prospect

Briefing

Prospect's Five Steps to a Secure, Low-Carbon Energy Future

1. Make the Renewables Revolution Work for Everyone

The UK has been a global leader in developing new renewables energy infrastructure over the past decade. Renewables provided around a third of our electricity in 2018, a roughly six-fold increase since 2008.1

Yet, the pace of renewables deployment has now slowed, and for technologies like solar and onshore wind, it has virtually ground to a halt. Even offshore wind, which has

1 BEIS, *Digest of UK Energy Statistics (DUKES)* July 2019

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grown rapidly to become a key component of our energy system, deployment rates are less than half of what is likely to be needed to hit a net-zero target by 2050.[2]

Furthermore, the price tag for renewables so far has been high; expenditure on low carbon subsidies is soon set to surpass £12 billion a year, and is levied effectively as a regressive tax on consumer bills which hits the poor hardest.[3] As subsidy payments grow, this opaque and disproportionate funding mechanism risks undermining support for new renewables investment.

There are also growing concerns about who benefits from the development of renewables. Much of the investment, and many of the jobs, are being directed overseas as companies seek higher profit margins at the expense of the UK manufacturing sector and UK workers. Coupled with subsidy curtailments, this has led to a 30% slump in renewables employment in the UK since 2014.[4]

What is urgently needed is a fresh approach. The market-led framework has proved costly, unfair, and inadequate. If net-zero is to be more than just an aspiration, we need to develop a real green industrial strategy for the UK, funded by direct public investment. This will be cheaper, fairer, and will deliver a much faster roll-out of renewable energy infrastructure, while directing jobs and investment to UK coastal communities.

2. Restart the Nuclear Renaissance

The case for new nuclear is overwhelming: weather-dependent renewables need to be backed-up with secure, low carbon power when the wind stops blowing and the sun stops shining. Nuclear is the only proven, scalable low carbon technology that can deliver high volumes of power whenever we need it.

Yet, a promised a nuclear renaissance has failed to materialise, and major new projects in Cumbria, Wales, and Gloucestershire have all collapsed, while a further project at Sizewell in Suffolk is in jeopardy. Successive governments have refused to use public funds on critical new infrastructure, in spite of evidence that public procurement could dramatically slash costs.[5]

To meet our carbon targets, and avoid a dangerous shortfall of power, we need to get new nuclear projects off the drawing board urgently. If direct public investment is not an option, then a 'regulated asset base' model should be developed as an alternative means to restart the nuclear renaissance.

2 Prospect calculations based on DUKES data

3 OBR, *Economic and Fiscal Outlook* March 2019

4 Prospect, *What Happened to All the Green Jobs?* May 2019

5 NAO, *Report on Hinkley Point C*, June 2017

3. Future-Proof Our Energy Networks

The UK's energy networks are a central part of our energy system and will have a critical role to play in our drive to decarbonise. But, since privatisation thirty years ago, they have been underserved by a system of regulation plagued by short-termism and an excessive focus on cost-cutting.

Under the current system, profits for network owners have remained generous, while spending on upgrading network infrastructure has been woefully inadequate. Preparing networks for the anticipated growth in electric vehicles alone is expected to cost tens of billions of pounds, but the current regulatory framework provides network owners with little incentive to plan for the future.6 At the same time, decades of job cuts have left networks under-staffed, suffering critical skills shortages, and looking increasingly unrepresentative of the communities they serve.

Our networks need to be run in a way that encourages long-term planning, and incentivizes resilience, safety, and innovation. Regardless of who owns them, networks need to be prepared for the future, and we urgently need a wide-ranging review of network regulation with a view to creating a system that prioritises decarbonisation and resilience over profits and cutting costs.

4. Investing in UK Energy R&D

Historically the UK has been at the forefront of developing new energy technologies, but public investment in UK energy research has plummeted in recent years. Since 2010, public investment in renewables R&D has fallen by more than 70%, while funding for nuclear research collapsed in the 1990s and has not recovered since.

This is cause for serious concern. The best pathway to net zero remains very uncertain, and innovation and new technological developments will be critical to determining the most secure, and cost efficient route to take. Developments in areas like energy storage, smart grids, and carbon capture technology will likely be game-changing, but the UK risks being left behind without substantial new investment in research and development. The potential rewards are huge, with the global market for carbon capture alone projected to be worth £100 billion a year by 2050.7

To ensure the UK can remain on the cutting edge of energy research the government must commit, as a minimum, to reversing recent cuts to funding for energy R&D while expanding public research capacity in promising new areas like energy storage and carbon capture.

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6 Energy Systems Catapult, *Preparing UK Electricity Networks for Electric Vehicles*, 2018

7 BEIS Select Committee, *Carbon Capture Usage & Storage: Third Time Lucky?* April 2019

5. A Just Transition for the Energy Workforce

The transition to a low-carbon economy is already displacing workers and impacting communities who have relied on extractive and carbon-intensive industries, and there is currently no meaningful commitment on the part of government to a just transition for those workers and communities. This is especially concerning given the disastrous history of industrial transition in the UK over the past forty years.

The move away from fossil fuels must not be detached from the ongoing fight to secure decent jobs and local investment in our communities. If decarbonisation is perceived as bringing nothing but job losses, further industrial decline, and hardship to local communities, then it will be very difficult to win popular support for the radical changes we need to make as a society to prepare for climate change. There are also valuable technical and engineering skills that are in short supply in the growing low-carbon energy sector which need to be preserved.

As Prospect, and other unions have argued previously, the government must commit to a just transition for energy workers that includes a package of training and other assistance for those whose jobs are impacted by decarbonisation, as well as supporting their transfer into good quality jobs in the low carbon energy sector where appropriate.8 This needs to be accompanied by support for those communities that currently rely on the energy industry.

8 Prospect, GMB, UNISON and Unite *Demanding a Just Transition for Energy Workers* December 2018