activity Code: ENV.2009.3.1.5.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Sustainability and performance assessment and benchmarkingof buildings - SuPerBuildings

Proposed EC Grant: 1.950.000 €

Abstract:

The project will develop 1) sustainability indicators for buildings, 2) understanding about the needed performance levels considering new and existing buildings, different building types and local requirements, 3) methods for the benchmarking of sustainable buildings (SB) and 4) recommendations for the effective use of benchmarking systems as instruments of steering and in building processes. The work will make use of the existing knowledge of SB assessment and rating systems. However, the project recognises that there are still unsolved issues and areas with no common understanding. These include: a) the integration of social and economic issues with SB assessment, b) consideration of certain environmental aspects as land use, c) defining appropriate performance levels considering both minimal levels and advanced targets, d) consideration of local conditions, different building types, and both new and existing buildings when selecting performance levels, d) selection of benchmarking criteria to be easily adopted in different parts of Europe, e) effective mobilisation of the benchmarking system, f) effective making use of the system in building processes and in building regulation and steering. The work will be divided into 8 work packages: WP1 ensures the effective work progress and the good communication between project members and between the project and the Commission; WP2 establishes the common starting point for the project; WP3 analyses the potential of SB benchmarking systems as an instrument of steering and when used in different phases of building projects, WP4 develops and selects sustainability indicators that describe the environmental, social and economic performance of buildings, WP5 defines performance levels and benchmarking criteria, WP6 makes recommendations for effective exploitation, WP7 pilots the system, and WP8 disseminates the outcomes with help of the project NETWORK GROUP and with help of powerful organisations of building professionals.

Partners:

N	Partner Legal Name	Country
1	VALTION TEKNILLINEN TUTKIMUSKESKUS	FI
2	BRE Global Ltd	UK
3	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BATIMENT	FR
4	CENTRE SCIENTIFIQUE ET TECHNIQUE DE LA CONSTRUCTION	BE
5	UNIVERSITAET KARLSRUHE (TECHNISCHE HOCHSCHULE)	DE
6	CESKE VYSOKE UCENI TECHNICKE V PRAZE	CZ
7	STIFTELSEN SINTEF	NO
8	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
9	FUNDACION LABEIN	ES
10	OSTERREICHISCHE GESELLSCHAFT FUR UMWELT UND TECHNIK	AT
11	YIT Kiinteistötekniikka Oy	FI
12	VINCI CONSTRUCTION FRANCE	FR
13	WSGreen Technologies GmbH	DE
14	Context AS	NO
15	Stichting W/E adviseurs duurzaam bouwen	NL
16	GEOS s.r.l.	IT

Activity Code: ENV.2010.3.1.5-2 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Holistic Management of Brownfield Regeneration

Proposed EC Grant: 3.497.278 €

Abstract:

HOMBRE seeks to achieve a paradigm shift in sustainable brownfield land management practice. This strategic goal can be expressed in four underlying objectives: Better understanding why, how, where and when brownfields are formed in order to avoid future brownfields. Better solutions for long term land use of current and potential future brownfields. Better operations, better implementation of state of the art technologies into practice and development of more sustainable integrated regeneration technologies for successful brownfield regeneratio; Improving the dividend from brownfield remediation for the environment, economy and society in the surrounding area by means of integrative management methodologies in cooperation with stakeholders. The project recognizes four different main tasks as part of a HOlistic Management of Brownfield REgeneration (HOMBRE) to be accomplished in associated case studies (mining, urban, industrial) with stakeholder participation: Zero brownfields strategy: a better understanding of the life cycle of urban, industrial and mining sites and the origination of brownfields in these settings is necessary to device a successful overall brownfield redevelopment program. Assessment of brownfield regeneration scenarios: development of an improved sustainable spatial (land-, urban) planning and decision making processes to enhance the up-take of brownfield regeneration projects based on a holistic approach. Integrated Regeneration Technologies: combination of technologies that address different site aspects or issues (eg. linking soil, water, energy and materials) to create faster and cheaper solutions during brownfield regeneration. Intermediate Renewal: solutions for greening, landscaping and amenity improvement of brownfields to ensure social, economical and environmental cohesion with the surrounding land use.

Partners:

N	Partner Legal Name	Country
1	STICHTING DELTARES	NL
2	FUNDACION LABEIN	ES
3	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
4	ACCIONA INFRAESTRUCTURAS S.A.	ES
5	DECHEMA GESELLSCHAFT FUER CHEMISCHE TECHNIK UND BIOTECHNOLOGIE E.V.	DE
6	Dr. Uwe Ferber	DE
7	PNStudio	IT
8	r3 environmental technology limited	UK
9	UNIVERSITA DEGLI STUDI DI ROMA TOR VERGATA	IT
10	AKADEMIA GORNICZO-HUTNICZA IM. STANISBAWA STASZICA W KRAKOWIE	PL
11	WAGENINGEN UNIVERSITEIT	NL
12	THE UNIVERSITY OF NOTTINGHAM	UK
13	Ramboll Polska Sp. z o.o.	PL

Activity Code: ENV.2010.3.1.5-2 **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: An Integrated Framework of Methods, Technologies, Tools and Policies for Improvement of Brownfield Regeneration in Europe

Proposed EC Grant: 3.499.902 €

Abstract:

Brownfield regeneration is essential for sustainable land management in European Member States. Currently, the success in brownfield regeneration is unsatisfying in terms of financial and eco-efficiency or social acceptance. Many useful and innovative technologies site clean-up as well as methods to support decision making processes exist, but they are only rarely applied using their full potential. An immense diversification of tools with little connection to each other as well as a lack of consideration of regional and cultural specificities deters end-users from application. Sometimes the non-visibility of tools is the reason that problem owners, managers, local authorities and other stakeholders do not regenerate brownfields using the best technology available. Additionally, emerging challenges, such as the urgent demand for soil remediation and the reuse of on-site infrastructures, call for the development of new and integrated solutions.This project will overcome existing barriers to brownfield regeneration by developing and providing customised problem- and target-oriented packages of approaches, technologies and tools. As a unique asset, these packages deliberately include the cultural and administrative characteristics and their regionally distinctive features. By providing a customisable toolbox specifically addressing the diverse processes that have to be dealt with during the course of a regeneration project, end-users will be enabled to find best practice based solutions. Improvement of existing means to support brownfield regeneration will be further accomplished by filling methodological core topics such as intelligent remediation in terms of technological advancements with regard to phytoremediation and partial source removal technologies. The project will deliver a tailored training and dissemination programme as part of an information centre that will transfer existing and emerging knowledge to the scientific community and end-users.

Partners:

N	Partner Legal Name	Country
1	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
2	EBERHARD KARLS UNIVERSITAET TUEBINGEN	DE
3	Ústav geoniky AV CR, v.v.i. (Institute of Geonics, AS CR, v.v.i.)	CZ
4	UNIVERSITA CA' FOSCARI DI VENEZIA	IT
5	UNIVERSITATEA TEHNICA DE CONSTRUCTII BUCURESTI	RO
6	DANMARKS TEKNISKE UNIVERSITET	DK
7	Landesentwicklungsgesellschaft Thüringen mbH (LEG Thüringen)	DE
8	National Environmental Protection Agency	RO
9	INSTYTUT EKOLOGII TERENOW UPRZEMYSLOWIONYCH	PL
10	SolGeo AG	CH
11	geo-log GmbH	DE
12	GeoExperts Dr. Kühne & Partner	DE
13	Zabar Group Holding Sarl	LU
14	UNIVERSITE DE FRANCHE-COMTE	FR
15	JENA-GEOS - Ingenieurbüro GmbH	DE

Activity Code: ENV.2008.3.1.6.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: PRODUCTIVITY TOOLS: Automated Tools to Measure Primary Productivity in European Seas. A New Autonomous Monitoring Tool to Measure the Primary Production of Major European Seas

Proposed EC Grant: 2.985.344 €

Abstract:

PROTOOL stands for PROductivity TOOLs: Automated Tools to Measure Primary Productivity in European Seas. In this 3 year project we will develop and adapt technology to measure primary production of phytoplankton with automated optical techniques, so that they can be placed on ships of opportunity (SOOP, ferries, container ships). The complete PROTOOL module will consist of a fluorometer measuring the rate of photosynthesis (using the variable fluorescence approach), an algal absorption meter based and a hyperspectral reflectance unit obtain water quality parameters like chlorophyll and suspended matter concentrations and the light attenuation coefficients. The design will be modular so that the individual units can also be used.

Our product is unique because it is the first sensor technology that can measure autonomous biological process RATES. It will provide detailed information on primary productivity and which is a fundamental parameter in the carrying capacity of any ecosystem. With our PROTOOL approach a much better assessment of ecosystem change can be made and we expect that our approach will stimulate to include primary production measurements as an important biological property in the ecological status assessment procedures in future WFD and Marine Strategy Initiatives. Primary production was mentioned as a parameter to measure in the initial versions of the Marine Strategy Initiatives but is not longer included, possibly because no current infrastructure is available in the EU-member states.The different version of the sensors and protocol modules will be tested in the Baltic Sea, The North Sea, in the English-Channel and Gulf of Biscay and in a number of Dutch estuaries. In the first 3 cases the PROTOOL equipment will be placed on SOOPs, next to a ferrybox. These field tests will obtain conversion factors necessary to calibrate the PROTOOL fluorometer and we will obtain estimates of primary production with high temporal and spatial resolution.

Partners:

N	Partner Legal Name	Country
1	Koninklijk Nederlandse Akademie van Wetenschappen _Royal Society of Arts and Sciences	NL
2	Finnish Institute of Marine Research	FI
3	GKSS-Forschungszentrum Geesthacht GmbH	DE
4	University of Essex	UK
5	Institue of Microbiology of the ASCR, v.v.i.	CZ
6	The Secretary of State for Environment, Food & Rural Affairs acting through the Centre for Environment, Fisheries & Aquaculture Science	UK
7	Natural Environment Research Council	UK
8	Photon Systems Instruments spol.s r.o.	CZ
9	TriOS Mess- und Datentechnik GmbH	DE

Activity Code: ENV.2009.3.1.6.1 **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Innovative coastal technologies for safer European coasts in a changing climate

Proposed EC Grant: 6.530.000 €

Abstract:

Coastal areas are vital economic hubs in terms of settlement, industry, agriculture, trade and tourism to mention some key sectors. There are already many coastal problems including erosion, flood risk and long-term habitat deterioration. As economies continue to develop the asset base at risk will grow, while accelerating climate change will increase the likelihood of damaging extreme events, as well as accelerate habitat decline. Existing coastal management and defence approaches are not well tuned to these challenges as they assume a static situation.THESEUS will develop a systematic approach to delivering both a low-risk coast for human use and healthy habitats for evolving coastal zones subject to multiple change factors. The innovative combined mitigation and adaptation technologies to be considered will include ecologically-based mitigation measures (such as restoration and/or creation of habitats), hydro-morphodynamic techniques (such as sediment reservoirs, multi-purpose structures, or overtop resistant dikes), actions to reduce the impact on society and economy (such as promotion of risk awareness or spatial planning) and GIS-based software to support defence planning. To integrate the best of these technical measures in a strategic policy context we will develop overarching THESEUS guidelines which will considers the environmental, social and economic issues raised in any coastal area. It is in this spirit that THESEUS will advance European and international experience in applying innovative technologies to reducing coastal risks. THESEUS activities will be carried out within a multidisciplinary framework using 16 study sites across Europe and the world, with specific attention to the most vulnerable coastal environments such as deltas, estuaries and wetlands, where many large cities and industrial areas are located.

Partners:

N	Partner Legal Name	Country
1	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
2	UNIVERSIDAD DE CANTABRIA	ES
3	University of Plymouth Higher Education Corporation	UK
4	AALBORG UNIVERSITET	DK
5	Infram International BV	NL
6	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
7	UNIVERSITY OF SOUTHAMPTON	UK
8	UNIVERSITE DE VERSAILLES SAINT-QUENTIN-EN-YVELINES.	FR
9	CENTRE D'ETUDES TECHNIQUES MARITIMES ET FLUVIALES	FR
10	MIDDLESEX UNIVERSITY HIGHER EDUCATION CORPORATION	UK
11	Instytut Meteorologii i Gospodarki Wodnej (Institute of Meteorology and Water Management)	PL
12	INSTITUTE OF OCEANOLOGY - BULGARIAN ACADEMY OF SCIENCES	BG
13	ATHENS UNIVERSITY OF ECONOMICS AND BUSINESS - RESEARCH CENTER	EL
14	KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW	NL
15	CORILA-CONSORZIO PER LA GESTIONE DEL CENTRO DI COORDINAMENTO DELLE ATTIVITA DI RICERCA INERENTI IL SISTEMA LAGUNARE DI VENEZIA	IT
16	Instytut Budownictwa Wodnego Polskiej Akademii Nauk	PL
17	BANGOR UNIVERSITY	UK
18	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
19	Hamburg Port Authority	DE
20	EID Méditerranée	FR
21	LATVIJAS UNIVERSITATE	LV
22	Istituto Superiore per la Ricerca e la Protezione Ambientale (ISPRA)	IT
23	VLAAMS INSTITUUT VOOR DE ZEE VZW	BE
24	Aristotle University of Thessalomiki	EL
25	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
26	Marine Hydrophysical Institute of National Academy of sciences of Ukraine	UA
27	P.P. SHIRSHOV INSTITUTE OF OCEANOLOGY OF RUSSIAN ACADEMY OF SCIENCES	RU
28	University of Delaware	US

29	Universidad Nacional Autónoma de México	MX
30	State Key Laboratory of Estuarine and Coastal Research	CN
31	Coastal Ocean Monitoring Center	TW
32	ASR Limited	NZ

Activity Code: ENV.2010.3.1.7-1 **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: Air Quality Monitoring Technologies for Urban Areas

Proposed EC Grant: 997.561 €

Abstract:

With increasing requirements for air pollution monitoring in Europe, and a rising number and complexity of available instruments, harmonisation of air pollution monitoring in Europe is of vital importance. It is needed to ensure comparability of measured concentrations, and their estimated measurement uncertainties, provided by European air pollution monitoring networks. To achieve harmonised air quality data, detailed recommendations on equipment evaluation and selection, standard operating procedures (SOPs) for set-up, operation and calibration, and proofs of equivalence to reference methods are needed. The necessity for harmonisation is especially important for particles (PM2.5 and PM10). Demonstration of equivalence to the reference methods, and QA/QC procedures for widely used automated PM monitors, are key current issues.The aim of AirMonTech is to compile the knowledge and information needed to harmonise air pollution measurements. The project is proposed by a consortium comprising air quality monitoring experts, measurement technique developers and health effect researchers from renowned research institutions and public bodies. Strong links to both urban and regional monitoring networks and European standardization institutions are ensured via direct links to AQUILA, EMEP and CEN. AirMonTech will gather information on instrument performance, test results, equivalence demonstrations and SOPs, and process them into specifically designed databases. Particular emphasis will be placed on methods for real-time monitoring of particles and particle-related proxy variables. A roadmap for future urban air quality monitoring including recommendations on existing and new monitoring technologies will be developed and discussed with stakeholders. Opportunities and limitations for the improvement and harmonization of monitoring activities in EU member states will be evaluated in an interactive dissemination process involving all relevant stakeholder groups.

Partners:

N	Partner Legal Name	Country
1	INSTITUT FUR ENERGIE UND UMWELTTECHNIK EV - IUTA	DE
2	STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND	NL
3	EIDGENOESSISCHE MATERIALPRUEFUNGS- UND FORSCHUNGSANSTALT	CH
4	AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
5	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
6	NORSK INSTITUTT FOR LUFTFORSKNING	NO
7	NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS	EL
8	NPL MANAGEMENT LIMITED	UK
9	UNIVERSITAET DUISBURG-ESSEN	DE

Activity Code: ENV.2010.3.1.8-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Biochar for Carbon sequestration and large-scale removal of greenhouse gases (GHG) from the atmosphere

Proposed EC Grant: 2.498.900 €

Abstract:

The transfer of Carbon from the atmosphere into useful carbon deposits is currently a key challenge. Transferring biomass to carbon-rich materials with potential mega-scale application is an option to sequester carbon from plant material, taking it out of the short-term carbon cycle and therefore binding CO2 efficiently and even in a useful, productive, way into longer term non-atmospheric carbon pools. One emerging option is to transform biomass into charcoal (or Biochar) and add that to agricultural soils. Biochar, that can be produced through thermochemical or hydrothermal processes and as by-product of energy production, is normally made of 60-80% of Carbon; both carbonization processes are exothermic as they produce rather than consume energy and the black-carbon of Biochar is a very stable product. The addition of large amounts of Biochar to agricultural soils potentially enhances their fertility and is compatible with sustainable agriculture. The EuroChar Project aims to develop and demonstrate technologies that will contribute effectively and on a large-scale to remove greenhouse gases (GHG) from the atmosphere in a long-term perspective (over 100 years). For this it is designed to determine in a detailed and rigorous way if the Biochar Option is in fact a realistic strategy to sequester atmospheric Carbon. To achieve this general objective the project will address a number of technical and practical questions and will include direct demonstration and prototyping activities. By integrating research made at molecular, ecosystem and technological scales and by delivering realistic scenario analyses and ISO-accredited whole Life Cycle Assessment carried out according to the International Reference Life Cycle Data System (ILCD) Handbook on LCA , as specifically required by the call.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
3	UNIVERSITAET BAYREUTH	DE
4	UNIVERSITY OF SOUTHAMPTON	UK
5	CS Carbon Solutions Deutschland GmbH	DE
6	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
7	Advanced Gasification Technology	IT
8	IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE	UK

Activity Code: ENV.2007.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Strategy for the preservation of plastic artefacts in museum collections

Proposed EC Grant: 2.100.000 €

Abstract:

During the twentieth century artists have used plastics and synthetics to create important pieces that are recognized nowadays as masterpieces. Unfortunately some plastics are degrading faster than had been expected and their preservation constitutes a challenge. Their is a lack of knowledge and agreement about the way we can exhibit, clean and store them in order to lower their deterioration speed. The focus of this project will be on art museum collections created with synthetic polymers (typically cellulose nitrate and acetates, poly (vinyl chloride), poly (methyl metacrylate) with a special interest into polyurethanes objects or coatings) and will focus on three dimensional objects as these frequently exhibit physical degradation. The objective is to develop a European wide accepted strategy that improves preservation and maintenance of plastic objects in museum collections. Based on scientific studies and experiences gathered from partners, it is proposed to evaluate and establish recommended practices and risk associated for exhibiting, cleaning and storing these artefacts.

Partners:

N	Partner Legal Name	Country
1	Centre National de la Recherche scientifique ile-de-France Est CNRS	FR
2	Centre National de la Recherche scientifique	FR
3	Victoria and Albert Museum	UK
4	National Museum of Denmark	DK
5	Consiglio Nazionale delle Ricerche	IT
6	Instituut Collectie Nederland	NL
7	Polymer Institute Slovak Akademy of Sciences	SK
8	IoSys - Dr. Timur Seidel e.K.	DE
9	ARC-Nucleart	FR
10	SolMateS BV, The Netherlands	NL
11	Morana RTD d.o.o.	SI
12	University of Ljubljana	SI

Activity Code: ENV.2007.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Smart Monitoring of Historic Structures

Proposed EC Grant: 1.405.000 €

Abstract:

Historic structures are often of extraordinary architecture, design or material. The conservation of such structures for next generations of European population is one of the main tasks, monument conservators are responsible for. To conserve historic structures it is more and more required to understand the deterioration processes mainly caused by the environment. To obtain more detailed information about the deterioration processes in certain cases continuous monitoring systems have been installed. However, most of these monitoring systems were just weather or air pollution data acquisition systems and just basic models for data analysis are used. The real influence of the environment to the structure or the structural material is often unaccounted for. That means that the structural resistance is just calculated from the measurements and not determined by sufficient sensors. Another aspect is the fact that most monitoring systems require cabling, which is neither aesthetically appealing nor in some cases applicable due to the needed fastening techniques.The proposed project aims at the development of competitive and smart monitoring systems using wireless sensor networks, new miniature sensor technologies (e.g. MEMS) for minimally invasive installation as well as smart data processing. With using these new technologies advanced material and lifetime prognosis models have to be developed or known models have to be extended. Comparative tests will be conducted to validate the models as well as the monitoring data, which is acquired during several case studies. The results of the project will be summarized in a toolbox and a guideline, which will be disseminated at special trainings organized for restorer, owner of cultural heritage and public authorities.

Partners:

N	Partner Legal Name	Country
1	Universitaet Stuttgart	DE
2	Arbeitsgemeinschaft der Restauratoren Bärbel Dieruff und Karl Fiedler	DE
3	Universitaet Stuttgart	DE
4	Europäische Akademie Bozen / Accademia Europea Bolzano	IT
5	ALMA MATER STUDIORUM – UNIVERSITA' DI BOLOGNA	IT
6	Rathgen Research Laboratory - National Museums Berlin	DE
7	Instytut Katalizy i Fizykochemii Powierzchni Polskiej Akademii Nauk	PL
8	Käferhaus GmbH	AT
9	TTI GmbH - TGU Smartmote	DE
10	METALMOBILE S.R.L.	IT
11	Artemis srl	IT
12	Consorzio Cetma	IT
13	Riwaq - Centre for architectural conservation	IL
14	University of Zagreb Faculty of Civil Engineering	HR
15	Department of Antiquities	JO

Activity Code: ENV.2007.3.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Technologies and Tools to prioritize assessment and diagnosis of air pollution impact on immovable and movable Cultural Heritage

Proposed EC Grant: 1.650.000 €

Abstract:

Most buildings of cultural/historical interest are located in urban environments. They undergo a number of different external forcings, which need to be addressed separately. It is important to consider local-scale variations of the urban environment, such as changes in pollutants, temperature field, relative humidity cycles, wind field, urban heat island effect etc. The most important challenge at the present time is to understand the different types of damage to cultural heritage that environmental changes will cause. In fact, the available scenarios of multi-pollutants trends in Europe and the world indicate that the effects of industrial, civil and transport emissions on corrosion and soiling will constitute a serious threat to cultural heritage. Such effects require improved methods of quantification to arrive at a more accurate damage assessment, diagnosis and monitoring of the movable and immovable cultural heritage. The high costs of preventive conservation and maintenance of the built cultural environment urgently impose the prioritization of air pollution monitoring in order to ensure a sustainable protection. For the purpose of attaining these goals, ad hoc devices and tools are necessary to identify and monitor the changing damage processes affecting immovable and moveable cultural heritage. This will be reached with TeACH developing its objectives. Among these, the main ones are: identify the multi-pollutants and prioritize the principal ones; Identify ways of improving the more reliable and efficient among existing technologies and tools, developing new devices and tools, particularly a new a compact and economical kit of instruments;deliver guidelines for the future prioritization of air pollution and disseminate the results.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	Istituto Cooperativo per l'Innovazione	IT
3	Tecno Penta	IT
4	Fundacion Labein	ES
5	ACCIONA INFRAESTRUCTURAS S.A.	ES
6	University of Antwerp	BE
7	Norwegian Institute for Air Research	NO
8	Belhadh Enterprise	DZ
9	University of Ljubljana	SI
10	Metropolitankapitel der Hohen Domkirche Köln - Dombauverwaltung	DE
11	National Museum in Krakow	PL

Activity Code: ENV.2008.3.2.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 60

Title: Damage risk assessment, macroeconomic impact and mitigation strategies for sustainable preservation of cultural heritage in the times of climate change

Proposed EC Grant: 4.964.866 €

Abstract:

Climate change is one of the most critical global challenges of our time which also threatens cultural heritage. As a non-renewable important resource to the European identity, sustainable adaptation strategies are required for long term preservation. For this purpose and for the first time ever, the CLIMATE FOR CULTURE project will couple completely new high resolution (10x10km) climate change evolution scenarios with whole building simulation models to identify the risks for specific regions. The innovation lies in the elaboration of a more reliable damage assessment by connecting the future climate data with whole building simulation models and new damage assessment functions. In situ measurements at UNESCO sites throughout Europe will allow a much more precise and integrated assessment of the real damage impact of climate change on cultural heritage. Appropriate sustainable mitigation/adaptation strategies, also from previous projects, are further developed and applied on the basis of these findings simultaneously. All these results will be incorporated into an assessment of the economic impacts. In order to ensure an efficient use of resources, this project will build on the results of already concluded EU research projects (Noah's Ark). Techniques from FP5/6 projects will be reassessed for their applicability in future scenarios at different regions in Europe and Mediterranean to fully meet sustainability criteria. The proposed project will thus be able to estimate more systematically the damage potential of climate change on European cultural heritage. The team consists of 27 multidisciplinary partners from all over Europe and Egypt including the world's leading institutes in climate modelling and whole building simulation. The final achievement of the project will be a macro-economic impact report on cultural heritage in the times of climate change akin to the STERN report which would be a truly European contribution to future IPCC Reports.

Partners:

N	Partner Legal Name	Country
1	Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V.	DE
2	Czech Technical University in Prague	CZ
3	Consiglio Nazionale delle Ricerche	IT
4	Faculty of Civil Engineering University of Zagreb	HR
5	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
6	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
7	Technische Universität München	DE
8	Eindhoven University of Technology	NL
9	Univerza v Ljubljani Univerza v Ljubljani	SI
10	Gradbeni inštitut ZRMK	SI
11	Gotland University	SE
12	Andreas Weiß freelance conservator restorer	DE
13	Engeneering Consulting & Software Development	PL
14	Krah & Grote Messtechnik	DE
15	Kaeferhaus GmbH	AT
16	Haftcourt Limited	UK
17	ACCIONA INFRAESTRUCTURAS, S.A	ES
18	Bayerische Schloesserverwaltung	DE
19	Doerner Institut	DE
20	The National Trust for England, Wales and Northern Island	UK
21	Kybertec, s.r.o.	CZ
22	Glasgow Caledonian University	UK
23	Center for documentation of Cultural & Natural Heritage	EG
24	Jonathan Ashley-Smith	UK
25	Imperial College London	UK
26	Fondazione Salvatore Maugeri	IT
27	Institute National du Patrimoine	FR

Activity Code: ENV.2009.3.2.1.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: NEW INTEGRATED KNOWLEDGE BASED APPROACHES TO THE PROTECTION OF CULTURAL HERITAGE FROM EARTHQUAKE-INDUCED RISK

Proposed EC Grant: 2.736.114 €

Abstract:

The project proposal tackles the problem of earthquake-impact on Cultural Heritage assets starting from basic consideration that efficient protection, with substantial guarantee of compatibility and low-intrusivity, can only be achieved with 'minimum intervention' approach. This requires that potentialities of existing materials and components are as much as possible exploited in terms of strength and energy dissipation, and candidate interventions are validated and optimized on specific, real application conditions. At the project start, earthquake-induced failure mechanisms, construction types and materials, intervention and assessment techniques will be cross-correlated with the aim of developing new integrated methodologies with a systemic approach. Traditional materials will be enhanced by innovative industrial processes (e.g., nano-limes or micro-silica for injection), and new high-performance (e.g. dissipative) elements will be developed. Novel collaborative combinations of them will be tested on structural components (walls, pillars, floors, vaults) and on structural connections (wall-, floor- and roof-to-wall), which converge the behaviour of single strengthened elements into the global structural response. The envisaged techniques will be also validated on model buildings and substructures. Advanced numerical studies will allow parameterizing the results and deriving simple and optimized design procedures. Early warning techniques for intelligent interventions and advanced monitoring techniques for knowledge based assessment and progressive implementation of interventions will be also developed. This bottom-up approach will bring to new integrated materials, technologies and tools for systemic improvement of seismic behaviour of CH assets. The new solutions will be condensed into guidelines for end-users. The large participation of research centres, SME, and end-user from various countries, including ICPC and MPC, ensures increased impact of the research.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITA DEGLI STUDI DI PADOVA	IT
2	BUNDESANSTALT FUER MATERIALFORSCHUNG UND -PRUEFUNG	DE
3	USTAV TEORETICKE A APLIKOVANE MECHANIKY, AKADEMIE VED CESKE REPUBLIKY VEREJNA VYZKUMNA INSTITUCE	CZ
4	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
5	POLITECNICO DI MILANO	IT
6	UNIVERSIDADE DO MINHO	PT
7	UNIVERSITAT POLITECNICA DE CATALUNYA	ES
8	UNIVERSITY OF BATH	UK
9	GAZI UNIVERSITY	TR
10	Ecole Nationale d'Architecture	MA
11	conservation department-cairo university	EG
12	Israel Antiquities Authority	IL
13	Bozza Legnami S.r.l.	IT
14	Peter James	UK
15	Interprojekt d.o.o.	BA
16	S&B Industrial Minerals S.A.	EL
17	ZRS Architekten Ingenieure Bürogemeinschaft	DE
18	Monumenta	PT

Activity Code: ENV.2009.3.2.1.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Performance-based approach to the earthquake protection of cultural heritage in European and Mediterranean countries

Proposed EC Grant: 2.237.475 €

Abstract:

PERPETUATE intends to develop European Guidelines for evaluation and mitigation of seismic risk to cultural heritage assets, with innovative techniques for the seismic strengthening of historical buildings and the preservation of artworks (frescos, stucco-works, statues, battlements, banisters, …). The main deliverable of the project will be made by a main document, which outlines the safety and conservation conceptual approach and the overall methodology, and other specific documents, describing the different components of the risk analysis. Two different problems are considered: a) assessment of a single cultural heritage asset (hazard analysis; soil foundation problems; investigations for the building knowledge; seismic analysis; SHM and strengthening interventions); b) policy initiatives for seismic risk mitigation (simplified vulnerability and risk analysis at territorial scale). Other important deliverables will come out from the application and validation of the methodology in two case studies, the Citadel of Algiers and the historical centre of Rhodes, both in the UNESCO list of the World Cultural Heritage. The call asks for the development of “integrated methodologies and innovative tools” for “protection .. of the main cultural heritage assets as regards the impact of earthquakes” and makes expressly reference to the contribution for improved regulation and standards. The recommendations recently issued by the Italian Ministry of Culture represent the framework for the development of European Guidelines, applicable in the European and the other Mediterranean countries. The methodology proposed in PERPETUATE will use a displacement-based approach for the vulnerability evaluation and the design of interventions; the use of safety verification in terms of displacement, rather than strength, orients to new strengthening techniques and helps in the comprehension of the interaction between structural elements and unmovable artistic assets.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITA DEGLI STUDI DI GENOVA	IT
2	Ente per le Nuove tecnologie, l'Energia e l'Ambiente	IT
3	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
4	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
5	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
6	UNIVERZA V LJUBLJANI	SI
7	UNIVERSITY OF BATH	UK
8	USTHB/LBE	DZ
9	Gradbeni inštitut ZRMK d.o.o.	SI
10	Entreprise de Travaux de Bâtiment Mekhati	DZ

Activity Code: ENV.2010.3.2.1-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Measurement, Effect assessment and Mitigation of pollutant Impact on movable cultural assets. – Innovative research for market transfer.

Proposed EC Grant: 2.499.777 €

Abstract:

The MEMORI proposal will provide the conservation market with innovative measurement technology, improved pollution effects knowledge and evaluation and control methods for the reduction of gaseous pollutant impact on movable cultural assets, - facilitating increased and safe use of protective enclosures for cultural heritage (CH) objects located indoors in new or rebuilt buildings for collections, to satisfy demands for energy saving to mitigate climate change. MEMORI will develop a small novel portable instrument for easy combined (oxidising + acidic impacts) environmental dosimetry in situ with adapted software and web page for results presentation and interpretation. MEMORI will do extensive laboratory and non-destructive field analysis of impact of indoor environments on a range of organic CH materials for the assessment of environmental quality for movable cultural assets, especially focusing on objects protected inside diverse types of enclosures. MEMORI will perform varied realistic experiments and studies of methods for mitigation of the pollution impact on CH objects in enclosures such as; use of absorbing media of different types; pollution barrier films; low emitting construction materials, and anoxic conditions. MEMORI seeks to achieve its goals by engagement of SMEs that combine expertise in marketing and consulting of conservation equipment with practical conservation experience for the benefit of conservators and stakeholders, supporting their effort to assure optimal conservation conditions for their collections. MEMORI also has significant participation of SMEs in its work with technological instruments development and presentation systems for the End users, and in the studies of mitigation methods for application with protective enclosures and accessories that these SMEs market. The basis for MEMORI is the scientific and technological excellence of research and innovation within a high quality consortium with high quality management.

Partners:

N	Partner Legal Name	Country
1	NORSK INSTITUTT FOR LUFTFORSKNING	NO
2	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
3	Verein Kultur und Arbeit e. V. - Association Culture and Work	DE
4	UNIVERSITA DI PISA	IT
5	UNIVERSITEIT GENT	BE
6	Royal Danish Academy of Fine Arts, School of Conservation	DK
7	UNIVERSITAET FUER BODENKULTUR WIEN	AT
8	CReART	RO
9	historic buildings and monuments commission for england	UK
10	BIRKBECK COLLEGE - UNIVERSITY OF LONDON	UK
11	SIT Transportes Internacionales S.L.	ES
12	The Board of Trustees of the Tate Galleries	UK
13	DUBLIN CITY UNIVERSITY	IE
14	Emcel Filters Ltd	UK
15	NILU Products AS	NO

Activity Code: ENV.2008.3.2.1.2. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: European Cultural Heritage Identity Card

Proposed EC Grant: 998.502 €

Abstract:

Aim: To collect data in a systematic way on heritage buildings across Europe and neighboring countries; and introduce the Identity Card concept to European Cultural Heritage. It will help in sustainable maintenance, preservation and rehabilitation of historic sites and monuments through the development of strategies and assessment of efficient and user-friendly systems for the screening of alteration of heritage building over time. Methods: The 6 work packages (WP) will be carried out by a multi-disciplinary consortium of highly qualified experts in conservation, architecture, construction and natural and social sciences. WP1 will coordinate the project; WP2 will review and document current methodologies; WP3 will develop criteria and indicators for risk assessment; WP4 will develop methods and tools to collect and store data for the evaluation of changes of heritage assets over time; WP5 will consolidate recommendations and strategies; and WP6 will disseminate results through appropriate professional and public channels.Project will carry out a consortium of 13 partners in 12 countries: Slovenia, Austria, Belgium, Czech Republic, Germany, Greece, Italy, Poland, Spain, Croatia, Egypt and Israel. The consortium will act by coordinating activities on a national and international level. It will also act to increase the level of information and awareness in society, as well as the level of professional education & vocational training in order to minimize the harmful impact of ignorance, lack of knowledge and vandalism. Project partners, including an Advisory Network, will establish and maintain rapport with local authorities responsible for CH safeguarding and other stakeholders involved in heritage protection.Conclusion: EU CHIC will facilitate development of a universal cultural heritage identity card that will demonstrate significant benefit for CH managers & owners, and for society, promoting effective preservation of our shared cultural heritage.

Partners:

N	Partner Legal Name	Country
1	Univerza v Ljubljani	SI
2	Schloss Schönbrunn Kultur- und Betriebsges mbH.	AT
3	Belgian Building Research Institute	BE
4	Zagora – Zagorje d.o.o.	HR
5	Ústav teoretické a aplikované mechaniky Akademie ved Ceské republiky, v.v.i.	CZ
6	Center for documentation of Cultural & Natural Heritage	EG
7	Fraunhofer Gesellschaft zur Foerderung der angewandten Forschung e.V.	DE
8	National Technical University of Athens	EL
9	Technion – Israel Institute of Technology	IL
10	University of Bologna	IT
11	University of Ferrara	IT
12	Institute of Fundamental Technological Research	PL
13	Fundacion Labein	ES

Activity Code: ENV.2008.3.2.1.2. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Strategies for the protection of shipwrecks in the Baltic Sea against forthcoming attack by wood degrading marine borers.A synthesis and information project based on the effects of climatic changes.

Proposed EC Grant: 754.813 €

Abstract:

Today the Baltic sea is a brackish marine environment, enclosing a unique well preserved historical collection of wooden shipwrecks and settlements. These objects and constructions are protected from aggressive marine borer due to the low salinity in the waters, and therefore it is one of the few localities in the world where historical shipwrecks are found so intact and available for historical research. There are however strong indications, showed by the EU- MOSS project, that the marine borer Teredo spp is spreading into this area. If we are not able to protect the cultural heritage, these objects will be lost within a relatively short time due to the aggressiveness of the marine borers. A strategy to handle this alarming scenario, is to provide the museums and conservators responsible for long term preservation of cultural heritage, with tools for predicting the spread of marine borers, and efficient methods for protection of the wreck, when the degradation is established.The WreckProtect project will therefore develop two guidelines synthesised on currently available information: 1. The prediction of marine borer attack in marine waters2. The protection of wrecks in situThese guidelines will be applicable to other European marine waters outside the Baltic.The WreckProtect project is consequently a cross-disciplinary coordination action involving partners with expertise within geographical information systems, marine archaeology, marine biology, wood microbiology and conservation. These experts will through meetings and networking exchange knowledge and synthesise it into practical tools and methods in the form of guidelines that will be disseminated in a joint action for the European managers of underwater cultural heritage. A seminar, workshop and training course on practical in situ preservation of shipwreck will be organised during the project, and the guidelines will be published in international scientific journals and a monograph.

Partners:

N	Partner Legal Name	Country
1	Swedish University of Agricultural Sciences	SE
2	The National Museum of Denmark	DK
3	Rijksdienst voor Archeologie Cultuurlandschap en Monumenten	NL
4	Geological Survey of Denmark and Greenland	DK
5	Göteborg University	SE
6	The Viking Ship Museum	DK

Activity Code: ENV.2009.3.2.1.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Fire Detection and Management through a Multi-Sensor Network for the Protection of Cultural Heritage Areas from the Risk of Fire and Extreme Weather Conditions

Proposed EC Grant: 2.697.092 €

Abstract:

The proposed project aims to develop an automatic early warning system to remotely monitor areas of archaeological and cultural interest from the risk of fire and extreme weather conditions. Since these areas have been treasured and tended for very long periods of time, they are usually surrounded by old and valuable vegetation or situated close to forest regions, which exposes them to an increased risk of fire. Additionally, extreme weather conditions (such as storms and floods) pose great risks for these sites. The proposed system will take advantage of recent advances in multi-sensor surveillance technologies, using a wireless sensor network capable of monitoring different modalities (e.g. temperature) andoptical and infrared cameras, as well as local weather stations on the deployment site. The signals collected from these sensors will be transmitted to a monitoring center, which will employ intelligent computer vision and pattern recognition algorithms as well as data fusion techniques to automatically analyze sensor information. The proposed system will be capable of generating automatic warning signals for local authorities whenever a dangerous situation arises. Detecting the starting position of a fire is only the first step in fire fighting. After detecting a wildfire, the main focus should be the estimation of the propagation direction and speed in order to help forest fire management. FIRESENSE will provide real-time information about the evolution of fire using wireless sensor network data. Furthermore, it will estimate the propagation of the fire based on the fuel model of the area and other important parameters such as wind speed, slope, and aspect of the ground surface. Finally, a 3-D Geographic Information System (GIS) environment will provide visualisation of the predicted fire propagation.Demonstrator deployments will be operated in selected sites in Greece, Turkey and Tunisia.

Partners:

N	Partner Legal Name	Country
1	CENTRE FOR RESEARCH AND TECHNOLOGY HELLAS	EL
2	Bilkent Universitesi	TR
3	Ecole Supérieure des Communications	TN
4	XenICs nv	BE
5	Stichting Centrum voor Wiskunde en Informatica	NL
6	MARAC ELECTRONICS, S.A	EL
7	Bogazici Universitesi	TR
8	MINISTRY OF CULTURE, IX EPHORATE FOR PREHISTORIC AND CLASSICAL ANTIQUITIES	EL
9	TITAN BUILDING SYSTEMS TECHNOLOGY, INDUSTRY AND TRADE LIMITED COMPANY	TR

Activity Code: ENV.2008.3.2.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Protection of cultural heritage by real-time corrosion monitoring

Proposed EC Grant: 765.595 €

Abstract:

There are many factors affecting air corrosivity, but it is only the temperature and sometimes the relative humidity that are controlled and monitored in indoor premises where valuable and culturally significant objects are stored or displayed. Additional anti-corrosion measures are usually applied only when often-irreplaceable historical objects have already been affected. Information on the actual corrosivity of the atmosphere is crucial to effective corrosion protection and there is a strong need for professionals active in the protection of cultural heritage to have a tool enabling real-time assessment of the air corrosivity. In a project financed within FP6, prototypes of loggers for continuous measurement of the corrosion rate of selected technical metals in atmospheric conditions were developed. The electronic unit measures and records changes in the electrical resistance of a thin metal track applied on an insulating substrate. The developed concept offers several important advantages, such as on-line and real-time monitoring, small size, easy replaceable metal sensors, remote data access, and automatic data delivery via e-mail.

The main objectives of the present project that will allow for the application of the logger in the cultural heritage sphere are: (1) To develop new sensors such as silver, lead, and metal alloys simulating more closely historical materials. (2) To improve currently available sensors by decreasing the metal layer thickness to 50–500 nm to provide higher sensitivity. (3) To improve the electronic part of the logger with new measurement ranges, a universal communication interface, and better water-tightness. (4) To adapt the electronic logger and software for single measurements on sensors exposed separately. (5) To develop software that provides user-friendly data handling and makes data interpretation simple by referring to available standards or recommendations.

Partners:

N	Partner Legal Name	Country
1	Institut de la Corrosion SAS	FR
2	Vysoka skola chemicko-technologicka, Praha	CZ
3	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	DE
4	nke SA	FR
5	Centre de recherche et de restauration des musées de France	FR
6	Schweizerische Landesmuseen	CH
7	Nationalmuseet Denmark	DK

Activity Code: ENV.2008.3.2.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Roman Cements for Architectural Restoration to New High Standards

Proposed EC Grant: 1.516.224 €

Abstract:

Highly hydraulic binders, known as natural or Roman cements, were key materials to cover façades of buildings of the European Historicism and Art Nouveau (19th/early 20th century), a period of rapid urban growth in Europe. The maintenance, restoration and reconstruction of historic Roman cement façades form therefore an important issue in Europe's efforts to preserve its architectural heritage. Therefore, the ROCARE project is proposed to provide conditions for the industrial development and commercialisation of Roman cements which is an innovative, promising technology developed at the level of a pilot-scale prototype in the recent research project of the 5th Framework Programme ROCEM, 2003-2006. The increasing awareness of the conservation profession and their interest in the product call now for further actions encompassed by the proposed ROCARE-project, which aim at filling gaps in knowledge and reducing the entry barriers of the novel technology to the market. They include (a) scaling up of the RC technology to a competitive level by optimising the process technologies at various conditions of production, (b) laboratory tests and studies to fully understand cement hydration and property development, as well as optimum conditions of mortar processing and handling in the conservation practice, and (c) broad dissemination measures to enlarge the market potential of the technology. The proposed project is designed for three-year duration and will be jointly conducted by 15 partners from industry, SMEs and research centres in 7 countries. It will allow the prototype developed in the earlier project to establish itself on the European market of building construction.

Partners:

N	Partner Legal Name	Country
1	Institute of Art and Technolgy/Section Conservation Sciences, University of Applied Arts Vienna	AT
2	Instytut Katalizy I Fizykochemii Powierzchni Polska Akademia Nauk	PL
3	University of Bradford	UK
4	CAS Composite Anode Systems GmbH	AT
5	Ecole Polytechniques Federale de Lausanne	CH
6	Cercle des Partenaires du Patrimoine - Laboratoire de Recherche des Monuments Historiques	FR
7	Dr. Eberhard Wendler - Fachlabor für Konservierungsfragen in der Denkmalpflege	DE
8	Univerzita Pardubice	CZ
9	Remmers Fachplanung	DE
10	Atelier Gurtner Wien	AT
11	TPA Gesellschaft für Qualitaetssicherung und Innovation	AT
12	Wietersdorfer und Peggauer Zementwerke GmbH	AT
13	Branch of Mineral Building Materials in Krakow, Institute of Glass, Ceramics, Refractory and Construction Materials in Warsaw	PL
14	Verein zur Foerderung der Baudenkmalpflege	AT
15	RENOVA Sp. z o.o.	PL

Activity Code: ENV.2007.3.2.2.1. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: European network on Research Programme applied to the Protection of Tangible Cultural Heritage

Proposed EC Grant: 1.986.500 €

Abstract:

NET-HERITAGE is the first significant initiative ever attempting to coordinate national RTD programmes of European countries and support European RTD Programmes in the field of research applied to Protection for Tangible Cultural Heritage. It aims to exert a massive, positive impact through the following objectives: - provide an integrated picture of the state of the art of cultural heritage research in EUMember States and at the European level;-overcome the lack of a coordinated research structure in this specific and multidisciplinary sector, with programmes fostering integration between art-history-conservation-maintenance-restoration areas and architectural-chemical-physics-engineering areas;- limit fragmentation within and among national research programmes, identifying common strategic priorities for research and programmes;- create effective actions to stimulate the exploitation of research results, and underpin cooperation between researchers and cultural heritage institutions for the application of identified solutions;- face problems due to insufficient and dispersed funding, in terms of local level and size of funding, compared to other research sectors;- favour exchange between national and European work programmes, to avoid a single top-down approach.NET-HERITAGE intends to achieve the following main outcomes:- coordinating actions within the EU partnership;- favouring protection of moveable and immoveable tangible cultural heritage;- expanding the potential of the cultural heritage research sector;- enhancing dissemination of research results and news in the field of protection of tangible cultural heritage;- increasing the visibility of the socio-economic importance of this sector; - supporting educational and training programmes and activities in the sector;- developing a common framework of policies for improving cultural heritage protection;- favouring common actions to promote Cultural Heritage research outside EU

Partners:

N	Partner Legal Name	Country
1	MINISTERO PER I BENI E LE ATTIVITA' CULTURALI	IT
2	MINISTERO DELL'UNIVERSITA' E DELLA RICERCA	IT
3	Belgian Federal Science Policy	BE
4	Ministry of Education and Science	BG
5	Ministry of Culture and Communication	FR
6	Deutsche Bundesstiftung Umwelt	DE
7	Hellenic Ministry of Culture	EL
8	The Archaeological Heritage Agency of Iceland	IS
9	The State Inspection for Heritage Protection	LV
10	HERITAGE MALTA	MT
11	Ministerstwo Kultury i Dziedzictwa Narodowego	PL
12	Autoritatea Nationala pentru Cercetare Stiintifica	RO
13	Ministry of Culture	SI
14	Spanish Ministry of Education	ES
15	Arts and Humanities Research Council	UK

Activity Code: ENV.2007.3.2.2.2. **Funding Scheme:** CSA-SA **Duration (Months):** 16

Title: Cultural Heritage Research meets practice

Proposed EC Grant: 165.000 €

Abstract:

Organization of the 8th EC Conference on Cultural Heritage Research in Ljubljana, in 2008 is proposed. Its main objectives are in accordance with the ones addressed in the Call: to foster exploitation and spin off of EU research results, through demonstration of new technologies tools and devices developed by the SMEs and industry in close cooperation with scientists and for benefit of end-users, conservators and restorers, managers and owners of the cultural patrimony. The objectives will be reached by oral presentations, posters, demonstration activities and training workshops focusing on presentation of research results relating to movable and immovable cultural heritage, landscapes and archaeology, policy impact assessment, technology and knowledge transfer, including education and life-long learning in the field of cultural heritage. Special attention will be devoted to integration of EC funded research with other similar funding schemes, in particular COST and Eureka, as well as pooling of expertise of key players in the field, such as FACH, ICOM-CC, ICOMOS, EUROPA NOSTRA, and others. Dissemination activities will heavily rely on IT technologies and will include pre-conference proceedings with extended abstracts, a web page and post conference prints containing the conference statement, invited talks (from the opening ceremony and the programme sessions) and rapports from the sessions. Special attention will be dedicated to communication of the results to the public, which will be achieved by dedicated web-pages, well prepared press releases and targeted public relations.

Partners:

N	Partner Legal Name	Country
1	Narodna in univerzitetna knjiznica	SI
2	Slovenski gradbeni grozd - GIZ	SI
3	University of Ljubljana	SI

Activity Code: ENV.2010.3.2.4-1 **Funding Scheme:** CP **Duration (Months):** 40

Title: Efficient ENergy for EU Cultural Heritage

Proposed EC Grant: 4.990.486 €

Abstract:

The project 3EN-CULT bridges the gap between conservation of historic buildings (HB) and climate protection, which is not an antagonism at all: HB will only survive if maintained as living space. Energy efficient retrofit is useful for structural protection as well as for comfort reasons - comfort for users and “comfort” for heritage collections.The joint task of conservation and energy efficient retrofit is highly interdisciplinary. The 3EN-CULT consortium consists of scientists and stakeholders, especially on the level of SMEs, from the fields of diagnostics, conservation, building physics, sustainability, architecture and lighting up to cybernetics, thus guaranteeing both, the development of sustainable solutions and the impact on European economy.Six case studies will demonstrate and verify solutions that are applicable to the majority of European built heritage in urban areas. Building owners and local historic preservation agencies are integrated in local case study teams.3EN-CULT will demonstrate the feasibility of “Factor 4” to “Factor 10” depending on the case and the heritage value. The main objectives are the development of passive and active solutions for conservation and energy efficient retrofit including available products as well as new developments by involved SMEs, the definition of diagnosis and monitoring instruments, the long term monitoring (also for IEQ controlling in HB) and the planning and evaluation tools and concepts supporting the implementation, the quality assurance and control of success of the energy retrofit measures. Guidelines will be disseminated to the scientific and public community.Finally, position papers will be issued suggesting possible integrations and/or implementations of the present regulation framework for improving energy efficiency of historic buildings in urban areas and in particular EPBD, Environmental Impact Assessment as well as the Strategic Environmental Assessment Directives and SUIT guidelines.

Partners:

N	Partner Legal Name	Country
1	ACCADEMIA EUROPEA PER LA RICERCA APPLICATA ED IL PERFEZIONAMENTO PROFESSIONALE BOLZANO (ACCADEMIA EUROPEA BOLZANO)	IT
2	The Royal Danish Academy of Fine Arts, School of Architecture	DK
3	ICOMS-CIVVH Interantional Commitee on Histroic Towns and Viallages	HU
4	UNIVERSITAET INNSBRUCK	AT
5	OVE ARUP & PARTNERS INTERNATIONAL LIMITED	UK
6	TECHNISCHE UNIVERSITAET DARMSTADT	DE
7	FUNDACION CARTIF	ES
8	BARTENBACH LICHTLABOR GMBH	AT
9	TECHNISCHE UNIVERSITAET DRESDEN	DE
10	COMUNE DI BOLOGNA	IT
11	Dr. Wolfgang Feist	DE
12	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
13	ALMA MATER STUDIORUM-UNIVERSITA DI BOLOGNA	IT
14	ARTEMIS SRL	IT
15	Institut für Diagnostik und Konservierung an Denkmalen in Sachsen und Sachsen-Anhalt e.V.	DE
16	GELBISON ELECTRONICS SRL	IT
17	Grupo Unisolar S.A.	ES
18	MENUISERIE ANDRE SARL	FR
19	Remmers Baustofftechnik GmbH	DE
20	ATREA s.r.o.	CZ
21	youris.com	BE
22	ICLEI European Secretariat GmbH	DE
23	Fédération de l'Industrie Européenne de la Construction	BE
24	Federation of European Heating and Air-conditionning Associations - REHVA	NL

Activity Code: ENV.2007.3.3.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: CAse studies on the Development and Application of in-Silico Techniques for Environmental hazard and Risk assessment

Proposed EC Grant: 2.767.034 €

Abstract:

Implementation of REACH requires demonstration of the safe manufacture and use of chemicals. REACH aims to achieve a proper balance between societal, economic and environmental objectives, and attempts to efficiently use the scarce and scattered information available on the majority of substances. Thereupon REACH aims to reduce animal testing by optimized use of in silico and in vitro information on related compounds.The REACH proposals advocate the use of non-animal testing methods, but guidance is needed on how these methods should be used. The procedures include alternative methods such as chemical and biological read-across, in vitro results, in vivo information on analogues, (Q)SARs, and exposure-based waiving. The concept of Intelligent Testing Strategies for regulatory endpoints has been outlined to facilitate the assessments. Intensive efforts are needed to translate the concept into a workable, consensually acceptable, and scientifically sound strategy.CADASTER aims at providing the practical guidance to integrated risk assessment by carrying out a full hazard and risk assessment for chemicals belonging to four compound classes. A DSS will be developed that will be updated on a regular basis in order to accommodate and integrate the alternative methods mentioned above. Operational procedures will be developed, tested, and disseminated that guide a transparent evaluation of four classes of emerging chemicals, explicitly taking account of variability and uncertainty in data and in models.The main goal is to exemplify the integration of information, models and strategies for carrying out safety-, hazard- and risk assessments for large numbers of substances. Real risk estimates will be delivered according to the basic philosophy of REACH of minimizing animal testing, costs, and time. CADASTER will show how to increase the use of non-testing information for regulatory decision whilst meeting the main challenge of quantifying and reducing uncertainty.

Partners:

N	Partner Legal Name	Country
1	National Institute of Public Health and the Environment	NL
2	Public Health Institute Maribor	SI
3	UNIVERSITA' degli STUDI dell'INSUBRIA	IT
4	IVL Swedish Environmental Research Institute AB	SE
5	Högskolan i Kalmar (University of Kalmar)	SE
6	GSF - Forschungszentrum fuer Umwelt und Gesundheit, GmbH	DE
7	Ideaconsult Ltd.	BG
8	Radboud University Nijmegen	NL
9	Mike Comber Consultancy	BE

Activity Code: ENV.2007.3.3.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 45

Title: MICROARRAYS FOR THE DETECTION OF TOXIC ALGAE

Proposed EC Grant: 2.234.851 €

Abstract:

Microalgae in marine and brackish waters of Europe regularly cause «harmful effects», considered from the human perspective, in that they threaten public health and cause economic damage to fisheries and tourism. Cyanobacteria cause similar problems in freshwaters. These episodes encompass a broad range of phenomena collectively referred to as «harmful algal blooms» (HABs). They include discoloration of waters by mass occurrences of microalgae (true algal blooms that may or may not be «harmful») to toxin-producing species that may be harmful even in low cell concentrations. A broad classification of HAB distinguishes three groups of toxic organisms. For adequate management of these phenomena, monitoring of microalgae is required. However, the effectiveness of monitoring programmes is limited by the fact that it is time consuming and morphology as determined by light microscopy may be insufficient to give definitive species and toxin attribution. Once cell numbers reach a threshold level, then shellfish are selected to toxin analysis by the mouse bioassay. The mouse bioassay is continued on a daily basis until no more toxin is detected. Molecular and biochemical methods are now available that offer rapid means of both species and toxin detection. In this project we will target rapid species identification using rRNA genes as the target. We include antibodies to specific toxins because even when cell numbers are very low, the toxins can be present and can be accumulated in the shellfish. Microarrays are the state of the art technology in molecular biology for the processing of bulk samples for detection of target RNA/DNA sequences.. The purpose of MIDTAL is to support the common fisheries policy to aid the national monitoring agencies by providing new rapid tools for the identification of toxic algae and their toxins so that they can comply with ECC directive 91/1491/CEE that can be converted to cell numbers and reduce the need for the mouse bioassay.

Partners:

N	Partner Legal Name	Country
1	AWI	DE
2	Stazione Zoologica Anton Dohrn	IT
3	University of Kalmar	SE
4	Instituto Español de Oceanografía	ES
5	National University of Ireland, Galway	IE
6	University of Oslo	NO
7	University of Westminster	UK
8	Toxispot A/S	DK
9	Instituto Tecnolóxico para o Control do Medio Mariño de Galicia	ES
10	University of Rhode Island	US

Activity Code: ENV.2008.3.3.1.1. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Risk-based management of chemicals and products in a circular economy at a global scale

Proposed EC Grant: 996.324 €

Abstract:

Many potentially hazardous compounds are traded as chemicals or incorporated as additives in products. Their release to the environment has been a concern of EC, UNO, WHO and OECD. The discussion of the assessment and management of chemicals and products led to the OECD program Globally Harmonised System of Classification and Labelling of Chemicals (GHS). The World Summit encouraged countries to implement GHS with a view of having the system operating by 2008. The need to form GHS on a global scale is part of EU policy. GHS aims to have the same criteria worldwide to classify the responsible trade and handling of chemicals and at the same time protect human health. The EU will ensure transition from the current EU Classification & Labelling (C+L) to the GHS which harmonizes with REACH. Countries like Japan and the USA announced to implement GHS in the near future. UNITAR supports other countries. However, a complete picture on the global state of implementation is not available. With the growing level of worldwide trade we however face unsafe products on the marked. Only last year reports about toys releasing hazardous components made it to headlines. Vietnam reported that all kind of plastic gets recycled and sold back to the market. This shows that global trade in a circular economy is not acceptable without globally agreed assessment methods and harmonised C+L. A ECB study revealed that the EU regulation REACH will require 3.9 mill. additional test animals if no alternative methods are accepted. The number of additional tests are unknown when GHS is implemented in a global scale. The CA RISKCYCLE will include experts from OECD, UNEP, SusChem, country experts from Asia, America and Europe. The overall objective of the project is to define with international experts future needs of R+D contributions for innovations in the field of risk-based management of chemicals and products in a global perspective using alternative testing strategies to minimize animal tests.

Partners:

N	Partner Legal Name	Country
1	Technische Universität Dresden	DE
2	Consejo Superior de Investigaciones Científicas	ES
3	Istituto di Ricerche Farmacologiche Mario Negri	IT
4	UNIVERSITAT POLITÈCNICA DE CATALUNYA	ES
5	Universiteit Leiden, CML-Institute of Environmental Sciences	NL
6	IVL Swedish Environmental Research Institute	SE
7	UNIVERSITAT ROVIRA I VIRGILI	ES
8	TuTech Innovation GmbH	DE
9	Università Cattolica del Sacro Cuore	IT
10	Technical University of Denmark	DK
11	Bureau de recherches geologiques et minieres	FR
12	Federal University of Rio de Janeiro / COPPE / GETRES	BR
13	Shenyang Institute of Aeronautical Engineering	CN
14	The Energy and Resources Institute, Registration No S 7159 with Government of Delhi, India	IN
15	Hanoi University of Science, Vietnam National University, Hanoi	VN
16	Ankara University, Faculty of Engineering	TR

Activity Code: ENV.2009.3.3.1.1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: CHEMICAL SUBSTANCE IN VITRO/IN SILICO SCREENING SYSTEM TO PREDICT HUMAN- AND ECOTOXICOLOGICAL EFFECTS

Proposed EC Grant: 3.496.723 €

Abstract:

The current system of risk assessment of chemicals is complex, very resource-intensive and extremely time-consuming. Because of this, there is a great need to modernize this process. However, this is not feasible without alternative, integrated testing strategies in which chemical characteristics are used to more advantage and where costly and time consuming animal tests are replaced to a large extent by more rapid, cheap and ethically less controversial methods. This is particularly needed for reproductive toxicity testing of chemical. Reproductive toxicity is important to assess both human and environmental toxicity and uses the most animals in toxicity testing. Unfortunately, there are very few alternative methods. We aim to fill this gap and place the tests in a more general innovative animal free testing strategy. For this, we will generate a simple rapid screening system, which aims at widespread implementation within the tight time schedule of the REACH program. It will be a flexible tool that can be adapted and used for applications beyond the scope of REACH and in the post-REACH period. It will use in silico methods for prescreening chemicals for all relevant toxic effects. When found positive, this will be followed by further in silico and in vitro tests, most of which are available already. To fill the gap of suitable alternative methods for reproductive toxicity testing we will use a novel high throughput approach combining in silico/in vitro methods. In this approach we will combine knowledge of critical processes affected by reproductive toxicants with knowledge on the mechanistic basis of such effects. Straight forward data interpretation and decision trees will be developed in which all information on the potential toxicity of a chemical is considered. In this way we will provide a cost-effective means to generate a basic set of data on toxicological properties of chemicals and a decision tool to assess if further testing of chemicals is required.

Partners:

N	Partner Legal Name	Country
1	BioDetection Systems B.V.	NL
2	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
3	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK	NL
4	SIMPPLE S.L.	ES
5	RIJKSINSTITUUT VOOR VOLKSGEZONDHEID EN MILIEU	NL
6	Technical University of Denmark	DK
7	PROCTER AND GAMBLE INTERNATIONAL OPERATIONS S.A.	CH
8	EBERHARD KARLS UNIVERSITAET TUEBINGEN	DE
9	Universität Konstanz	DE

Activity Code: ENV.2010.3.3.1-1 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: EUROPEAN NETWORK FOR ALTERNATIVE TESTING STRATEGIES IN ECOTOXICOLOGY

Proposed EC Grant: 994.387 €

Abstract:

EUROECOTOX is a Coordinating Action which aims at supporting and accelerating the development and use of alternative ecotoxicology methods and strategies in Europe in order to reduce or replace the use of laboratory animals, particularly those used for regulatory testing. For this, a network will be created (EUROECOTOX network) formed by European R&D groups from universities, public research institutions, animal welfare organizations, specialized ecotoxicological laboratories, industry and other stakeholders, developing alternative test methods. EUROECOTOX network will promote the cooperation between research centres, industry and other stakeholders in Europe devoted to the R&D and application of alternative ecotoxicity methods. It will aim at the integration of efforts and the exchange of knowledge, data and expertise between partners to accelerate the R&D, and validation of new methods. Planned activities includes: Mapping of European research capacities on alternative ecotoxicological test methods, identification of the rate-limiting steps to reduce or replace the use of animals, identification and promotion of new alternative methods, recommendations for future research, promotion of the dialogue with validation agencies and other coordination and networking activities. Elaboration of different documents and publications and launching a dedicated website is also planned. A final Conference open to all the stakeholders, will be organized to disseminate the results. Networking with ongoing activities of other European projects supporting R&D on alternative methods and with other relevant international, European and national R&D and initiatives is also expected.This Coordinating Action will be carried out by a consortium composed by eight partners with complementary background and it is expected to last two years, but the EUROECOTOX network has the objective of prevailing long-term.

Partners:

N	Partner Legal Name	Country
1	ZF BIOLABS SL	ES
2	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
3	EIDGENOESSISCHE ANSTALT FUR WASSERVERSORGUNG ABWASSERREINIGUNG UND GEWAESSERSCHUTZ	CH
4	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE
5	RUPRECHT-KARLS-UNIVERSITAET HEIDELBERG.	DE
6	NOTOX B.V.	NL
7	ECETOC AISBL	BE
8	Masarykova univerzita	CZ

Activity Code: ENV.2008.3.3.2.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Development and application of standardized methodology for the PROspective SUstaInability assessment of TEchnologies

Proposed EC Grant: 4.782.216 €

Abstract:

The main goal of PROSUITE is to develop a framework methodology, operational methods and tools for the sustainability assessment of current and future technologies over their life cycle, applicable to different stages of maturity. The project will apply the methodology for four technology cases with close consultation of the stakeholders involved, which includes cases from biorefineries, nanotechnology, information technologies, and carbon storage and sequestration. PROSUITE will show (i) how to combine technology forecasting methods with life cycle approaches, and (ii) how to develop and possibly combine the economic, environmental and social sustainability dimensions in a standardized, comprehensive, and broadly accepted way. PROSUITE will create a solid research basis for technology characterization, including the identification of decisive technology features, basic engineering modules for estimations of material flows and energy use, and learning curves. For the economic assessment, methods for the assessment for economic and sectoral impacts of novel technologies will be developed and combined with background data for scenario-based life-cycle inventory modelling. For the environmental assessment, state-of-the-art environment indicators will be proposed together with targeted method development for the assessment of geographically explicit land and water use impacts, metal toxicity and outdoor nanoparticle exposure. For the social assessment, a set of quantitative and qualitative social indicators will be selected via participatory approaches, setting the standard for future assessments. The use of various multicriteria assessment methods will be explored to aggegrate across indicators. The methods developed will be part of a decision support system, which will be output as open source modular software.

Partners:

N	Partner Legal Name	Country
1	Universiteit Utrecht	NL
2	Norwegian University of Science and Technology	NO
3	Technical University of Denmark	DK
4	Dialogik gemeinnützige Gesellschaft für Kommunikations- und Kooperationsforschung mbH	DE
5	Foundation of the Faculty of Sciences and Technology - New University of Lisbon	PT
6	Eidgenössische Technische Hochschule Zürich	CH
7	Institut Symlog de France	FR
8	National Institute for Public Heatlh and the Environment	NL
9	Suomen ympäristökeskus	FI
10	Ghent University	BE
11	International Institute for Applied Systems Analysis	AT
12	Institute of Sociology at Hungarian Academy of Sciences	HU
13	Universitat Autònoma de Barcelona	ES
14	PRé Consultants B.V.	NL
15	GreenDeltaTC	DE
16	Foundation for Research and Technology, HELLAS	EL
17	Solvin SA	BE
18	Organic Waste Systems	BE
19	Nokia Corporation	FI
20	TOLSA S.A.	ES
21	HeiQ Materials	CH
22	Paul Scherrer Institut	CH
23	Sony Ericsson Mobile Communications AB	SE
24	DSM Resins B.V.	NL

Activity Code: ENV.2009.3.3.2.1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Development and application of environmental Life Cycle Impact assessment Methods for imProved sustAinability Characterisation of Technologies

Proposed EC Grant: 3.413.950 €

Abstract:

LC-IMPACT is a 3-year project and its main objective is the development and application of life cycle impact assessment methods, characterisation and normalisation factors. Impact from land use, water use, marine, mineral and fossil resource use, ecotoxicity and human toxicity, and a number of non-toxic emission-related impact categories will be considered in LC-IMPACT. First, new impact assessment methods will be developed for categories that are not (commonly) included in life cycle impact assessments and categories for which model uncertainties are very high, i.e. land use, water exploitation, resource use, and noise. Second, LC-IMPACT will provide spatially explicit characterisation factors based on global scale models for land use, water exploitation, toxicants, priority air pollutants, and nutrients. Thirdly, parameter uncertainty and value choices will be assessed for impact categories with high uncertainties involved, such as ecotoxicity and human toxicity. Fourthly, ready-to-use characterisation factors will be calculated and reported. Fifthly, normalisation factors for Europe and the world will be calculated for the impact categories included. Sixthly, the improved decision support of the new characterisation factors and normalisation factors will be demonstrated in the context of the following three case studies: i) food production (fish, tomatoes, margarine), ii) paper production and printing, and iii) automobile manufacturing and operation. Finally, verification and dissemination of the new life cycle impact assessment methods and factors will be done by a portfolio of actions, such as stakeholder consultation, a project website, workshops, course developments, and training of user groups. In short, LC-IMPACT will provide improved, globally applicable life cycle impact assessment methods, characterisation and normalisation factors, that can be readily used in the daily practice of life cycle assessment studies.

Partners:

N	Partner Legal Name	Country
1	RADBOUD UNIVERSITEIT NIJMEGEN - STICHTING KATHOLIEKE UNIVERSITEIT	NL
2	Eidgenössische Technische Hochschule Zürich	CH
3	DANMARKS TEKNISKE UNIVERSITET	DK
4	SIK - INSTITUTET FOER LIVSMEDEL OCH BIOTEKNIK AB	SE
5	PRé Consultants b.v.	NL
6	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
7	UNILEVER UK CENTRAL RESOURCES LIMITED	UK
8	UNIVERSITAET STUTTGART	DE
9	Ecointesys - Life Cycle Systems Sàrl	CH
10	UNIVERSITEIT LEIDEN.	NL
11	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
12	Raw Materials Group RMG AB	SE
13	Grafisk Arbejdsgiverforening	DK
14	Daimler AG Mercedes Benz Werk Rastatt	DE
15	INSTITUT DE RECERCA I TECNOLOGIA AGROALIMENTARIES.	ES

Activity Code: ENV.2010.3.3.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Boosting Life Cycle Assessment Use in European Small and Medium-sized Enterprises: Serving Needs of Innovative Key Sectors with Smart Methods and Tools

Proposed EC Grant: 3.499.802 €

Abstract:

LCA to go develops sectoral methods and tools for bio-based plastics, industrial machinery, electronics, renewable energy, sensors and smart textiles. These sectors have been chosen, as the manufacturers show a high interest in making clear the environmental benefits of their products to customers (Green industries) and in prioritizing so they can reduce their environmental impacts. This is particularly the case for SMEs. Free webtools (apps) will serve dedicated needs of these sectors, addressing the specifics of the technologies and implementing parameterised models, such as calculators for energy-break-even-point of photovoltaics, Product Carbon Footprints (PCF) based on technology parameters of printed circuit boards, and Key Environmental Performance Indicators (KEPIs) for smart textiles. Selected Product Category Rules will be developed to provide a robust LCA guidance for SMEs. Practically, the project website will provide an exchange of scientifically validated data templates, to assist SMEs to pass the right questions to their suppliers. Carbon Footprints are a perfect entry point for SMEs to LCA strategies. Thus, implementation of an SME-compatible PCF methodology is a key element of the project. The approaches will be tested in 7 sectoral case studies, involving suppliers, end-product manufacturers and engineering companies. Inter-linkages between the sectors (on a technical and data level) will be thoroughly addressed. A broad dissemination campaign includes a mentoring programme for 100 SMEs, which will act as showcases for others, boosting use of LCA approaches among European SMEs at large. RTD and dissemination activities will be complemented by policy recommendations and liaison with standardisation activities. The web-tools, being compatible with ILCD data and other external sources, will be made available as open source software, to be adapted to other sectors. The project will have a direct impact on sectors representing nearly 500,000 SMEs.

Partners:

N	Partner Legal Name	Country
1	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
2	Instytut Tele- i Radiotechniczny	PL
3	TECHNISCHE UNIVERSITAET WIEN	AT
4	TECHNISCHE UNIVERSITEIT DELFT	NL
5	SIMPPLE S.L.	ES
6	UNIVERSITY OF WALES INSTITUTE CARDIFF	UK
7	INSTITUTO TECNOLOGICO DEL EMBALAJE, TRANSPORTE Y LOGISTICA	ES
8	SIRRIS ASBL	BE
9	EUSKAL HERRIKO ELEKTRONIKA ETA INFORMAZIO	ES
10	MULTIMEDIA COMPUTER SYSTEM LTD	IE
11	Future Shape GmbH	DE
12	ELDOS Sp. z o.o.	PL
13	TAIPRO Engineering	BE
14	TRAMA TECNOAMBIENTAL S.L.	ES
15	VALSAY S.L.	ES
16	Carl Diver Advanced Manufacturing Consulting	IE
17	Industrial Technology Research Institute	TW
18	United Microelectronics Corporation	TW

Activity Code: ENV.2009.3.3.2.2 **Funding Scheme:** CP **Duration (Months):** 48

Title: Biocommodity refinery

Proposed EC Grant: 13.920.238 €

Abstract:

BIOCORE will create and demonstrate create a lignocellulosic biorefinery for sustainable processing of agricultural residues (wheat and rice straws), SRC wood (poplar) and hardwood forestry residues, into 2G biofuels, bulk chemicals, polymers, speciality molecules, heat and power. To reach this overall objective, BIOCORE will: 1) Describe how a mixed lignocellulosic feedstock-based biorefinery can be supplied with biomass, taking into account biomass handling, feedstock variability and seasonality. Biomass provisioning scenarios will be described for several different local contexts (Europe and Asia); 2) Adapt and streamline a patented organosolv technology for targeted biorefining of BIOCORE feedstocks and develop all necessary processing steps (including enzymatic hydrolysis and physico-chemical operations) to produce high quality cellulose, polymeric and oligomeric hemicellulose-derivatives, high quality lignins, heat and power from process residues; 3) Develop multiple product manufacturing pipelines using a combination of advanced biotechnologies, chemical catalysis and thermochemical processes for the production of building block chemicals and polymers for bulk markets from sugars and lignins; 4) Design a complete biorefinery concept that will describe the alternative product manufacturing pathways. This will be achieved by developing integrated flowsheets and process designs that include all of the operational units, supply chain models, and economic factors; 5) Demonstrate the performance of the biorefinery through an integrated approach, producing industrial scale pilots for the biorefinery complexes that are closer to the market; 6) Assess the environmental, economic and social sustainability of the biorefinery concept considering the entire value chain; 7) Ensure efficient technology transfer to the energy sector, chemical and biotech industries, agro and forestry sectors, and the general public and policy makers

Partners:

N	Partner Legal Name	Country
1	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
2	VALTION TEKNILLINEN TUTKIMUSKESKUS	FI
3	STICHTING ENERGIEONDERZOEK CENTRUM NEDERLAND	NL
4	Compagnie Industrielle de la Matière Végétale	FR
5	CHIMAR HELLAS AE	EL
6	ARKEMA FRANCE SA	FR
7	NATIONAL TECHNICAL UNIVERSITY OF ATHENS	EL
8	ifeu - Institut fuer Energie- und Umweltforschung Heidelberg Gmbh	DE
9	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
10	SYRAL S.A.S.	FR
11	SYNPO, akciová spolecnost	CZ
12	AGROTECHNOLOGY AND FOOD INNOVATIONS BV	NL
13	CHALMERS TEKNISKA HOEGSKOLA AB	SE
14	LATVIJAS VALSTS KOKSNES KIMIJAS INSTITUTS	LV
15	INRA TRANSFERT S.A.	FR
16	THE ENERGY AND RESOURCES INSTITUTE	IN
17	OY KESKUSLABORATORIO - CENTRALLABORATORIUM AB	FI
18	Capax environmental services	BE
19	Koninklijke DSM N.V.	NL
20	nova-Institut GmbH	DE
21	Institut für Umweltstudien - Weibel & Ness GmbH	DE
22	SOLAGRO ASSOCIATION	FR
23	IMPERIAL COLLEGE OF SCIENCE, TECHNOLOGY AND MEDICINE	UK
24	SZENT ISTVAN EGYETEM	HU
25	Tarkett SA	FR

Activity Code: ENV.2009.3.3.2.2 **Funding Scheme:** CP **Duration (Months):** 48

Title: EUROpean multilevel integrated BIOREFinery design for sustainable biomass processing

Proposed EC Grant: 21.474.836 €

Abstract:

The development and implementation of bio-refinery processes is an absolute necessity and the key to meet the vision towards bio-based economy. The EuroBioRef concept is an integrated, sustainable and diversified bio-refinery involving all biomass value chain stakeholders. The latter will allow large-scale research, testing, optimisation and demonstration of processes in the production of a wide range of products with the dual aim to use all fractions of various biomasses and exploit their potential to produce the highest value possible in an eco-efficient and sustainable way. Moreover, the project attempts to overcome the efforts fragmentation of the whole biomass value chain requiring greater networking, coordination and cooperation among a large variety of actors from biochemical and chemical industry, SMEs, scientific knowledge chain, and European organisations. The new concept will adopt a flexible and a modular process design adapted to large- but also small-scale production units easier to install in various European areas. The overall efficiency of this approach will clearly exceed existing pathways and will consider sustainable options in order to:- Produce and use a high diversity of sustainable biomasses adapted for European regions - Produce high specific energy bio-jet fuels (42 MJ/kg) - Produce multiple products (chemicals, polymers, materials) in a flexible and optimised way that take advantage of the differences in biomass components and intermediates- Improve cost-efficiency by 30% through improved reaction and separation effectiveness, reduced capital investments, improved plant and feedstock flexibility, reduction of production time and logistics- Reduce by 30% the energy - Produce zero waste and rationalise use of raw materialsThe impact of the project in terms of environment, social and economic benefits is important and could give a serious advantage for European bio-industry.

Partners:

N	Partner Legal Name	Country
1	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
2	ARKEMA France	FR
3	BORREGAARD INDUSTRIES LIMITED	NO
4	Novozymes A/S	DK
5	METABOLIC EXPLORER SA	FR
6	Center for Renewable Energy Sources	EL
7	Haldor Topsøe A/S	DK
8	Institute for Solid Fuels and Applications / Centre of Research and Technology	EL
9	Process Design Center GmbH	DE
10	ECOINT - Life cycle systems	CH
11	European Biomass Industry Association	BE
12	Danish Technological Institute	DK
13	TECHNISCHE UNIVERSITAET DORTMUND	DE
14	Merck KGaA	DE
15	Faculdade de Engenharia da Universidade do Porto	PT
16	Rheinisch-Westfälische Technische Hochschule Aachen	DE
17	Consorzio Interuniversitario per la Reattività Chimica e la Catalisi	IT
18	Wytwornia Sprzeto Komunikacyjnego "PZL-Rzeszow" S.A.	PL
19	Osrodek Badawczo-Rozwojowy Przemyslu Rafineryjnego Spólka Akcyjna (Research & Development Centre for Petroleum Industry S.A.)	PL
20	STIFTELSEN SINTEF	NO
21	Société Agricole de Befandriana-Sud & Partners Sarl	MG
22	UMICORE AG & CO KG	DE
23	Nykomb Synergetics AB	SE
24	ALMA CONSULTING GROUP SAS	FR
25	ORGACHIM JSC	BG
26	Imperial College for Science, Technology and Medicine	UK
27	Oleon NV	BE

28	UNIWERSYTET WARMINSKO- MAZURSKI W OLSZTYNIE	PL

Activity Code: ENV.2009.3.3.2.2 **Funding Scheme:** CP **Duration (Months):** 48

Title: Sustainable products from economic processing of biomass in highly integrated biorefineries

Proposed EC Grant: 12.597.217 €

Abstract:

Economic and sustainable production of fuels, chemicals and materials from biomass requires capture of the maximum energy and monetary value from sustainable feedstock. SUPRA-BIO achieves this by focussing on innovative research and development of critical unit operations, by using process intensification to match economic production to the scale of available feedstock and by process integration that provides energy from process waste, optimises utilities to minimise environmental impact and maximises value from the product mix. A technology toolbox for conversion and separation operations is developed that adapts to various scenarios of product mix and feedstock. These are contextualized by full life cycle and economic analysis of potential biorefinery schemes. Based on lignocellulose, microbial/organic waste or microalgae feedstock, innovation and intensification are used to improve the economics and carbon efficiency of fractionation, separation, bio and thermochemical conversions to produce biofuels, intermediates and high value products. Strain selection, genetic manipulation, molecular design and nanocatalysis are used to improve productivity and selectivity; reactor design, intensification and utilities integration for economics. Fermentation to 2,3 butanediol is demonstrated. Mono and multiculture processes are researched for high value products and feedstock streams. Separation is developed for omega oils and specific lignochemicals. Nano and biocatalytic processes are developed for biofuels and bioactive molecules. Integration into potential biorefinery schemes is explored in laboratory pilots of integrated reactors, by piloting on sidestreams, by exchanging separated fractions between partners and by process evaluations. The project includes all the scientific, engineering and industrial skills required to produce the step changes required for biorefineries to impact significantly on realising the aims of the European Strategic Energy Technology Plan

Partners:

N	Partner Legal Name	Country
1	THE CHANCELLOR, MASTERS AND SCHOLARS OF THE UNIVERSITY OF OXFORD	UK
2	Borregaard Industrial. Ltd	NO
3	Vattenfall Europe Business Services GmbH	DE
4	United Utilities PLC	UK
5	StatoilHydro Petroleum AS	NO
6	BioGasol ApS	DK
7	B.T.G. BIOMASS TECHNOLOGY GROUP BV	NL
8	GRANIT RECHERCHE DEVELOPPEMENT SA	CH
9	Institut für Mikrotechnik Mainz GmbH	DE
10	ifeu - Institut fuer Energie- und Umweltforschung Heidelberg Gmbh	DE
11	Algetech Industrier AS	NO
12	AALBORG UNIVERSITET	DK
13	THE UNIVERSITY OF MANCHESTER	UK
14	Institut für Umweltstudien	DE
15	Stiftelsen Energitekniskt Centrum i Piteå	SE
16	International Lignin Institute	CH

Activity Code: ENV.2009.3.3.2.2 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Strategic Targets for 2020 - Collaboration Initiative on Biorefineries

Proposed EC Grant: 1.961.439 €

Abstract:

For the first time in Europe a real critical mass along the whole value-chain, and in all aspects of the biorefinery concept, will be achieved by the close collaboration of five industry-driven European Technology Platforms, five excellent research partners with complementary expertise, and the International Civil Society Organisation IUCN, who will validate the impact on the global sustainability of the results.The collaboration in this Coordination and Support Action is called Star-COLIBRI, and its main objectives are to promote coordination and work to overcome fragmentation in the field of biorefineries research; to facilitate information exchange and cross-fertilization; to support break-through innovations by speeding up and facilitate industrial exploitation of research results.The Star-COLIBRI project will accomplish these targets by working in two parallel but mutually dependant processes: The first process has longer term objectives and it will provide a framework for collaborations and information exchange, common vision and a roadmap for 2020. It will also directly contribute to policy initiatives such as the European Lead Market Initiative on Bio-Based Products. The second process has shorter term objectives and aims to the immediate support and coordination of ongoing biorefinery research projects with potential high impact. The new strategy developed for this is called StarClustering. Better coordination of national research funding through an ERA-Net Liaisons Office will also be achieved.

Partners:

N	Partner Legal Name	Country
1	European Confederation of Woodworking Industries aisbl	BE
2	EUROPESE ORGANISATIE VOOR WETENSCHAPPELIJK PLANTENONDERZOEK E.P.S.O. IVZW	BE
3	EUROPABIO - The European Association of Bionindustries	BE
4	Fachagentur Nachwachsende Rohstoffe e.V.	DE
5	TECHNISCHE UNIVERSITAET DRESDEN	DE
6	UNIVERSITY OF YORK	UK
7	VALTION TEKNILLINEN TUTKIMUSKESKUS	FI
8	ASSOCIATION INDUSTRIES ET AGRORESSOURCES	FR
9	Agrotechnology and Food Innovations B.V.	NL
10	IUCN Regional Office for Europe (IUCN ROFE AISBL)	BE
11	DBFZ Deutsches BiomasseForschungsZentrum	DE

Activity Code: ENV.2008.3.3.3.1. **Funding Scheme:** CSA-CA **Duration (Months):** 42

Title: Coordination action on Environmental Technology Verification ETV - Building a framework for international cooperation

Proposed EC Grant: 998.899 €

Abstract:

AdvanceETV aims to demonstrate that the proposed schemes and protocols for Environmental Technologies Verification systems have the potential to be recognised internationally. Thus the main objective is to develop an international framework for cooperation and mutual recognition by supporting the cooperation of international ETV activities, e.g the International Working Group (IWG). This requires support by joint coordination activities:(I) Providing a European basis for mutual recognition (II) Coordinating requirements for co-verification and joint verification(III) Developing a framework for international harmonizationThe European basis will be elaborated through integrating previous and on-going European RTD. This is done by bringing together protocols/verification reports out of the FP6 projects, consolidating stakeholder feedback of RTD and EC activities and by integrating experiences out of the CEN workshop agreement (CWA) elaboration and use. To raise awareness on gaps and overlaps of international cooperation a case study workshop on co- and joint verification will be initiated together with U.S. and Canadian partners. To foster recognition by harmonisation a standardisation framework will be identified to prepare the initiation of a standardisation procedure. Cross cutting issue workshops ensure feedback and exchange between these different areas. To bring forward mutual recognition, to support cooperation by co-/joint verification and harmonisation requires a strong link to international ETV activities and the IWG on ETV. A confirmed expert board with ETV system representatives from Canada, U.S., South Korea, Japan and others provides the direct link here.This concept supports the working structure of the CA: focused on a series of conferences, coordinated with international ETV activities, serving as a platform for incremental consolidation of the international framework.

Partners:

N	Partner Legal Name	Country
1	DECHEMA Gesellschaft fuer Chemische Technik und Biotechnologie	DE
2	IVL Swedish Environmental Research Institute Ltd	SE
3	DHI	DK
4	Commission of the European Communities - Joint Research Centre - Institute for Prospective Technological Studies	BE
5	Sachverstaendigen-Buero Dr. Thomas Ertel	DE
6	Fundacion labein	ES
7	Environment Agency	UK
8	STICHTING DELTARES	NL
9	Instytut Ekologii Terenów Uprzemyslowionych	PL
10	Ontario Centre For Environmental Technology Advancement	CA
11	Battelle Memorial Institute	US
12	Comite Europeen de Normalisation	BE

Activity Code: ENV.2007.4.1.1.1. **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Coordination Action Carbon Observation System

Proposed EC Grant: 1.747.683 €

Abstract:

COCOS will assess the status of harmonization of key carbon cycle variables with international partners. It will improve the interoperability of data sets that are used in global scale carbon cycle studies through joint activities between ecosystem, atmospheric and ocean bottom-up and top down observation communities. COCOS will also perform integrated regional-scale multiple constraint assessments of the land and ocean carbon balance through the use of harmonized data sets. It will identify, narrow down uncertainties and decrease differences in emerging global data sets that are aimed at providing constraints on the vulnerability of the global carbon cycle.COCOS will thus contribute to the implementation and improvement of global observing systems. It will organize a large international conference to demonstrate the status and way ahead of global carbon observations in light of monitoring requirements for GEO and the implementation of future climate change mitigation commitments. As such, it will contribute to an effective monitoring of the carbon cycle at global level as recommended by GEO and GCOS in supporting the European participation to an international CO2 research monitoring project. The research and harmonization work developed in this proposal will contribute significantly to building an integrated global approach that promotes close collaboration with the international carbon cycle research community.

Partners:

N	Partner Legal Name	Country
1	Vrije Universiteit, independent entity of “Vereniging voor christelijk hoger onderwijs, wetenschappelijk onderzoek en patiëntenzorg	NL
2	Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.	DE
3	Universitetet i Bergen	NO
4	UNIVERSITÀ DEGLI STUDI DELLA TUSCIA	IT
5	Leibniz-Institut für Meereswissenschaften an der Universität Kiel	DE
6	University of Liège	BE
7	Commissariat à l’Energie Atomique	FR
8	Alfred-Wegener-Institut für Polar- und Meeresforschung	DE
9	University of East Anglia	UK
10	Food and Agriculture Organization of the United Nations	IT
11	UNITED NATIONS EDUCATIONAL SCIENTIFIC AND CULTURAL ORGANIZATION	FR
12	Commissariat à l’Energie Atomique	FR

Activity Code: ENV.2008.4.1.1.1. **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: European approach to GEOSS

Proposed EC Grant: 6.052.122 €

Abstract:

EuroGEOSS demonstrates the added value to the scientific community and society of making existing systems and applications interoperable and used within the GEOSS and INSPIRE frameworks. The project will build an initial operating capacity for a European Environment Earth Observation System in the three strategic areas of Drought, Forestry and Biodiversity. It will then undertakes the research necessary to develop this further into and advanced operating capacity that provides access not just to data but also to analytical models made understandable and useable by scientists from different disciplinary domains. This concept of inter-disciplinary interoperability requires research in advanced modelling from multi-scale heterogeneous data sources, expressing models as workflows of geo-processing components reusable by other communities, and ability to use natural language to interface with the models. The extension of INSPIRE and GEOSS components with concepts emerging in the Web 2.0 communities in respect to user interactions and resource discovery, also supports the wider engagement of the scientific community with GEOSS as a powerful means to improve the scientific understanding of the complex mechanisms driving the changes that affect our planet.

Partners:

N	Partner Legal Name	Country
1	Bureau de Recherches Geologiques et Minieres	FR
2	European Community represented by the EUropean Commission - Directorate General Joint Research Centre	BE
3	Consiglio Nazionale delle Ricerche	IT
4	International Institute for Applied Systems Analysis	AT
5	UNIVERSITAT JAUME I DE CASTELLON	ES
6	The University of Nottingham	UK
7	Centro Nacional de Información Geográfica	ES
8	The Institute of Electrical and Electronics Engineering Incorporated	US
9	EMPRESA DE SERVIÇOS E DESENVOLVIMENTO DE SOFTWARE, S.A.	PT
10	Food and Agriculture Organization of the United Nations	IT
11	Observatorio de la Sostenibilidad de España	ES
12	Univerza v Ljubljani, Biotehniška fakulteta	SI
13	Global Biodiversity Information Facility Secretariat	DK
14	WCMC 2000	UK
15	Royal Society for the Protection of Birds	UK
16	Birdlife International	UK
17	University of Hamburg	DE
18	Universitaet fuer Bodenkultur Wien	AT
19	Albert-Ludwigs-University Freiburg	DE
20	UNIVERSIDAD DE ZARAGOZA	ES
21	Confederación Hidrográfica del Ebro	ES
22	Consejo Superior de Investigaciones Científicas	ES
23	U.S. National Drought Mitigation Center	US

Activity Code: ENV.2010.4.1.1-1 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Coordinating Earth and Environmental cross-disciplinary projects to promote GEOSS

Proposed EC Grant: 994.657 €

Abstract:

EGIDA will prepare a sustainable process promoting coordination of activities carried out by: the GEO Science & Technology (S&T) Committee; S&T national and European initiatives; and other S&T Communities. This will be done by supporting broader implementation and effectiveness of the GEOSS S&T Roadmap and the GEOSS mission through coherent and interoperable networking of National and European projects, and international initiatives. EGIDA will deliver evaluation processes, tests and assessment indexes, expertise databases, a “GEO Label” concept, surveys, and other instruments that will link relevant European S&T communities to GEOSS and ensure it is built using state-of-the-art science and technology. Through co-ordination with the GEOSS S&T Committee (five co-chairs are involved in EGIDA), these deliverables will contribute strongly to the GEO S&T Roadmap implementation.For European countries, EGIDA will deliver the EGIDA Methodology, a sustainable mechanism based on the GEO S&T approach at national and regional level, to coordinate national multi-disciplinary “System of Systems”. This builds on existing national initiatives and European projects, and facilitates the European S&T Community contributions to and interactions with GEOSS. The EGIDA Methodology will improve development and management of S&T infrastructures (i.e. sensors, data, processing services, and environmental modelling infrastructures), supporting mobilization of the resources needed to contribute effectively to GEOSS.EGIDA will involve developing countries by transferring the EGIDA S&T methodology to them and implementing three specific use cases: two regional use-cases (Balkan region, Mediterranean region) and a pan-European thematic use-case (Air Quality and Health). EGIDA will be embedded within a wide Network of Stakeholders selected to represent the various actors (science teams and institutions, S&T programmes, GEO components) and the scientific fields relevant to the nine GEOSS SBAs.

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	SECTION FRANCAISE DE L'INSTITUT DES INGENIEURS ELECTRICIENS ET ELECTRONICIENS	FR
3	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
4	Istituto Superiore per la Protezione e la Ricerca Ambientale	IT
5	NORSK INSTITUTT FOR LUFTFORSKNING	NO
6	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
7	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
8	IVL SVENSKA MILJOEINSTITUTET AB	SE
9	INSTITUT JOZEF STEFAN	SI
10	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
11	Bente Lilja Bye	NO
12	DANMARKS METEOROLOGISKE INSTITUT	DK
13	CENTRO DE INVESTIGACION ECOLOGICA YAPLICACIONES FORESTALES	ES

Activity Code: ENV.2007.4.1.1.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: European Biodiversity Observation Network; a project to design and test a biodiversity observation system integrated in time and space

Proposed EC Grant: 2.701.987 €

Abstract:

The key challenge addressed in the present proposal is to develop a biodiversity observation system that is transmissible, cost effective and provides added value to the currently independent data sources of in situ data and EO. There are three requirements: the production of protocols to enable extant data to be placed on a common framework for analysis; the provision of a sound scientific conceptual basis for the system that will provide a robust statistical structure for analytical tests and for the eventual estimates of stock and change and the provision of a system for estimating past change and monitoring as well as enabling forecasting of future options so that policy makers can generate appropriate strategies for mitigation.The present consortium has a major advantage in that the framework is based on existing institutional collaboration which has been developed in the EU project ALTERNET. This framework will ensure continuity of recording and shows an existing commitments of the institutes concerned to long term monitoring. It will also provide the necessary structure for integration of available data.. This network already has long term data sets for biodiversity indicators eg butterflies and birds but the ambition is to convert these from site specific measures through inter-calibration to the wider European picture, using tried and tested statistical procedures. The key work package will involve inter-calibration between EO and in situ data,which will involve habitats that can be linked to specific biodiversity indicators. These will be identified using a conceptual framework developed in another work package. The target is to provide a basis for up and down scaling that can be tested to show the added value of integration. Other work packages will provide protocols to place data onto a common framework tests of validation and stratification procedures for assessing the consistency of data coverage. A further work package will provide a

Partners:

N	Partner Legal Name	Country
1	Alterra Wageningen UR	NL
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	Helmholtz-Centre for Environmental Research - UFZ	DE
4	European Community represented by the European Commission – Directorate General Joint Research Centre	BE
5	Umweltbundesamt GmbH	AT
6	University of Bucharest	RO
7	Centre d'Etude du Machinisme Agricole et du Génie Rural des Eaux et Forêts	FR
8	RESEARCH INSTITUTE FOR NATURE AND FOREST	BE
9	The University of Edinburgh	UK
10	Israel Nature and Parks Authority	IL
11	Stiftelsen Norsk institutt for naturforskning	NO
12	Institute of Landscape Ecology of the Slovak Academy of Sciences	SK
13	Aristotle University of Thessaloniki	EL
14	Eesti Maaülikool	EE
15	Universidad Politecnica de Madrid	ES
16	University of Stellenbosch, Dept. of Botany & Zoology	ZA
17	Sveriges Lantbruksuniversitet	SE

Activity Code: ENV.2008.4.1.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: In situ monitoring of oxygen depletion in hypoxic ecosystems of coastal and open seas, and land-locked water bodies

Proposed EC Grant: 3.499.712 €

Abstract:

Hypoxic (low oxygen) conditions in aquatic ecosystems increase in number, duration and extent due to global warming and eutrophication. Global warming will lead to degassing of oxygen, increased stratification, reduced deep-water circulation and changes in wind patterns affecting transport and mixing. Projected increases in hypoxia (e.g. doubling of “dead zones”) are accompanied by enhanced emission of greenhouse gases, losses in biodiversity, ecosystem functions and services such as fisheries, aquaculture and tourism. A better understanding of global changes in oxygen depletion requires a global observation system continuously monitoring oxygen at high resolution, including assessment of the role of the seafloor in controlling the sensitivity of aquatic systems to and recovery from hypoxia. Here we propose to monitor oxygen depletion and associated processes in aquatic systems that differ in oxygen status or sensitivity towards change: open ocean, oxic with high sensitivity to global warming (Arctic), semi-enclosed with permanent anoxia (Black Sea, Baltic Sea) and seasonally or locally anoxic land-locked systems (fjords, lagoons, lakes) subject to eutrophication. We will improve the capacity to monitor oxygen depletion globally, by implementing reliable long-term sensors to different platforms for in situ monitoring; and locally by training and implementing competence around the Black Sea. Our work will contribute to GEOSS tasks in the water, climate, ecosystem and biodiversity work plans, and comply to GEOSS standards by sharing of observations and products with common standards and adaptation to user needs using a state of the art world data centre. We will connect this project to the GOOS Regional Alliances and the SCOR working group and disseminate our knowledge to local, regional and global organisations concerned with water and ecosystem health and management.

Partners:

N	Partner Legal Name	Country
1	Max-Planck Gesellschaft zur Foerderung der Wissenschaften e.V.	DE
2	Alfred Wegener Institut für Polar- und Meeresforschung	DE
3	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
4	Institute of Biology of the Southern Seas	UA
5	Leibniz-Institut für Meereswissenschaften	DE
6	Institut Francais de Recherche pour L'Exploitation de la Mer	FR
7	Istituto Nazionale di Geofisica e Vulcanologia	IT
8	Leibnitz Institute for Baltic Sea Research	DE
9	Istanbul Teknik Universitesi	TR
10	Universität Bremen	DE
11	Scottish Association of Marine Science	UK
12	Göteborgs Universitet	SE
13	University of Patras	EL
14	GKSS-Forschungszentrum Geesthacht GmbH	DE
15	National Institute of Marine Geology and Geo-ecology	RO
16	Koninklijke Nederlandse Akademie van Wetenschappen (Royal Netherlands Academy of Arts and Sciences)	NL

Activity Code: ENV.2009.4.1.2.1 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: Improving coordination, visibility and impact of European GEOSS contributions by establishing a EUropean GEoss NEtwork (EUGENE)

Proposed EC Grant: 735.060 €

Abstract:

Coordinated European contributions to GEO and GEOSS at all levels are key to making GEOSS a success for Europe, its States and its Organisations. There is consensus within the European GEO community that visibility and impact of European GEO contributions should be reinforced, mainly by improved coordination. The ultimate goals is to develop an adequate European GEO component that reflects the excellence and importance of European Earth Observation capabilities as well as the European needs from GEOSS. The EUGENE project, with a series of workshops and other activities, will lead to a more strategic and structured European GEO component and to a higher level of visibility and involvement of the political level. In the short term, EUGENE will yield concrete contributions to the next GEO Ministerial summit in 2010. This will intensify the global impact of European GEO activities and facilitate international networking. EUGENE will mainly, but not exclusively, address the major relevant European Organisations and Programmes in the field of earth observation, with regard and complementary to GMES, INSPIRE and FP7 GEO projects.

Partners:

N	Partner Legal Name	Country
1	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
2	THE EUROPEAN ORGANISATION FOR THE EXPLOITATION OF METEOROLOGICAL SATELLITES	DE
3	Bundesanstalt für Gewässerkunde	DE

Activity Code: ENV.2010.4.1.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: European Re-Analysis of global CLIMate observations

Proposed EC Grant: 3.499.607 €

Abstract:

ERA-CLIM will develop observational datasets suitable for global climate studies, with a focus on the past 100 years. These datasets will include atmospheric, oceanic, and terrestrial observations from a variety of sources, high-resolution global reanalysis products of the observations, and associated data quality information needed for climate applications. The project will use existing climate data records and make a substantial contribution to filling known gaps in these records. Proposed data recovery efforts will focus on upper-air observations made in the first half of the 20th century, as well as near-surface observations of wind and humidity, in all regions of the globe.A specific goal for the project is to improve the quality and consistency of climate observations through reanalysis. Together with other in-situ and remote-sensing datasets available from existing data archives, the observations collected for ERA-CLIM will be included in a newly developed Observation Feedback Archive. Quality feedback information for this archive, including data departures and bias estimates, will be generated during several new pilot reanalyses, as well as from existing reanalysis datasets. The pilot reanalyses and the Observation Feedback Archive will be made available to users world-wide as a unique resource for climate research and observational studies of the Earth system.

Partners:

N	Partner Legal Name	Country
1	EUROPEAN CENTRE FOR MEDIUM-RANGE WEATHER FORECASTS	UK
2	MET OFFICE	UK
3	UNIVERSITAET WIEN	AT
4	UNIVERSITAET BERN	CH
5	ALL-RUSSIAN RESEARCH INSTITUTE OF HYDROMETEOROLOGICAL INFORMATION-WORLD DATA CENTRE	RU
6	FUNDACAO DA FACULDADE DE CIENCIAS DA UNIVERSIDADE DE LISBOA	PT
7	THE EUROPEAN ORGANISATION FOR THE EXPLOITATION OF METEOROLOGICAL SATELLITES	DE
8	METEO-FRANCE	FR
9	Dirección Meteorológica de Chile	CL

Activity Code: ENV.2010.4.1.2-2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: QUAlity aware VIsualisation for the Global Earth Observation system of systems

Proposed EC Grant: 3.266.804 €

Abstract:

The GEOSS Common Infrastructure provides clearinghouses and portals that allow discovery and visualisation of data in an integrated way. GEOVIQUA will extend the GEOSS infrastructure by adding well-defined data quality indicators and quality-enabled search and visualisation tools. These GEOVIQUA components will be implemented so they can be accessed based on existing geo-portal standards and in the mass market "Google-like" map tools and other 3D viewers, as well as on mobile devices. The design and development of GEOVIQUA components will be undertaken in collaboration with the relevant GEO committees, the Open Geospatial Consortium Architecture Implementation Pilots and other relevant standards committees.Data quality will be extracted from metadata, from provenance information, from the reference data, from validation with in-situ sensors and from expert user comments. Existing quality standards will be used or extended to formalise the quality indicators and provenance in line with the Quality Assurance for Earth Observation (QA4EO) framework and taken forward into the standardisation process.

Graphical representation of metadata will allow users to easily screen data. Search functions will be augmented using quality indicators and search results will be able to be ranked by quality indicator. The work will contribute to a GEO S&T label increasing user trust in GEO product quality.Components will be developed to visualise data and associated quality information on GEO portals using different strategies. Work will link quality indicators and data in web map services and “Google like” tools, and make these available on mobile devices.Several pilot case studies ranging from local to global scales concerning many key Societal Benefit Areas will be used to motivate and validate the GEOVIQUA developments. The Global Carbon Project and the European Space Agency will link GEOVIQUA to the Communities of Practices in GEO, disseminating the results widely.

Partners:

N	Partner Legal Name	Country
1	CENTRO DE INVESTIGACION ECOLOGICA YAPLICACIONES FORESTALES	ES
2	UNIVERSITAT AUTONOMA DE BARCELONA	ES
3	52°North Initiative for Geospatial Open Source Software GmbH	DE
4	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
5	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
6	ASTON UNIVERSITY	UK
7	THE UNIVERSITY OF READING	UK
8	COMMISSARIAT A L' ENERGIE ATOMIQUE	FR
9	EUROPEAN SPACE AGENCY	FR
10	SCIENCE AND TECHNOLOGY B.V.	NL

Activity Code: ENV.2008.4.1.3.1. **Funding Scheme:** CP-IP **Duration (Months):** 48

Title: Energy Observation for monitoring and assessment of the environmental impact of energy use

Proposed EC Grant: 6.011.000 €

Abstract:

The main objective of the EnerGEO project is to develop a strategy for a global assessment of the current and future impact of the exploitation of energy resources on the environment and ecosystems and to demonstrate this strategy for a variety of energy resources worldwide.The global observation strategy will be developed to appropriately assess the impacts of current and future transitions in energy-use on the environment by a combination of:• models already available for the different sources of energ: TASES, REMIX and MESSAGE• existing global datasets from which environmental indicators will be derived to quantify changes to freshwater systems, biosphere, ecosystems, atmosphere and oceans. • existing and currently developed models capable of assessing and forecasting environmental impacts and costs of energy exploitation.By developing a distributed system based on the recommendations of the GEO-Architecture and Data Committee global collection and dissemination of data relating to the effect of energy use on the environment will be supported. By including members of the Energy-Community of Practice of GEO, sustained contribution of the GEO-tasks EN-07-02 and EN-07-3 will be realised.The project takes the testing and demonstration of the observing system and developed scenarios through the execution of dedicated pilots at heart. The pilots are focused on the most important issues relating to atmospheric composition and land degradation through the use of fossil fuels, future impacts of the use and production of biomass on land ecosystems and food security, sustainable integration of solar energy in current grids as well as its visual impact and relating to the impact of wind energy on marine ecosystems. Attention will be given to pollutants that are continuously cycling between the atmosphere and aquatic ecosystems. The results of the pilots feed into an integrated platform that will be run for known scenarios in order to assess energy strategies.

Partners:

N	Partner Legal Name	Country
1	Nederlandse Organisatie voor Toegepast Natuurwetenschappelijk Onderzoek	NL
2	Association pour la Recherche et le Développement des Méthodes et Processus Industriels	FR
3	Deutsches Zentrum für Luft- und Raumfahrt e.V.	DE
4	ARGOSS	NL
5	Austrian Research Centers GmbH – ARC	AT
6	International Institute for Applied Systems Analysis	AT
7	Uniresearch B.V.	NL
8	Paris-Lodron-Universität Salzburg	AT
9	AGH University of Science and Technology	PL
10	Pakistan Space and Upper Atmosphere Research Commission	PK
11	Institute of Energy and Environmental Technology - IUTA e.V.	DE
12	Netherlands Institute for Space Research	NL

Activity Code: ENV.2009.4.1.3.1 **Funding Scheme:** CP-IP **Duration (Months):** 36

Title: Earth Observation and ENVironmental modelling for the mitigation of HEAlth risks

Proposed EC Grant: 6.273.434 €

Abstract:

EO2HEAVEN contributes to a better understanding of the complex relationships between environmental changes and their impact on human health. The project will monitor changes induced by human activities, with emphasis on atmospheric, river, lake and coastal marine pollution. EO2HEAVEN will follow a multidisciplinary and user-driven approach involving public health stakeholders who will work closely with technology and service providers in both the earth observation and in-situ environmental monitoring domain. The result of this collaboration will be the design and development of a GIS based upon an open and standards-based Spatial Information Infrastructure (SII) envisaged as a helpful tool for research of human exposure and early detection of infections.The key factors of the EO2HEAVEN system will be 1) an enhanced integration of remotely sensed and in-situ environmental measurements, and 2) the development of models to relate these environmental data to exposure and health data. Both factors will directly address current goals of GEOSS such that the resulting system will be integrated into the GEOSS infrastructure after successful validation already during the course of the project.Throughout the life span of the project the stakeholder requirements from three different use cases (in Europe and Southern Africa) will be assessed and the technical solutions proposed by EO2HEAVEN will be evaluated through an iterative process, thus ensuring that the solutions can be applied on a global scale. EO2HEAVEN will specify and implement the SII as an open architecture based upon international standards and adaptive geospatial Web services in alignment with the large-scale initiatives INSPIRE and GMES. The SII will include bridging capabilities at the syntactic and semantic levels to and between environmental and health systems. Ongoing and recently completed research projects in the ICT, environmental and health domains will be studied and used in an integrative approach.

Partners:

N	Partner Legal Name	Country
1	ATOS ORIGIN SOCIEDAD ANONIMA ESPANOLA	ES
2	TECHNISCHE UNIVERSITAET DRESDEN	DE
3	52°North Initiative for Geospatial Open Source Software GmbH	DE
4	UMWELTBUNDESAMT	DE
5	SPOT IMAGE (SI) SA	FR
6	NEVANTROPIC	FR
7	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
8	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
9	OPEN GEOSPATIAL CONSORTIUM (EUROPE) LIMITED	UK
10	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V	DE
11	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
12	STICHTING INTERNATIONAL INSTITUTE FOR GEO-INFORMATION SCIENCE AND EARTH OBSERVATION	NL
13	UNIVERSITY OF KWAZULU-NATAL	ZA
14	ICT Policy Implementation Technical Unit	MZ

Activity Code: ENV.2010.4.1.3-1 **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: GNSS for Global Environmental Earth Observation (GEEO) and GEOSS

Proposed EC Grant: 1.000.000 €

Abstract:

In the next future, the number of GNSS will drastically increase. Not only more signals and frequencies will be available, but also the new generation of navigation satellites (GALILEO), will greatly enhance the performance of GNSS based applications, both scientific and mass-market. Current and next generation GNSS can improve and sustain GEEO applications, as well as be the enablers of novel applications. With the scope to support the GEOSS 10-year implementation plan (2005-2015) the 2010 Environment FP7 work program is launching various topics under sub-activity 6.4.1 Earth and ocean observation systems and monitoring methods for the environment and sustainable development. In line with the objectives of sub-activity 6.4.1, a coordination action promoting discipline connection, identity building and integration while defining future research, technology and policy directions is needed. GNSS for GEEO and GEOSS (GfG2) responds to these needs addressed by work program topic: ENV.2010.4.1.3-1 Exploring GNSS applications for GEEO and GEOSS. The goals of this three-year long initiative are: 1) to consolidate a community of experts with interest to exploit GNSS for GEEO and GEOSS; 2) to explore novel applications derived from GNSS for GEEO and GEOSS while enhancing research-industry collaboration to implement these applications; 3) to identify the research and technological challenges and define the strategic vision, roadmap and policy for GNSS for GEEO and GEOSS available or under development (EU and non-EU); 4) to assess the value (in this context) of the European GNSS independent constellation (EGNOS-GALILEO); 5) to promote the public understanding of GNSS for GEEO and GEOSS research and use within the GEO community, providing support to GEO tasks. GfG2 will achieve its objectives especially by using a working methodology based on active community interaction and events (2 summer schools, 4 workshops and a socioeconomic impact workshop).

Partners:

N	Partner Legal Name	Country
1	STARLAB BARCELONA SL	ES
2	THE UNIVERSITY OF NOTTINGHAM	UK
3	Helmholtz-Zentrum Potsdam Deutsches GeoForschungsZentrum	DE
4	CHALMERS TEKNISKA HOEGSKOLA AB	SE
5	UNIVERSITY OF LEICESTER	UK
6	METEOROLOGISK INSTITUTT	NO

Activity Code: ENV.2007.4.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Acoustic Technology for observing the interior of the Arctic Ocean

Proposed EC Grant: 3.000.000 €

Abstract:

ACOBAR will develop an observing system for the interior of the Arctic Ocean based on underwater acoustic methods including tomography, data transmission and communication to/from underwater platforms, and navigation of gliders. ACOBAR offers alternative methods the ARGO system, which cannot be used in ice-covered seas, based on platforms located under the sea ice, for data collection and transmission from the water column, the seafloor and the subseafloor. ACOBAR will contribute to filling gaps in the global ocean observing system and thereby support the development of GEOSS. ACOBAR will implement field experiments with acoustic sources and receivers in the Fram Strait and the Arctic Ocean basin. Acoustic tomography will be used to obtain integrated 3-D fields of temperature, transports and heat fluxes. Long-range acoustic navigation commands will be tested to operate gliders. Data transmission from fixed moorings via acoustic modems to the surface for downloading from ships or for satellite transmission will be implemented. The existing array of acoustic sources from ice-tethered platforms in the Arctic Ocean will be tested for tomographic measurements of water mass properties. Data from tomography arrays and other underwater platforms will be disseminated to users with near real-time capability, including assimilation in ocean models. ACOBAR will extend and improve methods for underwater data collection that are presently tested in DAMOCLES IP. The acoustic technologies in ACOBAR aim to be used for transmission of multidisciplinary data from underwater observatories under development in ESONET NoE. Transfer of technology and know-how from USA to Europe will take place, with exchange of scientists, workshops and meetings between scientists, engineers and students. The consortium consists of 9 partners, of which three are SMEs and six are research and educational institutions.

Partners:

N	Partner Legal Name	Country
1	Nansen Environmental and Remote Sensing Center	NO
2	Alfred-Wegener-Institut für Polar- und Meeresforschung	DE
3	UNIVERSITE PIERRE ET MARIE CURIE - PARIS 6	FR
4	Scripps Institution of Oceanography, University of California at San Diego	US
5	Woodshole Oceanographic Insitution	US
6	OPTIMARE Sensorsysteme AG	DE
7	ENSIETA	FR
8	Aquatec Telemetry Limited	UK
9	ACSA	FR

Activity Code: ENV.2007.4.1.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Integration and enhancement of key existing European deep-ocean observatories

Proposed EC Grant: 3.499.568 €

Abstract:

At present there are a number of fixed point observatories that autonomously measure biological, chemical and physical variables in the oceans around Europe. These operate at various levels of sophistication but in a largely uncoordinated and fragmented manner. There is no agreed set of basic variables and common data protocols are not followed.EuroSITES has two main objectives:1: To enhance the existing deep ocean observatories thus forming a coherent European network. This will then provide a clear and relevant description of the time varying properties of the ocean system.2: To perform a small number of specific science missions that will, in the future, form the basis for greatly improved and novel monitoring capability.The work we propose addresses directly and explicitly the vision of GEOSS. We will address this in the context of the time changing properties of the ocean interior, seafloor and sub seafloor around Europe. EuroSITES will promote links with other international observation networks such as the network envisioned under the U.S. National Science Foundation's Ocean Observatories Initiative (OOI). Long-term time-series data offer some of the most important insights into the ways our oceans are changing. Crucially important processes occur on time scales that can not be observed by ships and in the deep parts of the ocean that are outside the reach of satellites. Sustained in situ observations are therefore required to provide high quality data on climatically and ecologically relevant variables at a few key locations. EuroSITES is the means to achieve this.

Partners:

N	Partner Legal Name	Country
1	Natural Environment Research Council	UK
2	Universitetet i Bergen	NO
3	Hellenic Centre for Marine Research	EL
4	Istituto Nazionale di Oceanografia e di Geofisica Sperimentale	IT
5	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
6	Leibniz-Institut für Meereswissenschaften an der Universität Kiel	DE
7	The University Court of The University of Aberdeen	UK
8	Centre National de la Recherche Scientifique	FR
9	Institut français de recherche pour l'exploitation de la mer	FR
10	SOPAB/Océanopolis	FR
11	Instituto Canario de Ciencias Marinas	ES
12	Instituto Nacional de Desenvolvimento das Pescas	CV
13	UNIVERSIDAD DE LAS PALMAS DE GRAN CANARIA	ES

Activity Code: ENV.2009.4.1.3.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Earth Observation for Monitoring and Observing Environmental and Societal Impacts of Mineral Resources Exploration and Exploitation

Proposed EC Grant: 3.124.015 €

Abstract:

European Commission Vice President Günter Verheugen, responsible for enterprise and industry policy declared "European industries need predictability in the flow of raw materials and stable prices to remain competitive. We are committed to improve the conditions of access to raw materials, be it within Europe or by creating a level playing field in accessing such materials from abroad." The global dimension of access to raw materials was on the agenda of the G8 Summit on June 2007. On that occasion a Declaration on "Responsibility for raw materials: transparency and sustainable growth" was adopted. Several national and international initiatives, both from the private or the institutional sectors, arised to address the sustainable development of the extractive industry and the reduction of its environmental footprint.Meanwhile, the extractive industry is facing increasing environmental and societal pressures, being regulatory or not, during all phases of a project, from exploration to exploitation and closure. The social acceptability of a project is among the major key issues to be dealt with.EO-MINERS scientific and technical objectives are to: - assess policy requirements at macro (public) and micro (mining companies) levels and define environmental, socio-economic, societal and sustainable development criteria and indicators to be possibly dealt using EO- use existing EO knowledge and carry out new developments on demonstration sites to further demonstrate the capabilities of integrated EO-based methods and tools in monitoring, managing and contributing reducing the environmental and societal footprints of the extractive industry during all phases of a mining project, from the exploration to the exploitation and closure stages- contribute making available reliable and objective information about affected ecosystems, populations and societies, to serve as a basis for a sound “trialogue” between industrialists, governmental organisations and stakeholder

Partners:

N	Partner Legal Name	Country
1	BUREAU DE RECHERCHES GEOLOGIQUES ET MINIERES	FR
2	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
3	TEL AVIV UNIVERSITY	IL
4	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
5	WUPPERTAL INSTITUT FUR KLIMA, UMWELT, ENERGIE GMBH.	DE
6	GEOLOSKI ZAVOD SLOVENIJE	SI
7	Mineral Industry Research Organisation	UK
8	COUNCIL FOR GEOSCIENCE	ZA
9	Anglo Operation Ltd	ZA
10	UNIVERSITE DE VERSAILLES SAINT-QUENTIN-EN-YVELINES.	FR
11	CESKA GEOLOGICKA SLUZBA	CZ
12	Sokolovská uhelná, právní nástupce, a.s.	CZ
13	Anglo American plc	UK
14	Anglo American Chile Ltda	CL

Activity Code: ENV.2009.4.1.3.2 **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Impact Monitoring of Mineral Resources Exploitation

Proposed EC Grant: 2.614.913 €

Abstract:

ImpactMin will develop new methods and a corresponding toolset for the environmental impact monitoring of mining operations using Earth Observations. Novel technology will be proposed for the combined use of satellite remote sensing, aerial lightweight measurements and Unmanned Aerial Vehicles (UAVs). Results will be visualised by taking full advantages of Virtual Reality applications and 3D GIS. The proposed methods will be validated at four demonstration sites in Sweden, Bosnia&Herzegovina, Romania and Russia. The theoretical advancement in science and technology will be made public knowledge with the help of a free multimedia e-learning programme whereas the tools and foreground knowledge will be commercialised by the participating SMEs. The scientific challenge is to use remote sensing technologies to develop cost-effective, reliable and repeatable approaches for monitoring the impact of mining activities on the environment through time, in order to identify, predict and prevent potentially serious consequences for the natural and human environment. On the one hand it is of great importance that the amount of detail obtained from these data sources is sufficient to monitor relatively small changes through time. On the other hand it is essential that the methods used are sufficiently flexible to operate under different circumstances at acceptable cost. The composition of project partnership and the selection of demonstration sites correspond to European interests in both accessing strategic minerals needed for the European economy and the need to monitor and control environmental pollution from these sources.

Partners:

N	Partner Legal Name	Country
1	GEONARDO ENVIRONMENTAL TECHNOLOGIES LTD	HU
2	GEOSENSE	NL
3	University of Exeter	UK
4	Lulea University of Technology	SE
5	Photon d.o.o. Split	HR
6	University of Mostar	BA
7	Institute of Mineralogy Russian Academy ofSciences (Urals branch)	RU
8	Universitatea Babes-Bolyai	RO
9	Ukrainian Land and Resource Management Center	UA
10	DMT GmbH & Co.KG	DE
11	VLAAMSE INSTELLING VOOR TECHNOLOGISCH ONDERZOEK N.V.	BE

Activity Code: ENV.2010.4.1.3-2 **Funding Scheme:** CP-IP-SICA **Duration (Months):** 60

Title: Global Mercury Observation System

Proposed EC Grant: 6.882.068 €

Abstract:

The overall goal of the proposed project is to develop a coordinated global observation system for mercury able to provide temporal and spatial distributions of mercury concentrations in ambient air and precipitation over land and over surface waters at different altitudes and latitudes around the world. This will then provide high quality data for the validation and application of regional and global scale atmospheric models, to give to governments, national and international organisations and stakeholders a firm basis for future policy development and implementation. Specific objectives of the proposed project are (a) to establish a Global Observation System for Mercury (GMOS) able to provide ambient concentrations and deposition fluxes of mercury species around the world, by combining observations from permanent ground-based stations, and from oceanographic and tropospheric measurement campaigns; (b) to validate regional and global scale atmospheric mercury modelling systems able to predict temporal variations and spatial distributions of atmospheric mercury entering to and re-emitted from terrestrial and aquatic receptors; (c) to evaluate and identify source-receptor relationships at country scale and their temporal trends for current and projected scenarios of mercury emissions from anthropogenic and natural sources; (d) to develop interoperable tools to allow the sharing of observational and models output data produced by GMOS. The overarching goal of GMOS is to support the achievement of goals set by the GEO / GEOSS, and specifically of the GEO Task HE-09-02d and contribute to the advancement of our scientific understanding in the nine Societal Benefit Areas (SBA) established in GEOSS. The proposed project will rely on the results and knowledge acquired in the framework of past EU projects (i.e., MAMCS, MOE, MERCYMS) and international programs (i.e., UNECE TF HTAP; UNEP F&T partnership area).

Partners:

N	Partner Legal Name	Country
1	CONSIGLIO NAZIONALE DELLE RICERCHE	IT
2	NORSK INSTITUTT FOR LUFTFORSKNING	NO
3	IVL SVENSKA MILJOEINSTITUTET AB	SE
4	INSTITUT JOZEF STEFAN	SI
5	INIBIOMA CONICET Universidad Nacional del Comahue	AR
6	INSTITUT FRANCAIS DE RECHERCHE POUR L'EXPLOITATION DE LA MER	FR
7	Instituut voor Toegepast Technologisch Onderzoek	SR
8	GOETEBORGS UNIVERSITET	SE
9	UNIVERSITA CA' FOSCARI DI VENEZIA	IT
10	AARHUS UNIVERSITET	DK
11	GKSS - FORSCHUNGSZENTRUM GEESTHACHT GMBH	DE
12	UNIVERSITE JOSEPH FOURIER GRENOBLE 1	FR
13	UNIVERSITY OF YORK	UK
14	Institute of Geochemistry, Chinese Academy of Sciences	CN
15	Associacao Pesquisadores do Experimento LBA	BR
16	Meteorological Synthesizing Centre - East of EMEP	RU
17	MAX PLANCK GESELLSCHAFT ZUR FOERDERUNG DER WISSENSCHAFTEN E.V.	DE
18	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
19	Institute for Ocean Management, Anna University Chennai	IN
20	South African Weather Service	ZA
21	National Institute of Meteorology and Geophysics	CV
22	KENYA METEOROLOGICAL DEPARTMENT	KE
23	LATVIJAS UNIVERSITATE	LV
24	Saint Petersburg State University	RU

Activity Code: ENV.2007.4.1.3.3. **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: Regional pilot platform as EU contribution to a Global Soil Observing System

Proposed EC Grant: 2.600.000 €

Abstract:

Soil and land information are often inaccessible, incomplete, or out of date. e-SOTER addresses the felt need for a global soil and terrain database. It will deliver a web-based regional pilot platform with data, methodology, and applications, using remote sensing to validate, augment and extend existing data. Technical barriers include: quantitative mapping of landforms; soil characterization and pattern recognition by remote sensing; standardization of measures to convert legacy data. Major research thrusts involve: 1) improvement of the current SOTER methodology at scale 1:1 million in four windows in Europe, China and Morocco, using optical remote sensing and legacy data; 2) within 1:250 000-scale pilot areas, advanced remote sensing applications. Airborne radiometrics and electromagnetics, and image spectrometry together with field spectrometry will also be applied in a single, data-rich super site to link with field measurements.Advances beyond the state of the art include: transformation of pre-existing data and addition of new information with remote sensing and DEM; interpretations of the e-SOTER database that address threats defined in the EU Soil Thematic Strategy and comparing the results with current assessments; and delivery through a web service of a data portal. e-SOTER will deliver a Pilot Platform and a portal that provides open access to: 1) a methodology to create 1:1 million-scale SOTER databases, and an enhanced soil and terrain database at scale 1:1 million for the four windows; 2) an artifact-free 90m digital elevation model; 3) methodologies to create 1:250 000-scale enhanced SOTER databases, and the databases themselves for four pilot; 4) advanced remote sensing techniques to obtain soil attribute data; 5) validation and uncertainty propagation analysis; 6) dedicated applications related to major threats to soil quality and performance.

Partners:

N	Partner Legal Name	Country
1	International Soil Reference and Information Centre	NL
2	Miskolci Egyetem	HU
3	Bundesanstalt für Geowissenschaften und Rohstoffe	DE
4	European Commission - DG Joint Research Centre, Institute for Environment and Sustainability - Land Management and Natural Hazards Unit – Action SOIL	IT
5	Cranfield University	UK
6	Alterra b.v.	NL
7	Szent Istvan University	HU
8	scilands GmbH - Gesellschaft zur Bearbeitung digitaler Landschaften	DE
9	INSTITUT NATIONAL DE LA RECHERCHE AGRONOMIQUE	FR
10	University of Nottingham	UK
11	Ceska zemedelska universita v Praze	CZ
12	Institute of Soil Science, Chinese Academy of Sciences	CN
13	Ecole Nationale d'Agriculture de Meknès	MA
14	Wageningen Universiteit	NL

Activity Code: ENV.2007.4.1.4.1. **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: African-European Georesources Observation System

Proposed EC Grant: 1.930.996 €

Abstract:

Africa, the largest single component of the African Caribbean Pacific (ACP) Group of States, despite its huge potential for development through both human and georesources, suffers in many places from poverty and underdevelopment. The sustainable use of its resources is a key issue, not only for development of the African countries, but also for the world's future. Over the coming decades, these issues are likely to play an ever-increasing role due to the world's growing population, rapid urban development and the rising demand for better infrastructure and services.The sustainable use of georesources requires a knowledge based on data, information and expertise. Thus, the availability, traceability, accessibility and processing using GIS technologies of heterogeneous data from multiple sources is essential. Such processing requires a qualified and experienced personnel and the definition of strategies for capacity building and training. In view of this situation, a recognised need has emerged for a shared, distributed, Internet-linked georesources observation system, based on open standards and interoperability developments, as a contribution to the sustainable development of African countries. The Support Action is the preparatory phase needed to design the African-European Georesource Observation System (AEGOS) capable of hosting and providing access to Africa's geological resources, including groundwater, energy, raw materials and mineral resources. Its objectives are to define: i) operational procedures for data management (Spatial Data Infrastructure, metadata and data specification), ii) user-oriented products and services including the preparation of innovative spin off projects based on AEGOS and an evaluation of the input of Interoperability and interdisciplinary in support of GEOSS iii) the African- European partner network, iv) a geoscience contribution to GEOSS, in the context of INSPIRE

Partners:

N	Partner Legal Name	Country
1	BRGM	FR
2	Groupement Nature	BE
3	Czech Geological Survey	CZ
4	GEOLOGICAL SURVEY OF FINLAND	FI
5	centre international pour la formation et les échanges en géosciences	FR
6	Institut de Recherche pour le Développpement	FR
7	Federal Institute for Geosciences and Natural Resources	DE
8	Beak Consultants GmbH	DE
9	Natural Environment Research Council	UK
10	Polish Geological Institute	PL
11	Netherlands Organisation of Applied Scientific Research	NL
12	Instituto Nacional de Engenharia, Tecnologia e Inovação, I.P.	PT
13	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
14	The Southern and Eastern African Mineral centre	TZ
15	UNION ECONOMIQUE ET MONETAIRE OUEST AFRICAINE	BF
16	Geological Survey of Namibia	NA
17	COUNCIL FOR GEOSCIENCE	ZA
18	Geological Survey and Mines	UG
19	Direction des Mines et de la Geologie	SN
20	Geology Department, School of Mines, University of Zambia	ZM
21	Geological Survey of Ethiopia	ET
22	Institute of Resource Assessment	TZ

Activity Code: ENV.2008.4.1.4.1. **Funding Scheme:** CP-IP-SICA **Duration (Months):** 48

Title: Building Capacity for a Black Sea Basin Observation and Assessment System supporting Sustainable Development

Proposed EC Grant: 6.222.574 €

Abstract:

The Black Sea Basin is internationally recognized for its ecologically unsustainable development and inadequate resource management leading to severe environmental, social and economical problems. EnviroGRIDS aims at developing a Black Sea Basin Observation System that will store, analyze, visualize and disseminate information on past, present and future states of the region to assess and predict its sustainability and vulnerability. A gap analysis will identify specific areas where most efforts are needed. As climatic and hydrological changes are of concern, their impacts on several societal benefits areas of the Group on Earth Observation will be evaluated, namely on environment and health, energy, water, ecosystems, agriculture, biodiversity and environmental risks. EnviroGRIDS will rely on ultra-modern technology using the largest gridded computing infrastructure in the world. It will serve as a benchmark for the development of the European directive on Infrastructure for Spatial Information and for the Global Earth Observation System of Systems. Spatially-explicit scenarios of drivers of changes such as climate, demography and land cover will be created. EnviroGRIDS will be validated through several thematic implementations within the Black Sea basin. Finally, a web-based observation system including attractive visualisation tools will warn target populations about environmental risks and help regional/governmental agencies to prepare the most adequate responses. Capacity building will be based on a networking platforms supported by state-of-the-art e-learning courses on the internet and on DVD. The aim is to raise public and decision makers' awareness on key environmental issues and observation system technologies by organizing live and virtual trainings. Through the combination of all these activities, EnviroGRIDS will improve data access and use in the Black Sea basin, and build regional capacity on Observation Systems to favour its sustainable development.

Partners:

N	Partner Legal Name	Country
1	Université de Genève	CH
2	arx iT Consulting	CH
3	Melitopol State Pedagogical University	UA
4	University of Natural Resources and Applied Life Sciences, Vienna	AT
5	Black Sea Regional Energy Centre	BG
6	Ceske Centrum pro Vedu a Spolecnost	CZ
7	European Organization for Nuclear Research	CH
8	Center for Advanced Studies, Research and Development in Sardinia	IT
9	INSTITUTUL NATIONAL DE CERCETARE – DEZVOLTARE DELTA DUNARII TULCEA	RO
10	Danube Hydrometeorological Observatory	UA
11	Eidgenössische Anstalt für Wasserversorgung, Abwasserreinigung und Gewässerschutz	CH
12	GIS & RS Consulting Center GeoGraphic Ltd	GE
13	Institute of Biology of the Southern Seas	UA
14	Institute of Geography - Romanian Academy	RO
15	UNESCO-IHE Institute for Water Education	NL
16	International Institute for Sustainable Development	CH
17	Istanbul Technical University	TR
18	National Institute of Hydrology and Water Management	RO
19	Odessa National University	UA
20	St. Petersburg State University	RU
21	V.I. Vernadsky Taurida National University	UA
22	Universitat Autonoma de Barcelona	ES
23	United Nations University	JP
24	Ukrainian Scientific and Research Institute of Ecological Problems	UA
25	Technical University of Cluj-Napoca	RO
26	VITUKI, Enviromental Protection and Water Management Research Institute	HU
27	SORESMA NV	BE

Activity Code: ENV.2009.4.1.4.1 **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: GEO Network for Capacity Building

Proposed EC Grant: 999.992 €

Abstract:

The purpose of the GEO Network for Capacity Building (GEO-Net-CaB) project is to create the conditions for the improvement and increase of the GEO capacity building activities and framework, with special emphasis on developing countries, new EU member states (and EU neighbouring states) and climate monitoring and will serve the bigger goal of improved effectiveness and efficiency of GEO capacity building for application in the GEO societal benefit areas. Coinciding with this purpose, successful brokerage with (potential) clients for earth observation products and services will be facilitated. The project will deliver the following output: 1. Capacity building needs in earth observation are identified (at a generic and global level, but with emphasis on the target regions). 2. Specifications for earth observation capacity buildings are described. 3. Resource providers are identified. 4. Sustainable brokerage between stakeholders (including resource providers) is established. 5. A mechanism to facilitate cooperation between stakeholders and providers is established. 6. A global base of technical expertise for education and training in earth observation is established (with emphasis on developing countries, new EU member states and climate monitoring). 7. Monitoring and evaluation mechanisms for determining the efficacy of GEO capacity building efforts are established. To achieve maximum impact demonstration projects will be carried out in Southern Africa, the French-speaking African region, Czechia and Poland, with spin-offs to EU neighbouring countries and Latin America and Asia. The project (with a duration of three years) will be carried out by a strong consortium of partners from the Netherlands, France, South Africa, Morocco, Czechia and Poland, supervised by an advisory board with worldwide representation and strong connections to GEO.

Partners:

N	Partner Legal Name	Country
1	STICHTING INTERNATIONAL INSTITUTE FOR GEO-INFORMATION SCIENCE AND EARTH OBSERVATION	NL
2	Centre National d'Etudes Spatiales	FR
3	INSTITUT DE RECHERCHE POUR LE DEVELOPPEMENT	FR
4	CENTRUM BADAN KOSMICZNYCH POLSKA AKADEMIA NAUK	PL
5	Karlova Universita, Prírodovedecká fakulta v Praze	CZ
6	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH	ZA
7	Centre Régional Africain des Sciences et Technologies de l'Espace - LF	MA
8	Umvoto Africa pty ltd	ZA

Activity Code: ENV.2009.4.1.4.1 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: GEO capacity building initiative in Central Asia

Proposed EC Grant: 576.516 €

Abstract:

Central Asia is an important Europe's partner facing critical environmental challenges. Possessing certain experiences and capabilities of EO data application for solving environmental, economic, societal and other development problems, this region is better prepared for the uptake of GEOSS technologies than many other clusters of developing countries. Thus, the goal of SEOCA is to promote European GEO-techlogies in the region of Central Asia as a platform solution for the regional development challenges. In order to achieve this goal, the following activities will be implemented:- mapping of regional needs, capabilities, stakeholders, providers and planning further GEO CB activities in the region for the period until 2020- pilot GEO capacity building programme incl. training for stakeholders, reforming educational standards, direct brokerage between stakeholders and providers, etc.- setting up regional network of GEO offices in all 5 countries- pilot regional GEONETCast network- systemic dissemination and networking activities aimed at promoting GEOSS technologies in the region, building synergies with other relevant initiatives.As a result the consortium expects that SEOCA will radically increase acceptance of GEOSS technologies by regional governments for national environmental services, meteorology, natural hazards prevention, geological explorations, etc. Moreover, the project will lay a foundation for long-term GEO CB activities in the region

Partners:

N	Partner Legal Name	Country
1	Technical University Berlin	DE
2	Engineering, Consalting and Management Office	DE
3	TUBITAK UZAY, Uzay Teknolojileri Arastirma Enstitusu	TR
4	JeoDijital Bilisim Teknoloji Madencilik Insaat Sanayi ve Ticaret Limited Sirketi	TR
5	Aratos Technologies S.A.	EL
6	GIRAF PM Consultants	DE
7	Hydrometeorological Research Institute of the Centre of Hydrometeorological Servise on Cabinet of Ministers of the Republic of Uzbekistan	UZ
8	The State enterprise “Center of remote sensing and GIS technologies”	UZ
9	Tashkent State Technical University named after Abu Raikhman Beruni	UZ
10	Joint-stock company “The National Center of Space Researches and Technologies”	KZ
11	L.N. Gumilyov Eurasian National University	KZ
12	Agency of hydrometeorology on the Ministry for Emergency Situation of the Republic of Kyrgyzstan	KG
13	State Agency of hydrometeorology of the Republic of Tadjikistan	TJ
14	National Institute of Deserts, Flora and Fauna of the Ministry of Nature Protection of Turkmenistan	TM

Activity Code: ENV.2010.4.1.4-1 **Funding Scheme:** CSA-CA **Duration (Months):** 26

Title: Balkan GEO Network – Towards Inclusion of Balkan Countries into Global Earth Observation Initiatives

Proposed EC Grant: 990.189 €

Abstract:

Inclusion of all Balkan countries into GEO and their contribution to GEOSS is of great importance, since only a comprehensive EO framework can lead to better understanding and more intelligent utilization of the environmental resources, increased quality of life and faster economic development. The importance and benefits from participation in global EO initiatives have already been recognized by several Balkan countries. However, a great number of Balkan countries are still not members of GEO. This project aims to identify existing EO-data providers and users in the wider Balkan region, to determine their status, potentials and needs, and to coordinate EO players by establishing proper interfaces and networking between them. A broad analysis of gaps and complementarities of EO activities within the region will be performed, with the emphasis on user needs in the specific context of the Balkan region.The consortium has been carefully constituted to include key players both from EO-data provider and EO-data user communities, from all Balkan countries. Participants from other EU countries are also included to allow straightforward identification of mechanisms for leveraging, developing and coordinating EO capacity building initiatives in the region, and to ensure that the Project outcomes will be in line with the currently designed Shared Environmental Information System and with Infrastructure for Spatial Information in Europe.Main outcomes of the Project will be the creation of a permanent web-based networking facility, and the design of roadmaps and recommendations for an active, coordinated and sustained participation of all Balkan countries in global EO initiatives. These outcomes will also present a contribution to GEO task CB-09-03 „Building Institutional Capacity to Use EO" and specifically to subtask CB-09-03b „Establishing Regional Capacity Building Networks".

Partners:

N	Partner Legal Name	Country
1	UNIVERZITET U NOVOM SADU	RS
2	INSTITUT JOZEF STEFAN	SI
3	JOANNEUM RESEARCH FORSCHUNGSGESELLSCHAFT MBH	AT
4	IRIDA Labs	EL
5	UNIVERSITY OF SPLIT	HR
6	GEONARDO ENVIRONMENTAL TECHNOLOGIES LTD	HU
7	UMWELTBUNDESAMT GMBH	AT
8	INTERNATIONALES INSTITUT FUER ANGEWANDTE SYSTEMANALYSE	AT
9	UNIVERSITEIT GENT	BE
10	ROMANIAN SPACE AGENCY	RO
11	GEOPHYSICAL INSTITUTE - BULGARIAN ACADEMY OF SCIENCES	BG
12	FACULTY OF AGRICULTURE AND FOOD SCIENCE SARAJEVO	BA
13	JAVNA USTANOVA UNIVERZITET CRNE GORE PODGORICA	ME
14	UNIVERSITETI POLITEKNIK I TIRANES	AL
15	BALKAN FOUNDATION FOR SUSTAINABLE DEVELOPMENT	MK
16	PROVINCIAL SECRETARIAT OF AGRICULTURE, WATER ECONOMY AND FORESTRY, VOJVODINA	RS

Activity Code: ENV.2010.4.1.4-1 **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Strengthening and development of Earth Observation activities for the environment in the Balkan area

Proposed EC Grant: 999.466 €

Abstract:

Balkan countries do not have a coherent and continuous approach towards the challenge of implementing integrated Earth Observation (EO) applications in environmental monitoring and management. It should be mentioned that the Balkan countries, except Greece, are not ESA members. Besides, Albania, Serbia, Bulgaria, FYROM, Montenegro and Bosnia Herzegovina are also not members of the GEO.The defect in the implementation of EO applications and their use in the environmental decision making are manifested through the limited synergies among national and regional institutions, ineffective technological means and discontinuous record of participation to international organizations and committees. On the other hand, the increasing importance of a common approach towards effective environmental monitoring practices, for the benefit of the societal web of the broader Balkan region, calls for immediate action, setting as a starting point the built up of regional institutional capacity and spillage of technology transfer.The aim of the OBSERVE project is to collect and compile all the necessary information for delivering an integrated analysis on the current status of EO activities and networks in the Balkans regarding environmental monitoring, the potential benefit from the full exploitation of an integrated capacity building strategy and the prospect of creating a relevant permanent EO Community in the broader region. OBSERVE project has the ultimate goal to raise awareness and establish firm links with the regional decision making bodies on the importance of a mutual and enhanced EO application network on environmental monitoring according to the principles of the GEO.The OBSERVE project consortium consists of 15 institutions from 13 different countries, 8 of which belong to the Balkan region. 10 of the partners are Universities/Research Organizations while the other 5 are from private sector.

Partners:

N	Partner Legal Name	Country
1	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
2	Eidgenössische Technische Hochschule Zürich	CH
3	UNIVERZA V LJUBLJANI	SI
4	GEOIMAGING LTD	CY
5	INFOMETRIA IPIRESIES GEOPLIROFORIKIS	EL
6	TECHNICAL UNIVERSITY OF ISTANBUL	TR
7	UNIVERSITY OF HAIFA	IL
8	Univerzitet u Beogradu - Saobracajni fakultet	RS
9	UNIVERSITY OF ARCHITECTURE, CIVIL ENGINEERING AND GEODESY	BG
10	UNIVERSITETI POLITEKNIK I TIRANES	AL
11	Gradevinski fakultet u Sarajevu (Faculty of Civil Engineering, University of Sarajevo)	BA
12	GEO-SAT Company for Exploration and Development	HR
13	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
14	GISDATA	RS
15	Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE	MK

Activity Code: ENV.2007.4.1.4.2. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 48

Title: Coordinated Asia-European long-term Observing system of Qinghai – Tibet Plateau hydro-meteorological processes and the Asian-monsoon systEm with Ground satellite Image data and numerical Simulations

Proposed EC Grant: 3.403.076 €

Abstract:

Human life and the entire ecosystem of South East Asia depend upon the monsoon climate and its predictability. More than 40% of the earth's population lives in this region. Droughts and floods associated with the variability of rainfall frequently cause serious damage to ecosystems in these regions and, more importantly, injury and loss of human life. The headwater areas of seven major rivers in SE Asia, i.e. Yellow River, Yangtze, Mekong, Salween, Irrawaddy, Brahmaputra and Ganges, are located in the Tibetan Plateau. Estimates of the Plateau water balance rely on sparse and scarce observations that cannot provide the required accuracy, spatial density and temporal frequency. Fully integrated use of satellite and ground observations is necessary to support water resources management in SE Asia and to clarify the roles of the interactions between the land surface and the atmosphere over the Tibetan Plateau in the Asian monsoon system. The goal of this project is to: 1. Construct out of existing ground measurements and current / future satellites an observing system to determine and monitor the water yield of the Plateau, i.e. how much water is finally going into the seven major rivers of SE Asia; this requires estimating snowfall, rainfall, evapotranspiration and changes in soil moisture; 2. Monitor the evolution of snow, vegetation cover, surface wetness and surface fluxes and analyze the linkage with convective activity, (extreme) precipitation events and the Asian Monsoon; this aims at using monitoring of snow, vegetation and surface fluxes as a precursor of intense precipitation towards improving forecasts of (extreme) precipitations in SE Asia.A series of international efforts initiated in 1996 with the GAME-Tibet project. The effort described in this proposal builds upon 10 years of experimental and modeling research and the consortium includes many key-players and pioneers of this long term research initiative.

Partners:

N	Partner Legal Name	Country
1	Laboratoire des Sciences de l 'Image, de l 'Informatique et de la Télédétection, ULP	FR
2	International Institute for Geo_Information Science and Earth Observation	NL
3	ARIESPACE s.r.l.	IT
4	Universität Bayreuth	DE
5	Alterra bv	NL
6	UNIVERSITAT DE VALENCIA. ESTUDI GENERAL	ES
7	Institute of Tibetan Plateau Research, the Chinese Academy of Sciences	CN
8	China Meteorological Administration	CN
9	Beijing Normal University	CN
10	National Institute of Hydrology	IN
11	Graduate School of Life and Environmental Sciences, University of Tsukuba	JP
12	WaterWatch b.v.	NL
13	Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences	CN
14	Università degli Studi di Ferrara	IT
15	Institute of Geographic Sciences and Natural Resources Research	CN
16	Institute of Remote Sensing Applications, Chinese Academy of Sciences	CN

Activity Code: ENV.2007.4.1.4.3. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: GEONETCast for and by Developing countries

Proposed EC Grant: 1.852.546 €

Abstract:

The DevCoCast project aims at involving Developing Countries in the GEONETCast initiative.Many Developing Countries are exposed to serious environmental risks and their need for adequate information is high. Unfortunately, reliable and continuous access to real time environmental information is often lacking. The GEONETCast concept overcomes existing telecommunication limitations and is able to provide reliable and fast access to environmental information.The DevCoCast project will1. disseminate existing environmental added-value datasets (both in-situ and satellite based) from various sources in Africa, South- and Central America and Europe in (near) real time and at no cost via GEONETCast to a broad range of user communities in Developing Countries and 2. promote and support the use of these products.By utilizing the existing EUMETCast dissemination system, we can directly take benefit from the operational infrastructures and from a well developed user base in Africa and South-America. This enables us to focus our effort on the support of the use of the data and building up and maintaining the capacity in Developing Countries which includes training, workshops, networking and outreach.The project sets up a number of pilot cases in Africa, South- and Central America and Asia and is conceived to have a big impact with a limited budget, by building upon existing production (SPOT-VEGETATION a.o.) and dissemination infrastructures (EUMETCast, FengYunCast), existing research projects (GEOLAND, VGT4AFRICA, MERSEA, GOOS, YEOS a.o.) and servicing all relevant environmental end-user communities.The ultimate ambition is to introduce and embed the GEONETCast data in a systematic manner into reporting systems in support of planning and decision making processes. This effort will enable authorities in Developing Countries in fulfilling their increasing monitoring and reporting obligations and help them to better manage their natural resources.

Partners:

N	Partner Legal Name	Country
1	Vlaams Instituut voor Technologisch Onderzoek NV	BE
2	African Centre of Meteorological Applications for Development	NE
3	Centre Régional Agrhymet	NE
4	Companhia Nacional de Abastecimento	BR
5	Centro de Relevamiento y Evaluación de Recursos Agrícolas y Naturales, Universidad Nac. de Cordoba	AR
6	CSIR	ZA
7	Danish Meteorological Institute	DK
8	Brazilian Agriculture Research Corporation	BR
9	European Organisation for the Exploitation of Meteorological Satellites	DE
10	Instituto Nacional de Pesquisas Espaciais	BR
11	Instituto Nacional de Tecnología Agropecuaria	AR
12	International Institute for Geo-Information Science and Earth Observation	NL
13	European Community represented by the European Commission - Directorate General Joint Research Centre	BE
14	University of Cape Town	ZA
15	MEDIAS	FR
16	Natural Environment Research Council	UK
17	Plymouth Marine Laboratory	UK
18	Southern Africa Development Community (SADC)	BW
19	UNIVERSIDADE ESTADUAL DE CAMPINAS	BR

Activity Code: ENV.2007.4.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Prototypical Policy Impacts on Multifunctional Activities in rural municipalities

Proposed EC Grant: 1.999.335 €

Abstract:

The proposed project will develop a method for scaling down the analysis of policy impacts on multifunctional land uses and on the economic activities. This method will rely on micro-simulation and multi-agents models, designed and validated at municipality level using input from stakeholders. The models will address the structural evolution of the populations (appearance, disappearance and change of agents) depending on the local conditions for applying the structural policies on a set of municipality case studies. We shall consider policies related to use of Structural Funds (SFs), Cohesion Fund (CF), Preaccession funds (PAFs) and EAFRD (respectively CAP). This project will include the following actions: - Review the EU structural policies, identify driving forces at EU, national and regional levels for multifunctional land use activities and provide baselines for the design of national and regional scenarios on multifunctional land use activities. - Interaction with stakeholders: pre-model engagement with stakeholders in terms of scenario design and formulating agent decision rules for agent-based models, on-model engagement with stakeholders mirroring agent-based models, and post-model engagement with stakeholders in terms of assessing model outputs. - Design and develop micro-simulation and multi-agents models, of local dynamics and of the impact of European structural policies at the municipality level. - Build a mapping between available data on municipalities and prototypical, contrasted evolutions of micro-simulation and agent based models. This will allow us to aggregate the results provided by these models at a regional level, on a set of regional case studies, and to compare these results with existing models at regional scale. - Investigate the potential of the approach to design a method that enhances the scope of Strategic Environmental Assessment (SEA), Environmental Impact Assessment (EIA) and Sustainable Impact Assessment (SIA).

Partners:

N	Partner Legal Name	Country
1	Centre National du Machinisme Agricole, du Génie Rural, des Eaux et des Forêts	FR
2	University of Dortmund, Department of Spatial Planning	DE
3	University for National and World Economy	BG
4	Universitetet for miljø- og biovitenskap	NO
5	Landbouw-Economisch Instituut (LEI) B.V.	NL
6	University of Newcastle upon Tyne	UK
7	Leibniz Institute of Agricultural Development in Central and Eastern Europe	DE
8	University of Groningen	NL
9	Netherlands Environmental Assessment Agency	NL
10	Vyzkumný ústav zemedelské ekonomiky	CZ
11	Agronomski fakultet Sveucilišta u Zagrebu/ Faculty of Agriculture University of Zagreb	HR

Activity Code: ENV.2007.4.2.1.1. **Funding Scheme:** CP-FP **Duration (Months):** 30

Title: Transactional Environmental Support System

Proposed EC Grant: 1.801.112 €

Abstract:

TESS will assist policy makers to integrate knowledge from the regional and local level into the decision making process while also encouraging local people to maintain and restore biodiversity ecosystem services. To achieve this, a transactional environmental decision support system will be designed, linking central policy planning to local livelihoods. To develop this system, TESS will first research the needs and capacities of central policy makers and local actors, identify paths and trajectories of cooperation, and model required transactions between the central and the local in relation to each one's needs. A set of representative case studies from the whole EU (including the New Member States and pre-accession countries) will test the validity of the models and consolidate the project's results into the design for a transactional environmental decision support system, named TESS. TESS will also include base-line information and predictive models for Strategic Environmental Assessment (SEA), Sustainability (Impact) Assessment (SIA) and Environmental Impact Assessment (EIA). TESS will be supplemented by a set of brief and memorable policy guidelines to ensure its usefulness and enable its application in a European context. The process of developing TESS will be facilitated by a large interdisciplinary consortium, in which participants include European associations with a strong network of support and influence not only in the Brussels milieu, but also at the grassroots. By achieving its goal, TESS will enable the efficient and effective design and implementation of Cohesion and Structural Funds policies, leading to sustainable rural development.

Partners:

N	Partner Legal Name	Country
1	Aristotle University of Thessaloniki	EL
2	Bournemouth University Higher Education Corporation	UK
3	NERC Centre for Ecology and Hydrology	UK
4	Anatrack Ltd.	UK
5	ERENA, Ordenamento e Gestão de Recursos Naturais Ltd.	PT
6	Tero Ltd	EL
7	European Sustainable Use Specialist Group of IUCN/SSC	BE
8	Federation of Associations for Hunting and Conservation of the EU	BE
9	Pro-Biodiversity Service	PL
10	Centre for Cartography of fauna and flora	SI
11	Szent István University	HU
12	Institute of Sustainable Technology at Tallinn University of Technology	EE
13	Institutul National de Cercetare-Dezvoltare Delta Dunarii	RO
14	Dogal Hayati Koruma Vakfi	TR

Activity Code: ENV.2009.4.2.1.1 **Funding Scheme:** NOE **Duration (Months):** 54

Title: Linking Impact Assessment Instruments to Sustainability Expertise

Proposed EC Grant: 6.996.406 €

Abstract:

Existing research points out that the full potential of Impact Assessment (IA) for delivering sustainable development is not being realised. Many tools to support IA are not yet being fully employed by policy makers. This is symptomatic of a large and deep gap between the two broad communities of IA researchers and IA practitioners. Practitioners tend to look for tools that are simple and transparent while the researchers are more interested in the sophistication and innovative aspects of assessment tools. The main purpose of LIAISE is to identify and exploit opportunities to bridge between these two communities in a way that leads to an enhanced use of IA tools in policy making. Its centrepiece will be a shared toolbox – simultaneously accessible and useful for policy makers as well as for the research community. The LIAISE consortium will: • Unite the multi-disciplinary competences of a core of large European institutes, that in turn consolidate the expertise from large FP6 projects. • Combine researchers that analyse current policy needs and link them in innovative ways to those who maintain and develop IA tools;• Develop a roadmap towards a virtual centre of excellence on IA, that can operate as the durable hub of existing academic and practitioner networks relevant to the themes of the NoE;• Maintain the flexibility to support 'real life' IA processes, informed by a structured dialogue with the IA user community;• Develop a business plan to ensure durable operation, scientific credibility and efficient usability of the shared toolbox, also in the post-project period.Resulting in: • A shared toolbox: a durable and flexible infrastructure to support IA with improved tools;• A continuously updated shared research agenda;• Capacity building and training components to spread the results of research activities to target groups in communities of IA users and IA researchers;• A virtual centre of excellence on IA

Partners:

N	Partner Legal Name	Country
1	ALTERRA B.V.	NL
2	FREIE UNIVERSITAET BERLIN	DE
3	ARISTOTELIO PANEPISTIMIO THESSALONIKIS	EL
4	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
5	FONDAZIONE ENI ENRICO MATTEI	IT
6	AARHUS UNIVERSITET	DK
7	ESTONIAN INSTITUTE FOR SUSTAINABLE DEVELOPMENT,STOCKHOLM ENVIRONMENT INSTITUTE TALLINN CENTRE	EE
8	SUOMEN YMPARISTOKESKUS	FI
9	FUNDACION LABEIN	ES
10	RHEINISCHE FRIEDRICH-WILHELMS-UNIVERSITAET BONN	DE
11	UNIVERSITY OF EAST ANGLIA	UK
12	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
13	WAGENINGEN UNIVERSITEIT	NL
14	LEIBNIZ-ZENTRUM FUER AGRARLANDSCHAFTSFORSCHUNG (ZALF) e.V.	DE
15	ZENTRUM FUER EUROPAEISCHE WIRTSCHAFTSFORSCHUNG GmbH	DE

Activity Code: ENV.2010.4.2.1-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Enhancing Robustness and Model Integration for The Assessment of Global Environmental Change

Proposed EC Grant: 3.383.456 €

Abstract:

The development of interdisciplinary modelling tools and platforms to address the interactions between natural and socio-economic systems is an active research area in Europe. Nevertheless, notable gaps still exist in modelling capabilities, in particular, very little progress has been made to date in the direct coupling of models that resolve the spatial distribution of climate change with sectorally and regionally resolved economic models. Interactive couplings between climate and impact models are relatively underdeveloped. Likewise, the coupling of detailed economic models with impact and adaptation models is still at a relatively early stage. Finally, a coherent assessment of uncertainty is completely lacking in overall integrated assessments. The sustainability of agriculture and land-use policies and practices including water availability and the sustainability of climate policies that rely on high shares of bioenergy are critical applications that demand a spatially resolved representation of global environmental change including feedbacks between natural and socio-economic forces. ERMITAGE proposes to improve and extend existing modular frameworks for the coupling of intermediate complexity models of the natural and socio-economic systems to address the issues cited above. The resulting integrated assessment framework models will be applied to the analysis of post-2012 climate initiatives taking into account uncertainties and regional conflicts of interest in a coordinated way, propagating the analysis of uncertainty from climate simulation through to policy analysis, focusing particularly on the sustainability of agriculture, bioenergy and water resources.

Partners:

N	Partner Legal Name	Country
1	THE OPEN UNIVERSITY	UK
2	ORDECSYS SARL	CH
3	ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE	CH
4	UNIVERSITY OF EAST ANGLIA	UK
5	ENERIS Environment Energy Consultants S.L.	ES
6	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE
7	THE UNIVERSITY OF MANCHESTER	UK

Activity Code: ENV.2007.4.2.1.3. **Funding Scheme:** CP-FP-SICA **Duration (Months):** 36

Title: Spatial-economic-ecological model for the assessment of sustainability policies of Russia

Proposed EC Grant: 1.237.189 €

Abstract:

The objective of the study is to develop and implement for Russia an integrated spatio-economic-ecological modelling approach, which represents the state-of-the-art in different areas of economic, transport, resource-use and environmental modelling, and can be used to assist policy makers in their choice of medium and long-term sustainability policies. This implies the following interrelated aims: - develop modelling approach, which represents the state-of-the-art in impact assessment modelling and corresponds the complexity of the sustainability issue; - build consistent database necessary for the implementation of the developed approach for Russia; - construct the spatial-economic-ecological model for Russia; - develop a set of sustainability indicators associated with the model, which allows for quantification of social, economic and environmental effects of sustainability policies; - use the model to assess the effects of a set of important sustainability policy measures in order to demonstrate the operation ability and reliability of the developed modelling approach. The SUST-RUS modelling approach will provide Russian and international community with the sound scientific support for formulating sustainability policies, which is characterized by a balanced integration between social, economic and environmental policy objectives. The use of the SUST-RUS approach will assist the implementation of the EU strategy for sustainable development in Russia as well as an efficient incorporation of the sustainability goals into the existing Russian policy tools on regional and federal levels. The SUST-RUS modelling approach represents the state-of-the-art in many different areas of knowledge and, hence, will be superior to other models available for Russia.

Partners:

N	Partner Legal Name	Country
1	Centre for Economic and Financial Research	RU
2	Transport and Mobility Leuven	BE
3	Zentrum für Europäische Wirtschaftsforschung (ZEW) GmbH	DE
4	The Institute for the Economy in Transition	RU
5	Ural State University	RU
6	Voronezh State University	RU
7	Far Eastern Center for Economic Development	RU
8	Statistics Norway	NO

Activity Code: ENV.2007.4.2.2.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: INtegrating MainSTREAM Economic Indicators with those of SustainableDevelopment

Proposed EC Grant: 1.208.536 €

Abstract:

Though mainstream economic measures such as GDP are useful measures with great influence on both public and private decisions, they are flawed as measures of human welfare. In addition, they give little information as to whether the market is helping Europe make progress on its environmental goals and its commitment to sustainable development. There is a critical need in Europe for indicators and measurement systems that—working in conjunction with mainstream economic indicators—provide a useful measure of progress toward economic success, human well-being, environmental protection and long-term sustainability. There is now a growing interest and momentum on the part of policy makers and researchers in developing these complementary headline indicators to better assess progress. The IN-STREAM project will undertake the qualitative and quantitative assessments necessary for linking mainstream economic indicators with key well-being and sustainability indicators, providing needed insight into the synergies and trade-offs implicit in Europe's simultaneous pursuit of economic growth and environmental sustainability. Based on qualitative and quantitative analyses, recommendations for new indicator approaches will be proposed. Recommended indicators (and sets of indicators) will those that perform best in terms of their robustness, feasibility and suitability to EU policy objectives. Strategies for implementing these approaches will be identified and developed in consultation with stakeholders.

Partners:

N	Partner Legal Name	Country
1	Ecologic - Institute for International and European Environmental Policy gGmbH	DE
2	The University of Bath	UK
3	Fondazione Eni Enrico Mattei	IT
4	Univerzita Karlova v Praze	CZ
5	Institute for European Environmental Policy	UK
6	Universitaet Stuttgart	DE
7	International Institute for Applied Systems Analysis	AT
8	Zentrum für Europäische Wirtschaftsforschung GmbH (ZEW) Mannheim	DE

Activity Code: ENV.2008.4.2.2.1. **Funding Scheme:** BSG-CSO **Duration (Months):** 36

Title: GEOTRACEBILITY FAIR TRADE

Proposed EC Grant: 1.460.710 €

Abstract:

Fair Trade is an activity area where CSOs play a key role. Fair Trade is also an activity area promoting the best social, economic and environmental practices of sustainable development. Unfortunately CSOs do not have the means to develop concerted strategies in Research and Technology Development. Their short term concerns often prevent them to have the necessary hindsight. The main objective of the Geo Fair Trade project is to bring together Fair Trade CSOs and RTD performers. Discussions with the principle Fair Trade stakeholders and actors have shown that their basic needs to win new markets and new consummers are Transparency and Traceability. Taking advantage of the results obtained in two FP5 and FP6 research projects, the CCI Gers and its partners CRA-W and CIRAD, together with six Fair Trade CSOs, have defined the main objectives of the project whose: 1. To select sustainable development indicators with a spatial component and related to the three dimensions of Fair Trade (social, economic and environmental). 2. To adapt the Geo-traceability Integrated System, set-up in the previous research projects, enabling finding and browsing of all relevant information corresponding to the needs of Fair Trade actors. 3. To validate this approach with five case studies chosen by the CSOs. 4. To develop training and educative tools to disseminate this approach. The Geo Fair Trade project is based on a permanent communication between the RTD performers and the CSOs, who will participate in all scheduled progress meetings, to validate the results or to reorientate the Research and Technology Development activities. The final expected result is a reference framework built on the sustainable development geo-indicators that can be used in all the traceability systems already implemented in Fair Trade. This reference framework will improve the certification of the best practices implemented by the Fair Trade actors

Partners:

N	Partner Legal Name	Country
1	Chambre de Commerce et d'Industrie du Gers	FR
2	Centre de Coopération International en Recherche Agronomique pour le Développement	FR
3	Centre wallon de Recherches agronomiques	BE
4	ECOCERT INTERNATIONAL Northeim	DE
5	Système d'Information à Référence Spatiale (SIRS) SAS	FR
6	Equi'Sol (Equitable et Solidaire)	FR
7	Pakka Trade AG (Ltd)	CH
8	International Fair Trade Association	NL
9	PLATE FORME POUR LE COMMERCE EQUITABLE	FR
10	Wageningen University and Research	NL
11	Max Havelaar France	FR
12	Coordinadora Estatal del Comercio Justo	ES

Activity Code: ENV.2008.4.2.2.1. **Funding Scheme:** BSG-CSO **Duration (Months):** 24

Title: One Planet Economy Network: Europe

Proposed EC Grant: 1.300.000 €

Abstract:

The goal of the One Planet Economy Network Europe project (OPEN: EU) is to help transform the EU economy to a One Planet Economy by 2050. As the world's largest economy, Europe must embark upon an immediate and major transformation to avert dangerous climate change and prevent ecosystem collapse. Currently, the impact of the European economy is nearly three times larger than what is required for a sustainable world. A shift to a more sustainable future for Europe must be achieved by building an economy that respects all environmental limits and is socially and financially sustainable. CSOs are well placed to help catalyse this transformation through bringing insights, concerns and issues into the public debate and making them communicable, relevant and timely. The achievement of a One Planet Economy will require a range of actors to come together to deliver this transformation. In this context the 'convening power' of major CSOs is a significant asset.Through a project consortium of CSOs and RTD performers, OPEN: EU will:1. Build the evidence base and enhance sustainable development indicators by developing an academically robust and policy relevant "footprint family" (Ecological, Carbon and Water footprints);2. Build the application by developing a new scenario modelling tool for evidence-based policy, increasing the policy relevance of sustainable development indicators and helping CSOs to illustrate the links between economic growth and environmental degradation to policy makers and the public;3. Build capacity through a new One Planet Economy Network – an online network of decision-makers, CSOs and businesses leaders. This will provide a forum for the visions, knowledge and interests of different stakeholders and facilitate dialogue and debate on solutions to achieve a One Planet Economy. The network will enable a targeted dissemination of communication materials, workshop programme and website to CSO's, policy makers and other key audiences.

Partners:

N	Partner Legal Name	Country
1	WWF-UK	UK
2	Ecologic-Institute for International and European Environmental Policy gGmbH	DE
3	Global Footprint Network	US
4	Stiftelsen The Stockholm Environment Institute	SE
5	Universiteit Twente	NL
6	Norwegian University of Science and Technology	NO
7	SERI Nachhaltigkeitsforschungs und -kommunikations GmbH	AT
8	Institute of European Environmental Policy	UK

Activity Code: ENV.2008.4.2.2.1. **Funding Scheme:** CSA-SA **Duration (Months):** 18

Title: Participatory Assessment of Sustainable Development indicators on good governance from the Civil Society perspective

Proposed EC Grant: 597.360 €

Abstract:

PASSO will assess Sustainable Development Indicators on Good Governance and its cross-cutting features from a social perspective. The starting point will be the list of SDIs adopted in the context of the EU Sustainable Development Strategy on the Good Governance Theme. Alternative sets of governance indicators from international initiatives (e.g. United Nations) will be considered too. These sets of indicators will be subject to a participatory assessment process allowing CSOs members to react to RTD performers, statisticians and experts' views in an iterative manner. A small interdisciplinary International Expert Group (20 members) composed of both CSOs representatives and experts will be created for a first professional review of the existing indicators. The results of the assessment will be submitted for consultation to a Europe-wide large CSOs network. In parallel, national CSOs consultations in Austria, Belgium, Bulgaria, France, Italy, Romania, Spain and The Netherlands will take place. The consultation process will be reiterated within the IEG first and with the public at large at the end so as to ensure that the outcome of PASSO is built on the consensus among all social actors concerned. The aim of the overall assessment will be: - to appraise the relevance and efficiency of the existing indicators from the Civil society perspective in combination with experts views; - to identify gaps and suggest how to fill them, with possible amendments or development of new indicators; - to produce a priority list of such amendments/new developments based on a multi-criteria assessment of their relevance from the CSOs perspective; - to draft recommendations for the improvement of SDS/SDIs.

Partners:

N	Partner Legal Name	Country
1	Istituto di Studi per l'Integrazione dei Sistemi	IT
2	MISSIONS PUBLIQUE	FR
3	Pour la Solidarité	BE
4	University of Stuttgart	DE

Activity Code: ENV.2010.4.2.2-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Compiling and Refining Environmental and Economic Accounts (CREEA)

Proposed EC Grant: 3.499.649 €

Abstract:

The main idea behind this project is to refine and elaborate economic and environmental accounting principles as discussed in the London Group and consolidated in the future SEEA 2012, to test them in practical data gathering, to troubleshoot and refine approaches, and show added value of having such harmonized data available via case studies. This will be done in priority areas mentioned in the call, i.e. waste and resources, water, forest and climate change / Kyoto accounting. In this, the project will include work and experiences from major previous projects focused on developing harmonized data sets for integrated economic and environmental accounting (most notably EXIOPOL, FORWAST, a series of Eurostat projects in Environment Accounting, and to a lesser extent EU KLEMS and WIOD). Where possible data gathered in the project will be consolidated in and enrich such existing databases (most notably the EXIOPOL and FORWAST databases). The project will be executed by a mix of National Statistical Institutes and top research institutes in this field Europe, of whom the majority was involved already in EXIOPOL, FORWAST and various EUROSTAT projects setting up environmental and economic accounts, or have dedicated expertise on key domain areas. The project has made special provisions for further engagement of (European) participants in the London Group.

Partners:

N	Partner Legal Name	Country
1	NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK - TNO	NL
2	COMMISSION OF THE EUROPEAN COMMUNITIES - DIRECTORATE GENERAL JOINT RESEARCH CENTRE - JRC	BE
3	UNIVERSITEIT LEIDEN	NL
4	Statistics Netherlands	NL
5	NORGES TEKNISK-NATURVITENSKAPELIGE UNIVERSITET NTNU	NO
6	STATISTISKA CENTRALBYRAN	SE
7	UNIVERSITEIT TWENTE	NL
8	ETH Zurich	CH
9	2.-0 LCA consultants Limited liability partnership (ApS)	DK
10	WUPPERTAL INSTITUT FUR KLIMA, UMWELT, ENERGIE GMBH.	DE
11	SERI - NACHHALTIGKEITSFORSCHUNGS UND -KOMMUNIKATIONS GmbH	AT
12	EUROPEAN FOREST INSTITUTE	FI

Activity Code: ENV.2007.4.2.3.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Policies to promote sustainable consumption patterns (POPP)

Proposed EC Grant: 1.437.425 €

Abstract:

The project aims at increasing knowledge about the impact of sustainable consumption (SC) policies on consumption patterns and on sustainability. This objective will be achieved by the following steps: A conceptual model will be developed as a framework for the whole project. Embedded in a broader overview of general SC strategies and instruments, research will focus on the need areas of food and housing. For these areas, sustainability potentials will be quantified in order to identify the potential that SC policies may tap. Impacts will then be explored at macro and micro-level that food and housing related SC instruments throughout Europe have on consumption patterns (Impact Assessment). Instruments to be looked at encompass regulatory and economic instruments, including fiscal and procurement policies, as well as communicative instruments, procedural regulation and societal self-regulation. Conditions of success and failure of these instruments will be identified. The instrument impact assessment is based on the analysis of statistical data, expert interviews, focus groups with consumers and workshops with public procurers. Having explored the impact of SC instruments on consumption patterns, a material flow analysis will be carried out to assess their impact on sustainability, including at international level. Options to enhance sustainable consumption patterns will be explored, especially with regard to designing, implementing and transferring effective SC instruments. On the basis of the project results, policy recommendations will be developed to be fed into the Marrakech process. The project is relevant to the Work Programme by identifying the impact of different types of policy instruments at disaggregated level; by evaluating the conditions of success and failure of SC strategies in an interdisciplinary effort; by developing links between the economy, environment and society and presenting innovative policies to make consumption more sustainable.

Partners:

N	Partner Legal Name	Country
1	Öko-Institut e.V. - Institute for Applied Ecology	DE
2	Kuluttajatutkimuskeskus	FI
3	University College London	UK
4	Association Baltijas Vides Forums (engl. Baltic Enviornmental Forum)	LV
5	Assocació Ecoinstitut d'Ecologia Aplicada	ES

Activity Code: ENV.2008.4.2.3.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Rethinking Globalisation in the light of Contraction and CONVERGEnce

Proposed EC Grant: 1.398.213 €

Abstract:

The CONVERGE project will build from the concept of 'contraction and convergence' that informed the Kyoto process. C&C linked the key social concept of equal rights to emissions with the key ecological need for reduced emissions to issue a challenge to economic systems to develop fair processes for emissions reduction. CONVERGE aims to re-think globalisation by developing our understanding of convergence beyond emissions-trading across wider social, economic and ecological dimensions of sustainability. CONVERGE will research, develop and test the processes of contraction, convergence and divergence in current forms of globalisation. The research will be based on systems science to integrate social, scientific and economic disciplines in order to create coherent solutions to complex problems. Key to the success of this study is the interdisciplinary approach and working with stakeholders from civil society, government and business. CONVERGE seeks to explore convergent sustainability relationships across different scales from local, national, global-regional to global. CONVERGE will research current examples of convergence in communities, policies and indicators moving towards sustainability. The project will develop a convergence frame for understanding and development in civil society and policy communities; accessible publications providing guidance and tools for the use of this framework; a set of Convergence indicators, quantitative and qualitative, that will be used to test and model the processes of convergence including development of a Computer Programme; and recommendations to assist policy makers to integrate C&C into the decision making process. CONVERGE will play a significant role in achieving the strategic objective of EUs global partnership: "to promote sustainable development actively worldwide and ensure that the European Union's internal and external policies are consistent with global sustainable development and its international commitments."

Partners:

N	Partner Legal Name	Country
1	The Schumacher Institute for Sustainable Systems	UK
2	The University of Bristol	UK
3	The Natural Step International	SE
4	Lund University	SE
5	GreenDependent Sustainable Solutions Association	HU
6	Szent István University	HU
7	SOCIAL CHANGE AND DEVELOPMENT	IN
8	SCAD COLLEGE OF ENGINEERING & TECHNOLOGY	IN

Activity Code: ENV.2008.4.2.3.1. **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Glibalisation Informed by Sustainable Development

Proposed EC Grant: 1.189.089 €

Abstract:

The objectives of GLOBIS are to synthesise from the scholarly debate in different disciplines, a theoretical foundation for reconciling the three global processes: globalisation, development and sustainable development. Our ontological assumption is that globalisation is an ongoing and in principle benign process, but a process that needs to be promoted and adjusted in relation to sustainable development. Development as a concrete and institutionalised process also needs to be carefully aligned with sustainability. Based on this comprehensive understanding we will analyse how the global flows of financial capital, people, goods and ideas are promoted, restricted and regulated through a number of important policy areas, such as: trade, agriculture and food, energy, transport, technology and innovation, and tourism, in order to identify the existing tensions in globalization, recognizing the trade-offs involved, and thus pointing to possible areas of reform in current policy practices and global institutions.GLOBIS will serve to inform European policy processes on how to reconcile globalisation and sustainable development in order to promote ambition of EU to become the leading force in the world towards sustainability. This will be pursued through a number of thematic studies of important policy areas. The project will engage stakeholders from different sectors of EU and beyond in dialogues on concrete policy dilemmas.

Partners:

N	Partner Legal Name	Country
1	Lunds Universitet	SE
2	University of Copenhagen	DK
3	Société de Mathématiques et de Sciences Humaines	FR
4	Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.	DE

Activity Code: ENV.2008.4.2.3.1. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Sustainable development reflexive inputs to world organisation

Proposed EC Grant: 983.638 €

Abstract:

The objective of the project is to provide the EU with conceptual tools and applicable ideas to make sustainable development an operational paradigm framing EU policy making in the globalization process.Broadening the utilitarian, state-centred, and market failure approach often mobilised in globalisation analysis, we develop a reflexive framework within which time and irreversibility, institutional path-dependency and multiple actors, with heterogeneous knowledge, beliefs, preferences, technology and power, interfere in the process of policy making. In this procedural approach, the policy making process itself will be scrutinised and integrated as a key determinant of the policy outcome itself. Within this renewed framework, globalization core challenges will be intersected with sustainable development conceptual challenges, which will be tackled specifically before nurturing back EU policy-making in the globalization process. The “ultimate test case for collective action” according to recent statement by Nick Stern - namely the governance of climate change and the bottom billion interlinked issue - will be used as an application case study throughout the project. The project’s main outputs are threefold: firstly, identify methodological tools to fulfil the empirical deficit in the measure of world citizens’ heterogeneous preferences across a range of sustainable development issues; second, develop conceptual tools to better understand sustainable development implications on EU social contracts and policy making processes; third, propose building blocks for a renewed dialogue on global governance within the EU and outside as “if sustainable development really mattered” to paraphrase Dani Rodrick.

Partners:

N	Partner Legal Name	Country
1	Institut du Développement Durable et des Relations Internationales	FR
2	London School of Economics and Political Science	UK
3	Freie Universität Berlin	DE
4	Sciences Po Chaire du Développement Durable	FR

Activity Code: ENV.2009.4.2.3.1 **Funding Scheme:** CP-FP **Duration (Months):** 48

Title: Assessing the role of economic instruments in policy mixes for ecosystem services and biodiversity conservation (POLICYMIX)

Proposed EC Grant: 3.459.102 €

Abstract:

POLICYMIX aims to contribute to achieving the EUs goals of reversing trends in biodiversity loss beyond 2010 through the use of cost-effective and incentive-compatible economic instruments. POLICYMIX focuses on the role of economic instruments in a mix of operational conservation policy instruments. To this end, POLICYMIX will develop an integrated evaluation framework that considers multiple policy assessment criteria – biodiversity and ecosystem service provision indicators; valuation of their economic benefit and policy implementation costs; social and distributional impacts; and legal and institutional constraints – at different levels of government. This multi-level approach is of paramount importance for effective biodiversity conservation policy given the overlap between ecological systems and systems of governance in practice. In particular, we evaluate the cost-effectiveness and benefits of a range of economic instruments vis-á-vis direct regulation through command-and-control in a variety of European and Latin American case studies. The suite of selected POLICYMIX case studies aims to provide complementary examples of innovative economic instruments such as Payments for Ecosystem Services (PES) and ecological fiscal transfers, and assess the possibilities for transfer of policy success stories, providing concrete learning possibilities for policy-makers. POLICYMIX actively uses advisory boards including land-users, local managers and national policy-makers, who collaborate with our researchers in the feasibility assessments of economic instruments. Based on this science-policy dialogue, POLICYMIX will develop a stepwise framework for carrying out policy assessment using available data, multi-criteria spatial targeting tools and tiered policy selection matrices. The POLICYMIX approach to policy design at multiple government levels is highly complementary with on-going EU ecological research on multi-scale conservation prioritization.

Partners:

N	Partner Legal Name	Country
1	STIFTELSEN NORSK INSTITUTT FOR NATURFORSKNING	NO
2	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
3	FUNDACAO DA FACULDADE DE CIENCIAS E TECNOLOGIA DA UNIVERSIDADE NOVA DE LISBOA	PT
4	Vrije Universiteit, independent entity of "Vereniging voor christelijk hoger onderwijs, wetenschappelijk onderzoek en patientenzorg" VU (IVM)	NL
5	International Institute for Environment and Development	UK
6	SUOMEN YMPARISTOKESKUS	FI
7	Pós-Graduacão de Ciencias Sociais em Desenvolvimento, Agricultura e Sociedade - Universidade Federal Rural do Rio de Janeiro	BR
8	Institute of Economics at the State University of Campinas	BR
9	Centro Agronómico Tropical de Investigación y Enseñanza	CR

Activity Code: ENV.2010.4.2.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: CReating Innovative Sustainability Pathways

Proposed EC Grant: 1.498.980 €

Abstract:

The core objective of this proposal is to identify potential paths to engaging on an integrated effort to support the transition, to a sustainable, low carbon Europe. The call text places much emphasis of using a scenario and backcasting approach that explicitly discerns individuals, organisations and the collective (societal and economic organisation), addresses the interaction of agency and structure, and analyses from there how individuals and collectives can be engaged on sustainable paths, and how new policy mixes and co-operation mechanisms can overcome barriers to change. In response, this project will: - build upon theories that explicitly link individual and organizational agency with structure and pathways of change (most notably Transition theory, that builds upon structuration and innovation theories) (WP1). - analyse practical (past) cases of change with this framework (WP2 and WP3) to additional understanding on the role of agency and structure and related barriers, drivers and pathways of change (WP4). - apply novel participatory scenario techniques, most notably transition scenario and backcasting methodologies, to develop sustainability visions WP5) and transition paths (WP6). These allow for specific analysis of processes in transition paths and the factors that drive and hinder such transitions (WP7). Finally, on the basis of the analysis of the theoretical basis and cases (WP4) and the results of the scenario/backcasting exercise (WP7), the core question of the call can be answered (WP8): what novel policy mixes and co-operation mechanisms can help to overcome barriers for individuals and collectives to engage on sustainable paths. The project is completed by WPs on Management and Dissemination. The impact of the findings of the project is enhanced by its strong participatory approach and an elaborated dissemination program that includes a policy stakeholder panel.

Partners:

N	Partner Legal Name	Country
1	UNIVERSITY OF SURREY	UK
2	KOZEP-EUROPAI EGYETEM	HU
3	RIJKSUNIVERSITEIT GRONINGEN	NL
4	STATENS INSTITUTT FOR FORBRUKSFORSKNING	NO
5	KAUNO TECHNOLOGIJOS UNIVERSITETAS	LT
6	Netherlands Organisation for Applied Scientific Research	NL
7	TECHNOLOGICAL EDUCATIONAL INSTITUTE OF PIRAEUS	EL

Activity Code: ENV.2010.4.2.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: InContext: Individuals in Context: Supportive Environments for Sustainable Living

Proposed EC Grant: 1.496.727 €

Abstract:

InContext will investigate drivers and barriers for sustainability and their interplay on an individual and collective level. InContext assumes that both individual and collective behaviours respond to an external context (like social norms, policies, and infrastructure) and an internal context (like needs, values and priorities). So far, initiatives to further sustainable development have focused mainly on external contexts. InContext argues that it is essential to address both sides and include factors like individual needs or subconscious aspects to successfully bridge the gap between awareness and action at individual and collective levels. InContext will:• Study internal and external contexts and the way individuals respond to them to identify drivers and barriers to actions advancing sustainable development.• Conduct participatory scenario development and back-casting exercises in three local communities to generate findings on innovative mechanisms for co-operation and the identification of agents for change.• Improve the understanding of the interplay between internal factors and external factors to behaviour, thereby generating results with regard to the interaction between structural and agent-based factors.• Improve the understanding of how policies at EU and local levels (as part of the external context) can help address the internal context in a way that supports sustainability-driven action.• Identify a set of innovative policy mixes for sustainability-driven action considering the roles of actors on different levels such as policy and opinion makers, business and civil society.InContext attaches great importance to the applicability and distribution of its research results. This concern is reflected in the project design by the integration of a network of local governments and the setting up of an interdisciplinary advisory board allowing for a permanent communication and reality-check by political as well as business professionals.

Partners:

N	Partner Legal Name	Country
1	ECOLOGIC INSTITUT gemeinnützige GmbH	DE
2	SERI - NACHHALTIGKEITSFORSCHUNGS UND -KOMMUNIKATIONS GmbH	AT
3	ERASMUS UNIVERSITEIT ROTTERDAM	NL
4	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
5	UNIVERSITE LIBRE DE BRUXELLES	BE
6	ICLEI European Secretariat GmbH	DE
7	TECHNISCHE UNIVERSITEIT DELFT	NL
8	Institute for Agricultural and Forest Environment, Polish Academy of Science	PL

Activity Code: ENV.2010.4.2.3-1 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Low Carbon at Work: Modelling agents and organisations to achieve transition to a low carbon Europe

Proposed EC Grant: 1.493.424 €

Abstract:

The project will provide a theoretically and empirically grounded analysis of everyday practices in the workplace, of the macro and micro-level processes which act as drivers for and constraints upon sustainable practices in different types of workplaces across different European countries, and the relationship between work and outside work practices. These analyses will constitute the empirical basis for developing: agent-based models, which will provide a detailed account of barriers to and drivers for cooperation in transitioning to a low-carbon Europe; and back-casting scenarios, which will allow the mapping out of different pathways to a desirable, future low-carbon Europe. These results will be translated into detailed, articulated descriptions of how to encourage cooperative interaction to reach a sustainable Europe.The project will focus on 6 European case studies of large-scale organizations operating under different national and international contexts and occupying different relevant positions in the sustainability debate (state and private). It will focus on three main categories of practices at work, responsible for the GHG emissions of each organization: consumption of materials and energy, generation of waste and waste management, and organization-related mobility. The project will follow a multi-method approach that will include both qualitative and quantitative methodologies (interviews, questionnaires, agent-based modelling etc.)The findings will provide European policy makers with a more integrated understanding of how the workplace can become a crucial centre for engaging individuals, collectives (e.g., trade unions) and management in new sustainability practices, and with recommendations for context-sensitive policies that would enhance successful cooperation among agents in the transition to a low-carbon Europe.

Partners:

N	Partner Legal Name	Country
1	UNIVERSIDADE DA CORUNA	ES
2	UMEA UNIVERSITET	SE
3	UNIVERSITATEA DE VEST DIN TIMISOARA	RO
4	UNIVERSITY OF SURREY	UK
5	THE MACAULAY LAND USE RESEARCH INSTITUTE	UK
6	RIJKSUNIVERSITEIT GRONINGEN	NL
7	UNIVERSITA DEGLI STUDI DI ROMA LA SAPIENZA	IT

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** CSA-SA **Duration (Months):** 22

Title: Partnering to Enhance Civil Society Organisations' Contribution to Research in Sustainable Consumption & Production

Proposed EC Grant: 583.454 €

Abstract:

Some relative decoupling of economic growth from materials and energy consumption has been achieved in many EU countries during the past decade. However, this did not lead to an absolute decrease in environmental pressures, because absolute resource use has been generally remained steady over the past two decades. Moreover, due to the 'rebound effect', it is unlikely that resource use can be reduced by technological improvements alone. This leads us to the conclusion that sustainability of current lifestyles and consumption patterns may have to be critically reviewed.In order to reach the goal of shifting towards less environmentally damaging consumption patterns without reductions in the "quality of life", contributions from and agreement among a variety of economic and societal actors are required. Civil Society Organizations (CSOs) have the unique position to bring a variety of actors together and convince them to take action for more transformational type of change beyond resource productivity measures. They can encourage concrete set of goals to drive away from currently unsustainable patterns of consumption.This project looks into how CSOs can provide new insights for research in sustainable consumption and production with the goal of reaching absolute decoupling of economic growth from resource use. Incorporating all major priorities of the call, specific objectives of the project are as follows:- Identify gaps (1) in the knowledge of CSO's how to shape consumption and production patterns in a sustainable way, and (2) in the research agenda for sustainable consumption and production policy strategies, assessment tools and indicators;- Providing new insights for increasing efficiency of policy strategies, assessment tools and indicators for sustainable consumption and production through small-scale exploratory actions;- Create partnerships between CSOs and research organisations to increase involvement of CSOs in research.

Partners:

N	Partner Legal Name	Country
1	UNEP/Wuppertal Institute Collaborating Centre on Sustainable Consumption and Production (CSCP)	DE
2	Northern Alliance for Sustainability	NL
3	STIFTELSEN THE STOCKHOLM ENVIRONMENT INSTITUTE	SE
4	Sustainable Europe Research Institute	AT
5	WWF-UK	UK

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** BSG-CSO **Duration (Months):** 36

Title: Civil Society for Sustainability

Proposed EC Grant: 852.000 €

Abstract:

Abstract not available

Partners:

N	Partner Legal Name	Country
1	Dialogik - Gemeinnützige Gesellschaft für Kommunikations- und Kooperationsforschung	DE
2	Ulmer Initiativkreis nachhaltige Wirtschaftsentwicklung e.V.	DE
3	MUTADIS CONSULTANTS	FR
4	Regional Environmental Center for Central and Eastern Europe	SI
5	Institute of Sociology at Hungarian Academy of Sciences	HU
6	Energia Klub Környezetvédelmi Egyesület	HU

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** CSA-SA **Duration (Months):** 30

Title: European Network engaging CIvil society in Low Carbon scenarios

Proposed EC Grant: 717.980 €

Abstract:

The overall aim of ENCI-LowCarb is to engage civil society in research on low carbon scenarios. This will be achieved by : Creating a European network related to the factor 4 composed by Civil Society Organisations and research institutes; Elaborating two national studies (France and Germany) based on the confrontation between climate policies of low carbon scenarios and civil society organisations (social acceptability); Disseminating the results to a larger public. This project has direct relevance to the last developments of climate change european policies. The Spring Council of 8-9 march 2007 recognized that in order to stabilize the climate and to reach the 2°C objective, industrialized countries need to cut their greenhouse gases emissions by 30% by 2020 and by 60 to 80% by 2050 compared to 1990. In this context, the European Council endorsed an EU objective of a 30% reduction in greenhouse gas emissions by 2020 compared to 1990 as its contribution to a global and comprehensive agreement for the period beyond 2012. Policies able to reach these objectives still have to be conceived, and as there is not one single emission reduction objective common to each member state, there is no unique way to reach it. Discussions on this subject will take into account different national circumstances and potentials : French and German situations in particular will be analysed. But two main elements are decisive in implementing climate policies : of course their economic assessment, but also their social acceptability. The long term impact of the ENCI-LowCarb project will be to enhance the adoption by citizens and decision makers of the new behaviours which are required to reach the Factor 4 objective.

Partners:

N	Partner Legal Name	Country
1	Réseau Action Climat - France	FR
2	International Network for Sustainable Energy - Europe	DK
3	Germanwatch Nord-Süd-Initiative e.V.	DE
4	Centre National de Recherche Scientifique	FR
5	POTSDAM INSTITUT FUER KLIMAFOLGENFORSCHUNG	DE

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** BSG-CSO **Duration (Months):** 24

Title: The Development of Indicators & Assessment Tools for CSO Values-based projects in Education for Sustainable Development (ESD)

Proposed EC Grant: 814.569 €

Abstract:

This proposed FP7 project involves five very different Civil Society Organisations (CSOs) involved in Education for Sustainable Development in a very wide range of project types coming together to investigate three main aims, with academic assistance:

1) to develop more useful indicators to measure the impact of value/behaviour change elements in their ESD projects – at the project level. This will enable them to better prioritise their resources across a wide range of project types. To assist this, a considerable range of value-based projects will be considered, involving SMEs, communities and school-aged children. These newly developed project level impact indicators will be related to those for other levels, e.g. regional, national; and those used in academic arenas.It will be necessary to particularly focus on the development of less established SD indicators such as " well-being" which are can be strongly affected by spiritual/faith-based values and activities (Clark and Lelkes, 2005). Indicators for this have been difficult to quantify so far in mainstream discussions, but by focussing at project impact level we believe some can be defined and refined. Some schools of thought suggest changing values will lead more effectively to behaviour changes, leading to larger SD impacts; without ways to measure, such ideas cannot be tested.2) to improve the environmental impact of projects through advice at ground level. Three of the CSO participants in this proposal are faith-based and their projects generally focus on social issues more than environmental ones. In this proposal the RTDs will be asked to outline possibilities to increase the projects' environmental impact within their current context. Overall this will lead to suggestions and guidelines for such CSOs to allow them to be more effective at environmental impact even when this is not their main focus. Researchers officers will work extensively in the field on CSO projects for both aims.

Partners:

N	Partner Legal Name	Country
1	University of Brighton	UK
2	Earth Charter Initiative	SE
3	European Baha'i Business Forum	FR
4	Alliance of Religions and Conservation	UK
5	Baha'i Agency for Social and Economic Development - UK	UK
6	People's Theater e.V.	DE
7	Arthur Lyon DAHL	CH
8	Univerzita Karlova v Praze	CZ

Activity Code: ENV.2007.4.2.3.2. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Integrating civil, scientific and stakeholder knowledge towards African sustainable energy policy

Proposed EC Grant: 548.832 €

Abstract:

Sustainable development is closely linked to the issues of Environment and Energy and their interdependencies. Sustainable economic growth and social development are only possible if secure, constant and equal access to energy sources is guaranteed. However, intensive energy use is likely to present serious implications for the environment and the climate. Especially in developing countries, promotion of sustainable energy options is necessary to tackle these challenges. In Africa, Civil Society Organisations (CSO) have been particularly active in addressing sustainable development and energy management within the last 15 years. While presenting important representatives for social needs and concerns, their effective impact on research policy agenda setting has however been considerably low yet. In line with the EU's commitments to strengthening civil participation and to promoting a global approach to the issue of sustainable development, SustainergyNet aims at promoting the engagement of CSOs in Africa in the field of research policy agenda setting concerning sustainable and efficient energy management. In this perspective, the project will elaborate and suggest ways on how to encourage and facilitate the cooperation between CSOs and RTD performers. This will be based on the assessment of current settings and frameworks that already exist, the formulation of recommendations and best practices and the presentation of a specific facility ("CSO Involvement Net") that shall support CSOs towards actively contributing to research and policy processes.

Partners:

N	Partner Legal Name	Country
1	Organisation for International Dialogue and Conflict Management	AT
2	Groupe de recherche et d'échanges technologiques (GRET)	FR
3	Österreichisches Institut für Internationale Politik	AT
4	Technische Universität Dresden	DE
5	AFREPREN/FWD Energy , Environment and Development Network for Africa	KE
6	Cairo University/ Institute of African Research and Studies	EG
7	Université de Yaoundé II/Faculté de Sciences Juridiques et Politiques/ Département de Science Politique	CM

Activity Code: ENV.2008.4.2.3.2. **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: How to achieve sustainable water ecosystems management connecting research, people and policy makers in Europe

Proposed EC Grant: 1.497.360 €

Abstract:

The issue of concern of the AWARE project is the anthropogenic deterioration of water ecosystems, in particular in coastal areas. The new approach proposed by the AWARE project to enhance connectivity between research and policy-making exploit the concept of integrated adaptive ecosystem management, engaging scientists, policy makers and the public (the latter including both stakeholders and lay citizens/water users) into comparable case studies of participatory scenario-building. The emphasis given to the role of the public enlarges the concept of organisational learning to the wider concept of social learning. The specific objectives and WPs of the AWARE project will include therefore: WP1: to design and prepare the pilot experiments of participatory scenario-building; WP2: to perform three case studies of participatory-scenario building in different coastal regions of Europe; WP3: to make an evaluation and assessment of the pilot case studies and of the proposed approach; WP4: to foster networking between science institutions, policy authorities and stakeholders in the case study areas and at EU level, and disseminate the approach elsewhere in Europe. The AWARE consortium includes 13 partners of complementary expertise in the field of aquatic ecosystems studies (UU, UPMC, ULB, UNIPR), social sciences (ADELPHI, ICCR, Missions Publiques), system analysis (ISIS, JRC-IES, UNISI) and integrated water management (BIOFORSK, POLIEDRA), plus the Environmental Service from the Provincial Administration of Ferrara. The consortium will be complemented by an advisory group of 20 policy makers and stakeholders.

Partners:

N	Partner Legal Name	Country
1	Istituto di studi per l'Integrazione dei Sistemi	IT
2	Bioforsk Soil and Environment	NO
3	Adelphi Research	DE
4	The Interdisciplinary Centre for Comparative Research in the Social Sciences	AT
5	Uppsala University	SE
6	MISSIONS PUBLIQUES	FR
7	European Commission, DG-Joint Research Centre	BE
8	Universita' di Siena	IT
9	Università degli Studi di Parma	IT
10	Poliedra - Centri di conoscenza e formazione del Politecnico di Milano	IT
11	University Pierre & Marie Curie	FR
12	Provincia di Ferrara	IT
13	Université Libre de Bruxelles	BE

Activity Code: ENV.2008.4.2.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Brokering Environmentally Sustainable Sanitation for Europe

Proposed EC Grant: 933.964 €

Abstract:

This collaborative research project will last 36 months and involve 10 partners. Its general aim is to contribute to the EU Renewed Sustainable Development Strategy through the enhancement of the links between policy and research on sustainable development in the field of sanitation (a crucial area with regard to environmental sustainability and quality of life in general). The project has two specific aims.1. Generating new knowledge on the factors hindering the dissemination of scientific and technological knowledge that can be immediately applied in support to sustainable development, and of identifying knowledge brokerage methods enabling to overcome these hindering factors and to maximise the exploitation of relevant knowledge.2. Starting up a learning process on knowledge brokerage in general as a tool for the socialisation of Scientific and Technological Research.The project components, to be implemented in the partner countries, are:- Research. Activities will carried out for mapping the knowledge and technological options for environmentally sustainable sanitation (ESS), and the actors that possess this knowledge. This, together with a consultation of experts aimed at listing the obstacles to knowledge brokerage dissemination, will provide the basis for experimentations. - Experimentation. Knowledge brokerage experiments on ESS will be carried out in the Netherlands, Italy and Bulgaria via 3 pilot projects.- Learning. The results achieved will serve to start up a process aimed at drafting policy guidelines (including a position paper) on knowledge brokerage on ESS.- Dissemination. Dissemination and awareness-raising initiatives will be carried out on the project issues and results.9 WPs are foreseen. WP1 and 2 for the first part of the research; WP3-6 will be devoted to the design and implementation of 3 pilot projects, WP7 will be devoted to learning process; WP8 will deal with dissemination and WP9 with project management.

Partners:

N	Partner Legal Name	Country
1	Universiteit Maastricht	NL
2	Laboratorio di scienze della cittadinanza	IT
3	Water, Engineering and Development Centre, Loughborough University	UK
4	Research Centre Regional and Global Development	BG
5	Comune di Castel Sant'Angelo di Rieti	IT
6	Waterschapsbedrijf Limburg	NL
7	Water Supply and Sanitation - Pernik	BG
8	Associazione Italiana per il Consiglio dei Comuni e delle Regioni d'Europa	IT
9	Consiglio Nazionale delle Ricerche	IT
10	International Water Association	NL

Activity Code: ENV.2008.4.2.3.2. **Funding Scheme:** CSA-CA **Duration (Months):** 24

Title: Policies and Research for an Integrated Management of Urban Sustainability

Proposed EC Grant: 1.221.551 €

Abstract:

The PRIMUS project has been designed to bridge the gap between research on the European level on one hand, and policy-making at (and for) the local level on the other hand. The theme chosen for this 36-months coordination action is 'sustainable urban management', thus covering the way how the various policy areas of urban development (energy/water/waste, transport, planning and design, social inclusion, etc) are integrated, rather than one of these themes in particular. This focus is based on the assumption that the decoupling of environmental degradation and economic growth can only be achieved through a better management and governance of the largely inter-dependent issues of urban development. Indicators and information systems, efficient and effective policy processes, and innovative public participation are the main instruments to set ambitious targets, gain wide acceptance, and implement behavioural changes in society. The project is built around a series of events of different nature - so-called Connection Fora, Linkage Fora and Implementation Fora - linking into and building upon each other. They convene local governments from across Europe, researchers in the field of urban sustainability management, and national ministries and agencies dealing with sustainability policies directed at the local level in their respective Member States. A pilot dimension of the project is the 'explorative application' of two selected research-based tools for sustainable urban management by some 100 local governments throughout Europe. This application should explore the connectivity between research and policy-making and deliver criteria for its general enhancement in other thematic areas and in the future. With the European Report on Urban Sustainability - the first of its kind and derived from this explorative application - PRIMUS will demonstrate the fascinating potential of a better connectivity between research and policy-making.

Partners:

N	Partner Legal Name	Country
1	ICLEI Europasekretariat GmbH	DE
2	University of Northumbria at Newcastle	UK
3	Ambiente Italia s.r.l.	IT
4	Abo Akademi University	FI

Activity Code: ENV.2008.4.2.3.2. **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Policy Science Interactions: connecting science and policy through innovative knowledge brokering

Proposed EC Grant: 1.373.083 €

Abstract:

European policy makers and researchers recognise the large policy potential of research in the field of sustainable development, but the potential is not fully used. PSI-connect wants to contribute to bridging the gap between science and policy in the field of the impacts of climate change on water management. The decoupling challenge from the EU Sustainable Development Strategy implies that impacts of climate change on the river basin system should be diminished. This is a policy issue of contemporary urgency and it is a topic where large quantities of high quality knowledge ('untapped potential') are available. The consortium partners are all involved in different EU-projects with high relevance and have excellent contacts with relevant national research programs and easy access to national and regional policy makers. PSI-connect will experiment with and develop innovative knowledge brokering instruments in the field of impacts of climate change impacts on river systems. These instruments will be developed from available candidates such as Communities of Practice, games, group model building, and scenario workshops. We will develop and test these instruments in six case studies: - Working group Climate Change and Water of the CIS of the WFD; - Committee on Climate Change of the EU Parliament; - German Ministry of Environment; - Dutch Ministry of Traffic, Public Works and Water management; - River basin Community Elbe (Germany); - Water Board Rivierenland (the Netherlands); The final results of PSI-connect will be tested knowledge brokering instruments for different policy levels. Furthermore, 'knowledge brokerage communities' will be established that act as learning communities and have the capacity to maintain European leadership in this field beyond the lifetime of the PSI-connect project itself. Results will be disseminated to the relevant audiences through summer schools, a web-site and a final conference.

Partners:

N	Partner Legal Name	Country
1	Netherlands Organisation for Applied Scientific Research (TNO)	NL
2	Cranfield University	UK
3	Centrum Rozwiazan Systemowych	PL
4	University of Osnabrück	DE
5	Potsdam Institute for Climate Impact Research	DE
6	VITUKI Environmental Protection and Water Management Research Institute	HU

Activity Code: ENV.2009.4.2.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Enhancing connectivity Between Research and Policymaking in Sustainable Consumption

Proposed EC Grant: 1.482.292 €

Abstract:

The project “CORPUS - Enhancing Connectivity Between Research and Policymaking in Sustainable Consumption” aims to develop novel approaches to knowledge brokering (KB) between policy-making and research. It will foster evidence-based policy-making at the example of sustainable consumption by applying and testing a combination of online and offline KB methods. It will stimulate community-building across the involved researchers and policy-makers to arrive at a self-sustaining process of knowledge management in sustainable con-sumption policies.The CORPUS Web Platform is to become a central reference point for high quality information and networking among European professionals working with sustainable consumption. It will provide a space for incubating and nurturing knowledge to be shared among researchers and policy-makers through private domain, and scientific results to be disseminated in the public domain, and a transparent, effective interaction (dialogue) between scientists and policy-makers. The Interaction Exercises in three priority areas of sustainable consumption (food, mo-bility, housing) will explore novel modalities of knowledge brokerage through different forms of face-to-face dialogues. They provide specifically tailored arenas for personal exchange, infor-mation provision, and offline community-building. Since community-building is crucial for successful and ongoing knowledge exchange, a sepa-rate work package is dedicated to building of relationships, governing the network, and stimulat-ing engagement of participants. Another work package provides resources for initial fine-tuning and recurrent adaptations of the process and ensures the transferability of the projects results by systematically reflecting the empirical experiences against the background of knowledge management theory. Related to that, a built-in evaluation further enhances continued learning on the knowledge brokerage approach taken within CORPUS.

Partners:

N	Partner Legal Name	Country
1	INSTITUT FUR OKOLOGISCHE WIRTSCHAFTSFORSCHUNG GmbH -IOW	DE
2	Bundesministerium für Land- und Forstwirtschaft, Umwelt- und Wasserwirtschaft	AT
3	COPENHAGEN BUSINESS SCHOOL	DK
4	Danish Topic Centre on Waste	DK
5	VRIJE UNIVERSITEIT BRUSSEL	BE
6	Planète Publique	FR
7	The Regional Environmental Center for Central and Eastern Europe	HU
8	STRATEGIC DESIGN SCENARIOS SPRL	BE
9	STATENS INSTITUTT FOR FORBRUKSFORSKNING	NO
10	WIRTSCHAFTSUNIVERSITAT WIEN	AT
11	Ministry of the Environment	FI

Activity Code: ENV.2009.4.2.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: POLICY ADDRESSING CLIMATE CHANGE AND LEARNING ABOUT CONSUMER BEHAVIOUR AND EVERYDAY LIFE

Proposed EC Grant: 1.330.626 €

Abstract:

At the heart of this project lies the development, trialling and operationalisation of a tool (STAVE), designed to support the work of policy-making for sustainability in real-world settings. The tool will support processes of knowledge brokerage, promoting the appropriate application of existing research findings, and the generation of new knowledge which is focused on specific policy objectives. In substantive terms, the project responds to recent work on sustainable consumption, which has provided compelling arguments about the difficulties entailed in seeking to address anthropogenic climate change by attempting to shift patterns of consumer behaviour. The project will take the form of a series of collaborative problem-focused interventions with policy-makers which will engage with their current work in these areas. STAVE will allow these policy-makers to examine the nature and validity of assumptions about human sensibilities, reasoning and action that are incorporated into the development of policy. The project will yield detailed guidance on how best to utilise STAVE across a variety of organisational and policy-specific environments. It will also generate important insights into the mechanisms by which different sources of knowledge are utilised in the practical activity of policymaking; and into the nature of lay citizens' practical reasoning and everyday activities, as they relate to the sustainability of their patterns of consumption.

Partners:

N	Partner Legal Name	Country
1	CENTRO DE INVESTIGACIONES ENERGETICAS, MEDIOAMBIENTALES Y TECNOLOGICAS-CIEMAT	ES
2	UNIVERSITAT AUTONOMA DE BARCELONA	ES
3	CARDIFF UNIVERSITY	UK
4	UNIVERSITY OF SURREY	UK
5	LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE	UK
6	INSTITUT SYMLOG	FR
7	DIALOGIK GEMEINNUETZIGE GESELLSCHAFT FUER KOMMUNIKATIONS- UND KOOPERATIONSFORSCHUNG mbH	DE
8	Försvarshögskolan, Swedish National Defence College	SE
9	SC MedaResearch SRL	RO
10	AMPHOS XXI CONSULTING SL	ES

Activity Code: ENV.2009.4.2.3.2 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: SCIENCE-POLICY INTERFACES FOR BIODIVERSITY: RESEARCH, ACTION, AND LEARNING

Proposed EC Grant: 1.349.293 €

Abstract:

SPIRAL aims to enhance the connectivity between biodiversity research and policy making. Although conservation and the sustainable use of biodiversity are fundamental requisites of human well-being, the biodiversity issue raises unprecedented challenges regarding science-policy interfaces. The project proposes state of the art interdisciplinary research on science-policy interfaces for sustainability governance at the theoretical, methodological and practical levels. This will support the design, implementation and operation of the 'real-life' institutional designs that are currently emerging to interface biodiversity research and sustainability policy. The project will also provide an opportunity for the main actual or potential policy actors and stakeholders in biodiversity science-policy interfaces to learn, share experiences and network. SPIRAL will deliver a series of practical products for the benefit of users involved in interfaces, including workshops, networking opportunities, handbooks, policy briefs, targeted synthetic reports, an internet pilot platform, and a dedicated website. Overall this will allow scientists, policy-makers and other stakeholders to capitalise on a better understanding of science-policy interfaces and implement better practices.

Partners:

N	Partner Legal Name	Country
1	NATURAL ENVIRONMENT RESEARCH COUNCIL	UK
2	Median SCP	ES
3	Vlaams Gewest	BE
4	HELSINGIN YLIOPISTO	FI
5	STICHTING KONINKLIJK NEDERLANDS INSTITUUT VOOR ZEEONDERZOEK (NIOZ)	NL
6	UNIVERSITATEA DIN BUCURESTI	RO
7	HELMHOLTZ-ZENTRUM FUER UMWELTFORSCHUNG GMBH - UFZ	DE
8	THE MACAULAY LAND USE RESEARCH INSTITUTE	UK
9	CENTRE DE COOPERATION INTERNATIONAL EN RECHERCHE AGRONOMIQUE POUR LE DEVELOPPEMENT	FR
10	African Model Forest network Initiative	CM

Activity Code: ENV.2010.4.2.3-2 **Funding Scheme:** CSA-CA **Duration (Months):** 36

Title: Producing s shared vision on how to harness Research & Development for Sustainable Development

Proposed EC Grant: 984.200 €

Abstract:

The main objective of VISION RD4SD is to ensure that Europe is able to contribute to a Sustainable Development of the world by formulating policies and decisions based on robust, up to date knowledge of highest scientific quality. The project focuses on a dialogue among European science policy makers, administrators and those funding policy makers in general who demand and need solutions from VISION RD4SD. The project will develop an overview on how research and development to a sustainable development is being funded, supported and evaluated by science policy. This will be done by a number of state of the art studies. These studies will be carried out through desk research and interviews, both on country, regional and European scale. The dialogue process will be discussed in a set of facilitated workshops. The results of these workshops will be synthesised in a shared vision with relevance on how to harness Research & Development for Sustainable Development.The final outcome of the project will disseminate the results to a broader target group in science policy as well as science communities working for Sustainable Development.

Partners:

N	Partner Legal Name	Country
1	FORSKNINGSRÅDET FÖR MILJÖ, AREELLA NÄRINGAR OCH SAMHÄLLSBYGGANDE	SE
2	Swiss federal office for the environment	CH
3	THE ICELANDIC CENTRE FOR RESEARCH	IS
4	MINISTERIO DE CIENCIA E INNOVACION	ES
5	CONSORZIO PER LA GESTIONE DEL CENTRO DI COORDINAMENTO DELLE ATTIVITA DI RICERCA INERENTI IL SISTEMA LAGUNARE DI VENEZIA	IT
6	DEUTSCHES ZENTRUM FUER LUFT - UND RAUMFAHRT EV	DE
7	UNIVERSITEIT MAASTRICHT	NL
8	TURKIYE BILIMSEL VE TEKNOLOJIK ARASTIRMA KURUMU	TR
9	UNIVERSIDADE DE AVEIRO	PT
10	MALTA COUNCIL FOR SCIENCE AND TECHNOLOGY	MT
11	KAUNO TECHNOLOGIJOS UNIVERSITETAS	LT
12	UMWELTBUNDESAMT	DE
13	NATURVARDSVERKET	SE
14	SIHTASUTUS ARCHIMEDES	EE
15	GENIKI GRAMMATIA EREVNAS KAI TECHNOLOGIAS, YPOURGIO PAIDIAS, DIA VIOU MATHISIS & THRISKEVMATON	EL
16	Science development	DE
17	Dr. Jill Jaeger	AT
18	Lernprozesse für Nachhaltige Entwicklung	DE
19	Groundswell Research Associates Limited	UK
20	Dr John Holmes	UK
21	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	DE
22	transdisciplinarity-net, c/o Swiss Academy of Sciences	CH
23	Dr J. David Tabara	ES
24	SERVICE PUBLIC FEDERAL DE PROGRAMMATION POLITIQUE SCIENTIFIQUE	BE
25	THE SECRETARY OF STATE FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS	UK
26	Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer	NL
27	Staatssekretariat für Bildung und Forschung SBF	CH
28	NATIONAL INSTITUTE OF METEOROLOGY AND HYDROLOGY OF THE BULGARIAN ACADEMY OF SCIENCES	BG
29	BUNDESMINISTERIUM FUR WISSENSCHAFT UND FORSCHUNG BMWF	AT
30	LATVIJAS REPUBLIKAS IZGLITIBAS UN ZINATNES	LV

Activity Code: ENV.2010.4.2.3-3 **Funding Scheme:** CP-FP **Duration (Months):** 36

Title: Knowledge brokerage to promote sustainable food consumption and production: linking scientists, policymakers and civil society organisations

Proposed EC Grant: 1.495.263 €

Abstract:

The policy issue central to this project is food as many of today's sustainability problems (e.g. water shortage, GHG emissions, pollution of soil and water, decrease of biodiversity, urban waste) are related to the prevailing pattern of food production and consumption (including processing and distribution). Hence, developing more sustainable food production and consumption patterns will have a significant impact on sustainable development in general. This project aims to develop and experiment with new integrative modalities of linking research to policy-making in the field of sustainable food consumption and production, thereby contributing to the establishment of new policy-relevant communities of researchers, policy makers & CSOs and enhancing the use of research insights in policies to promote sustainable food systems. Three different Communities of Practice will be developed, focusing on different dimensions of a newly emerging integrated territorial food geography: a) short food supply chains, b) sustainable public food procurement, and c) urban food strategies. Like the FOODLINKS consortium, each CoP will consist of researchers, policymakers and CSO representatives. In this project we will monitor and evaluate the knowledge brokerage activities in the CoPs, in order to propose new ways of linking research and policymaking in the food domain as well as in other public domains.

Partners:

N	Partner Legal Name	Country
1	WAGENINGEN UNIVERSITEIT	NL
2	FORSCHUNGSINSTITUT FUER BIOLOGISCHEN LANDBAU	CH
3	CARDIFF UNIVERSITY	UK
4	UNIVERSITA DI PISA	IT
5	Baltic Studies Centre	LV
6	THE CITY UNIVERSITY	UK
7	INTERDISZIPLINAERES FORSCHUNGSZENTRUM	AT
8	Malmö Stad / City of Malmö	SE
9	Scottish Executive	UK
10	NEIKER-INSTITUTO VASCO DE INVESTIGACION Y DESARROLLO AGRARIO SA	ES
11	FEDERATION REGIONALE DES CENTRES D'INITIATIVES POUR VALORISER L'AGRICULTURE ET LE MILIEU	FR
12	Tukuma novada Dome	LV
13	OBV-VIA CAMPESINA AUSTRIA-OSTERREICHISCHE BERGBAUERN UND BERGBAUERINNENVEREINIGUNG	AT
14	Department for waste and material flow management (FA 19D)	AT

Activity Code: ENV.2010.4.2.3-3 **Funding Scheme:** CP-FP **Duration (Months):** 42

Title: linking RESearch and POlicy making for managing the contradictions of sustaiNable consumption anD Economic gRowth

Proposed EC Grant: 1.499.376 €

Abstract:

RESPONDER aims to develop, implement and evaluate a knowledge brokerage system on managing the contradictions of sustainable consumption and economic growth. Therefore the project will not just bridge the gap between science and policy, but will also improve the mutual understanding between what could be called the “pro-growth community” (i.e. economists and policy makers oriented towards the EU Lisbon Strategy) and the “beyond-growth community” (i.e. scientists oriented towards the limits to growth and policy makers involved in the sustainable development debate). In a series of EU dialogues a system map of sustainable consumption and economic growth will be developed together by researchers and policy makers in order to understand paradigmatic contradictions, conflicts of interest and trade-offs. The map will constitute the basis for systematizing empirical findings, questioning different assumptions, analysing policies and identifying new research questions. In a series of multinational knowledge brokerage events, the generic map will be applied to five policy areas (housing, energy, financial, transport and agricultural policies). An internet-based knowledge platform will support a continuous dialogue by “trading” information on facts, trends, policies and experiences based on system maps. Policy makers will benefit from RESPONDER by experiencing innovative forms of knowledge brokerage, by getting easy access to research findings and by networking. Researchers will benefit by understanding better the rationality of decision makers, by getting access to them, by improving the mutual understanding across different paradigms and by elaborating a joint research agenda. The consortium consists of 2 ministries, 5 universities and 3 research institutes, the Advisory Board consists of Members of the European Parliament, the business sector, NGOs and the OECD. RESPONDER is supported by policy makers from 20 European member states committing themselves to participate.

Partners:

N	Partner Legal Name	Country
1	WIRTSCHAFTSUNIVERSITAT WIEN	AT
2	INSTITUT FUR OKOLOGISCHE WIRTSCHAFTSFORSCHUNG GmbH -IOW	DE
3	SERI - NACHHALTIGKEITSFORSCHUNGS UND -KOMMUNIKATIONS GmbH	AT
4	UNIVERSITAT AUTONOMA DE BARCELONA	ES
5	DANMARKS TEKNISKE UNIVERSITET	DK
6	UNIVERSITY OF SURREY	UK
7	Prognosticky ustav Slovenskej akademie vied	SK
8	FUNDACAO DA FACULDADE DE CIENCIAS E TECNOLOGIA DA UNIVERSIDADE NOVA DE LISBOA.	PT
9	Swiss Federal Office for Spatial Development, Sustainable Development Section	CH
10	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Division General Aspects of Environmental Policy, Sustainability and Enviro	DE

Activity Code: ENV.2008.5.1.0.1. **Funding Scheme:** CSA-SA **Duration (Months):** 48

Title: Communicating environmental impacts on water quality, availability and use

Proposed EC Grant: 871.620 €

Abstract:

The ComEnvir project aims to narrow the gap between EU sponsored environmental research and European citizens. Water (resources, quality, pollution and biodiversity issues) has been chosen as a common theme to be addressed by the project. It will cover environmental stressors, waste treatment, health effects, biodiversity, risks and therefore the role of water quality in its different environmental locations (fresh water, marine, soil, air). The project will last 48 months. The project will communicate results and activities of EU environmental research with two specific target groups. The primary target group are teachers and students. The second target group is the general public. The overall project objectives are to: - empower the European citizens to constructively engage in scientific dialogue and debate; - inform European consumers of the latest scientific advances in the food sector; - strengthen science education in classrooms and promote scientific curiosity among the youth. The ComEnvir project will achieve its set objectives through a number of innovative approaches and strategies that have already been piloted in 2006 and 2007. These approaches centre around three key elements: - creation of knowledge packages on EU environmental research and will include films, film clips, FAQs, news, background reading materials, a glossary and links; - effective dissemination measures (broadcast media, DVDs and internet) and; - thorough evaluation of on-going project deliverables. The ten project members, located in Denmark, France, Germany, Italy, The Netherlands, Norway and the UK. possess complementary expertise that assures successful project outcome. The project will last 48 months.

Partners:

N	Partner Legal Name	Country
1	Ludwig Maximilians University	DE
2	ProBio Partners VOF	NL
3	Visions Unlimited Medien GmbH	DE
4	UNESCO	FR
5	Hedmark University College	NO
6	ECT Oekotoxikologie GmbH	DE
7	Instituto di Ricerca Sulle Acqua	IT
8	Ecological Consultancy Services Ltd	IE
9	Karolinska Institute	SE
10	Consejo Superior de Investigaciones Científicas	ES

Activity Code: ENV.2008.5.1.0.1. **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Organising dissemination on Results of projects on Chemical Evaluation, Spreading Techniques for Risk Assessment

Proposed EC Grant: 910.930 €

Abstract:

The project ORCHESTRA has the main aim to disseminate and exploit the European research activities dealing with computer models for the environment. These models have a huge potentiality for dissemination, for their nature, based on information technologies. This area is multidisciplinary, because it deals with environmental science, health, chemistry and information technology. The general impact of information technology is proceeding in an exponential way. Specific use is often limited by a poor knowledge about the availability of suitable tools, cultural scepticism, and lack of training. We will address the strategies for a broad, systematic dissemination and exploitation of the research results of a number of EU projects. Specific dissemination and exploitation measures will be identified for the different stakeholders, including regulators, industry, citizens, international bodies, scientific and other associations. Dissemination towards regulators of all EU member and associated states will be provided. We will also address industry, with special attention to SME, which may gain from the software we are dealing with. We will communicate to citizens, their associations, scientists and other publics with different tools. In the consortium we have representatives of all major stakeholders involved, and a number of partners expert in efficient communication strategies. A sustainable strategy will result from the project. The software products from the different projects will be organised in a web-based system open to the public for continuous access and promotion. Links with other initiatives will exploit results at the regulatory level and in the information technology community, making results living and evolving. The mathematic approach we will disseminate will be also useful to generate simple indicators of regulation impact. ORCHESTRA will promote a repository of software and databases, suitable for updated information on European research on chemicals.

Partners:

N	Partner Legal Name	Country
1	Istituto di Ricerche Farmacologiche Mario Negri	IT
2	DIALOGIK gemeinnützige Gesellschaft für Kommunikations-und Kooperationsforschung mbH	DE
3	PublicSpace Ltd	UK
4	Politecnico di Milano, Dipartimento di Elettronica e Informazione	IT
5	Institut Symlog de France	FR
6	University of Patras	EL
7	Centro Reach S.r.l.	IT

Activity Code: ENV.2009.5.1.0.1 **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Scoping China's Environmental Research Excellence and major Infrastructure: Foresight, Potentials, and Roadmaps

Proposed EC Grant: 993.233 €

Abstract:

SPRING is a supporting action under EU FP7 Environment theme, with the main objective of creating and providing a solid basis for future EU-China collaboration in environmental research. SPRING will identify common needs and opportunities, analyse potential topics of research cooperation and initiatives, map competences and potentials of Chinese research organisations and major infrastructure, investigate strategic development plans and initiate roadmaps for future collaborations.SPRING will analyse the hurdles, barriers, and cornerstones that need to be addressed to enable better research engagement by EU researchers to China, and vice versa. It will improve the visibility of research initiatives and strengths of Chinese regions to a wider audience in Europe. The project will create and maintain a web portal that will serve as a bilateral contact point, showcasing past projects and present project, and also update strategic plans for EU-China cooperation.

Partners:

N	Partner Legal Name	Country
1	THE UNIVERSITY OF EXETER	UK
2	Applied Research and Communications Fund	BG
3	Center for International Climate and Environmental Research - Oslo	NO
4	TSINGHUA UNIVERSITY	CN
5	Chinese Research Academy of Environmental Sciences	CN
6	China Institute of Water Resources and Hydropower Research	CN
7	Tianjin University	CN
8	UNIVERSITY OF BRISTOL	UK
9	PEKING UNIVERSITY	CN

Activity Code: ENV.2010.5.1.0-1 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: Science, Technology and Policy interfacing using WISE-RTD

Proposed EC Grant: 900.000 €

Abstract:

The aim of STEP-WISE is to promote and increase the use of FP environmental RTD results in the sector of environmental technologies focusing on water by diverse stakeholders: policy, scientists and industry. The WISE-RTD Web Portal (www.wise-rtd.info) has already been implemented to serve as a dissemination tool, linking diverse EC Water Framework Directive policy aspects to FP RTD (and LIFE) results, thus bridging the science policy gap in information exchange. Amendment of WISE-RTD to include also other (EC) Directives that relate to water policies will expand the current set of intricate algorithms that define science-policy interactions. In addition, the WISE-RTD structure will be expanded with environmental technologies focusing on water (WISE-RTD+ Web Portal).FP (and LIFE) funded environmental research projects and results with high EU added value will be identified and selected using preset criteria. By uploading these projects/RTD results using a dedicated tool WPIS (Web Portal Input System) to the WISE-RTD+ Web Portal, the information automatically become linked to the diverse sets of policy instruments (i.c. Directives). The WISE-RTD+ Web Portal will be used to evaluate whether policy questions have been answered by the RTD outcome (top down, scientific support to policy), and whether needs from identified stakeholders, e.g. from the environmental water technologies sector, are covered by policy issues (bottom-up). Merging of these two approaches will form the gap-analysis, recommendations towards a better uptake of FP environmental RTD results with tangible impact on economic growth and social welfare.The policy and science related contents of WISE-RTD+, and the two-way gap analyses will form the basis for dissemination using different user-friendly media. Innovative dissemination tools and activities will direct to different audiences/stakeholders at targeted national and/or international level including policy makers, researchers and industries.

Partners:

N	Partner Legal Name	Country
1	HydroScan NV	BE
2	Mermayde	NL
3	WISE-RTD Association	BE
4	KATHOLIEKE UNIVERSITEIT LEUVEN	BE
5	XPRO Consulting Limited	CY
6	Quality Consult srl	IT
7	Hydro International plc	UK

Activity Code: ENV.2010.5.1.0-1 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: STREAM

Proposed EC Grant: 590.000 €

Abstract:

The EU has invested considerable resources over the last decade to support the development of water technologies. As it often is the case with innovative technologies, there are currently few resources to pursue this process in the needed scale, and the uptake potential of water technologies and other environmental technologies resulting from EU-funded research seems limited due to insufficient awareness of their developments and the opportunities they offer. Raising awareness among researchers, policy makers, businessmen and industries, as well as the large public, young people in particular is paramount to the full exploitation of these technologies which are able to boost economic growth and social welfare.The STREAM project intends to tackle this issue by bringing water technologies to the interest of potential uptakers through a diversified series of dissemination and communication actions tailored to the needs of the different categories of stakeholders. These include Policy Seminars to be held in 3 different countries and also streamed online, a Final Symposium at the European Parliament in Brussels, 2 Summer Schools, e-learning courses, audiovisual materials, including videos and interviews, webinars for research events and participation in sectorial events. A web platform will be set up from the very start of the project serving as a repository for all its activities and for the updated documentation material on latest research and policy progress in the field of water. A group of highly qualified actors need to be involved in such an ambitious proposal to perform all variety of activities foreseen: STREAM consortium gathers partners with specific capabilities and backgrounds and established relations in the field, like specialists in water issues, experts in communicating science and carrying out innovative dissemination activities to transfer the knowledge gathered to the target audiences.

Partners:

N	Partner Legal Name	Country
1	MINERVA CONSULTING & COMMUNICATION	BE
2	European Water Partnership a.i.s.b.l.	BE
3	EUROPE FOR BUSINESS LTD	UK
4	RESEAU MENON E.E.I.G.	BE

Activity Code: ENV.2010.5.1.0-1 **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Dissemination and uptake of FP water research results

Proposed EC Grant: 928.415 €

Abstract:

The implementation of the Water Framework Directive is not a “Business-as-usual approach”, and needs new knowledge and know-how, but it is demonstrated that the actual connection between research and policy is not efficient.The concept of the project is to add an intermediate step after research, like a marketing team in the industry. This “step-further” will be developed closely with the stakeholders, by involving them within a social network, the European Water Community, for promoting exchanges; the project will develop a process tailored to every typology of target groups, which are • decision-makers (basin authorities, municipalities), and “doers”, (suppliers of technologies, consultancies, operators) ;it is needed to convince both the ones who accept to “host innovation”, and those who take the risk to develop innovative processes.• researchers, as individual knowledge holders, and as members of European consortiums, and the research funding bodies, at national level.The project will collect information on about 60 water-related FP6/FP7 research projects outputs, analyse their potential future in close collaboration with the research teams, design for each an Individualised Dissemination Strategy, and then support their transfer to the targeted stakeholders, with the support of Web 2.0 features, together with events designed for specific audiences.The e-infrastructure is a mix of social networking tools, to support a community of practices among the stakeholders, virtual seminars, permanent virtual fair of results, etc.The project includes social events to help stakeholders to meet and share ideas, and imagine future actions: brokerage events (1-day workshops, back-to-back with large events, with booths to meet the targets), seminars (1-day events at local level), summer schools (targeted at young researchers).The partnership gather institutes from FR, DE, PL, RO, UK, IT, SP to do dissemination at EU scale.

Partners:

N	Partner Legal Name	Country
1	OFFICE INTERNATIONAL DE L'EAU	FR
2	Ecologic Institute	DE
3	Gdanska Fundacja Wody	PL
4	Fundatia Centrul de Formare si Pregatire Profesionala in Domeniul Apei	RO
5	University of Oxford - Institute of Advanced Technologies	UK
6	Centro Italiano per la Riqualificazione Fluviale	IT
7	AMPHOS XXI CONSULTING SL	ES
8	TRIPNITY	FR

Activity Code: ENV.2008.5.1.0.2. **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: European Union and RussiA Link for S&T co-operation in the area of the environment

Proposed EC Grant: 652.956 €

Abstract:

The overall strategic objective of the E-URAL project is to improve in quantity and quality the participation of Russian researchers and SMEs in the “Environment (including climate change)” theme of the Seventh Framework Programme (FP7). This objective answers to specific gaps that hamper the participation of Russia, such as the lack of knowledge among researchers and multipliers from Russia on the FP7 and the Environment theme and the lack of know-how on submission procedures under EU-FPs, as well as of awareness in Europe of skilled potential partners from Russia to be involved in EU-FPs projects.E-URAL project, through its multi-skilled consortium composed of various leading and long experienced institutions from EU and Russia, addresses these major obstacles in 4 main lines of activity: mapping of research expertise and needs in Russia in the field of Environment; awareness raising and capacity building for multipliers and researchers in Russia through training activities and staff exchanges; promotion of co-operation opportunities between EU and Russia; liaison with Russian and European stakeholders in the field of concern. A special emphasis will be given to the identification of topics of common interest for Russia and EU, that will be sent to the European Commission to be inserted in the Environment Work Programme, facilitating the participation of Russia in the Enviroment theme of the FP7.The achievement of these strategic and ambitious objectives is guaranteed by the effective structure of the work plan and the partnership of both Russian and European partners with long experience in environment research or in training activities. As a result, the project will create new research consortia, will raise the number of Russian participants in the Framework Programme and identify key RTD topics for further work programmes in the FP7 Environment theme.

Partners:

N	Partner Legal Name	Country
1	Università Ca' Foscari di Venezia	IT
2	Agenzia per la Promozione della Ricerca Europea	IT
3	FOUNDATION FOR RESEARCH AND TECHNOLOGY HELLAS	EL
4	Kassel University	DE
5	Voronezh State University	RU
6	Sochi State University for Tourism and Recreation	RU
7	Siberian Information and Consulting Centre at the Presidium of the Siberian Branch of RAS	RU
8	Arkhangelsk State Technical Universty	RU
9	State Institution Caspian Marine Scientific Research Center	RU

Activity Code: ENV.2009.5.1.0.2 **Funding Scheme:** CSA-SA **Duration (Months):** 36

Title: Conservation Genetic Resources for Effective Species Survival

Proposed EC Grant: 991.816 €

Abstract:

Genetic biodiversity is recognised by the Convention on Biological Diversity and the EC Biodiversity Strategy as one of three essential elements of living diversity, yet it is poorly represented at the policy level, compared to the two other components, species and ecosystems. The CONGRESS consortium aims to rectify this situation by delivering dissemination tools which European policy makers can conveniently use to incorporate genetic biodiversity into their policy framework. The six work packages of this project fall into two components, with WPs 1 – 5 concerned with the provision of a one-stop, community-enabled web portal, comprising 1) databases containing information on academics and professional end-users, relevant publications and genetic data for key European species (wild and domestic); 2) a simulation tool to allow biodiversity managers to assess the power of genetic data in highlighting processes which may result in genetic erosion; 3) a decision matrix module, which will allow end-users to establish the optimal policy and management options for a population, species or community, given the genetic data which have been produced; and 5) a knowledge pack and series of information leaflets, translated into the main European languages, which can potentially be assembled into a manual. The sixth WP comprises a series of dissemination and exchange workshops carried out across all regions of the European Union and including a transborder workshop and hands-on demonstration meeting in Eastern Europe. CONGRESS will integrate and enhance these work packages by using the workshops as forums for discussion of the contents of the portal and will be, from the outset, guided by an end-user advisory group drawn from throughout the EU, who will oversee the development of these tools and ensure their utility for the community who will benefit from them.

Partners:

N	Partner Legal Name	Country
1	CARDIFF UNIVERSITY	UK
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE (CNRS)	FR
3	CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS	ES
4	UNIVERSITY OF DURHAM	UK
5	FONDAZIONE EDMUND MACH	IT
6	UNIVERSITA DEGLI STUDI DI FERRARA	IT
7	ALBERT-LUDWIGS-UNIVERSITAET FREIBURG	DE
8	Københavns Universitet	DK
9	Koninklijke Maatschappij voor Dierkunde van Antwerpen	BE
10	STICHTING NATIONAAL NATUURHISTORISCH MUSEUM NATURALIS	NL
11	QUEEN MARY AND WESTFIELD COLLEGE, UNIVERSITY OF LONDON	UK
12	TURUN YLIOPISTO	FI
13	Institute of Vertebrate Biology - Academy of Sciences of the Czech Republic	CZ

Activity Code: ENV.2009.5.1.0.2 **Funding Scheme:** CSA-SA **Duration (Months):** 49

Title: KNOwledge from Science to SOcitieS

Proposed EC Grant: 868.500 €

Abstract:

KNOSSOS seeks to address the gap between science and society in the field of environmental research with a focus on policy makers and civil society, who are the main recipients of the project.We propose to take stock of available research results that are useful for policy-making. KNOSSOS will then add a knowledge management system, with innovative tools to guarantee fast and easy access to relevant information. This initial phase will also yield collaborative workshops on evidence-based policy making and training for policy makers in the field of environmental research.KNOSSOS puts an emphasis on disseminating research findings beyond Europe: through a number of 'Knowledge Fairs' as side events of international conferences, but also by including DG Research findings in one of the world's largest collections of Environmental Science Research, the Online Access to Research in the Environment (OARE).In order to ensure swift uptake of European environmental research into policy making, KNOSSOS, with its partner The Club of Rome, will issue monthly policy briefs for European, national and international policy makers.Aiming for enhanced visibility of European environmental science, KNOSSOS will appoint Environmental Science Ambassadors to the EU member states, endowed with a mission to raise public awareness about emerging environmental issues.KNOSSOS' strength lies in the composition of its consortium: UNEP, the world's leading environmental authority, joins forces with the Club of Rome, a renowned think tank with an strong reputation in giving policy advice; and with GLOBE EU/Europe, an excellent partner in training policy-makers and disseminating deliverables.KNOSSOS will have an impact on both policy makers and civil society in and beyond Europe. Our goal is to make European environmental science not only understandable, but also actionable and a preferred reference for all who seek information to pressing ecological questions of our time.

Partners:

N	Partner Legal Name	Country
1	United Nations Environment Programme	KE
2	The Club of Rome - European Support Centre	AT
3	GLOBE EU	BE
4	GLOBE Europe	BE

Activity Code: ENV.2009.5.1.0.2 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: European Marine Research Knowledge Transfer and Uptake of Results

Proposed EC Grant: 782.000 €

Abstract:

MarineTT is premised on the concept that knowledge is a major source of competitive advantage in business. Much potentially valuable knowledge, locked into inaccessible or non-user-friendly contexts, is unused because key stakeholders are not aware of its existence. MarineTT is concerned with marine environment research, an approach allowing coverage of other themes (climate change, biodiversity, earth observation and urban development) while also allowing important sub-topics (such as fisheries and aquaculture) to be included, given their relevance to the key area of the impacts of economic growth leading to environmental degradation, and the current ecosystem management approach supported by the EC. MarineTT will use the existing EurOcean info-base of European marine research funded projects as its initial basis, extending its functionality by introducing critical missing fields, making it a more efficient tool, focusing on knowledge outputs rather than a simple listing of research projects. The profiles will be updated to include new fields, such as: stated aims and objectives vs. actual outputs, research performers, research outcomes, research methodologies (effective and/or ineffective), products, and other relevant information. This knowledge can then be discharged through encouraging and accelerating commercial application of research results, through facilitating the transfer of knowledge for policy and senior decision makers, and through the promotion of research results to the public at large. MarineTT will make a real contribution to the call for improved access to EU research results for industry, multipliers, the civil society, and policy-makers. The project is divided into three phases: (1) Collect and Understand, refining and improving databases and info-bases; (2) Analyse (cost & benefit) and Consult, with key stakeholders and experts; and (3) Transfer and Connect; effective knowledge transfer

Partners:

N	Partner Legal Name	Country
1	AquaTT UETP Ltd	IE
2	EurOcean Foundation	PT

Activity Code: ENV.2009.5.1.0.2 **Funding Scheme:** CSA-SA **Duration (Months):** 24

Title: Mountain Sustainability: Transforming Research into Practice, regional development, new communication tools

Proposed EC Grant: 847.000 €

Abstract:

The goal of mountain.TRIP is to provide stakeholders, end-users and practitioners with readily accessible and understandable forms of research-based information relevant to sustainable development in mountain regions.Mountain.TRIP will start where other EU projects have finished, translating research findings into useful information and developing relationships between users and researchers. EU research projects generally focus on elucidating truths, not on communicating these truths to practitioners or the interested public. Research projects often produce valuable results, methods, tools and instruments, but at the end of the project neither time nor money remain to disseminate these results among practitioners and to the interested public. Furthermore, research results usually exist in forms recognized by the research community but not easily or quickly assimilated by communities of practice.Mountain.TRIP will close the gap that currently exists between EU project findings and the needs of policy- and decision-makers, stakeholders in economy and environment, planners and administrators, non governmental organisations, end-users, and other members of groups representing the interests of citizens and industry of the most important mountain regions of Europe.Mountain.TRIP will not just disseminate research results but will rather synthesize results from multiple EU projects while adapting the format of that synthesis through continuous interaction with practitioners to meet their needs. The project uses multiple innovative mechanisms to ensure effective interaction with practitioners.

Partners:

N	Partner Legal Name	Country
1	OESTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN	AT
2	UNIVERSITAET BERN	CH
3	UNIWERSYTET JAGIELLONSKI.	PL
4	ECOLOGIC - INSTITUT FUER INTERNATIONALE UND EUROPAEISCHE UMWELTPOLITIK gGmbh	DE
5	Euromontana	FR
6	Perth College	UK

Activity Code: ENV.2010.5.1.0-2 **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: Increasing the impact of Central-Eastern European environment research results through more effective dissemination and exploitation

Proposed EC Grant: 851.585 €

Abstract:

Based on indications from EC and FP7 statistics, the Central and Eastern European (CEE) countries participate at low rate in the FP7 Environment theme. On the other hand air pollution, chemical pollution and environmental risks should be handled with expressed interest in this region, due to severe environmental damages caused by decades of negligence and mishandling. CEE researchers have been conducting research in the mentioned fields since the middle of the 20th century, however, their results did not reach – and influence - either the policy makers of their own country, or their academic counterparts in EU-15.The main objective of ENVIMPACT is to enrich the EU knowledge base with the environment-related results of the CEE researchers, thus inducing new collaborations under FP7/FP8 which may lead to innovative solutions for the lasting protection of our environment.Using local contacts, knowledge and the insight of expert groups consisting of relevant academic, industrial/ETP and policy representatives, the innovative environmental research practices and results originating from Central and Eastern Europe will be identified, mapped and made available for the governmental, academic and industrial stakeholders all over Europe. After analysing the presently applied dissemination and exploitation practices of CEE research results (by SWOT analysis), good and bad practices will be presented in an online catalogue. Recommendations will be prepared for the development a taylor-made toolkit. To close the communication gap, CEE researchers will be offered trainings and online mentoring services, based on the recommendations for communication and exploitation of research results.Partners from 7 NMSs will ensure the availability of local research results, while representatives from 4 EU-15 countries will help to identify and match the needs in terms of communication of CEE/EU-15 researchers and will provide the expertise in reaching the relevant stakeholders.

Partners:

N	Partner Legal Name	Country
1	TUDOMANYOS ES TECHNOLOGIAI ALAPITVANY	HU
2	Steinbeis Innovation gGmbH	DE
3	AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA	IT
4	INTRASOFT INTERNATIONAL SA	BE
5	Iparfejlesztési Közalapítvány	HU
6	SOFIISKI UNIVERSITET SVETI KLIMENT OHRIDSKI	BG
7	AGENCE BRUXELLOISE POUR L'ENTREPRISE	BE
8	FIZIKALAS ENERGETIKAS INSTITUTS	LV
9	UNIVERZITA KARLOVA V PRAZE	CZ
10	INSTITUT JOZEF STEFAN	SI
11	EuroProjekts sp. z o.o.	PL
12	Agentia Manageriala de Cercetare Stiintifica, Inovare si Transfer Tehnologic - Politehnica	RO

Activity Code: ENV.2010.5.1.0-2 **Funding Scheme:** CSA-CA **Duration (Months):** 30

Title: PROmotion and coordination of environmental research in Central and Eastern Europe for a sustainable Development with the support of the Enterprise Europe Network

Proposed EC Grant: 730.000 €

Abstract:

PROCEED focuses on the communication and dissemination of environmental research results and practices originating in Central and Eastern European Countries (CEEC) towards industry, policy makers and public and private research centres (including Academia),with the aim to enhance the uptake of research results and foster the participation of CEEC in EU-funded research projects through S&T cooperation with other European partners.The specific research sectors on which PROCEED will focus are Air pollution,Chemical pollution, Environmental Technologies.The partners will create a data base of all innovative environmental research practices and results originating in CEEC and will lead a SWOT analysis of the existing channels and tools used to communicate environmental research results in Europe with specific focus to Academia, policy makers and industry.The PROCEED communication system will be made of personal communication in national and international workshops and a web 2.0-based research social network, an interactive communication channel specifically targeted at creating research opportunitiesAmong other, results will be the signing of TT agreements and the collaborative participation in FP environment project proposalsThe project partnership covers 9 CEEC (6 new Member States and 3 Associated countries) and 3 EU-15 Member statesAll 12 project countries are represented by at least one partner member of the Enterprise Europe Network which will be the main communication channel in the project, with its 600 members present in all European countries and beyond (including China and United States) and an extended network of contacts and partners.Partners will engage other EEN members, the Fp7 National Contact Points Network and other relevant FP7 coordination and support actions to create an integrated communication system.Partners will plan the exploitation of the project after its lifetime through the integration of PROCEED tools in the EEN activities.

Partners:

N	Partner Legal Name	Country
1	Arad Chamber of Commerce, Industry and Agriculture –Center for Technological Information	RO
2	NATIONAL RESEARCH AND DEVELOPMENT INSTITUTE FOR ENVIRONMENTAL PROTECTION – ICIM BUCHAREST	RO
3	Regional Union of the Chambers of Commerce Industry Handicraft and Agriculture of Veneto	IT
4	Sogesca s.r.l.	IT
5	BULGARIAN CHAMBER OF COMMERCE AND INDUSTRY	BG
6	Plovdiv Chamber of Commerce and Industry	BG
7	Chamber of Commerce and Industry of Slovenia	SI
8	TECHNOLOGY DEVELOPMENT CENTRE OSIJEK LTD.	HR
9	Foundation for Management and Industrial Research	MK
10	INSTITUT MIHAJLO PUPIN	RS
11	Heraklion Chamber of Commerce and Industry	EL
12	Latvian Technological Center	LV
13	Lithuanian Innovation Centre	LT
14	University of Warsaw	PL
15	Agro Business Park A/S	DK

Activity Code: ENV.2007.5.1.1.1. **Funding Scheme:** CSA-CA **Duration (Months):** 60

Title: Environment NCPs cooperating to improve their effectiveness

Proposed EC Grant: 2.799.568 €

Abstract:

National Contact Points (NCPs) hold a key role in communication with the European Commission concerning executive matters and the scientific community. The quality of proposals submitted, for example, relies partially on an effective NCP network.This project is a set of coherent activities and tasks that will foster further cooperation between Environment NCPs from EU member States and Associated States. The main goal is to improve the services NCPs offer to potential proposers; within this goal, the integration of Environment NCPs from high potential International Cooperation Countries where NCP or similar networks for dissemination of information on FP7 exist will also be supported.The main outcomes will be: a) strengthened cooperation between NCPs across Europe by setting up new and effective means of communication, b) increased quality of services offered by NCPs to proposers with the aim to increase the number and quality of project proposals submitted in response to FP7 calls for proposal and c) integration of other non-EU NCPs into the EU NCP network in order to increase mutually beneficial research and technological development between Europe and International Partners Cooperation Countries.

Partners:

N	Partner Legal Name	Country
1	Autoritatea Nationala pentru Cercetare Stiintifica	RO
2	Österreichische Forschungsförderungsgesellschaft mbH	AT
3	Agence Bruxelloise pour l'Entreprise	BE
4	Technical University of Sofia	BG
5	Euresearch	CH
6	RESEARCH PROMOTION FOUNDATION	CY
7	Technology Centre AS CR	CZ
8	Forschungszentrum Jülich GmbH	DE
9	Archimedes Foundation	EE
10	Agence de l'environnement et de la maîtrise de l'énergie	FR
11	National Office for Research and Technology	HU
12	MATIMOP-ISERD	IL
13	Agenzia per la Promozione della Ricerca Europea	IT
14	Agency for International Science and Technology Development Programmes	LT
15	Malta Council for Science and Technology	MT
16	SenterNovem	NL
17	Instytut Podstawowych Problemow Techniki PAN	PL
18	Gabinete de Relações Internacionais da Ciência e do Ensino Superior	PT
19	National Forest Centre	SK
20	Turkiye Bilimsel ve Teknolojik Arastirma Kurumu	TR
21	National Centre for Scientific Research Demokritos	EL
22	Luxinnovation	LU
23	Beta Technology Limited	UK
24	The Swedish research Council for Environment, Agricultural Sciences and Spatial Planning	SE
25	Danish Agency for Science, Technology and Innovation	DK
26	CENTRO PARA EL DESARROLLO TECNOLOGICO INDUSTRIAL	ES