



Clean energy security via *decarbonisation*

– Experiences from UK and EU

Japan Climate Action Summit 2026

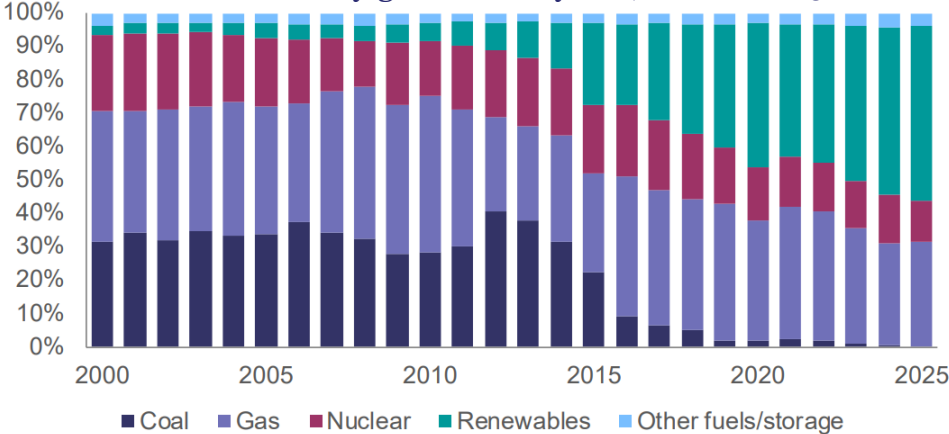
Dr Matt Webb | 2 October, 2026

e3g.org

We are moving to an age where countries are seeking clean energy security for national self interest

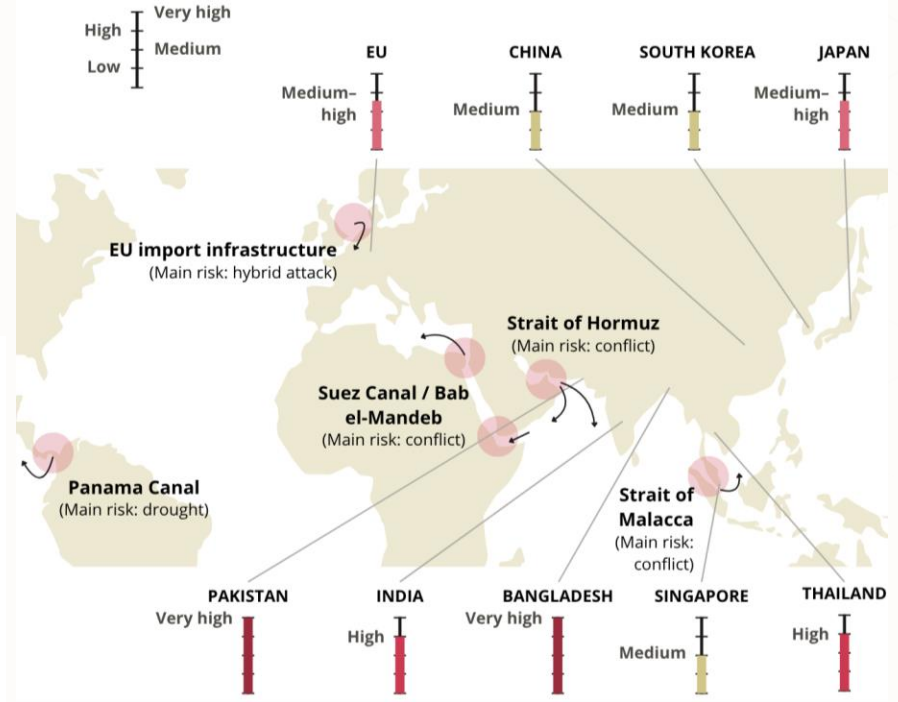


UK's Shares of electricity generation by fuel, 2000 - 2025



Source: Department of Energy Security and Net Zero, [Digest of UK Energy Statistics Annual data](#)

IMPORTER OVERALL VULNERABILITY

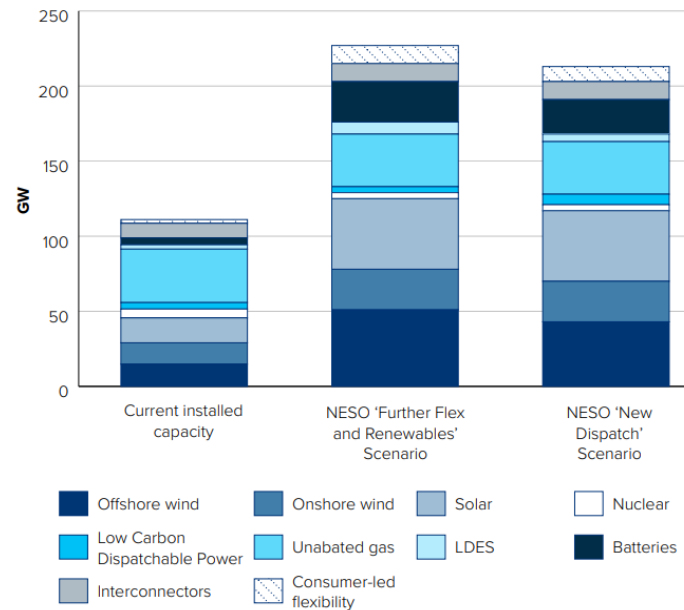


Source: E3G, March 2026, [Beyond Securing Supply: Chokepoint risk for oil and gas importers](#)

We need to clean up and electrify faster as demand grows, make investment more equitable and diversify supply chains

UK outlook:

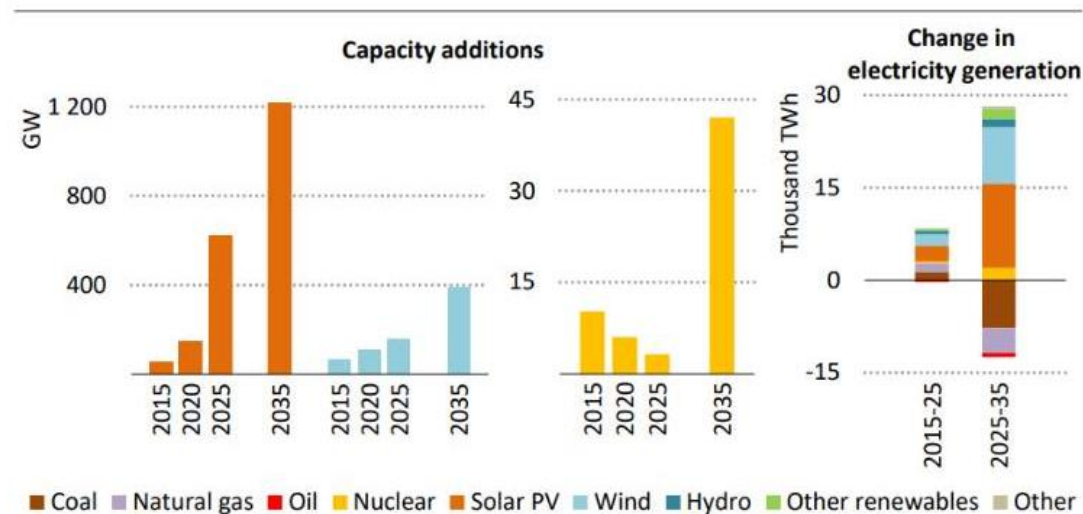
Figure 6: Installed capacity in 2030 in the NESO 'Further Flex and Renewables' and 'New Dispatch' scenarios, compared to current installed capacity (GW)



Source: Government of the UK, April 2025, [Clean Power 2030 Action Plan](#)

Global outlook:

Figure 3.2 Capacity additions and change in electricity generation by source in the HES with the NZE mix case, 2015-2035

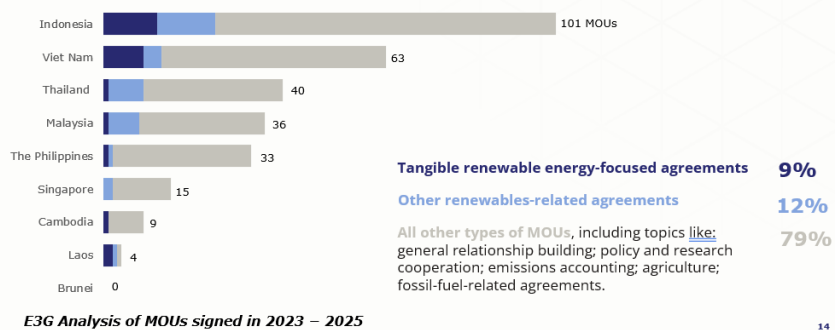


Source: IEA, September 2026, [Electrification takes centre stage as Hormuz shock spurs countries to seek to enhance energy security](#)

The way forward: we must place clean energy security at the heart of international cooperation



9% of MOUs aim to develop **concrete** renewable energy projects in power or captive energy use



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Source: E3G analysis, September 2026

Energy security cooperation in the North Seas



Figure 1: Cooperation between countries and between institutions within countries must establish a formal link between energy and security considerations.

Source: E3G, January 2026, [Empowering Europe: Delivering the security and economic benefits of North Seas wind](#)