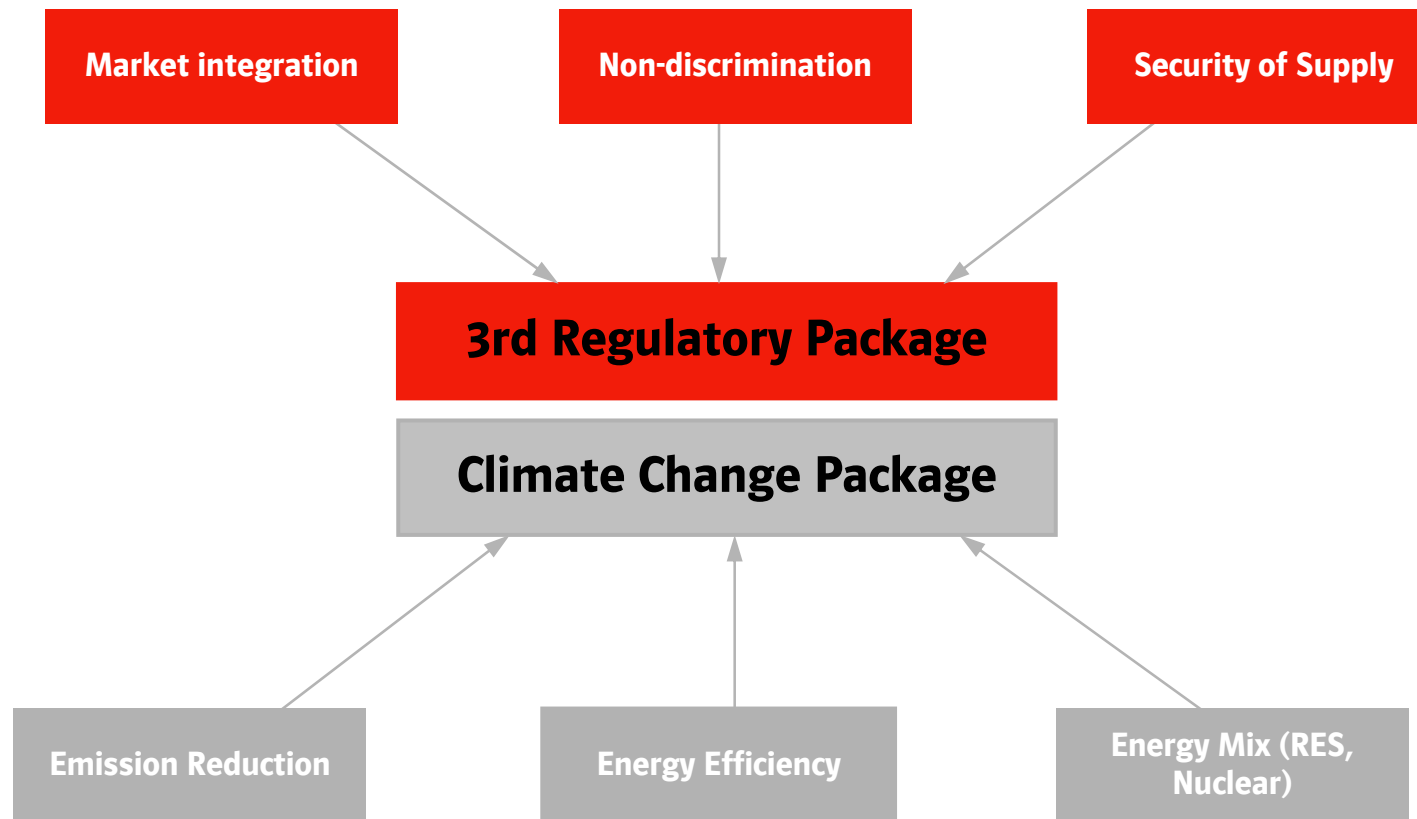




Dinner debate on
"Integration of the EU electricity market and the Third
Regulatory Package – do we have the right focus?"

Dr. Johannes Teysen
Strasbourg, 25th September 2007

What are the new objectives of the Commission and does it lead to a sustainable and coherent picture?



And: What will the industry and E.ON bring to the table?

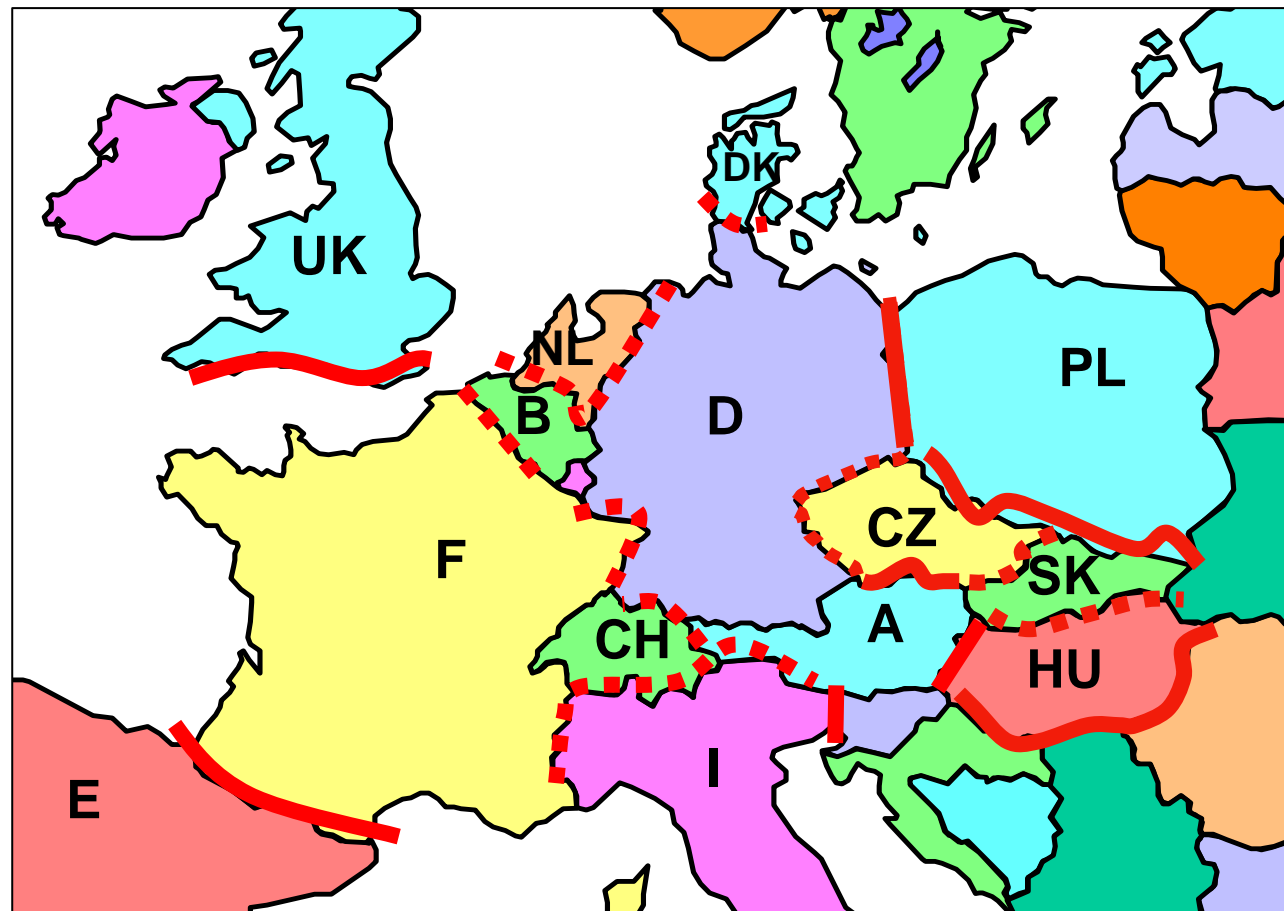
Market integration:

Physical base for an internal market not yet completed, markets and trading

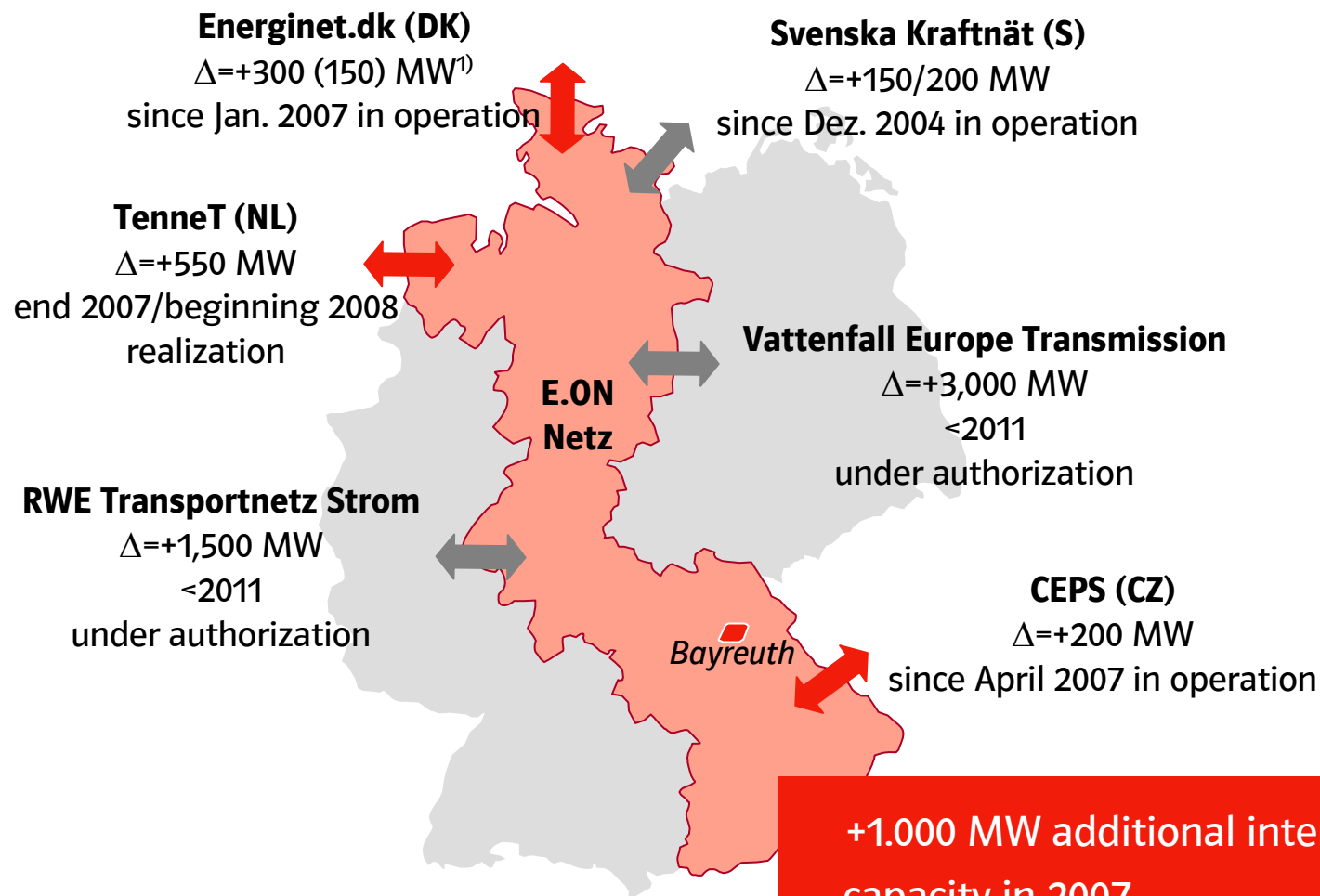
not yet consolidated

 serious congestion

 limited congestion



"Real life" power system integration: E.ON investment in interconnectors



Legend

- 1) 1st value: Energinet.dk → E.ON Netz
- 2nd value: E.ON Netz → Energinet.dk

+1.000 MW additional interconnector capacity in 2007
+ 500 km under planning/authorisation

"Real life" gas system integration: E.ON investment in gas import and transport infrastructure - 10 bn € planned until 2010

Upstream - secure gas flows to Europe

Scarv Idun
Yushno Ruskoje

Infrastructure - secure free and efficient flow

Nord Stream
BBL
UK Interconnector

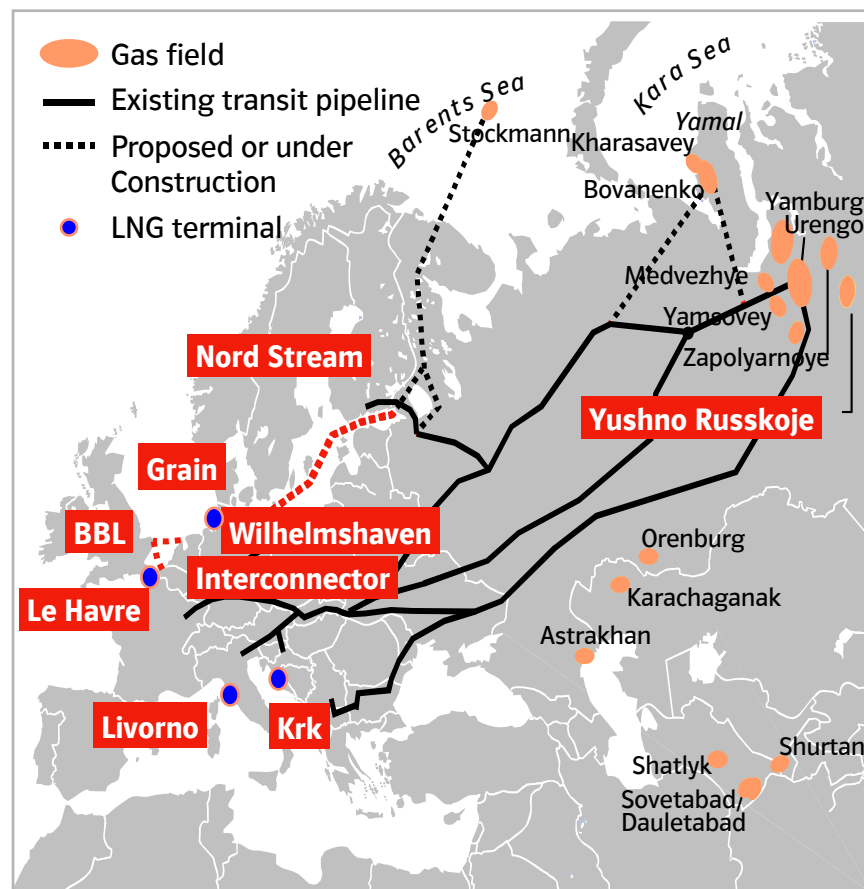
Security of supply - secure independence from source and price setting

LNG Terminal projects

- Wilhelmshaven
- Krk

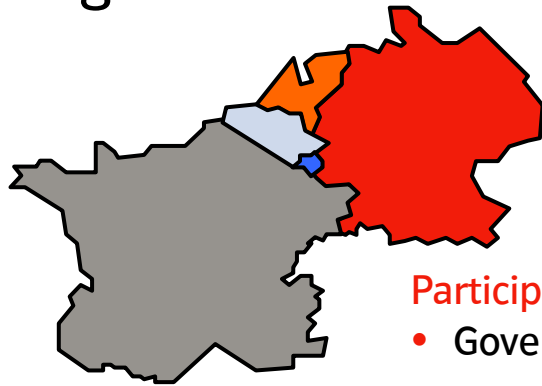
Capacity booking

- Le Havre
- Isle of Grain
- OLT Livorno



1. Based on 10.3 kWh/m³, 20° Celsius
2. Assessment of proven reserves based on Russian standards.

International market integration: Pentalateral Forum and Nordic System Operator as the nucleus for a full European wide market integration

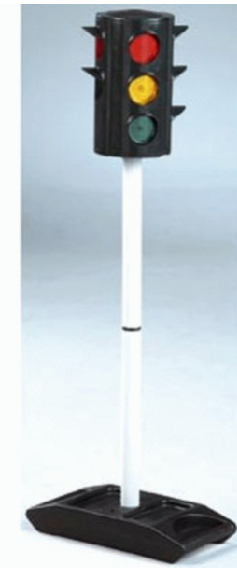
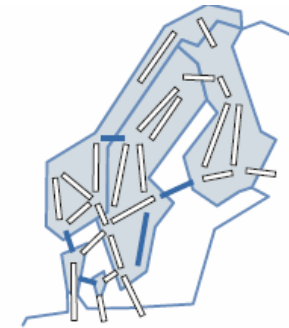


Participants:

- Governments, Regulators, TSO's, Exchanges

Tasks include:

- Optimal allocation of interconnector capacity
- Technical security
- Development of a cross border transmission capacity plan
- Consolidation of energy exchanges



PEF: 8 TSO as market facilitators devising an „intelligent traffic guidance system“ for regional electricity flows

Market integration: Regional System Operator as a step-change approach (RSO model)

Objectives	<ul style="list-style-type: none">• Rapid cross-national market integration and network development• More efficient use of interconnectors (market coupling instead of explicit auctions)• Increased network security (standard reliable rules)
Tasks	<ul style="list-style-type: none">• Power to enforce investment decisions (espec. in interconnectors and bottlenecks)• Congestion management• Interface for traders/exchanges (market facilitator)• Harmonization of technical rules/system security (4 Nov 06)
Organisation	<ul style="list-style-type: none">• Governance rules to ensure complete neutrality towards all market participants incl. asset owners• One-stop shop for all market participants

Market and competition: Non-discriminatory network access and efficient exchanges

„According to our information there are no significant cases of discrimination against competitors in Germany today“ (M. Kurth, German Regulator)

What is needed?

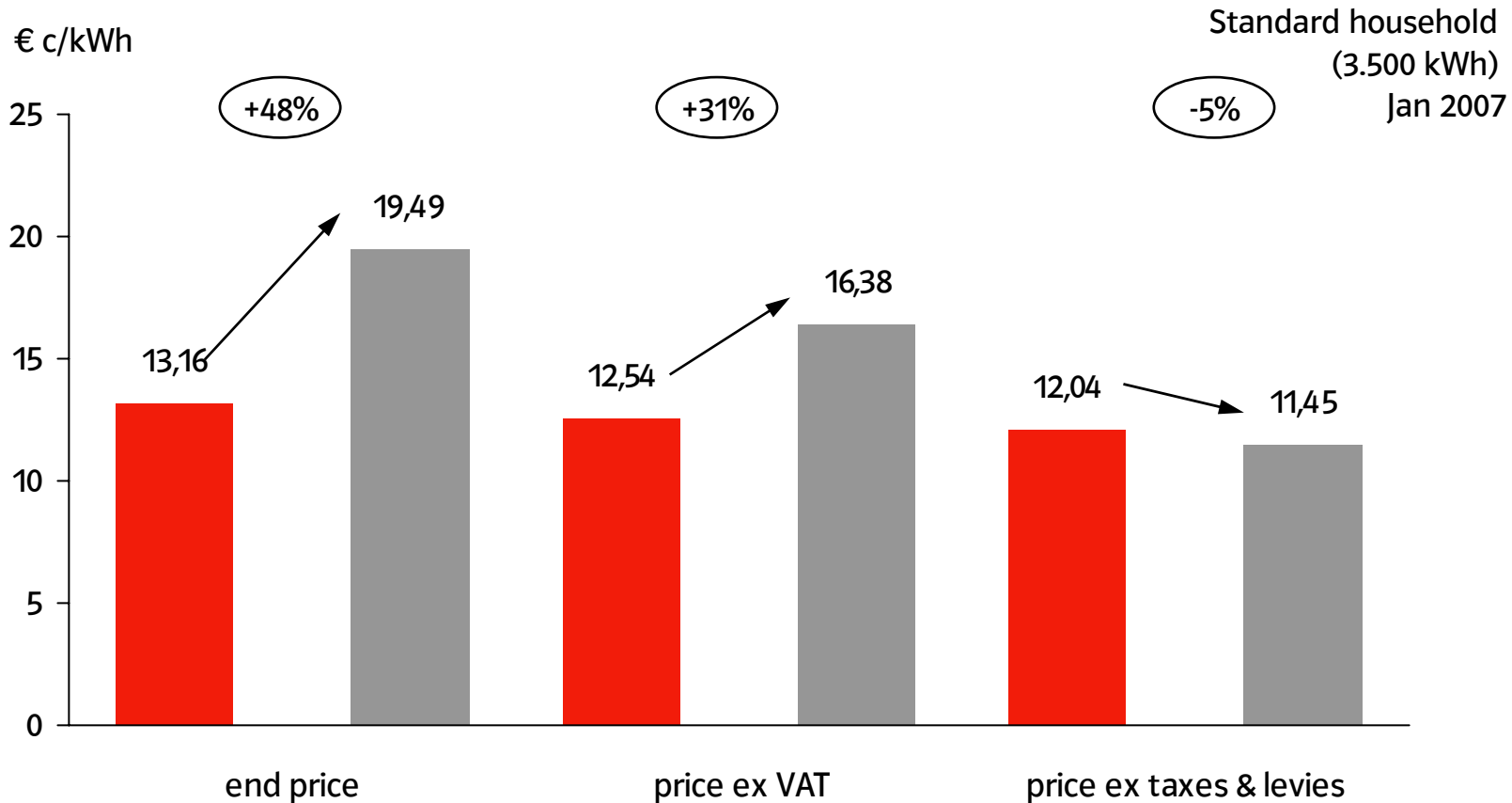
- Equal access to information for all market participants
- Non-discriminatory network connection
- Efficient and integrated energy exchanges

Assured by:

- Clear legal framework for regulation and effective supervision
- Consolidate market places enforce level playing field without interference

⇒ Do ownership unbundling or ISO+ bring any added value to the table (prices, investments, market integration etc.) ?

Market and competition: ownership unbundling and electricity prices

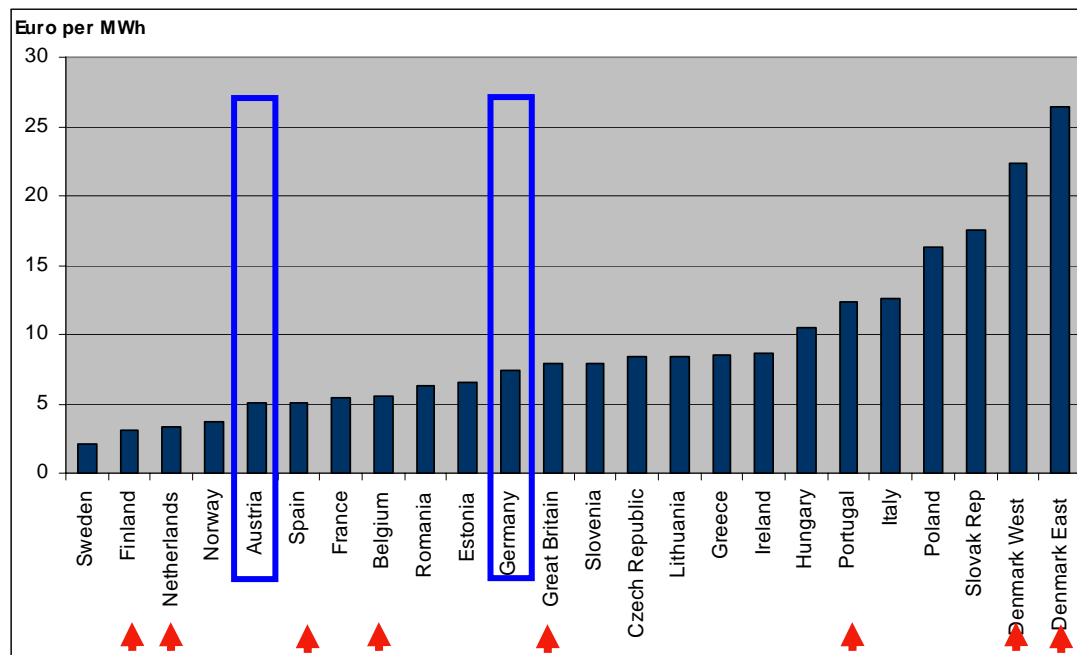


Source: Eurostat, KEMA, VDEW, EP-1

■ UK ■ DE

An inconvenient truth ...

	Import (NTC)/ Generation [%]	Generation [GW]
UK	2	80
Spain	6	56
Italy	6	80
Ireland	6	5
Portugal	9	12
Poland	10	34
France	14	112
Finland	14	14
Germany	16	119
The Netherlands	17	20
Norway	18	23
Czech Republic	23	16
Austria	24	18
Belgium	25	16
Sweden	29	27
Hungary	38	8
Slovak Republic	39	8
Denmark	50	8
Slovenia	68	3



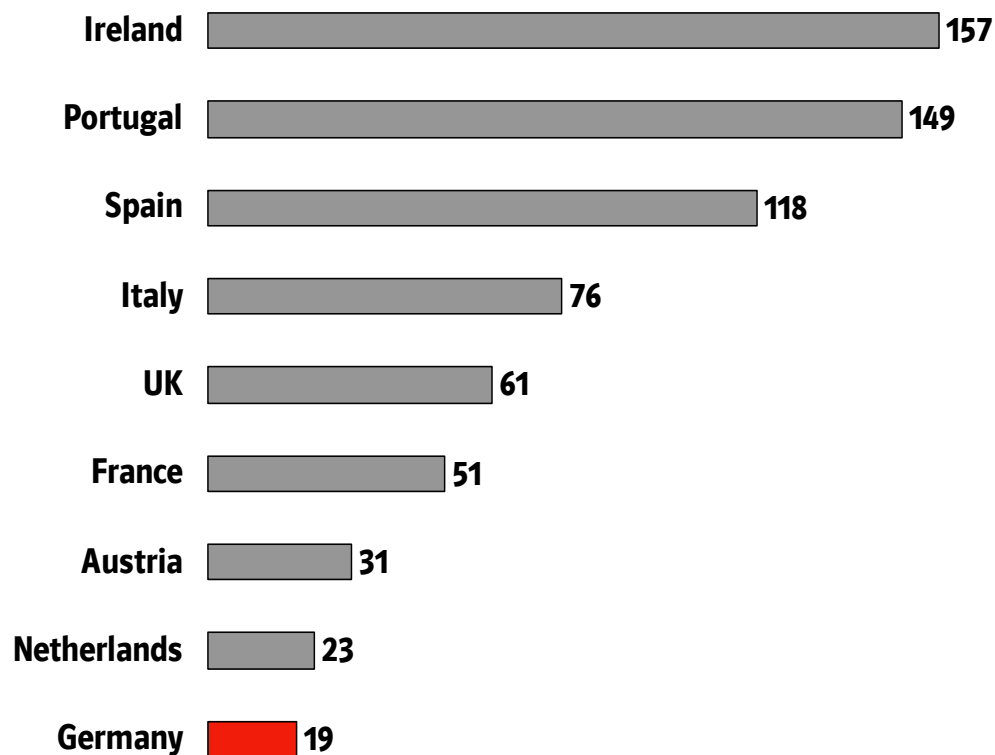
Source: ETSO 2005

Ownership unbundled

...ownership unbundling does not help investments and grid charges!

Network Reliability: Network security in EU

Average interruption time for electricity supply in Europe (minutes, 2004/5)



Conclusion

- Fair competition and market integration appropriate objectives for 3rd liberalisation package
- National ownership unbundling or ISO+ are questionable instruments for these objectives
 - ➔ Better: cross-national RSO approach, exchange consolidation
- New regulatory measures and restrictions for the competitive part of business are counter-productive
 - ➔ No regulatory authority in commodity markets
- Efficient market integration is the better way to increase competition
 - ➔ Market Coupling
- Regional cooperation promotes development of infrastructure and facilitates cross-border trade
 - ➔ Focus on investment in interconnectors/reduction of bottlenecks
- Focus of the third regulatory package should be on the legal framework for regional integration - focus and priorities

It's the international and efficient market, Stupid!

Outlook: We need a holistic approach to energy and climate policies

- Climate goals have to be achieved without influencing the open and efficient energy market (ETS)
- General and open goals, don't set to many sub goals (specific regimes for primary energies)
- Don't raise the wrong expectations of the general public (i.e. efficient market functions not absolute price level matters)

Thank you very much for your attention!

Backup

Market integration: E.ON investment in gas import infrastructure - 10 bn € planned until 2010

Upstream - secure gas flows to Europe

Scarv Idun: 1,4 bcm for E.ON 2011 (total res: 48,3 bcm)

Yushno Ruskoje: 25%+ 1 share,

Infrastructure - secure free and efficient flow

Nord Stream: 55 bcm (2010), 24,5% E.ON share

BBL: 16,5 bcm (2006), 20% E.ON

UK Interconnector: increase from 8,3 bcm to 23,5 bcm (2006), E.ON share 23,59%

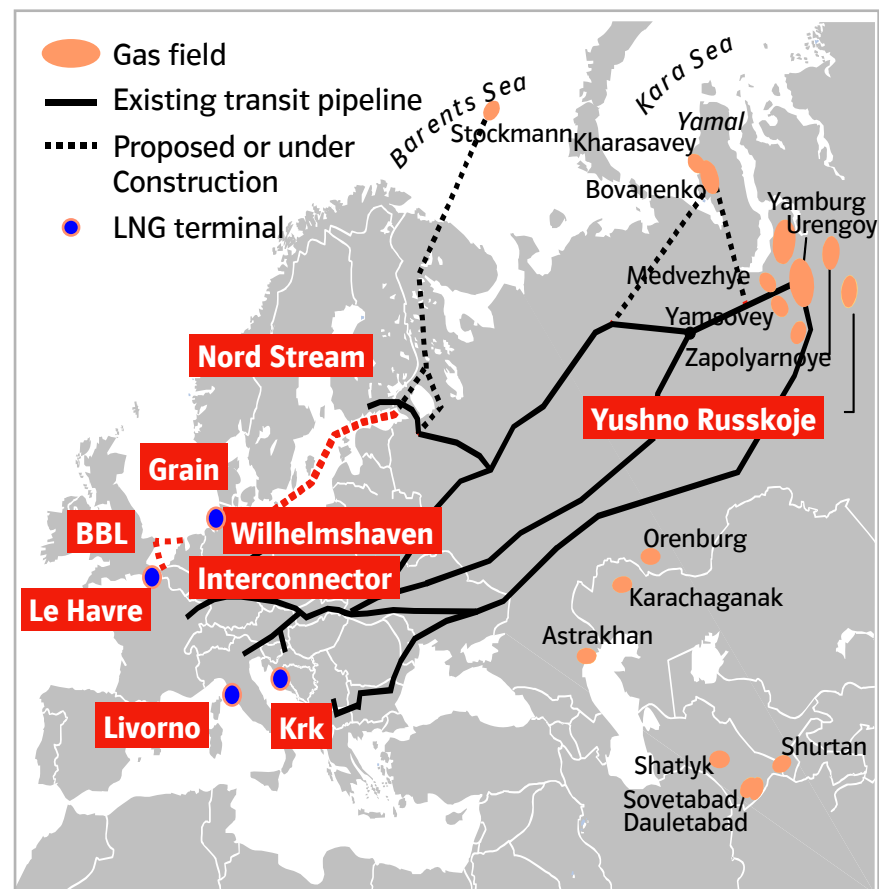
Security of supply - secure independence from source and price setting

LNG Terminal projects

- Wilhelmshaven: 10bcm p.a.
- Krk: 10-15 bcm p.a.

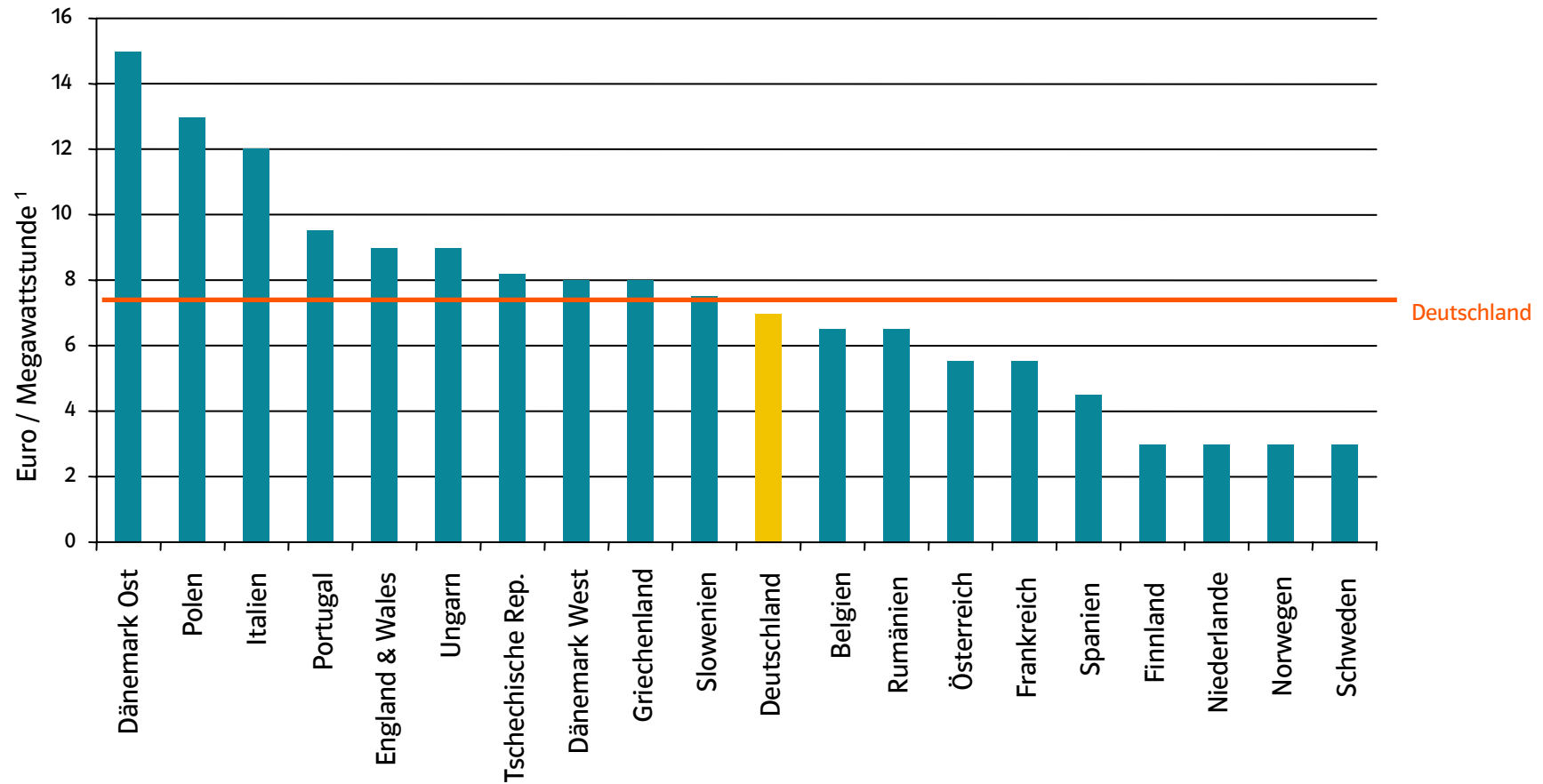
Capacity booking

- Le Havre: 3 bcm p.a.
- Isle of Grain: 1,7 bcm p.a. (19y as of 2010)
- OLT Livorno: 3,75 bcm p.a.



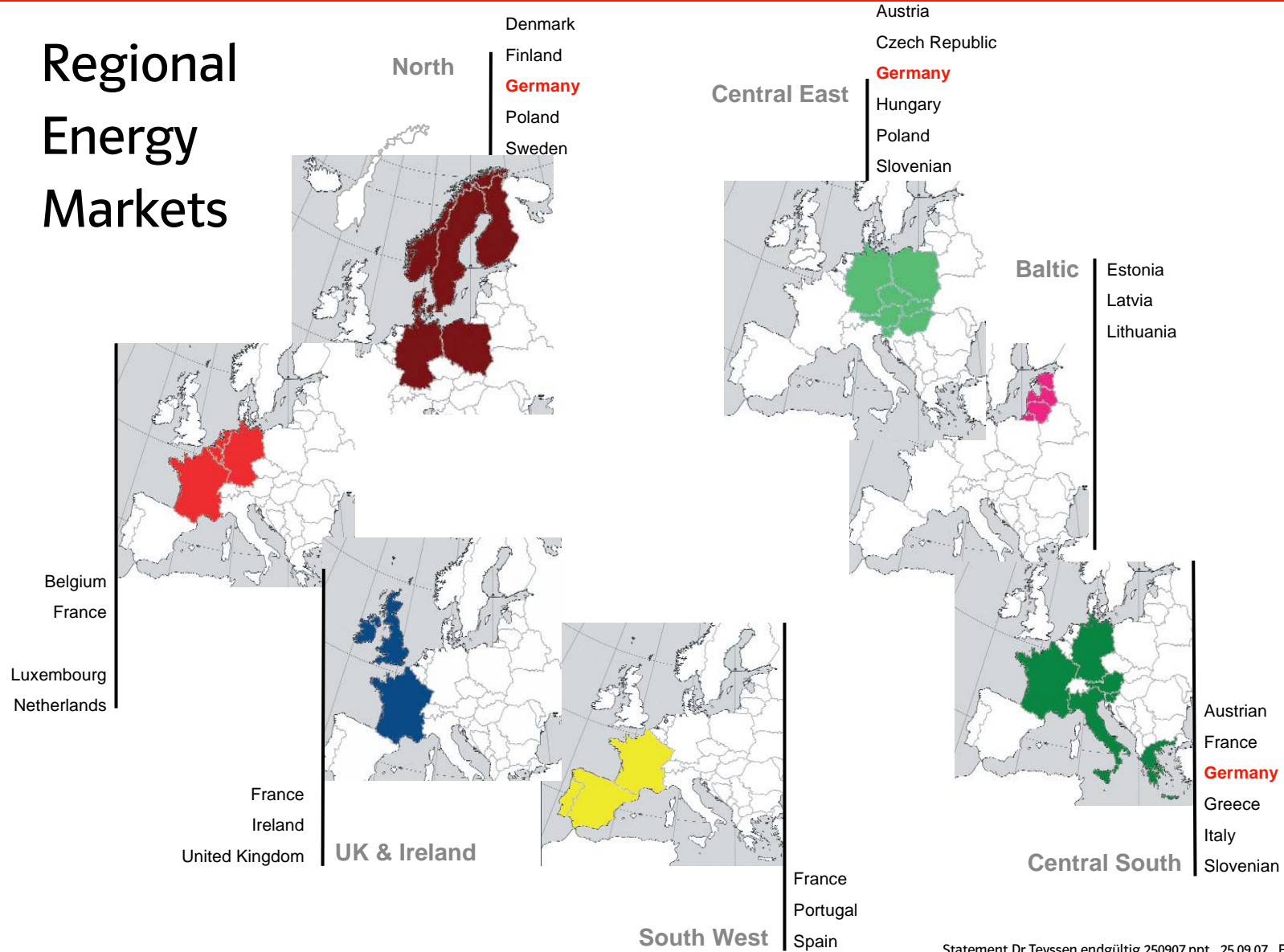
1. Based on 10.3 kWh/m³, 20° Celsius
 2. Assessment of proven reserves based on Russian standards.

Non-discrimination: Third Party Access



Quelle: ETSO, Benchmarking on transmission pricing in Europe (April 2005)

Regional Energy Markets



Over 500 km under planning and authorization

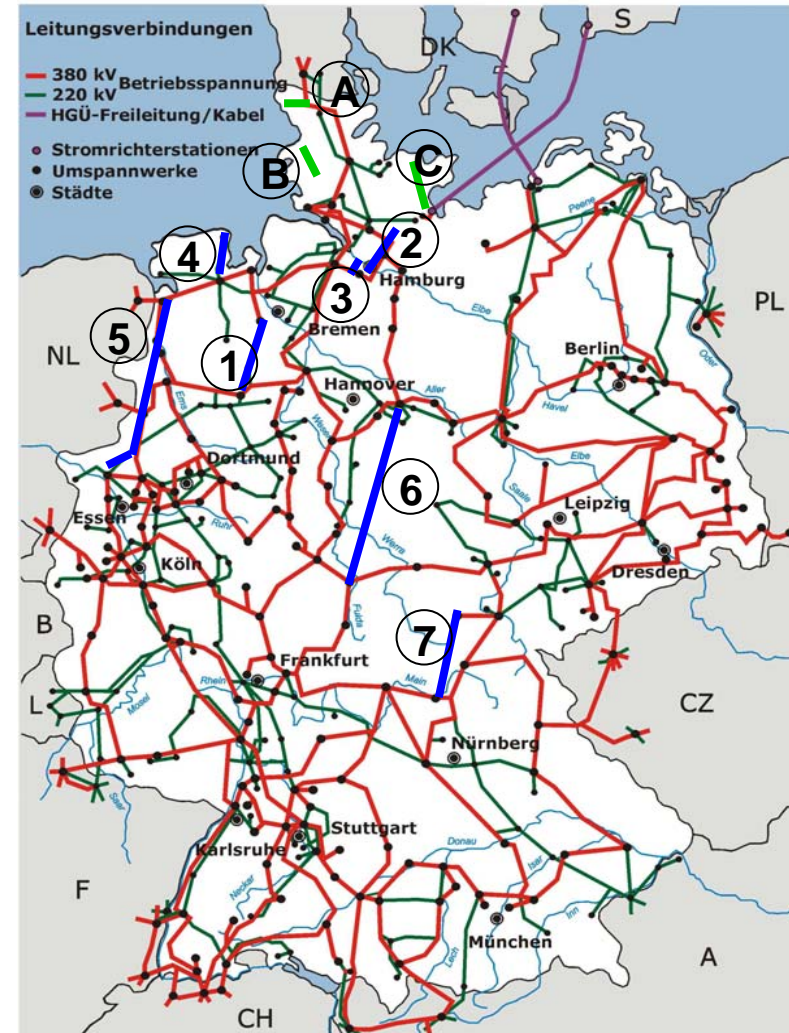
380 kV

- ① Ganderkesee – St. Hülfe (60 km)
- ② Hamburg/Nord – Dollern (45 km)
- ③ Stade – Dollern (12 km)
- ④ Wilhelmshaven – Conneforde (40 km)
- ⑤ Diele – Niederrhein (200/50 km*)
- ⑥ Wahle – Mecklar (190 km)
- ⑦ Altenfeld – Redwitz (60/25 km*)

110 kV

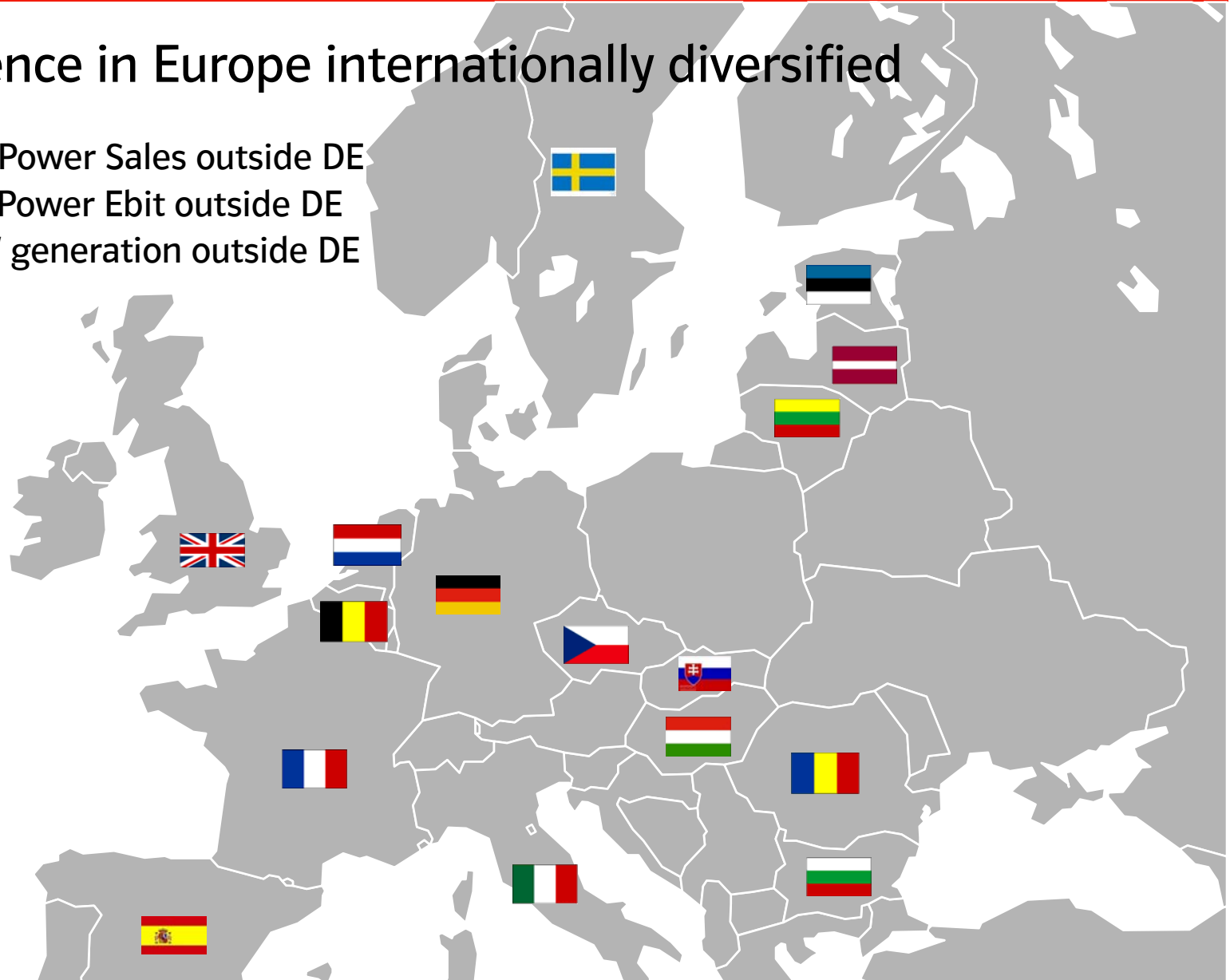
- Ⓐ Breklum – Flensburg (27 km)
- Ⓑ Heide – Pöschendorf (32 km)
- Ⓒ Lübeck – Göhl (50 km)

Problem: local opposition and endless authorization procedures!



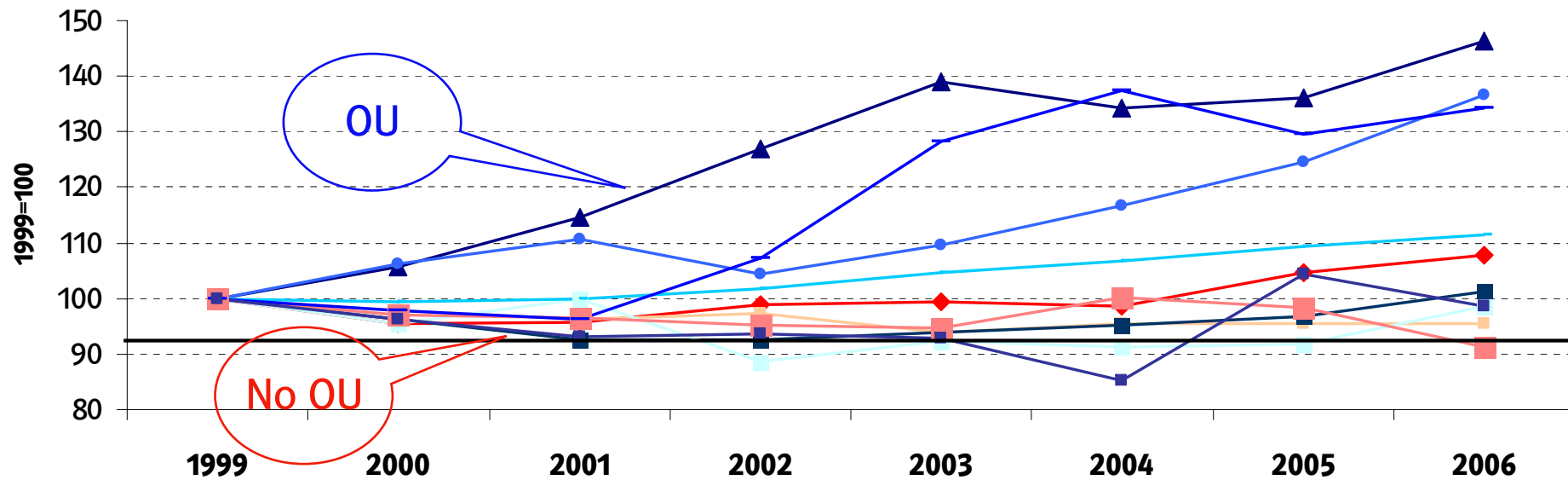
E.ON presence in Europe internationally diversified

- 40% Gas and Power Sales outside DE
- 45% Gas and Power Ebit outside DE
- 65% of 76 GW generation outside DE



No link between ownership structure and price development

End customer prices for a standard household of 3.500 kWh exclusive taxes



Source: Eurostat, EP-1

