The policy setting, institutions and the science-policy interface in Europe

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## EU air quality management structure

<table>
<thead>
<tr>
<th>Institutions</th>
<th>Scale (km)</th>
<th>Responsibilities</th>
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</table>
| Europe-wide (EU)            | ~1500      | • Air Quality Limit Values (uniform)  
• Uniform, source-specific emission limit values (BAT)  
• National emission ceilings |
| National governments        | 200-1000   | • Transposition into national laws                                               |
| City administrations        | 20-50      | • Licensing  
• Air quality monitoring  
• Air quality management plans  
• Local short-term action plans |
The policy process in the European Union

European Commission

GAINS cost-effectiveness analysis

European Parliament

European Council (all Environment Ministers)

European National Emission Ceilings Directive (NEC)

National governments of Member States

National laws

National governments of Member States

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National laws
The policy process in Europe
From the GAINS cost-effectiveness analysis to law

1. Preparation and scientific review of the GAINS model
2. Validation of input data by stakeholders in bilateral consultations
3. Alternative policy option scenarios developed with GAINS for the European Commission
4. European Commission analyzes these policy option scenarios and proposes a package of measures
5. The European Parliament and Council (i.e., Member States) need to reach a common position – request for further GAINS analyses
6. All Member States need to transpose this new EU legislation into national laws
Policy analysis:
Institutional arrangements in Europe

Policy negotiations
(LRTAP/EU Commission/Parliament/Council)

Expert group/Task Force
on Integrated Assessment Modelling

Policy options scenarios

Center for Integrated Assessment Modelling
GAINS

Emissions
Technology & costs
Atmospheric modelling
Health & eco. impacts

Scientific community

Member States and stakeholders
Key messages

• To facilitate an effective approach to air quality management in Europe, the EU has established a comprehensive legislative framework, including
  – Ambient air quality standards,
  – minimum emission standards,
  – national emission ceilings
  – compliance and enforcement mechanisms.

• The negotiations of the National Emission Ceilings Directive employed the GAINS cost-effectiveness analysis as a shared scientific tool.

• Europe has established a comprehensive long-term scientific infrastructure to agree on common methodologies and databases for emissions, economics, atmospheric transport, health and environmental impacts.