

Europe needs smart grids now.
T&D Europe¹ views on the current challenges of the EU Energy Policy.
13 April 2011

Since the entry into force of the Treaty of Lisbon and the nomination of the Barroso II Commission, the energy policy has been very high on the EU agenda, with a series of strategy documents and action plans tabled. Recent geopolitical developments in the Middle East and the major nuclear accident in Japan confirm in a hard manner this need for a strong energy policy at EU level, which is competitive, sustainable, secure and affordable. This policy also requires a long-term vision and it is therefore highly appreciated that, following and building up on its Energy Strategy 2020, the European Commission is now forward-looking to the next forty years with the Roadmap for moving to a Low Carbon Economy in 2050 and the future Energy Roadmap 2050.

As providers of technologies, the companies of the electricity transmission and distribution equipment and services, represented within T&D Europe, are at the very centre of the economic and technology revolution currently at work in the energy field. We indeed strongly believe that **electricity and electricity technologies are at the core** of this revolution, and provide the major tools to achieve the 20/20/20 targets: reaching and moving beyond the three objectives (reduction of CO₂ and other greenhouse gases, improvement of energy efficiency and increase of the renewable part in the energy offer) require a profound modernisation of our electricity networks in Europe. Moreover, such a modernisation will enhance the global competitiveness of the European T&D equipment and services industry and help maintaining at the technological top.

As the deployment of a new and ambitious energy policy is now on track, T&D Europe would like to provide with a few thoughts on how, in our view, this deployment should take place.

1. A fully completed EU Internal Market for electricity.

T&D Europe fundamentally supports the deregulation of power supply and welcomes the coming into force of the third energy package on 3rd March 2011. This legislation (and, where necessary, the legislation transposing the second energy package) has now to be fully implemented in all Member States. T&D Europe supports Energy Commissioner Oettinger's commitment to closely monitor the progress of this

¹ T&D Europe (www.tdeurope.eu) is the European Association of the Electricity Transmission & Distribution Equipment and Services Industry, which members are the European National Associations representing the interests of the electricity transmission and distribution equipments manufacturing and derived solutions. The companies represented by T&D Europe account for a production worth over € 25 billion EUR, and employ over 200,000 people in Europe.

implementation, as underlined in his speeches at the inauguration of the Agency for the Cooperation of Energy Regulators (ACER) on 9th March 2010.

T&D Europe also supports the role of the ACER in its functions to ensure the full deployment of the Electricity Internal Market, notably the preparation of guidelines for the preparation of harmonized network codes by ENTSO-E, and its general advisory role towards the European Commission on possible improvements to the functioning of the Internal Market.

2. A strong push for private and public investments in electricity infrastructures

Investments require a stable political and legislative framework, without which they are postponed or abandoned, due to difficulties to proceed with calculations or to too short break-even time for long-term investments, especially since network operators have been privatised.

T&D Europe has carefully read the Commission communication on energy infrastructure priorities for 2020 and beyond. We fully support the push for simplification of authorisation procedures for the construction of new infrastructure projects, particularly for trans-border interconnection projects, where cooperation between Member States has to improve, and the need to complete it by public awareness-raising and acceptance campaigns.

We also believe that market attractiveness is the way to foster a booming investment culture for the European grids. In the case of T&D equipment and services, this means ensuring investment security with sufficient return on investment - and eliminating existing investment barriers. Appropriate incentives should be given to regulators on how to upgrade the network and the ageing structures, especially with regards to T&D equipment.

3. An acceleration of the deployment of smart grids

T&D Europe has largely contributed to the work of the European Commission Smart Grid Task Force and is now looking forward to the formal tabling of the Communication in April 2011. We fundamentally support the five axes within which the Commission envisages to foster the deployment of smart grids, namely

- the development of standards, which should be in line with the current international standards framework;
- the protection of data privacy and security, which will require a clarification about data ownership;
- the enactment of regulatory incentives, **which in our view clearly should take the form of a directive**, developing a harmonized approach to all issues (technical, privacy/data protection, organisational, cross issues between energy and ICT, interoperability), with clear identified targets in energy

efficiency, CO₂ reduction, integration of renewable and KPIs in identifying customer services related to the objectives mentioned above;

- the guarantee of a competitive retail market protecting consumers interests;
- the support to innovation, fully recognising the role and encouraging the participation of equipment manufacturers in relevant bodies such as the European Electricity Grid Initiative (EEGI).

4. A stable and predictable legislative framework

As representative of equipment manufacturers in the high and medium voltage sector, T&D Europe underlines that the entire product-related legislation should comply with the concept of “better” or “smart legislation” put forward by the European Commission itself, and only be developed and implemented where necessary, namely where the market or industry initiatives are not delivering. In our sector, international standardisation is the level where health, safety and environment requirements are being tackled.

EU EHS legislation is affecting our T&D equipment in two areas, where T&D Europe is currently directly involved with the Commission services via expert or stakeholders groups:

a) Review of the F-gases regulation (EC) 842/2006

T&D Europe would like to reiterate the importance of SF₆ as a switching and insulating medium in medium-voltage, high-voltage and very high-voltage switchgear for Electricity Transmission and Distribution networks. The entire European electrical energy sector, several years before the Kyoto Protocol entered into force, analysed the use and handling of SF₆ intensively and consequently implemented the experience and suggestions for improvement from an early stage, with respect to performance, safety and also to the reduction of greenhouse gas emissions.

We welcomed the F-gases regulation, and believe that, since its implementation is recent, priority should be given to its full transposition and implementation in all Member States.

T&D Europe has prepared a position paper and a detailed technical paper on the subject, but would like to underline that the electrical sector in Europe (also in Japan) has already reached what can be considered the technical limits in the mitigation of emissions by application of the highest technical standards. Only the replacement of older, less efficient, equipment by state-of-the-art new equipment will contribute to improvements in reduction of emissions. The European industry will also contribute to SF₆ emission reduction by supplying to other countries, equipment and technical assistance.

Finally, we want to underline that SF₆ is used in a closed cycle system in order to avoid emissions into the atmosphere. The so called re-use concept, founded on international standards, has been put in place, allowing the re-use of SF₆.

b) Implementing measures for transformers in the framework of the Eco-design directive

T&D Europe has been closely involved with the feasibility study, carried out under the supervision of DG Enterprise, on the preparation of Implementing Measures for transformers within the Eco-design directive. We are generally satisfied with the outcome of the report and look forward to contributing to the next steps, including the drafting of the Implementing Measures.

5. A support for energy R&D by EU public funds

T&D Europe is currently finalising its contribution to the public consultation on the Commission Green Paper “Towards a Common Strategic Framework for EU research and innovation funding”. Framework Programmes have provided essential support to the European academic and industry sector, particularly in the energy field. T&D Europe is convinced that by optimising the orientation and implementation of the 8th Framework Programme, notably with respect to implementation risks, its positive impact on the European industry can be further improved.

Improvements in areas such as visibility of programmes, reduction of time between the publication of a call and the project granting, more financial latitude of coordinators towards project partners, and better risk coverage would be particularly welcome.

In terms of research areas, T&D Europe would suggest to focus priorities on electricity storage, power electronics, materials for electric energy technologies, environment performance indicators related to electricity, direct current high voltage systems and embedding smart grids in Europe (coordination with other initiatives).

6. The way forward

To further support the deployment of our thoughts within the new EU energy policy, T&D Europe believes that, amongst other policy tools but of particular relevance, a follow up of the Electra report of June 2008 and the subsequent Commission Communication of October 2009 could provide a strong policy impetus and supports such a follow up.