



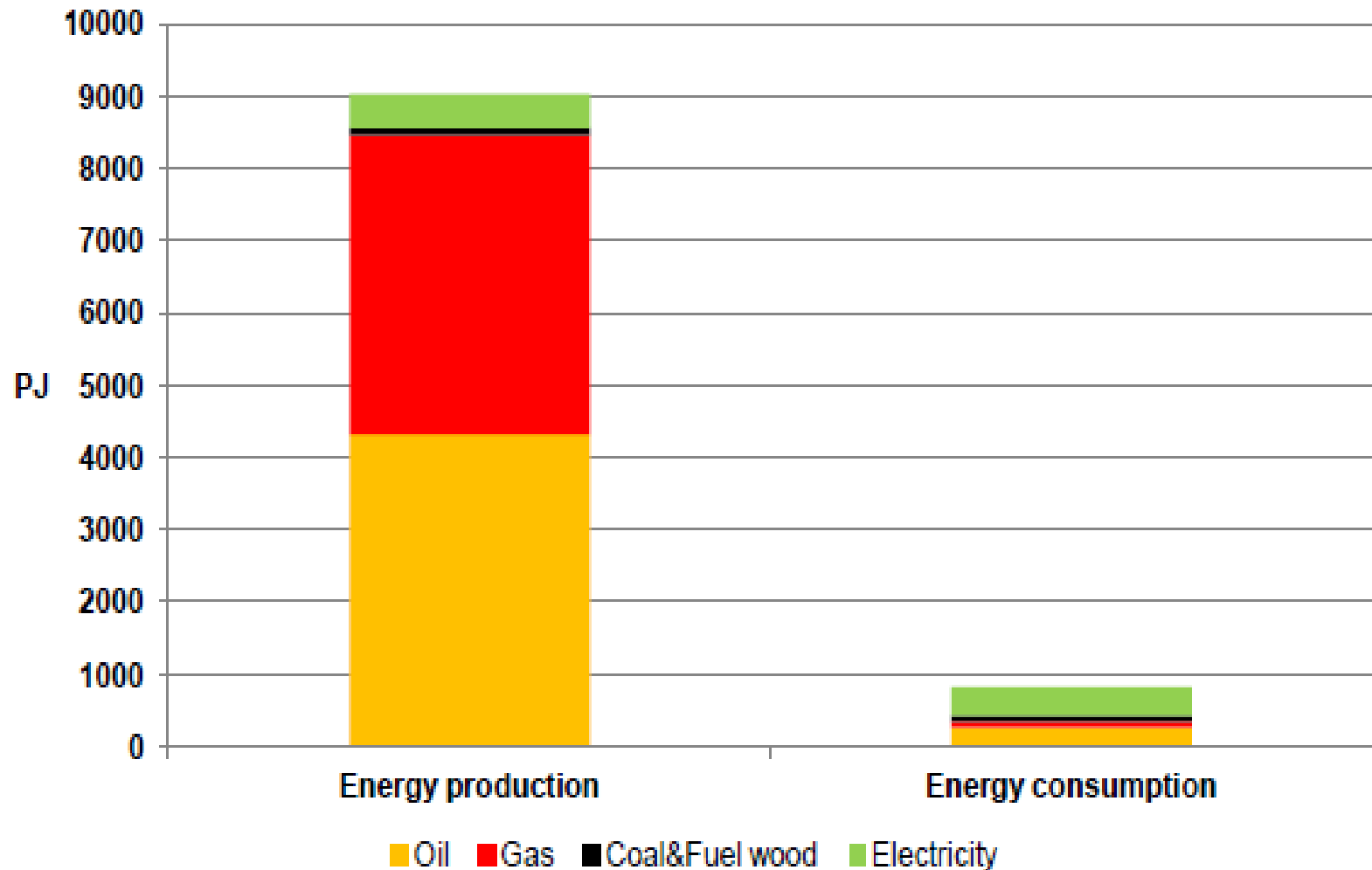
OLJE- OG ENERGIDEPARTEMENTET

# Renewable energy policy in a European context – Norway

Nordic - Baltic conference in Tallinn 18. october 2012

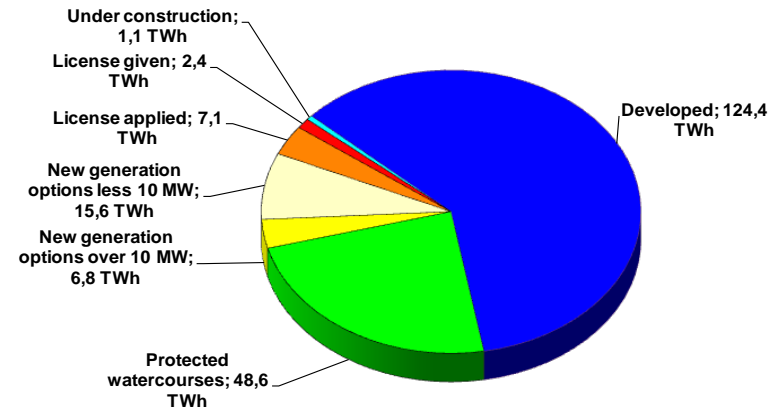
Deputy Director Johan Vetlesen, Ministry of Petroleum and Energy , Norway

# Production and consumption of energy in Norway (2009)

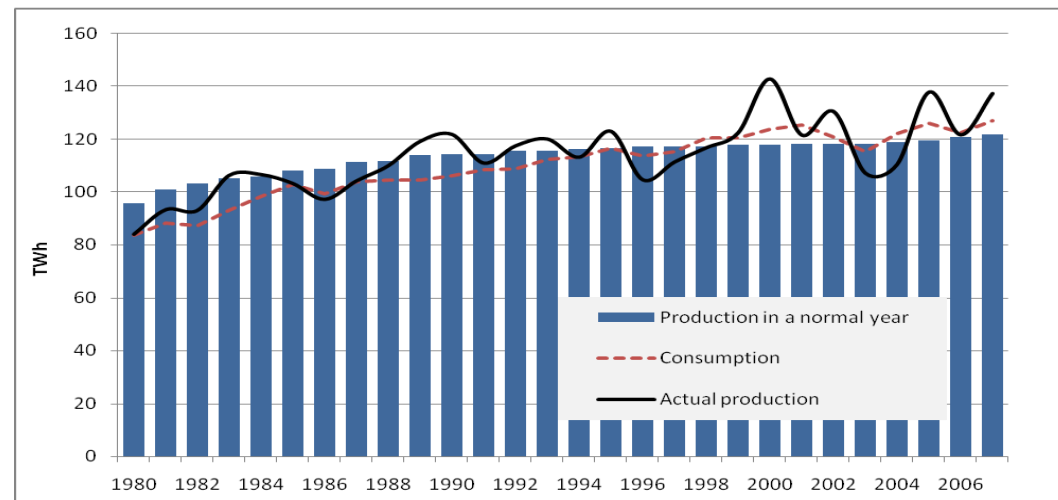


# Electricity Production in Norway

## Hydropower potential as of 01.01.2011



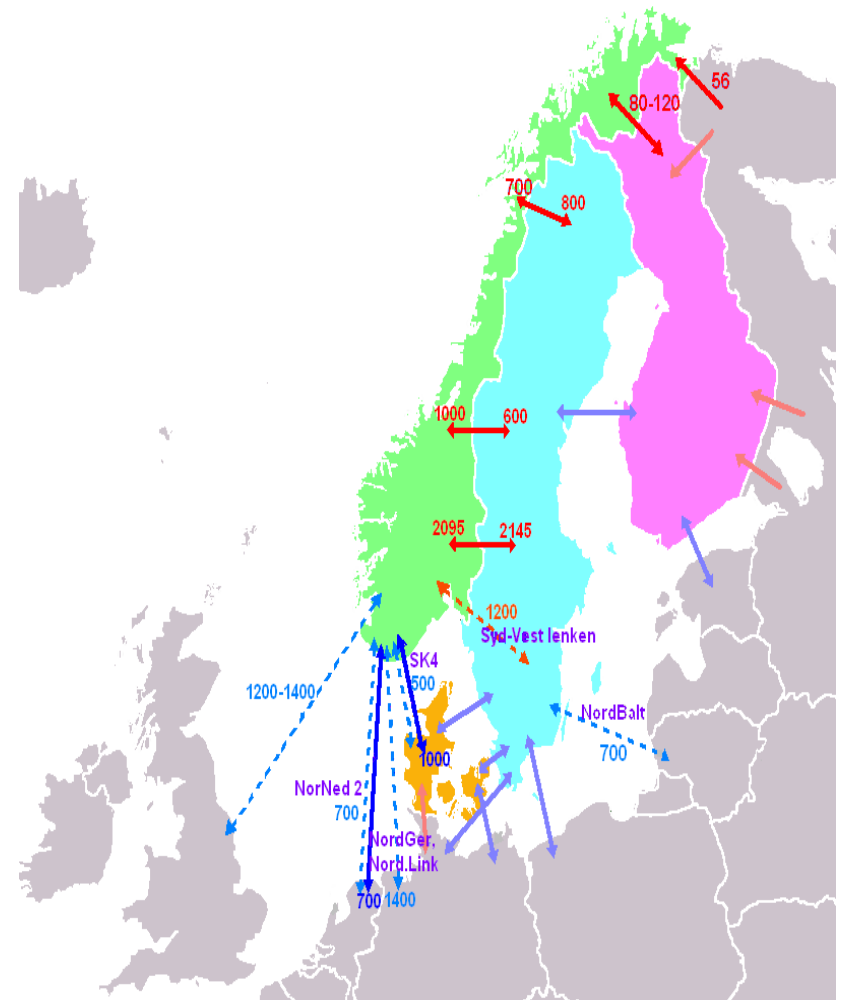
## Mean annual generation capacity: 206,0 TWh



- Installed capacity 30 000 MW
- Production in 2009: 133 TWh
- Sixth largest hydropower producer in the World
- 96-97 % of electricity production from hydro power
- Roughly 50 % of the reservoir capacity in Europe
- Statkraft is Europe's largest producer of renewable energy

# Nordic Power trade

- During the 1990s, the Nordic countries created a framework for a common power market based on open competition.
- Nord Pool was the first international commodity exchange for trading power.
- Integrated part of a Northern European power market
- Model for market design in the Baltic countries



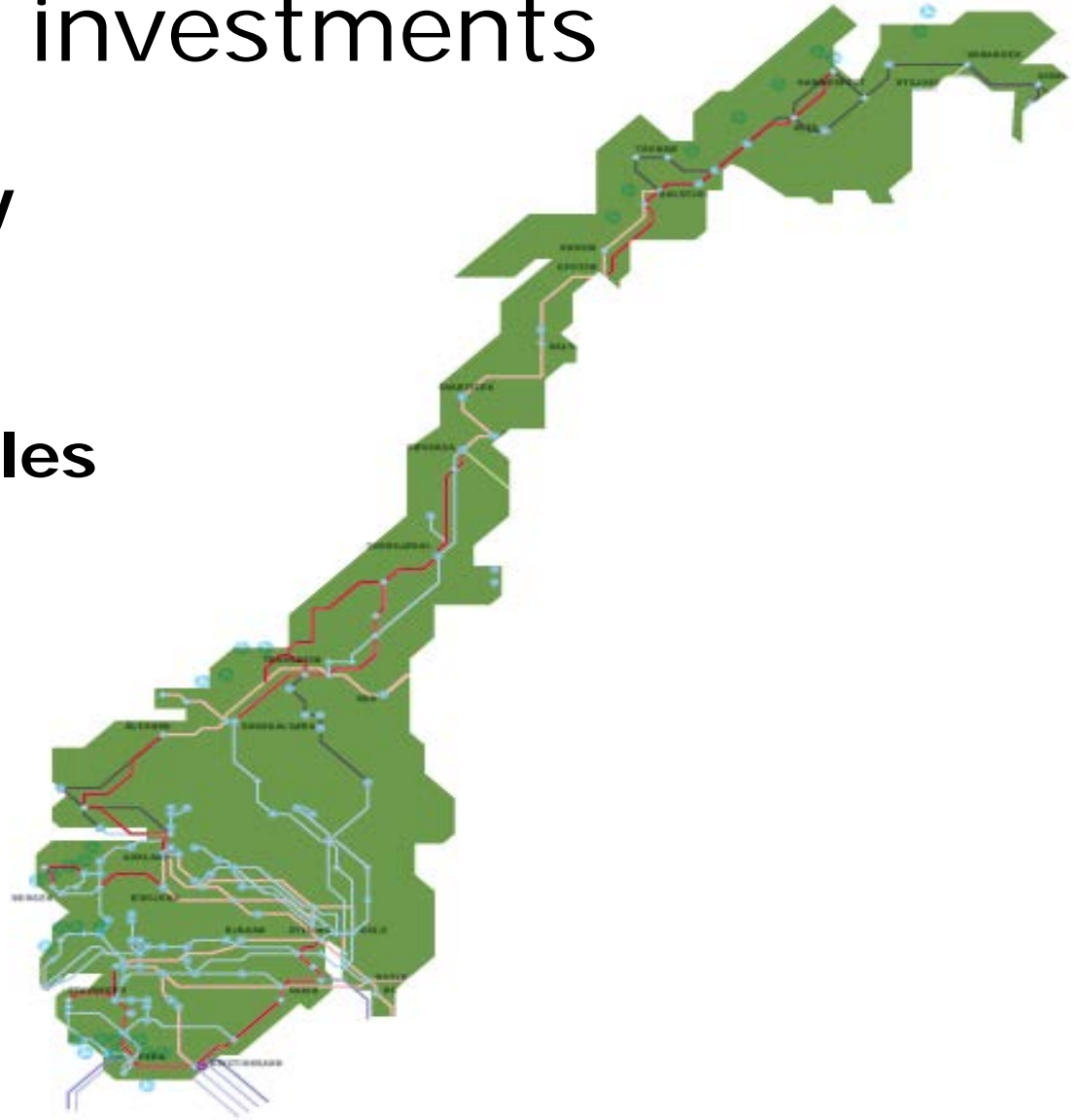
# Main issues in current energy policy

- Develop more renewable power production
- Further development of national grid.
  - interconnectors
- Energy restructuring and – efficiency



# Increased grid investments

- **Security of supply**
- **Climate/renewables**
- **Value creation**

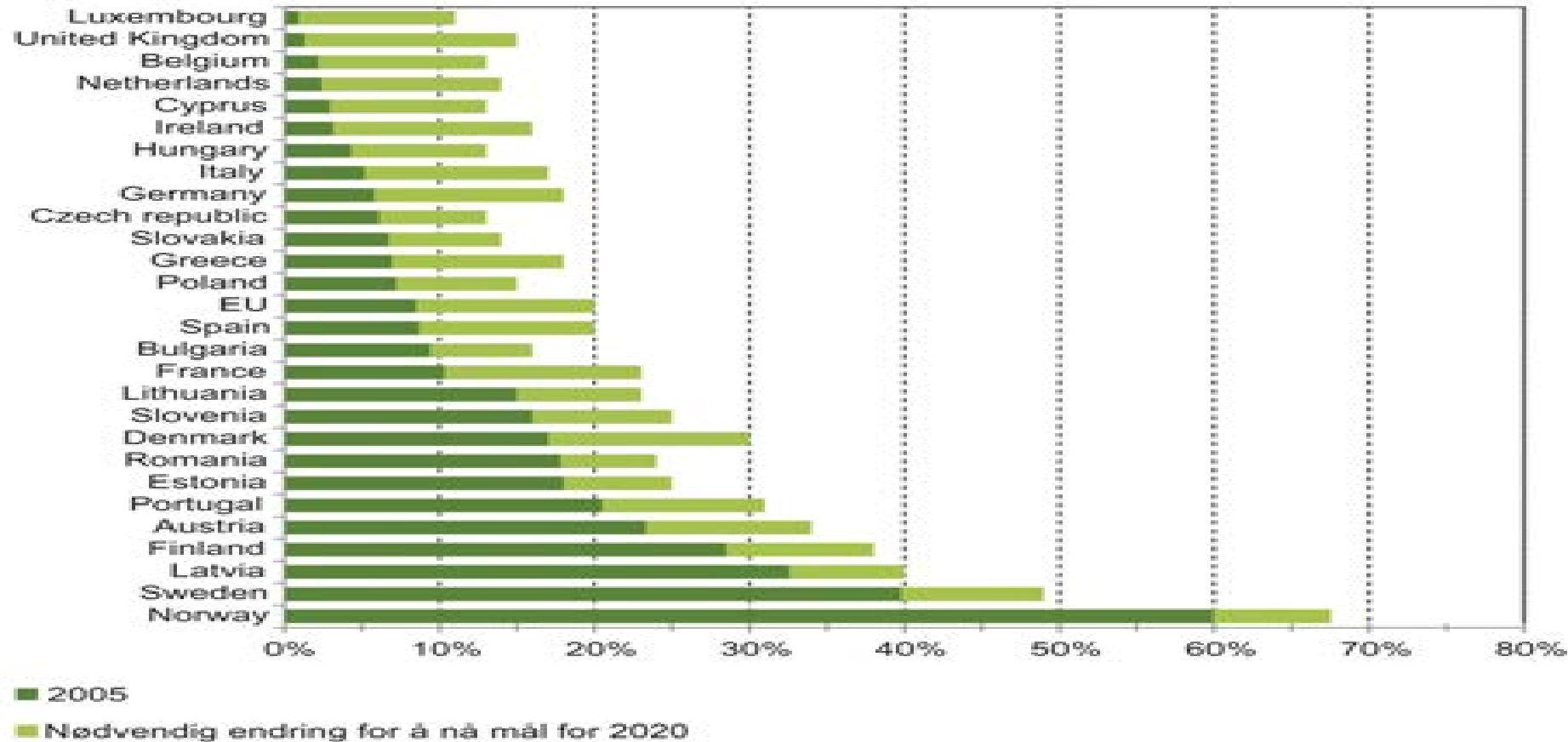


# Norway - EU energy cooperation. The renewable energy dimension

- EU-Norway energy policy dialogue
- EEA agreement (since 1994)
- RES I (2005) and RES II (2011)
- North Sea Offshore Grid Initiative
- Baltic Energy Market Integration Plan
- Energy infrastructure – regional groups
- Intelligent Energy Europe, Concerted Actions and FP 7.
- Cooperation mechanisms
- BASREC and NB 8

# Renewable energy directive – the EU/EEA context

→ Andel fornybar energi i 2005 og mål for 2020



KILDE: EU/Eurostat, 2012 / miljøstatus.no



# Renewable energy – the EU/EEA context. Renewable directive

- Renewable directive II (discussions 2010-2011)
- EEA adoption and entry into force december 2011
- Target for Norway 67,5%
- Certificate market with Sweden from jan. 2012 ( one cooperation mechanism)
- National Renewable Action Plan submitted in June 2012 ( 6 months after adoption)

# Swedish-Norwegian Green Certificate Market

- Together with Sweden, Norway has a goal of increasing the renewable energy production by 26,4 TWh/y by 2020.
- 26,4 TWh represent 13 per cent of the total renewable energy production in the two countries today, and 10 percent of total energy production.
- The common certificate market is to take effect from 1<sup>st</sup> of January 2012 and last until 31<sup>st</sup> of December 2035.
- Technology neutral system



# The functioning of the system

- The certificate system is a market based support scheme
- Producers will receive one certificate per MWh renewable.
- Electricity suppliers and certain consumer groups have a statutory duty to buy green certificates.
- This will create a demand for certificates

# Organisation on Norwegian side

- The Norwegian Water Resources and Energy Directorate (NVE) has the supervisory authority of the green certificate market in Norway.
- More information about the green certificate market can be found at NVE's website

[http://www.nve.no/en/Electricity\\_market/Electricity-certificates/](http://www.nve.no/en/Electricity_market/Electricity-certificates/).