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**FUTURE DEVELOPMENT OF EU POLICY TO PROMOTE THE USE OF
RENEWABLE ENERGY SOURCES TO PRODUCE ELECTRICITY
UNICE COMMENTS**

1. Introduction

According to the 2001 Renewables Directive (EC/2001/77), the Commission shall by October 2005 report on the experience gained with the different support schemes used by member states to support Electricity production based on Renewable Energy Sources (RES-Electricity, or **RES-E**).

UNICE welcomes this evaluation process, which has to involve all stakeholders. UNICE points out that, given that most RES-E technologies are still not competitive, it is more important to support research and development than the production of RES-E.

This being said, UNICE finds it very important to address how a framework for supporting renewable energy production can be developed in a way that is:

- *effective* (the support measures must foster a meaningful increase in the quantity of electricity generated from renewables)
- and *cost-efficient* (increased RES-E supply should be obtained through a strategy which minimises the direct and indirect costs linked to it).

Furthermore, this framework has to comply with the objectives of the internal electricity market.

Deployment of RES-E technologies plays a role with regard to environmental issues and long-term security of supply. Based on observations of the interaction between RES-E policies and development of the internal electricity market, UNICE will in this document highlight some of the important challenges that have to be addressed for sustainable integration of RES-E in the European internal electricity market.

2. What should we aim for?

UNICE supports the Commission's efforts to establish a well functioning common electricity market and sees various renewable energies as a part of the future energy mix. It is however of vital importance that the RES-E policy is implemented in a way that does not weaken or hamper the competitiveness of the European industry.

UNICE finds that a well functioning internal electricity market requires a unified, Community-wide and cost-efficient market-based support framework. Schemes for RES-E promotion should be effective and cost-efficient. Compatibility with the internal electricity market should be an important focus and over the coming years a level playing field for European RES-E producers as well as for the consumers of electricity should be installed. Furthermore it is important to take into consideration the unwanted indirect effect of promoting renewable energy on other markets, e.g. the markets for wood and the biomass chains. A well designed harmonised framework, as an ultimate goal, should yield efficiency benefits compared with the existing 25 different schemes.

In the short to medium term, UNICE believes that support at the level of production or consumption is still required in order to meet the indicative 2010 targets based on political criteria. It is however important to meet these indicative targets in the most cost-efficient way possible, which calls for a high degree of flexibility. RES-E technologies that are close to being self-supportive should be stimulated to further reduce their costs to become completely self-supportive – since only then can RES-E technologies play their role with regard to environmental protection and long-term security of supply. In the medium to long term, support schemes for RES-E should lead RES-E to an independent market existence without any further support. Policies should be designed both to acknowledge the benefits of producing RES-E and to strengthen the technological innovation process that will allow RES-E technologies to become competitive and to function under market conditions in the longer term.

RES-E policies should be developed and implemented taking account of other policies like the EU Emission Trading System with similar aims, in order to avoid duplication (double burdens) and even potentially conflicting incentives. The CO₂-avoidance costs of RES-E have to compete against those of other CO₂-avoidance technologies. In regions with strong urban and/or industrial concentrations posing particular challenges for air quality objectives, the cost of abatement policies for emissions other than CO₂ should also be considered when RES-E costs are evaluated. RES-E policies also need to take account of the current situation with regard to functioning of the internal electricity/energy market (and not simply assume that it is functioning perfectly).

3. Current situation

a) Economic issues

Most RES-E technologies are not yet competitive and require further developments. Today each EU member state has its own indicative target and support scheme models. The level of RES-E on national markets varies due to differences in national conditions (wind conditions, biomass resources, etc.) and the design of support schemes. As a result, the impact of the production of RES-E on the power market is also different between member states.

Some countries have expensive and cost-inefficient support schemes - often based on high feed-in tariffs. These schemes have led to significant increases in the electricity prices paid by consumers and especially affecting the power intensive industries, with the result of harming their competitiveness.

In comparison, other countries have succeeded in establishing systems allowing for a more cost-efficient implementation of RES-E. So, there are important lessons to be learned from studying how RES-E production is promoted in different European countries. Examples of good practice must be disseminated rapidly across the entire EU. Where existing cost-inefficient systems cannot be corrected in the short term, it is essential that the public authorities:

- introduce measures which place a ceiling on the costs (surcharges on electricity prices) that these systems impose on energy-intensive industries;
- define clear framework conditions which allow consumer industries to develop stable cost planning.

Costs linked to the special technological challenges and requirements resulting from RES-E input (illustrated in point 3 b) hereunder) must be made transparent and must be taken into account whenever estimating the efficiency of RES-E support. As an illustration of these

special costs, feed-in of stochastic sources like wind power requires a back-up by conventional power plants and increases the need for balancing power.

b) Technical issues

The large and increasing share of wind power in some countries of Europe constitutes a challenge for integrating that electricity feed in the supply system. Experience shows that high levels of wind power often will have an effect on the supply systems in other countries beyond their impact on the national system. The grids of neighbouring countries have in periods with high levels of wind been overloaded by the electricity based on wind power.

Thus, the existing European transmission grid system requires a Europe-wide approach to the issue of RES-E integration, to reduce the impact on cross-border electricity transmission and on electricity trade and to avoid failure in fostering a sound and balanced RES-E development. Appropriate cost sharing should be applied to the integration of RES-E in the transmission and also the distribution grids.

c) Design of biomass promotion policies

Biomass may be used both as a raw material or as a fuel. As the overall availability of biomass is limited, the increasing use of biomass in electricity production - in combination with the high support rates paid - leads to gradually increasing prices of biomass. This influences industries dependent on the availability of biomass resources.

Since it is used both as a raw material and as a fuel, biomass therefore has to be promoted in a way that:

- does not disturb other, non-supported uses of biomass,
- does not hamper the raw material availability (e.g. virgin wood, used wood and paper recovered from waste, animal fats, palm oil, etc.) for a number of industries (woodworking, pulp and paper, chemicals, cement, etc.).

The Commission should take full account of the existing studies¹ regarding the cost and benefits of supporting the use of biomass in the production of heat and power compared with other industrial uses of biomass, and complement this information base with any relevant supplementary analyses.

d) Progress towards targets

There are still countries where the share of RES-E is still far away from 2010 targets, even for well developed sources such as wind or biomass. In these cases objections are raised, among others, on the basis of grid or environmental considerations.

4. Solutions

To ensure the cost-efficient integration of RES-E into the grid and supply system, focus should be laid on the following topics:

- Ensuring a better planning and overall management of the networks.

Investment in new grid infrastructure is needed – both to allow the internal electricity market to develop and to allow for better integration of the large amount of wind power

¹ For example « The interaction of EU RES policies and the EU forest-based industries » by Directorate General Enterprise & Industry of the European Commission (soon to be finalised)

capacity expected over the coming years in many countries of Europe. A Europe-wide study on the grid impacts of wind power – similar to the DENA grid-study in Germany - could teach some important lessons for future grid planning. UNICE also calls for closer cooperation between national transmission systems operators (TSOs) in order to secure better long-term grid infrastructure planning, reflecting the development of RES-E production. Furthermore, a stable framework is required for the investments necessary in the grid infrastructure.

- Finding solutions for efficient balancing of wind power and other technologies with fluctuating production.

This calls for operators delivering such fluctuating production to participate financially in covering the cost of the balancing power. These costs must be calculated correctly, taking account inter alia of the proportion that wind farms represent as compared with the total electricity production capacity connected to a certain part of the grid.

- Giving incentives for innovations leading to reliable and low-priced RES-E generation.

Innovations are essential to uphold Europe's world leading position on development of renewable energy technologies. A continuous R&D activity is vital to maintain this progress. R&D is also the answer to many of the important technical challenges faced today on the integration of RES-E in the supply system.

It is essential that the Community-wide framework to be developed in the area of renewables gives Member States the possibility to offset, in the most harmonised manner possible, the financial burdens on energy-intensive industries resulting from RES-E support schemes, so that their competitiveness is not jeopardised.

A higher degree of flexibility is needed in order to enhance the possibilities to meet national targets outside a member state's own national territory. This is needed in order to minimise costs in some member states.

UNICE does not support setting new and higher indicative targets for the period after 2010. Higher shares of RES-E must be reached through competitive RES-E technologies which may call for further support on the research and development side.

UNICE finds it important that the European Commission takes up the challenge of developing a process that will gradually take us from national RES-E policies to a Community-wide policy. UNICE recognises that there are various national circumstances to be taken into account in this process. This process also has to take into consideration the importance of safeguarding RES-E investments. The analysis of the experience gained by all participants in this field with national systems is a valuable input to a process that should lead Europe to a comprehensive and consistent policy on RES-E that also takes due consideration of the competitiveness of European business.

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