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# Policy Dialogue on Aligning Priorities in the Western Balkans

Sarajevo, Bosnia and Herzegovina  
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## Status of environment and climate in the Western Balkans

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# Introduction

- This report summarises for the first time the status of air, climate, water and soil in the Western Balkans (WB)
- It describes the current knowledge as of 2021 and gaps with respect to the *EU acquis* (*Chapter 27*),
- The objectives of the study are to:
- benchmark the progress in this field, during the accession process and
- support the implementation of the Green Agenda for the WB with particular reference to depollution and decarbonisation priorities
- contribute to the WB Agenda on Innovation, Research, Education Culture, Youth and Sport

<https://publications.jrc.ec.europa.eu/repository/bitstream/JRC129172/kjna31077enn.pdf>



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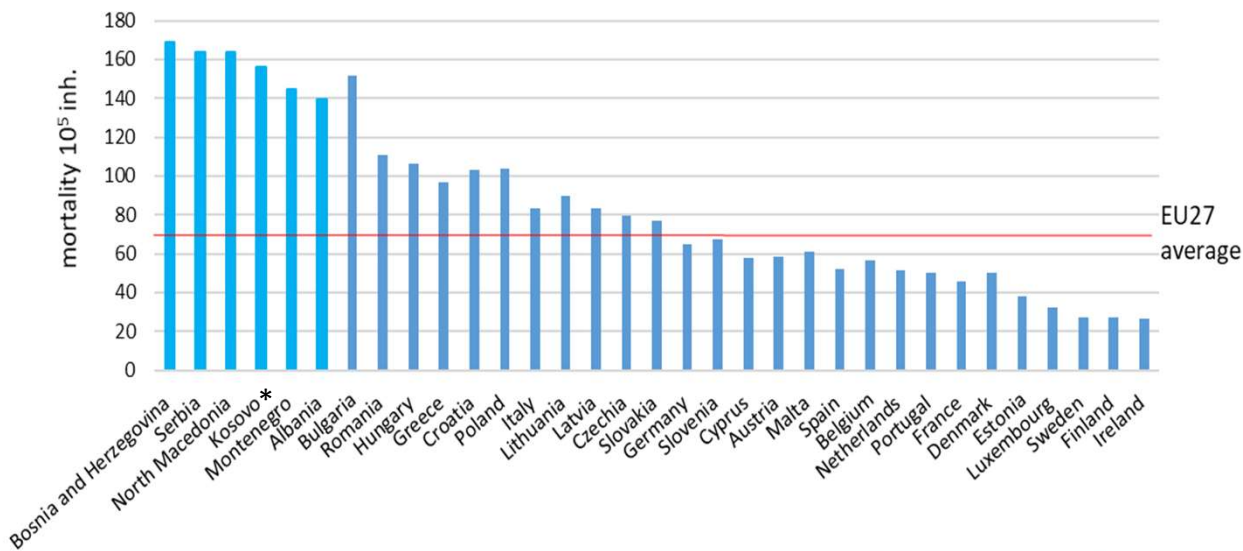


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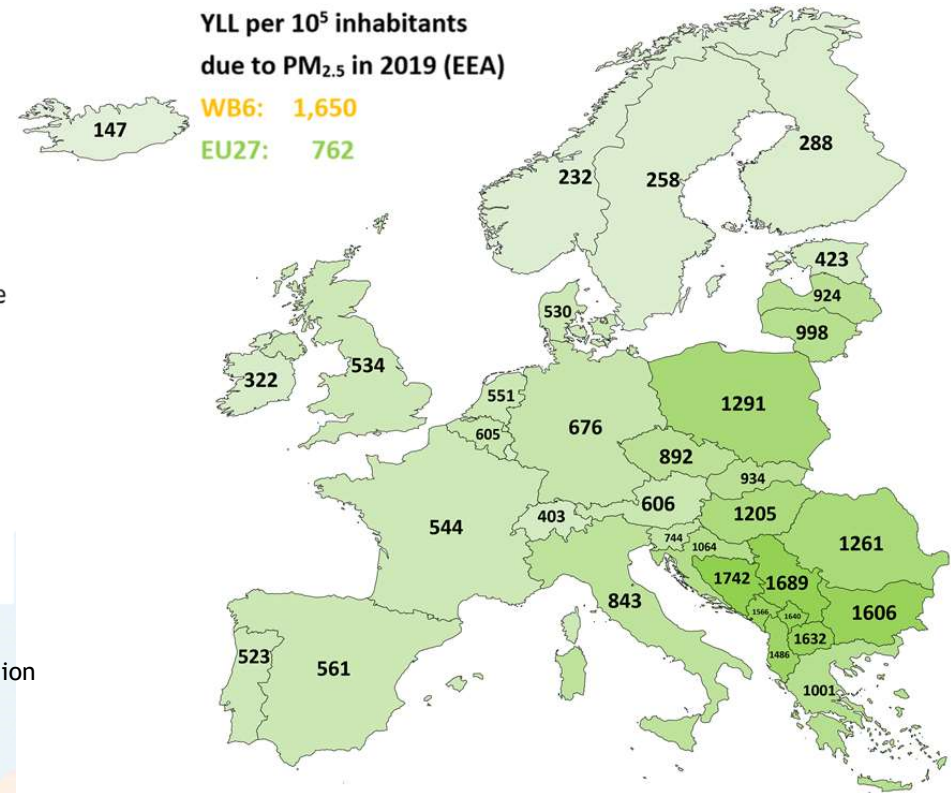


# Status of Air Quality and Climate

Annual mortality rate due to PM<sub>2.5</sub> in WB in 2019 and comparison with EU27 average



Years of life lost (YLL) per 10<sup>5</sup> inhabitants attributable to PM<sub>2.5</sub> in 2019



\*This designation is without prejudice to positions on status, and is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo declaration of independence, as on the official website of the European Union

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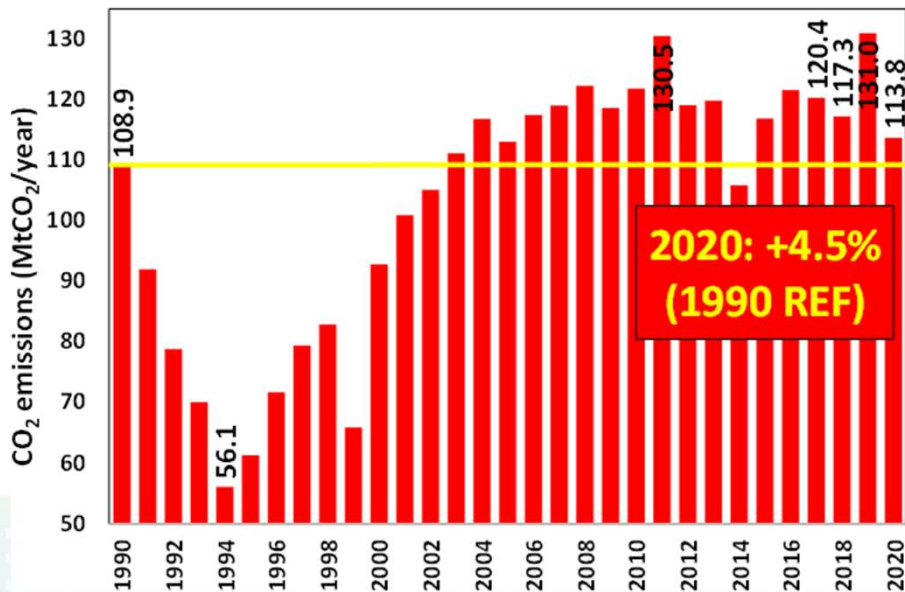
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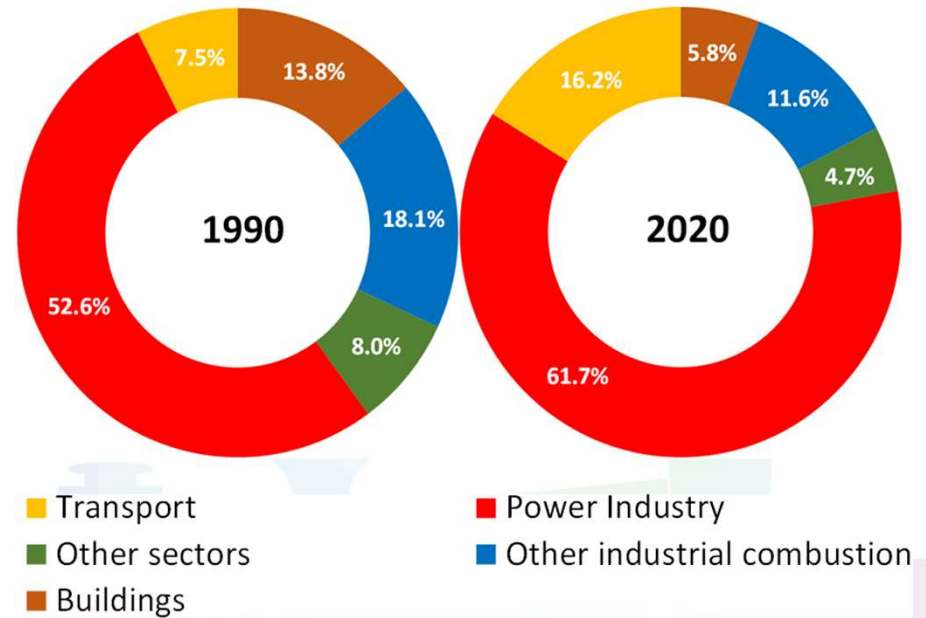
Source: EEA, 2021 (JRC elaboration)

# Status of Air Quality and Climate

Trend of “fossil CO<sub>2</sub> emissions” in WB5 region 1990-2020 including fossil fuel and processes and excluding LULUCF (land use, land-use change, and forestry)



Breakdown by sectors of “fossil CO<sub>2</sub> emissions” (fossil fuel and processes) in WB5 region: 1990-left and 2020-right

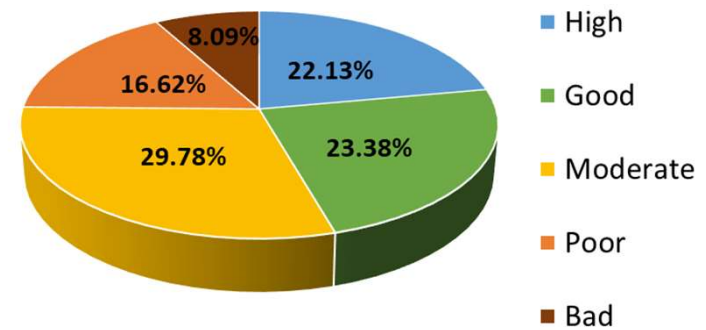
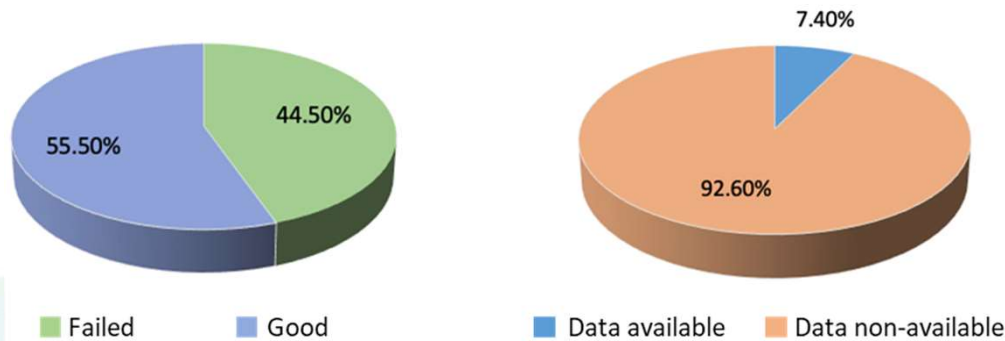




# Status of Water

**Chemical status** of waterbodies in WB based on the data from Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia (left). Data availability on chemical monitoring (right).

Overview of the **Ecological status** in WB based on 1,125 waterbodies from Bosnia and Herzegovina, Montenegro, and Serbia.





# Status of Soil

- The issue of “*Pollution including risks to food*” is very relevant in the Western Balkans where a total of **2,735 contaminated sites are reported**
- A first assessment of “*Soil sealing*” in the Western Balkans shows that **0,87% of the total land area in the region is artificially covered**. Agriculture land appears to have experienced the biggest losses
- “*Salinisation*” was combined also with sodicity and a special soil type typical for the Western Balkans or the magnesian rich soils, locally known as Smonitsa or Chromic Vertisols. Overall, it is estimated that these areas cover less than **10% of the whole territory of the Western Balkans**.
- Regarding “*Desertification*”, none of the countries meet the criteria of aridity index as described by the United Nations convention to combat desertification (UNCCD)
- **No data were available for “*Soil biodiversity*”**

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Source: Zdruli et al 2022, in preparation

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# Conclusions and Outlook



## Cross-cutting issues

For all environmental matrices considered in the report it is recommended to establish **monitoring networks** with sufficient data coverage in space and time, as well as a set of analysed parameters to reflect EU legislative requirements .

To promote implementation of EU environmental legislation it is recommended to improve the **integration** of environmental measures for key policy areas like energy, transportation, industry, agriculture, etc.

Considering the **transboundary** nature of pollution, it is recommended to take advantage of:

- existing international agreements (e.g. **Air Convention, Energy Community**)
- good practices (e.g. **International Commission for the Protection of the Danube River**)
- interregional initiatives (e.g. **Regional Cooperation Council**)
- Pan-EU soil initiatives, (e.g. **LUCAS, EUSO, Clean Soil Outlook**)

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# Conclusions and Outlook



Air



Climate

## Air and Climate

While significant improvement was made in recent years to align the climate and greenhouse gas emissions monitoring and reporting legislation with the EU acquis, **implementation** of the adopted legislation needs further strengthening.

The **integration** of environmental measures into energy production, energy efficiency, industry and transport policies is recommended.

It is recommended to develop an **alert system** for ozone episodes and heatwaves, involving sanitary authorities and meteorological forecast systems.

To take advantage of a renewable energy source like and reduce the exposure to air pollutants, it is recommended to ensure that best available technologies and practices are deployed for the operation of residential heating systems using **biomass** fuel.

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# Conclusions and Outlook



## Water

It is recommended to put in place a **monitoring** plan for chemical and ecological status of waterbodies including a program to protect biodiversity and prevent hydrogeological degradation.

To optimise the setup of networks and implement well designed surveillance schemes it is considered a key action to **modernise water monitoring** in the short term.

Continued close **scientific research cooperation with Member States** is recommended for the establishment of effective water management practices in the Western Balkans

In addition, further investments in **waste water collection and treatment** are recommended in this region.

The implementation of the EU Regulation (EU 2020/741) on water re-use is of particular importance in Western Balkans due to growing water needs on the one hand, and the general lack of available water on the other, especially in view of the expected negative impact of climate change on the Western Balkans region.

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# Conclusions and Outlook



## Soil

A key for the implementation of the Green Agenda for the Western Balkans would be the identification and adoption of **less intensive agricultural practices**, in line with the targets of the Farm2Fork Strategy.

It is recommended to put in place a targeted programme to support the implementation of **'light-houses'** and **living labs** in the Western Balkans e.g. through links with the Mission 'A Soil Deal for Europe'.

It is recommended that **the EU Soil Observatory**, together with the European Environment Agency, establishes a roadmap for an integrated soil monitoring and indicator framework to collect data to feed a soil dashboard that assesses the effectiveness of policies.

It is advised to adopt a **Soil Health Law** to give soils the same **EU-wide legal basis as air and water**.

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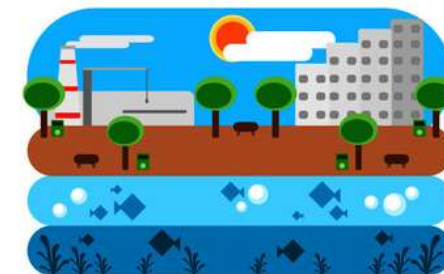
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# Some JRC work related to WB

Under the JRC project: [Environment and Climate in EU Enlargement](#)



- **Summer school.** “The evaluation of air, soil and water pollution in support to the European Green Deal: a holistic approach”  
Dedicated to advanced students and young scientists from the Western Balkans (25 participants)  
EC- JRC in partnership with University of Novi Sad  
From 4 to 8 September 2023  
Key features of the event:
  - Dealing with the three main environmental matrices at once using a holistic approach
  - Close collaboration between JRC and WB scientists for delivering training
  - Combination of theoretical and hands-on activities
  - Oriented to improve the expert preparedness to contribute to the Green Agenda for the Western Balkans
- **Scientific study.** Assessment of the health impacts and costs attributable to air pollution in urban areas using two different approaches. A case study in the Western Balkans (under review).
- **New reports** on the status of Environment in Enlargement countries will be published in 2024

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# Policy Dialogue on Aligning Priorities in the Western Balkans



Pathways: Digital • Green • Health • Vision 2030

## Thank you for your attention!

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For further information regarding POLICY ANSWERS visit  
[westernbalkans-infohub.eu](https://westernbalkans-infohub.eu)

# Economic and Investment Plan for the Western Balkans



## Sustainable transport

- ▶ FLAGSHIP 1 – Connecting East to West
- ▶ FLAGSHIP 2 – Connecting North to South
- ▶ FLAGSHIP 3 – Connecting the coastal regions



## Clean energy

- ▶ FLAGSHIP 4 – Renewable energy
- ▶ FLAGSHIP 5 – Transition from coal



## Digital future

- ▶ FLAGSHIP 8 – Digital infrastructure



## Environment & climate

- ▶ FLAGSHIP 6 – Renovation wave
- ▶ FLAGSHIP 7 – Waste and waste water management



## Private sector

- ▶ FLAGSHIP 9 – Investing in the competitiveness of the private sector



## Human capital

- ▶ FLAGSHIP 10 – Youth Guarantee

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Slide by Alessandra Sgobbi (DG NEAR)

# Green Agenda for the Western Balkans (GAWB)



- Informed by the European Green Deal
- Embedded in the Economic and Investment Plan for the Western Balkans
- Endorsed by Western Balkans leaders at Sofia Summit (2020)

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Slide by Alessandra Sgobbi (DG NEAR)

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# EU4GREEN

It is worth mentioning this EU funded project co-financed by Austria which aims to support the implementation of the Green Agenda for the Western Balkans Duration 2022 – 2025 (under the supervision of DG NEAR and DG ENV)

It deals with the following topics (most of which are addressed in the JRC report):

- Biodiversity
- Circular Economy
- Depollution of Air, Soil and Water
- Green Education
- Green Finance
- Monitoring the progress of the GAWB
- Involvement of the civil society
- Sustainable agriculture

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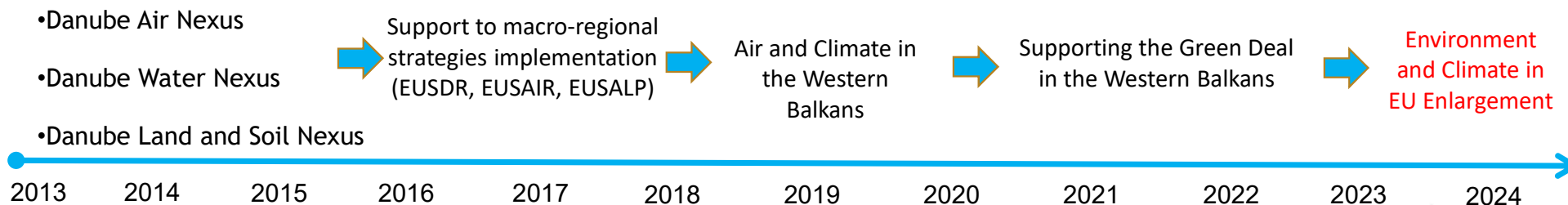
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# JRC work on Environment in SE Europe

## Projects



## Activities

Scientific studies and ex-ante analyses

Networking of experts and authorities

Capacity building

## Resources

JRC databases  
EDGAR

Modelling tools  
FASST, SHERPA

European reference laboratories  
ERLAP

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