

The Climate Change Agenda

Towards Sustainable Electricity Systems and Competitive Electricity Market

- New era in the power sector with distributed generation,
- Expansion of the use of electricity in heating/cooling, transport etc, with increasing demand,
- New structure and rules in the European power system for efficient management, ENTSO-e,
- Actions on energy efficiency and new power generation with zero emission,
- High RES penetration into the future networks with storage facilities and flexible power units,
- Competitive electricity market with large RES penetration and charges for CO₂ emission after 2013

Sustainable Electricity Systems

Large Penetration of RES into the Electricity Sector

- Integration of RES into the management and operation structure of the networks for high penetration,
- Optimum mix of the RES considering their complementarity for efficient penetration into the network and geographical dispersion ,
- The feed-in tariff, a tool for policy in RES development and step to the entry in the electricity market,
- Large offshore wind parks and super-grid in the North Sea with 35€/MWh are designed for participation in the electricity market,
- Solar Photovoltaic in the south European countries could be exploited, grid parity soon and beginning of the next decade competitive in the electricity market
- Forecasting models for solar and wind power generation for efficient management in the market

Sustainable Electricity Systems in the Region

Sharing the Same Vision

- The way for large RES penetration is difficult: prudence, innovative technologies, time and investment are needed,
- Sustainable development combined with competitiveness and maximizing the social and economic benefits,
- Large RES penetration, the main issue for the power sector in the next decades, cooperation in R&D activities,
- RES are going to be competitive with fossil fuel power generation, policy and measures for participation in the market, virtual power plants,
- Integrated action plans for RES development in SE Europe and Trans-European power transmission lines