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## Local solutions for sustainable development in the EU-25, and beyond ?

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## Local solutions for sustainable development in the EU-25, and beyond?


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### CONTENT

- ◆ Sustainable development in EU policy
- ◆ What will enlargement induce
- ◆ EU is involved in several local actions

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## The policy framework

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**Complex issues**

**Synergies between  
energy/transport/environment policies**

**Therefore : good example of a sustainable  
development policy area**

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## Sustainable Development in EU Policies

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- ♦ **EC Treaty :** Art. 2: Sustainable development  
Art. 6: Integration of environment
- ♦ **Sustainable Development Strategy :**  
Sectoral priorities (Gothenburg 2001)
- ♦ **Transport :** White Paper on a common transport policy (2001)
- ♦ **Energy :** Green paper on Security of Supply
- ♦ **Kyoto Protocol :**  
reduce CO2 emissions by 8% in 2008-2012  
compared to 1990 level (for EU-15)

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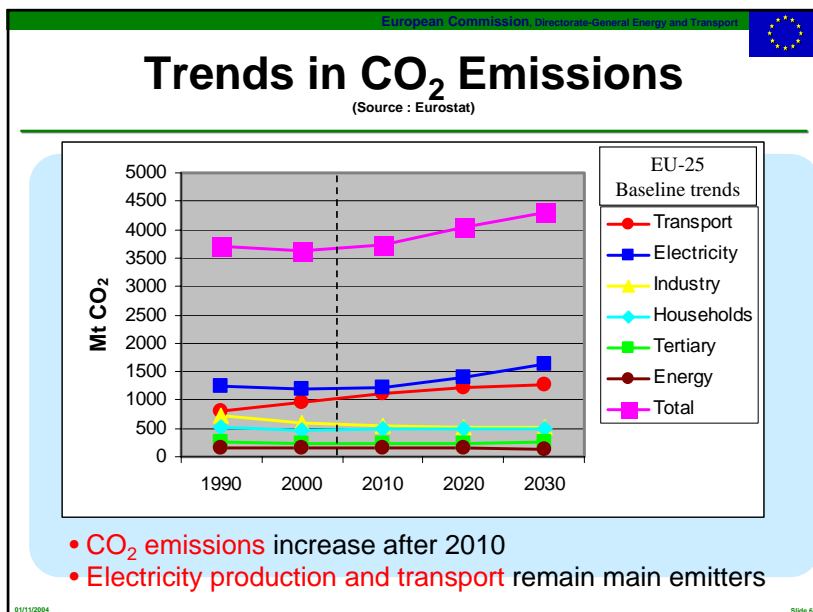
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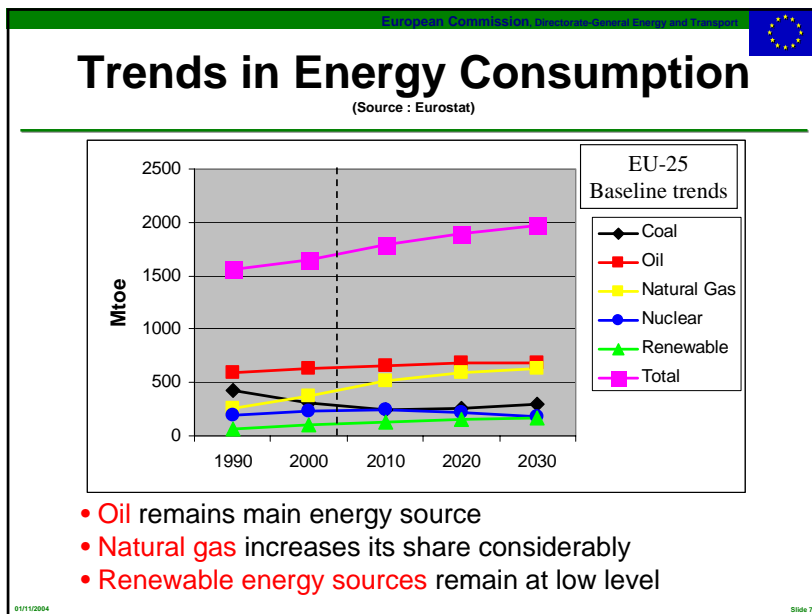
## Sustainable Development Strategy

**priorities :**

- ♦ Energy : limit climate change and increase use of clean energy
- ♦ Improve transport system
- ♦ Health and social policies
- ♦ Manage natural resources more responsibly

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## Use of clean energy

**A rational use of energy :**

- to reduce energy demand
- to substitute oil

**The development of alternative fuels :**

- Biofuels
- Natural gas
- Hydrogen

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## Alternative fuels : Biofuels, Natural Gas and Hydrogen

- ◆ **Security of energy supply**  
Diversification of the supply base : less fossil fuels consumed
- ◆ **Reduction of greenhouse gas emissions**
- ◆ **Economic aspects**  
Efforts are needed to make these markets more competitive

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## Alternative Fuels Targets on Market Share


3 options with a potential of more than 5% fuel consumption

Development scenario to attain **20 % market share by 2020**:

	Biofuel	Natural gas	Hydrogen	Total
2005	2			2
2010	5.75	2		8
2015	(7)	5	2	14
2020	(8)	10	5	(23)

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## A lot to do to improve transport system

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**To limit the growth of the demand**


- Encourage local initiatives to tackle the problems faced by urban areas
- Promote less car dependent lifestyles
- Rural development

**To adapt the transport offer to the sustainable development objectives**

- Priority to railways, inland waterways, short sea shipping, intermodal operations, public transport (modal shift)
- Increase quality, safety and efficiency of transport

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## Main Policies and Measures in the Transport Sector (2001-2004)

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- ◆ White Paper on a common transport policy
- ◆ Railways revitalisation
- ◆ Trans-European Networks in transport
- ◆ Satellite navigation system Galileo
- ◆ Single Sky programme
- ◆ Infrastructure charging
- ◆ Maritime safety improvement
- ◆ Alternative fuels promotion
- ◆ Road safety improvement

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## Enlargement : new challenges


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**EU-25 : a wide variety in situations... :**

**Kyoto commitments**  
**Transport positive BUT changing !**

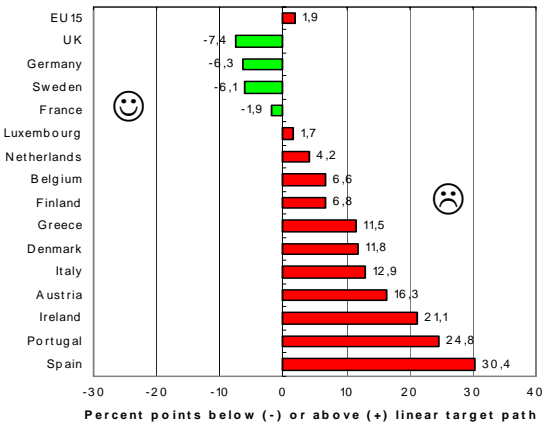
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## Actual progress assessment towards Kyoto target, EU-15

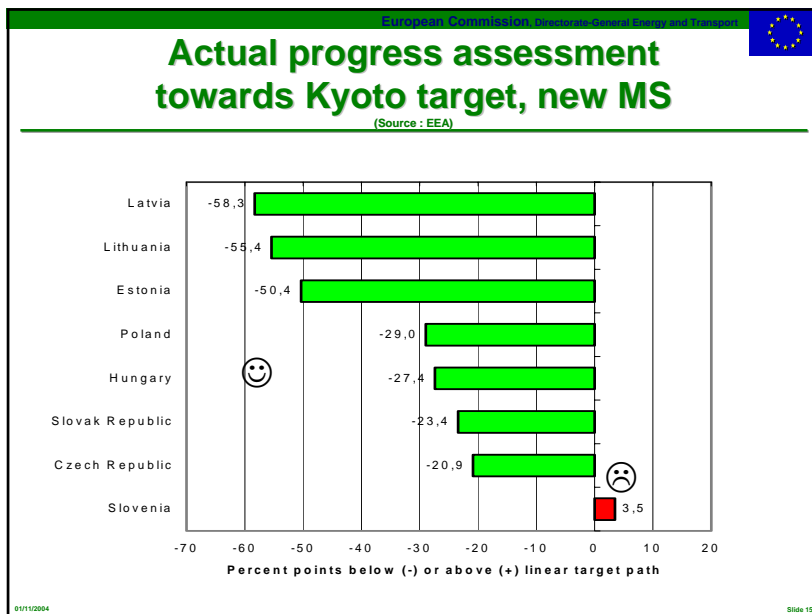
(Source : EEA)



Country	Percent points below (-) or above (+) linear target path
EU 15	1,9
UK	-7,4
Germany	-6,3
Sweden	-5,1
France	-1,9
Luxembourg	1,7
Netherlands	4,2
Belgium	6,6
Finland	6,8
Greece	11,5
Denmark	11,8
Italy	12,9
Austria	16,3
Ireland	21,1
Portugal	24,8
Spain	30,4

-30   -20   -10   0   10   20   30   40  
 Percent points below (-) or above (+) linear target path

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## Transport challenges in new Member States

**Decrease in use of public transport**  
E.g. Prague : - 30 % between 1991 and 1999

**Importance of preserving and improving existing infrastructure for rail and public transport**

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## Looking at the future of EU-25

Transport demand will increase... and so will energy consumption and emissions

A wide spread transport network is needed to make member states close to each other... and the cleanest modes have to be privileged

Promote renewable energies and alternative fuels

Each experience must be useful and profitable for everyone

Keep safety in mind




## What is EC doing ?

**The EU is involved in several actions, also local**

**But also : subsidiarity !**

**Local and regional authorities have  
to take the lead !**

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## EC actions

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Networks (e.g. Managenergy)  
Exchange of good practices  
Financing support :

- supported by the 5th & 6th RTD **framework programmes** (demonstration)
- **Structural funds**

Demonstration projects

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## Role of local agencies

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**Laboratories of tomorrow's Community policies**


**Linking Community policies to the citizens**

**Think globally, act locally**

**2003-2006 : priority to local agency development in new Member States**

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## Local concrete actions supported by EC

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**CIVITAS**


**CUTE**

**Alternative fuels programs in 6th FP RTD**

**Energy efficiency programs (Intelligent Energy Europe, including STEER)**

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## The CIVITAS Initiative: Radical Strategies for Clean Urban Transport

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CIVITAS is looking for radical change:  
Integrated demonstrations of technology  
and policy measures in the field of energy  
& transport

CIVITAS is about cities

- Cities have to be in the core of the consortia + relevant partnership
- High political commitment
- A reduced number of laboratories

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## The CIVITAS Community and its actors

Adding efforts and financial resources  
Building up on plans that are in the pipeline

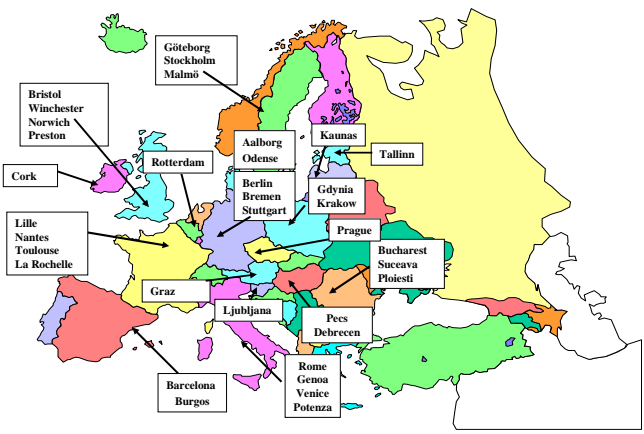
European Cities    Member States    European Commission    Local Stakeholders

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## CIVITAS cities



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## CIVITAS measures (1)

- Energy-efficient cost effective clean vehicle fleets for public and/or private transport using alternative fuels (bio-fuels, natural gas, hybrid vehicles) and innovative fuelling infrastructure (**mandatory**)
- Schemes for access control, limiting access to clean vehicles only, walking & cycling, parking management
- Integrated pricing strategies, including congestion charging and area-specific pricing schemes
- Stimulating collective passenger transport and quality, including safety, security and accessibility aspects

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## CIVITAS measures (2)

- Encouraging new forms of vehicle use/ownership, less car-dependant lifestyles
- New concepts for the distribution of goods, including freight logistics services and clean vehicle fleets
- Innovative 'soft' measures for managing mobility demand, including walking and cycling, road safety aspects
- Integration of transport management systems, information systems and passenger services

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## Two years of CIVITAS: what have we learnt?

- Radical actions need strong political support AND politicians need users acceptance
- Innovative radical measures are sometimes very difficult: mental, legal, organisational barriers
- Successful development of new public-private partnerships at local level
- Infrastructure doesn't solve everything! Policy measures are also necessary
- CIVITAS Forum: Learning within and through international city networks; double benefit: internal (experiences, arguments in political debate), external: makes cities visible

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## CIVITAS II: The challenges


- From 19 to 36 cities
- Increased emphasis on energy efficient and clean vehicles and alternative fuels (biofuels, natural gas). Contribution to reduce oil dependency & alternative motor fuels strategy
- Targeting medium sized cities (less than 500.000 inhabitants)
- The enlargement dimension: 10 new Member States have joined the European Union

Cities facing rapid increases in car ownership and decreases in public transport use: *Testing transitions strategies integrating transport policy and fuel/vehicle-technology measures aiming to maintain modal split*

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## Hydrogen Demonstration Project CUTE - Clean Urban Transport for Europe


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- A fleet of 27 hydrogen powered buses
- Demonstration in 9 European cities (Porto, Madrid, Barcelona, London, Luxembourg, Hamburg, Stuttgart, Amsterdam and Stockholm)
- Production, distribution and refueling
- Exploring the potential of renewables as primary energy source
- Co-operation with Iceland (ECTOS) and Australia (STEP)

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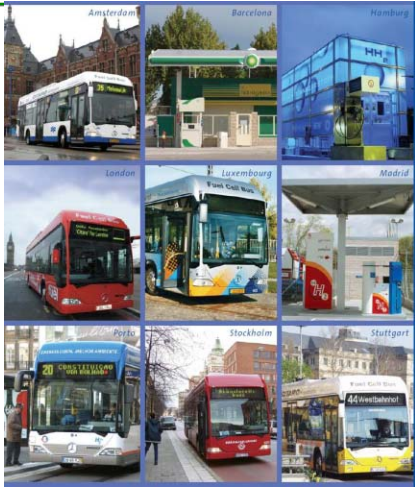
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## What do we expect? (1)

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- availability, efficiency, cost, environmental benefits, safety aspects of the **individual production ways**
- **comparative assessment of different ways** of hydrogen production and supply
- design, permits, construction and operation of hydrogen **fuelling stations**
- maturity of **infrastructure** for wider deployment, component by component
- **education** of bus operators to handle new fuels, including its production



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## What do we expect? (2)



- **feasibility of running a bus fleet** powered with fuel cells under different climatic, traffic and topographic conditions
- comparative **LCA** of hydrogen fuel cell buses with conventional diesel and CNG buses
- **maintenance** of hydrogen fuel cell buses
- operators, bus drivers and passengers **satisfaction**
- **public awareness, understanding and eventual acceptance** of hydrogen and fuel cells

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## Alternative Motor Fuels Demonstration Work Programme 2004 6th FP RTD

**Aim: Establish 2 EUROPEAN PARTNERSHIPS**  
(Call closes December 8th 2004)


**Biofuel-Cities**  
Energy efficient vehicle fleets using biofuels  
Production, storage and distribution of biofuels  
Assessment and monitoring  
Communication and dissemination

**Hydrogen for Transport**  
Innovative captive hydrogen fleets  
Production, storage, distribution and fuelling of hydrogen  
Link of transport and stationary sectors, biofuels and hydrogen pathways  
Assessment and monitoring  
Communication and dissemination

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## STEER

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**Part of Intelligent Energy Europe**


**Focus on energy aspects of transport,  
in particular energy use and efficiency**

**Pilot projects, dissemination, standards  
development**

**Empowerment and knowledge development of  
local (energy) agencies**

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## Other initiatives : legislation

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**Promotion of clean and efficient vehicles**

**Infrastructure charging/road pricing**

**Thematic strategy for the urban environment**

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## Clean vehicles


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**Upcoming proposal for a Directive on clean and energy efficient vehicles :**

**role of public authorities and public procurement to promote clean and efficient vehicles**

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## Infrastructure charging

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**2 proposals in 2003 :**

**Draft Directive on charging heavy goods vehicles**  
**Draft Directive on electronic charging systems**

**Possible local use : see London example**

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## Thematic strategy on urban environment


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**Due Summer 2005**  
**Communication Feb. 2004**

**4 priorities :**

- Management**
- Transport**
- Construction**
- Urban design**

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## To conclude

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Energy, transport and environment are closely linked : transport represents 32% of energy consumption and 28 % of CO2 emissions

A wide variety of actions is undertaken, including at the local level.

The new Member States can quickly join the different programs, benefit of the experiences and help to develop each initiative by bringing in their own specific experiences.

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