Review of efficiency of local air quality measures

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Related activities

- Development of AQ management plans at local level
- Ongoing fitness check of EU Directives on air quality
  - 2008 Directive on PM, NO_2, SO_2, CO, O_3, etc.
  - 2004 Directive on PAHs and metals
- Focus on ex-post estimates of cost and benefit

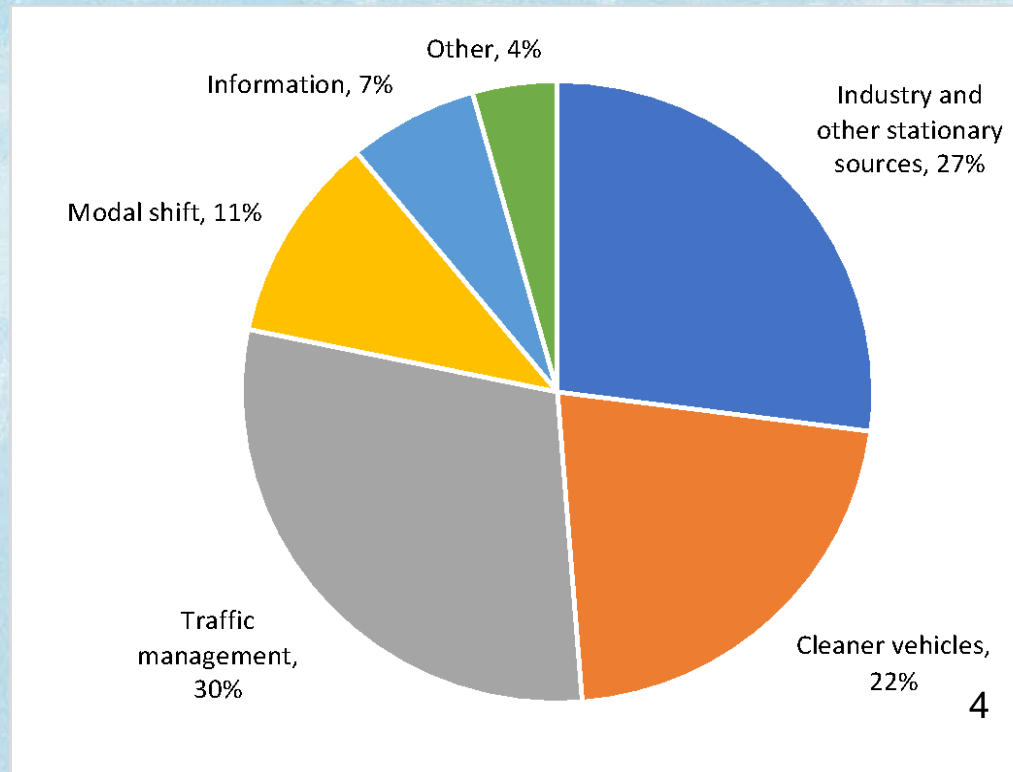# Efficiency and local air quality management

- Obtain maximum improvement in health per unit expenditure across the population

or

- Meet air quality (concentration) objectives at least cost
  - Protecting parts of the population against exposure to levels considered unreasonably hazardous

Types of measure

- Low emission zones
- Boiler replacement programmes
- Promotion of walking and cycling
- Fiscal measures
- Vehicle scrappage schemes
- 'Beyond BAT'
- Etc.

Other, 4%

Information, 7%

Industry and other stationary sources, 27%

Modal shift, 11%

Traffic management, 30%

Cleaner vehicles, 22%

Difficulties in identification and assessment of appropriate local measures

- Lack of data and systematic data collection (Fitness check, EUROSAI, ECA)
  - Measures being introduced in many places
  - Some theoretical and ex-ante assessment
  - Very little ex-post assessment
    - Understanding of behavioural effects?
    - Little desire to reassess implemented policies
- Primary rationale for introducing measures is often unrelated to air quality (mobility/congestion climate…)
  - Responsibility for actions is often dispersed
- Background of other AQ actions specifically on air pollutant emissions (IED, etc.)
- Variability in effectiveness and costs of measures between sites
- Analytical biases (e.g. valuation of time)

Reasons for variability

- Example: LEZs
  - The size of the LEZ
  - Types of vehicle affected
  - Vehicle fleet characteristics
  - Emission standards required
  - Charging scheme
  - Strategy for future tightening of standards
  - Links to other policies (congestion, mobility, climate)
  - Enforcement regimes
  - Distributional issues
  - Availability of alternatives
- Variability increases the value of data

Conclusions

- Need to
  - Recognise the value of this data
  - Systematically collect ex-post data on costs and effectiveness of local AQ measures
  - Bring data together in a way that informs future decision making