

Directorate-General
for Energy
and Transport

Climate Action: Biofuels in the renewable energy directive

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INFORSE  **EREF** http://www.inforse.org/europe/seminar08_BXL.htm



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Structure

- EU's transport policy
- EU's climate policy
- Energy efficiency and alternative fuels
- Why a separate target for biofuels?
- Expected costs and benefits of the 10% biofuels target
- Sustainability criteria for biofuels
- What's next?

● EU's transport policy

- Transport policy has been at the heart of EU policies since the founding of the then European Economic Community in 1957.
- Over the last 50 years it has become a key part of the European Union's policies, facilitating economic growth, encouraging mobility and improving quality of life for European citizens.
- Today EU transport policy faces new challenges posed by transport's very success: climate change, local pollution, noise, congestion and accidents.

● EU's transport policy

- The current transport policy – first set out in 2001 (*White Paper “European transport policy for 2010: time to decide”*) and revised in 2006 (*“Mid-term review of the EC’s White Paper”*) – aims for sustainable mobility; this means allowing greater mobility while reducing its negative impacts.
- The policy was developed – and will continue to be – in the framework of the EU's Sustainable Development and Lisbon Strategies. Environment, climate change and energy policies all play an important role in reducing these impacts, supported by EU policies on the Single Market, Research and Cohesion.

● EU's climate policy

- In 2002, the EU ratified the Kyoto Protocol to the United Nations framework Convention on climate change. This committed the EU as a whole to an 8% reduction in GHG-emissions by 2008-12 compared to 1990.
- More recently, in March 2007, the EU committed itself to achieving a 20% reduction in GHG-emissions by 2020 and a 30% reduction if this is part of an international agreement.

● EU's climate policy

- To meet the 20% target, the Commission proposed, in January 2008, concrete targets for changes in GHG-emissions between 2013 and 2020 for each Member State.
- These targets cover the sectors – such as transport – that are not in the EU's ETS. It will be for the Member States to decide how the changes are to be divided up between sectors; however, it is a general principle that all sectors of the economy should contribute to the overall reduction targets.

● What can be done to achieve the target?

Increasing energy efficiency

- » Increasing energy efficiency in transport will automatically lead to fewer emissions per kilometre and will hence contribute to reduced GHG and pollutant emissions, as well as to reducing dependency on oil imports.
- » In 2007 the European Council agreed to a target of increasing energy efficiency by 20% by 2020 compared to the business-as-usual growth that would otherwise take place.
- » The Energy Efficiency Action Plan highlights the importance of improving energy efficiency in the transport sector because it is the sector that consumes the bulk of oil products and has the fastest growing emission profile.
- » The plan contains many transport mode-specific actions.

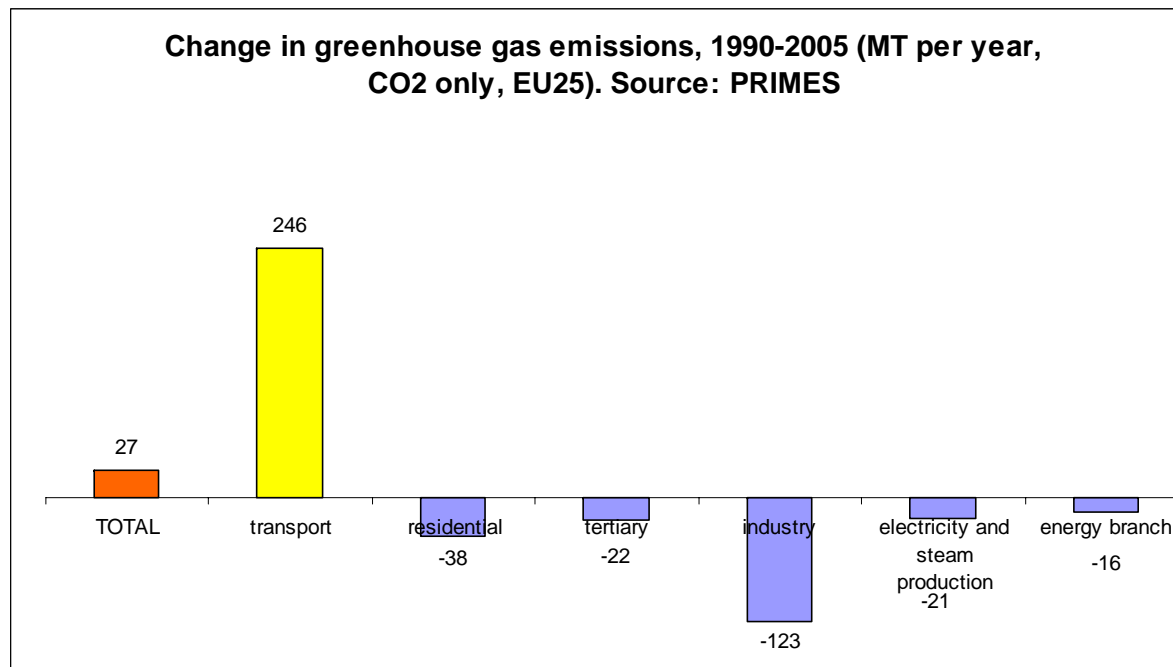
● What can be done to achieve the target?

Alternative Fuels

- » Cleaner fuels and fuels from renewable energy sources can reduce the environmental impact of transport.
- » The European Council committed the EU to increase the use of renewable energy by 20% by 2020.
- » The Commission proposed that 10% of petrol and diesel used for transport should come from alternative fuels by 2020.

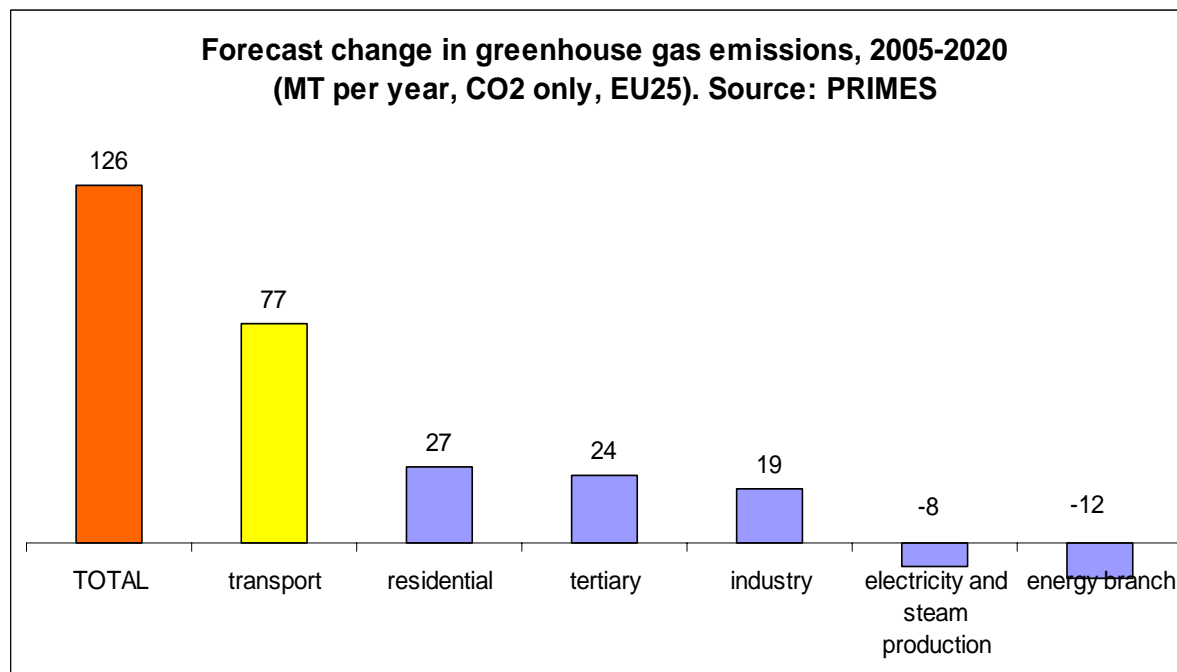
Why a separate target for biofuels

1. Biofuels are not the cheapest way to reduce GHG-emissions but trends have been worse in transport



Why a separate target for biofuels

- This trend is not expected to improve much in the next 15 years: biofuels are one of the few large-scale solutions



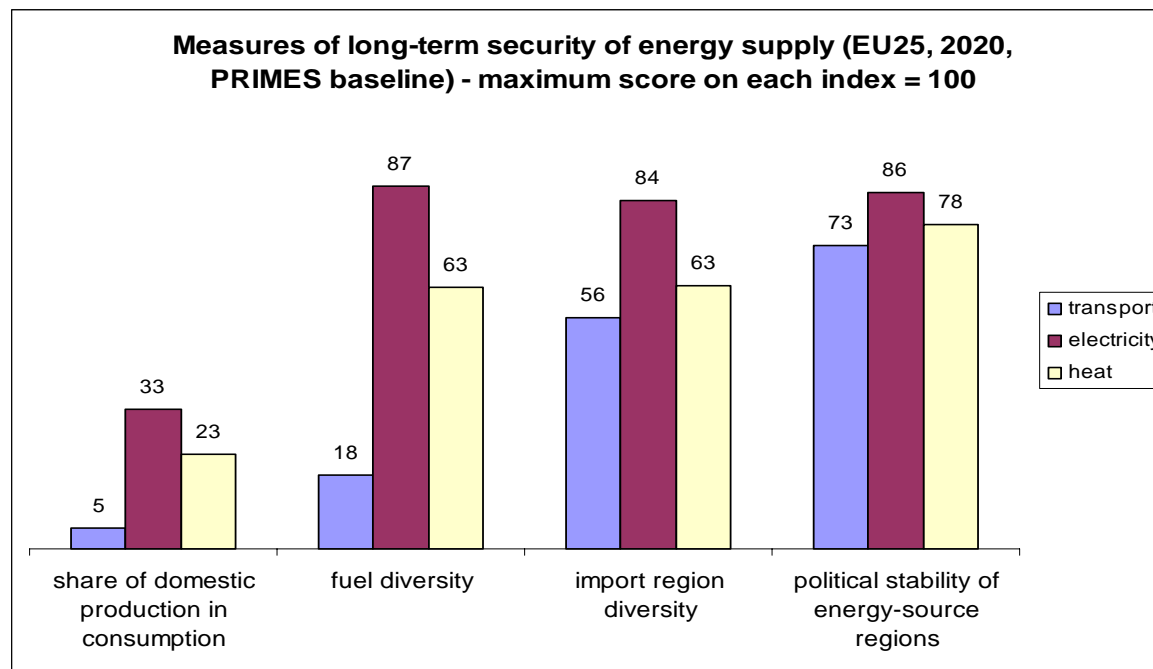
● Why a separate target for biofuels

First reason: reduce GHG-emissions in transport

- » Transport is responsible for more than 1/5 of GHG-emissions that contribute to climate change in the EU. And emissions are climbing faster in this sector than in any other.
- » Using more biofuels can help to bring this damaging growth under control – together with other policies, for example in the field of car emissions or organisation of transport logistics.

Why a separate target for biofuels

2. Insecurity of energy supply, however measured, is worst in transport: biofuels permit supply diversification and domestic production



● Why a separate target for biofuels

Second reason: reduce transport's dependence on imported oil

- » The EU transport sector's dependence on imported oil is 98 per cent!
- » High oil dependence means considerable economic and political risks, and a high bill for the economy especially with an oil price of 100 \$/barrel.
- » Greater energy security, principal goal of EU energy policy, and biofuels are part of the answer.

● Why a separate target for biofuels

- biofuels cost more than other forms of renewable energy and without a separate biofuel target, their development will fall behind;
 - this would mean in the medium-term low reductions in oil use and less GHG benefits in transport;
 - to send signals for the future: car makers need a signal to build for high biofuel blends; industry needs a signal to invest in 2nd generation; the oil market needs a signal that the EU is serious about alternatives
- » Target endorsed last year by Council and European Parliament on the condition of sustainability

● Expected costs and benefits of the 10% biofuels target (figures for 2020)

- » Greenhouse gas savings: 68 million tonnes CO₂eq
- » Reduced imports of oil from Middle East and CIS countries: 33 million tons
- » Employment in EU: up to 120 000 jobs
- » GDP: up to + 0.17%
- » Cost: €4.3 - €11.6 bn

● Sustainability criteria for biofuels

- » Sustainability is a sine non quo condition for biofuels promotion in the EU!
- Sustainability criteria must be met in order to obtain incentives
- Scheme based on international science and norms (UN IPCC, FAO etc.)
- Non-discriminatory – WTO compatible

● Biofuels sustainability – Scope

- The sustainability criteria apply to:
 - » Biofuels (liquid and gaseous fuels used in transport)
 - » Other bioliquids (liquid fuels used in heating and electricity)
- By 2010, the Commission will report on criteria for other energy uses of biomass



Sustainability criteria

- Greenhouse gas impact
- Land use/ carbon stock
- Biodiversity
- Environmental requirements for agriculture





Sustainability criteria – Greenhouse gas impact

- Greenhouse gas impact
 - » Minimum requirement for GHG saving, relative to fossil fuel, of at least 35%
 - » Waiver until April 2013 for current plants (*Article 15.2*)
 - » Rules for calculation of GHG saving
- Biofuel producers can choose to ...
 - » Use default values given in the directive (*Annex VII.A*); or
 - » Show actual values that are better (*Annex VII.C*)



Sustainability criteria – Land use criteria/ carbon stock

- No conversion of wetland or “continuously forested area” (*Art. 15.4*)
- Other land use change is counted in greenhouse gas calculation (*Annex VII.C.7*)
- Specific incentive for crops from “idle lands” (*Annex VII.C.8*)

Sustainability criteria – Biodiversity

- No raw material from forest undisturbed by significant human activity or from highly biodiverse grassland (*Art. 15.3*)
- No raw material from nature protection areas unless compatible with nature protection (*Art. 15.3*)

● Sustainability criteria – Requirements for agriculture

- Environmental requirements for agriculture (EU only)
 - » All biofuel production must comply with the “cross compliance” rules already applied under the CAP (*Art. 15.5*)



● Sustainability criteria

- One European sustainability scheme (*Article 15.6*)
 - » Member States must apply the criteria laid down in the Directive



● Penalties and verification

- Penalties for not fulfilling the criteria (*Article 15.1*)
 - » Biofuels do not count towards EU targets
 - » Biofuels do not count towards national biofuel obligations
 - » Biofuels may not benefit from tax exemptions and similar financial support





Review

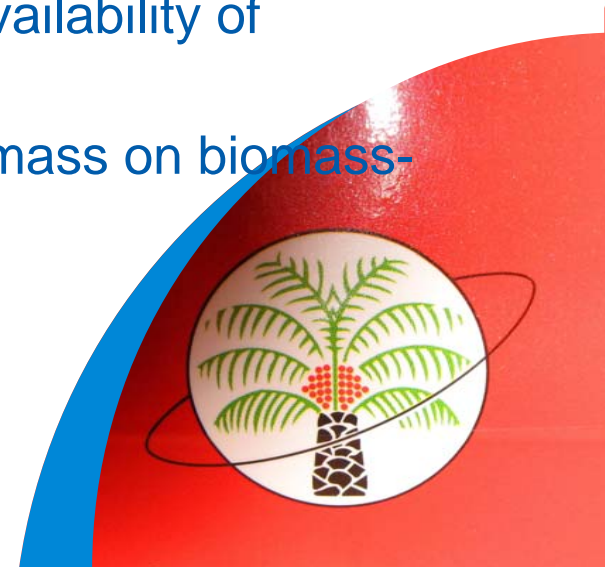
- Member States report every two years on (*Article 19.1*):
 - » Developments in the availability and use of biomass resources for energy purposes
 - » Prices and land use effects of biomass use
 - » Impacts of biofuel production on biodiversity, water resources, water quality and soil quality





Review

- Commission reports every two years on (*Article 20.5*):
 - » Environmental costs and benefits of different biofuels
 - » Impact of increased demand for biofuels on sustainability
 - » Impact of EU biofuel policy on the availability of foodstuffs in developing countries
 - » Impact of increased demand for biomass on biomass-using sectors



What's next?

- First debate in the Energy Council on 28 February and in the European Council on 13 -14 March on the entire energy and climate package: positive reactions
- An ambitious further timetable:
 - » Agreement under French Presidency end of 2008 and adoption 2009
 - » Entry into force: March 2010

For more information:

http://ec.europa.eu/energy/climate_actions/index_en.htm

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● *Thank you for your attention!*