

The context of the Energy Sector in the UK in 2016

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- Total final energy expenditure (£139bn):
 - 43% Petroleum Products
 - 25% Electricity
 - 16% Gas
 - (+ coal, crude oil and other fuels)
- Tax Revenue:
 - £38bn (6% of total)
- Net energy imports:
 - £11bn (only electricity £0.68bn)
 - Effected by exchange rate movement.
 - Net exporter of gas to EU-27 (+43 TWh), but some seasonal imports (64 TWh from EU-27).
- Net purchaser of EU ETS permits in 2016 (0.7m - negligible)

The Energy Sector in the UK

- UK is 15% EU-28 GDP, 12% of total final energy consumption, 16% of gas consumption, 11% of electricity consumption, 13% of CO₂e production (8.5% of redeemed EUAs).
- Of EU-28 net imports, UK is 10% of all fuels, 11% for gas and 6% of electricity.
- UK is small and focus should be on near neighbours.
- Northern Ireland (1/4) of All Ireland electricity and gas.
- Irish gas consumption is 5% of UK gas consumption.
- Energy demand is falling for electricity and gas. Final demand for gas was 20% below 2004 peak in 2017; final demand for electricity was 14% below 2005 peak in 2017. We need to economise on investment!

How UK Energy policy should develop after Brexit

- Materiality of any likely interruption of EU trade to UK - EU-27 energy and climate trade is small.
- (Pollitt and Chyong (2017) estimated $-\$0.16/\text{mmbtu}$ at NBP if no flow to NWE; $+\pounds0.08/\text{MWh}$ per GW future interconnection lost).
- Possible benefits of freedom from EU rules:
- More merchant interconnectors
- Locational transmission charging for interconnectors at UK end
- Border tax adjustment to carbon content of electricity imports
- Exemption from large combustion plant directive (LCPD) and capacity market
- These benefits, even if realisable, are small.
- **More focus on avoiding domestic policy mistakes.**