

EPCAC – Expert Panel on Clean Air in Cities

Progress and position paper

Co-chairs:

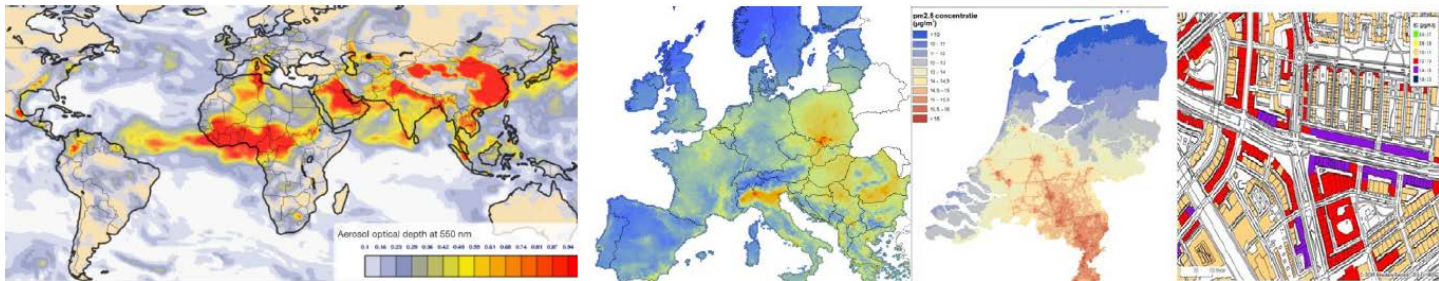
- Martine Ouwersloot, Ministry of Infrastructure and Water management, Netherlands
- Guus Velders, RIVM, Netherlands

Expert Panel on Clean Air in Cities

- Adopted by the Executive Body of the UNECE Air Convention, Dec 14, 2018

- Revised TFIAM mandate:

“Multi-scale multi-objective assessment modelling aimed at cost-effective policy strategies that combine international, national and local actions as well as the links between air quality policy and other policy processes (e.g. on SDGs, climate, biodiversity).”



Key questions

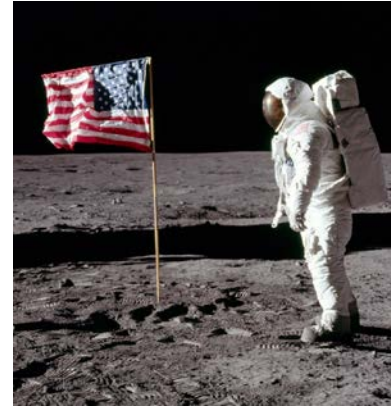
- **Which actions** at **which government level** are most effective to reduce health effects?
- Can we say more about the **cost-effectiveness** of measures at different government levels?
- What **knowledge** should be improved for robust policy advice?



Mission and Task

- EPCAC will **provide a science-policy arena** for analysis of cost-effective multi-scale air quality strategies
- EPCAC will **highlight the interactions between geographical scales**, acknowledging that air quality on a local scale is affected by international policies whilst the impact of local policies is propagated to other cities, regions and countries

➔ **Involvement of cities is important**



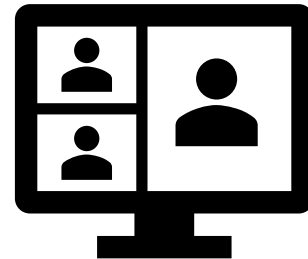
Past meetings

Meetings held in Bratislava (2019), Online (2020, 2021, 2022)

- 100 participants: national governments, cities, scientific community, NGO's, industry, EC

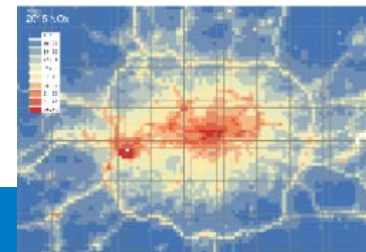
Presentations and summary available:

<https://iiasa.ac.at/web/home/research/researchPrograms/air/policy/TFIAM.html>



Some findings

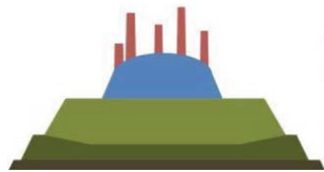
- Multilevel governance necessary for achieving the health objectives
- Link between air pollution and health well established by many (review) studies
- Integrating policies is important:
 - Nitrogen and climate policies are important for air quality objectives
 - Air quality objectives also relevant for climate policies
- Different contributions in different cities in EU, West Balkans, EECCA
- Models provide the necessary information for local and national authorities



EPCAC Position Paper

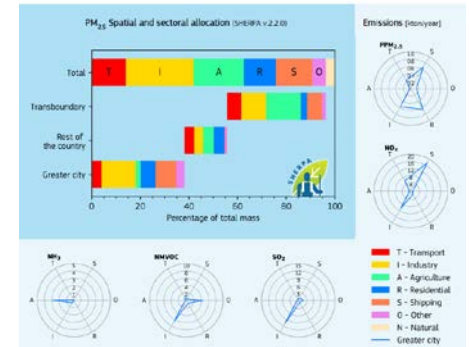
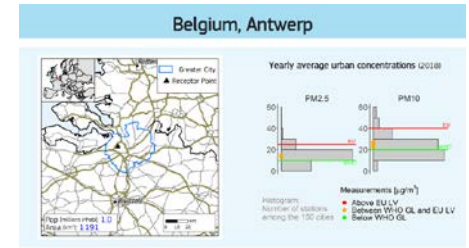
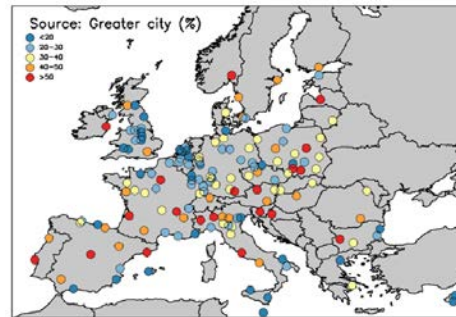
“Prepare a position paper to raise awareness among national and local policy makers of the multi-scale interactions. To be followed by other relevant guidance documents.”

Initial attempt in 2020



Contributions:

- Street
- City
- National
- Transboundary Natural



In 2024: Steps for a Position Paper

1. Core writing team
2. Annotated outline (April)
3. A few online meetings with core team (May, June, July)
4. EPCAC meeting in Sept 2024 (maybe in week 23-27 Sept)
 - Day 1: Core writing team meet in Bilthoven at RIVM
 - Day 2: Online presentations and discussing the position paper
5. Revise position paper (Oct)
6. Circulate among EPCAC participants for written feedback (Nov)
7. Informal version available (Dec)
8. First formal version to be presented at WGSR63 (spring 2025)

Outline of Position Paper



Preamble

Summary

1. Introduction: Air quality is still a problem in cities
2. The role of cities
3. Sources of air pollution in cities
4. Measures
5. Conclusions
6. Further research needed (the known unknowns)

Box: City based on administrative boundaries versus population

1. Introduction

- Significant impacts of air pollution on health: PM, NO₂, O₃
- Large part of urban population in UNECE exposed to concentrations higher than WHO guidelines
- Challenge for EU countries to meet proposed EU limit values in 2030
- Even harder for several EECCA and West-Balkan countries

- Combustion is a large local cause of urban air pollution for NO₂
- For PM_{2.5} and O₃ sources from further away also contribute significantly

- Air quality is strongly linked with climate change measures
 - ➔ offers options for win-win solutions, but prevent adverse effects

3. Sources of air pollution in cities

- Contribution of different sectors and regions to concentration in cities differ among cities
- Source apportionment is a first step in designing a cost-effective multi-scale air quality strategy
- Use of JRC-urban PM_{2.5}-atlas and EMEP/GAINS calculations:
 - Transboundary sources
 - National and regional sources
 - Local sources
- Particulate matter (PM_{2.5}), Nitrogen oxides, Ozone



4. Measures

- Catalogues of measures exists:
 - Fairmode
 - Proposed EU AQD (annex 8)
- The question is to what extent local measures will be applicable/sufficient for solving local poor air quality
- Examples of experiences of measures taken
- Ranking of measures
- Non-technical measures



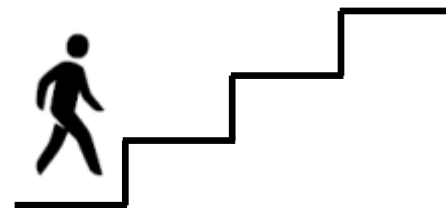
Box. Administrative boundary vs Population

- Large differences between cities: conglomerates of cities (e.g. Paris), cities in industrial, rural areas
- Urban health impacts more related to reduction of population exposure, less to exceedances of local limit values
- Measures in core of large cities might be sufficient to meet NO₂ limit values, but not significantly reduce exposure in whole city

- Cities have administrative boundaries (jurisdiction for policies), but measures in greater city area needed to reduce exposure
- Multi-layered government actions needed to reduce population exposure
 - ➔ Challenge how to organize: examples, Berlin, Paris, London, ...

Next steps

- Input and feedback is welcome (NOW)
- Core team will produce a draft (May-July)
- Discussed during EPCAC meeting (Sept)
- Revised version (Oct)
- Written feedback from EPCAC community (Nov)
- Informal version available (Dec)



Questions?

Dank u wel



Gracias



Danke

Merci

Diolch yn fawr

Спасибо

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谢谢

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