

# Data flow K and database of air quality measures

Can we improve the information available on measures, also in the context of FAIRMODE CT5?

# Knowledge on measures

- In principle useful to share experiences among member states
  - To replicate good ideas
  - Avoid possible mistakes
- Some efforts in this direction
  - FAIRMODE CT5
  - Data flow K (MS official reporting)
  - Catalogue of AQ measures - CAQM (for capacity building)

# FAIRMODE CT5

- Collecting best practices...
- Existing knowledge (FAIRMODE documents, APPRAISAL, PAQ, ...)
- Pollutant specific key challenges:
  - How to implement a low emission zone, to reduce NO<sub>2</sub> and BC
  - How to act on non-exhaust traffic sources to reduce PM
  - How to design measures on domestic heating, to reduce PM and benzo(a)pyrene
  - ...
- Horizontal key challenges:
  - How to consider NEC requirements and co-benefits (including GHG) in an air quality plan
  - How to integrate background concentrations in a local modelling study
  - ...

# Data flow K on measures

In this data flow the authorities report on measures incl. information on type/classification of measure, source sectors affected, spatial scale (e.g. national, local), implementation status, time scale (e.g. long, medium, short).

But there are some issues, as:

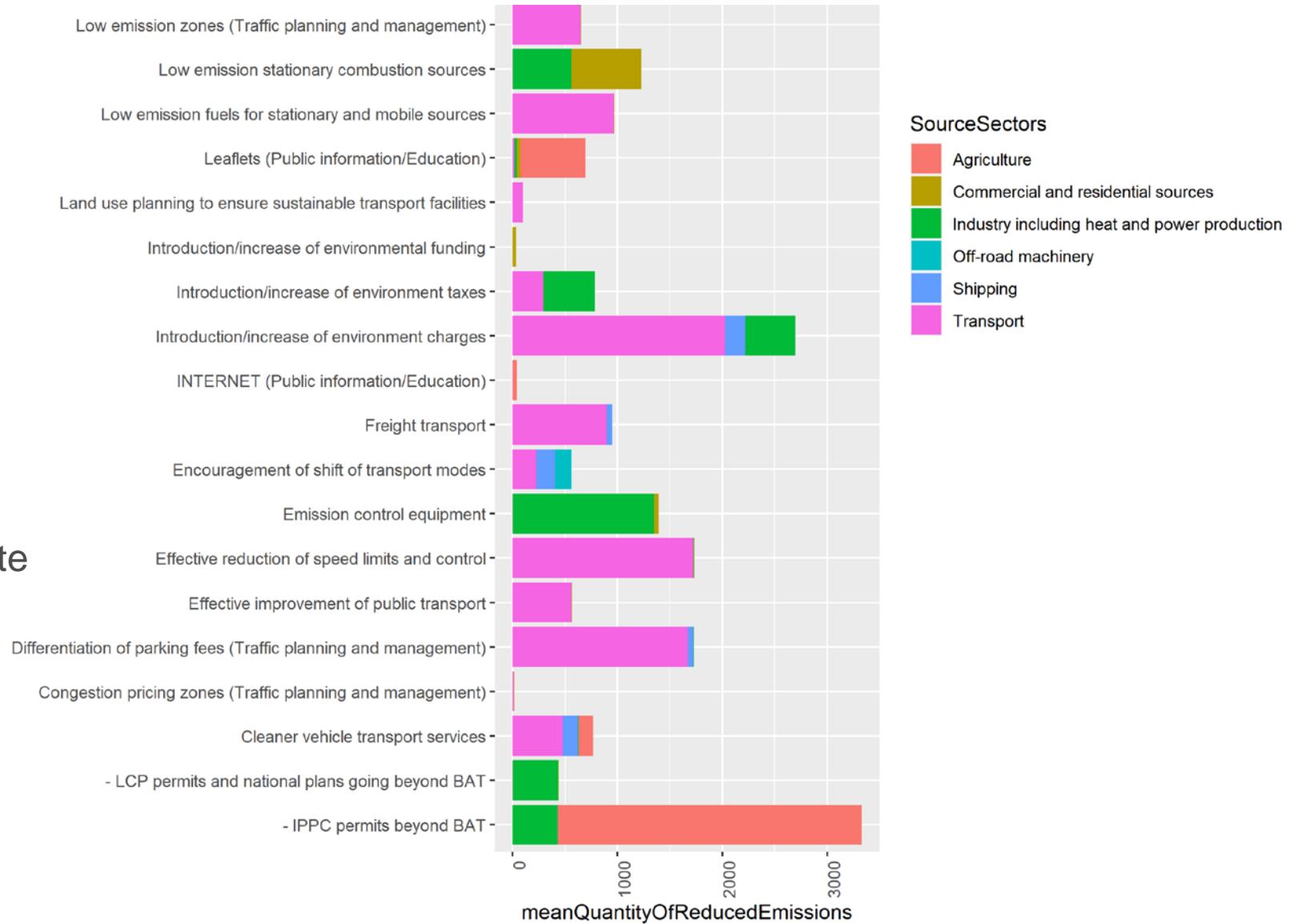
- data flows make interpretation of data difficult
- Often no information on emissions' reduction (which pollutants? Where? When?)
- Often lacking information on air quality impact (requested/reported info is unclear/open to interpretation)
- Little or no information on costs (incl. methodology)
- No information requested on benefits (health, ecosystems)
- No requested information on ex post evaluation and actual cost/benefits

# Data flow K:

We could in principle extract information

But at the moment data are not sufficiently accurate and complete

MeasureClassification



# CAQM

- Available at <https://fairmode.jrc.ec.europa.eu/measure-catalogue/>
- Compiled by UBA Austria for DG ENV, now hosted at JRC
- Collection of measures, now a bit outdated



The screenshot shows the top section of the CAQM website. It features a dark blue background. In the top right corner, there are two buttons: "Learn more" with a magnifying glass icon and "Contact us" with an envelope icon. In the center, there is a logo consisting of a white circle containing a stylized air quality monitor, surrounded by twelve yellow stars. Below the logo, the title "Catalogue Of Air Quality Measures" is displayed in white. Underneath the title, a paragraph of text explains the purpose of the catalogue. At the bottom center, there is a white button with the text "View all" and a downward-pointing triangle.

Learn more Contact us



## Catalogue Of Air Quality Measures

This "Catalogue of measures" supports the implementation of the Air Quality Directive by providing a selected number of successful (best practice) and unsuccessful Air Quality measures. This database is intended for officials responsible for air quality assessment, planning and management on the national, regional and local level.

View all ▼

 73 measures available in the database

# CAQM

- Containing successful and unsuccessful measures
- With some quantitative information on
  - Description of measure
  - Emission reductions in %, Impact on AQ, Costs
- But:
  - Based on old data,
  - Not used by practitioners
  - Missing fields for allowing a meaningful comparison and extrapolation of a measure to other location

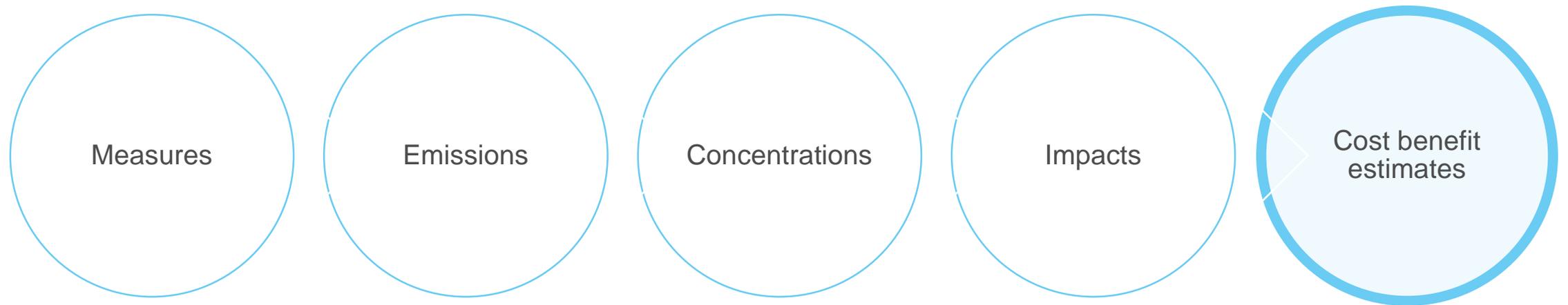
# Summary on current situation

- We are working on best practices from FAIRMODE CT5
- and have:
  - Data flow K
  - CAQM
- **Potentially** these are useful, but **information is lacking and unclear**
- Can this information be **simple enough to report** and **complete enough to be used?**

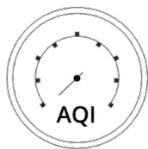
# Can we define a fit-for-purpose system?

- By improving the reporting system and requirements on reported information,
  - In order to share experiences and information with others
- 
- What information is missing to ensure usefulness?
  - What information is unclear and/or not useful in the current DB of measures and data flow K?

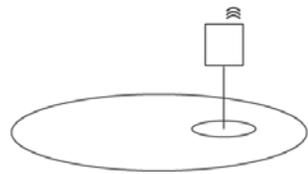
# From measures to impacts and benefits



# Applications to the reporting of measures



Which **indicator(s)** is(are) selected to assess the impact of the measure (PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>2</sub>...)?



*Receptor*

Over **which spatial area** is the indicator averaged (city, core city, street...)?

Over **which time period** is the indicator averaged (hours, days, year...)?



*Source*

Over **which spatial area** is the measure applied (city, core city, street)?

Over **which time period** is the measure applied (hours, days, year...)?

**Which sectors/activity** are abated (transport, Euro5,...)?

**By how much** are source emissions abated (full, 20%,...)?



*Method*

**Which methodology** to estimate the impacts?

**What is the method** to estimate costs?

**What is the method** to estimate benefits?



What are the estimated **costs and benefits**

# Some feedback form you (SLIDO)

- 1) Are you using 'data flow K' information in your work? Y/N
- 2) Are you using the 'catalogue of measures' in your work? Y/N
- 3) Are you directly involved in the preparation of air quality plans, and/or in the assessment of the impact of measures? Y/N
- 4) If an ideal DB of measure would exist, would you use it? Y/N
- 5) Are you willing to participate in a pilot to define what should be reported under data flow K"? IF YES PROVIDE YOUR NAME

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