



Eich cyf/Your ref P-06-1339
Ein cyf/Our ref JJ/01461/23

Jack Sargeant MS
Chair - Petitions committee
Senedd Cymru
Cardiff Bay
Cardiff
CF99 1SN

7 June 2023

Dear Jack Sargeant MS,

Thank you for your letter of 18th May 2023 regarding a petition seeking to ensure that all new buildings incorporate solar panels.

I have considered the petitioner's request: -

The world is facing an urgent energy crisis and we are all facing a daunting climate and nature crisis. This is why it is so important that the Welsh Government should lead the way in securing future renewable energy sources.

This is why all new industrial, commercial and domestic builds (who are not shaded or north facing) should include solar energy as part of their planning consent.

I agree fully with the petitioner on the scale and urgency of the climate and nature crisis we face. I don't underestimate the scale of the challenge or the necessity for action. My colleagues across government are of the same view and we are open to all ideas and suggestions on how to best meet these challenges.

The issues we face are complex and multi-faceted. As we all understand, they are the product of many generations of choices, habits, technological and social changes. Many of the decisions we made in the past on where we live, how we generate energy, how we travel and how we use our natural resources, whilst made in the best interests of society at the time, now provide us with a significant challenge to deliver the best possible future for the generations that follow.

The solutions are complex too and will require co-ordinated action at all scales as we determine how best to meet the challenges we face. We have already made tough decisions on how places should change, the standards we want new buildings to be built to, road and rail infrastructure and how we want to protect and manage our natural environment. There are many more important decisions ahead.

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Rydym yn croesawu derbyn gohebiaeth yn Gymraeg. Byddwn yn ateb gohebiaeth a dderbynnir yn Gymraeg yn Gymraeg ac ni fydd gohebu yn Gymraeg yn arwain at oedi.

We welcome receiving correspondence in Welsh. Any correspondence received in Welsh will be answered in Welsh and corresponding in Welsh will not lead to a delay in responding.

The proposition that all new buildings be fitted with solar energy panels, is in principle a good suggestion. There are extensive roofscapes around us, we are becoming more familiar with solar panels in the environment and the technology is proven. There are however important reasons why I do not believe the Welsh Government should mandate the requirement for solar on all new buildings at this time, and these are as follows: -

1. Approach taken by Building Regulations

Building regulations in Wales are, in general, technology and fuel neutral. They do not prescribe or prohibit any particular form of heating or energy generation. The intention is to ensure maximum flexibility in meeting energy targets, utilising the best and most appropriate solutions in each individual case, and to avoid inadvertently creating a barrier to new innovation by determining that one technology be installed instead of any other. Part L of the Building Regulations 2022 amendments do not, therefore, mandate a particular technology (such as solar PV). They do however include solar PV within the notional dwelling specification which sets the energy target. This in turn encourages the use of renewable energy in new dwellings.

The Welsh Government completed a review of Part L of the Building Regulations in 2022. This review introduced a significant uplift in minimum energy efficiency standards for all new homes. The 2022 amendments introduced a 37% reduction in carbon emissions for new dwellings (compared with previous standard). In addition, all new homes will need to be future-proofed, to make it easier to retrofit low carbon heating systems.

The 37% reduction is intended as a steppingstone towards the next Part L changes in 2025 when it is planned that all new homes will produce a minimum of 75% less CO₂ emissions than ones built to previous Part L (2014) requirements. Our vision for the Part L 2025 standard is designed to shift to low-carbon heat sources for heating and hot water. This means that new buildings constructed to the standard will be able to become carbon neutral over time as the electricity grid and heat networks decarbonise.

I am therefore confident that the overall approach to Building Regulations, the amendments we have made and the amendments we intend to make are the right steps to achieve carbon neutrality over time.

2. Availability of Permitted Development Rights

Both domestic and non-domestic buildings benefit from existing permitted development rights which allow the installation of solar PV (electricity) and solar thermal (heat) panels subject to certain conditions. In most cases this means there is no need to submit a planning application for installation. Some limitations and conditions do apply so that, for example, panels are appropriately located on a building. Solar panels should be sited so as to minimise their effect on the external appearance of the building or amenity of the wider area. Where a planning application is required, this is not a negative judgement on a proposal to install solar panels, but to ensure that the amenity of neighbouring properties and the wider area are fully considered by the local planning authority.

Under the permitted development rights, domestic properties can install solar panels up to 50kw of electricity generation or 45kw of heat. For non-domestic properties there is no upper limit meaning that significantly scaled roof solar schemes can progress without the need for the submission of a planning application.

I am satisfied that our existing permitted development rights strike an appropriate balance between permitting domestic and non-domestic solar installations against the need to ensure that the amenity of neighbouring properties and the wider area are appropriately considered.

3. Other Considerations

It will be the case that solar panels may not be suitable for every property. Greatest efficiency and energy generated is provided by installation on a south facing roof where the roof is pitched. East and west facing roofs can be 15-20% less efficient, north facing roofs will be less efficient again. Shading by natural features, such as trees, or from taller buildings and structures may also have detrimental effects on efficiency and energy generation.

Other technologies such as domestic and non-domestic ground source, water source and air source heat pumps, and wind turbines may provide more efficient and more effective solutions. Energy efficiency measures such as insulation should also form a substantial part of the solution alongside any renewables. At a neighbourhood scale, district heating networks and community ownership initiatives should also be a consideration with the potential to provide more efficient and cost-effective solutions.

Issues of visual amenity may arise in historic and protected locations where separate consenting regimes may also apply, such as Listed Building Consent. The existing non-domestic permitted development rights do not permit the installation of solar panels within 3km of the perimeter of an airport or aerodrome, also solar panels so far as practicable should be sited to minimise any impacts from 'glint' and 'glare'. Any new regime would need to explore how these issues would be addressed and managed.

There may be issues of viability, installation and maintenance costs, specific implications for different building types (e.g. flats vs houses). The mandating of a single technology may also delay the emergence of new solar and other technologies and more efficient energy solutions. There may be issues of availability of solar panel supply to meet increased building demand. Any new regime would need to consider these and other potential issues.

For these reasons, whilst I am very supportive of the installation of solar panels on buildings, I do not believe it is appropriate to mandate the installation of solar panels on all new properties.

Yours sincerely,



Julie James AS/MS

Y Gweinidog Newid Hinsawdd
Minister for Climate Change