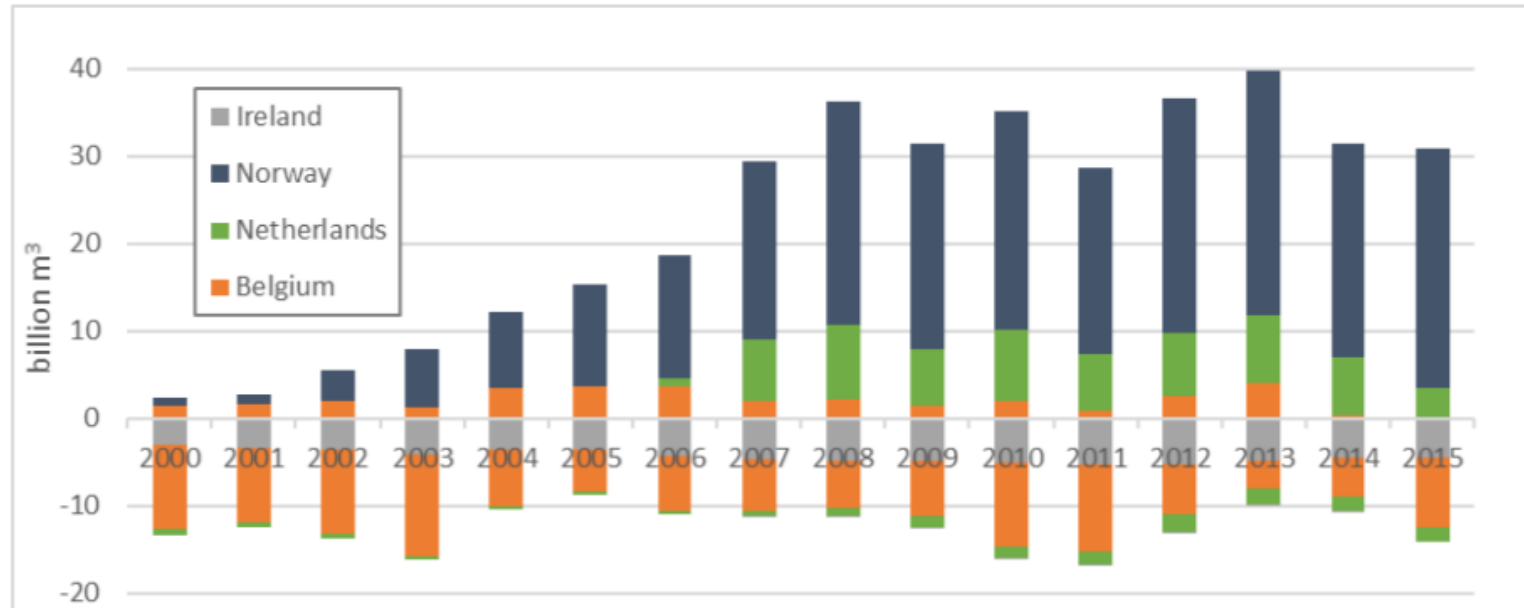


# Options and Considerations for the future EU electricity and gas partnership with the UK after Brexit

Gustav Fredriksson  
Alexander Roth  
Georg Zachmann

# Gas trade: UK a net importer and transit country to continent and Ireland

**Figure 1: (Gross) UK natural gas imports and exports (gaseous state, in bcm)**



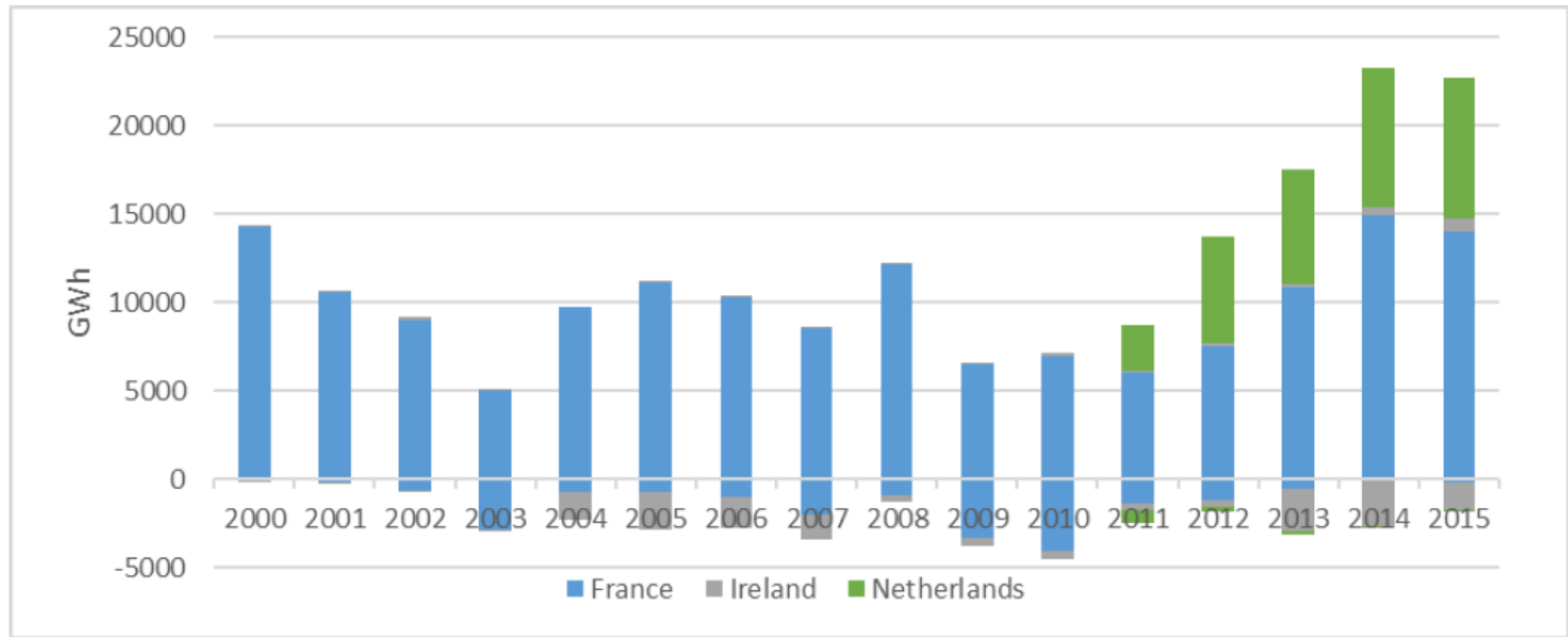
**Source:** Bruegel based on IEA (2017).

**Note:** Positive values are gross imports; negative value are gross exports.

- Mutual dependency on gas flows makes it likely that an arrangement is found to continue those.

# Electricity trade: UK a net importer, but exporter to Ireland

**Figure 4: UK (gross) electricity imports and exports (in GWh)**



**Source:** Bruegel based on IEA (2017).

**Note:** Positive values are gross imports; negative value gross exports.

- electricity trade value (€1.2 bn) is only about 10% of gas trade, but electricity not storeable -> more coordination needed
- Importance of electricity trading set to increase with new lines (doubling current capacities) and more renewables

# Without EU rules and institutions trade partners might only export/import bulk **electricity**

- **Electricity markets are complex service markets – not simple commodities markets**
    - RES support
    - Capacity Mechanism
    - Wholesale Market
    - Balancing
    - Ancillary services
    - ...
  - **Without EU rules and institutions trade partners might only export/import bulk electricity**
    - Suboptimal dispatch
    - Lower market liquidity
    - Less competitive pressure
    - Imperfect investment signals
- > Keeping IEM intact would make both sides better off**

# Issue: Capacity mechanism

- If the UK leaves the internal energy market it would also not participate in any cross-border exchange of capacity.
  - increasing capacity investments into the UK (paid for by UK consumers)
  - overcapacities → might depress prices in regional wholesale markets.
- > the EU should make sure that UK-overcapacities (that are supported through mechanisms that are unavailable for market participants in the EU27) do not undermine investment or dispatch decisions in the EU27

# Issue: Treatment of EU companies in the UK electricity and gas market

**Table 28: EU 27 electricity and gas companies active in the UK market**

MARKET SEGMENT	ELECTRICITY	GAS
<b>Wholesale Market</b> <i>(market shares in brackets, 2016)</i>	EDF (24 percent), RWE (16 percent), Uniper (6 percent), ScottishPower* (4 percent)	No data
<b>Retail Market</b> <i>(market shares in brackets, Q1 2017)</i>	EDF (12 percent), E.ON (14 percent), RWE npower (9 percent), ScottishPower* (11 percent)	EDF (8 percent), E.ON (10 percent), RWE npower (8 percent), ScottishPower* (9 percent)

- Post-Brexit, the UK would not be bound to EU state aid rules
  - Hence, EU companies would have to challenge regulatory decisions and state aid in favor of UK competitors in a UK court.
- > Hence, after Brexit, EU companies might need some safeguards against an uneven playing field.

# Issue: Remit

- Electricity and gas trading settled in the UK would be treated as financial instruments implying higher capital requirements
  - Data exchange between UK and EU will not be possible after Brexit unless EU and UK decide on a new regime of data exchange
  - EU needs to address the risk, that energy trading in the UK can dive under the radar of EU tax, financial supervision, competition and other authorities
- > London needs rigorous financial market and transparency rules for energy trading

# Conclusion

- From a sectoral perspective, both, the UK and the EU would benefit if the UK could commit to the EU energy *acquis*
- The *Energy Community* and the *EEA* provide two institutional models
- Otherwise,
  1. the EU and the UK would fall back to duty-free exchanges of bulk amounts of electricity and gas under the WTO
  2. or a frustrating number of details will need to be settled in a short period of time, to make sure that energy exchanges continue to contribute to the efficient operation of both systems