

Review of Wales' Renewable Energy Targets

Welsh Government Consultation

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.

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- Submission date: 18 April 2023

Introduction

Solar Energy UK welcomes the opportunity to respond to the Welsh Government's review of Wales's Renewable Energy Targets. We applaud the Welsh Government for having taken the initiative to provide greater clarity on how it intends to reach 70% of its consumption from renewable energy by 2030 through the increased deployment of low-carbon technologies.

However, we are concerned that the proposals set out within the consultation fail to recognise the potential of solar, at all scales, to support Wales in reaching its renewable energy targets and wider contributions to net zero.

Our primary recommendation calls for Welsh Government to set out ambitious, technology-specific targets (e.g., for heat pumps, solar PV, hydrogen) - using 29TWh as a minimum baseline target [1]. This will signal development opportunities to investors and increase the likelihood of any targets being met. By setting individual targets, Government will demonstrate greater confidence in the renewable industry in Wales, resulting in greater business and employment opportunities.

We expand on these points, in our responses to proposals, 1,2,3 and 8. We thank you for taking our thoughts into consideration.

2. Do you agree with Proposal I, to retain the scope of the previous generation target, focusing on generating electricity to meet future demand? Please indicate Yes/No

If not, what alternative target would you propose? Please provide evidence to support your statement.

No, we do not agree. The proposal to retain the scope of the previous generation target to deliver 70% of electricity from renewable energy sources by 2030, must be more ambitious. The Government should look to expand the scope to include generation for export in addition to domestic consumption. By doing so, the Welsh Government could see an increase in investment from renewable technologies, delivering direct benefits back into the Welsh economy and securing the infrastructure needed to reach net zero.

Secondly, the proposal underestimates the potential of solar technologies in contributing to electricity generation and net-zero targets. Whilst we agree that there is a role for all renewable technologies in delivering net zero; Government must focus on technologies that can be deployed at speed and scale such as solar if they are going to reach 70% of electricity consumption from renewables by 2030. Solar is inherently rapid to deploy, as well as one of the cheapest forms of power generation.

Furthermore, it is important to recognise that Wales will not be able to reach net zero in silo. For example, Wales would benefit from the increased capacity in England during instances when Welsh output is lower or vice versa. Wales has a host of renewable resources which must be utilised to increase energy security, and self-sufficiency and deliver a multitude of benefits to the people of Wales including reduced energy bills and lower carbon emissions.

We recommend that the Welsh Government takes insight from other devolved Governments, such as Scotland, where investment in renewable energy continues to grow. The National Planning Framework 4 may be a useful model to consider when revising National Planning Wales and wider planning documents.

Lastly, to promote investor confidence in renewable technologies, we ask that Government sets out ambitious, technology-specific targets (e.g., heat pumps, solar PV, hydrogen) as this will signal development opportunities to investors and increase the likelihood of targets being met. By setting individual targets, Government will demonstrate greater confidence in the renewable industry in Wales, creating an attractive business case for developers. This will, in turn, promote additional employment and wider economic and environmental benefits for the people of Wales.

We expand on this further, in question 3.

2. Proposal 2 states: That Welsh Government use the CCC's Balanced Pathway as a basis for Wales' electricity demand projections when setting renewable energy targets. We will also incorporate 9% transmission losses into our projections.

We do not agree. Throughout the consultation, the role of solar is not fully recognised. Indeed, when reviewing 'A route to 2035', solar PV remains at 1.1GW across all three projections, showing very little ambition to accelerate solar deployment over the next 12 years.

Government should also look to include other sources when determining electricity demand projections, to inform credible, robust databases. We recommend that Government work with Solar Energy UK and the wider solar industry to produce data which is fully representative of active projects and those in the planning pipeline. For example, SEUK's market intelligence shows that there is more than 6.5GW of solar generation capacity in the large-scale pipeline in Wales. This is significantly more than acknowledged in the current Future Energy Scenarios (FES).

We develop this point further in question 3.

3. Proposal 3 states: That the Welsh Government set a target for us to meet the equivalent of 100% of our annual electricity consumption from renewable energy by 2035 and to continue to keep pace with consumption thereafter.

We somewhat agree. The proposal outlines that Welsh Government should set a target to meet 100% of Wales's annual electricity consumption from renewable energy by 2035 and continue with pace from there onwards. We encourage the Government to be more ambitious, bringing the target forward, with incremental milestones from 2023 onwards.

Wales has an abundance of renewable energy sources e.g., wind and solar, which if fully utilised, can make significant contributions to delivering 100% of Welsh annual electricity consumption earlier than 2035. The delivery of this target and beyond, could be achieved by expanding the scope to include generation for export, in addition to general consumption, as recommended in our response to question 1.

In reviewing the CCC balanced pathway modelling for Wales's electricity projections for setting renewable energy targets, we are concerned that the overall contribution of 29TWh in 2035 and 37TWh are unambitious. Cross-referencing this figure with that of the NGESO's Future Energy Scenarios, it projects that 29TWh is most closely aligned with the 'failing short' scenario. We, therefore, encourage the Government to set more ambitious targets, using 29TWh as a minimum baseline target.[1]

^{2.} https://www.gov.wales/sites/default/files/consultations/2023-01/energy-targets-review-graphing-outputs_0.pdf

³ Page 158, https://www.nationalgrideso.com/document/263951/download

As outlined in the consultation, the uptake of renewable energy technologies in Wales has slowed over the last few years. Government must see this review of its renewable energy targets as an opportunity to kick-start renewable development across all technologies in Wales. One way in which this can be done is through setting ambitious, technology-specific targets for minimum levels of renewables deployment to better ensure target delivery and to boost investor confidence in Government commitments.

We encourage Government to work with industry bodies to determine the individual targets for the renewable technologies outlined in the infographic 'A route to 2035'. Solar Energy UK stands ready to work with Welsh Government, as needed.

We are acutely aware that there are wider barriers in place that could reduce the speed of deployment of renewables, for example, access to the grid. It is therefore of great importance that projects are built steadily from now until 2035 to ensure the supply chain is able to deliver in a timely manner, without placing undue pressure on supply chains for finite staff and resources in the middle of the 2030s.

SEUK members have reported that the thresholds within the planning regime are reducing levels of deployment. At present, the threshold for triggering the DNS planning process is 10MW. Although there is information to suggest that the DNS process has been streamlined to accelerate deployment of solar >10MW, our members have reported that this is not the case. The DNS process is long, slow and expensive. We strongly recommend that the threshold is increased to 50MW to match the regime in England and unlock further deployment potential.

8. We have asked a number of specific questions. Do you have any other issues that you wish to bring to our attention, which is not captured by the above questions? Please provide evidence to support your answer.

As referred to in our earlier responses, one of the most limiting factors to renewable energy deployment and achieving net zero is the lack of grid capacity. The Welsh grid is under a significant amount of strain. It is understood that there are parts of the country where the grid is close to full capacity, and that this is especially true of mid Wales.

If Wales hopes to generate 100% of its required capacity, and even to be a net exporter of energy, the Government must work in collaboration with Ofgem and other stakeholders to mitigate the current challekick-startrid poses by increasing investment into grid infrastructure. Action must be taken to modernise the rules and regulations that govern the electricity grid and facilitate the infrastructure needed for a decarbonised energy system.

It is important for developers of solar projects to work closely with the DNOs and energy companies to ensure that their projects can be connected to the grid in a timely and efficient manner. It is understood that connections dates are increasingly offered in the 2030s. Such timescales make it clear that the lack of timely and affordable grid connections poses a significant threat to the Welsh's Government net zero ambitions.