ENERGY INFRASTRUCTURE

Status: 10 January 2011



MAIN ISSUES

Objective of the Communication: The Commission presents its strategy for developing the energy infrastructure in Europe.

Parties affected: All citizens, the overall national economy, in particular power supply companies.



Pros: (1) An improved coordination and strategic planning of cross-border infrastructure development in the EU is indispensable for the completion of the internal energy market.

(2) Swift approval procedures for energy infrastructure projects expedite the development of infrastructure and improve the energy supply in the internal market.

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CONTENT

Title

Communication COM(2010) 677 of 17 November 2010: **Energy infrastructure priorities for 2020 and beyond – a blueprint for an integrated European energy network**

Brief Summary

- Challenges and targets
 - According to the Commission, the EU must urgently invest in "outdated and poorly interconnected" energy infrastructure (in particular in energy, natural gas, oil, CO₂) in order to meet their energy policy and climate objectives by 2020 (p. 4).
 - "Fully integrated energy infrastructures based on smart and low-carbon technologies" are a precondition (p. 5) to:
 - establishing a well-functioning internal energy market,
 - increasing security of supply,
 - integrating renewable energies into the energy system and
 - boosting energy efficiency.
- Investment needs and financing gap
 - The Commission estimates investment needs until 2020 as follows:
 - 1 trillion euros for the entire EU energy system (incl. networks, renewable energies, energy efficiency),
 - 500 bn euros of which will be needed for networks alone (energy transmission networks, electricity and gas storage, "smart grids"),
 - out of these investments, 200 bn euros are needed for energy transmission networks alone while
 - approx. 100 bn euros can be raised by the market and
 - a financial gap of approx. 100 bn euros remains.

New planning method

The Commission intends to replace the current procedure for developing trans-European energy networks (TEN-E) with "inflexible project lists" through "new EU energy infrastructure policy" (p. 5) with a "new method for strategic planning" (p. 9).

- A "smart supergrid" is to interconnect networks in the EU and beyond ("energy infrastructure map").
- EU action should focus on a limited number of infrastructure priorities by 2020.
- A limited number of "projects of European interest" (PEI) is to be determined.
- PEI are to be implemented with a "new set of tools":
 - strengthened regional cooperation ("regional Initiatives", see <u>CEP Compass</u>, p. 18 et seq., in German only),
 - streamlined approval procedures,
 - better information for decision makers and citizens and
 - "innovative funding instruments".
- Infrastructure priorities
 - Priority Corridors for the electricity grid: In order to integrate the electricity generated from renewable energies in North and South Europe into the electricity grid, the EU is to focus on the following "priority corridors" by 2020:
 - offshore grid in the Northern Seas and interconnections in North and Central Europe;
 - interconnections in South Western Europe, in particular between Spain and France;
 - interconnections in Central Eastern and South Eastern Europe;



- strengthening the East Western interconnections and the integration of the Baltic states in the EU electricity market through the implementation of the "Baltic Energy Market Interconnection Plan" (BEMIP).
- Priority corridors for the gas supply: In order to enhance the security of gas supply and, at the same time, diversify the sources of supply, the EU should focus on the following "priority corridors":
 - "Southern corridor" to fuel imports from the Caspian Basin, Central Asia and the Middle East.
 - Linking the Baltic Sea, Black Sea, Adriatic and Aegean Seas by implementing the BEMIP and a "North-South Corridor" in Central Eastern Europe and South Eastern Europe.
 - "North-South Corridor" in Western Europe to eliminate bottlenecks and to link external supplies from, amongst others, Africa.
- "Smart grids" are electricity grids "that can cost efficiently integrate the behaviour and actions of all users connected to it" (p. 36).
 - The Commission intends to set incentives for "rapid" investments in "intelligent network" infrastructures for:
 - a competitive electricity retail market,
 - an energy services market which gives choices for energy savings and efficiency,
 - the integration of renewable and distributed energy generation into the electricity network and
 - "new types" of electricity demand [e.g. electric vehicles; COM(2010) 186, see CEP Policy Brief].
- In 2011, the Commission intends to assess the need for rules regarding the introduction of "smart grids".
- "Electricity highways" are electricity transmission wires with a higher capacity than existing highvoltage transmission grids in terms of the electricity volume and transmission distance (p. 41).
 - "Electricity highways" should:
 - accommodate into the electricity grid windsurplus generation in the Northern Seas and in the Baltic sea area as well as renewable energies from East and South Europe and Northern Africa,
 - connect new generation capacities with large storage capacities in Nordic countries and the Alps and with large consumption centres in Central Europe and
 - cope with an increasingly flexible and distributed electricity demand and supply.
 - The Commission proposes to establish "immediately" a plan for the development of new technologies, notably direct current transmission and voltage levels higher than 400 kilovolts.

- CO₂ transport infrastructure

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- According to the Commission, large-scale CO₂ capture and storage (CCS) [COM(2008) 18, see <u>CEP Policy</u> <u>Brief</u>] is needed to achieve the lowest CO₂ levels possible in the EU economic system ("decarbonisation") after 2020.
- Given that suitable CO₂ storage sites are not evenly distributed across Europe, the Commission deems an extensive CO₂ transport infrastructure necessary. This can go beyond the EU borders where Member States have no CO₂ storage sites.

Identification of "projects of European interest" (PEI)

- In order to implement infrastructure priorities, in 2012 a list with "projects of European interest" (PEI) will be drawn up and updated every 2 years.
- PEI are to be selected according to the following criteria:
 - Electricity infrastructure: contribution to security of electricity supply; capacity to connect renewable energies and transmit it to major consumption and storage centres; increase of market integration and competition; contribution to energy efficiency and smart electricity use.
 - Gas infrastructure: diversification of energy sources, supplying counterparts and routes; increase in competition through increase in interconnection level; increase of market integration and reduction of market concentration.

• Faster and more transparent permit granting procedures

- National approval procedures for PEI are to be streamlined and better coordinated.
- In Member States, an authority serving as a "single interface" ("one-stop shop") coordinating the approval
 procedure between project developers and national, regional and local authorities.
 - Member States remain in charge of the allocation of decision-making powers.
 - For cross-border projects, the Commission wishes to explore the possibility of coordinated and joint procedures.
- Approval procedures should be completed within a certain time limit according to the accompanying document by the Commission, after 5 years at the latest [SEC(2010) 1395, p. 32].
 - The Commission wishes to explore whether in the case of failure to comply with a time limit a national authority should be given "special powers" to adopt a final decision.
 - The public is to be involved "early and effectively" in the decision-making process.
- The right to appeal authorities' decisions is to be "clarified and strengthened".
- The Commission wishes to develop guidelines to increase the transparency of approval procedures for all parties involved – ministries, authorities, project developers and affected populations.
- The Commission is considering providing "rewards and incentives, including of a financial nature" to regions or Member States that would facilitate a timely authorisation of PEI (p. 16).



- In 2011 [SEC(2010) 1395, p. 41], the Commission wishes to:
 - carry out comprehensive consultations among affected parties (incl. authorities, network operators, non-governmental organisations),
 - examine approval procedures in Member States in a detailed manner and
 - submit a legislative proposal regarding approval procedures.
- Financing
 - The Commission estimates that despite improved planning methods and new instruments, in 2020 there
 will still be an investment gap of 60 billion euros.
 - For the financing of infrastructure projects, private sources are to be leveraged. For that purpose, "cost allocation" is to be improved:
 - According to the Commission, electricity and gas infrastructure should also in future be mainly financed through regulated consumer tariffs ("user pays principle"). However, the tariff setting of national regulatory authorities takes too little account of EU-wide priorities.
 - In 2011, the Commission intends to submit guidelines or a legislative proposal on cost allocation to address major or cross-border projects through tariff or investment rules.
 - National regulators are to agree on common principles in relation to cost-allocation of interconnection investments and related tariffs.
 - The Commission wishes to propose "innovative market-based solutions" addressing the shortfall in equity and debt financing, whereby the following option, amongst others, will be examined: equity participation and support for infrastructure funds; facilities for project bonds; risk-sharing facilities; and public private partnership (PPP) loan guarantees.

Statement on Subsidiarity by the Commission

According to the Commission, the EU cannot achieve its energy policy and climate targets by 2020 without the further development of a European energy infrastructure. "This is not a task which a single Member State can achieve on its own" (p. 4).

Policy Background

The action plan "An Energy Policy for Europe" [COM(2007) 1, see <u>CEP Policy Brief</u>, in German only] sees the securing of the energy supply, EU competitiveness and the combating of climate change as major EU challenges. In 2007, the European Council adopted the <u>"20-20-20 Decision</u>": By 2020, the EU should reduce its greenhouse gas emissions by at least 20% compared to 1990; Member States should save at least 20% of the EU energy consumption projected for 2020 through energy efficiency improvements; the share in renewable energy in the total EU energy consumption should be at least 20% in 2020.

In its flagship initiative "Resource efficient Europe" – an integral part of its Strategy "Europe 2020" [COM(2010) 2020, see <u>CEP Policy Brief</u>] – the Commission announced proposals for the further development of trans-European networks on a European "supergrid" and the establishment of "smart grids". In its EU energy strategy 2020 [COM(2010) 639, see <u>CEP Policy Brief</u>] it calls for a new approach to the planning, development and operation of energy infrastructures. As the energy infrastructure to be built in coming years will still be used in 2050, the Commission wishes to publish a comprehensive "Energy Roadmap towards 2050" containing various scenarios for an energy mix. They should demonstrate how the long-term EU target of a low-carbon economic system can be achieved and which energy policy decisions are to be taken to that end.

Options for Influencing the Political Process

Leading Directorate General:	DG Energy
Consultation procedure:	Not provided

ASSESSMENT

Economic Impact Assessment

Ordoliberal Assessment

The selection of subjects addressed within the Communication is generally appropriate. In view of the fact that concrete measures to further develop the energy infrastructures have not yet been stipulated, it seems questionable if development will be carried out as fast as the Commission wishes. Limitating EU measures to just a few infrastructure projects "of European interest" (PEI) could help prevent the unsystematic fragmentation into too many single projects.

Impact on Efficiency and Individual Freedom of Choice

The optimised coordination planned in connection with the "new EU energy infrastructure policy" and the "strategic planning" of cross-border infrastructure development in the EU are needed in order to implement the internal energy market. Both are also required to keep the infrastructure apace with the politically pushed development of renewable energies.

The development of a suitable key and of shared cost allocation principles in Member States, especially for cross-border infrastructure projects, is an essential prerequisite for infrastructure development. In order



to avoid setting incentives for infrastructures that are too expensive, misdirected or unnecessary, the development costs should generally only be borne by users who benefit from a higher security of supply and lower energy costs. **Tax-based financing should be taken into account only in a limited number of exceptional cases**. This applies in particular to infrastructure projects which cannot be financed through usage fees, but which are desirable for the completion of a cross-linked internal energy market and the security of energy supply. When the Commission substantiates its concept of financing the further development of infrastructure, it must ensure that the relationship between rule and exception in financing infrastructure development is maintained. The costs incurred through the development of electricity generation must be borne by the energy producers in order to avoid disincentives.

Swift approval procedures regarding energy infrastructure projects expedite the development of infrastructure and thus improve the energy supply in the internal market. However, the real challenge lies in ensuring the support of the affected local public, in particular where infrastructure projects are concerned whose allegedly negative impact, such as a changed local scenery, do not create any local benefits. This applies in particular to electricity storage or cross-border power lines. Where public acceptance is not provided, it will not be possible to implement important infrastructure projects as quickly and extensively as necessary.

Impact on Growth and Employment

Energy infrastructure projects are accompanied by short-term effects at regional level. Nevertheless, it is much more important that a secure, reliable and economical energy supply creates positive long-term effects for growth and employment.

Impact on Europe as a Business Location

A secure, reliable and economical energy supply increases the quality of Europe as a business location.

Legal Assessment

Legislative Competence

Unproblematic. The EU has the power to adopt energy policy measures, in particular to foster the interconnection between energy networks in order to ensure the functioning of the energy market and energy supply and to promote energy efficiency and energy savings (Art. 194 TFEU). Moreover, the EU is entitled to participate in the setting-up and further development of "trans-European networks" in the field of energy (TEN-E) in order to promote the interconnection and interoperability of national networks (Art. 170 TFEU). To this end, the EU may establish guidelines identifying "projects of common interest" (Art. 171 AEUV).

Subsidiarity

The Commission is right to state that an EU-wide harmonisation of the approval procedures with a final decision competence at EU level is inconsistent with the principle of subsidiarity [SEC(2010) 1395, p. 32]. The Commission's step-by-step approach of developing guidelines on the basis of comprehensive consultations and a thorough examination of national approval procedures gives rise to optimism regarding a legally permissible degree of intervention. A final assessment will not be possible until the Commission has published concrete proposals.

Proportionality

Currently not evaluable.

Compatibility with EU law

The Commission is right to state that the proposed "streamlining" of the approval procedure for PEI might collide with participation rights of the parties affected and the public. These are anchored in particular in the following EU laws: the EU Directive – based on the international Århus agreement – on public participation in respect of the drawing up of plans and programmes relating to the environment (2003/35/EC); the Directive on the assessment of the effects of certain public and private projects on the environment (85/337/EEC); the Directive on strategic environmental assessment (2001/42/EC). Accordingly, the Commission wishes that "ensuring open and transparent debates" enhances public trust and acceptance of the installations, creates transparency to all parties affected and facilitates public participation in the decision-making process (p. 14). A final assessment will not be possible until the Commission has published concrete proposals.

Compatibility with German Law

"Streamlining" approval procedures for PEI represents a potential intrusion into the planning rights of Member States and the participation rights of parties affected and the public. A final assessment will not be possible until the Commission has published concrete proposals.

Conclusion

The intended optimisation of the coordination and strategic planning of cross-border infrastructure development in the EU is indispensable for the completion of the internal energy market. A critical precondition for the further development of infrastructure is the development of a suitable key for cost allocation, in particular for cross-border infrastructure projects. Their financing should generally be borne by users who benefit from a higher standard of supply security or lower energy costs; only in a very limited number of exceptional cases should tax-based funding be taken into account. Swift approval procedures for energy infrastructure projects improve the energy supply in the internal market.