

The electricity market transition – a British perspective

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UK Government

Provides democratic legitimacy.

Responsible for setting the policy and regulatory framework for the gas and electricity sectors in the UK.

Department for Energy Security & Net Zero, sponsor department for Ofgem.

Responsibilities:

- delivering security of energy supply
- ensuring properly functioning energy markets
- encouraging greater energy efficiency
- seizing the opportunities of net zero to lead the world in new green industries

Strategy Policy Statement guides Ofgem & the System Operator objectives.



Independent energy regulator of Great Britain.

Non-ministerial department, directly accountable to UK Parliament for performance of functions and duties.

Priorities defined by core objective: **protect the interests of current and future energy consumers.**

Have regard to:

- security of power & gas supply
- licensees finance regulated activities
- sustainable development
- interests of the vulnerable

Funded by levy on industry paid for by consumers through bills.



Electricity system operator **ensures the reliable delivery of electricity** at efficient cost.

Separate licenced entity from network operator, with own Ofgem price control.

Manages system balance and operability, facilitates competitive markets and whole system outcomes.



Gas system operator ensures the reliable delivery of gas at efficient cost.

Ofgem set price control for combined SO and transmission operator functions.

Forecasts demand & supply, acts as residual balancer, informs system investment planning.

Within these, the headline aim for the power sector is to **fully decarbonise the GB power system by 2035.**

Including, **by 2030:**

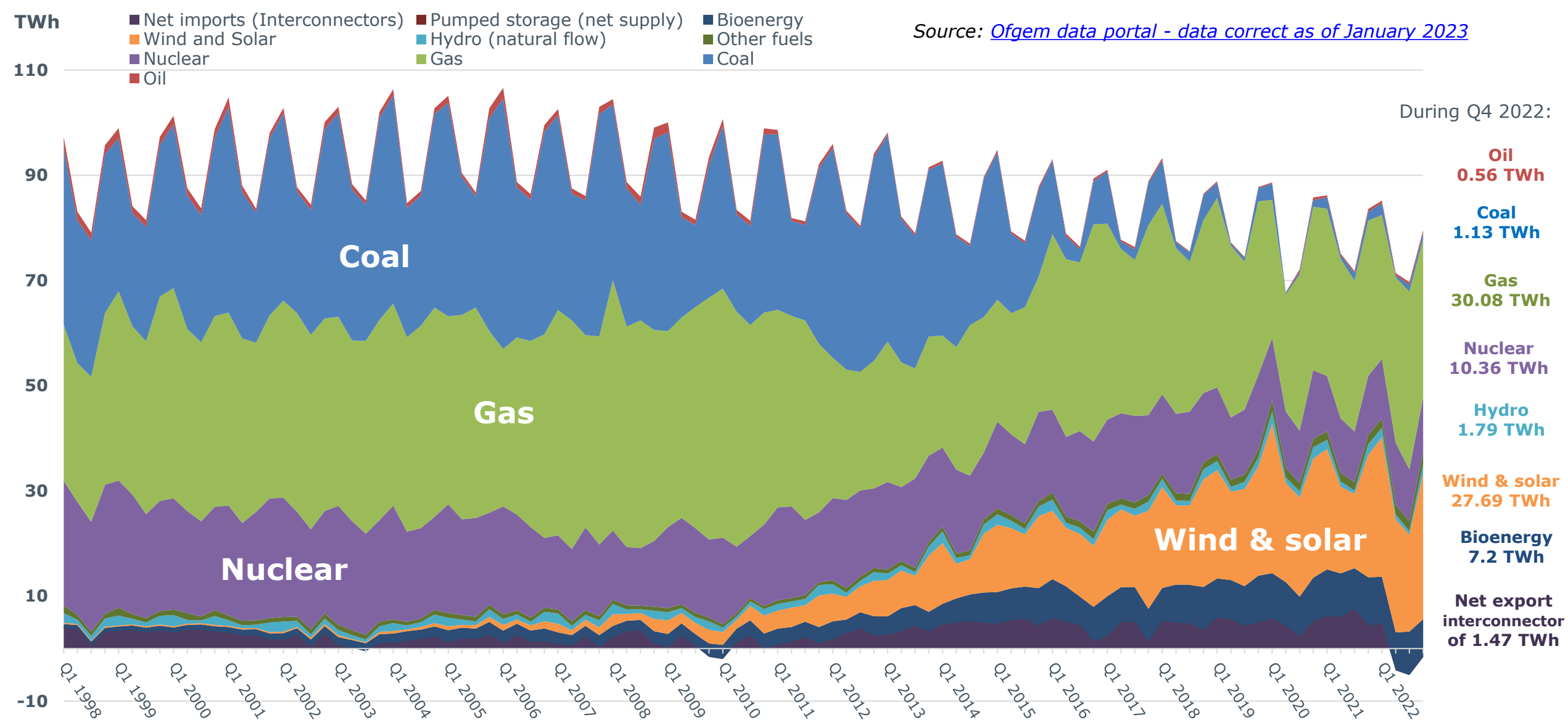
- up to 50GW of offshore wind (with 5GW of floating offshore wind),
- at least 18 GW of interconnector capacity (currently 8.4GW),
- 10GW of low carbon hydrogen production capacity,
- capturing and storing 20-30Mt of CO2 per year, and
- up to 24GW of nuclear capacity (by 2050).

2020	<ul style="list-style-type: none"> • Energy White Paper • Ten Point Plan for a Green Industrial Revolution
2021	<ul style="list-style-type: none"> • Net Zero Strategy
2022	<ul style="list-style-type: none"> • British Energy Security Strategy
2023	<ul style="list-style-type: none"> • Energy Security Plan • Net Zero Growth Plan

Ofgem's recent activities and focus going forward is **to accelerate the build out of a secure, net zero energy system at least cost.**

GB electricity generation mix by quarter and fuel source – 1998 to 2022

Source: [Ofgem data portal](#) - data correct as of January 2023



System planning

Increased role for the future system operator to plan nationally – extending the existing approach.
Equally, at regional level in collaboration with local leaders.

Wholesale market reform

Reform of the wholesale market to allow energy prices and network charging to vary more by time and (possibly) location.
New mechanisms to enable greater demand flexibility.

Retail market reform

To deliver better outcomes, and allow customers to benefit from moving their energy use to times when energy is cheapest (high supply from renewables/low demand for example).

National and local system planning

- Holistic network design (HND) published by Electricity System Operator (ESO) in July 2022 to meet 2030 targets for offshore wind, with next plan to support 2035 targets due by end of 2023.
- In 2026, new Future System Operator will publish the Central Strategic Network Plan (CSNP) for gas and electricity system needs out to 2040 and 2050.
- A framework for regional system planning for distribution networks is also underway

Accelerating network build

- New 'Accelerated Strategic Transmission Investment' regulatory framework worth over £20bn for onshore investment, with £22bn of investment in local distribution grids already agreed as part of price control determinations
- Recently consulted on the future of network regulation (Future Systems and Network Regulation) – new framework in autumn on need to build on this acceleration model.

Speeding up connections

- Ofgem open letter in May set out position on connections reform. Joint action plan with Government to be published this summer to reform first-come, first-served system and speed up grid connections.
- Three key areas of reform: (a) clear the queue of stalled projects, (b) introduce tighter entry criteria to discourage speculative connection applications, and (c) prioritise connections based on readiness.
- Longer term reform will need to align connections policies with long-term system plans.

Ofgem is the Office of Gas and Electricity Markets. We are a non-ministerial government department and an independent National Regulatory Authority. Our role is to protect consumers now and in the future by working to deliver a greener, fairer energy system.

We do this by:

- **working with Government, industry and consumer groups to deliver a net zero economy at the lowest cost to consumers.**
- **stamping out sharp and bad practice, ensuring fair treatment for all consumers, especially the vulnerable.**
- **enabling competition and innovation, which drives down prices and results in new products and services for consumers.**