

Quinbrook Infrastructure Partners

Q3 2021



In the run up to COP 26 UK Government publishes energy policy bonanza

The bumper suite of recent policy announcements by the UK Government is adding to what is, in Quinbrook’s view, an already compelling economic¹ investment case for new renewables and grid support infrastructure to drive the ‘Net Zero’ transition. At the end of July, the UK saw the release of the “Decarbonising Transport Strategy”, the “Transitioning to a Net Zero energy system - Smart Systems and Flexibility Plan” and the “Digitalising our energy system for Net Zero: Strategy and Action plan”. These plans build upon the initiatives previously announced in the Industrial Decarbonisation Strategy, Energy White Paper and Ten Point Plan.

The highly anticipated Decarbonising Transport Strategy outlines key milestones for all transport sub-categories in

pursuit of Net Zero by 2050. Despite efficiency improvements, total transport emissions increased between 1990 and 2019, and accounted for more than a third of total GHG emissions across Great Britain in 2019². Shipping and aviation industry emissions remain the hardest to abate; their emissions are estimated to have increased by 15 MtCO₂e (or 38%) over the past 30 years. Cars, vans and taxis contribute the most to emissions within the transport sector, whilst average vehicle occupancy is estimated at just 1.55 people per vehicle. The Decarbonising Transport Strategy maps out progressive near-term, 2030, 2040 and 2050 milestones to track the path to Net Zero. Total electricity demand of 312 TWh projected for 2021 could double though decarbonising all road transport, with additional electricity demand of up to 348TWh³ predicted by 2050.

¹ BNEF Levelised cost of energy across technologies UK 2021, H1

² Aurora Summer Policy Update August 5th 2021

³ Depending on the technology mix, Aurora Summer Policy Update August 5th 2021

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Record levels⁴ of flexible capacity have already been contracted by Britain's electricity distribution networks in 2021, with a total of 1.6 GW (45% more than for the whole of 2020) being contracted in the first 7 months of the year alone⁵. The Smart Systems and Flexibility Plan ("the Plan") outlines the urgent need for improved flexibility, technology and data usage in the UK power market. Flexibility needs and opportunities are identified across a full range of specific energy efficiency and heat policies. This is considered by Quinbrook to imply that many of the subsidy schemes and market mechanisms which support energy efficiency, could be extended to incorporate flexibility initiatives and smart technologies too. Both Residential and Industrial/Commercial premises are a major focus of the Plan's pre 2030 decarbonisation targets, and Quinbrook therefore expects a proliferation of incentives to encourage installation and optimisation of more flexibility investment.

The Plan contains a clear statement that flexibility is essential to UK energy security as renewables replace fossil fuelled generation out to 2030 and beyond. Highlights include⁶:

- By 2030, 30,000 MW (30 GW) of low carbon flexible assets (storage, demand side response ("DSR") and interconnectors) will be needed, with an expectation of at least 13,000 MW (13 GW) of storage capacity;
- A new range of flexibility services and tariffs are required to incentivise this increased flexibility although flexibility service providers must be more appropriately regulated as they control significantly more load. A consultation in 2022 will assess regulation options (e.g. an aggregator license). Service providers who are already able to meet Flex Assure⁷ requirements can expect to benefit from being ahead of the curve; and
- More government support for industry-led initiatives like Flex Assure (a code of conduct scheme that sets

common standards for DSR aggregators) is expected to follow.

The Digitalisation Strategy sets out the UK Government's plan for harnessing the power of data and digitalisation to support competitive markets, seize economic opportunities, and capitalise on new low carbon technologies⁸. Data collection is assumed to be accessible by default, enabling a noticeable step-up in asset visibility, whilst security is maintained. Improved market transparency and data access for participants is expected to allow innovators to revolutionise UK energy markets.

Quinbrook believes that the UK energy transition, supported by the proliferation of new policy initiatives, will open up critical infrastructure investment opportunities in both new and established sectors of the energy market.

⁴ <https://www.energynetworks.org/newsroom/britain-breaks-network-flexibility-record-with-45-percent-more-contracted-this-year-than-all-of-2020>

⁵ <https://www.energynetworks.org/newsroom/britain-breaks-network-flexibility-record-with-45-percent-more-contracted-this-year-than-all-of-2020>

⁶ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003778/smart-systems-and-flexibility-plan-2021.pdf

⁷ www.flexassure.org Flex Assure is a code of conduct scheme which sets common standards for demand side response (DSR) aggregators

⁸ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1003778/smart-systems-and-flexibility-plan-2021.pdf