REDESIGNING THE ENERGY MARKET

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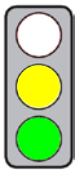
KEY ISSUES

Objective of the Communication: In the context of increasing electricity generation based on renewable energy, the Commission puts forward its ideas for the creation of a "fully functioning" electricity market.

Affected parties: The whole economy, primarily the electricity industry and energy-intensive enterprises.



Pro: (1) A renewables support scheme based to a greater extent on competition and cost effectiveness may limit the further rise in support costs.

(2) Capacity mechanisms should only be introduced where securing an adequate level of electricity generation cannot be achieved simply by greater integration of national electricity markets.

Contra: State support for renewables development hinders an accurately targeted and cost-effective EU climate protection policy.

CONTENT

Title

Communication COM(2015) 340 of 15 July 2015: Launching the public consultation process on **a new energy market design**

Brief Summary

- **Context and objectives**
  - The EU aims to be "the world leader" in the development of renewable energy (renewables) (p. 2).
  - The renewables share of gross final energy consumption in the EU will rise to 20% by 2020 and to 27% by 2030 (European Council, Conclusions of 23/24 October 2014, para. 3; see cep**Input** No. 2/2015).
  - In order to achieve the 27% development target by 2030, the renewables share of electricity generation must reach "up to" 50% by 2030 (p. 3). According to the Commission, this is not compatible with the current structure of the electricity markets ("electricity market design") in the EU. These are still based on (p. 3)
    - centralised power generation by a small number of plants,
    - national electricity markets and
    - "passive" electricity consumers.
  - The Commission calls for a "fully functioning" electricity market in the EU (p. 3). For this purpose, it wants to "redesign" the electricity markets of the Member States by
    - improving the market integration of renewables,
    - increasing "flexibility" of electricity consumers,
    - strengthening the internal electricity market,
    - expansion and development of electricity infrastructure and
    - a uniform EU "approach" where security of the electricity supply is at risk.
  - The Commission presents its ideas for redesigning the electricity markets and asks stakeholders to answer a list of questions as part of a public consultation.
- **Improving the market integration of renewables**
  - Decisions on investment in renewables will be market driven and not policy-driven. This will require
    - carbon emissions allowances ("emissions allowances") to be cut back by 2030 by way of a reform of the EU Emissions Trading System (EU-ETS; see cep**Input**) (p. 5 and 7) and
    - suppliers of electricity from renewables to be able to sell them several years in advance via futures markets (p. 6).
  - While renewables remain uncompetitive, they will be supported by the Member States. Support schemes must, however, be consistent with the EU Guidelines on State aid for environmental protection and energy 2014-2020 (see cep**Study**) (p. 7). This means they must (p. 7)
    - be market-based and cost-effective and
    - avoid overcompensation and market distortion.
  - The costs of renewables support may be reduced by greater cooperation between the Member States (see cep**Compass** EU Climate and Energy Policy, p. 92 et seq.). The Commission is considering a concrete framework for cross-border participation in support schemes in order to address the current "practical difficulties" relating to cross-border renewables support (p. 8).

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- **Increasing the "flexibility" of electricity consumers**
  - Due to state price caps and "distortive taxation", there are currently no price signals from the retail electricity market which would give electricity consumers an incentive to adapt their consumption to fluctuations in the electricity supply [COM(2013) 442; see cep**PolicyBrief**].
  - The Commission calls for (p. 8)
    - the removal of price caps on wholesale and retail electricity markets,
    - price trends on the wholesale markets to be reflected to a greater extent in retail electricity prices,
    - network tariffs to be designed in a way that does not discourage a more flexible demand response.
- **Strengthening the internal electricity market**
  - The Commission supports a rise in cross-border flows and the integration of national spot markets ("market coupling") in the EU. For this purpose, uniform EU-wide rules will be developed for cross-border intraday trading as already exist for day-ahead trading. (p. 5).
  - The markets for balancing energy, which make up for differences between supply and demand due to forecasting errors, will in future cover larger market areas in order to reduce the overall amount of balancing energy required.
- **Development of electricity infrastructure**
  - The integration of national electricity markets requires sufficient cross-border electricity infrastructure. This will be achieved by increasing the capacity of cross-border electricity connectors as compared with the capacity of domestic electricity generation ("interconnection level") [COM(2015) 82; see cep**PolicyBrief**]. The Commission criticises the fact that
    - the interconnection level for the expected cross-border power flows is still too low,
    - transmission system operators rarely use revenues from transporting electricity from low-price to high-price areas ("congestion charges") for development of the network (p. 11).
  - The development of "smart grids" [COM(2011) 202; see cep**PolicyBrief**], which record and coordinate electricity generation, consumption and flow in real time by way of digital measurement, communication and control systems, may mitigate the consequences of a decentralised and fluctuating electricity supply from renewables. The Commission calls for closer cooperation between the transmission and distribution network operators with regard to planning and operating smart grids.
- **A uniform EU approach where security of the electricity supply is at risk**
  - The Commission wants Member States to use uniform EU methods to assess whether there is a risk to security of the electricity supply.
  - Risks to the electricity supply in the EU should primarily be avoided by (p. 14 et seq.)
    - closer integration of national electricity markets in the EU,
    - "effective electricity pricing" providing sufficient incentive for investment in new power plants, and
    - flexible electricity demand.
  - Some Member States have also developed "capacity mechanisms" whereby power plant operators receive payments for the provision of generation capacity irrespective of whether electricity is sold (see cep**Input** Capacity Mechanisms). The Commission calls for capacity mechanisms to be used only as an exception when the electricity supply cannot be secured by the electricity market itself (p. 14).
  - The decision as to whether a Member State should additionally introduce a capacity mechanism to guarantee security of supply will be based on an EU-wide "standardised assessment" (p. 14).
  - Capacity mechanisms must be compatible with the Commission's Guidelines on state aid for environmental protection and energy [C(2013) 7243; see cep**PolicyBrief**]. In particular, they must be designed so that (p. 15)
    - all power plants are permitted to offer their generating capacity irrespective of their generating technology,
    - remuneration is limited to the provision of capacity and
    - provision of capacity from other Member States is generally possible.
  - The Commission considers developing one or a number of reference models for capacity mechanisms in order to make them more comparable and to facilitate the provision of capacity from other Member States.

Policy Context

The EU wants to reduce greenhouse gas emissions by 20% by 2020 and by 40% by 2030; increase the renewables share of gross final energy consumption to 20% by 2020 and to 27% by 2030 and increase energy efficiency by 20% by 2020 and by 27% by 2030 (see cep**Compass** EU Climate and Energy Policy, p. 6 et seq. and p. 112 et seq.). In February 2015, the Commission submitted a Strategy for an "Energy Union" [COM(2015) 80; see cep**PolicyBrief**] in which it sets out its plans for energy and climate policy for the next five years.
This Communication forms part of what is called the Commission's "Summer Package" which also includes a proposal for the amendment of the ETS Directive (2003/87/EC; see cep**Compass** EU Climate and Energy Policy, p. 10 et seq.) [COM(2015) 337; see cep**PolicyBrief**], a proposal for a Regulation to replace the Energy Labelling Directive (2010/39/EU; see cep**Compass** EU Climate and Energy Policy, p. 82 et seq.) [COM(2015) 341;

see cep**PolicyBrief**] as well as a Communication on strengthening the role of energy consumers [COM(2015) 339; see cep**PolicyBrief**].

Options for Influencing the Political Process

Directorates General:	DG Energy (leading)
Consultation procedure:	All citizens have until 8 October 2015 to express their opinion: https://ec.europa.eu/energy/en/consultations/public-consultation-new-energy-market-design; https://ec.europa.eu/energy/en/consultations/public-consultation-risk-preparedness-area-security-electricity-supply

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

The Commission rightly indicates that the decision on renewables development must be market and not policy driven. This view is, however, inconsistent with the fact that the Member States must achieve concrete quantifiable objectives for the renewables share of energy consumption by 2020 and that the EU has set itself targets in this regard for 2030. It is not yet apparent whether it will ever be possible for the construction and operation of renewables plants to be financed via the electricity market. Although the costs of building renewables plants have fallen in recent years, the wholesale prices are also falling as renewables development increases. In addition, wind and solar energy plants have greater capability of supplying electricity at times when, due to weather conditions, there is in any case plenty of energy on the grid and the wholesale price is therefore low.

It is not yet apparent whether the reform of the EU-ETS will give rise to a significant increase in the price of emissions allowances in the EU, which in itself would provide sufficient incentive for investment in renewables to achieve the renewables development target for 2030. In any case, for reasons of climate policy, there should be no attempt to increase the allowance price because a lower allowance price provides a clear indication that there are options which are cheaper than renewables for achieving the EU emissions reduction targets.

Impact on Efficiency and Individual Freedom of Choice

In order to achieve the policy-based renewables targets, renewables must continue to be supported for the foreseeable future. **State support for renewables development** takes away part of the steering effect of the EU-ETS and thus **hinders an accurately targeted cost-effective EU climate protection policy. Renewables support which is based more on competition and cost-effectiveness** – as stipulated by the Commission in the Guidelines on state aid for environmental protection and energy – **may at least limit a further increase in support costs.**

Comprehensively opening up national renewables support systems to foreign electricity suppliers may significantly increase the efficiency of renewables support. Thus the rules, being considered by the Commission, on reducing "practical difficulties" – e.g. administrative hurdles – to cooperation between Member States will mean that electricity from renewables is no longer supported primarily where the rate of support is highest but where it can be most cost effectively generated.

Existing price restrictions on the wholesale and retail markets, which prevent supply and demand driven differences in the electricity price over the day, should be removed because consumers will only be willing to adapt their demand to fluctuations in the electricity supply if the electricity price differences at different times of the day are sufficiently large.

The coupling of national spot markets, supported by the Commission, will make the supply of electricity in the participating Member States cheaper and more secure, firstly because cross-border competition among electricity generators will increase, leading to lower electricity prices, and secondly because fluctuations in the electricity supply caused by renewables will be more evenly spread over several Member States.

Increased market coupling must, however, be accompanied by the development of cross-border electricity infrastructure. The Commission rightly criticises the fact that Member States are resisting the agreed increase in the interconnection level so that cross-border power flows are being hindered by a lack of electricity interconnectors.

Greater integration of the national electricity markets and the removal of government price restrictions may increase the security of the electricity supply. Although capacity mechanisms can make the electricity supply more secure, they also increase the risk of antiquated power plants being subsidised beyond their period of economic viability, which distorts competition. **Capacity mechanisms should** thus **only be introduced where** it is proven that **securing adequate electricity generation cannot be achieved solely by greater integration of the national electricity markets** and removal of government price restrictions. As the Commission stipulates, such proof should have to be provided by way of a uniform EU procedure so that national efforts at market isolation can be eliminated.

Insofar as capacity mechanisms are introduced, they must comply with the EU law on state aid. In particular, capacity payments must be determined by way of a competitive procedure. **It must be ensured that power plant operators from other Member States are not excluded from participating in a national capacity market.** The development of uniform EU reference models for capacity markets will facilitate this.

Impact on Growth and Employment

A competitive concept for renewables support limits the burden arising from policy-based renewables development. This will at least minimise the increase in electricity prices caused by renewables support and the resulting negative impact on economic growth and employment.

Impact on Europe as a Business Location

Political measures which have a positive effect on security of the electricity supply in the EU without giving rise to significant electricity price increases, improve the EU as a business location.

Legal Assessment

Legislative Competency

Unproblematic. The EU is entitled to issue energy policy measures in order to secure the functioning of the energy market, to guarantee security of energy supply, to promote the interconnection of energy networks as well as to support energy efficiency, energy savings and the development of new and renewable energy sources (Art. 194 TFEU).

Subsidiarity

Unproblematic.

Possible future follow-up measures by the EU

Depending inter alia on the result of the public consultation, the following Acts in particular may have to be amended: Internal Electricity Market Directive (2009/72/EC), Electricity Trade Regulation (No. 714/2009), CEER Regulation (No. 713/2009), TEN-E Regulation (No. 347/2013), Directive on safeguarding security of the electricity supply (2005/89/EC), Energy Efficiency Directive (2012/27/EU) and Renewable Energies Directive (2009/28/EC).

Conclusion

State support for renewables development hinders an accurately targeted and cost-effective EU climate protection policy. A renewables support scheme based to a greater extent on competition and cost effectiveness may limit the continued rise in funding costs. Capacity mechanisms should only be introduced, if a reasonable level of electricity generation cannot be achieved simply by greater integration of national electricity markets. It must be ensured that power plant operators from other Member States are not excluded from participating in a national capacity market.