



# Renewable Energy in the enlarged Europe Policy framework

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# European Renewable Energy Council



## Umbrella organisation regrouping:

### As Members

- ✓ **EPIA** European Photovoltaic Industry Association
- ✓ **ESHA** European Small Hydropower Association
- ✓ **ESTIF** European Solar Thermal Industry Federation
- ✓ **EUBIA** European Biomass Industry Association
- ✓ **EWEA** European Wind Energy Association
- ✓ **EUREC Agency** European Renewable Energy Research Centres Agency

### As Associate Members

- ✓ **EGEC** European Geothermal Energy Council
- ✓ **AEBIOM** European Biomass Association

# EREC's objectives



- To act as a forum** for exchange of information and discussion on issues related to RES.
- To provide information and consultancy** on renewable energies for the political decision makers on local, regional, national and international level.
- To launch policy initiatives** to create a positive framework for renewable energy sources
- To promote European RES equipment, products and services** on world markets



# Framework

- ✓ **White Paper on Renewable Energy** (1997) with the target to double the Share of Renewable Energy from 6 to 12 % of the final energy consumption by 2010
- ✓ **Green paper towards a European strategy** for the security of energy supply (2000)
- ✓ **White Paper on EU transport policy** (2001) with the aim to substitute 20 % of diesel and gasoline by alternative fuel by 2020

# Motivation

- **Security of supply**
- **Protection of environment** –including the necessity to reduce greenhouse gas emissions
- **Energy mix for the future**
  - independence from Energy import
  - decrease of oil, coal, uranium, etc.
  - Energy policy is peace policy
- **New innovative business sector**



# EU Policies & Targets (1)

## **RES White Paper 1997:**

- **To double** the share of renewable energy **from 6% to 12%** of gross energy consumption in Europe (EU-15) **by 2010**

## **RES e-Directive 2001:**

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

## **Directive on the energy performance of buildings (2002)**

- **To realise a savings potential of around 22% by 2010** for energy used in heating, air-conditioning, hot water and lighting

## **Directive on liquid biofuels (2003)**

- **To achieve a share of 5.75 % of biofuels** for transport in the total amount of fuels in Europe **by 2010**



## EU Policies & Targets (2)

**2003** - Directive restructuring the community framework for the **taxation of energy products and electricity**

**2003** - Proposal for a Directive on the **promotion of end-use efficiency and energy services**

**2003** - Proposal for Directive on establishing a framework for the setting of **eco-design requirements for energy-using products**

**2004** - Directive on the promotion of **cogeneration based on a useful heat demand** in the internal energy market



## EU Policies & Targets (3)

- **Directive** on Cogeneration of heat and power
- **Action plan** for Energy efficiency, target: to reduce energy intensity by a further 1% point / year until 2010
- Comply with **EU commitments** under the 1997 Kyoto protocol on reducing greenhouse gas emissions
- More ambitious targets for 2020, discussed at **Berlin** (19-21 January 2004) and **Bonn** (1-4 June 2004)
- **Treaty of Accession**, Athens 16 April 2003 provides for Accession states to comply with EU directives



# Accession countries

- Are full Member States **in May 2004**
- Have **full rights and obligations**
- **Big potential** for energy saving and renewables

# Renewable electricity directive



Directive 2001/77/EC of 27.09.2001  
OJ L 283 of 27.1.2001, page 33

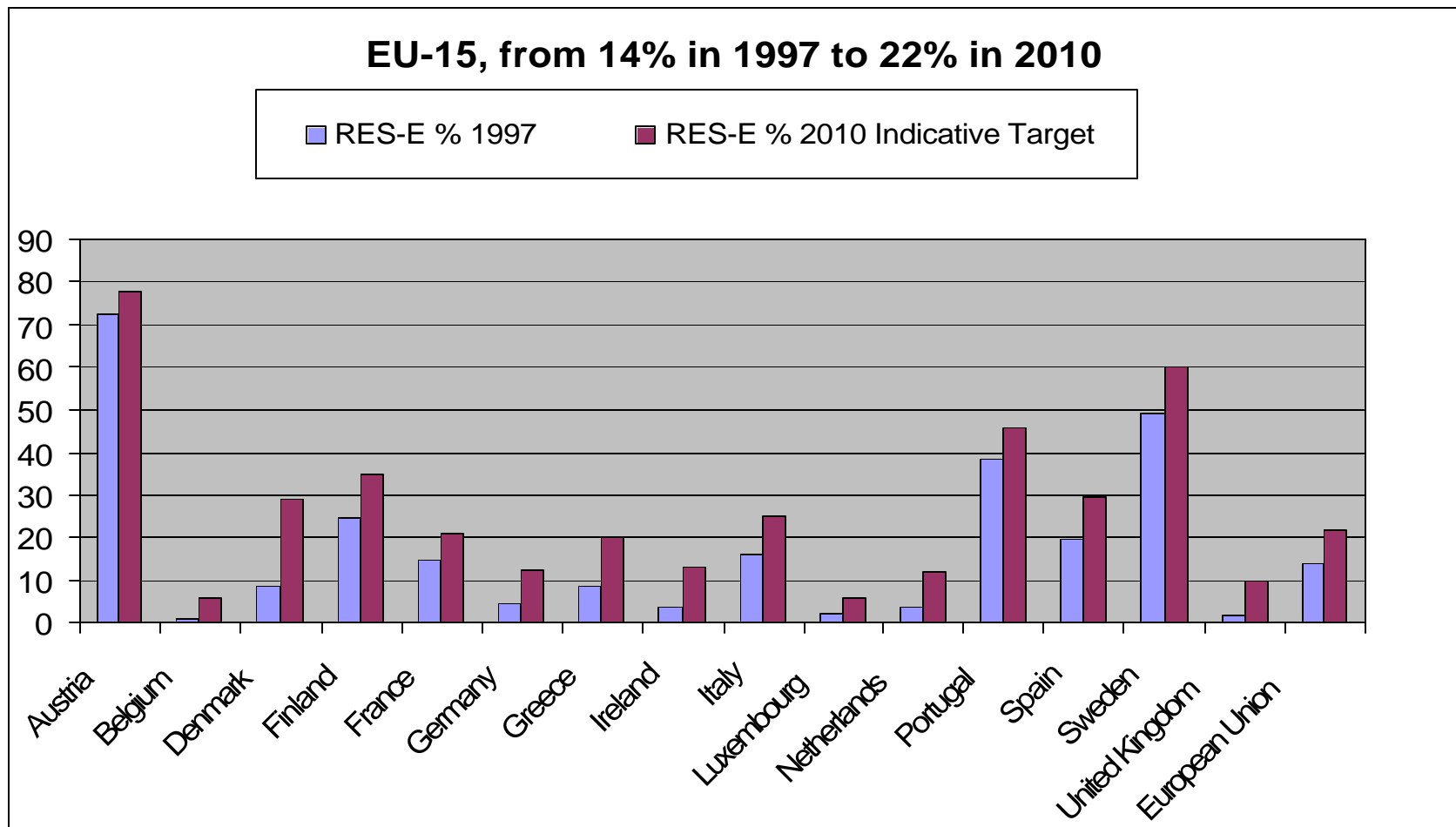
- ✓ Quantified **national targets** for consumption of electricity from renewable sources of energy
- ✓ National **support schemes** plus, if necessary, a harmonised support system
- ✓ Reporting obligations and monitoring
- ✓ **Simplification** of national **administrative procedures** for authorisation
- ✓ **Guaranteed access** to transmission and distribution of electricity from renewable energy sources
- ✓ **Fair and transparent tariffs** for related grid costs, such as transmission, refurbishment or connection



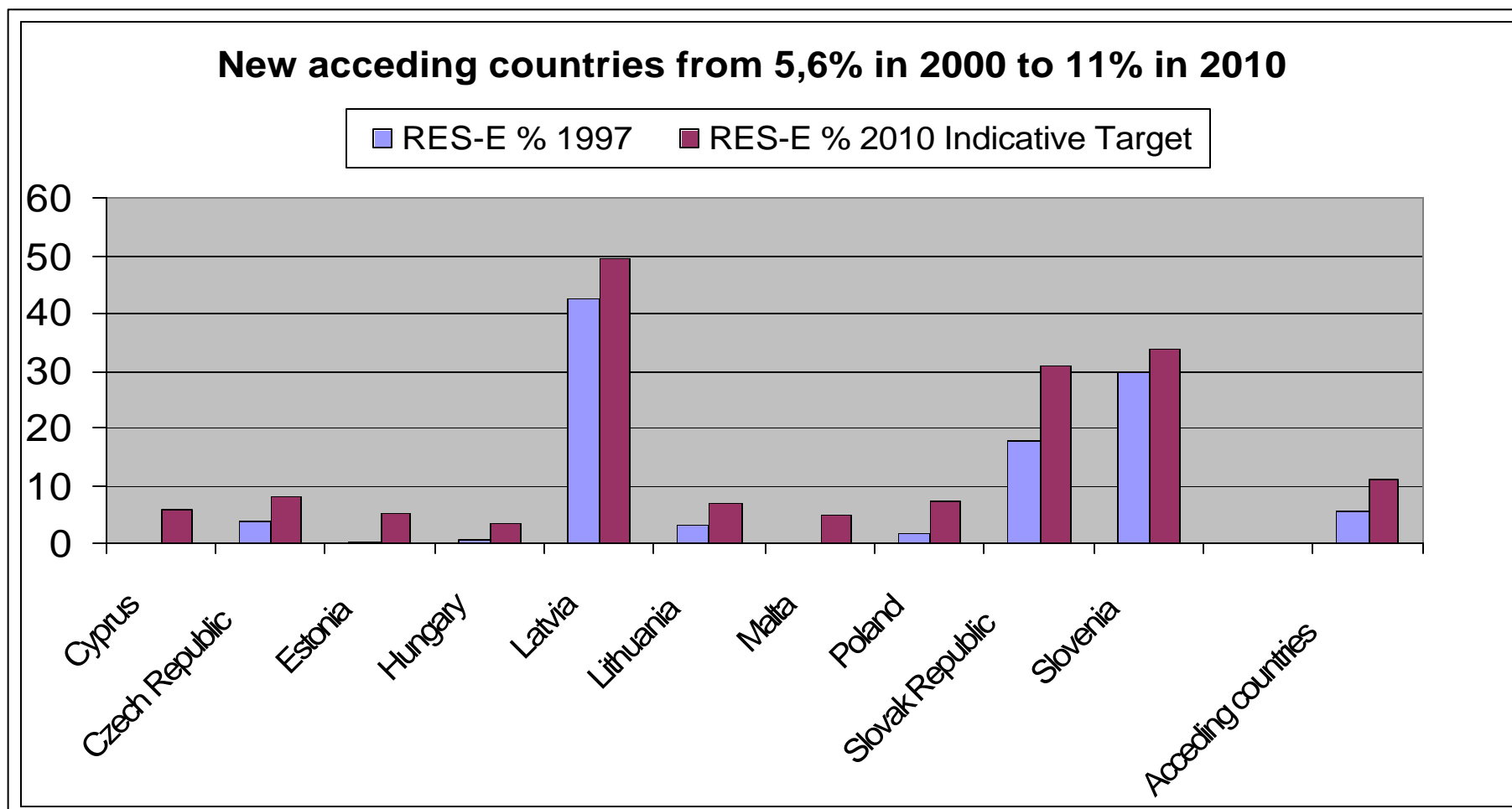
# The Definition of Renewable Energy Sources

- *Renewable energy sources* shall mean renewable non-fossil energy sources (wind, solar, geothermal, wave, tidal, hydropower, biomass, landfill gases, sewage treatment plant gas and biogases)
- *biomass* shall mean the biodegradable fraction of products, waste and residues from agriculture (including vegetal and animal substances), forestry and related industries, as well as the biodegradable fraction of industrial and municipal waste.

# % RES e-penetration in EU-15 (Indicative targets)



# % RES e-penetration in EU-10 (Indicative targets)



# Estonia



Electricity share :

From 0.2% to 5.1% in 2010

# Energy Performance of Buildings



Directive 2002/91/EC of 16.12.2002  
OJ L 1 of 4.1.2003, page 65

- Improvement of energy performance of buildings within the EU through cost-effective measures

## **Proposed measures**

- Methodology for integrated buildings energy performance standards
- Application of standards on new and existing buildings
- Certification schemes for all buildings
- Inspection & assessment of boilers/heating and cooling Installations

# Energy Performance of Buildings



The Directive:

- gives **flexibility** to designers to meet energy performance requirements in the most cost-effective way
- **integrates** insulation, heating, hot water, cooling, ventilation, lighting, heat recovery, passive & **renewables installations**, indoor climate, position and orientation of the building
- provides the basis for an **energy performance certificate** of a building
- proposes **common methodology** for calculating energy performance standards

# Elements of the European biofuels policy



- **Communication** presenting an **action plan** for promoting **biofuels** and other **alternative fuels** in road transport, with the objective of substituting **20%** of traditional fuels by **alternative fuels** in road transport **by 2020**.
- **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.
- **Directive** allowing Member States to apply **Differentiated tax rates or tax exemptions for biofuels**. The Directive modifies **Directive 92/81 on excise duties**.



# Biofuels Directive

Considerations for the biofuels directive:

- ❑ Traffic causes 28% of total CO-2 emissions
- ❑ 84% of transport emissions are generated by road transport.
- ❑ CO-2 emissions will increase up to 50% between 1990 and 2010 if no major action is taken

# Promotion of biofuels



**Directive 2003/30/EC of 8 May 2003**  
**OJ L 123 of 17.5.2003, page 42**

## Objectives:

- **Member States** must ensure by end of 2005 a **2%** minimum proportion of biofuels of all gasoline and diesel fuels sold on their market.
- **Schedule for the indicative share:**
  - 2005 - 2%
  - 2010 - 5.75%

# Promotion of biofuels



- **Biofuels can be made available as:**
  - pure
  - blended in mineral oil derivatives
  - liquids derived from biofuels such as ETBE

# Reports and reviews



**Member States (EU 25)** shall report every year on the total sales of transport fuel and share of biofuel.

**In 2006** the **Commission** will **report** to the European Parliament and Council on progress **if appropriate** propose to **review the schedule** for minimum shares of biofuels



# Additional Support Measures

- ❑ Campaign for take-off (1999-2003)
- ❑ Intelligent energy for Europe (2003-2006)
- ❑ Public Awareness Campaign (2004-2007)
- ❑ 6<sup>th</sup> RD&D Framework Programmes (2002-2006)

# Conclusions



POLICY WORKS !



**Thank you for your attention**

**For more information**

**[www.erec-renewables.org](http://www.erec-renewables.org)**

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