

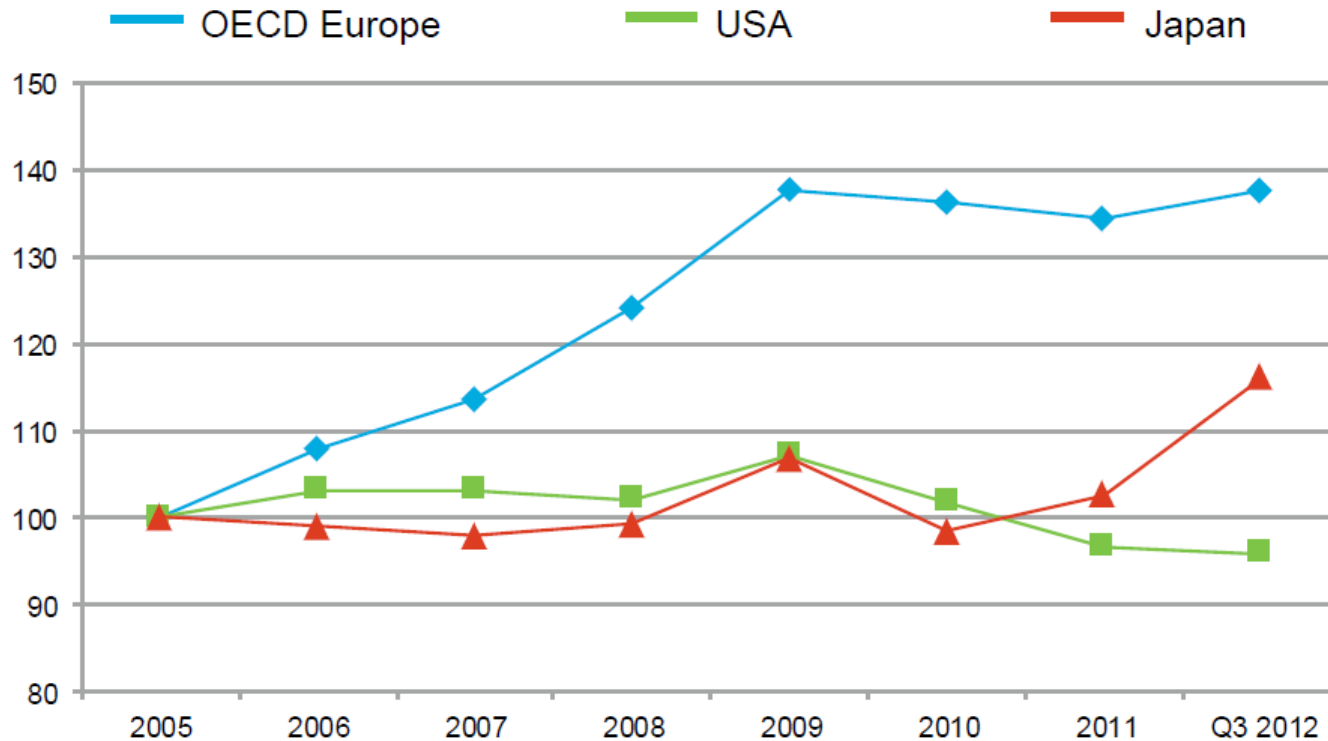
The future of gas in the EU energy market

Philip Lowe
Director General for Energy
European Commission



Current debate: energy prices and competitiveness

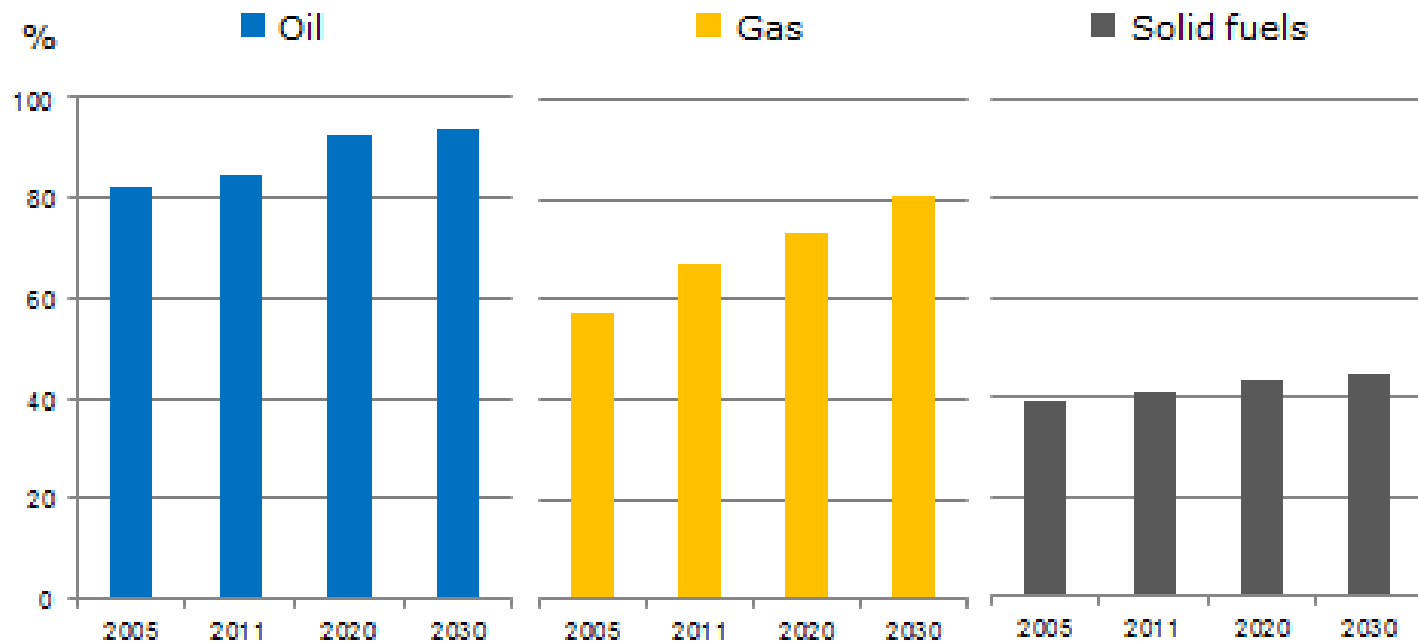
Evolution of end-user electricity prices for industry,
taxes excluded (2005 = index 100)



Source: International Energy Agency

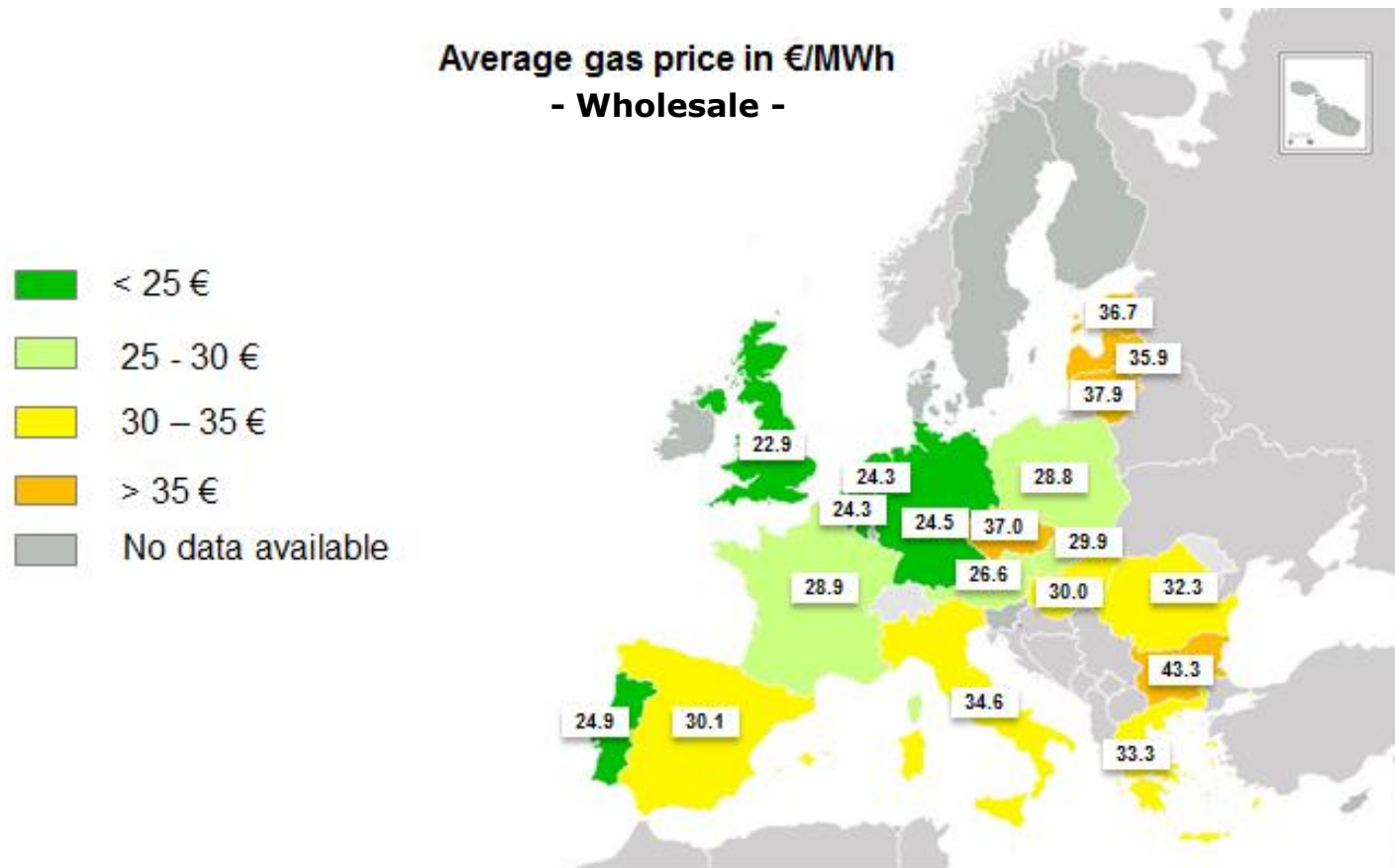
Europe imports the equivalent of EUR 406 billion (3.2% of GDP) of oil, gas and coal every year and its dependence is expected to grow

Share of imported fuel in total EU consumption
("business as usual" scenario)



Source: European Commission

The future of gas depends on competitive prices



Source: European Commission



European
Commission

Competitive prices (ctd)

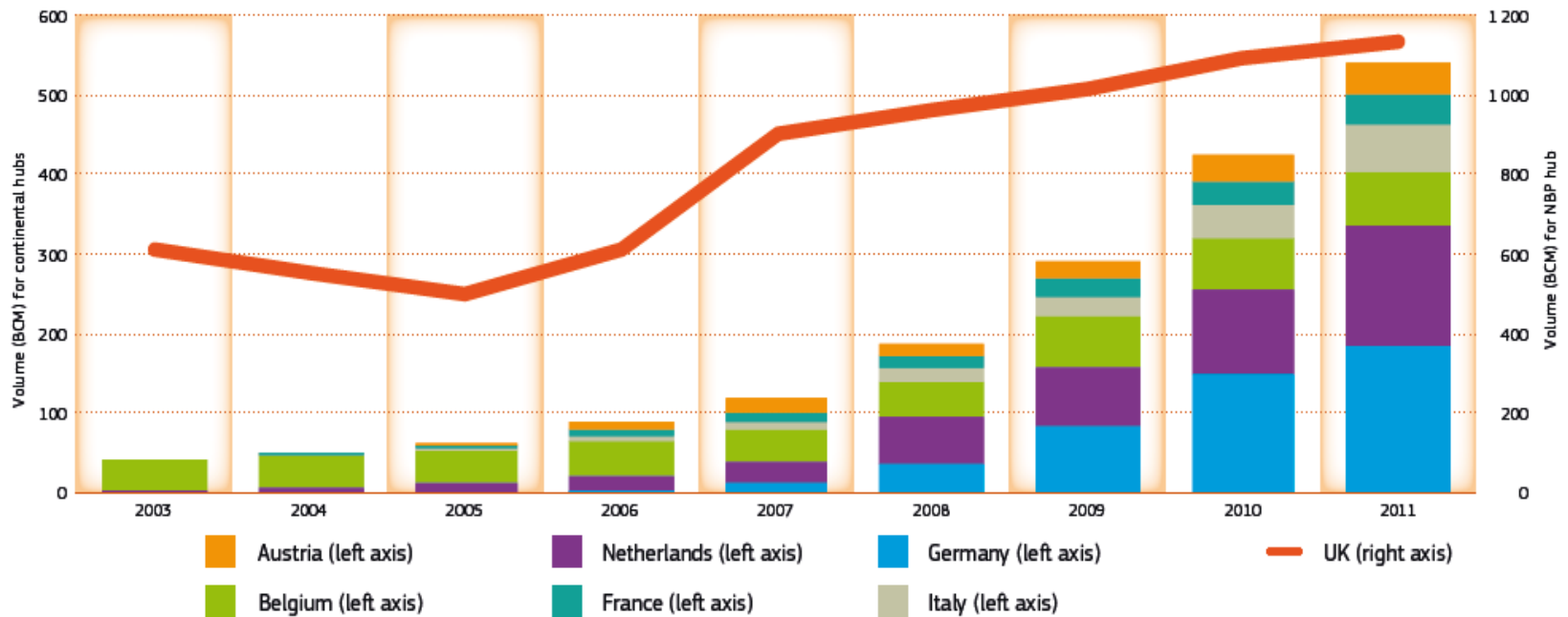




European
Commission

The future of gas depends on trade and integration

.....



Source: IEA Medium-Term Gas Market Report

Note: The chart covers the following trading hubs: UK: NBP (National Balancing Point); Belgium: Zeebrugge; Netherlands: TTF (Title Transfer Facility);

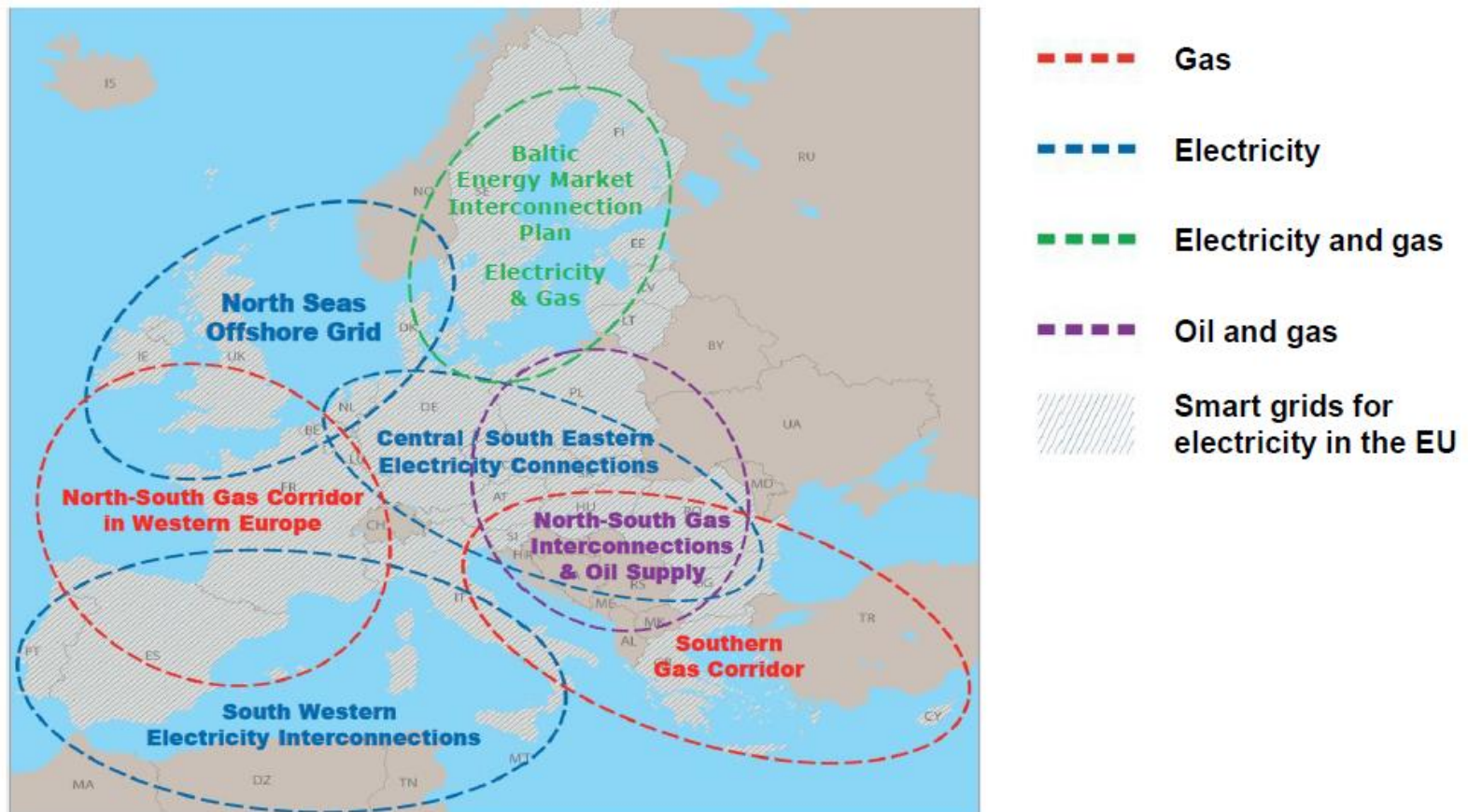
France: PEG (Point d'Echange Gaz); Italy: PSV (Punto di Scambio Virtuale); Germany: GASPOOL and NCG (NetConnect Germany);

Austria: CEGH (Central European Gas Hub).



European
Commission

The future of gas depends on interconnection



Source: European Commission

The future of gas depends on innovation (and public acceptance of new technologies)

Power-to-gas

CCS

Smart gas

Shale/tight gas?

The future of gas depends on regulatory certainty

EU Green Paper 2030 of 27 March 2013

Public consultation ongoing:

http://ec.europa.eu/energy/consultations/20130702_green_paper_2030_en.htm

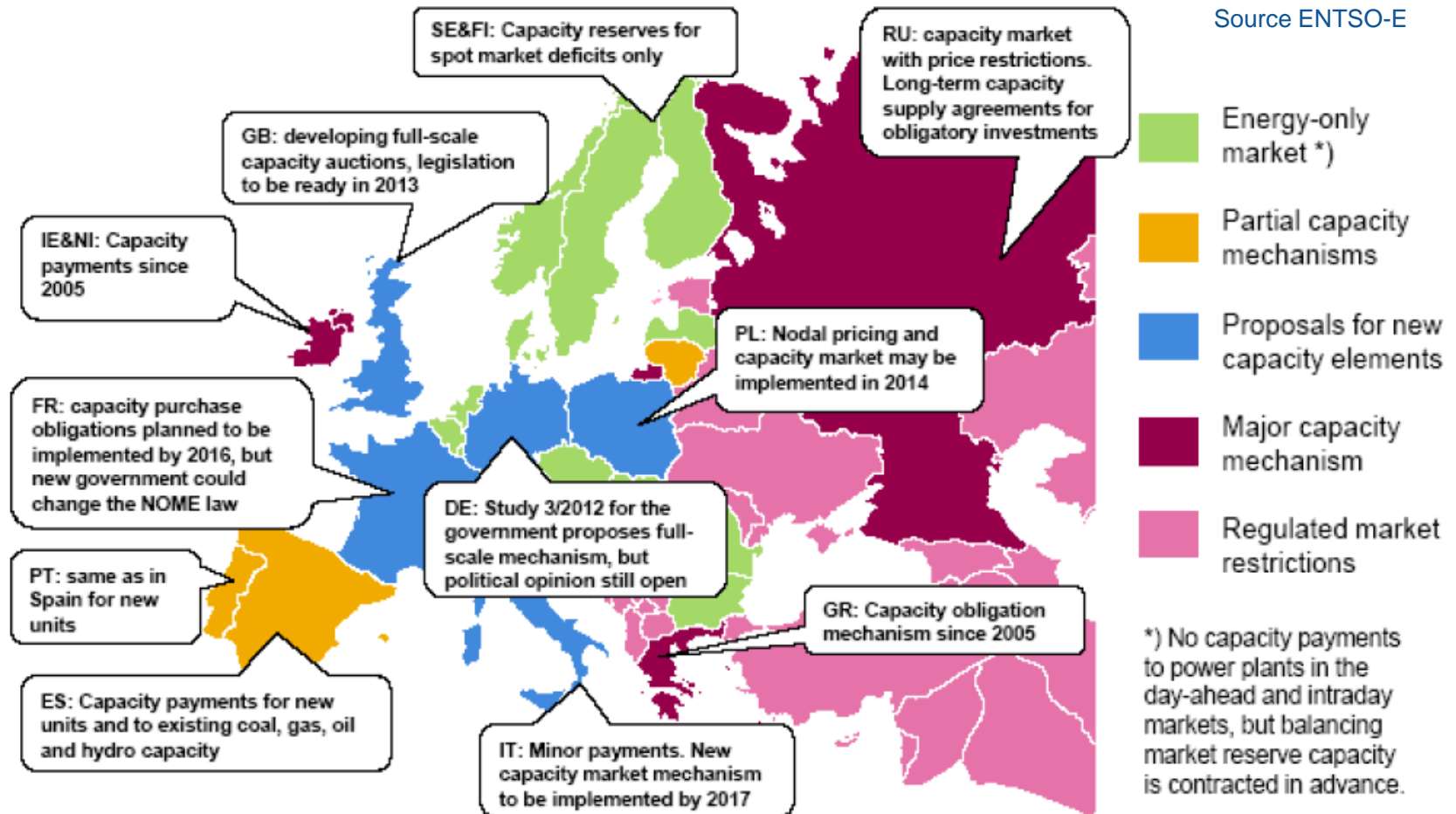


European
Commission

Back up and alternatives

National capacity mechanisms can have an impact on the further integration of EU energy markets

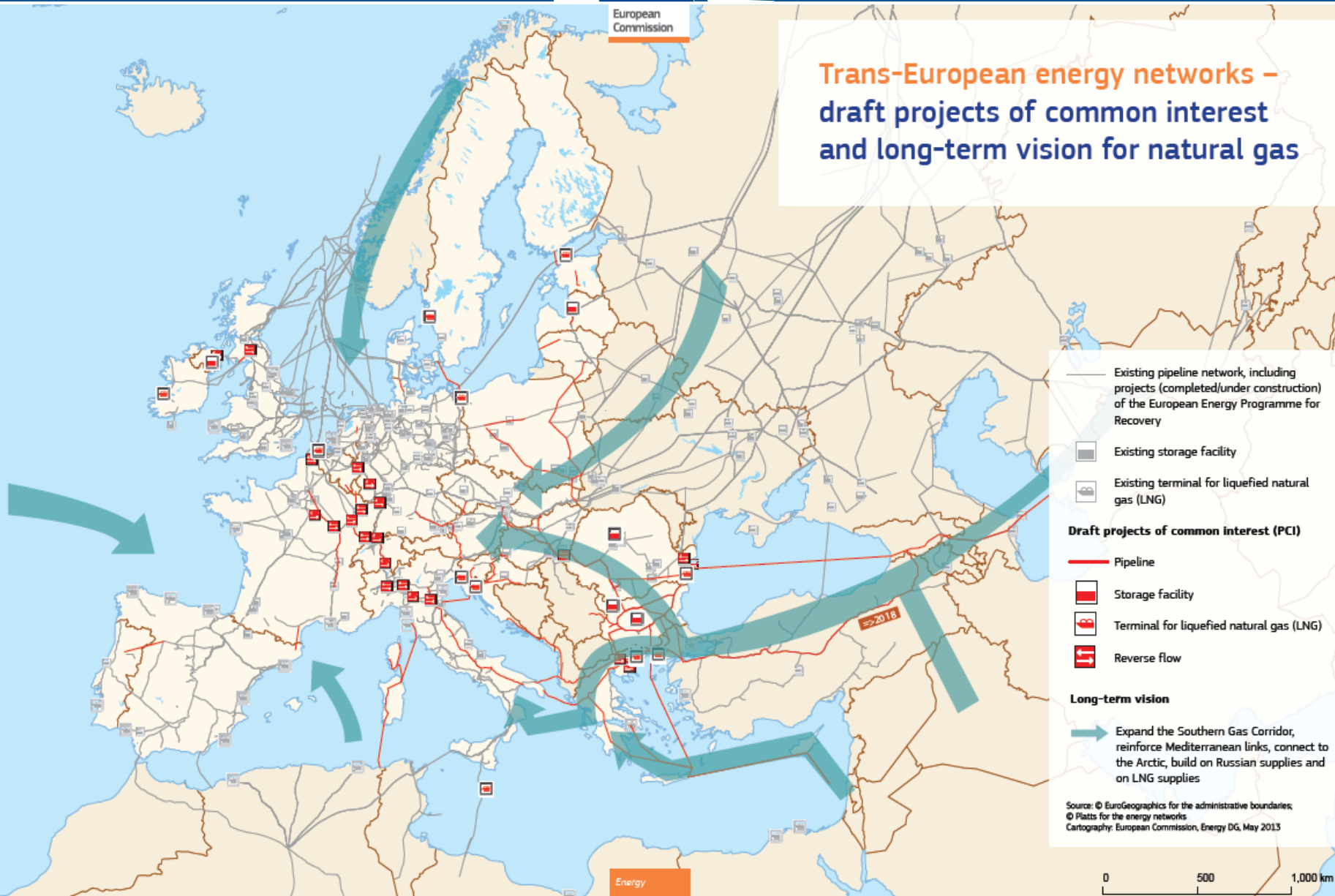
Source: ENTSO-E





European Commission

Trans-European energy networks – draft projects of common interest and long-term vision for natural gas



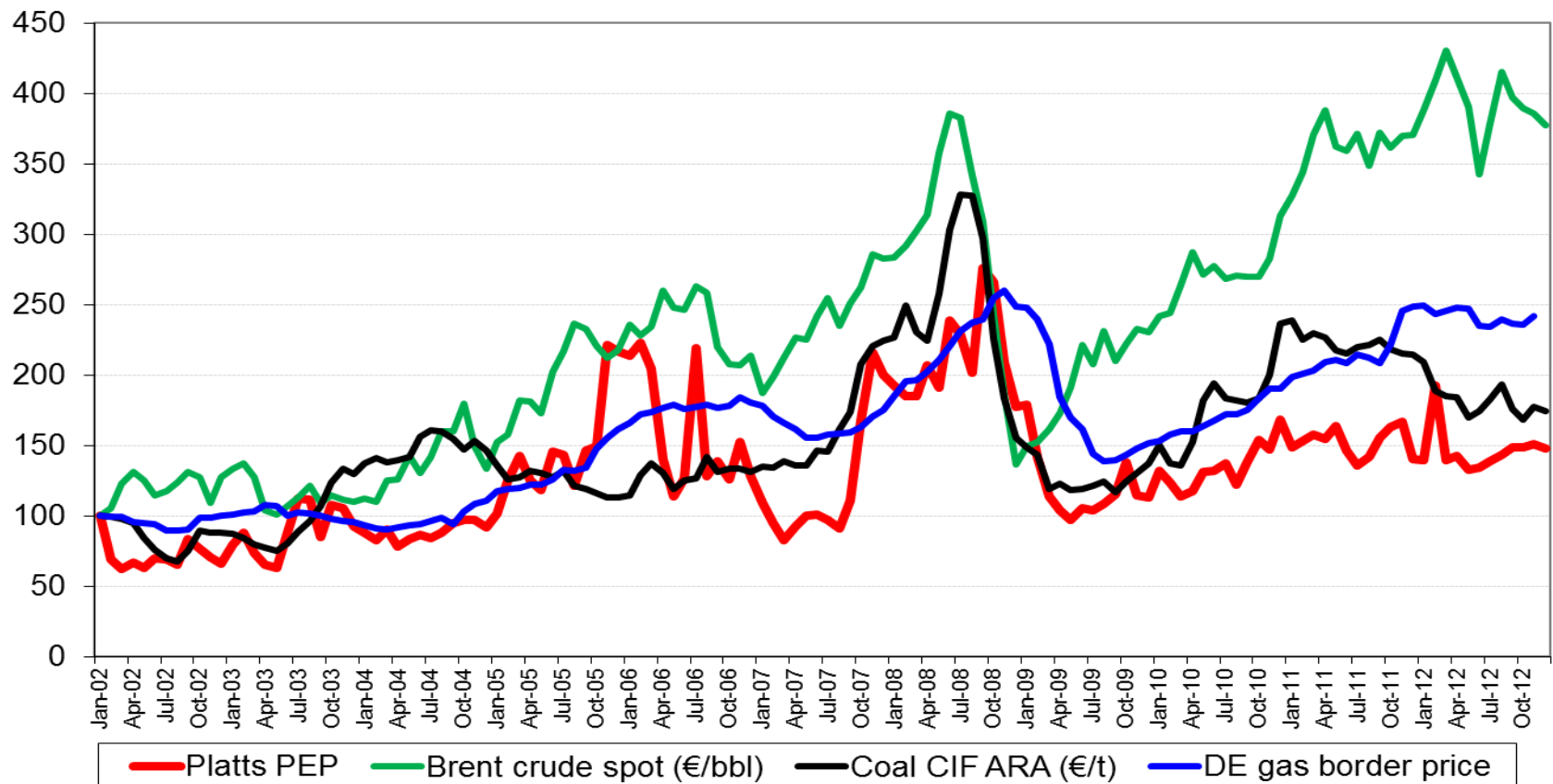
- Existing pipeline network, including projects (completed/under construction) of the European Energy Programme for Recovery
- Existing storage facility
- Existing terminal for liquefied natural gas (LNG)
- Draft projects of common interest (PCI)**
 - Pipeline
 - Storage facility
 - Terminal for liquefied natural gas (LNG)
 - Reverse flow
- Long-term vision**
 - Expand the Southern Gas Corridor, reinforce Mediterranean links, connect to the Arctic, build on Russian supplies and on LNG supplies

Source: © EuroGeographics for the administrative boundaries; © Platts for the energy networks; Cartography: European Commission, Energy DG, May 2013

0 500 1,000 km

Energy

Future role of gas depends on its price

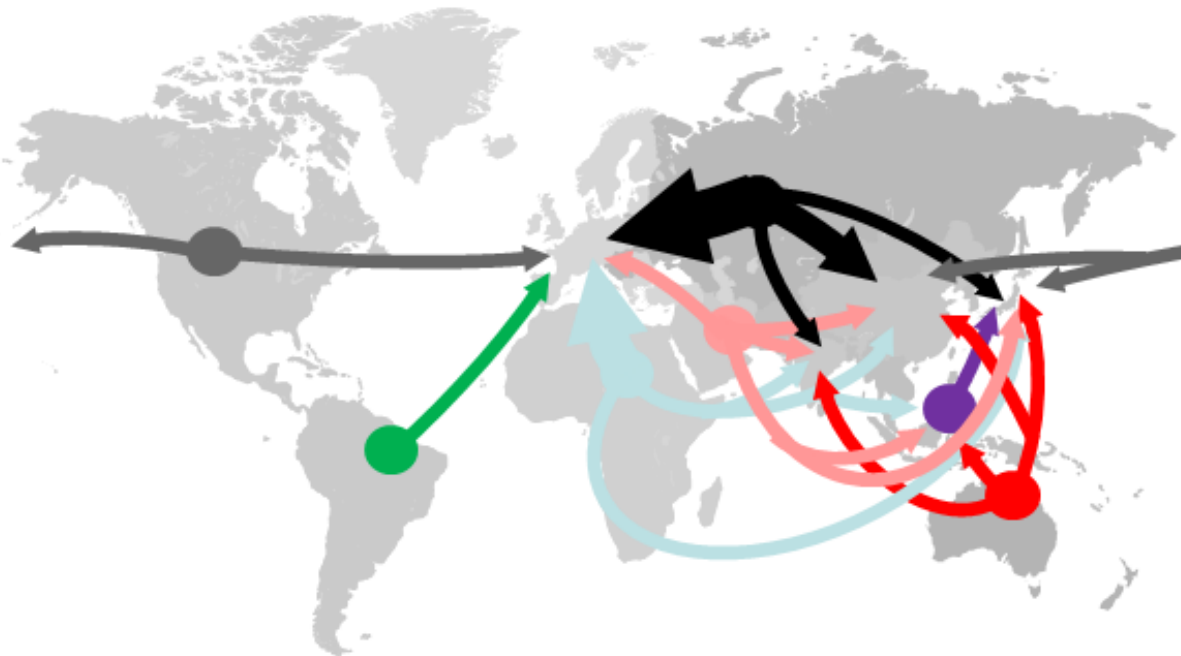


Source: Platts, BAFA

Rising supplies of unconventional gas & LNG help to diversify trade flows

Major global gas trade flows in 2035

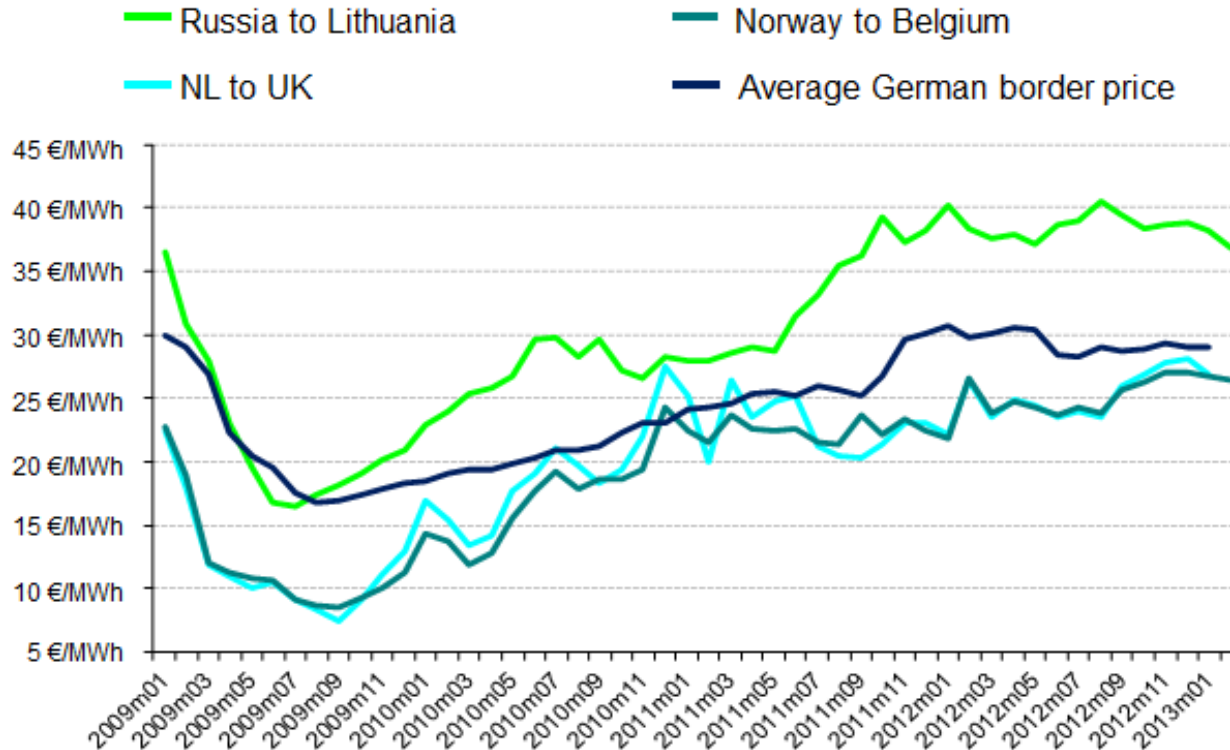
- North America
- Latin America
- Eurasia
- Asia (excluding OECD Asia, China and India)
- Africa
- Middle East
- Oceania



Source: International Energy Agency

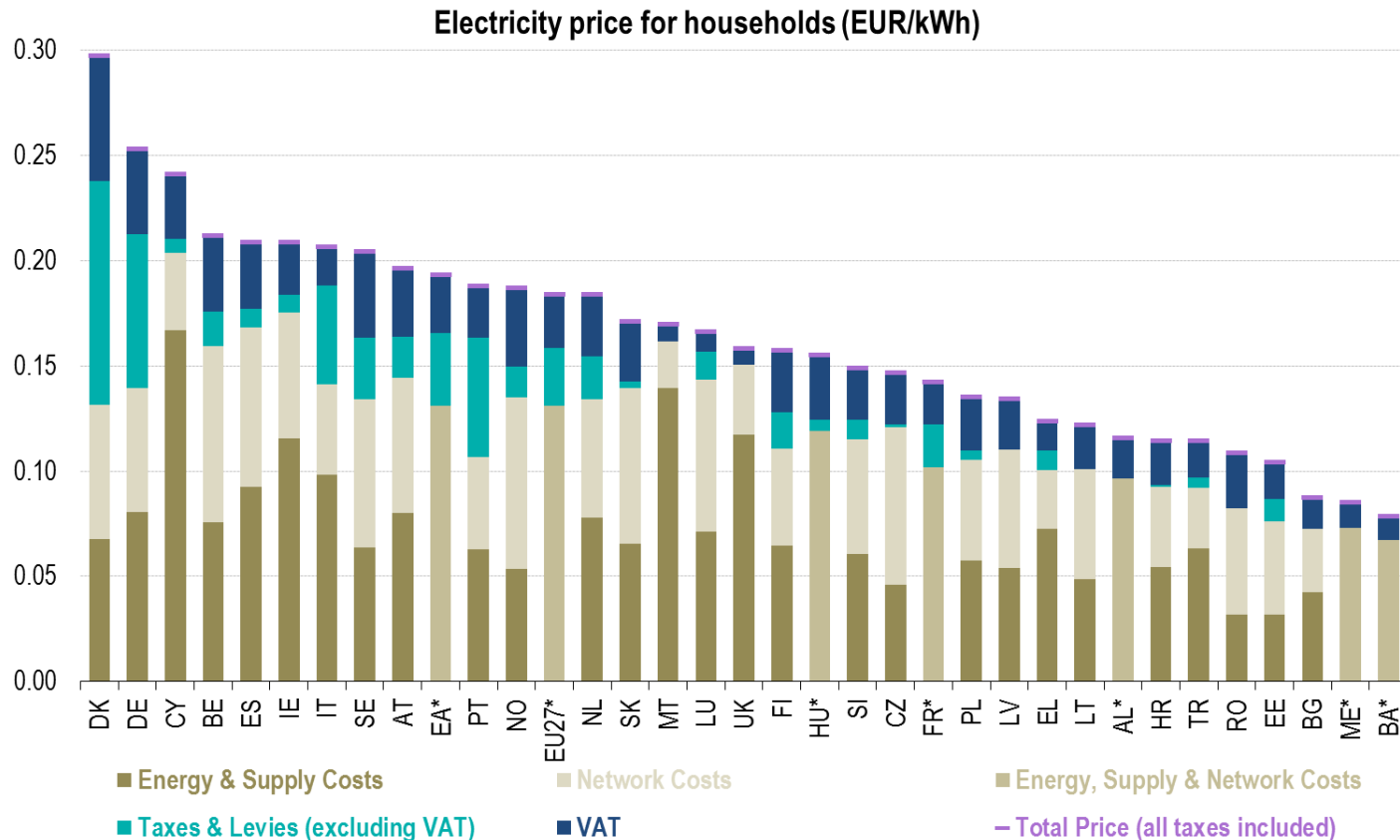
Gas prices become more competitive with more suppliers/sources

Comparison of EU wholesale gas prices (€/ MWh)



Source: European Commission

Importance of the non-energy component in household electricity prices

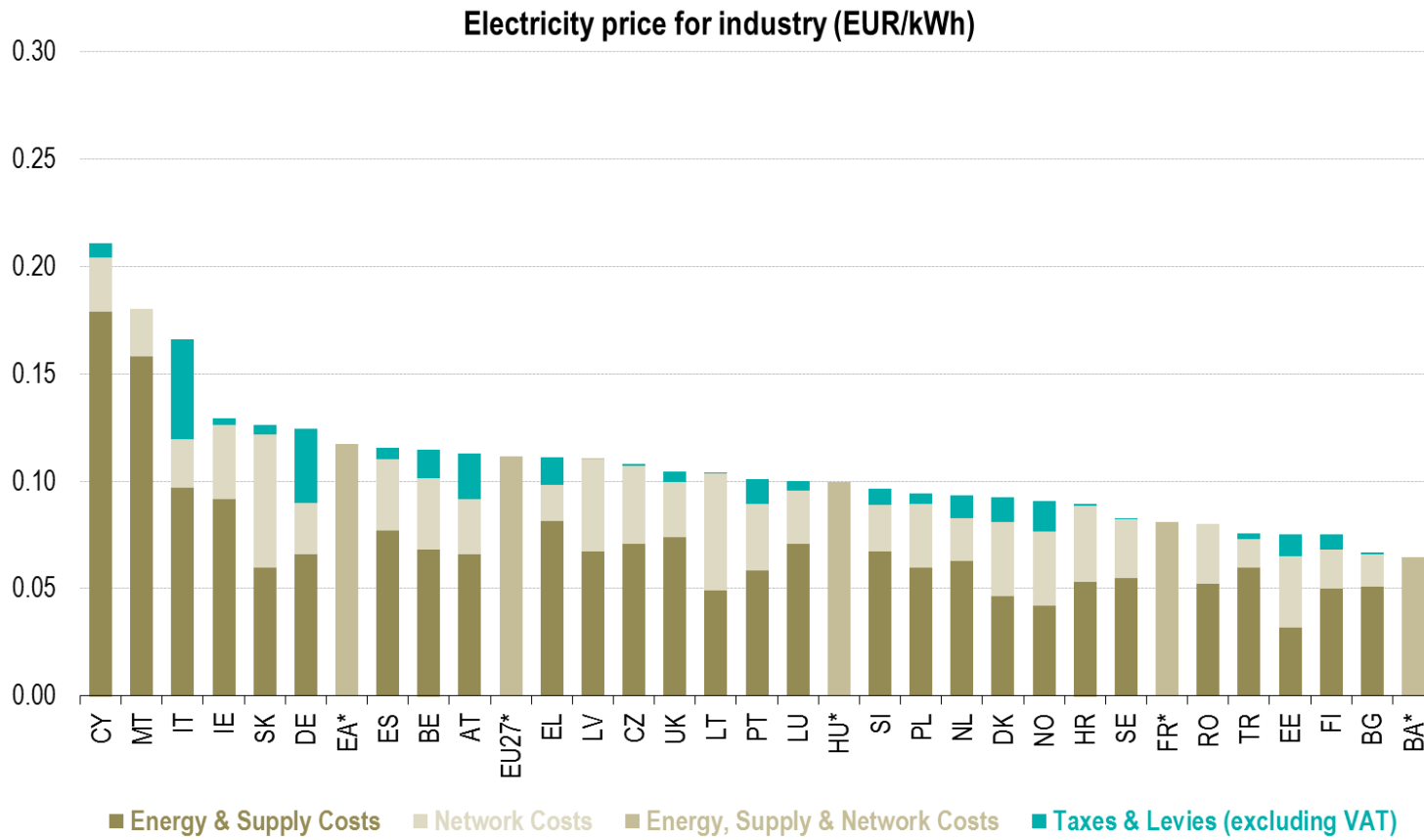


Source: Eurostat

Source: Eurostat, average electricity price for households with annual electricity consumption between 2 500 and 5 000 kWh during 2nd semester 2011

* Disaggregated price data are not available, only total for "Energy, Supply & Network Costs" is shown.

Less differences across EU for industry prices



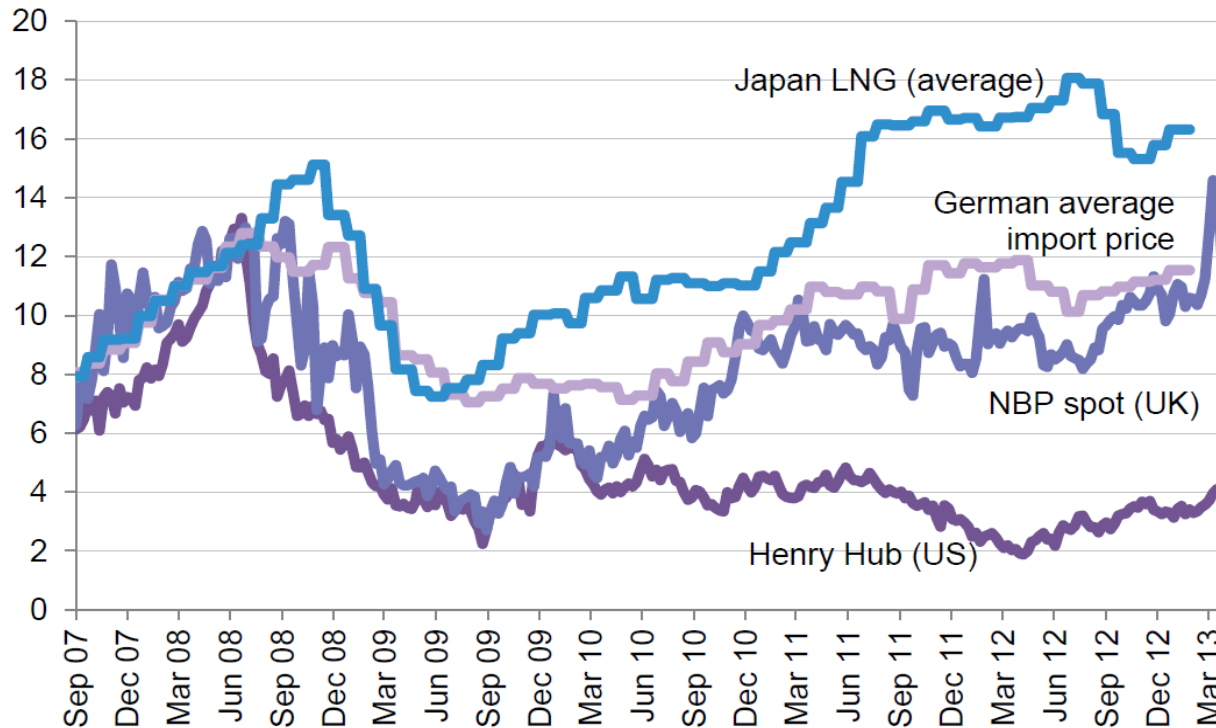
Source: Eurostat, average electricity price for industry with annual electricity consumption between 500 and 2000 MWh during 2nd semester 2011

* Disaggregated price data are not available, only total for "Energy, Supply & Network Costs" is shown.

American Liquefied Natural gas (LNG) can yield higher profits on Asian markets

GLOBAL GAS PRICES

(\$/MMBTU)



Source: Bloomberg New Energy Finance, Japan LNG Corp, German Federal Office of Economics and Export Control