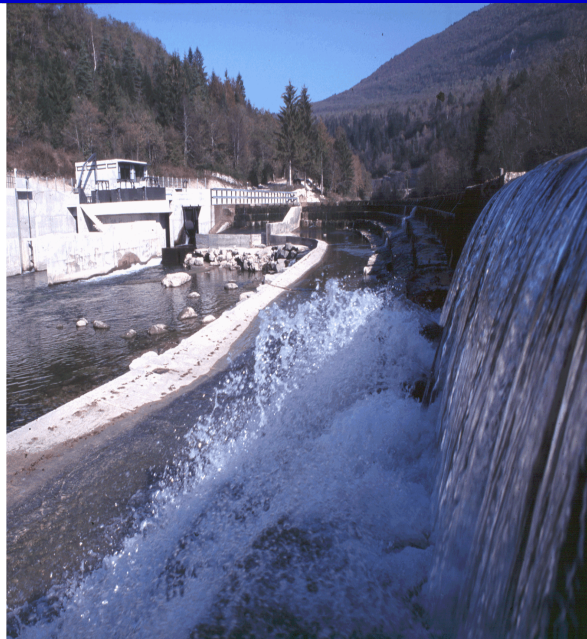




European Commission



Renewable energies: an European policy

Green-X Workshop

*Brussels,
23 September 2003*

Beatriz Yordi
DG Energy and Transport





European RES policy

- **To double** the share of renewable energy **from 6% to 12%** of gross energy consumption in Europe **by 2010**
- **To meet** the commitments made by the EU under the 1997 Kyoto Protocol on **reducing greenhouse gas emissions**
- **To contribute to security of supply**





Instruments

Adapt and strengthen the European Union's action in the legislative and financial areas

Community action on the basis of most performant individual Member States initiatives to achieve common goals while ensuring complementarity

Legislative measures



The Commission initiatives promoting:

- electricity from renewable sources
- biofuels
- energy efficiency in buildings
- co-generation

Support programmes



Existing support programmes must be strengthened in the period 2003-2006:

- 6th RTD Framework Programme
- Intelligent Energy for Europe





EU Energy Policy Papers

COM on Green Paper on Security of Energy Supply (Jun 2002)

White Paper on Common Transport Policy (Oct. 2001)

White Paper on Renewable Energy Sources (Nov. 1997)

Action plan to improve Energy Efficiency in the EU (April 2000)

- ✓ **Renewable Electricity Directive 2001/77/EC (Sept 2001)**
- ✓ **Directive on Buildings Energy Performance (Dec 2002)**
 - ✓ **Directive on Biofuels for Transport (May 2003)**
- ✓ **Draft Directive Taxation Energy Products (incl. Biofuels)**
- ✓ **Draft CHP “Co-generation” Directive (COM proposal July 2002)**





EU Targets

- **RES-e DIRECTIVE 2001** : to establish a framework to **increase the share of green electricity from 14% to 22% of gross electricity consumption by 2010**
- **White paper 1997** (Green paper 2001): increase share of RES from **6% to 12% of gross consumption by 2010**
- **Liquid biofuels** targets: 2% by 2005; 5.75% by 2010
- **Energy efficiency** target to reduce energy intensity by a further 1 percentage point per year until 2010
- Comply with EU commitments under the 1997 Kyoto Protocol on **reducing greenhouse gas emissions**
- Johannesburg “**coalition of the willing**” to work to increase the use of RES using targets and timetables





Benefits of renewable energy

Environment

Reducing emissions of CO² and other pollutants (acid rain, etc.)



Local and regional development

Economic and social cohesion



Local job creation



Security of supply

Reducing imports





Principles of the directive

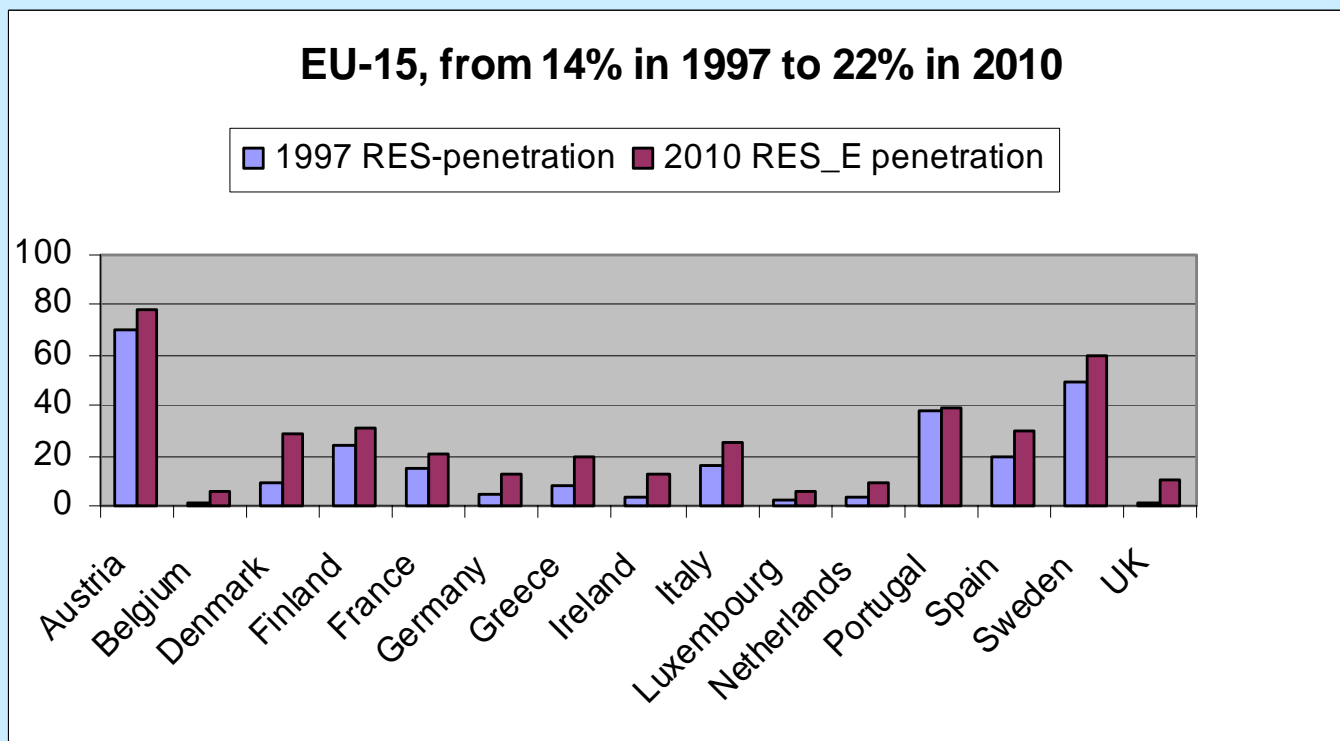
Promotion of electricity from renewable energy sources:

To establish a framework to **increase the share of green electricity from 14% to 22% of gross electricity consumption by 2010**





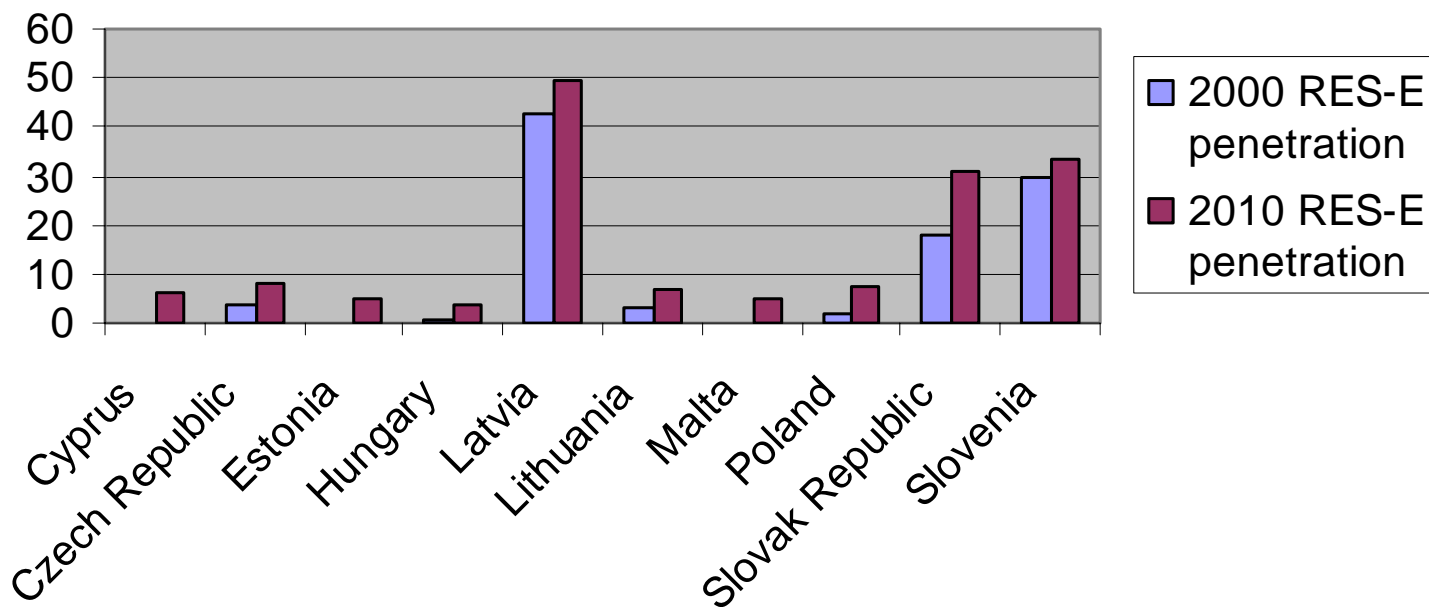
EU-15





EU-10

New Acceding countries from 5.6% in 2000 to 11% in 2010





Quantified targets

Setting of targets

Member States must set **national indicative targets** for the consumption of electricity from renewable sources up to 2010.

If these targets are met, the consumption of electricity from renewable sources will rise to 22% by 2010.

Monitoring of results

The Commission will monitor the progress made by the Member States in pursuing national targets and will, if necessary, propose mandatory targets for States failing to achieve their targets.





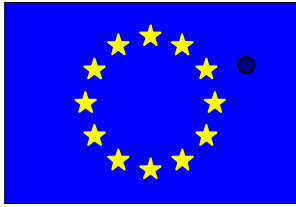
Support schemes



- The directive does **not** propose a harmonised Community support system for green electricity.
- The Commission **must assess** the support measures taken by Member States and present a report on these measures after 4 years.
- At this stage the Commission may, **if necessary**, propose a Community support framework.

This framework should take the following into account:

- the extent to which national indicative targets have been achieved
- compatibility with the principles of the internal electricity market
- technical and geographical features of renewable energy sources
- the simple and efficient promotion of renewable energy sources
- investors' confidence: a transition period of at least 7 years



Reducing administrative obstacles

Guarantee of origin

Member States must guarantee the origin of green electricity and guarantee certificates must be reciprocally recognised. The Commission will, if necessary, propose standard rules.

Production of green electricity

The Member States will review their existing legislative and regulatory frameworks concerning authorisation procedures for installations producing green electricity

Objectives:

- to reduce the obstacles to increasing production
- to rationalise and speed up administrative procedures
- to ensure objective, transparent and non-discriminatory rules
- to take account of the characteristics of renewable technologies





Facilitated grid connection

Guaranteed access to transmission and distribution

Member States will require operators to **guarantee** access to transmission and distribution for green electricity. If the electricity system permits, they will provide priority access.

Connection costs

Member States will ensure that operators:

- **Publish** objective, transparent and non-discriminatory rules on costs for connection and for strengthening of the grid
- **Provide** producers with complete and detailed estimates of costs





Conclusions

This is the first time that the European Union has adopted a legislative text aimed at promoting the production of energy from renewable sources.

The success of the European Directive is a first step on the road to achieving a sustainable energy system.



The Directive on the promotion of biofuels for transport





The fuel challenge



- **Environment and climate change**

CO₂ is the main gas responsible for climate change. Although the European Union committed to reduce its **CO₂ emissions, emissions from the transport are still growing. Road transport** in particular generates **85%** of the transport sector's emissions.

- **Security of supply**

98% of the transport market is dependant upon oil. If nothing is done, the European Union's **external energy dependence will reach 70% before 2030, 90% for oil.**



Elements of the European biofuels policy

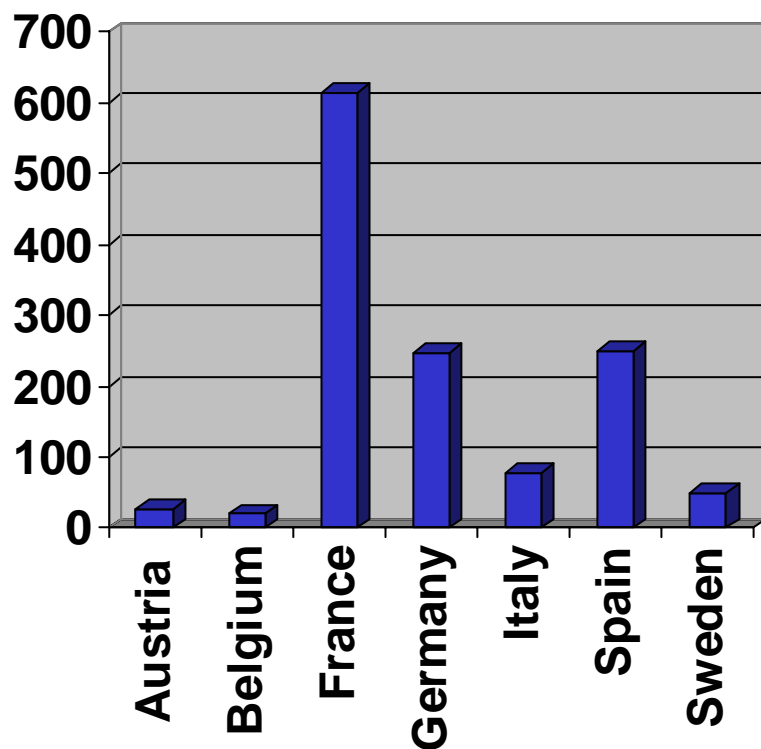


- **A Communication** presenting the **action plan** for the promotion of **biofuels** and other **alternative fuels** in road transport.
- **The Directive** on the **promotion of biofuels for transport** which requires an increasing proportion of all diesel and gasoline sold in the Member States to be biofuel (May 2003).
- The biofuels taxation, which is part of the large draft Directive on the taxation of energy products and electricity, proposing to allow Member States to apply **differentiated tax rates** in favour of biofuels.



Biofuels in figures: current production

The current situation in Europe



New statistics show 1.254 k tons of biofuels produced in the Union in the year 2000.

Biofuels represented around **0.4%** of diesel and gasoline consumption in the Union in 2000 (~0,6% now).





The Directive

- **Member States** shall ensure by end of 2005 a **2%** minimum proportion of biofuels of all gasoline and diesel fuels sold on their market.

- **Schedule for the biofuels share after 2005:**

2005

=> => => =>

2010

2

5.75

- **Biofuels can be made available as:**

pure

blended in mineral oil derivatives

liquids derived from biofuels such as ETBE





Contribution to security of supply of Community legislation. EU-15 in 2010

- The renewable energy Directive would contribute to approximated additional 60 Mtoe from a total of 100 Mtoe in primary energy in 2010
- The biofuels Directive would contribute to approximated additional 17 Mtoe of a total of 18 Mtoe in primary energy.
- The CHP Directive would imply additional 28 Mtoe saved compared to 1998 levels.
- The Building directive would imply an additional energy saving of around 20 Mtoe.

Baseline predictions for energy consumption, in 2010 are 1.556 for EU-15.





Staying informed

- **EUROPA:**

[*http://www.europa.eu.int*](http://www.europa.eu.int)

- **6th Framework Programme (general):**

[*http://europa.eu.int/comm/research/fp6/index_en.html*](http://europa.eu.int/comm/research/fp6/index_en.html)

- **DG RTD “energy” web site:**

[*http://europa.eu.int/comm/research/energy/index_en.html*](http://europa.eu.int/comm/research/energy/index_en.html)

- **DG TREN “energy” web site:**

[*http://europa.eu.int/comm/energy/index_en.html*](http://europa.eu.int/comm/energy/index_en.html)

- **CORDIS:**

[*http://www.cordis.lu*](http://www.cordis.lu)

- **ManagEnergy** (local/regional agencies, projects, partner search...) [*http://www.managenergy.net*](http://www.managenergy.net)

