The new Renewable Energy Directive: 20% renewable energy by 2020

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President EWEA – European Wind Energy Association
Chairman GWEC – Global Wind Energy Council

EEF Dinner Debate sponsored by EREC
European Parliament, 3rd June 2008
ERE – European Renewable Energy Council

Umbrella organisation representing all RES sectors:

✓ AEBIOM   European Biomass Association
✓ EBIO     European Bioethanol Industry Association
✓ EGEC     European Geothermal Energy Council
✓ 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

Associate members:

✓ EU-OEA   European Ocean Energy Association
✓ EREF     European Renewable Energy Federation
✓ ESTELA   European Solar Thermal Electricity Association

Representation of European RES industry, trade & research
EU Renewable Energy industry

- Europe is global leader in RES development
- 350,000 jobs in Europe already now
- Annual turnover of 40 billion € already now
- Innovative Business Sector
- Economic growth and regional development
Renewable energy – 2005 baseline year

- About 14% of all EU electricity supply is generated by renewable energy sources
- About 11% of heat demand is supplied by renewable energy sources
- About 1% of transport fuel demand by renewable energy sources

2005 Total: 8,5 %
2006 Total: 9,2 %
EU Energy Policy

From
Coal & Steel
and
Nuclear

To
Security of Supply
Competitiveness
Sustainability
A unique opportunity!

Renewables have predictable cost and by that increase Europe’s competitiveness

Renewables reduce import dependency

Renewables offer a carbon-free energy supply

Renewables create jobs in Europe
A change in perception and policy
Jack,
age 6,
UK.
Alexandros,
age 7,
Cyprus.
Policy is making the change

- Uneven growth among EU Member States which cannot be explained by distribution of natural resources!
  - Why should Austria‘s solar capacity per capita be 30 times larger than Italy‘s?
  - Why are 70 % of all geothermal heat pumps installed in 3 EU countries?
  - Why has biomass heating taken off in Austria and the Nordic countries and other countries only follow slowly?
What was achieved in the past

The contribution of renewable energy (electricity, transport and heat) 1990-2004 (mtoe)

Source: EC
Production of ‘new’ RES-E (without hydropower) 1990-2005

Source: EC

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<th>RENEWABLES</th>
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<th>LARGE HYDRO</th>
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Source: Platts, EWEA
Net Increase/Decrease in Power Capacity
EU 2000-2007 (in MW)

Source: EWEA and Platts PowerVision
Net Increase/Decrease in Power Capacity
EU 2007 (in MW)

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The Commission Proposal

1. Sets mandatory national targets for renewable energy shares, including 10% biofuels share, in 2020 (Articles 3 and 5)

2. Requires national action plans (Article 4)

3. Standardises “guarantees of origin” (certifying the renewable origin of electricity or heat) and enables the transfer of these to provide flexibility to Member States (Articles 6, 7, 8, 9 & 10)

4. Requires reduction of administrative and regulatory barriers to the growth of renewable energy (Article 12), improvements in provision of information and training (Article 13) and improves renewables’ access to the electricity grid (Article 14)

5. Creates a sustainability regime for biofuels (Articles 15-18)
Proposals by the rapporteur:

Binding interim target & Introduction of Direct Penalties

We support binding interim targets. Direct penalties should be imposed on Member States which fail to comply with these targets.

The level of the penalty should provide enough incentives to invest in renewable energy.

These new provisions urge Member States to commit right from the beginning to active policies on renewable energy sources in order to reach the 20% target.
Flexibility mechanisms for Member States

The Rapporteur proposes real flexibility via four different mechanisms:

• bilateral/multilateral agreements between Member States,

• common target fulfillment,

• project-based flexibility

• and “opt-in” system into a certificates market for those Member States who decide so
Trade and Flexibility

EREC fully supports trade in renewable energy – as long as it is energy that is traded and not papers (because energy is what we need)

What the Commission currently proposes (Art.9) is:

- Trade between Member States (once they have reached their interim targets)
- Trade between companies (as a default option)
- Member States can set limits to the imports and exports of GoO between companies (opt-out).

The Rapporteur drafted a coherent alternative to the Commission’s proposal by separating the GoOs (into it’s original disclosure function) and creating additional certificates for those MS who want to use them. Only this is removing the legal uncertainties in the Commission’s proposal. Only with such an approach can governments maintain control over their targets.
An opt-out mechanism is not legally sound.

Therefore EREC proposes in order to ensure both:

- Flexibility for MS in meeting their target
- Government control over meeting the targets with national mechanisms

• Opt-in system rather than an opt out. (countries who wish to have a common certificate market as a tool to promote renewables e.g. UK and Denmark can do so without harming other national support schemes – after they have met their interim targets)
EU-wide certificate trading mechanism would lead to:

- legal uncertainties and investment insecurity
- investments in a limited portfolio of renewable energy technologies, leaving out technologies with a very significant long term potential
- undermining national support schemes
- windfall profits for incumbent electricity producers
- and increasing costs to achieve the target - according to Fraunhofer Institute up to €30 billion higher annually
Other important elements to be improved:

- The NAPs need to be strengthened to provide harmonised and detailed information on how Member States intend to meet their targets.
- Administrative barriers have to be removed further
- Grid Access and transmission rules have to be strengthened
- Developing further infrastructure is necessary
- Obligations for RES in buildings is key for renewable heating development
- Education and Training measures need to be coherent
- Public & Private Financing for Renewable Energy Sources to be increased
Challenges in the transport sector

- Import dependency is about 98%
- Transport sector accounts for more than one quarter of EU GHG emissions – which have increased by 26% since 1990
- Oil price doubled within one year

What are the options?

Biofuels, together with increased transport efficiency and savings are at present the only immediately available and viable alternative to fossil fuels
Biofuels are not responsible for increased food prices

The on-going media debate on biofuels – driven by a strange alliance between big oil companies, multinational food-producers and some environmental NGOs - is to a large extent an emotive debate and neglects an analysis of the overall market concentration in the food and agricultural market, where biofuels only make up a tiny fraction.

Currently, only 1.6% of the total EU produced cereals out-put is used to make fuel ethanol. By far the biggest share of EU grain production serves to feed cattle (58.1%). The second biggest consumer of cereals is the food industry (22.1%). Globally, biofuels are currently using about 2% of the world’s grain production.

The principal drivers to the recent surge in food prices is explained as a combination of demand growth especially in Asia, of harvest failures in some key producing countries, of food export restrictions by some national governments, of financial speculation and also, of course, the high oil prices.
RES in transport – binding 10% target must be maintained

- 10% transport target is an essential, necessary part of the overall 20% target for renewable energy
- Development of sustainable biofuels in Europe requires a binding target
- Opportunity for Europe to develop a sustainability regime as example for the rest of the world
- Only this creates investment security
- Create the necessary incentive for the industry to develop advanced 2nd generation biofuels
Sustainability criteria connected to the target:

• The industry is willing to commit to strong and reasonable sustainability standards since we do not want to repeat the mistakes of the oil industry

  • A start with 35% GHG emissions reduction allows to invest in further reduction opportunities, without destroying nearly all existing EU biofuels industry
  • EU biofuel producers comply already today with the highest possible global farming standards
  • Social sustainability standards should be set for all sorts of fuels

• The EU is creating the opportunity of setting a new standard in the world; dismantling our own biofuel target will take away justification for a new global standard on sustainability
• Introducing sustainability criteria for biofuels is just the start of eventually having such criteria for all forms of fuels.
The 20% by 2020 EU target will only be met if legislation is adopted timely.

The Directive should be in force as soon as possible in order to avoid market instability around 2010 (ending of RES-E & Biofuels Directives)

Timely adoption of the energy-climate package is crucial in view of the end of the mandate of the European Commission and elections of the European Parliament in June 2009.
RES industry targets 2020

• The contribution of RES to electricity production will be around 35% in 2020.

• The contribution of RES to heat production will be around 25% in 2020.

• The contribution of biofuels can be more than 10% in 2020.

Total: 20%
Environmental benefits

• With a renewable energy share of 20%, the equivalent figure would be 600-900 Mt CO$_2$. This is equal to a saving of about 12%-14% of total CO$_2$ emissions compared to 1990 levels.

• Combined with 20% efficiency by 2020 an additional saving of 780 Mt CO$_2$ by 2020 could be reached.

This together would be a saving of about 24% compared to 1990
Climate Change Mitigation Options to 2020

- To prevent the worst ravages of climate change, we must get global emissions to peak and begin to decline before 2020;
- According to the IPPC this will require emission reductions of at least 30% by 2020 from industrialized countries.
- The power sector is the largest single source of emissions.
- The options for reducing emissions between now and 2020 in the power sector are: efficiency; fuel switching from coal to gas; and renewable energy.
- Other technologies often discussed, such as carbon capture and storage and new nuclear may play a role in the future, but not a substantial role before 2020.
Security of Supply and Competitiveness

• Decrease the dependency of imports and the negative effects of increasing (and volatile) oil and gas prices

• Avoided fuels in 2020 from increasing the share of renewable energy range from around 234-300 Mtoe/year of which approximately 200Mtoe/year would be imported. **This reduces imports by about 20%**

• An active renewable energy policy also creates potential for European manufacturers to export this technology. This export potential is greatest for innovative technologies, but also exists for well-established technologies

**Strengthening the competitiveness of our economy and facilitating the creation of as many as two million jobs in Europe**
Turn the energy challenge into an opportunity for Europe

• If we are to shape our energy future, we need to shift direction and start developing the indigenous clean resources that are available at our doorstep – forever.

• The economic future of Europe can be planned on the basis of known and predictable cost of energy, derived from indigenous energy sources free of all the security, political, economic and environmental disadvantages associated with the current energy supply structure.

• Using the energy efficiency potential, together with a major shift towards renewables, the EU could become the most energy import independent region in the world.
EU Presidency Renewable Energy Policy Forum
17 November 2008, Paris

Further information: www.erec.org
Further information:

www.erec.org

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