

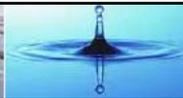


Biofuels – A European Perspective Current and Future EU Policy on Biofuels

Carbon Labelling Workshop 'Biodiesel and other Biofuels for Smaller EU Member States'

11 December 2007, Malta

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Potential Benefits of Biofuels

- Reduction of **GHG Emissions**
- Reduction of air pollution (CO, SO₂, PM)
- Improvement of **energy security**
- Reduction of oil imports, **diversification** of energy sources and technologies
- Development of new agricultural markets, income generation in rural areas



Potential Drawbacks of Biofuels

- **Higher fuel production costs**
- Increase of some pollutant emissions (NO_x, aldehyde) – compliance with emission norm EURO 4
- Vehicle/fuel system modifications – **technical limits** to blending (B/E5), limits on the vapour content of petrol
- Higher crop and crop product prices (**food-fuel competition**)
- Negative environmental impacts (e.g fertiliser run-off)



Cleaner Transport – The Wider Context

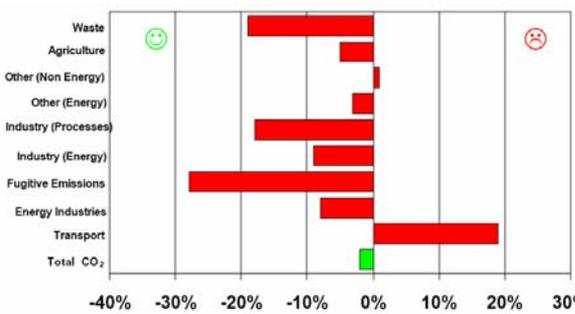
- 1997 – **EU White Paper, Energy for the future: Renewable sources of energy**
 - Increasing the contribution of RE sources from 6% to 12% of EU gross energy consumption by 2010
- 2000 – **EU Green Paper on the security of energy supply**
 - Europe imports 50% of its total energy needs
 - Import dependence of the transport sector: 80%
 - Target of 20% substitution of conventional fuels by biofuels, natural gas and hydrogen by 2020


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- 1997 – **Kyoto Protocol** on the reduction of GHG emissions (entered into force on 16 February 2005)
 - EU Commitment: 8% reduction of annual GHG emissions by 2010 (compared with the 1990 level)
 - Transport sector: 28% of Europe's CO₂ emissions

EU GHG Emissions (1990-1999)



Sector	Change (%)
Waste	-18%
Agriculture	-12%
Other (Non Energy)	-5%
Other (Energy)	-2%
Industry (Processes)	-15%
Industry (Energy)	-10%
Fugitive Emissions	-25%
Energy Industries	-10%
Transport	+20%
Total CO ₂	-5%

Source: EEA


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Energy Policy for Europe – Jan/March 2007

- 3 Energy Challenges: **Climate Change** -- **Security of Supply** -- **Competitive EU Economy**
- Targets and Objectives
 - Reducing **GHG emissions** by **20% by 2020** compared to 1990
 - Improving **Energy Efficiency** by **20% by 2020**
 - Raising the share of **RE** to **20% by 2020**
 - Increasing the level of **Biofuels** in transport to **10% by 2020**
 - **National Action Plans** (Energy mix decided by MS)



EU Biofuels Directive

- Directive on the promotion of the use of biofuels or other renewable fuels for transport (2003/30/EG) – 8 May 2003
 - Directive restructuring the Community framework for the taxation of energy products and electricity (2003/96/EG) – 27 October 2003
- ➔ Legislative framework for Member States to promote biofuels (e.g. tax exemption, biofuel obligations)
- ➔ Indicative Targets
- **2% by 2005**
 - **5,75% by 2010**



EU Biofuels Directive – Timeframe

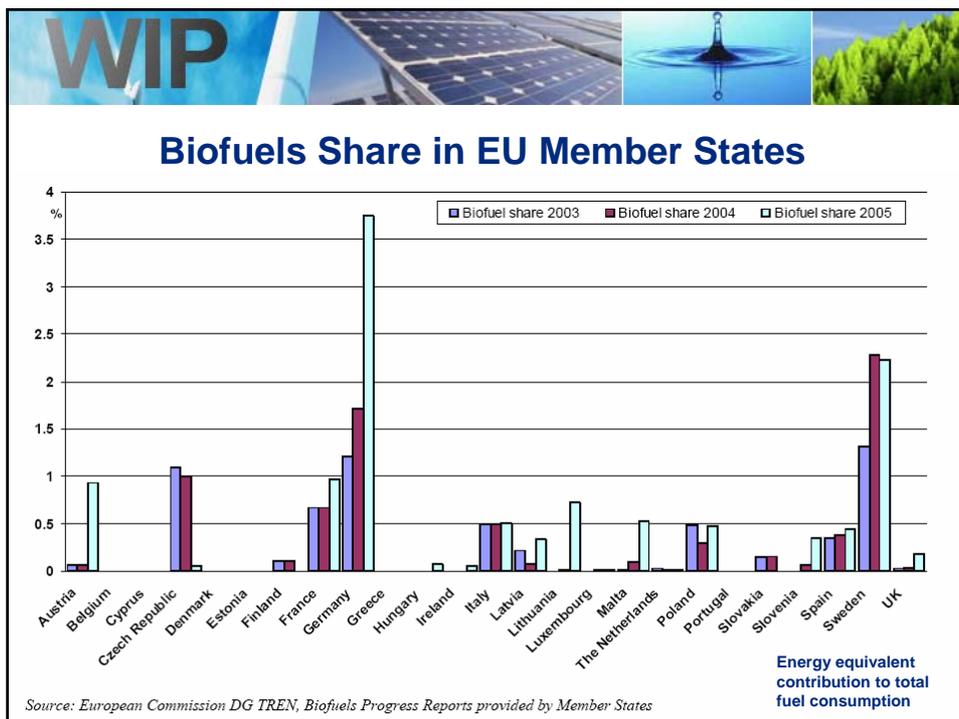


Flexibility Member States set their own indicative targets and develop national policies and measures (techn., financial, social choices)



Biofuels Directive - National Implementation

- **Member States with Biofuel Tax Exemptions:**
Austria, Belgium, Czech Republic, Denmark, Estonia, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Spain, Sweden, UK
- **Member States with Biofuel Obligations:**
Austria (2005), France (2005), Slovenia (2006), Czech Republic (2007), Germany (2007), Netherlands (2007), UK (2008)



%	2006	2007	2008	2009	2010
Austria	2.50	4.30	5.75	5.75	5.75
Belgium	2.75	3.50	4.25	5.00	5.75
Cyprus					
Czech Republic	1.78	1.63	2.45	2.71	3.27
Denmark	0.10				
Estonia	2.00				5.75
Finland					
France			5.75		7.00
Germany	2.00				5.75
Greece	2.50	3.00	4.00	5.00	5.75
Hungary					5.75
Ireland	1.14	1.75	2.24		
Italy	2.00	2.00	3.00	4.00	5.00
Latvia	2.75	3.50	4.25	5.00	5.75
Lithuania					5.75
Luxembourg	2.75				5.75
Malta					
The Netherlands	2.00	2.00			5.75
Poland	1.50	2.30	²⁸	²⁹	5.75
Portugal	2.00	3.00	5.75	5.75	5.75
Slovakia	2.50	3.20	4.00	4.90	5.75
Slovenia	1.20	2.00	3.00	4.00	5.00
Spain					
Sweden					5.75
UK			2.00 ³⁰	2.80 ³¹	3.50 ³²
EU					5.45 ³³

National Indicative Targets (2006-2010)

Source: national reporting under the biofuels directive except France: response to public consultation on review of the biofuels directive.



Revision of the Biofuels Directive (Jan. 2008)

Biofuels Progress Report (Jan. 2007): Failure of directive's target is **not 'justified'** (1% in 2005)

- ➔ Signal of determination to reduce its dependence on oil and move to a low carbon economy
- ➔ Set **minimum standards** for the share of biofuels in 2020 (10%) – binding target
- ➔ Discourage poor-performing biofuels, **encourage biofuels with good environmental and supply security performance (CARBON LABELLING)**



Reduction of CO₂ Emissions from Passenger Cars

Proposal of Legislative Framework in Dec. 2007

- ➔ EC Integrated Approach to reach objective of **120 g CO₂/km by 2012**
- ➔ **Mandatory target of 130 g CO₂/km** for average new car fleet by improvements of motor technology
- ➔ Further reduction of **10 g CO₂/km** by:
 - Other technological improvements (tyre pressure)
 - Increased use of biofuels (CARBON LABELLING)**



Summary

- The new EU Energy Policy includes a target for biofuels in transport of 10% in 2020
- Based on the Biofuels Progress Report the revised Biofuels Directive (January 2008) will
 - Set a binding target of 10% by 2020
 - Encourage biofuels with good env. performance
- **Carbon Labelling Initiatives may significantly contribute to achieving EU biofuel targets**



THANK YOU for your attention!

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