Briefing note: Clean Power 2030

The government has published a detailed plan for meeting its target of Clean Power by 2030.

This briefing sets out key interventions and proposals detailed in the plan.

What is the Clean Power 2030 target?

By 2030 the UK will produce enough clean power to meet its total annual energy demand – backed up by unabated gas supply to be used only when essential (meaning that 95% of power generation will come from clean sources).

56% of the UK's energy consumption is currently met through clean sources, and 60% of its power generation comes from these sources.

The National Energy System Operator has set out two scenarios for the growth of installed energy capacity – "new dispatch" (more dispatchable power generation) and "further flex" (more energy storage capacity), which combined have a Clean Power Capacity range which sees.

- Offshore wind capacity rising from 14.8GW to 43-50GW
- Onshore wind capacity rising from 14.2GW to 27-29GW
- Solar capacity rising from 16.6GW to 45-47GW
- Battery storage rising from 4.5GW to 23-27GW.

The plan relies on keeping almost all the country's existing gas-fired power stations open for the rest of the decade.

Community Energy

The plan states local and community renewable energy will "**play a vital role in delivering our ambitions, contributing to the capacity mix on an aggregate basis, delivering significant local benefits and reducing network system losses by bringing generation supply closer to electricity demand.**"

Great British Energy will provide support to deliver the Local Power Plan and will "partner with, and provide funding and support to Local Authorities, Mayoral Combined Authorities, Community Energy Groups to "roll out local and community energy projects (mainly onshore wind and solar) to develop up to 8 GW of clean power".

Electricity networks and connections

An unprecedented expansion in the grid is needed to meet the Clean Energy 2030 goal - with around twice as much new transmission infrastructure needed by 2030 as has been delivered in the past decade.

To enable this, the plan sets out actions relating to:

- **Reform of the connections process** – going beyond previous plans to remove stalled or slow moving projects from the queue and to prioritise readiness. While these actions are still needed, the process will now consider technological and locational factors so the

right projects can connect in the right place at the right time and prioritise the projects we need the most to deliver the Clean Energy 2030 goal.
    - Wherever renewable projects can be connected to the lower-voltage local distribution systems, instead of the high-voltage national transmission grid this should be encouraged.
    - Projects that have secured a Contract for Difference or "capacity market" contract, "nationally significant" projects and others that are considered well advanced will also be included in the reformed connections queue.
    - The government will also work with Ofgem to explore the appropriateness of tightening incentives and penalties for network operators, for the delivery of strategically important infrastructure.
- **Reforming regulations** including amending the Strategy and Policy Statement to ensure 2030 clean power is sufficiently weighted in decision making to approve strategic investments by network companies at an earlier stage and working with Ofgem to explore the appropriateness of tightening incentives and penalties for network operators for the delivery of strategically important infrastructure.
- **Changes to the planning system**:
    - Expanding planning content exemptions to include low voltage connections and upgrades – including upgrading single phase to three phase overhead lines.
    - Stating a presumption in the National Policy Statement for Electricity Networks Infrastructure for overhead lines for large network projects which do not include nationally designated landscapes where undergrounding is the starting presumption.
- **Community Engagement**: The plan states this government believes that it is a vital principle that communities that host clean energy infrastructure should benefit from it. To deliver this the plan commits to:
    - Publication of voluntary guidance to increase the amount and consistency of community benefit funds from transmissions networks.
    - A public communications campaign around grid expansion in early 2025.

Renewable Project Delivery

While the plan notes that much of the generation capacity that will be deployed by 2030 is likely to come from large-scale commercial energy infrastructure, local and community renewable energy will also play a vital role". Interventions in this area include:

- **Great British Energy's forthcoming Local Power Plan,** which will see it partner with and provide funding and support to local authorities, mayoral combined authorities, community energy groups and others to roll out local and community energy projects (mainly onshore wind and solar) to develop up to 8GW of clean power.
- Publishing in Spring 2025 a **Solar Roadmap designed to deliver 15GW of rooftop solar** capacity – in particular on warehouses.
- Introducing new building standards **requiring all new buildings in England to be zero-carbon ready**, meaning that they will become zero-carbon as the grid decarbonises, without need for retrofit.

- Giving further details on how **solar can be supported by the Warm Homes Social Housing Fund** after the Spending Review.
- Assessing the potential to drive the **construction of solar canopies over outdoor car parks of a certain size** through a call for evidence in 2025.
- Publishing a response to a consultation on proposed transitional support for large-scale biomass.

Reforming electricity markets

The long-running review of electricity market arrangements (REMA), which began in 2022 will include by around mid-2025.

This process will include a decision on whether the UK will introduce zonal pricing for electricity or whether electricity prices will continue to be set at national level.

Flexibility

To support greater flexibility in the electricity system, the government plans to publish a **low carbon flexibility roadmap in 2025**. This will consolidate existing and future actions to drive short and long-duration flexibility.

Long duration flexible technologies will be utilised to provide a secure supply of electricity during extended periods of low renewables output and the government estimates 40-50GW of dispatchable and long-duration flexibility capacity could be needed by 2030. This will be supported through:

- **Power Carbon Capture Usage and Storage** – natural gas fuelled generation equipped with carbon capture technology – starting with the Net Zero Teesside project, which is expected to operational by 2028. The project is the first example of a Dispatchable Power Agreement, which will see power dispatched from the facility ahead of unabated gas but behind renewables.
- Implementation of a **Hydrogen to Power Business Model** designed to derisk investment, with a market engagement document to be published in early 2025. This model will also be based on a Dispatchable Power Agreement.
- Introduction by **Ofgem of a cap and floor scheme for long-duration energy storage**. The scheme will guarantee that revenues for developers will be above an agreed floor but subject to an agreed cap.
- EDF has also announced plans to keep four existing nuclear power stations operational for longer than originally planned, meaning 4.6GW of nuclear capacity will remain on the grid in 2030.

The action plan includes specific measures to overcome hurdles in the rollout of battery storage including the introduction of incremental market reforms to provide batteries and consumer-led flexibility.

This could include encouraging households to carry out electric vehicle charging late at night instead of during peak hours. To support this, the action plan suggests enhancing rewards for

consumers who choose to participate in flexibility, as well as the need for changes to market access for flexibility providers.

Contracts for Difference

The government is aiming to secure an additional 12GW of offshore wind over the next two contracts for difference (CfD) auctions - due in 2025 and 2026. To do so, it will introduce to the auction process, including a relaxation of the eligibility criteria for fixed-bottom offshore wind projects to allow projects to bid even if they have not obtained full planning consent.