

## GIIA Briefing: Thursday 7<sup>th</sup> April: Energy Security Strategy

### Background

- The Energy Security Strategy is a long awaited government document, outlining a roadmap to building a more resilient, self-sufficient energy system that will shield the UK from the unpredictable nature of foreign imports, as well as ensuring we meet our climate commitments, including reaching Net Zero status by 2050.

### Introduction

- Post-pandemic surge, including in demand for oil and gas, following war in Ukraine and abhorrent actions from Russia the situation has intensified – with clear impacts on international imports.
- Acknowledgement of the need to address the UK's vulnerability to international oil and gas prices by reducing dependency on imported oil and gas - increasing the proportion of electricity generated by renewables, we can reduce exposure to volatile fossil fuel markets.
- While reducing imports, there is a need for continued gas and oil provision – direction of travel is to source this domestically within the North Sea.

### Energy Efficiency

- Over 90% of homes heated by fossil fuels and the majority of homes are energy inefficient. Improving efficiency could reduce our heating bills by around 20% and reduce our dependency on foreign gas.
- **By 2025, c.700,000 homes will be upgraded, and by 2050 all our buildings will be energy efficient with low carbon heating.**
- Government wants to ensure UK homes continue to be more comfortable and cheaper to run.
- Highlights that the government 'has gone further than any government in setting out an ambitious strategy' through aspects including: the Heat and Buildings Strategy (& £3.9bn support); expansion of the Energy Company Obligation to £1bn per year (2022-26), and setting 2035 as the date for phasing out the sale of new/replacement gas boilers.
- **Cutting costs for consumers:** Zero-rating VAT for next five years on energy-saving materials; £450m Boiler Upgrade Scheme (to launch this month) and 'rebalancing' the costs placed on energy bills away from electricity – the government will publish proposals on how to do so, this year.

#### **(I) Market:**

- Government looking to facilitate low-cost finance from retail lenders, to drive investment into energy efficiency measures.
- Around 40 green mortgage products available. Government will **double innovation funding for the development and piloting of new green finance products for consumers from £10m to £20m.**
- **Will work with the UK Infrastructure Bank (UKIB), as it considers investment opportunities including those that would improve the energy efficiency of our buildings.**
- Bringing in new minimum standards and labelling requirements for some energy-use products (will formally consult on draft regs, end of 2022, early 2023)

- Expanding manufacturing of heat pumps – **Heat Pump Investment Accelerator Competition in 2022, worth up to £30m.**

(II) Frameworks:

- **Setting clear energy performance standards varying by building type** – more details in May.
- **Reviewing practical planning barriers that households may face when installing energy efficiency measures** – to be completed by 2022.

### Oil and Gas

- Around half of demand for gas is met by domestic supplies – in meeting net zero by 2050, **we may still use a quarter of the gas that we use now.**
- **Fully utilise North Sea reserve, use empty caverns for CO2 Storage, bring through hydrogen to use as an alternative to natural gas and use offshore expertise to support offshore wind sector.**
- North Sea to be a foundation of energy security, but still aim to reduce gas consumption by more than 40%, by 2030.
- Gas highlighted as an important transition fuel: **“There is no contradiction between our commitment to net zero and our commitment to a strong and evolving North Sea industry. Indeed, one depends on the other.”**

Government to send clear signals on the role of gas in the transition, by:

- **North Sea Transition Authority** to launch another licensing round in autumn.
- Establishing **Gas and Oil New Project Regulatory Accelerators** to provide support to facilitate rapid development of new projects.
- Reducing emissions of offshore oil and gas further- **driving rapid industry investment** in electrifying offshore production.
- **Remaining open minded about onshore reserves** – commissioned impartial, technical review on shale gas by British Geological Society. “Any exploration or development of shale gas would need to meet rigorous safety and environmental protection both above ground and sub-surface.”

New lease of life for North Sea in low-carbon tech, by:

- **Delivering £1bn commitment to four CCUS clusters by 2030**
- **Industrial clusters to be the starting point for new carbon capture industry in UK with sizeable export potential**
- **Publishing delivery roadmaps for CCUS and hydrogen to provide clear signals to industry to invest this month**

### Renewables: Offshore Wind

- Ambition to deliver up to 50GW by 2030, including up to 5GW of innovative floating wind.
- By 2030, we will have more than enough wind capacity to power every home in Britain.
- “We will be the Saudi Arabia of wind power” – by 2030, ambition is that over half of our renewable generation capacity will be wind
- “On cost, the unit cost of offshore wind power has fallen by around two-thirds. The Contracts for Difference scheme has shared the risks of investing in new technologies to boost UK renewables and bring in billions of pounds of private investment.”

Development and deployment of offshore wind farms can take up to 13 years – to cut the process time by over half, the government will:

- Reduce **consent time from up to four years, to one**
- Strengthen **Renewable National Policy Statements**
- **Make environmental considerations** at a more strategic level
- Introduce **strategic compensation** environmental measures
- Reviewing how **Habitats Regulations Assessments** are carried out, for all projects applying from late 2023
- Implementing a new **Offshore Wind Environment Improvement Package**
- Working with the **Offshore Wind Acceleration Task Force, Ofgem and National Grid**, to further cut timeline
- Establishing a **fast track consenting route** for priority cases where quality standards are met

Government will ensure the UK is a world leader, by:

- Offering clear investable signals through annual auctions (next round March 2023)
- Consulting on changes to the 2024 CfD auction, Allocation Round 6, that incentivise renewables to locate and operate in a way that minimises overall system costs
- Aiming to bring forward up to 5GW of floating offshore wind by 2030, which opens up some of the windiest spots. This is backed by investing up to £160 million in ports and supply chains and £31 million in R&D.

### **Onshore Wind**

- UK already has over 14GW of onshore wind and strong pipeline of future projects in Scotland.
- Will continue to include onshore wind in future auction rounds of Contracts for Difference.
- **Scotland and Wales:** Continue working with Scottish Government to ensure communities and landscapes are considered for future projects and work with the Welsh Government to improve grid connections.
- **In England:** recognition of the range of views, prioritise putting local communities in control. Not introducing wholesale changes to current onshore wind planning regulations but will **consult this year with some supportive communities that want to host onshore wind infrastructure, in exchange for lower energy bills.**
- Government will consider arrangements to support repowering of onshore wind sites upon the need for updating/replacing.

### **Solar / Other Technologies:**

#### **Solar**

- Currently 14GW of solar capacity in the UK and cost of solar has fallen by approximately 85% over the past decade – expect a five fold increase in deployment by 2035.
- Ground-mounted solar: consult on amending planning rules.
- Encouraging large scale projects to locate on previously developed/lower value land.
- Support solar co-located with other functions.
- Rooftop solar: bring down bills and increase jobs by simplifying planning processes.
- Government has removed VAT on solar panels for residential accommodation, but is looking at facilitating low-cost finance from retail lenders to drive rooftop deployment.

## Other Technologies

- Exploring other opportunities including tidal and geothermal.
- Exploring potential for international projects (clean, affordable and secure power), including by expanding the Contracts for Difference scheme.

## Nuclear

- **By 2050, Britain plans to have 25% of energy demands be met by nuclear.**
- UK will see 5 of 6 existing nuclear power stations offline and only 1 new project in construction. France has 9 times more nuclear capacity.
- Increase **deployment of civil nuclear to 24GW by 2050.** 1 project will be taken to FID in this parliament and 2 FID projects in the next parliament, including Small Modular Reactors which are subject to value for money and relevant approvals.
- This pipeline could see 1 reactor being built every year.
- This will sit alongside the £2 billion pledged in new nuclear including £100 million to support development of Sizewell C and £210 million to bring small modular reactors.

Changes to deliver new nuclear projects

- **Launch of £120 million Future Nuclear Enabling Fund in April**
- Set up Great British Nuclear Vehicle to help projects through every stage of development.
- Great British Nuclear to be given extra funding for new projects and initiate selection process in 2023 for further UK projects. The government will consider the role it plays in financing to support new projects.
- **Government to work with regulators to streamline approvals process and harmonize on international regulation.**
- UK has 8 designated sites – Hinkley, Sizewell, Heysham, Hartlepool, Bradwell, Wylfa, Oldbury and Moorside.

## Hydrogen

- Hydrogen ambition to double – 10GW by 2030, half to come from electrolytic Hydrogen.
- Plan to blend 20% hydrogen into the natural gas grid – decision to be made by the end of the year.
- Run annual allocation rounds for electrolytic hydrogen and plan to move to price competitive allocations by 2025 (subject to legislation and market conditions).
- **1GW of electrolytic Hydrogen by 2025** to be operational or in construction.
- Hydrogen certification scheme to be set up by 2025 to ensure imported Hydrogen meets UK standards.

(BEIS correspondence regarding Hydrogen - “To accompany the Strategy and the exciting new ambition to increase low carbon hydrogen production capacity to up to 10 GW by 2030, we expect to shortly publish the Hydrogen Investment Package. This will include the Hydrogen Investor Roadmap and the government responses to the consultation package on the Hydrogen Business Model, Net Zero Hydrogen Fund and Low Carbon Hydrogen Standard”)

**GIIA Comment – Meeting with Energy and Investment Ministers on 20<sup>th</sup> April when we expect to hear further detail on this and opportunities for international investors.**

### Networks, storage and flexibility

- Prioritise 2 key features:
  - Anticipating need to minimise cost and disruption in future;
  - Flexibility to match supply and demand to minimise energy waste.
- **This 2-prong approach could bring cost down by £10 billion a year by 2050.**
- The strategy recognised that the UK has an ageing onshore electricity distribution network and that **it is more beneficial to pay higher prices in the short term for long term resilience and cost reduction.**
- The strategy takes a pro competition approach to minimise wasted energy.

The government will offer clear signals

- Establish a Future System Operator to oversee the transition to Net Zero.
- Public a strategic framework with Ofgem to highlight how networks should deliver Net Zero.
- Appoint Electricity Networks Commissioner to advise government on policy and regulatory changes that can speed up network delivery.
- **Blueprint for the whole system by the end of 2022 and** updates to National Policy Statements to recognise the blueprints.
- Ensure Ofgem expedites the approval process to build networks (this will be set out more clearly in the Strategy and Policy Statement for Ofgem).
- Reduce the time for delivering onshore transmission networks infrastructure by 3 years and ensure that local communities can benefit from this onshore infrastructure.
- **Launch Offshore Coordination Support Scheme to de-risk delivery** of advanced offshore wind projects.

Flexible and efficient system for generators and consumers

- **Develop policy to enable investment in large scale long duration electricity storage.**
- Place electrolytic hydrogen in strategic locations to reduce network constraints.
- Review of Electricity Market Arrangements to be taken in Britain, this will go towards setting out plans before the next price cap.
- Smarter system with flexible pricing through Time of Use tariffs and battery storage.

### International Delivery

- Work with partners and maintain stable energy prices and reduce reliance on Russian fossil fuels.
- Russian oil and coal to be phased out by 2022, end LNG as soon as possible.
- Deepen energy collaboration by hosting UK-Qatar Strategic Energy Dialogue.
- Work with US on gas and on how to leverage UK LNG to support Europe.
- Plans for the UK to provide a key EU entry point for non-Russian gas.

Support other nations on the green transition

- Clean Green Initiative, double international climate finance to £11.6 billion.

### Key Quotes

- **Prime Minister – Foreword:** “We’re going to work with industry to slash our way through needless and repetitive red tape so that all this can happen much more quickly. Energy companies tell me they can get an offshore wind turbine upright and generating in less than 24 hours but that it can take as much as 10 years to secure the licences and permissions required to do so.”
- “Net zero is a smooth transition, not an immediate extinction, for oil and gas.”

- “...we need to build a British energy system that is much more self-sufficient. This requires power that can be relied on even when the sun is not shining, or the wind is not blowing.”