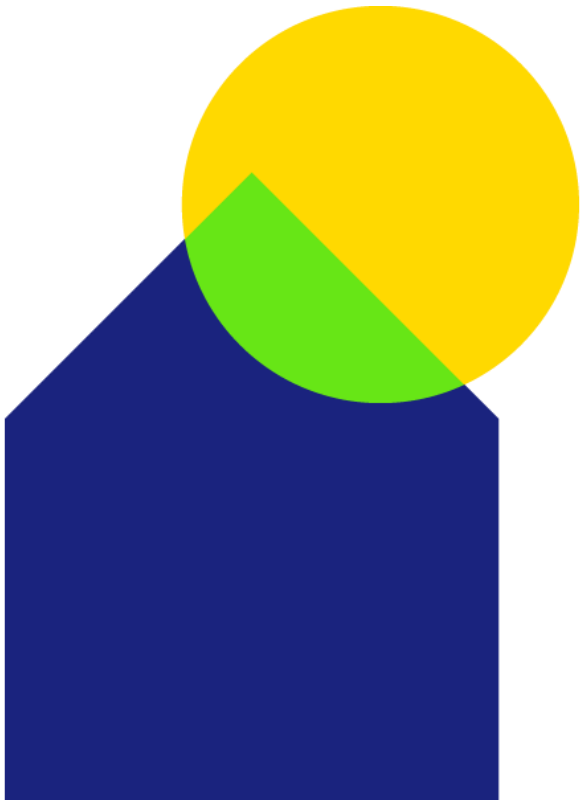
Smart meter policy framework post 2020:

Minimum annual targets and reporting thresholds for energy suppliers



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.

Our mission is to empower the UK solar transformation. We are catalysing our 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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Would you like this response to remain confidential? No

Summary

We welcome the opportunity to respond to the consultation from the Department for Business, Energy & Industrial Strategy (BEIS) on *Smart Meter Policy Framework Post 2020: Minimum Annual Targets and Reporting Thresholds for Energy Suppliers*.

We provide a summary response below to the questions asked in the consultation, highlighting our support for the overall goal of supporting the roll-out of smart meters as swiftly and effectively as possible. In terms of specific questions, we in general support the proposals continued in the consultation. We note and agreed with the intention stated to carry out a mid-point review that will consult on and revise the model according to the latest installation and other data.

Response

Members of Solar Energy UK represent a wide range of solar companies involved in domestic solar installation, cleaning, and maintenance work. They do not necessarily work directly on the installation of smart meters, and so we have not responded to the individual questions in this consultation. However, in general we agree with the proposals put forward for how to ensure the deployment of smart meters across the

UK as rapidly as possible, and would be happy to take part in any conversations about the importance of this for the UK to transition to a zero-carbon economy.

Indeed, we would like to stress the importance of doing so. The UK's housing stock is responsible for 15% of UK greenhouse gas emissions, and the installation of smart meters is vital to ensure that the potential of domestic onsite power generation, such as solar, as well as the benefits of domestic storage and flexibility and the system benefits this provides to the grid, is realised.

This is important because forecasters such as the National Grid say that under every potential decarbonisation scenario, there will be a major increase in power demand as the UK begins to electrify heat and transportation. This was reiterated with the publication in December 2020 of the Government's consultation on delivering a net zero electricity system with high renewable capacity by 2050, as well as documents including the Energy White Paper.[1]

The call for evidence notes that renewable electricity generation could quadruple in total capacity over the next three decades, paving the way for a low-cost, low-carbon electricity system. With a range of scenarios modelled, the Government is considering the potential for substantial solar photovoltaic (PV) capacity growth in the coming years, with as much as 80-120GW of total installed capacity required under some scenarios. This aligns with the latest analysis published by the Climate Change Committee, which estimates 75GW-90GW of solar capacity will be required to meet net zero,[2] as well as that of the National Infrastructure Commission, which has a higher estimate of 121GW.[3]

A significant proportion of this can be delivered through residential rooftop PV systems. Our research, for example, shows that solar-enabled, flexible power generation installed on residential property can and must play a central role in the high renewable, net zero electricity system of the future.[4] Delivering 4.4 million 'Smart Solar Homes' – which include rooftop PV generation, a domestic energy storage system, 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. On an annual basis, these homes could reduce peak demand consumption by 97%, while smart solar homes with a 20kWh battery could enable individual homes to come off the grid all day. For this potential to be maximised, homeowners need to be able to access and use smart data on their energy use, so that, for example, domestic energy storage systems can make the most of new time-of-use tariffs. The rapid rollout of smart meters is therefore fundamental to delivering

[1] https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future
[2] https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf
[3] https://nic.org.uk/studies-reports/net-zero-opportunities-for-the-power-sector/
[4] https://www.solar-trade.org.uk/wp-content/uploads/2020/07/Smart-Solar-Homes.pdf

not only cost savings for end consumers, but to deliver the system wide benefits outlined above.

Note that in our response to the BEIS consultation on *Improving the Energy Performance of Privately Rented Homes in England and Wales*, we suggested that the installation of a smart meter be made mandatory as part of any energy performance improvements carried out by landlords in private rented homes. We consider that this is one way in which uptake could also be improved in this sector.