

Policy Paper
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Priorities for a Renewable Recovery Package

Solar and Storage's Role in the Green Recovery



The Impact of Coronavirus

The coronavirus pandemic is affecting all UK citizens, businesses, and local authorities, including the thousands of workers and SMEs in the solar industry. Priority must be given to addressing immediate health impacts, but it is also imperative to take strong political action to ensure the UK's economy recovers sustainably.

Globally, there have been unprecedented governmental interventions in response to COVID-19. The Prime Minister and BEIS Secretary of State have publicly underscored their commitment to net zero and a clean energy transition, however a review of the 'green vs brown orientation of stimulus funding' from eleven major economies places the UK in the bottom three¹. Calls from across society for investments in innovation, green technologies, and a clean energy transition must be swiftly translated into meaningful action to power the UK's economic recovery.

New and existing solar projects have been significantly delayed by COVID-19 due to difficulty accessing finance, supply chain disruptions, restrictions on the movement of workers, and impeded administrative procedures. This has caused uncertainty across the sector and pushed the development of many projects slated for 2020 into 2021. Yet the continued resilience and success of the solar industry is clear.

A Solar-Powered Recovery

In 2020, solar has contributed to a record coal-free period of over two months and has generated over 4TWh since lockdown began. The technology has broken records throughout 2020, including contributing to a new lowest carbon intensity record for the grid, set on Sunday 24 May 2020, during a month where solar power met over 11% of UK electricity demand, and a new all-time peak generation record of 9.68GW set at 12:30pm on Monday 20 April 2020.

The Committee on Climate Change estimates the UK will need 54GW of solar PV by 2035, to achieve the Government's net zero targets, representing a deployment rate of roughly 3.7GW per annum through to 2050.² The industry is more than capable of achieving this, with a record level of new solar capacity (738MW) added to the planning pipeline in April 2020, which now totals more than 8GW.³ The industry is continuing to innovate, deploying the latest technologies and exploring new opportunities accelerate grid upgrades to create the additional capacity necessary for the deployment of zero carbon generation.

Solar is a powerful job creator and an inherently rapid technology to deploy, as well as one of the cheapest forms of power generation today, with costs of solar PV having fallen by over 80% in the last decade⁴. As such, it can play a central role in driving the UK's economic recovery and energy transition. However, government must work with industry to remove economic and regulatory barriers and unlock the industry's potential.

Rooftop solar, particularly the residential sector, benefits from very short project lead times alongside minimal design and permitting requirements. Current projections show that due to the high labour intensity of solar as many as 1.5 million jobs could be created across the solar value chain throughout Europe by 2030. Workers can easily be up skilled to deliver the installation, operation, and maintenance of solar projects. Furthermore, the strong health and safety protocols already in place across the electricity sector and its position as the backbone to powering the wider economy means the renewables sector is uniquely positioned to drive a rapid economic recovery.

The STA is confident that with the right stimulus and policy interventions the solar industry can benefit the UK recovery by creating thousands of local, high quality jobs, generating billions in direct and indirect GVA, and delivering on the Government's net zero commitments. The following high-impact recommendations have been developed through ongoing engagement with industry and are targeted to stimulate all segments of the solar and storage industries, including those which have been hardest hit by the lockdown restrictions. As a starting point, **any sectoral support or stimulus from government should include robust conditionality requirements regarding net zero targets and the procurement of additional renewable generation capacity.**

¹ <https://www.vivideconomics.com/wp-content/uploads/2020/05/200501-Stimulus-Green-Index-summary-report.pdf>

² <https://www.theccc.org.uk/wp-content/uploads/2019/05/Net-Zero-Technical-report-CCC.pdf>

³ https://www.solarpowerportal.co.uk/blogs/record_new_capacity_added_to_uk_large_scale_solar_pipeline_during_april

⁴ <https://www.irena.org/costs>

Immediate Recovery Priorities

1. Maximise Routes to Market and Improve Investor Confidence

Contracts for Difference: Implement a robust CfD design to maximise solar deployment, including sufficient Pot 1 budget, regular 6-monthly auctions, and no or adequately high capacity caps.

Multiple independent analyses, in addition to the Government's own analysis, have concluded that it will not be possible to achieve net zero by 2050 with merchant projects alone. Solar generation capacity has the lowest technology costs and – despite lower loads factors than onshore and offshore wind – can offer much lower strike prices. Solar represents the lowest cost to the consumer throughout the CfD delivery years. It is therefore capable of delivering substantial additional capacity through this mechanism and can provide income to the CfD scheme to cross-subsidise other technologies, thereby diversifying the UK's renewable generation mix further. The design, budget share, and administration of Pot 1 auctions should reflect the level of solar deployment required to meet net zero and the clear evidence that the solar industry can deliver the capacity needed at the lowest cost to consumers.

Sector: Ground-mount

Job Creation: 0.57 per MW – 1,500-1,800 new FTEs per annum

GVA per MW of new build (indirect and direct): £820,000/MW/Annum

Delivery body/programme: BEIS – Contracts for Difference

2. Implement Green Tax Reform to Ensure Continued Sustainable Growth

Business rates: Except rooftop solar and storage from business rates.

Since 2017, businesses installing onsite solar have faced a 600-800% rise in business rates. The increase has prevented many installations in the C&I sector from going ahead due to the rates significantly reducing the savings solar affords and increasing payback periods. Excepting solar and storage from business rates, as gas CHP is, would stimulate SME investment in renewables once again. Battery storage will also pay business rates from the next revaluation, meaning businesses seeking to cut emissions through investing in smart technologies will be similarly penalised. High business rates will further deter the nascent onsite storage market, already facing tight economics and regulatory uncertainty risks, to the detriment of the UK's leadership in smart technology.

Sector: Commercial and Industrial Solar

Job Creation: 2,600 FTEs/annum

Investment Generated: STA estimates the extra annual business investment could be £315m/annum

Delivery body/programme: HM Treasury – Business Rates Review

3. Support Innovation and Energy Efficiency to Improve UK Property Portfolio

New Build Properties: Implement high, ambitious new build minimum energy efficiency standards keeping to the timelines set out in the Future Homes Standard consultation.

The Government's Future Homes Standard is legislation that would see housebuilding standards substantially improved in 2020 and subsequently again in 2025. It offers increased opportunities for the deployment of solar and improved energy efficiency measures in the new build market, minimising expensive retrofit measures in later years, benefiting households through lower running costs, and preparing supply chains for newer technologies. At a minimum, the Government should implement Option 2 uplift of 31% in 2020 and 75-80% in 2025. It is essential that the Government does not delay the implementation of the Future Homes Standard or water-down its ambition. It is far more efficient and cost-effective to set high standards now, in comparison to the substantial long-term costs of inaction. The Government should not reduce efficiency ambitions in an attempt to support a short-term acceleration in housebuilding post-COVID-19. Many local authorities and house developers have already committed to uplift efficiency beyond the 31% target.

Sector: Domestic

Delivery body/programme: MHCLG – Future Homes Standard

Green Finance for Retrofit: Provide access to green finance for domestic and commercial entities to install solar and storage through grants, zero interest loans or other fiscal incentives.

Grants and zero interest loans have demonstrated clear uptake in the solar and storage sectors before and should be employed to stimulate these markets in COVID recovery. Available grants such as those accessible to businesses installing solar PV through the EU, grants for solar water heating in Ireland and in the UK before the implementation of the RHI each evidence the effectiveness of grants to stimulate investment in renewables. Solar PV and storage should be incorporated into the forthcoming Home Upgrade Grant Scheme and solar thermal must be included within the proposed Clean Heat Grant Scheme. Similarly, access to zero interest loans in Scotland through the Homes Energy Scotland scheme has also stimulated the domestic solar and storage market and should be widened to the whole of the UK.

Sector: Domestic and Commercial & Industrial Rooftop

Delivery body/programme: Treasury/BEIS – Home Upgrade Grant Scheme, BEIS – Clean Heat Grant Scheme

Medium- and Long-Term Priorities

There remain additional systemic barriers to the delivery of the energy transition in the medium to long-term which the Government must address as part of a comprehensive Green Recovery strategy. The depth of impact to the global economy from the coronavirus pandemic will likely mean that it will take some time for economies to fully recovery to pre-coronavirus levels. Government should consider further support packages and policy improvement to enhance the role of renewable energy in their Industrial Strategy. Many of the medium to long-term priorities outlined below could be included in a solar sector deal, similar to those that have been announced for offshore wind, nuclear, and other energy industries.

1. Ensure grid access and costs do not delay or prevent new deployment of renewables and storage:

Specifically, the Government must:

- a. Incorporate strong decarbonisation and flexibility requirements within the RIIO-ED2 framework.
- b. Enable cross-industry collaboration towards sharing grid reinforcement costs.
- c. Implement standardised and transparent network costs, such as Assessment and Design fees.

2. Power the Civil Estate with 100% renewables:

Ensure that 100% of the electricity demand of the UK Government's Civil Estate is met through procuring additional renewable energy generation capacity. The target could require a minimum of 1GW of onsite renewables on Government estate as per shelved Government Solar PV strategy circa 2014. Power Purchase Agreements would allow for the deployment of additional renewable generation at no upfront cost to the Government. The Government should also consider adding supply to all publicly owned or publicly hosted EV chargers to local authority PPA scope, to ensure the EV transition is powered by clean renewable energy.

3. Remove VAT for solar and storage technologies:

Since October 2019, residential properties installing solar and storage have been subjected to complicated VAT regulations, in some circumstances increasing VAT from 5% to 20%. All solar, storage installations (including maintenance to existing sites) should face 0% VAT to incentivise the uptake of domestic solar and smart technologies moving forward. This would significantly reduce the upfront cost to consumers.

4. Reform network charging to support the deployment of embedded generation:

It is essential that regulatory reforms, such as Ofgem's Network Access and Forward Looking Charging Review, be designed to incentivise renewables, zero-carbon storage and flexibility. Reforms made to date through the Targeted Charging Review have disproportionately impacted embedded generation and present a significant barrier to deployment which must be addressed to align with the shared objective of creating the resilient, flexible, and low carbon energy networks of the future.

5. Strengthen the UK's commitment to carbon pricing:

A strong commitment to carbon pricing and clear price signals are essential to demonstrate the Government's commitment to the energy transition, unlock access to capital, and ensure the cost competitiveness of renewable generation in the long term.

6. Amend Ofgem's remit to prioritise decarbonisation and grid flexibility:

Ofgem is moving in the right direction with the publication of their Decarbonisation Action Plan, however, more can be done to align the regulator's remit with the Government's net zero objectives. Ofgem needs to take a holistic, long-term view of the requirements of the energy sector to support the rapid decarbonisation and increased energy system flexibility which is essential to achieve the UK's net zero emissions target. This would enable the network improvements necessary for consumers to benefit from the expansion of low-cost renewables and can be achieved with a new Strategy and Policy Statement from the Secretary of State for Business, Energy and Industrial Strategy, as per the Energy Act 2013.

7. Develop skills programmes:

Any economic stimulus package must incorporate jobs training and reskilling programmes to support the levels of solar and storage deployment needed. There is currently a shortage of the skilled workers required to achieve the level of deployment needed to achieve net zero, and the solar industry is ready to work with government to develop and deploy education and training programmes to upskill the workforce and ensure the workforce necessary to deliver the energy transition is in place.

