



2019

AIR QUALITY IN WESTERN BALKANS CITIES

SOURCES, IMPACT ON HEALTH AND COSTS

The health impact and related costs due to air pollution in 2019 were assessed in 30 urban areas of the Western Balkans, one of Europe's air pollution hot spots.

HEALTH EFFECTS

Main Causes of Premature Death Attributable to PM_{2.5}

STROKE
40%

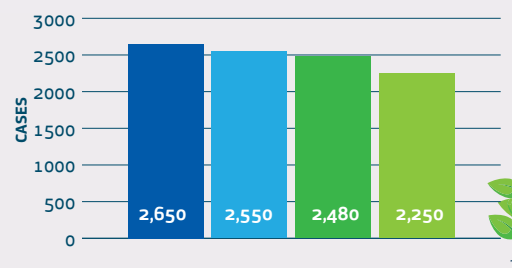
Mortality rate 55 per 100,000 inhabitants equivalent to an Average of 70 deaths per city.

ISCHEMIC HEART DISEASE
38%

Mortality rate 52 per 100,000 inhabitants equivalent to an Average of 67 deaths per city.

Disease Cases Attributable to Air Pollution

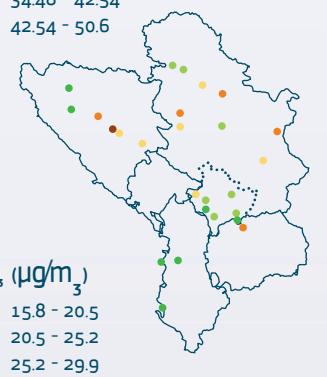
Air pollution also impacts on cases of bronchitis, asthma and hospital admissions due to cardiovascular and to respiratory causes.



- Myocardial Infarction
- Chronic Obstructive Pulmonary Disease (COPD)
- Diabetes Mellitus Type 2
- Cardiovascular Disease

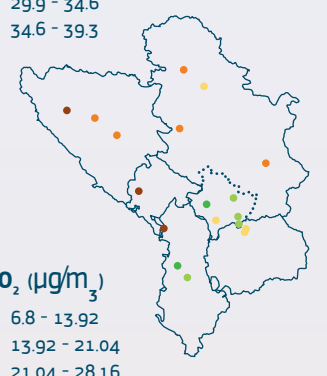
PM_{2.5} (µg/m³)

- 10.3 - 18.36
- 18.36 - 26.42
- 26.42 - 34.48
- 34.48 - 42.54
- 42.54 - 50.6



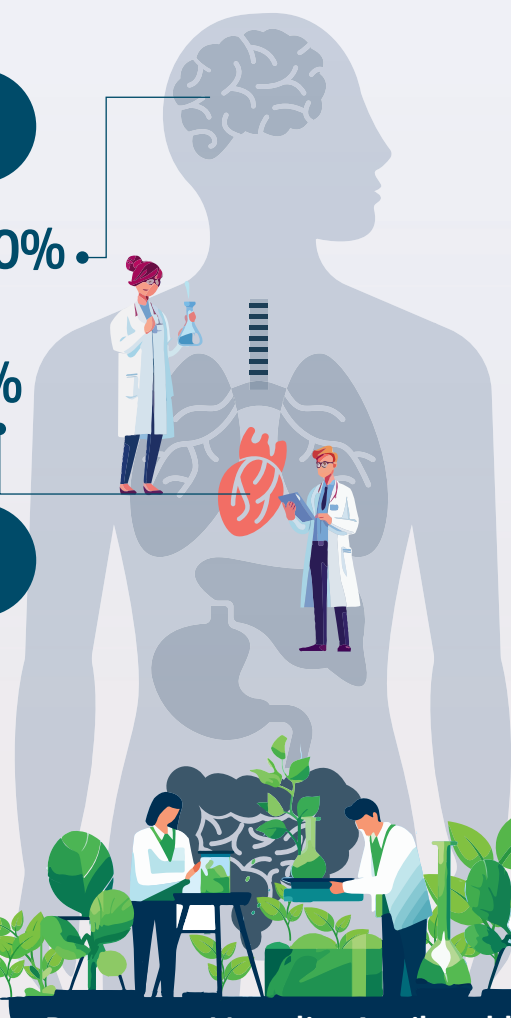
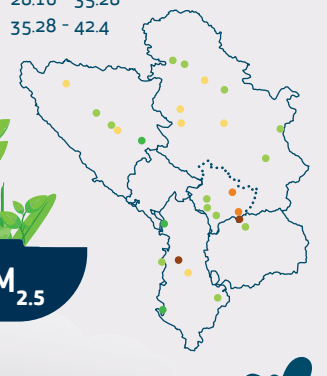
O₃ (µg/m³)

- 15.8 - 20.5
- 20.5 - 25.2
- 25.2 - 29.9
- 29.9 - 34.6
- 34.6 - 39.3



NO₂ (µg/m³)

- 6.8 - 13.92
- 13.92 - 21.04
- 21.04 - 28.16
- 28.16 - 35.28
- 35.28 - 42.4



Premature Mortality Attributable to PM_{2.5}

75,100 - 86,000
Years of life lost

4,600 - 5,300
Premature deaths

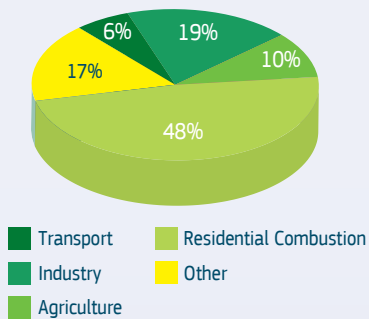


Joint Research Centre

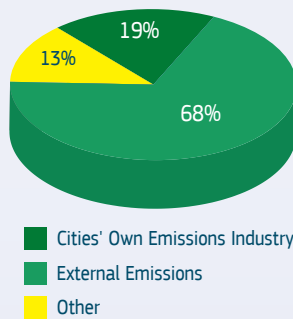
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SOURCES, IMPACT ON HEALTH AND COSTS

Sources of urban PM_{2.5}

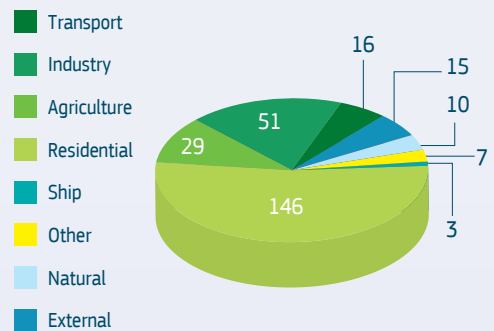


Distribution of PM_{2.5} Contributions



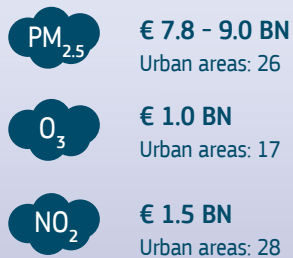
Benefits attributed to PM_{2.5} Sources

(Avg. 17 cities, € mln)

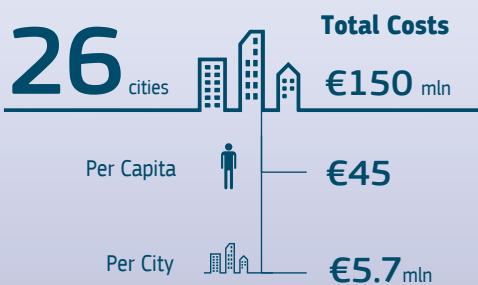


Economic Costs

Cost of Mortality Attributable to:

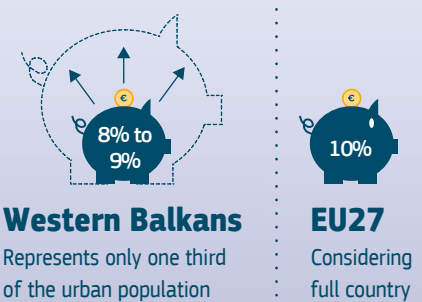


Cost of Morbidity Attributable to PM_{2.5} - PM₁₀



Economic Burden on GDP (%)

3x higher than EU27



Comparison with EU27



137 - 158 | PM_{2.5}-related Mortality Rate per 100,000 inhabitants



69 | PM_{2.5}-related Mortality Rate per 100,000 inhabitants

THE WAY FORWARD

Economic Benefit:
Up to **€ 9 BN** per year

Conclusion

The analysis of PM_{2.5} sources indicates that reducing emissions from the domestic and industrial energy sector is essential to achieve significant health and economic benefits.

To prioritise this goal, it is important to implement measures that promote the transition to renewable energy sources, enhance building efficiency and adopt Best Available Techniques for industrial facilities, as outlined in the Green Agenda for the Western Balkans.

More info:

