

# ENTSO-E's perspective on regional cooperation in the internal electricity market

**Bente Hagem**

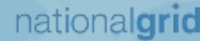
Chair of the Board, ENTSO-E

Regional cooperation and Nordic perspectives on Europe  
22 November 2017, Oslo

---

# “Enabling the energy transition”

- 43 TSOs
- Office in Brussels, 90 employees
- Established 2008
- Legal mandates from EU
- A TSO member organization



• 43 TSOs

• Office in Brussels, 90 employees

• Established 2008

• Legal mandates from EU

• A TSO member organization

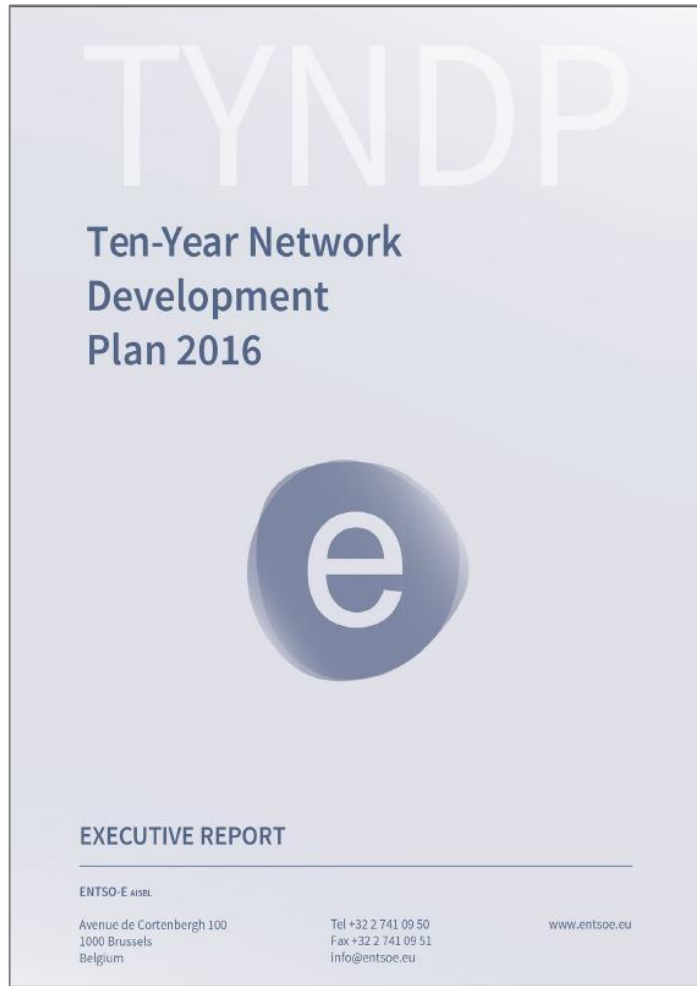


# Main tasks for ENTSO-E

- **Secure**
- **Sustainable**
- **Efficient**

- Ten year investment plans
- Network Codes
- Power system analysis
- Five Regional Coordination Centers
- Market platforms
- Best practice sharing
- Interact with stakeholders and policymakers

# We invest 150 B€ towards 2040



50.000 km of grid investment



80% CO2 reduction  
in the power sector



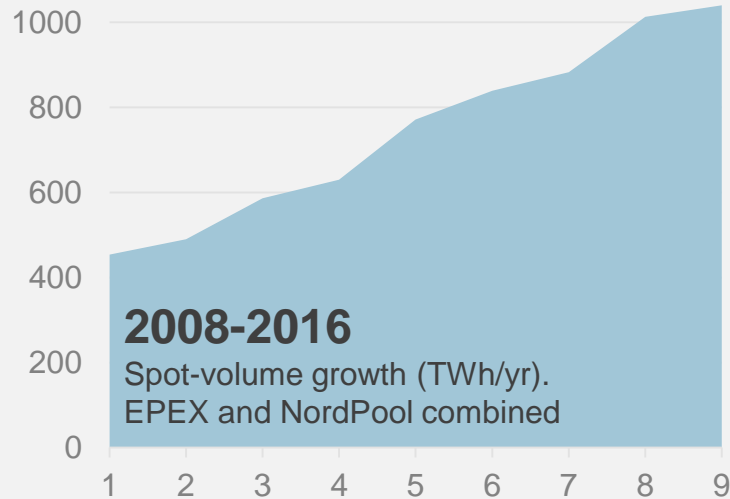
60 % of total consumption  
covered by RES

*Making 2€ for each € invested!*

# We develop markets

## DAY-AHEAD MARKETS

- 1500 TWh traded on exchanges,
- 1 B€ in social welfare, yearly



## INTRADAY MARKETS

- 120 TWh traded 2016
- New European platform 2018
- Next steps might be real time auctions



## BALANCING MARKETS

- 4 European projects ongoing
- 3B€ in cost savings, yearly



# We link wholesale and retail markets – how ?

- ❑ Distributed generation and flexibility require smart meters
- ❑ Consumers shall have access to all markets
- ❑ TSO-DSO determine products and processes for distributed flexibility
- ❑ Neutral bodies should run data hubs for data collection – all commercial activity in markets
- ❑ Cyber security and privacy issues needs to be ensured

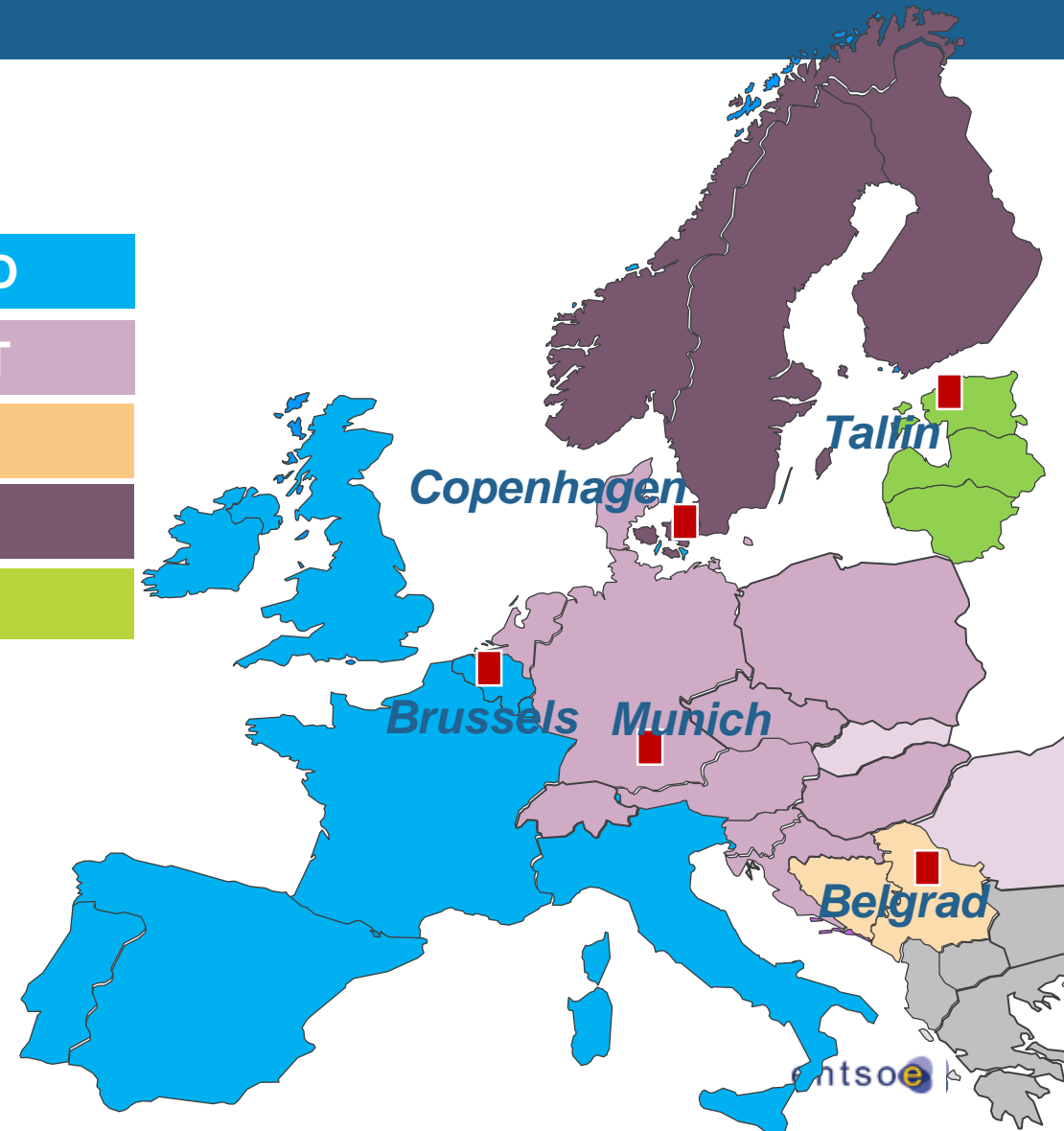


# We establish 5 Regional Coordination Centers

## Main tasks

- Operational security coordination
- Outage coordination
- Capacity calculation on borders
- Adequacy analyzes
- Common Grid Model

**And more services will be delivered!**



# We need to prepare for 80% RES in the energy mix

- *Current measures are not sufficient*

We have ambitious regulation



Now we need regional cooperation on policy issues

"Regional Energy Forums"





# What is Regional Energy Forums ?

*Member States, regulators, TSOs and stakeholders meet, discuss and push for regional cooperation*

- Changes in energy mix and consequences
- Subsidy schemes
- Adequacy plans
- Grid investment plans
- Capacity allocation on borders
- Market development

# How to organize Regional Energy Forums?

- High level representation from participants
- Biannual meetings, delivering road maps and following up on progress
- Each state is part of at least one REF
- REF secretariat need to ensure continuity and focus on regional tasks not national

# Need a 'YES I DO" from many at the same time

Regional Energy Forums will ensure speed and significant welfare gain



**All good things starts in regions!**

**Thank you for the attention**

---