

Written evidence submitted by Kevin McCann (Solar Energy UK)

About us

Since 1978, Solar Energy UK has worked to promote the benefits of solar energy, and to make its adoption easy and profitable for domestic and commercial users. A not-for-profit association, we are funded entirely by our membership, which includes installers, manufacturers, distributors, large scale developers, investors, and law firms. We host industry Working Groups specifically focused on the development of residential and commercial battery storage systems and markets. Our mission is to empower the UK solar transformation, using the strengths of our more than 230 members to pave the way for 40GW of solar energy capacity by 2030. We represent solar heat, solar power and energy storage, with a proven track record of securing breakthroughs for all three.

Respondent details

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Evidence

1. We welcome the opportunity to respond to the Public Accounts Committee on the Green Homes Grant scheme. The potential of this scheme to contribute to the decarbonisation of the UK's housing stock was significant, and important, with residential buildings accounting for 15% of the UK's carbon emissions.
2. Residential solar power systems can and must make a major contribution to domestic decarbonisation. Solar Energy UK research shows that delivering 4.4 million 'Smart Solar Homes' – houses which include rooftop PV generation, a domestic energy storage system, such as a battery, and intelligent controls, such as smart meters – would enable the UK's housing stock to eliminate the evening peak electricity demand on a typical winter's day.¹ Solar technology is a popular home improvement, with a million homes already having some form of solar energy system installed.
3. Solar Energy UK research also demonstrates the robust investment case – across a variety of financial circumstances, including for social housing – of installing residential solar power systems.² This is because home occupiers who

¹ <https://www.solar-trade.org.uk/wp-content/uploads/2020/07/Smart-Solar-Homes.pdf>

self-consume electricity they produce onsite avoid the cost of importing grid electricity, which is significantly more expensive. They can also receive payments for selling surplus electricity back to the grid, under the Smart Export Guarantee.

4. Solar thermal generation and storage technologies are also an effective and reliable way to contribute to water and space heating. This is a key area of innovation, with a number of emerging technologies such as infrared home heating coming to market.
5. Consumer interest in rooftop power and heat technologies is high, and increasing. Figures from the Microgeneration Certification Scheme show consistent growth in residential-scale rooftop solar PV installations, and solar thermal was a highly popular measure under the Green Homes Grant, accounting for nearly 14% of all measures installed.
6. Furthermore, the environmental and financial benefits of solar heat and power will only increase as the electrification of heat and transport gathers pace. Electrification is a key part of the Government's decarbonisation strategy. However, the transition to electric heat and transport must be carefully managed to ensure that it does not make homes less affordable. This would pose a risk to public acceptance of the need for decarbonisation, particularly. A key mitigation to this is self-consumption and storage of heat and power generated onsite, by buildings equipped with solar PV, solar thermal, and heat and energy storage and zero-carbon technologies.
7. For all these reasons, we therefore continue to support the principle of a grant scheme to support the retrofit of homes in England, and across the UK.
8. However, the design, implementation and subsequent early closure of the Green Homes Grant voucher scheme for homeowners were a source of immense frustration for the solar and energy storage industries. Solar Energy UK flagged concerns to BEIS in private, and later in public, relating to key problems with the scheme. We outline three of these below.
9. First, the short-term design of the scheme. Our understanding is that the scheme was initially conceived in part to stimulate the economy as part of the Government's package of measures to respond to the Covid-19 pandemic. Funding for measures was intended to last for an initial period of only six months.
10. In the context of a policy that would provide a major stimulus for demand – by providing direct grant funding for homeowners – this was always likely to mean a very high volume of sales leads would be generated through the scheme.
11. However, the extremely short duration of the initial version of the scheme sought to spend £2 billion in six months. This timeframe for scale-up was a major challenge for many businesses. It meant that installers had only a tiny window in which to identify, recruit and train staff to handle customer inquiries – all of which need home visits, assessments, quoting and client support – and project installations. This was in the

² Forthcoming (October 2021).

knowledge that many sales during the scheme's duration were likely to be as a result of the scheme (and hence they would have to be able to engage with it), but also that demand might cease very abruptly once the scheme finished, so leaving installers with more staff than were necessary or they could afford.

12. Solar Energy UK welcomed the extension of the initial version of the scheme until 2022, to reflect this.
13. The second major challenge with the scheme was the complexity and delays with the voucher system used to administer grants and payments, and the difficulty in receiving information on the status of voucher applications and payments from the scheme administrators. This caused major cash flow problems for installers. Combined with the short-term nature of the scheme – which meant in some cases employers faced both an increase in expenditure (on new staff) and a reduction in income (because of delays in payments), this meant extreme cash flow disruption for some installers and the very real risk of going out of business. This is an incredible outcome for a scheme intended in part to *support* businesses to recover from Covid-19.
14. This also risked having an impact on consumer confidence in the availability and reliability of green home upgrades – for example, if consumers who wanted to install a low-carbon heating system to replace a gas boiler had to wait weeks, in the middle of winter, to have one fitted.
15. The third major concern our members had with the scheme was around the cost assumptions which informed the assessment procedures for different technologies. It became evident that at one stage of the scheme, applications for solar thermal projects were being delayed or rejected because of the apparent over-costing of quotes (implying to consumers that they were at risk of being overcharged). It is not clear on what specific basis (or price inputs) this information was generated and communicated to customers, but it risked reducing consumer confidence in the scheme, damaging the reputation of the industry, and reducing the number of projects deployed with the funding available.
16. Solar Energy UK's recommendations for the design of any future grant scheme are as follows:
17. **First, any future retrofit support scheme should be extended until at least 2030. The scale of the domestic decarbonisation challenge is huge, and a long-term timeframe is needed for consumer education and interest in green home upgrades to be converted into action, and for industry to scale in a sustainable manner to deliver the millions of home retrofit projects needed.**
18. Government must develop policy support to reflect real-world project installation time frames, and the need for businesses to take recruitment and investment decisions in a stable operating environment. Time for consumer education and home assessment needs to be built into the scheme, and industry must have the time to scale up in a sustainable manner. There is an enormous potential zero-carbon home upgrade market,

and industry is ready and willing to supply it, but the boom-and-bust cycles which have characterised green policy support to date are highly counterproductive.

19. Second, any future retrofit support scheme must be technology neutral.

29 million homes need to be retrofitted in the UK, each one based on the specific energy and environmental performance measures best suited to the property. To facilitate this, homeowners and occupiers should not be restricted in the choice of low and zero-carbon measures for which they are able to apply. Measures eligible should include solar PV, solar thermal, energy storage and heat storage technologies, to ensure the benefits of these outlined above are maximised. Given the nature of technological change, eligible measures should also be reviewed and updated on a regular basis (we suggest annually), and where technologies are not necessarily mainstream at the moment, homeowners should be able to apply for them on a discretionary basis. This will maximise the decarbonisation potential of any scheme in a way that provides most flexibility, and hence supports consumer interest in and uptake of green technology.

20. Third, any future retrofit support scheme be designed in full consultation with zero-carbon retrofit industries.

21. Given the challenges outlined in this evidence, it is imperative that any future scheme be designed from the ground up based on full consultation with the green retrofit industries – including the solar and energy storage, roofing, construction and other relevant industries. This should include discussion of how best to design customer interface, procurement, legal, financial and supply chain processes and procedures, as well as to ensure that issues such as cost assumptions are properly addressed. Future retrofit schemes cannot be allowed to fail customers and industry the way previous schemes have.

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