

INTEGRATION OF EUROPEAN ELECTRICAL LINKS

Baltic Energy Forum 2015

Bente Hagem
Chair of ENTSO-E board
November 24th 2015, Vilnius

entsoe
Reliable Sustainable Connected

Drivers of integration

SUSTAINABILITY



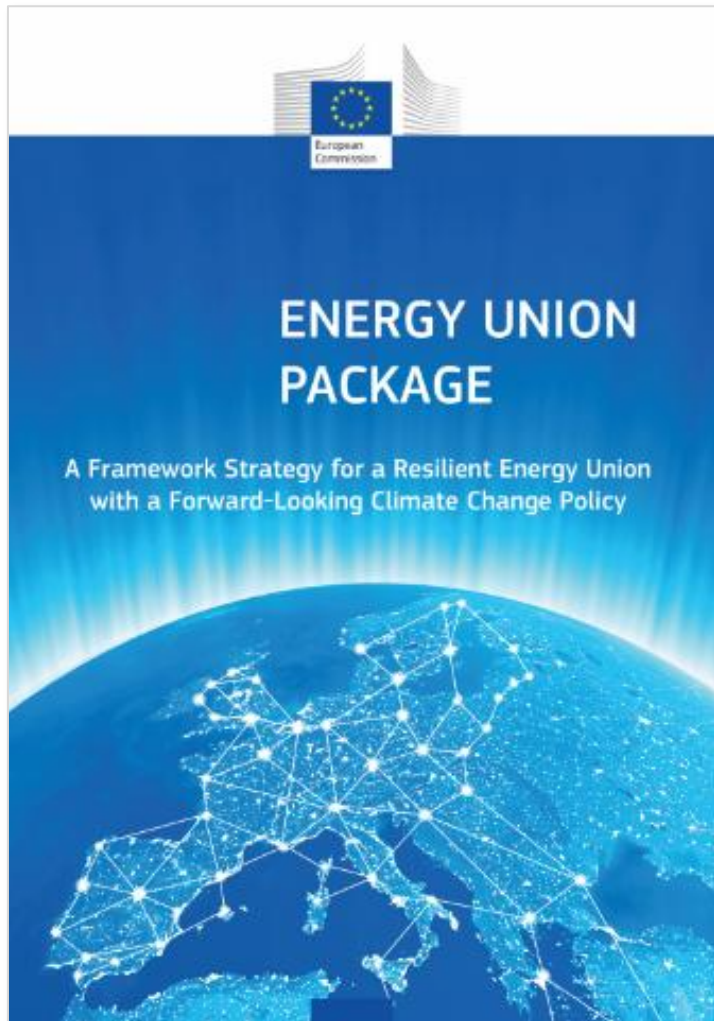
COMPETITIVENESS



SECURITY OF SUPPLY



TSOs instrumental in delivering the Energy Union



Key role of ENTSO-E

From the 2009 3rd IEM Package:

- TSOs to cooperate in ENTSO-E
- Draft and implement network codes
- Develop Ten-Year Network Development Plans and adequacy outlooks

Other legal mandates:

- 2010 Inter-TSO Compensation Mechanism 2013
- Transparency Regulation 2013
- Infrastructure Regulation: Cost Benefit Analyses for Projects of Common Interest (PCIs)

ENTSO-E Vision Package

Vision Market Security Regions Regulation 24 June 2015

This vision is ENTSO-E's response to the Energy Union Communication

ENTSO-E's forthcoming 'Vision package' includes four executive papers on an augmented market design, on regional co-operation to complete the Internal Energy Market, on better regulation for energy in the EU and on the interaction of security of supply and European markets. These papers, launched at the Annual Conference of ENTSO-E on 20 November 2015, formulate high-level recommendations accompanying the Energy Union implementation, 'from promise to practice'.

ENTSO-E VISION

THE ENERGY UNION AHEAD!

RELIABLE, SUSTAINABLE, COMPETITIVE

"Our vision is of an Energy Union where Member States see that they depend on each other to deliver secure energy to their citizens, based on true solidarity and trust."
(Energy Union Communication 25 February 2015)

The European Power System is in the midst of transformative change. Electricity is essential to our economy and way of life – it is one of the core infrastructures that keeps society functioning and our economies operating. The ability to develop and operate the transmission and distribution systems is a key factor for the success of electricity in modern societies. New stakeholders and market players get on board and develop a wide range of opportunities for customers, who have to be present in all markets.

The interaction and collaboration between TSOs and DSOs will be crucial and has to live up to the multiplication of data. All this puts network operators in a unique position and at the same time puts a high responsibility towards society on them because the energy transition requires their strong support. The members of ENTSO-E consider that strong European co-operation, with an important role for regions, is the basis for addressing the opportunities and challenges related to the energy transition.

ENTSO-E
VISION PACKAGE

European Network of
Transmission System Operators
for Electricity

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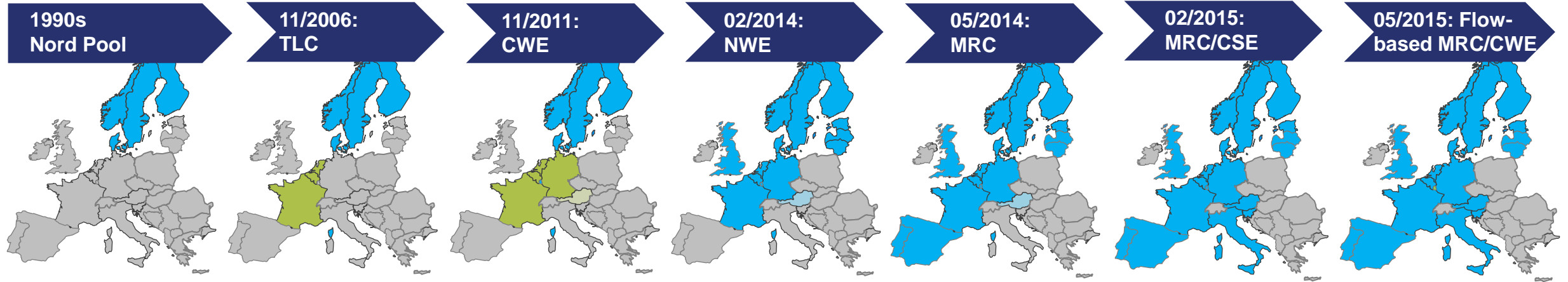
MARKETS AND INNOVATION
DELIVER THE ENERGY UNION

WHERE MARKETS MEET SECURITY OF SUPPLY

REGULATORY GOVERNANCE FOR THE ENERGY UNION

REGIONAL COOPERATION:
WHERE THE ENERGY UNION STARTS

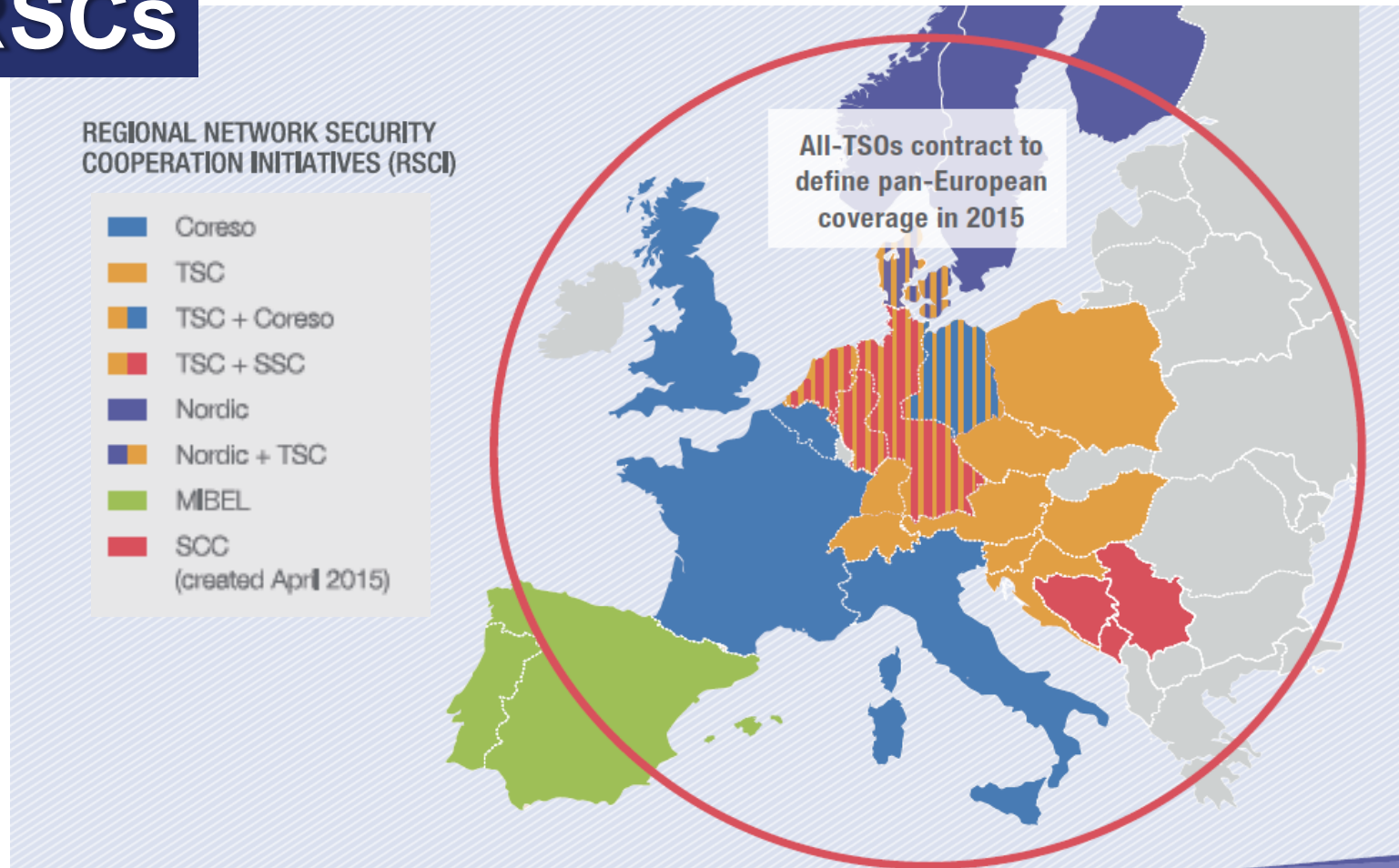
We integrate markets



- Internal Energy Market started regional and expanded
- Market coupling day ahead – first market timeframe to be integrated, followed by intraday and balancing markets

We integrate operations

RSCs



CORE ACTIVITIES

Security Analysis

Adequacy Forecasts

Capacity calculation

Outage planning

Common Grid Model

We build interconnectors



25 000 km DC lines/cables



30 000 km AC lines



20 % CO2 reduction in the power sector



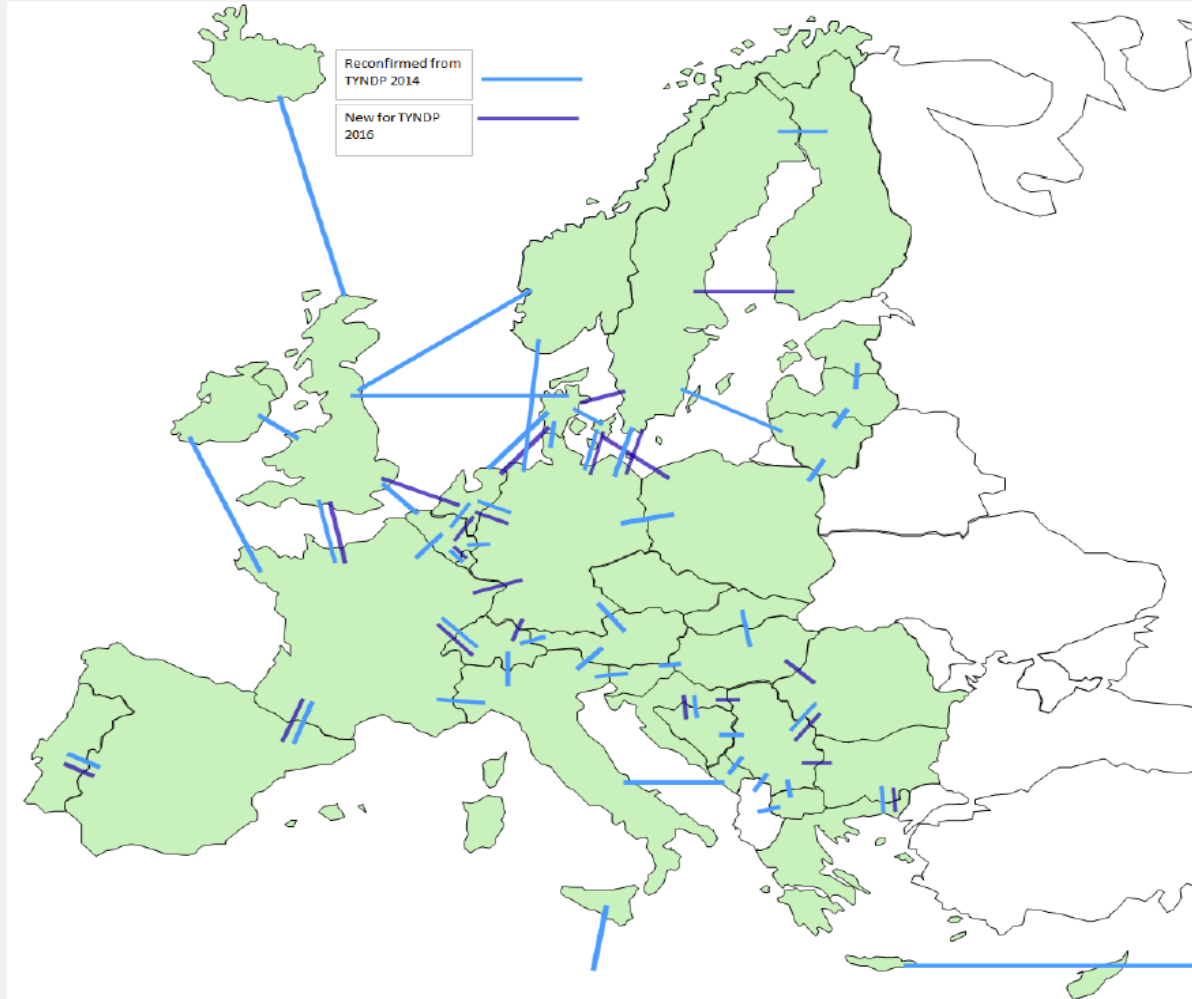
60 % of total consumption covered by RES



1 € of investments give 2 € back



Cross border projects will be analysed in TYNDP 2016

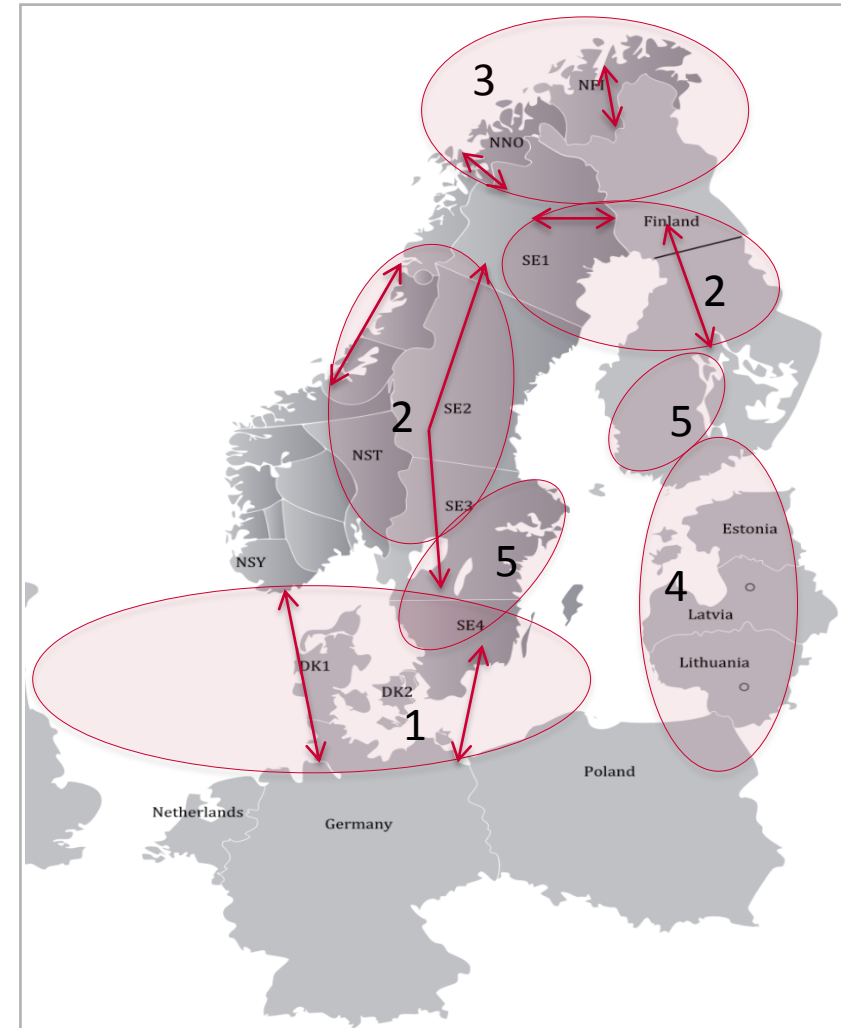


Regional plans



Drivers for planning in Baltic region

1. New interconnectors
2. North-South flows
3. Arctic consumptions
4. Baltic integration
5. Nuclear and thermal decommissioning



From the Regional Investment Plan Baltic Sea 2015

Integrated planning – regional developments

Interconnections in progress



Baltic integration to the European market

- Estlink 1 and 2 (1000 MW)
- LitPol-link, stage 1 (500 MW), Q4-2015
- NordBalt (700 MW), Q1-2016
- LitPol-link, stage 2 (500 MW), 2020 ??
- Baltic Synchronisation

PCI list 2015: 108 electricity projects

European tool to accelerate infrastructure for the completion of the European energy market

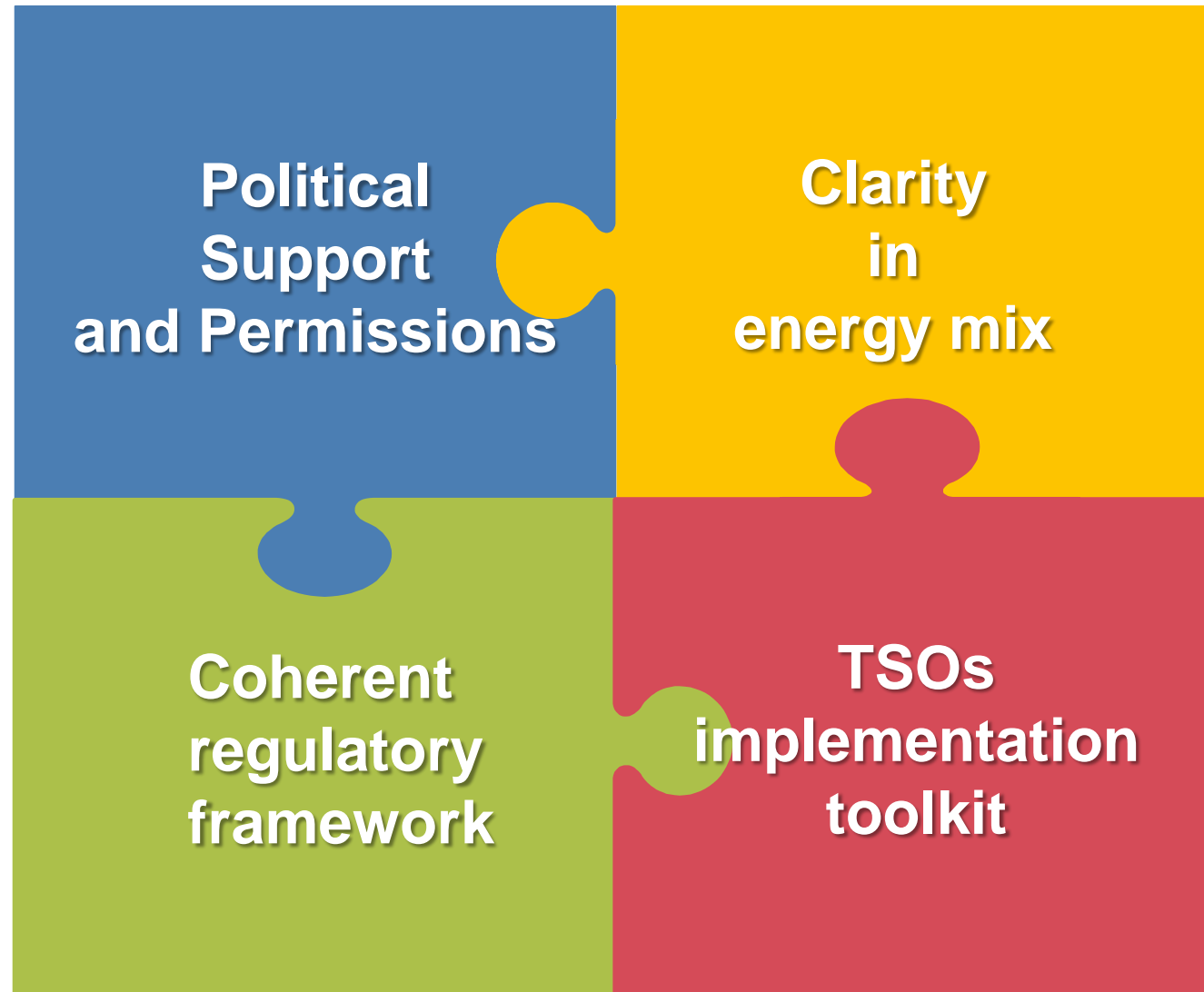
Requirements to PCIs

- *Significant benefits for at least two Member States*
- *Contribute to market integration and competition*
- *Enhance security of supply*
- *Reduce CO2 emissions*

Benefits of being a PCI

- *Accelerated permitting procedures (binding 3,5 years time limit)*
- *Strengthened transparency and improved public consultation*
- *Improved regulatory treatment*
- *Eligible for financial support from the Connecting Europe Facility (€325 M€ allocated in 2014-15).*

We need political support to build networks on time



We need to connect European regions





THANK YOU FOR LISTENING

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