

Urbanization, Sprawl and Smart Growth in the Great Lakes Region

***A Perspective from the
International Air Quality Advisory Board***

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A European Effort

Towards an Urban Atlas

Assessment of spatial data on
25 European cities and urban areas

Environmental issue report No 30

European Environment Agency, 2002

European Commission

Systems of urban and territorial indicators

Box 3.1: The EEA DPSIR -model applied to urban issues

Driving forces — human activities such as production, consumption, transport, housing

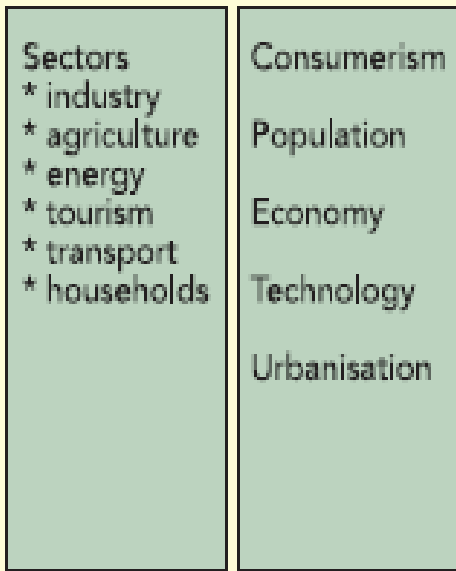
Pressure — emission of pollutants, deposition of waste, extraction of natural resources, land consumption

State — effects of pressure on the physical media (quantity)

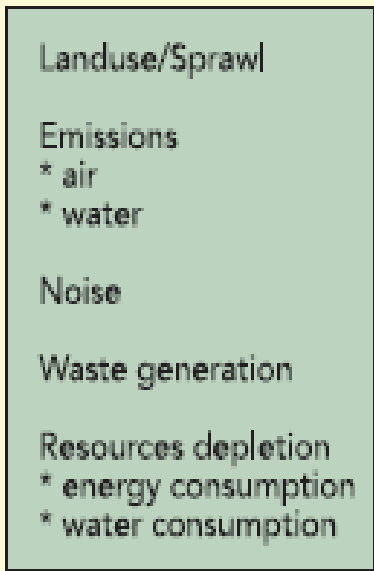
Impact — effects of pressure and of the quality of physical media on the state of ecosystems, public health and living conditions

Response — the societal responses to environmental problems

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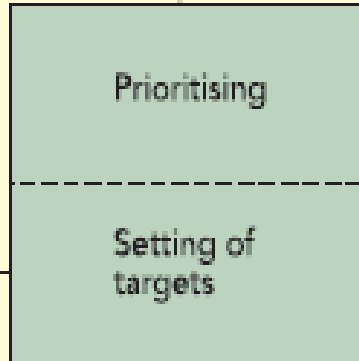
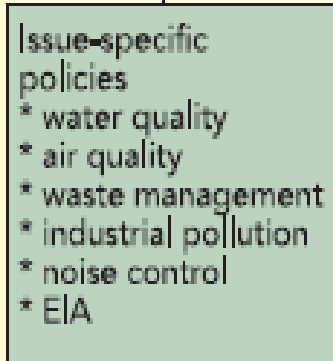
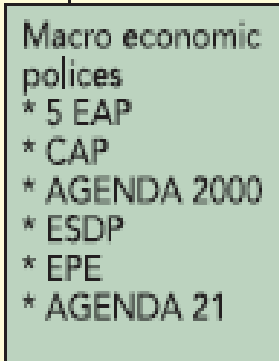
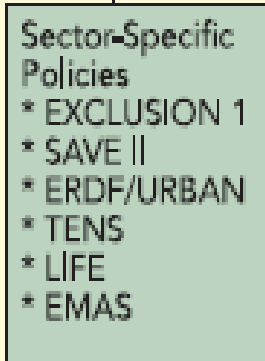
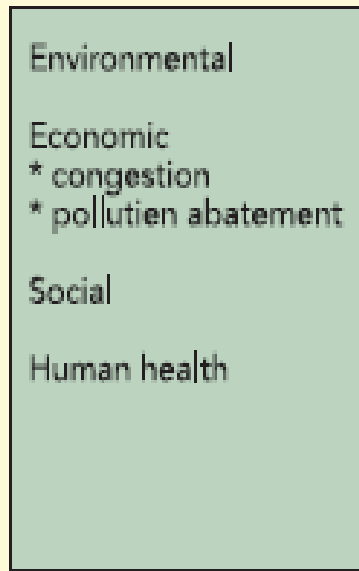
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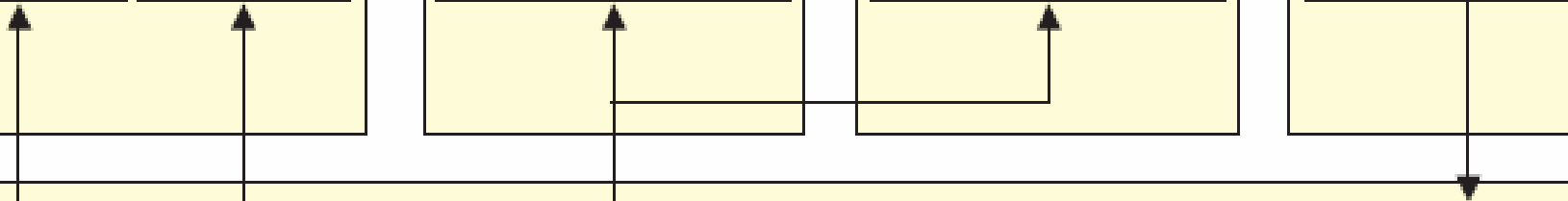
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A Possible Approach

- Focus on the policy issues from an integrated perspective of water, air, health and ecosystem impacts from the past urban growth and land use practices and for possible future scenarios.
- Use a Framework to provide the integrated perspective in terms of
 - Driving Forces
 - Pressures
 - State
 - Impact
 - Response

A Possible Approach

- Build on the work of the Canada Centre for Remote Sensing (CCRS) which used urban landscape and other data sources to analyze transportation, energy, environmental issues and sustainability
- Provide selected examples of the potential benefits of Best Management Practices using the CCRS work as the base case.