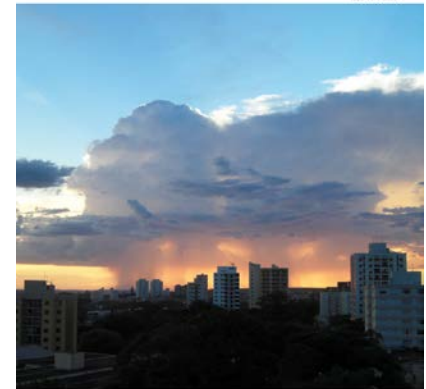


Europe's urban air quality- re-assessing implementation challenges for cities



Air Implementation Pilot 2018

- AIP 2013: Joint EEA – DG ENV project
- [EEA report on the lessons learnt from the implementation of air quality legislation at urban level](#)
- highlight the challenges of 12 European cities (countries)
- contribute to the review of EU's air quality policy and its subsequent proposed Clean Air Policy Package
- follow-up of AIP 2013, initiative of EEA, supported by ETC
- outlining the state of play in the original cities and understand challenges cities still faced in implementing AQ policy
- explore further needs of cities to overcome challenges
- not intended to check the compliance, but develop general proposals to improve implementation of air policy
- exchange of experiences and knowledge (good practices) among pilot cities
- **Methodology:** questionnaire, workshop, webinars with local authorities to explore results



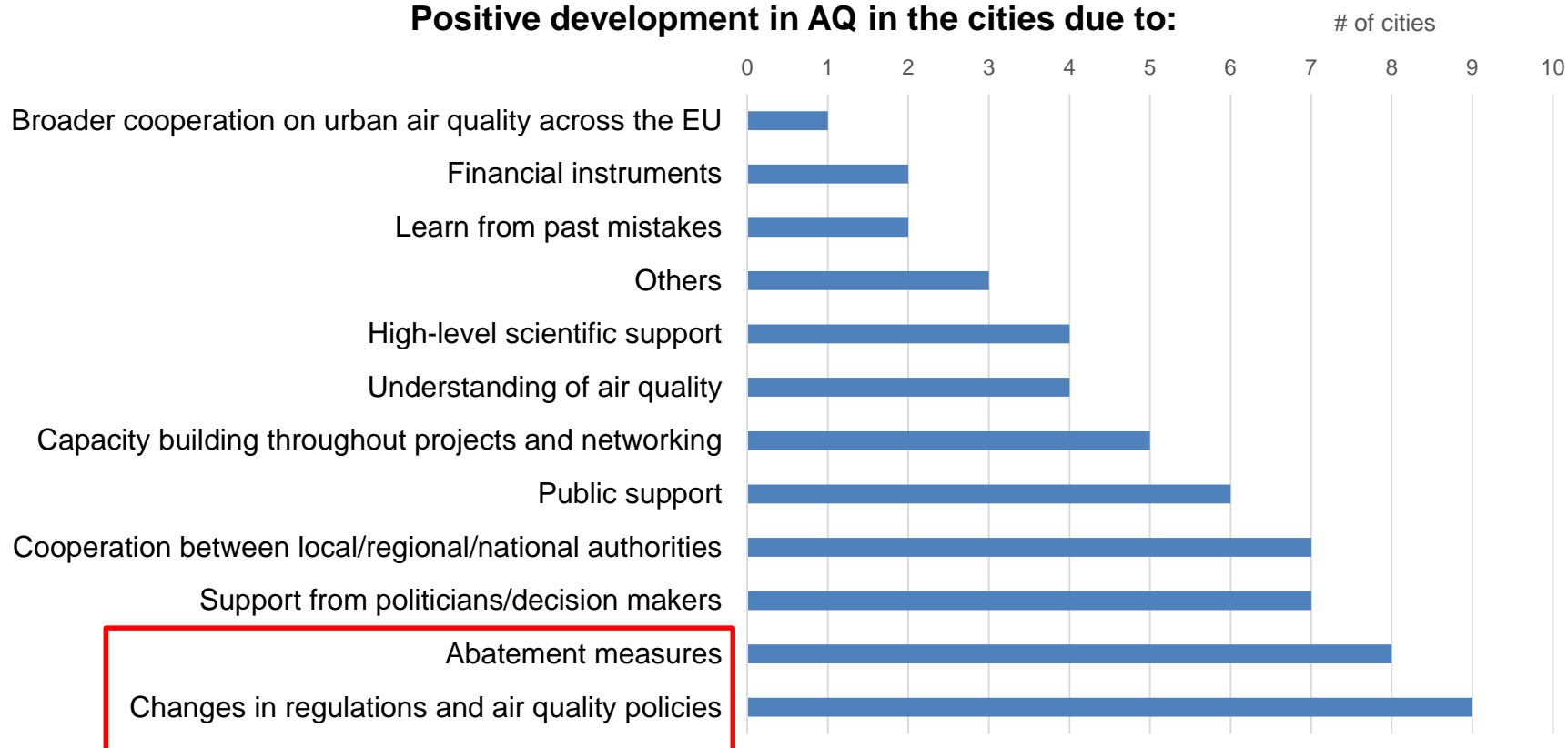
Air quality trends in pilot cities in the period 2012-2016

- 6 of the 10 pilot cities exceeded the PM₁₀ daily limit value (50 µg/m³)
- 7 of 10 pilot cities measured NO₂ concentrations above EU annual limit value (40 µg/m³)
- 9 out of 10 pilot cities measured exceedances of the hourly NO₂ limit value (200 µg/m³) in all cities, Malmö was the exception



Improvement of air quality in cities

Positive development in AQ in the cities due to:



Local air quality measures



Energy-efficient buildings with insulation, renewable energy sources

Relocation of factories/industrial sites out of urban areas

Measures to reduce diffusive dust emissions in ports

Substitution of old, dirty stoves and boilers with clean models

District heating

Fuel conversion in domestic heating

Ban on coal for household heating/cooking

Low-S fuels for shipping fuels in port area

Electric buses, trams, Euro VI or retrofitted buses

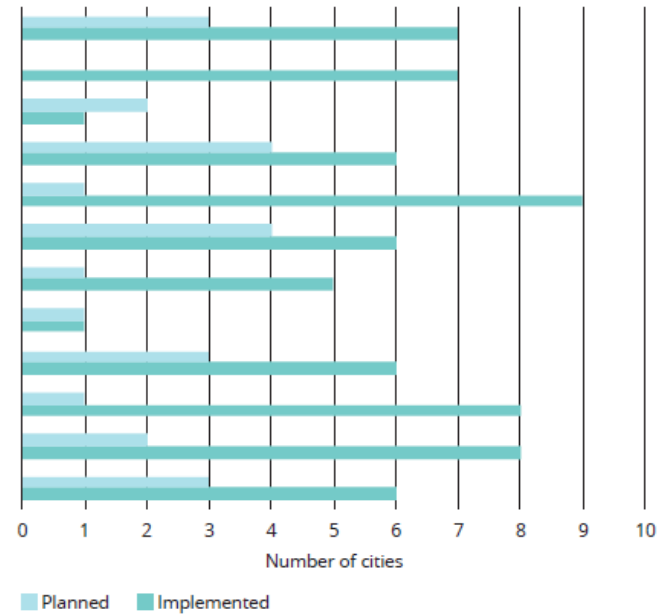
Reduced speed limits/Congestion charges

Promotion of cycling

Low Emission Zone

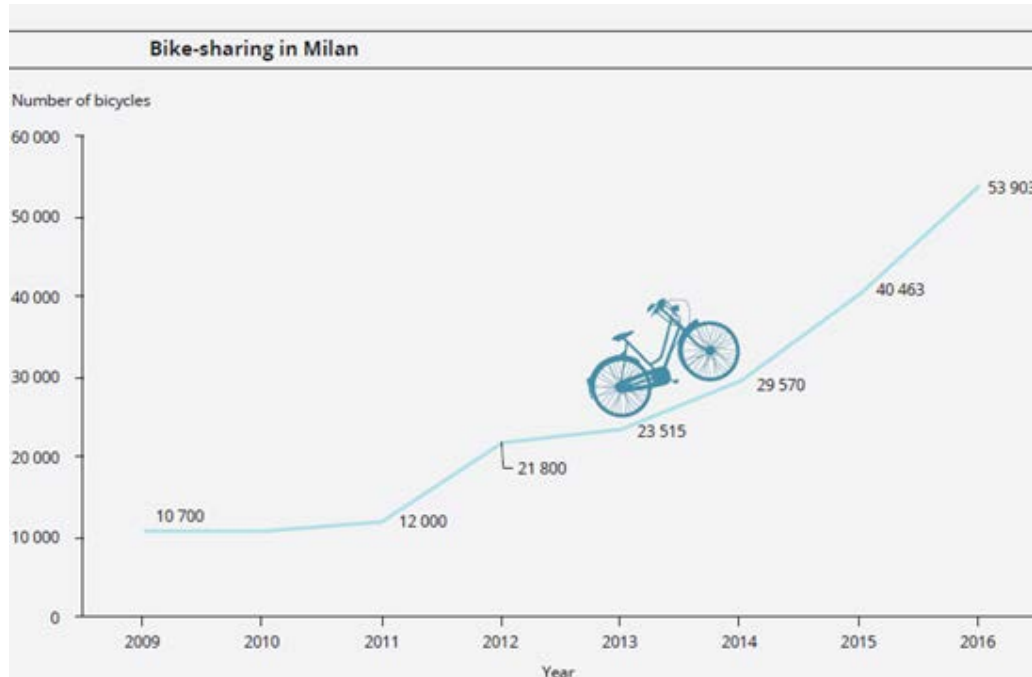


Mitigation measures in the cities



Good practice: co-benefits of congestion charge area in central Milan

- decrease in traffic (30%), increase in use of public bike-sharing and extension of bike roads

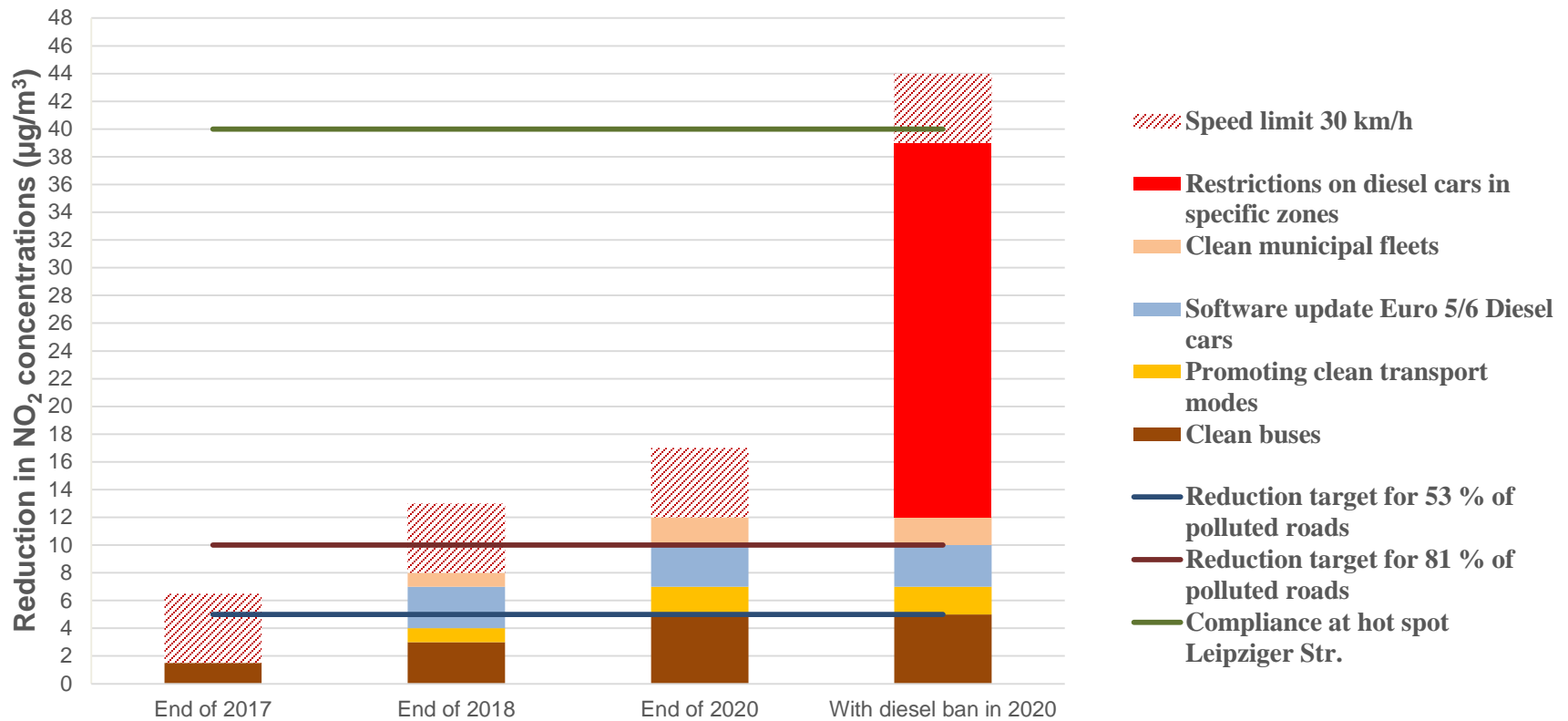


Source: Representatives of Milan

- also increase in private car-sharing schemes with the incentives of free admission to the congestion charge and allowing free parking



Good practice: Quantifying the impacts of traffic measures and modelled reduction in NO₂ concentrations in Berlin



Source: Representatives of Berlin.

Good practice: Link to the health benefits via scenario analysis of exhaust-free transport in Malmö

- Air pollution data were modelled and used to calculate NO_x and PM_{2.5} concentrations in Malmö.
- The modelling results indicate that fewer people would die prematurely (2-4% of premature deaths prevented each year)
- There would be fewer asthma incidents (6%) in children and fewer children would suffer from bronchitis (10%) each year



Source: [Malmqvist et al., 2018, Estimated health benefits of exhaust free transport in the city of Malmö, Southern Sweden](#)

Good practice: Extending the ban on smoky bituminous coal from local level (Greater Dublin area) to national level (Ireland)

- The sale of bituminous fuels was banned in the Greater Dublin area in 1990, leading to 350 fewer annual premature deaths and estimate of financial benefits over €20 million.
- The ban was extended from Dublin to 26 cities and towns and lower levels of PM₁₀ in these areas were observed at monitoring sites.
- In 2017, it was announced the intention to introduce a nationwide low-smoke zone.
- Finally, it was decided in 2018 to extend the original ban on the sale of smoky coal in Dublin to countrywide, with a total ban coming into force in 2019.



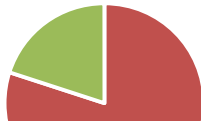
Source: Irish EPA



Source: Shutterstock/xtrekx

Challenges

Administrative competency



Financial



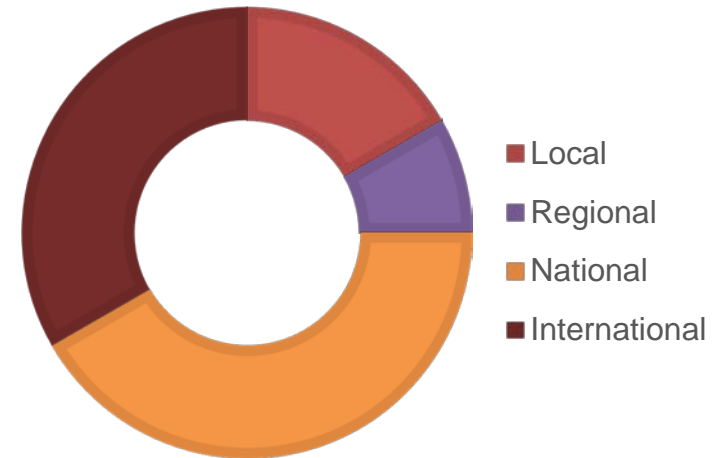
Public acceptance



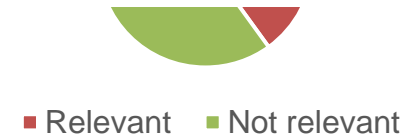
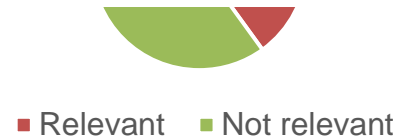
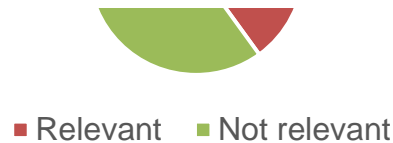
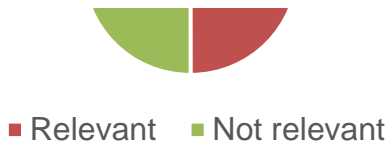
SUFFICIENT COOPERATION AT LOCAL/REGIONAL/NATIONAL/INTERNATIONAL LEVEL?



TYPE OF COOPERATION NEEDED



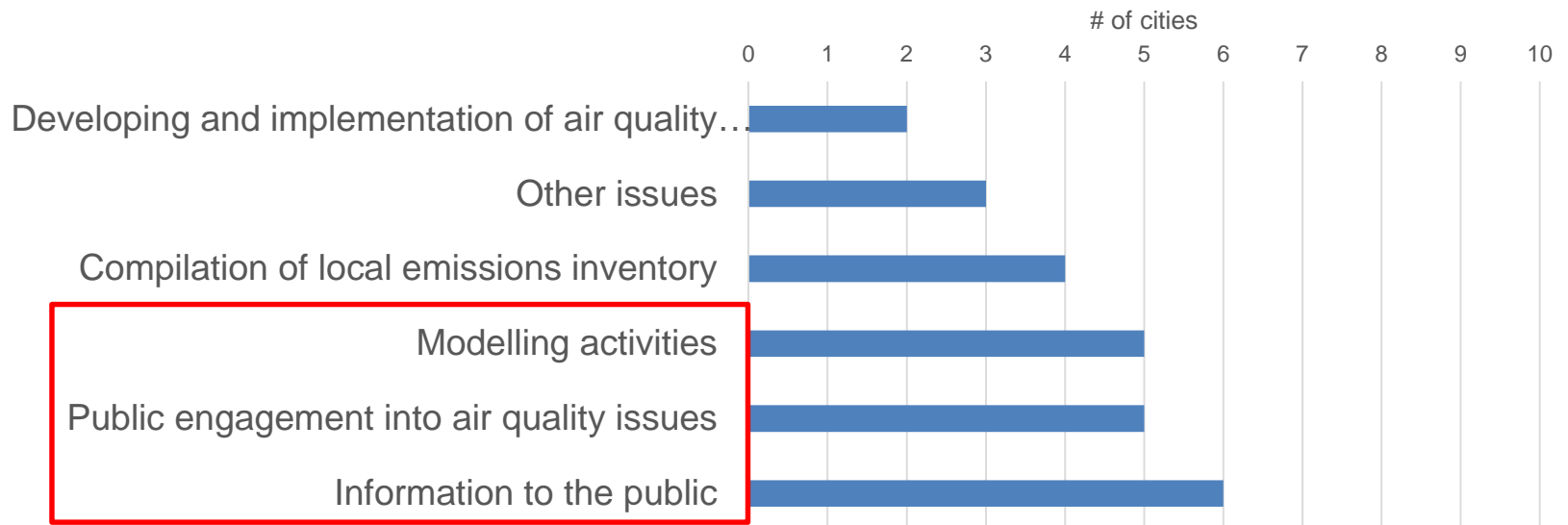
- Local
- Regional
- National
- International



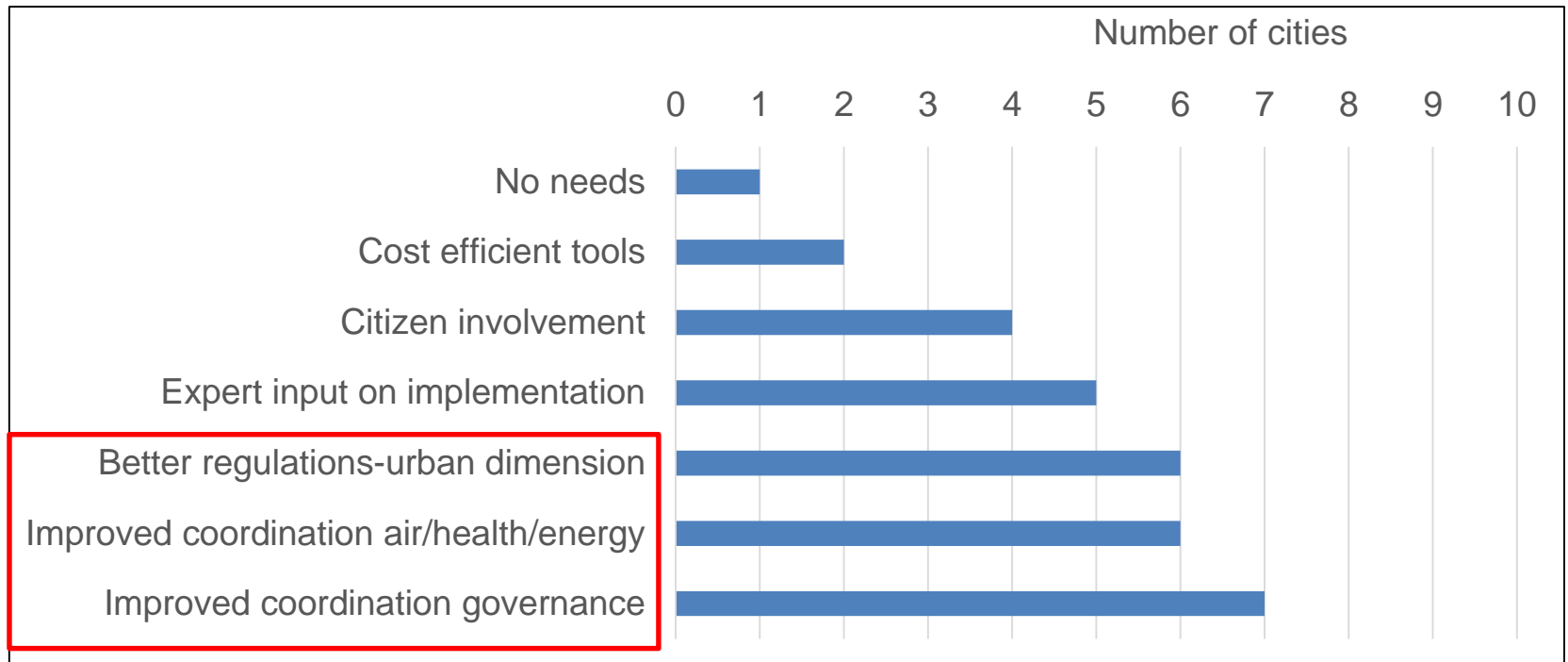
Needs of local authorities



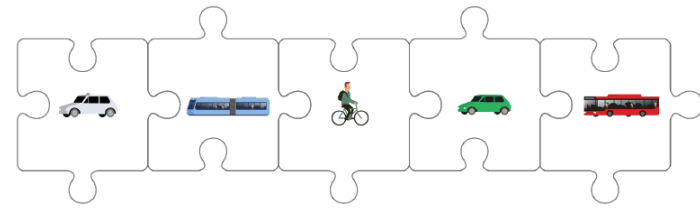
Further guidance needed



Specific needs of local authorities



Take-home messages



- **There is no one solution/measure that fits to all cases.**
- **Smart and integrated urban mobility services are needed at local level, rather than pointing at only one measure (ex. shift to electro-mobility).**
- **Health focused air policies are gaining more importance and this requires action and cooperation at different scales: European, national and local/city levels.**
- **Citizen involvement into air quality issues and public information are the keys for public acceptance of the planned measures, resulting in behavioural change.**
- **Collaborative work is needed to build capacity and knowledge in order to deliver policy more effectively in the long term.**
- **A single dedicated and endorsed platform is lacking for communication among cities and central governance on urban air quality.**



Thank you