



SUSTAINABILITY IN E.U. TRANSPORT AND ENERGY POLICIES

**Sandra Stevens
European Commission
DG Energy and Transport**

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DG Energy and Transport



Unit ' Sustainable Development '

- ➔ Horizontal
- ➔ Information /Coordination
- ➔ Link DG Environment



Sustainable development in E.U. policies

TREATY :

Art. 2 : Sustainable development

Art. 6 : Integration and environment

SUSTAINABLE DEVELOPMENT STRATEGY

Sectoral priorities (Gothenburg 2001)

Equal attention to economic, social and environmental aspects (Barcelona 2002)



Integrating transport into sustainable development

Why?

- **Air quality**
- **Climate change**

Transport produces 28% of all CO₂ emissions.
Rise of 50% projected between 1990 and 2010
84% of transport emissions generated by road transport.

- **Noise pollution**

How?

Break the link economic growth / transport growth
Sustainable development strategy





White Paper (2001)



European Transport Policy for 2010

Time to Decide





European Transport Policy for 2010

- **Shifting the balance between modes (from road to rail and maritime, better links between modes)**
- **Removal of bottlenecks (implementing TEN's, charging policy)**
- **Focussing on user-needs (road safety, quality of services, clean and efficient urban transport)**



Green Paper on the Security of Energy Supply (november 2000)

- **EU 's external energy dependence will reach 70 % by 2030**
- **98 % of transport market dependent on oil**
- **CO₂ emissions reduction targets BUT emissions from transport still growing**



The Kyoto Protocol

- **Ratification by EU in 2002**
- **EU - target : - 8% CO₂ emissions by 2008 - 2012 compared to 1990 levels**



European Climate Change Programme (ECCP)

- **Multi-stakeholder Process**
- **Identify measures to reach -8% target cost-effectively**
- **Provides the basis for the Commission to develop legislative and other proposals**



Reduction potential of GHG for sectors in EU until 2010

Marginal cost €20/tCO ₂ eq	Emissions 1990 or 95 Mt CO ₂ equivalent	Baseline emissions for 2010 with existing measures	Cost-effective potential beyond baseline projection for 2010
Energy sector	1422	-6%	-13%
Industry	757	-9%	-12%
Transport	753	31%	-4%
Households	447	0%	-6%
Services	176	14%	-15%
Agriculture	417	-5%	-4%
Waste	166	-18%	-13%
Total	4138	1%	-9%



ECCP - Most promising measures

- ➔ EU wide emissions trading
- ➔ renewable energy sources
- ➔ promotion of biofuels
- ➔ energy-efficiency standards
- ➔ energy demand-side management
- ➔ combined heat and power generation
- ➔ measures on fluorinated gases
- ➔ modal shift in transport / infrastructure use & charging



Alternative Fuels



- **Communication on alternative fuels**
Aim: 20% market share in 2020
 - Biofuels
 - Natural gas
 - Hydrogen
- **Directive on the promotion of biofuels**
requires increasing proportion of biofuel for all diesel and gasoline sold in the Member States.
- **Directive on differentiated tax rates in favour of biofuels**
(modification of Directive 92/81 on excise duties)



Biofuels

- **Expensive**
- **Can be used in existing vehicles and distribution system. No investment needed**
- **Around 60 % CO₂ reduction advantage**
- **Potentially 100 % indigenous**



Natural Gas

- **Cost-effective and commercial potential**
- **Can be used in existing cars with modifications**
- **Investment needed in refuelling facilities**
- **Potentially 20-25 % less CO₂ emissions than gasoline and less noise**
- **Imported but more evenly distributed**



Hydrogen

- **Expensive**
- **New cars needed. Investment needed in production, storage and distribution**
- **Emissions depend on how electricity is produced. No emissions from the car**
- **Supply depends on type of energy used to produce electricity**



Other Initiatives

- **Civitas / CUTE**
- **Contact Group on alternative fuels**
- **High level group on hydrogen**



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- **Targets renewable energy sources**
 - **Indicative targets biofuels**
 - **Emissions trading scheme**
 - **Energy efficiency**
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- ➔ **Climate Change and Sustainability remain an important challenge for the future**