

The Phase out of Coal Power Generation in Britain and Germany

A Comparative Analysis of Drivers and Barriers

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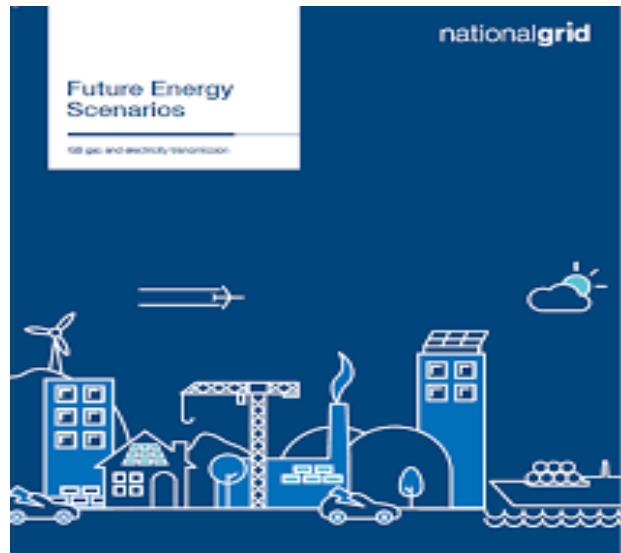


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Research Goals



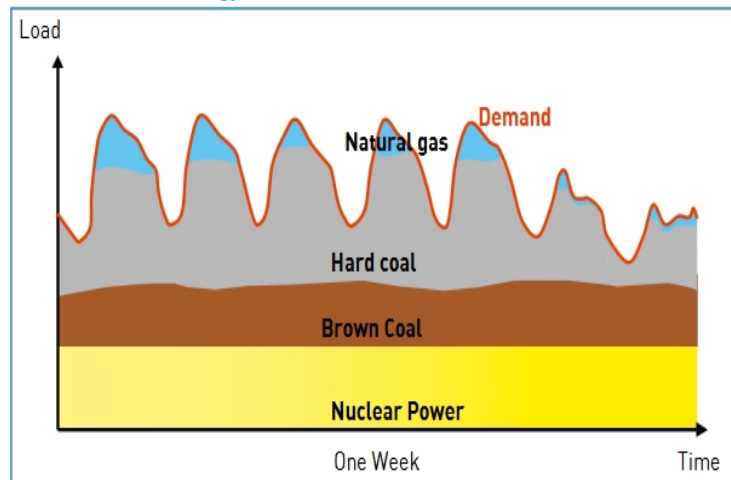
- Contextual Factors: Complexity
- PESTEL Technique
- Drivers & Challenges



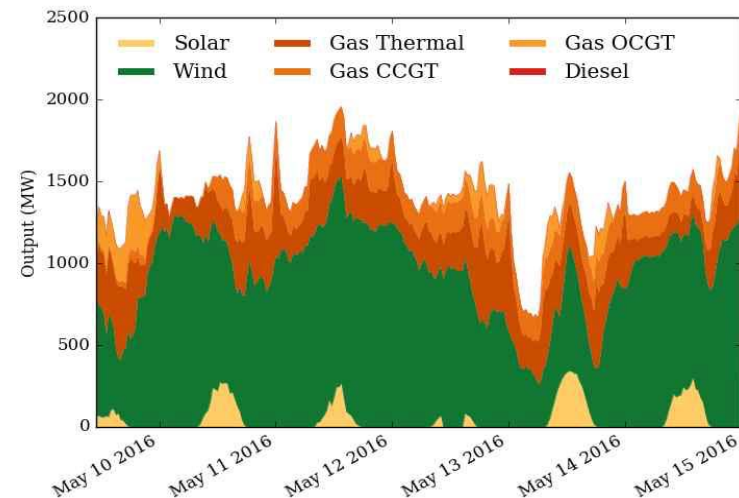
Decline Stage of Technology

New Power System

The use of conventional power plants to meet overall demand in a power plant park without renewable energy sources



Centralised system with baseload power



More decentralised system, limited baseload, merit order

Insights beyond UK and Germany

Other countries could draw lessons from the British and German cases

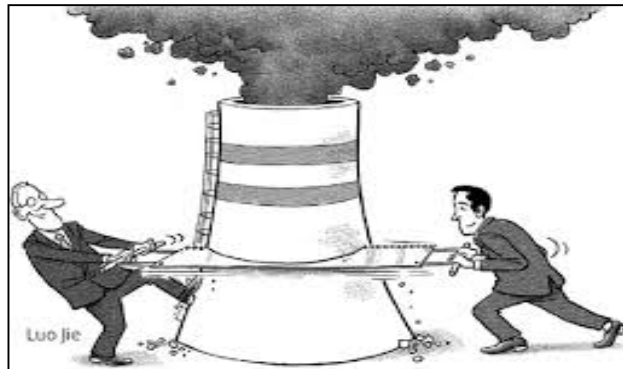


EU states in Eastern Europe still depend substantially on coal for their power supply



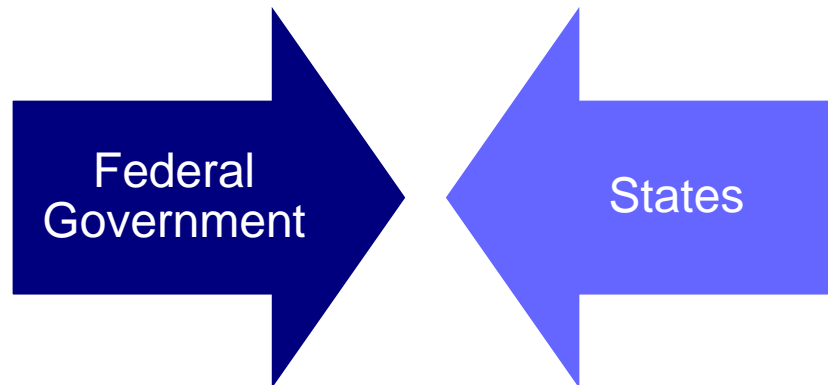
As EU states, they are subject to climate targets

Institutional Framework: UK



- Committee on Climate Change
- Energy UK support
- How to enforce, if plant operators unwilling to close?

Institutional Framework: Germany



- Governmental Structure
- Institutional Shareholders
- Compensation

Economic & Technological Implications: UK



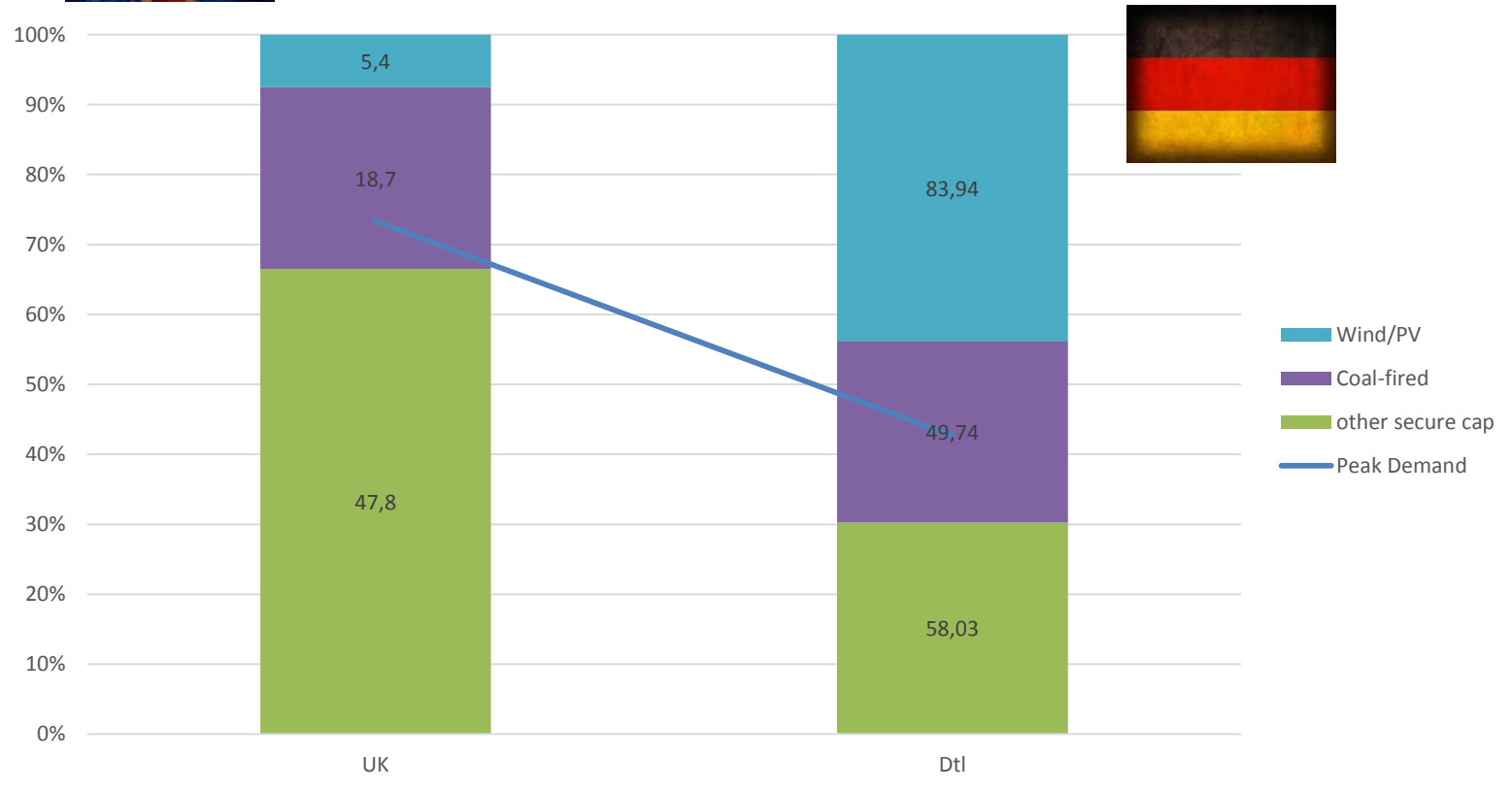
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*Carbon Price Floor, Emissions Performance Standard,
oil and natural gas focus*

Economic & Technological Implications: UK



Relative Installed Capacity and Yearly Peak-demand



Economic & Technological Implications: Germany



*Ending of subsidies
for hard coal mining*



CCS ruled out

Stakeholders and Environmental Interests: Both Countries



- Environmental Pressure: mining, Paris Agreement
- Divestment
- Geopolitics

Stakeholders and Environmental Interests: Germany

- *„For me and the Board, the last year has been like a rollercoaster ride that has put our crisis management skills and nerves to the test“*

(Peter Terium, RWE Chairman)

Conclusions



- Ageing coal infrastructure & economic instruments pushing phase out
- Robust and clear climate policy, but...
- More vulnerable security of supply and...
- Enforcement difficulties



- Strong security of supply
- Opposition to CCS and termination of subsidies, but...
- Challenge of decentralised government and...
- Greater social and distributional impacts of phase out