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Biofuels Policy Update: The European Union

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Delegation of the European Commission to the U.S.



The European Union



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27 Member States
490 million people





Outline



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- Policy Background, 1997-2007
- 1- EU Climate Change and Renewable Energy package (2008)
- 2- The new Directive on Renewable Energy: Scope and Policy Tools
- 3- The specific mandate of 10% Renewable Energy in ground transport by 2020
- 4- Sustainability Criteria for Biofuels
- Conclusion



Background: EU policy framework for Renewable Energy



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Renewable energy promotion since 1997

- **sustainability – world leadership in halting climate change**
- **security of supply – oil supply & prices, gas worries, rising global demand, driven by TRANSPORT**
- **competitiveness – supporting an innovative industrial sector where we are world leaders and face a fast growing export market**



Background: EU policy framework for Renewable Energy



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| | Sector | | Supply | Demand | | |
|---|---|----|--------|--------|----|-----|
| | RES | EE | | BU | TR | IND |
| Political and legislative instruments: | | | | | | |
| 1997 ↓ 2006 ↓ 2007 | White Paper on RES | X | | X | | X |
| | Green Paper on Security of Energy Supply | X | X | X | X | X |
| | Directive on RES-electricity | X | | X | | X |
| | Directive on Energy Performance of Buildings | X | X | X | | |
| | Directive on Biofuels | X | | | X | |
| | Directive on a Scheme for GHG Trading | X | X | | | X |
| | Directive on the Taxation of Energy Products | X | X | X | X | X |
| | Directive on Co-generation | X | X | X | | X |
| | Green Paper on Energy Efficiency | | X | X | X | X |
| | Green Paper on Energy | X | X | X | X | X |
| | Energy Package | X | X | X | X | X |



Background: EU policy framework for Renewable Energy



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Policy papers and legislation related to biofuels

- ▶ Fuel Quality Directive - March 2003
- ▶ Biofuels Directive – May 2003
- ▶ Energy taxation Directive – October 2003
- ▶ Biomass Action Plan – December 2005
- ▶ Biofuels Strategy – February 2006



1- The Climate Change and Renewable Energy Package



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- ▶ **Conclusion of the EU Council of March 2007: Action Plan for launching a “New Energy Policy for Europe”**
- ▶ **Commission’s proposal on the Climate Action & Renewable Energy (CARE) package adopted in January 2008**
- ▶ **Agreement at the end of December 2008 between EU Council and EU Parliament**
 - ▶ **Cut GHG emissions by 20% by 2020**
 - ▶ **Improve energy efficiency by 20%**
 - ▶ **Establish a 20% share for renewable energy by 2020**



2- The new Renewable Energy Directive: 20% RE by 2020



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Objective: 20% renewable energy by 2020

Scope: It covers:

- **All Renewable Energy sources: biomass & biogas, wind, solar, geothermal, hydrothermal & ocean energy, hydropower**
- **Sectors: Transport fuel, heating & Cooling, electricity**

Entry into force of the new Directive in April 2009

To be implemented by Member States April 2010

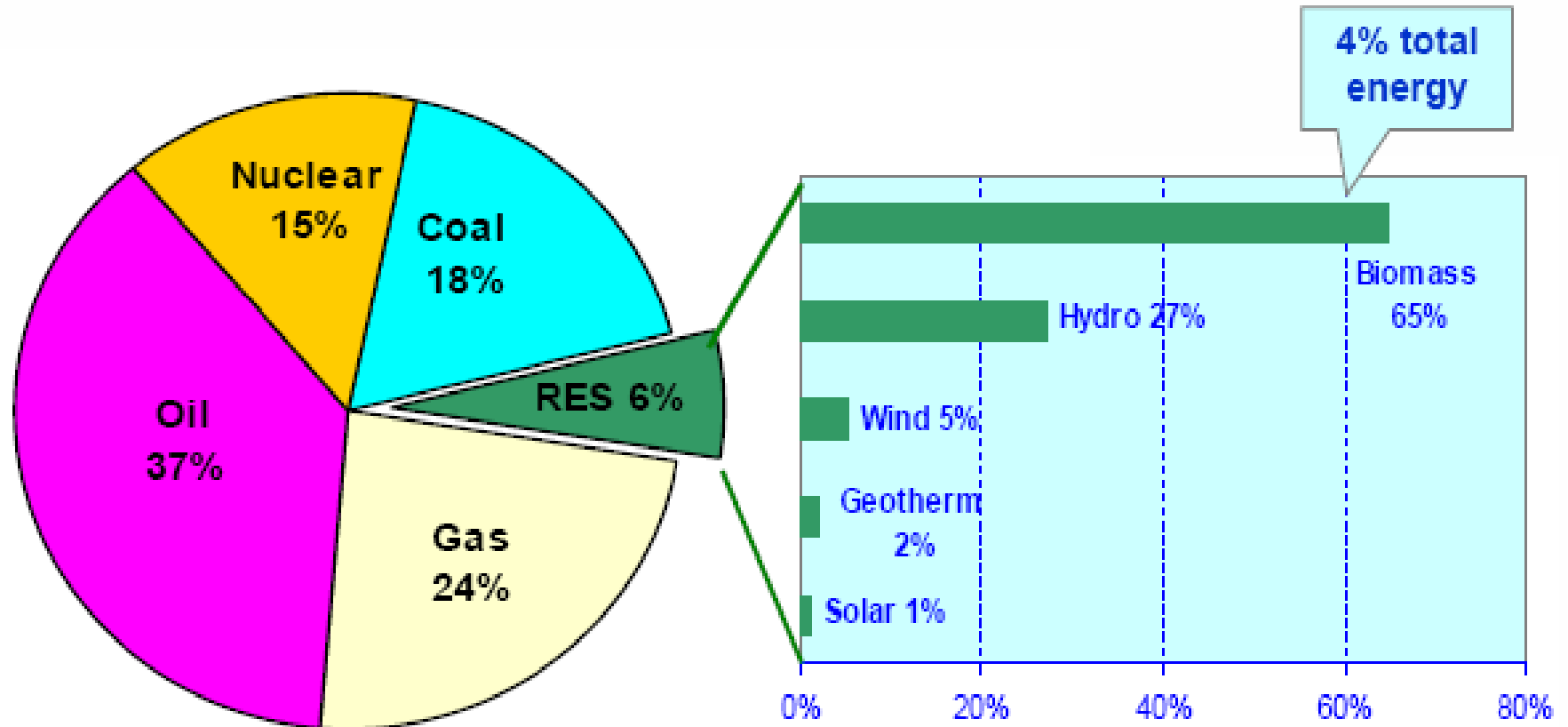


2- The new Renewable Energy Directive: 20% RE by 2020



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Breakdown of EU-25 Gross Energy Consumption (2006)



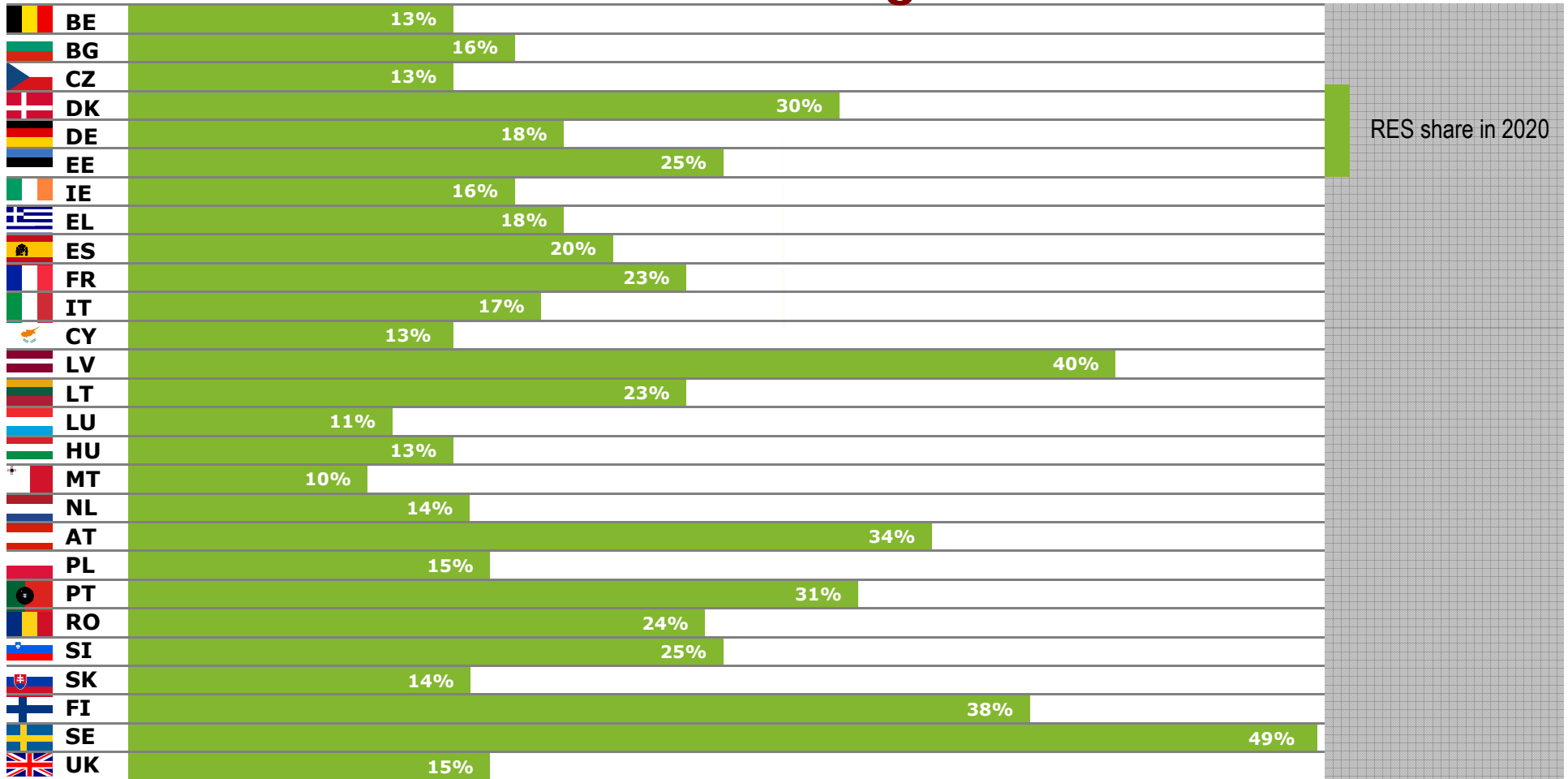


2- The new Renewable Energy Directive: 20% RE by 2020

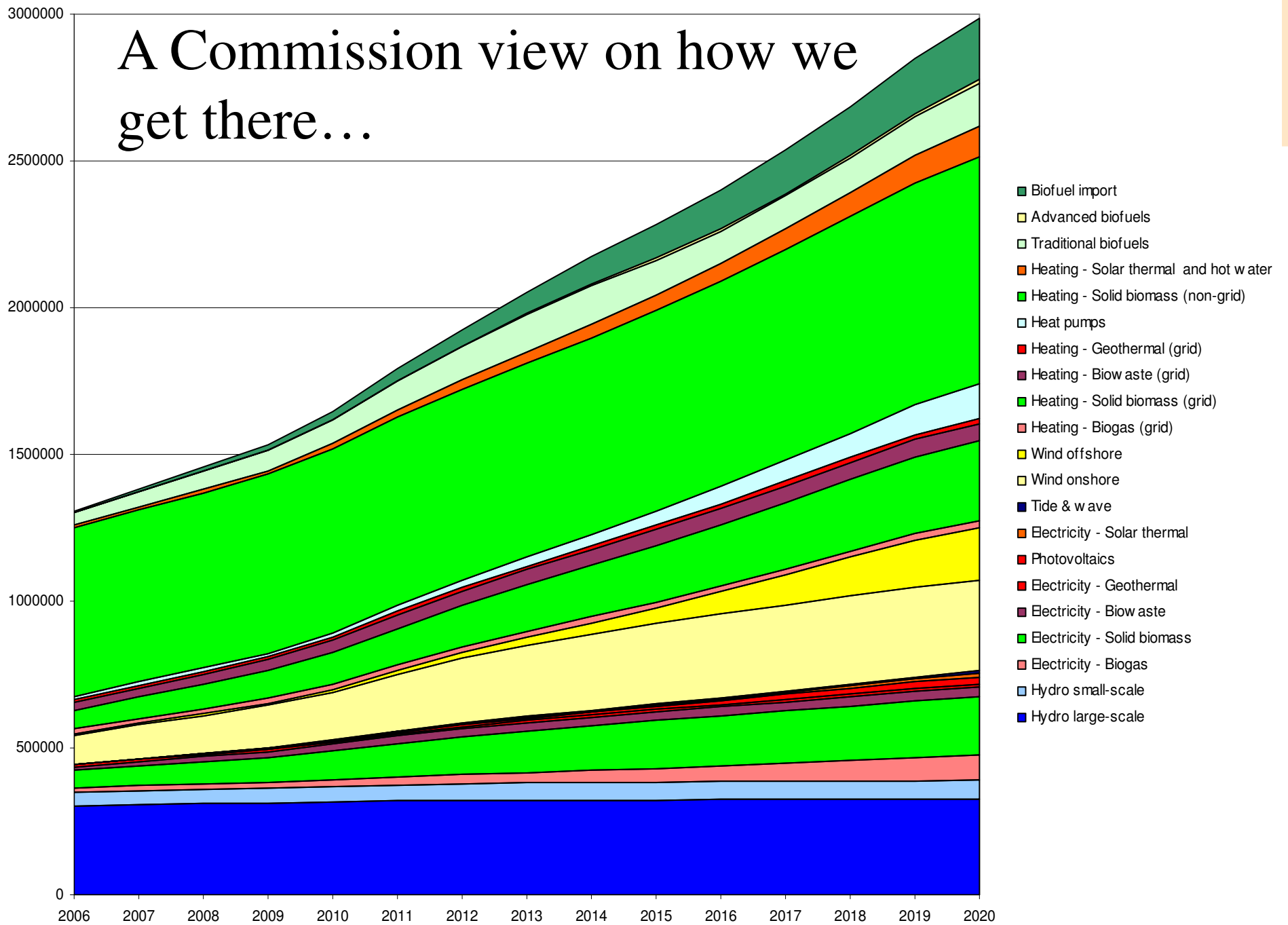


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Member States' targets



A Commission view on how we get there...





3- The 10% mandate of RE in ground transport by 2020



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- **Binding for each Member State**
- **10% of RE in final consumption of petrol, diesel & electricity to goes to ground transportation**
 - **All types of RE are eligible (technologically neutral)**
- **Incentive Mechanisms to boost innovation:**
 - **Second-Generation biofuels from wastes, residues, ligno/cellulosic count x2**
 - **Electricity in cars counts x2.5**



3- The 10% mandate of RE in ground transport by 2020



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| Policy measures | Strengths | Weaknesses |
|---|--|---|
| <p>Tax exemptions (production increases according to variations in relative prices)</p> | <ul style="list-style-type: none"> • Easy to implement; • Few market risks; • Incentive for innovation; • Suitable for the early stages of development | <ul style="list-style-type: none"> • Loss of fiscal revenues; • Risks of overcompensation (if high tax reduction); • Strongly dependent on the initial levels of the excise tax: it is effective where these levels are high |
| <p>Blending obligations (the produce increases independently from variations in relative prices)</p> | <ul style="list-style-type: none"> • It injects certainty into the agricultural sector; (unless the subsequent increase in prices significantly penalises the agricultural supply) • It does not involve additional costs for public budget; • Suitable for the more advanced stages of development | <ul style="list-style-type: none"> • Higher prices for consumers; • Less incentive to innovate; • Higher prices variability; • Difficult to implement and monitor |



3- The 10% mandate of RE in ground transport by 2020



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Signals for the future:

- Car makers need a signal to build for high biofuel blends;**
- industry needs a signal to invest in second generation;**
- the oil market needs a signal that we are serious about alternatives**



4- Sustainability criteria for Biofuels



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- **Objective: ensure that first generation biofuels will generate net benefits → the first scheme of its kind in the world**
- **Condition of eligibility to the mandate & support**
- **So far, applied to Biofuels (liquid & gaseous fuels used in transport)**
- **By end-2009: The Commission shall report & possibly propose sustainability requirements for other biomass and energy uses**



4- Sustainability criteria for Biofuels



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- **Growing GHG saving thresholds, from 35% to 50% from 2017 (60% for new plants)**
- **No conversion of wetland, continuously forested area”, peatland (high carbon-stock land)**
- **Avoid losses of highly biodiverse grassland: No use of raw material from primary forest, protected areas, highly biodiverse grassland**
- **Ensure environmental & social standards (cross-compliance, reporting obligations from operators)**



Conclusion



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- **Renewable energy: a key element of a sustainable future**
 - **Significant reduction of GHG emissions**
 - **New opportunities for Energy security, rural economies**
- **In the future: more diversified feedstocks – better economic and environmental perspectives**
- **Research and technological development – more advanced and more cost-efficient biomass production technologies**

Thank you for your attention !

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