

ESOF2020

EUROSCIENCE OPEN FORUM
TRIESTE



TRANEE

Toward market-based skills
for sustainable Energy Efficient construction

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 785005



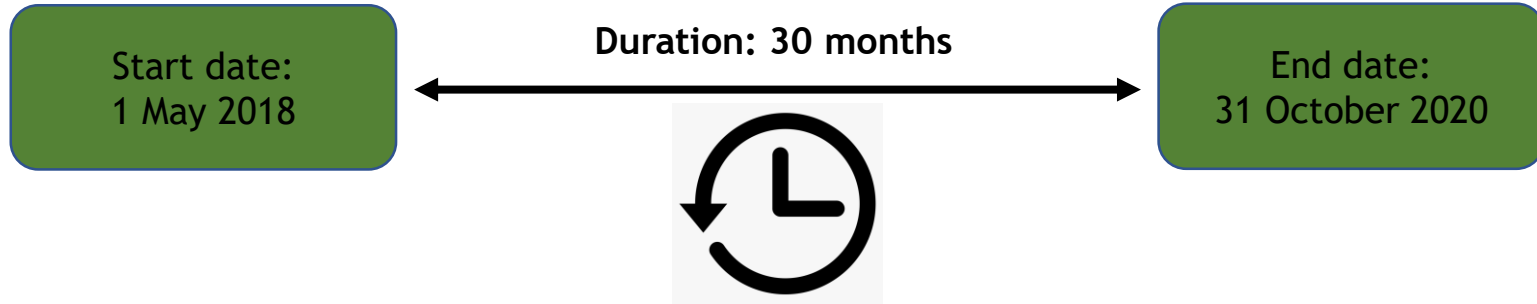
Nena Nikolovska LL.M.
4 September 2020



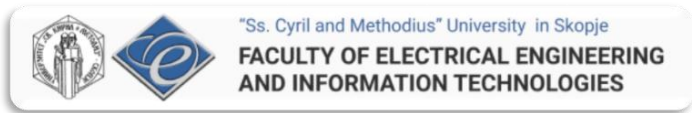
Project fact sheet

Basic information

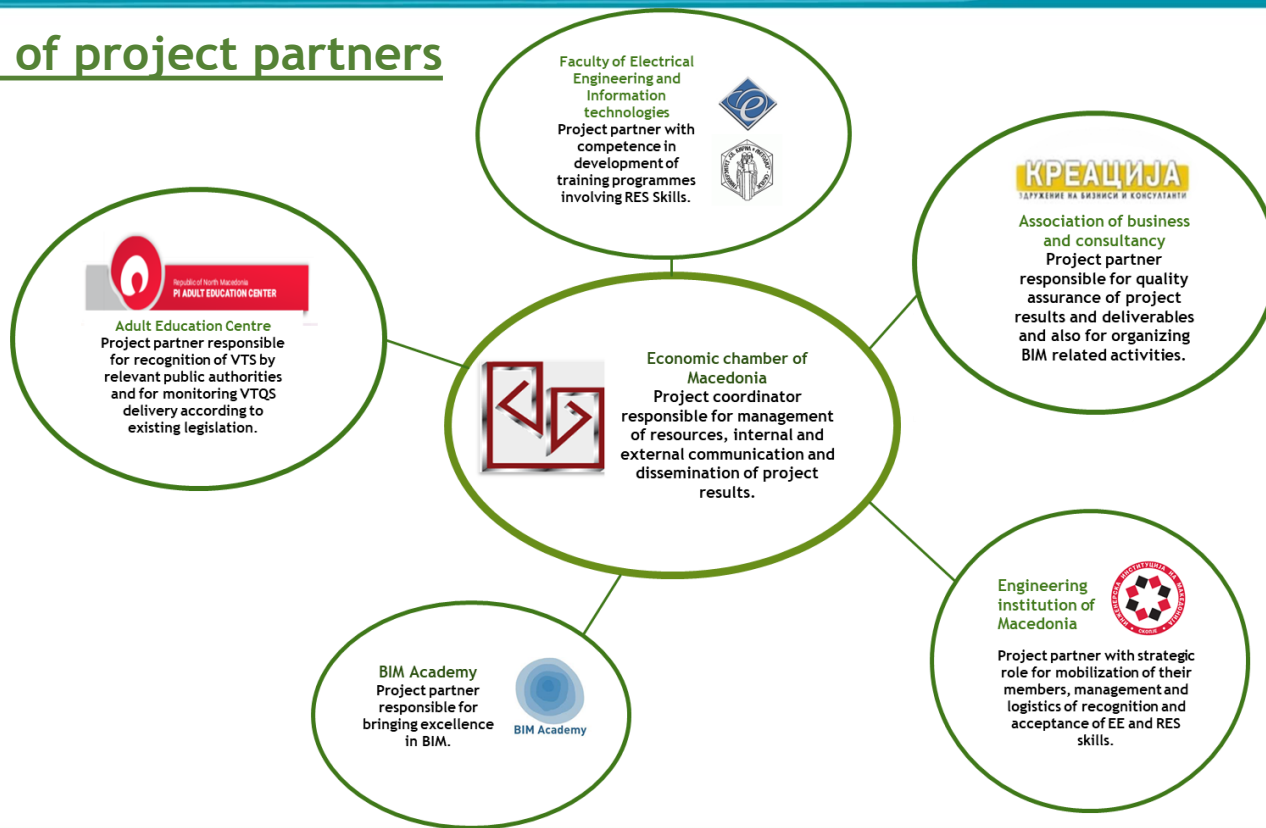
- Horizon 2020 Research and Innovation Programme
- Work Program “Secure, clean and efficient energy”
- “Energy efficiency” Call EE-2016-2017
- Project budget: 877.000 EUR



Project partners



Roles of project partners



What is new compared to previous actions?

- ▶ **Build up skills (BUS MK)** has identified the gaps between the existing and needed number of qualified blue - collar workers and introduced voluntary qualification schemes as well as different training programs to build up the energy efficiency skills of the building sector.
- ▶ **Builders' energy efficiency training (BEET)** defined the path that needs to be followed for the upgrade of skills and qualifications of the building workers in the practical application of Energy Efficiency (EE) and Renewable Energy Sources (RES) measures as the national energy targets for 2020 could be met.
- ▶ **Toward market based skills for sustainable energy efficient construction (TRAINEE)** has enlarged the offer of voluntary training schemes with training schemes for middle and higher level professionals (RES installers and designers, architects, engineers and technicians).

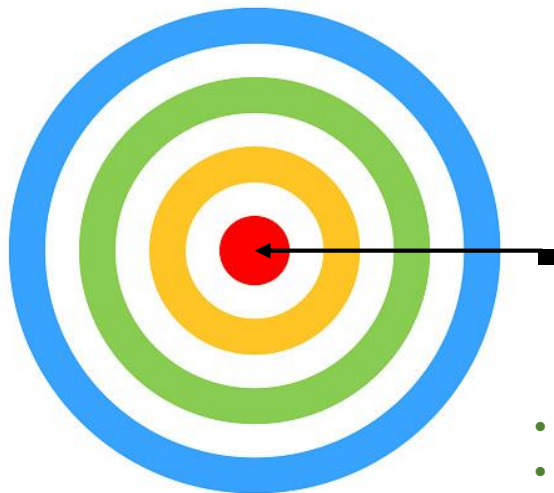


TRAINEE

Objectives



TRANEER



Overall objective

CREATING QUALIFIED BUILDING WORKFORCE

Market supply of qualified workforce will be improved with:

- 280 building professionals
- 440 blue-collar workers

Objectives

Specific objectives

Qualifications



- Two voluntary qualification schemes**
 - 1. Development of training schemes;
 - 2. RPL (recognition of previous learning) for higher level of NQF.

- Sustainability through established Knowledge Centre**
 - 1. Creating catalogues of training schemes;
 - 2. Increasing capacity for annual replication of training schemes

BIM



- Initiating BIM on national level**
 - 1. Raising awareness;
 - 2. Developing Roadmap for introduction and adoption on Macedonian market.

- Training schemes for BIM**
 - 1. Organizing of trainings for building professionals;
 - 2. Developing on - line distance modules.

Market



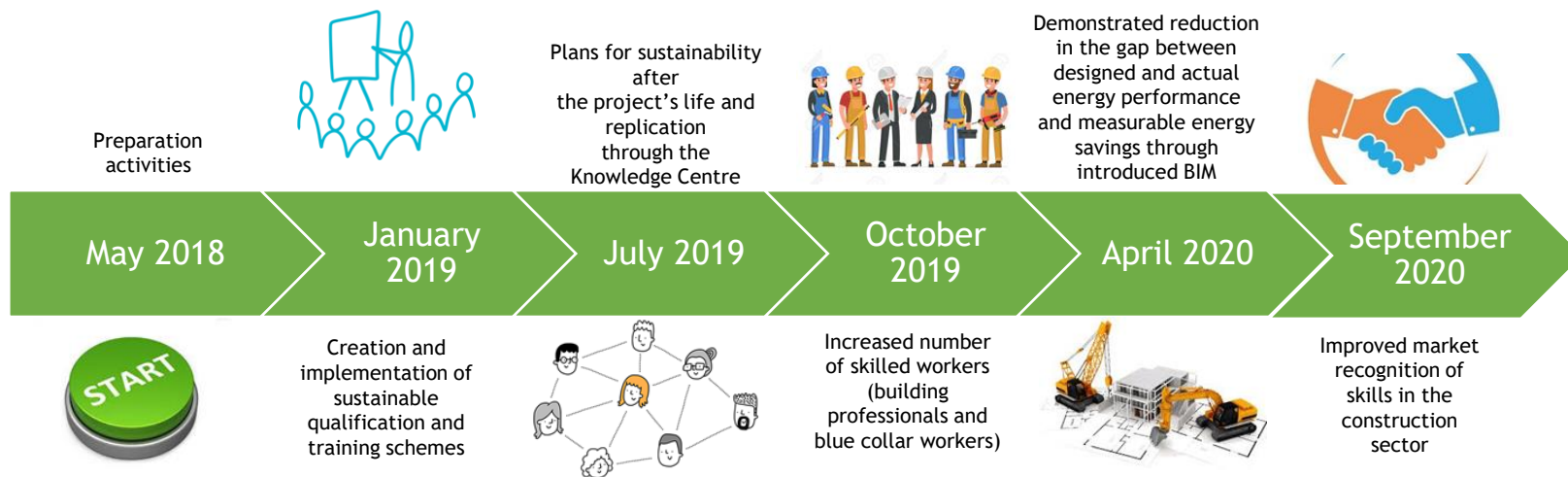
- Improved market recognition and acceptance of EE skills**
 - 1. Signing memorandums with professional institutions;
 - 2. Creating two registers of certified trainers.

- Dissemination of project results**
 - 1. Organizing national workshops with industry;
 - 2. Organizing wide conference for market acceptance.



TRANEE

Project timeline





TRAINER

Assumptions, Concept and Approach



TRAINER Assumption

- All actors are willing to participate in straightening construction sector for provision of higher standards in energy efficiency of the buildings.



TRAINER Concept

- Designing support actions for provision of qualified workforce for the construction sector related to EE and RES skills and coordinating activities for market recognition and acceptance of EE skills by key market actors.



TRAINER Approach

- Implementing bottom-up actions that will increase the demand for buildings with EE performances and recognition of EE skills on small and medium level.



Methodology

TRINEE Methodology encompasses of **support actions** and **coordination activities**.

Support actions:

- Development of voluntary qualification schemes for occupations from whole value chain in the construction sector, “large scale“ piloting of two training schemes for 10 occupations to upgrade EE and RES skills for professionals/ workers and assuring sustainability through Knowledge Centre.
- Spreading initiative for the use of BIM on national level.

Coordinating activities:

- Undertaking actions related to market recognition of EE skills through register of certified professionals and workers in N.Macedonia.

TRAINEE Actions



- **Upgrading voluntary qualification schemes**
 - ❑ **vertically** through value chain for technicians/engineers and architects
 - ❑ **horizontally** for additional two RES occupations (designers and installers for solar-thermal energy conversion and photovoltaic systems)

- **Large scale piloting of two training schemes** (involving 150 technicians, 80 civil engineers, 30 architects, 20 RES designers and 300 blue collar workers for EE and 40 for RES skills)

- **Introduction of BIM**
 - ❑ survey about the level of knowledge and awareness about BIM among relevant stakeholders
 - ❑ development of BIM software with piloting its usage
 - ❑ organization of BIM trainings for professionals

- **Organizing public events, roundtables and wide conference**

- **Establishing two registers**
 - ❑ training providers and trainers
 - ❑ certified professionals and workers



TRANEE

Target groups





TRANE

Knowledge Centre



Joint venture of all project partners, governed by management defined and comprised by the project consortium.

Aim: supporting the development of sustainable EE market - based construction skills through continuing training schemes and services for professional guidance for persons, companies and providers.

Mission: linking VET with labor market needs, upgrading people's occupational qualifications, reinforcing their employment perspectives and strengthening social cohesion.

Building information modelling - BIM

- Construction is one of the **least digitized economic sectors**.
- BIM is at the center of the digital transformation of the construction sector.
- Governments and public procurers across Europe and around the world are recognizing the value of BIM as a strategic enabler for cost, quality and policy goals.
- **BIM** is an intelligent 3D process that gives architecture, engineering and construction professionals the insight and tools to more efficient planning, designing, building and managing buildings and infrastructure.



Areas of project impact

Enabling policy - Proposals for improving the legislation

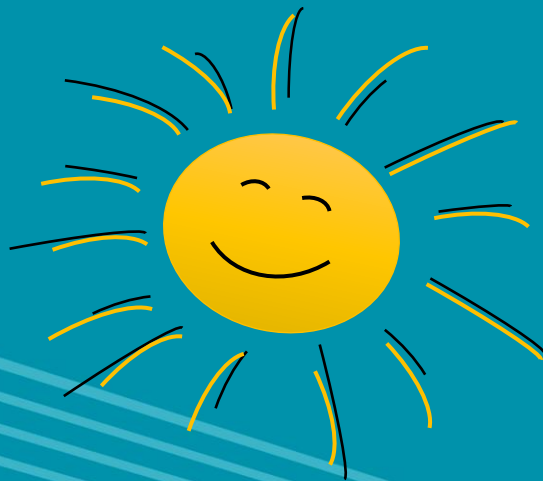
- Rulebook for energy performance of building;
- Methodology for recognition of previous learning;
- Roadmap for introducing BIM on national level.

Building capacities and skills

- **Technical issue** - providing professionals with EE and RES skills that will lead to high quality buildings and energy savings;
- **Market issue** - changing the level of renovation and usage of EE measures;
- **Organizational issue** - establishing Knowledge Centre as platform for large market recognition of skilled workers.

THANK YOU FOR YOUR ATTENTION

<http://trainee-mk.eu/>
www.mchamber.org.mk



ESOF2020
EUROSCIENCE OPEN FORUM
TRIESTE

Euro
Science

Fondazione
internazionale
Trieste