

# ENERGY INFRASTRUCTURE FORUM 2016

Session 1: Energy Networks for Energy Transition

Gerhard Seyling, President of T&D Europe:  
«Industry and technology for the Future Energy Transmission and Distribution»

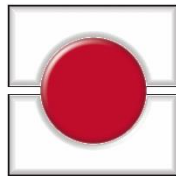
Copenhagen, Moltkes Palæ  
23 June 2016



The European Association of the Electricity Transmission  
and Distribution Equipment and Services Industry

# ABOUT T&D EUROPE

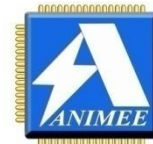
- T&D EUROPE is the European association of the electricity transmission and distribution equipment and services industry.
- Our scope includes the complete range of products and services necessary to transport and distribute electricity in high and medium voltage, between the producers and the end users. This includes the full range of grid technologies, including advanced, smart systems suitable for interaction with renewable energies and ICT.
- The companies represented by T&D Europe account for a production worth over €25 billion, and employ over 200,000 people in Europe.
- Members are national associations:



**EMSAD**



CONFINDUSTRIA



# ELECTRICITY NETWORKS: BACKBONE OF A SUCCESSFUL ENERGY TRANSITION

1. Electricity is THE enabler for a sustainable energy global eco-system
2. Regionally extended and adequately equipped electricity networks are an accepted facilitator for integrating even very high shares of renewable energy
3. They also support increasing shares of distributed power generation by levelling local feed-in peaks
4. Well designed T&D networks are ensuring the necessary security and resilience required for the stability of the system, from generation to low voltage end-users, as clearly demonstrated in the e-Highway2050 project
5. **However, speed of deployment is of utmost importance and not sufficient today.**



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# EUROPEAN T&D INDUSTRY CONTRIBUTION

The European T&D industry has done its homework by developing many solutions to support the energy transition over the past 10 years.

- HVDC solutions, notably enabling cost-efficient low-loss transmission of (giga-watt) power from offshore wind farms to mainland
- HVDC/HVAC technologies for an overlay grid
- High voltage cables as an additional means to increase acceptance of infrastructure
- Intelligent microgrid/nanogrid solutions with distribution energy management systems
- Electricity storage via battery
- Intelligent MV/LV transformer substation (integrating monitoring, telecontrol and power-flow control)
- Power electronics for distribution grids (voltage control and power quality)

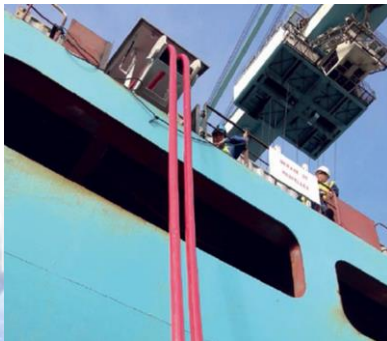


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# NEED FOR URGENT DEPLOYMENT

- The right framework is in place, including the four energy targets and the 3rd energy package
- Technologies are available in and from Europe and European T&D manufacturers are ready to support network operators to deploy them
- Business cases and incentives for future-proof/non conventional solutions are necessary; it is urgent to adapt regulatory schemes in the EU:
  - Rewarding innovation
  - Reflecting long-term benefits of investments
- Once the need of transmission lines has been identified and confirmed, implementation needs to be accelerated

**It is now up to policy makers and networks operators to accelerate deployment!**



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