



The  
countryside  
charity

**CPRE, The Countryside Charity response to the Department for Levelling Up, Housing and Communities [open consultation on The Future Homes and Buildings Standards: 2023 consultation Published 13 December 2023](#)**

**Deadline: 27 March 2024**

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**Scope of consultation**

The government is committed to improving the energy efficiency and reducing the carbon emissions of new homes and non-domestic buildings. Energy efficiency requirements for new homes and non-domestic buildings are set by Part L (Conservation of Fuel and Power) and Part 6 of the Building Regulations 2010 (“the Building Regulations”). This consultation sets out plans for achieving the Future Homes Standard and Future Buildings Standard. It sets out technical proposals for changes to the Building Regulations, the associated Approved Document guidance and calculation methods.

**CPRE, the countryside charity**

We believe in countryside and green spaces that are accessible to all, rich in nature and playing a crucial role in responding to the climate emergency. For almost a hundred years CPRE has engaged with government to ensure the planning system is responsive to the needs of rural communities and protects our thriving landscapes. We echo the *Better Planning Coalition* call for planning reforms to:

1. Be democratic – allow meaningful community engagement and be accountable;
2. Respond to rural affordable housing shortages;
3. Tackle the climate emergency – reduce greenhouse gas emissions;
4. Tackle the biodiversity crisis – support nature recovery;
5. Ensure beautiful places and protect heritage –respect rural landscapes; and
6. Enhance access to local green space for its health and well-being benefits.

**The Future Homes and Buildings Standards: 2023**

CPRE welcomes *The Future Homes and Buildings Standards: 2023* consultation, which is vital in encouraging an increase in energy from solar PVs on new homes and buildings. The climate change is the biggest threat our countryside faces, and the more solar energy we achieve from our roof tops and other wasted spaces, the more green fields can be saved for farming and nature.

CPRE supports the mandating of solar panels for all new homes and urges the government to extend the requirement to commercial property too. Especially on logistic warehouses, as

the resultant planning balance would be more positive. Working with building owners is important so that tenants can install them without restrictive lease provisions precluding installation, which can be scaled up if working with business park owners. Constraints to installation can be engineering related so making sure structures can take the weight of solar PV with safe access for maintenance is key. For these and other reasons, maximising the solar orientation of new buildings through planning policies on design would also be beneficial. Ensuring grid capacity is also important.

Considering environmental impacts, such as those to bats that roost in barns and the significance of designated heritage assets, existing buildings should also be considered for their potential for solar installation. CPRE welcomes that the Government implemented extended permitted development rights (PDR) for solar panels in December 2023. Now PDR allow:

- homeowners with flat rooftops (less than 0.6m above highest part of the roof) to install solar panels without submitting a planning application.
- standalone solar equipment within the curtilage of domestic buildings in conservation areas where it is installed closer to the highway than the dwelling (no higher than 2.0 metres).
- standalone solar equipment within the curtilage of non-domestic buildings.
- overhead solar arrays on canopies in non-domestic off-street car parks at ground level is also created by the legislation (maximum height of 4 metres from ground level and cannot be within 10 metres of the curtilage of a dwellinghouse or block of flats). Water to run-off to a permeable/porous area. There are restoration conditions.

CPRE is pleased that there are also restrictions in protected landscapes requiring additional prior approval.

### **CPRE's Climate emergency policy and research on the benefits of rooftop solar**

CPRE believes that the climate emergency is the biggest threat facing rural areas in the future. A priority issue is for CPRE to campaign for sustainable land use decisions to support the Government to meet its legally binding targets to reduce carbon emissions by 100% by 2050. The planning system has a fundamental role to play in helping to mitigate and adapt and net zero carbon development must be the outcome of future planning in rural areas.

CPRE supports renewable energy projects that are appropriately sited, and it has been successfully raising awareness of the benefits of installing more solar energy Photovoltaic (PV) on wasted brownfield land and underused building roofspace, an obvious way of avoiding 'needless' loss of farmland for solar. Installation of solar on rooftops also helps minimise the amounts of energy lost in transmission that are observed in larger schemes. (<https://theconversation.com/small-scale-solar-has-key-benefits-and-one-critical-weakness-over-large-solar-farms-218297>) We want to have both the benefit of solar and retain land for agriculture and other rural jobs.

Our call for a 'rooftop revolution' has had immense positive take up with the public, politicians and planners across England based on our research to better understand how

more people and stakeholders can contribute to rapidly reducing our greenhouse gas (GHG) burdens to stop the worst impacts of planning and development. Please refer to our South from the Rooftops, 2023 research on rooftop solar:

<https://www.cpre.org.uk/resources/shout-from-the-rooftops-delivering-a-common-sense-solar-revolution/>

CPRE's report *Lighting the Way: International policies for making rooftop solar revolution a reality, 2024* (supplied with this submission, soon to be available on our website) seeks to progress the upscaling of solar on roofspace based on independent research by WPI Economics on international exemplars. Broadly, WPI Economics looked at what is happening in the UK and considered international best practice, finding major rooftop delivery mechanisms can be categorised into three systems:

1. fiscal incentives;
2. process reforms, and,
3. mandatory actions.

Most successful approaches use a combination of the three systems.

The UK's current solar PV installed capacity is 14GW, but to meet climate change targets, the government has set out it needs to be increased to achieve 70 GW by 2050, 40GW on rooftops. CPRE thinks there is enough wasted space for 117GW on roofspace and other wasted brownfield land and grey space (car parks and other publicly owned land). The good news is that the cost of solar PV has fallen by circa. 85%. However, the sad news is that there are clear gaps in mandatory actions and process reforms.

CPRE recognises the Government's Solar Strategy seeks to roll out more solar PV and create jobs, and it responded positively to the consultation on additional Permitted Development Rights to make solar installation on rooftops quicker. CPRE is also particularly supportive of using wasted brownfield land because together with vacant rooftop space this avoids using green fields that are important for farming and nature.

CPRE recommends that increased energy generation from rooftop solar PV is achieved through a mandatory requirement in England, through the *Future Homes and Buildings Standard* for residential, commercial, and other land uses too.

The recent research is revealing, not least because there are lessons to be learnt from the international examples. In overview, the study considered what is happening in China, Germany, Japan, Poland, and Italy. It identified three systems of fiscal incentives, process reforms, and mandatory actions in China, Germany, and Japan.

China has mandated regulations for 50% rooftop coverage of solar PV. A driver was limited land availability and an incentive that subsidised feed-in tariffs. As a result. rooftop installations in China increased to 27.3 gigawatts (GW) in 2021 from 19.4GW in 2017.

Germany has also experienced a 52% increase in residential solar systems in 2022 compared with the previous year. In 2023 it achieved 7.0GW of solar on domestic rooftops while the UK managed only 0.66GW. Germany achieved this ten-fold take-up through its *Solarstrombonus*, a three-system approach, it mandates solar on rooftops of residential,

industrial, and commercial buildings and a driver was the increased cost of energy. Parking lots over a certain size also require solar panels.

Japan has increased solar PV capacity by more than 18-fold since the country's decision to diversify away from nuclear power after the devastation caused by the 2011 Fukushima disaster. Since 2020, for example, the city of Kyoto has required the installation of solar panels on new and renovated buildings with a floor space of more than 2,000m<sup>2</sup>. Tokyo took this a step further by extending the requirement to single family homes and other small buildings.

Poland focuses on fiscal incentives and in 2019 launched a rebate scheme with a total budget of 1 billion PLN (approx. £200 million). Meanwhile, Italy has introduced new measures to simplify permits to install commercial PV systems with a capacity between 50kW and 200kW.

In the UK, barriers to adoption include investor lack of knowledge about solar technology, a supply constraint, and skills shortages. All of these are linked to, and exacerbated by, inconsistent government support through subsidy regimes. Smaller companies need encouragement with stable policy and financial support.

This report can support better the understanding of the Government in increasing solar energy in a way that least harms rural England.

We have qualified planners at our national office and groups across the country actively promoting greater deployment of solar on roofspace.

There is increasing potential in community-led initiatives where large properties can be used to mount solar PV, such as parish hall buildings for sell on of benefits to the local community. Examples include Burnside Community Energy installed on Croppers Paper Mill in Cumbria.

CPRE considers that there is a need for urgent assessment of the compelling case for public as well as private investment in retrofitting. Please refer to PAS 2035: 2023 is the current Retrofit Standard for Retrofitting dwellings for improved energy efficiency.

[https://www.bsigroup.com/siteassets/pdf/en/insights-and-media/insights/brochures/pas\\_2035\\_2023.pdf](https://www.bsigroup.com/siteassets/pdf/en/insights-and-media/insights/brochures/pas_2035_2023.pdf)

Whether applying renewable technology to new development or retrofitting, CPRE is confident that the investment will boost green jobs and skills and provide significant opportunities that are being enjoyed already in other countries.

CPRE groups in Hampshire and Sussex are working with the University of Southampton to better understand the roofspace potential in the areas. The output will hopefully lead to open-source mapping tools to provide more granular estimates of rooftop solar in each county. For more information, please read this blog:

<https://www.centreforthesouth.co.uk/activities/rooftop-renewables>

Groups are also working with communities, (mostly rural, but the benefits are applicable to urban areas too), to understand how new development in the future can more consistently achieve the following:

- better energy efficiency and fabric first measures (structural materials, insulation etc);
- double/triple glazing;
- low-carbon heating via heat pumps or heat networks to replace fossil fuel boilers which generate emissions;
- solar PV with battery storage;
- suitable Electric Vehicle Charging Points (EVCP).

**CPRE would welcome conversations with officials working on the Future Homes and Building Standards to progress this important matter.**

It is with the above in mind that we provide comments to the consultation focusing on questions (7), (8), (9), (10), and (11).

Please do contact the CPRE Team if you would like to discuss issues further.

## **Consultation questions**

**Question 1.** Are you responding as / on behalf of (select all that apply):

Other - CPRE, The Countryside Charity

We are CPRE, the countryside charity. We believe in countryside and green spaces that are accessible to all, rich in nature and playing a crucial role in responding to the climate emergency. For almost a hundred years CPRE has engaged with government to ensure the planning system is responsive to the needs of rural communities and protects our thriving landscapes.

**Question 2.** If you are responding as a member of the public/a building professional, what region are you responding from? [drop down list of England regions + other]

N/A

**Question 3.** If you are responding as a member of the public, are you a [checkboxlist: private tenant, housing association/local authority housing tenant, private landlord, homeowner]

N/A

**Question 4.** If you are responding on behalf of a business/organisation, what is the name of your business/organisation? [free text]

N/A

**Question 5.** If you are responding on behalf of a business/organisation, where is your business/organisation based/registered? [drop down list England regions + other]

N/A

**Question 6.** When you respond it would be useful if you can confirm whether you are replying as an individual or submitting an official response on behalf of an organisation and include:

- your name: **Jackie Copley, MRTPI, MA, BA(Hons)**
- your position: **Planning Policy Lead**
- the name of organisation: **CPRE, The Countryside Charity**
- an address (including post-code): **15-21 Provost Street, London, N1 7NH**
- an email address: **JackieC@cpre.org.uk**
- a contact telephone number: **020 7981 2800**

**Question 7.** Which option for the dwelling notional buildings (for dwellings not connected to heat networks) set out in The Future Homes Standard 2025: dwelling notional buildings for consultation do you prefer?

- a. Option 1 (higher carbon and bill savings, higher capital cost)

**Question 8.** What are your priorities for the new specification? (select all that apply)

carbon savings

**Question 9.** Which option for the dwelling notional buildings for dwellings connected to heat networks set out in The Future Homes Standard 2025: dwelling notional buildings for consultation do you prefer?

- a. Option 1 (higher carbon and bill savings, higher capital cost)

**Question 10.** Which option do you prefer for the proposed non-domestic notional buildings set out in the NCM modelling guide?

- a. Option 1

CPRE welcomes the Government recommendation for Option 1 for Solar PV panel coverage equivalent of 40% of the building's foundation area for side-lit spaces and 75% for top-lit spaces. However, CPRE urges the Government for more ambition and to increase the coverage to a larger proportion of a building's foundation area and for side-lit spaces and for top-lit spaces, where practicable. It is noted on pitched roofspace up to 50% of the area usually faces the sun.

**Question 11.** What are your priorities for the new specification?

carbon savings