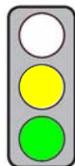


## MAIN ISSUES

**Objective of the Communication:** The Commission provides information as to the status, prospects and challenges of the renewable energy sector and calls for the cost-effective development of renewable energies.

**Parties affected:** Energy producers, the economy as a whole



**Pros:** (1) The Communication's objective to develop renewable energy as cost-effectively as possible limits the negative impact of climate protection on growth and employment.

(2) The development of energy infrastructure is necessary for an efficient energy supply.

(3) Cooperations between Member States are indispensable to ensure that renewable energy is developed where there is the highest possible energy yield.

**Cons:** (1) Subsidies for renewable energy must have a clearly pre-defined endpoint.

(2) Growth cannot be created by policy decisions that imply that arbitrary expenditure for renewable energy is per se "growth stimulating".

## CONTENT

### Title

**Communication COM(2011) 31** of 31 January 2011: **Renewable Energy – Progressing toward the 2020 target**

### Brief Summary

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

#### ► Background and objective

- The EU has committed itself ("[20-20-20 Decision](#)"; see [CEP Compass](#), p. 10 et sqq. and p. 57 et sqq.) to by 2020:
  - increase the share of energy from renewable sources (e.g. wind, solar, geothermal, hydro, biomass power) in the overall EU energy consumption to at least 20% and
  - increase the share of biofuel in the final energy consumption in each Member State to at least 10% in the transport sector.
- The EU-wide 20% target is to be achieved through legally binding development targets for the Member States ("burden sharing") and ranging from 10% for Malta to 18% for Germany and up to 49% for Sweden (Art. 3 (1), Annex I Part A; see [CEP Compass](#), p. 58 et sqq.).
- The Commission's Communication analyses the status, prospects and "challenges" of the renewable energy sector on the basis of the following reports:
  - Report on the operation of the mass balance verification method for the biofuels and bioliquids sustainability scheme [SEC(2011) 129],
  - Report on the recent progress in developing renewable energy sources and technical evaluation of the use of biofuels and other renewable fuels in transport [SEC(2011) 130] and
  - Review of European and national financing of renewable energy [SEC(2011) 131].

#### ► Projections for the development of renewable energy by 2020

- By 2020, across all sectors
  - the overall share of renewable energy in the EU will exceed the 20% target;
  - the renewable energy consumption will increase from 103 million tons of oil equivalent (Mtoe) in 2005 to 217 Mtoe;
  - almost half of the Member States (Bulgaria, Denmark, Germany, France, Greece, Lithuania, Malta, Netherlands, Austria, Slovenia, Spain, Sweden, Czech Republic) will exceed their own national targets.
- The electricity sector is expected to account for 45% of the increase in renewable energy.
  - By 2020, 37% of the electricity is expected to be generated through renewable energy.
  - Therefore, "urgent" action is needed to further develop electricity grids, to interconnect them across borders and to modernize them ("smart grids") in order to facilitate the integration of "significant volumes" of electricity produced from renewable energy [p. 5; COM(2010) 677, see [CEP Policy Brief](#)].
- The heating and cooling sector will account for 37% of the increase in renewable energy by 2020.
  - The use of biomass will continue to prevail over the use of other energy technologies (geothermal energy, solar energy, heat pumps).

- Due to a more favourable support framework, the Commission expects increased investments and development in biomass pellet industry, biomass boiler technology, co-firing power plant technology and biofuels refining.
- The transport sector is expected to account for 18% of the increase in renewable energy by 2020. By 2020, first generation biofuels (e.g. biodiesel) will remain the predominant source over second generation biofuels (e.g. biomethane) and electric vehicles [COM(2010) 186, see [CEP Policy Brief](#)].

#### ► Financing

- The Commission estimates investment needs by 2020 [COM(2010) 677, see [CEP Policy Brief](#)]
  - at 1 trillion Euros for the EU energy system (incl. networks, renewable energy, energy efficiency),
  - of which “approximately half” is needed for replacing or further developing electricity generation capacity (p. 7).
- The annual capital investment in renewable energy (S. 9)
  - today averages approximately 35 bn. Euros,
  - which, according to the Commission, would need to be “rapidly” doubled to about 70 bn. Euros and should therefore be funded.
- To reach the 20% target by 2020 in an “economical and resource efficient” manner, the EU must, according to the Commission, invest more in the research of advanced renewable energy technologies and bring down the costs of offshore wind, photovoltaic power, electric cars and second generation biofuels.
- “Financing instruments” by the EU and Member States to support renewable energy (e.g. grants, loans and loan guarantees, equity funds, feed-in tariffs, premiums, quota and certificate schemes, fiscal incentives) are to alleviate project risks in terms of technology, construction and regulatory.
- To ensure that the money spent on renewable energy is used “cost effectively” and without any distortion of competition, the choice of the “financing tools” should be related to the state of technology and the maturity of a project (p. 8).
  - With regard to the research and development of technologies, significant portions of project capital costs should be financed through the public purse, as this would be too risky for the private sector.
  - Once a technology is capable of being deployed but not yet competitive, the major portion of support should be financed by “energy consumers rather than from taxation”.
  - Support levels should be adapted gradually and predictably so as to avoid “excessive returns on capital” through falling production costs of renewables.
  - According to the Commission, the financial support for renewable energy can be “clearly” phased out only when “market failures” have been corrected and they can operate in a competitive market (p. 9).
  - In view of the tight budget situation in Member States
    - the financing of renewable energy “in the current context of macro-economic fragility and fiscal consolidation” should be recognized as a “growth-enhancing expenditure” that will provide greater returns in the future (p. 14), and
    - it is “essential” that the support of renewable energy is financed by energy consumers and not by taxpayers so as to avoid permanent “stop and go” policies (p. 9).

#### ► Member State support systems

- Only a small part of the money for funding renewable energy is provided by the EU (9.8 bn. Euros from 2007 to 2009).
- Member States can choose between various “support schemes”, such as investment aid, tax exemptions, renewable energy obligations (quotas), feed-in tariffs and premium payments (Art. 2 lit. k, Art. 3 (3) lit. a).
- The Commission repeats its call for a “greater convergence” of national support schemes in the EU [p. 11; COM(2010) 639, p. 9; see [CEP Policy Brief](#)].

#### ► Cooperation between Member States and third countries

- The Commission estimates that up to 10 bn. Euros annually could be saved if Member States treated renewable energy “as a commodity in a single European market rather than in national markets” (p. 11).
- The Commission criticizes that most Member States focus on the development of renewable energy in their own country in order to achieve their 2020 targets alone.
- The Commission calls upon Member States to make more use of the “cooperation mechanisms” for the cost-effective development of renewable energy (Directive 2009/28/EC, Art. 6 to 12; see [CEP Analysis Climate Protection](#), p. 26 et sqq., in German only).
  - “Statistical transfers” (Art. 6): Member States agree that a specified amount of energy (electricity, heating, cooling) produced cost-effectively from renewable sources in one Member State is assigned to another Member State without actually delivering any energy.
  - “Joint projects” (Art. 7 to 10): one Member State co-finances a project for producing
    - renewable energy (electricity, heating, cooling) in another Member State, whereby both must agree as to how the produced energy will count towards their respective targets (Art. 7 and 8);
    - electricity from renewable sources in a third country e.g. North Africa (Desertec, Mediterranean Solar Plan) if the electricity is actually imported to the EU (Art. 9 and 10).

- “Joint support schemes” (Art. 11): two or more Member States may agree to harmonise their national support schemes wholly or partially and define how the produced energy counts towards their respective targets.
- The Commission intends to:
  - assess in 2014 the “effective functioning” of support schemes and “cooperation mechanisms”,
  - prepare guidelines for “more harmonised reforms” of national support schemes and
  - support the development of renewable energy in the Mediterranean region.

## Policy Context

In order to double the share of renewable energy to 12% by 2012 [COM(97) 599], sector-specific legal acts have been adopted. By 2010, the share of renewable energy – in particular in electricity – is to be increased to 21% (Directive 2001/77/EC) and the share of biofuels in the transport sector to 5.75% (Directive 2003/30/EC). Moreover, the privileged access of electricity produced from renewable energy to the electricity grid has been facilitated (Directive 2003/54/EC). When after 2007 it became clear that the envisaged targets would not be met, the Directives 2001/77/EC and 2003/30/EC were replaced by the Renewable Energy Directive (2009/28/EC). Today, this covers all forms of renewable energy and constitutes the comprehensive EU legal framework for their promotion.

## Options for Influencing the Political Process

Leading Directorate General: DG Energy  
 Consultation procedure: A consultation procedure is not planned.

# ASSESSMENT

## Economic Impact Assessment

### Ordoliberal Assessment

The share of renewable energy in the energy mix of Member States should not be determined through policy decisions but through market forces in consideration of climate policy instruments, in particular emissions trading. However, it is too late for that now.

### Impact on Efficiency and Individual Freedom of Choice

**It is absolutely essential that the already decided legally binding development of renewable energy be achieved at the lowest possible cost.** Therefore, **Member States should abandon their national orientation** and, instead, do as the Commission asks and both recognize the advantages of the single market also for renewable energy **and** use the possibilities given by the renewable Energy Directive to **reduce costs through international cooperations.**

**The development of renewable energy** is unnecessarily expensive, for today it **is carried out predominantly in those Member States which subsidise it most and not where there is the best possible energy yield** (e.g. large wind parks off the Western Europe shore, hydropower stations in Scandinavia and Austria, photovoltaic systems in South Europe and solar thermal units in North Africa). As the differences related to the locations are not temporary but of a permanent nature, the power plants located at inconvenient places can only be kept competitive through subsidies. **This leads to a wrong specialisation and hinders competition in the single energy market.** It is a waste of scarce resources if non-competitive industries are being kept alive artificially through compulsory taxes. In coal mining Europe has already left this path behind (see [CEP Standpoint](#) on coal mining, in German only). The same should be done with renewable energy. **Therefore, the support of renewable energy in the EU must be better coordinated and as a result an end should be put to the highly inefficient support schemes of individual Member States.** The Commission should commit to this target in a more decisive manner.

The Commission’s call for **the national and cross-border development of electricity grids is also indispensable for an energy supply that is efficient** and as cost-effective as possible. For national and international projects (offshore windparks, Desertec, Solar Mediterranean Plan) will only achieve their full potential if the necessary energy infrastructure is available. However, it is doubtful if the development of the energy infrastructure will advance at the necessary pace by 2020 (see [CEP Policy Brief](#) on energy infrastructure).

**The promotion of renewable energy must be directed towards a clearly defined end point.** Contrary to what the Commission claims, a clear view of the phasing out of subsidies is a prerequisite for the increased efficiency of renewable energies and of integration into a competitive environment. The opposite assumption as held by the Commission, whereby subsidies should expire only *after* renewable energy has become competitive, not only negates the efficiency-boosting impact of competition but also the danger that Member States might seek to protect “their” plants for the production of renewable energy from international competition.

The development of renewable energy could actually, as feared by the Commission, be impeded by sudden changes to support schemes in Member States. However, this might not serve as an argument against Member States' decisions to cease inefficient support schemes, even at short notice.

State aid for basic research can be justified if private funding fails to materialize (cp. [CEP Analysis](#) on public aid control). However, where basic research is funded by the public purse, technology pathways should not be prescribed.

#### Impact on Growth and Employment

The renewable energy policy of the EU and the Member States inevitably leads, as the price for climate protection, to increased energy costs and thus has a negative impact on growth and employment. **A European approach to promoting renewable energy enables costs to be reduced and thus the negative impact on growth and employment to be limited.**

**Growth is not created**, as the Commission suggests, **by declaring through policy decisions that arbitrary expenditure** in favour of renewable energy is **“growth-enhancing” and will** provide greater returns in the future (p. 14). Under no circumstances must this argumentation serve to soften or even exceed state debt barriers.

#### Impact on Europe as a Business Location

The more the costs for the development of renewable energy are reduced through exploiting the potential of the single energy market, the less will Europe's quality as a business location suffer.

### Legal Assessment

#### Legislative Competence

The EU has the power to adopt energy policy measures promoting renewable energy and the interconnection of networks 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 designing national support schemes (Art. 3 (3) lit. a). Accordingly, 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 the grid system operators to power plant operators (§ 16 in conjunction with §§ 18 to 33 EEG) must finally be borne by the end consumers.

The Commission has countered concerns ([Press Release](#) of 31 January 2011) that its call for “greater convergence” represented an attack through full harmonisation on national support schemes such as the German EEG. At the same time, however, it emphasized that an EU-wide adjustment e.g. of feed-in tariffs was necessary to create a “truly European” energy market in the medium and long term.

### Conclusion

As the EU has already adopted legally binding shares of renewable energy in the energy mix of Member States, it is essential that this is achieved at the lowest costs possible. Member States should, as proposed by the Commission, use the possibilities provided by the Renewable Energy Directive to reduce costs through international cooperations, so as to ensure that the development of renewable energy is carried out where there is the best possible energy yield. Thus the negative impact of increased energy costs on growth and employment is limited. The development of energy infrastructure is absolutely indispensable for an efficient energy supply. The promotion of renewable energy must be directed towards a clearly defined endpoint regarding subsidies. Growth cannot be created through policy decisions that state that arbitrary expenditure, per se, is “growth-enhancing”.