RENEWABLE ENERGY BEYOND 2020

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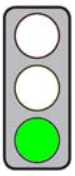
Centrum für Europäische Politik

KEY ISSUES

Objective of the Communication: The Commission presents its ideas on European and international renewable energy policy beyond 2020.

Parties affected: Energy producers, the overall economy.



Pro: (1) Investors need to be given clarity early on as to which renewable energy policy the EU will pursue upon the expiry of the Renewable Energy Directive in 2020.

(2) Adjusting the funding policies of Member States strengthens the technological and regional competition and prevents an inefficient permanent funding of renewable energies.

(3) In view of the fact that the share of electricity derived from renewable energy is growing constantly, a level playing field must prevail in the internal energy market. This includes all electricity producers bearing the costs they actually create.

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CONTENT

Title

Communication COM(2012) 271 of 6 June 2012: **Renewable Energy**: **a major player in the European energy market**

Brief Summary

Note: Articles quoted refer to the "Renewable Energy Directive" (2009/28/EC).

► **Background and targets**
- The EU has undertaken ("20-20-20 decision"; s. cepKompass, p. 10 et sqq. and p. 57 et sqq. – *in German only*) to increase by 2020 the share of energy from renewable sources in the total annual EU energy consumption by at least 20%.
- The EU-wide 20% expansion target is to be achieved by way of binding expansion targets for Member States ("burden-sharing"), ranging from 10% for Malta, 18% for Germany or up to 49% for Sweden (Art. 3 (1), Annex I Part A Renewable Energy Directive 2009/28/EC; s. cepKompass, p. 58 et sqq.).
- This legal obligation to expand renewable energies expires in 2020.
- In the Communication and accompanying documents, the Commission assesses if and how the use of renewable energies should be encouraged beyond 2020.

► **Importance of renewable energies**
- In 2050, renewable energies will probably make up the largest share in energy supply [cp. Energy Roadmap 2050 COM(2011) 885, s. CEP Policy Brief].
- Renewable energies lead to a diversification of energy supply which, according to the Commission, serves the purpose of ensuring a secure energy supply and Europe's competitiveness.
  - Thus new industrial branches are established and new export options are created.
  - At the same time, renewable energies reduce greenhouse gas emissions.
  - "Strong" (p. 2) renewable growth to 2030 could create more than 30 million new jobs in the EU.
- Due to the latest economic crisis, investors have become cautious. Investors need reliability as regards the political framework conditions, in particular for the time following 2020.

► **Driving renewable energies: Status and challenges**
- Member States use different instruments and support schemes to promote renewable energies: either through guaranteed feed-in tariffs, premiums, quota obligations for power producers, investment grants, tax credits and other financial incentives.
- The Commission plans to draw up guidelines containing best practices and experience gained, as well as "where necessary" support scheme reforms, in order to develop a greater consistency of national action and thus prevent a fragmentation of the internal market.
- The funding of research and development is decisive for technological progress. Within the last ten years the Member States and the EU have spent 9.2 billion Euros.
- The following technologies must be further developed:
  - deep-sea offshore wind, wave and tidal power;
  - biofuels;
  - photovoltaic and concentrated solar power;
  - new materials; and
  - electricity storage technology.

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– In a Communication projected for 2013, the Commission will provide information as to energy technology policy.
– The costs for renewable energies are mainly determined by the projects' administrative and capital costs.
– Complicated approval procedures, the lack of one-stop-shops and the fear of retroactive changes to support schemes increase the project risks of expanding renewable energies.

► **Integration of renewable energies in the internal electricity market**

– Mature technologies operating in competitive markets, with a well-functioning carbon market and "properly designed" energy taxes, should ultimately no longer need support [p. 4; cp. Directive Proposal COM(2011) 169, s. CEP Policy Brief]. For instance, photovoltaic systems and onshore wind production "are expected" to be competitive "in several markets" by 2020 (p. 3).
– At the same time, renewable energy should be "gradually" integrated into the market with reduced or no support.
– In the longer term, the Commission wishes to ensure a level playing field between the producers of electricity from conventional energy and those of renewable energies, which also means that the latter are to contribute to the stability and security of the grid.

► **Cross-border opening of markets for renewable energies**

– The Renewable Energy Directive provides for cross-border "cooperation mechanisms" (Art. 6 to 12; s. cepDossier Climate Protection, p. 26 et sqq. in German only). For instance, the renewable energy produced in one Member State can count towards the target of another.
  - The Commission will draw up guidelines to facilitate the cross-border trade with renewable energy.
  - "More convergence, including common joint support schemes", would lead to cost reductions as well as be more consistent with the single market (p. 6).
  - More cross-border co-operations can lead to annual cost reductions of up to 8 billion Euros.
– To date, only Luxembourg and Italy intend to use these options in order to comply with their obligations from the Renewable Energy Directive.
– The Commission assumes that ten Member States will more than fulfil their obligations from the Directive and thus will be able to make their surpluses available to other Member States.
– The Commission also wishes to expand renewable energies in EU-neighbouring countries, in particular in the southern Mediterranean. It wishes to achieve this by:
  - facilitating international co-operations through bilateral and multilateral agreements;
  - fostering trade with Northern African electricity from renewable sources; and
  - extending the Renewable Energy Directive 2009/28/EC to countries of the European Neighbourhood Policy (ENP) region.

► **Security of electricity supply**

– A liberalised electricity market "should" ensure that companies providing the uninterrupted electricity supply can cover their investment costs through the profits they generate.
  - However, the following issue exists here: wholesale electricity prices are based on short run marginal costs. In the case of electricity from wind and solar power, these tend to be near zero, as no fuel is required to produce them. Therefore, this electricity leads to a reduction in the wholesale price (so-called "merit order effect"). This can lead to a situation whereby the profits gained from electricity marketing do not cover the investment costs to ensure an uninterrupted electricity supply.
  - In order to solve these problems, several Member States have developed capacity payment systems, which remunerate the maintenance of reserve capacities. This can encourage investment, but according to the Commission, it also separates investment decisions from market price signals. Moreover, there is a danger that such systems discourage incentives for demand-oriented flexibility.
– Power generation should be so flexible that the supply is reduced when prices are low and increased when prices are high. Likewise, demand should be able to respond to volatile wholesale prices.
– Later in 2012, the Commission will present suggestions as to how to include renewable energies into the internal energy market and simultaneously ensure a safe energy supply, a flexible electricity demand and the decentralized power generation.

► **Renewable energy policy after 2020**

– In an impact assessment the Commission assesses four policy options for the time following 2020:
  - Option 1: "Business as usual" – no European rules on the promotion of renewable energies
  - Option 2: Strict climate protection targets but no binding targets for renewable energies
  - Option 3: Binding targets and coordinated support for renewable energies
  - Option 4: Binding targets and a harmonised measures to promote renewable energies
– In its Communication, the Commission does not express any preferences for a certain option. In the accompanying impact assessment [SWD(2012) 149], it waives only option 1.
– A decision as to which path to take until 2030 can only be taken "after reflection" on the state of post-2020 climate policy, the degree of competition in Europe's electricity, heating and cooling and transport fuel markets, and the degree of energy diversity and technology innovation by 2020 (p. 13).

Statement on Subsidiarity by the Commission

The Commission does not address the issue of subsidiarity.

Policy Context

In order to double the share of renewable energies between 1997 and 2012 to 12% in the EU [KOM(97) 599], sector-specific legal acts have been adopted. For instance, the share of renewable energies, in particular in the field of power generation, was to be increased to 21% by 2012 (Directive 2001/77/EC) and the share of biofuels in the transport sector was to be increased to 5.75% (Directive 2003/30/EC). Moreover, the privileged access for electricity from renewable energies to the electricity grid was made possible (Directive 2003/54/EC). When in 2007 it became clear that the targets projected for 2010 would be missed, Directives 2001/77/EC and 2003/30/EC were replaced by the Renewable Energy Directive (2009/28/EC). It comprises all forms of renewable energy and stipulates the EU-wide 20% expansion target as well as legally binding expansion targets for Member States. In order to achieve the 20% expansion target, the Commission called for a greater "convergence" of national support schemes in 2011, for reinforced cooperation among Member States and with third countries and the cross-border networking of energy infrastructures [Communication COM(2011) 31, s. cep Policy Brief].

Options for Influencing the Political Process

Leading Directorate General:	DG Energy
Consultation Procedure:	Not provided.
Committees of the European Parliament:	Industry, Research and Energy (leading), Rapporteur Herbert Reul (EPP, DE)
Committees of the German Bundestag:	N.N.

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

The energy mix of Member States, including the share of renewable energies, should not be determined through policy decisions but result from the competition between different technologies and the exploitation of regional advantages and in consideration of climate policy instruments. With its Renewable Energy Directive, the EU has chosen another direction.

Potential **investors need to be given clarity early on as to which renewable energy policy the EU will choose upon the expiry of the Renewable Energy Directive 2020**. The Commission's Communication comes at the right time to discuss the four options presented.

Impact on Efficiency and Individual Freedom of Choice

The development of renewable energy is unnecessarily expensive, for it is carried out mainly in countries in which it is strongly subsidised by Member States and not where the energy yield is optimal in terms of infrastructure costs. As regional differences are not of a temporary but of a permanent nature, generating plants at unfavourable locations can only remain competitive through permanent funding. This leads to a misguided specialisation and prevents competition in the internal energy market. **The harmonisation of support policies in Member States, propagated by the Commission, would** help prevent this misguided specialisation**, strengthen the technology and location competition and prevent the long-term inefficient subsidising of renewable energies**.

Greater **Europeanization and internationalisation of the renewable energy policy,** which the Commission wishes to promote by way of guidelines relating to the cross-border trade with renewable energies and the integration of neighbouring countries into the renewable energy policy, **can have cost-reducing effects and strengthen competition in the internal energy market.** If states cooperate across borders to comply with their mandatory expansion targets and offset renewable energies financially against each other, then internationally negotiated prices for renewable energies are made transparent. As they can be compared to the costs for promotion in national systems, competitive elements apply that affect the promotion schemes determined politically.

The Commission could clarify its call for "gradually" removing subsidies for renewable energies more precisely: **the funding of renewable energies must be directed at a clearly defined expiration**. The subsequent competitive pressure will lead to further efficiency increases and allow for different technologies and business locations to play on their respective advantages in the competition. It is not the business of politics to support the use of certain technologies through long-term subsidies. Instead, the Commission is right to call upon politicians to set the framework conditions through tools such as taxes and emissions trading, under which renewable energies can create their climate protecting effects as competitive advantages. Without a clearly defined expiration date there is a danger that the Member States will try to protect "their" generating plants for renewable energies from international competition. The desired competitiveness can only be achieved, if at all, through subsidies much later.

Long-term state funding can be justified for basic research if private funding is not available (cp. CEP-Study on State aid control). However, where basic research is funded from the public purse, certain purpose-related technology targets should not be set.

In view of a the fact that the share of electricity from renewable energy is growing constantly, a level playing field must, as the Commission demands, prevail in the internal market. This includes each electricity producer being charged the costs they cause. **Since electricity which is fed into the grid in a volatile manner makes a secure electricity supply more expensive, the producers of such electricity should consequently** be obliged to **bear the costs created through such fluctuations**.

Impact on Growth and Employment

The Commission also believes that the renewable energy policy of the EU and Member States leads, as the price for climate protection, to an increase in energy costs and thus has a negative impact on growth and employment. In particular, if one views it from the long-term perspective until 2050, the development of renewable energies in line with the Energy Roadmap 2050 [2050 COM(2011) 885, s. cep Policy Brief] will lead to substantial increases in electricity costs for industrial and household electricity. Through a European coordination of Member States' funding of renewable energies, their costs can be reduced and thus negative impacts on growth and employment be limited.

Impact on Europe as a Business Location

As long as there is no global consensus on climate protection policy, the costs for the development of renewable energies have a particularly negative effect on Europe as a business location – as does the entire burden created through the climate protection policies of the EU –, as other regions in the world can play on their regional advantages.

Legal Assessment

Legislative Competency

The EU has the power to adopt energy policy measures in order to promote renewable energies and the interconnection of the grids, as well as securing the operation of the single energy market (Art. 194 TFEU).

Subsidiarity

Unproblematic.

Proportionality

Unproblematic.

Compatibility with EU Law

Unproblematic.

Compatibility with German Law

The Member States are responsible for the shaping of the national funding schemes (Art. 3 (3) lit. a). Consequently, the German Renewable Energies Act (*Erneuerbare-Energien-Gesetz - EEG*) regulates the priority connection to the electricity grid system of installations generating electricity from renewable energy sources and the priority purchase, transmission, distribution of and payment for such electricity by the grid system operators. The feed-in tariffs to be paid by grid system operators to the operators of power plant operators (§ 16 to 33 EEG) are finally borne by the end consumer.

In 2011, the Commission countered concerns (Press statement of 31 January 2011) that its call for a greater "convergence" of national funding schemes – such as EEG – through full harmonisation were seen as an attack on national support schemes. However, it stressed that an EU-wide adjustment e.g. of feed-in tariffs would be necessary to establish a "really European" energy market in the long or medium term.

Conclusion

Investors need to be given clarity early on regarding the question of which renewable energy policy the EU will pursue upon the expiry of the Renewable Energy Directive in 2020. The Commission's Communication comes at the right time. The measures announced by the Commission which are intended to bring about an increased Europeanization and internationalisation of the renewable energy policy can have cost-reducing effects and boost competition in the internal energy market. In particular, the propagated adjustment of the funding policies of Member States strengthens the competition for technologies and regions and prevents an inefficient long-term funding of renewable energies. The funding of renewable energies must be directed at a clearly defined expiration date. In view of a growing share of electricity from renewable energy, a level playing field, as is called for by the Commission, must prevail in the internal market. This includes each electricity producer being charged the costs they cause.