

Catalogue of measures

Measures and principles for creating air quality plans

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Agenda

- Background
- About the report
- How to select measures
- Catalogue of measures- selected parts

Background

















- Air pollution – cause for serious concerns
- Western Balkans struggle with air quality standards
- Many initiatives going on- more needs to be done

- Catalogue of Measures- A project Funded by the Swedish Environmental Protection Agency

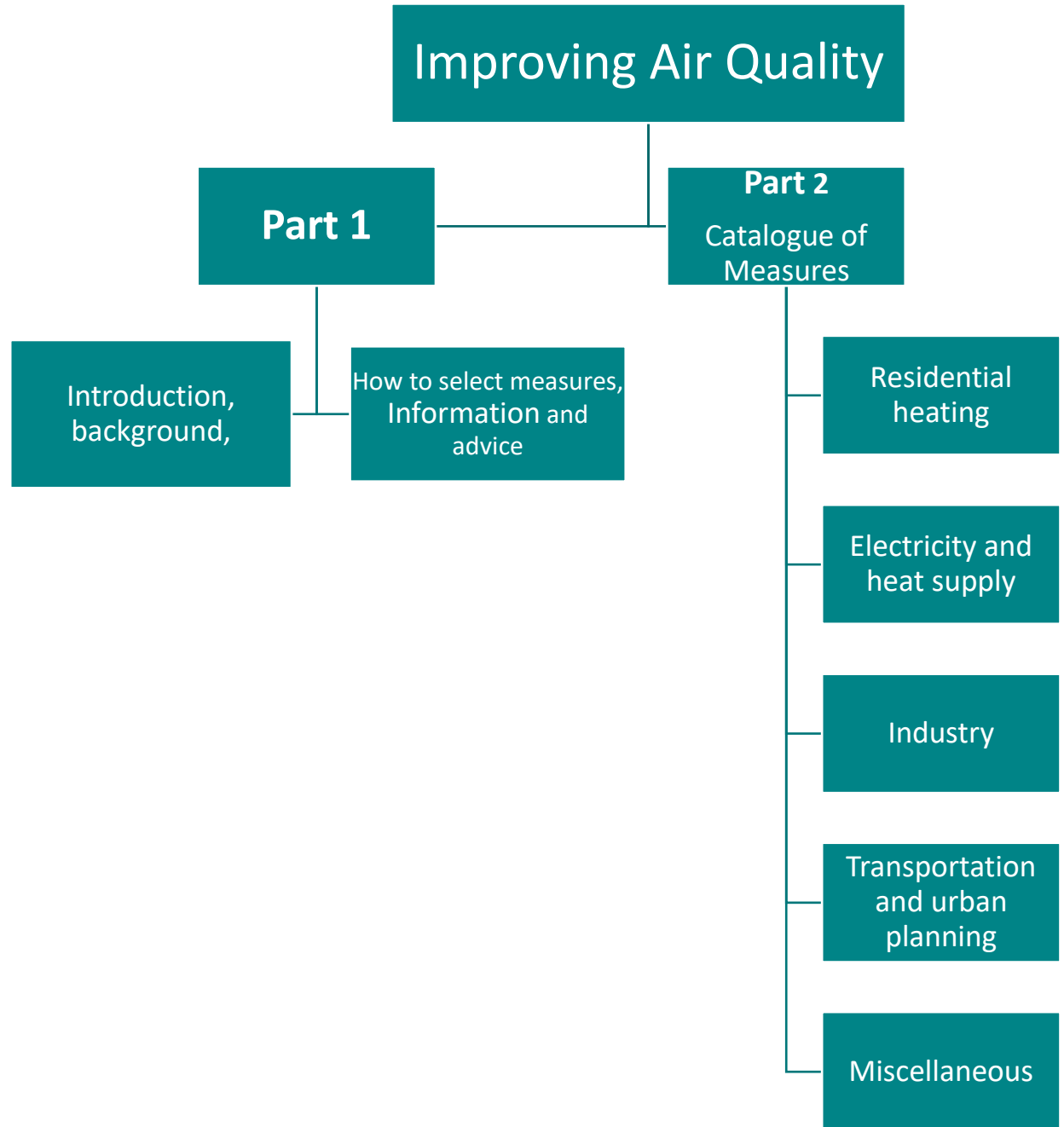
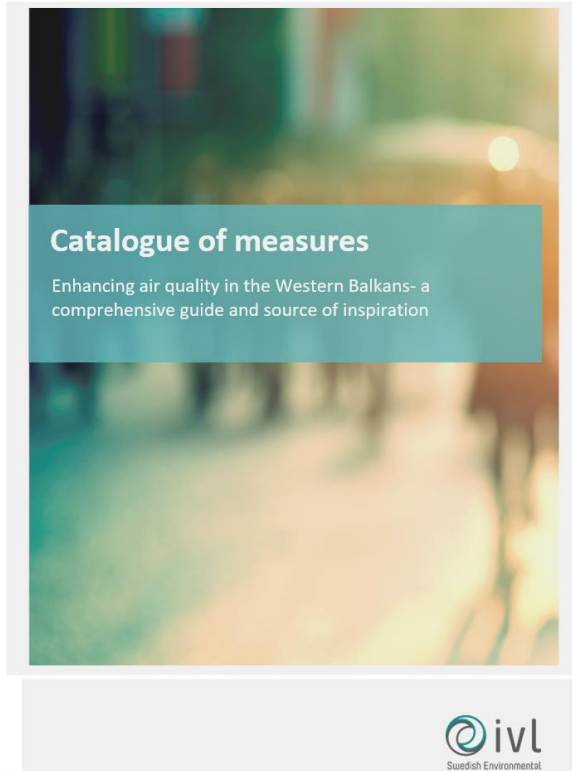


About the report

- A source of inspiration for creating air quality plans
- Provides a theoretical framework for selecting measures (more of this later)
- It is a start but not the solution
- Think about local context
- Target group: municipalities
- Based on air quality plans and air quality management reports from the region

-  9. Albania_AAQ Strategy Draft Final_Eng.pdf
-  10. BiH Plan kvaliteta vazduha, februar 2021. English.pdf
-  11. BiH_Sarajevo_kantonalni_plan_zastite_okolisa_kantona_sarajevo_verzija_za_web_2017.pdf
-  12. BiH_Zenica_Akcioni plan za smanjenje zagađenja zraka 30-04-2020.pdf
-  13. BiH_Zenica_Akcioni plan za smanjenje zagađenja zraka 30-04-2020_compressed.pdf
-  14. Kosovo_Gjakove Drafti Perfundimtare (05.12.2022).docx
-  15. Kosovo_Gjilan_Local Action Plan for Air Quality_19 June_2023_N.H1.docx
-  16. Kosovo_Prishtine_plan_i_cilesise_se_ajrit_per_prishtinen_2023-28.pdf
-  17. Montenegro_Pljevlja_Kratkoroni-akcioni-plan_2017.pdf
-  18. Montenegro_Pljevlja_Plan+kvaliteta+vazduha_2013.pdf
-  19. Montenegro_Podgorica_Plan+kvaliteta+vazduha.pdf
-  20. North Macedonia_Kavadarci Plan-za-vozduh_2022.pdf
-  21. North Macedonia_Kumanovo_Plan-za-vozduh_2022.pdf
-  22. North Macedonia_Skopje AQ Plan_2017.pdf
-  23. Serbia Plan kvaliteta vazduha Kraljevo_maj_2023.pdf
-  24. Serbia_Kragujevac_Plan-kvaliteta-vazduha-2021.pdf

Structure of the report



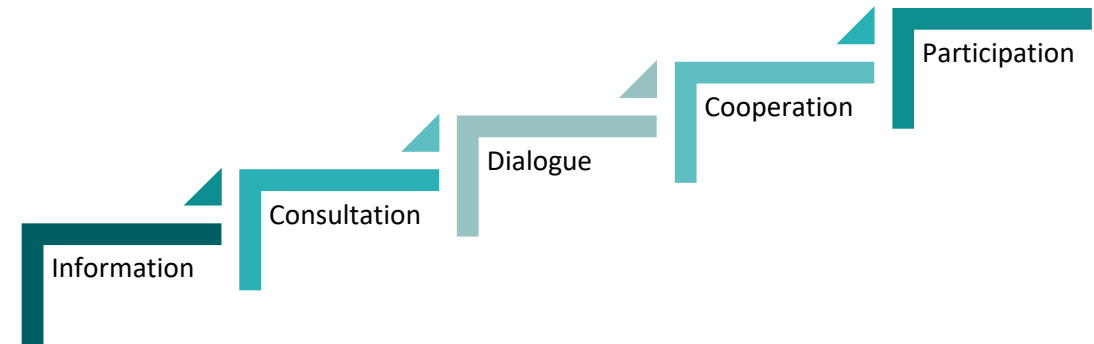
One measure won't do- package of measures gives best effect

- How to avoid unwanted effects
- Importance of systems perspective
- Synergistic effects of multiple measures
- Not all measure will suit all municipalities- context matters



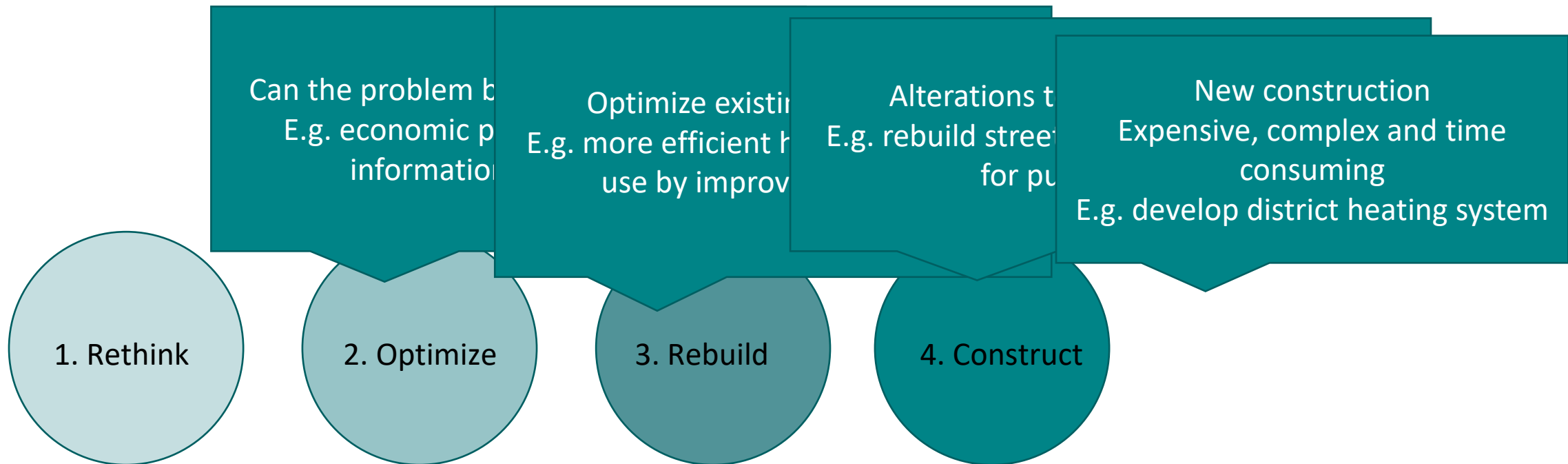
The dialogue staircase

- Information- one-way
- Consultation- exchange of experience and knowledge
- Dialogue- participation on equal terms
- Cooperation- both parties contribute
- Participation- all parties involved, equal premises



How to select measures...

- A four-step approach for measure selection



...How to select measures

- Vulnerable groups:
 - Children, women, elderly
- Financial constraints- most bang for the buck
- Time frame

Sectors of interest

- Residential heating
- Transport and urban planning
- Electricity and heat supply
- Industry

Catalogue of Measures

Structure of the catalogue

- Brief description
- Pollutants
- Administrative level
- Owner
- Socio-economic effects
- Impact on children and gender

- Where information is available:
- Costs
- Time scale etc.

5.1.2 Expansion of green areas in the city, green corridors, green public spaces. Creating green barriers with vegetation (trees) around industrial facilities.

| | |
|--------------------------------|--|
| Description in brief: | This is a measure that increases the green areas that filters air pollutants while also giving other benefits in a climate adaptation perspective such as contributing to cooling of temperature in cities during heat waves. Pollutants that are addressed are NO _x , CO, NMVOC and impact is mainly local. Implementation time can be estimated to 1-5 years depending on whether it is about improving already existing green areas or planting/arranging new ones. Estimated cost for setup of green areas was in Kavadarci MKD 3 000 000,00. |
| Administrative level: | Local |
| Owner: | Municipality |
| Socio-economic effects: | Positive. Increased access to greenery and green spaces have proven positive effects for the public health in several aspects. |
| Impact on children: | Positive as children and youngsters more often than adults are dependent on walking, cycling and public transport and thus benefit of better air quality. |
| Impact on gender: | Positive as women more often than men are dependent on walking, cycling and public transport and thus benefit of better air quality ¹⁹ . Positive as women as a group suffers more from heat waves. |

¹⁹ [Are mobility systems gender-neutral? - Ramboll Group](#)
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Residential heating- Rethink Prevent heat leakage

- Subsidy and/or information campaign
- Relatively quick measure
- Reduces the energy demand
- Positive economic effects on households

- (Connects to the youth manifesto we heard about before lunch)

4.1.7 Encourage replacing seals to prevent heat leakage

| | |
|--------------------------------|---|
| Description in brief: | Subsidies combined with information campaigns directed to households aimed to encourage replacing seals to prevent heat leakage from buildings. The measure is cost-effective offering several benefits: energy savings, improved comfort, reduced emissions of PM and NOx and enhanced durability of building systems. The cost for setup depends on factor such as size of building, extent of sealing required, and materials used. The primary cost is the material including sealing material such as weatherstripping, caulking, sealants, and insulation. Installation of sealing strips around windows and doors is relatively simple and does not require any additional labor costs. Time scale for implementing subsidies, information and as a result achieving replaced seals of houses is estimated to 3-5 years. |
| Administrative level: | Local, regional, or national depending on source of financing of subsidies and/or campaign. |
| Owner: | Municipality |
| Socio-economic effects: | The primary effect is energy cost savings due to lower utility bills for homeowners and tenants. Reduced energy consumption is positive from a property value point of view. |
| Impact on children: | Improved insulation of houses prevent heat leakage and thus reduced energy consumption. If the heat is generated through domestic burning of fuels, improvement in this area can contribute to improved indoor air quality which will benefit children who typically spend a lot of time in the home. If coal is the primary energy source, improved insulation contributes to decrease the dependence of coal and thus bring benefits in terms of improved air quality for people. |
| Impact on gender: | Improved insulation of houses prevent heat leakage and thus reduced energy consumption. If the heat is generated through domestic burning of fuels, improvement in this area can contribute to improved indoor air quality which will benefit women who typically spend a lot of time in the home. |

Transport and urban planning- Rethink Car parking policy

- Creates incentives to use other modes of transport
- Have significant effects on number of car trips
- Can be implemented relatively quickly
- Municipality has ownership



Electricity and heat supply- New construction

Solar panels

- Solar panels on municipal buildings- leading by example
- Embody a principle of sustainable energy
- Municipalities have control over their own buildings- good place to start
- Apply for funding is a possibility for financial support



Industry- Rebuild

Paving roads used by heavy vehicles

- A way to reduce emissions
- Less generation of dust particles
- Lower fuel consumption
- Important for roads used by coal industry



Industry- Rethink Polluters pays fees

- Polluters pays fees and environmental inspections
- Polluters- financially accountable
- Encourage adoption of cleaner technologies
- Creates incentives to reduce emissions!
- Equity and fairness



Miscellaneous- Optimize Remediate illegal waste dumps

- Strengthen legislation and enforcement
 - Provide proper waste management infrastructure
 - Inspections
 - Requires collaboration
-
- (Our youth representatives from BiH mentioned waste management as an important area)



What's next?

Last updates will be made before final publication

Possibility to update and further develop this catalogue

Thank you!

Don't hesitate to reach out