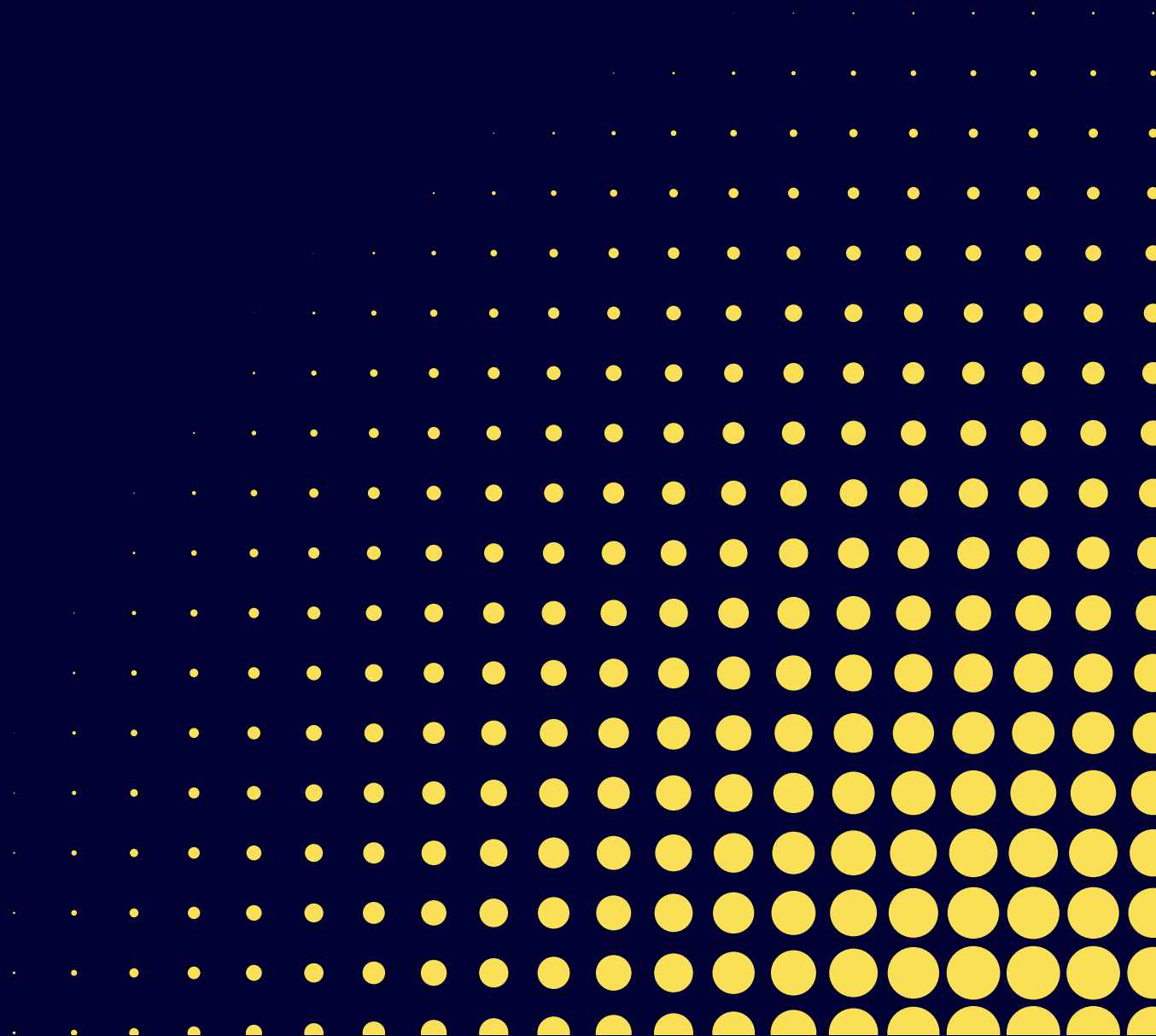


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2022 – A bright future for solar

Realising the UK's potential:
a study into public attitudes to solar

Foreword

Chris Hewett, Chief Executive, Solar Energy UK and Sam Cranston, Director of Energy Infrastructure, Copper Consultancy

The UK Government's own analysis shows that solar energy is now one of the most cost-effective ways to get the country to net zero carbon emissions.¹ If we are going to fulfil the Government's commitment to reach net zero by 2050, this will require the UK to triple its solar capacity by 2030. The scale and pace of development required to meet this demand highlight why it's so important to better understand the needs and priorities of local communities when it comes to solar projects.

Public support for solar has always been strong, and this support is only increasing as the impacts and urgency of addressing the climate crisis become even more apparent.² For the first time, this research clearly demonstrates that support for solar farms is strong not only amongst the wider public but crucially amongst those living closest to them.

The public opinion research conducted for this report is unique in its focus on large scale ground mount solar projects and those that live in their vicinity. The UK solar industry is at its heart committed to delivering climate and environmental solutions, being good partners

and neighbours for the communities where these projects are built, and delivering local and national benefits.

That is why Solar Energy UK and Copper Consultancy have come together to conduct this vital research, to better understand where public sentiment stands, to provide further evidence on the priorities for local communities, and to help ensure the UK solar industry is fully equipped to deliver the best projects possible, for all parties involved.

For instance, this research clearly shows the importance people place on protecting the local environment, biodiversity, and natural capital in the design and operation of solar sites. Its findings validate the work that the UK solar industry has been doing on this front for many years.³ The UK solar industry is focused on not only delivering affordable clean energy for the country, but also on being responsible stewards of the land and delivering net environmental improvements for local communities, habitats, and wildlife across the lifetime of solar projects.

In these ways, the importance of this research is clear, and the findings will help the industry and stakeholders understand how we can collaboratively deliver projects that benefit everyone and help the UK achieve its net zero ambitions.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/911817/electricity-generation-cost-report-2020.pdf

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/985092/BEIS_PAT_W37_-_Key_Findings.pdf

³ <https://solarenergyuk.org/resource/natural-capital/>

Introduction

Solar is a key part of plans to achieve net zero and we need to take the public and customers with us.

The drive towards net zero is already playing a central role in government policy and will continue to impact the public for decades.

How we choose to power our homes and businesses is at the centre of this. Public debates and political decisions on this issue will impact the public's decisions about how to live.

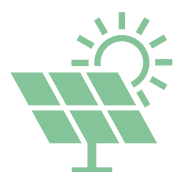
Copper has measured public attitudes to infrastructure for over 5 years to understand the sentiment around key areas of our industry.

Now, in partnership with Solar Energy UK, we have studied⁴ public attitudes to solar energy to better understand shared priorities and how the industry can further support improved awareness of the technology and our renewable energy future.

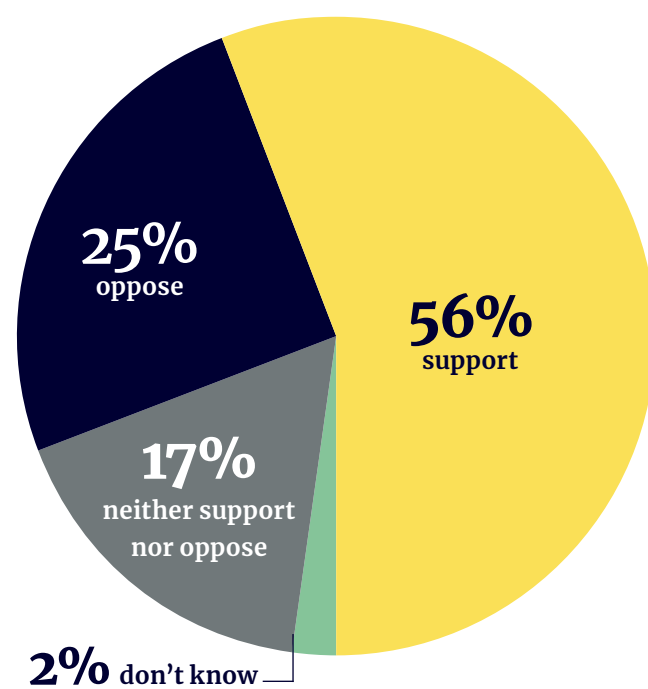


⁴ The research was conducted by Censuswide with a nationally representative sample of 2003 people between 6 and 10 October 2021. Censuswide abide by and employ members of the Market Research Society which is based on the ESOMAR principles.

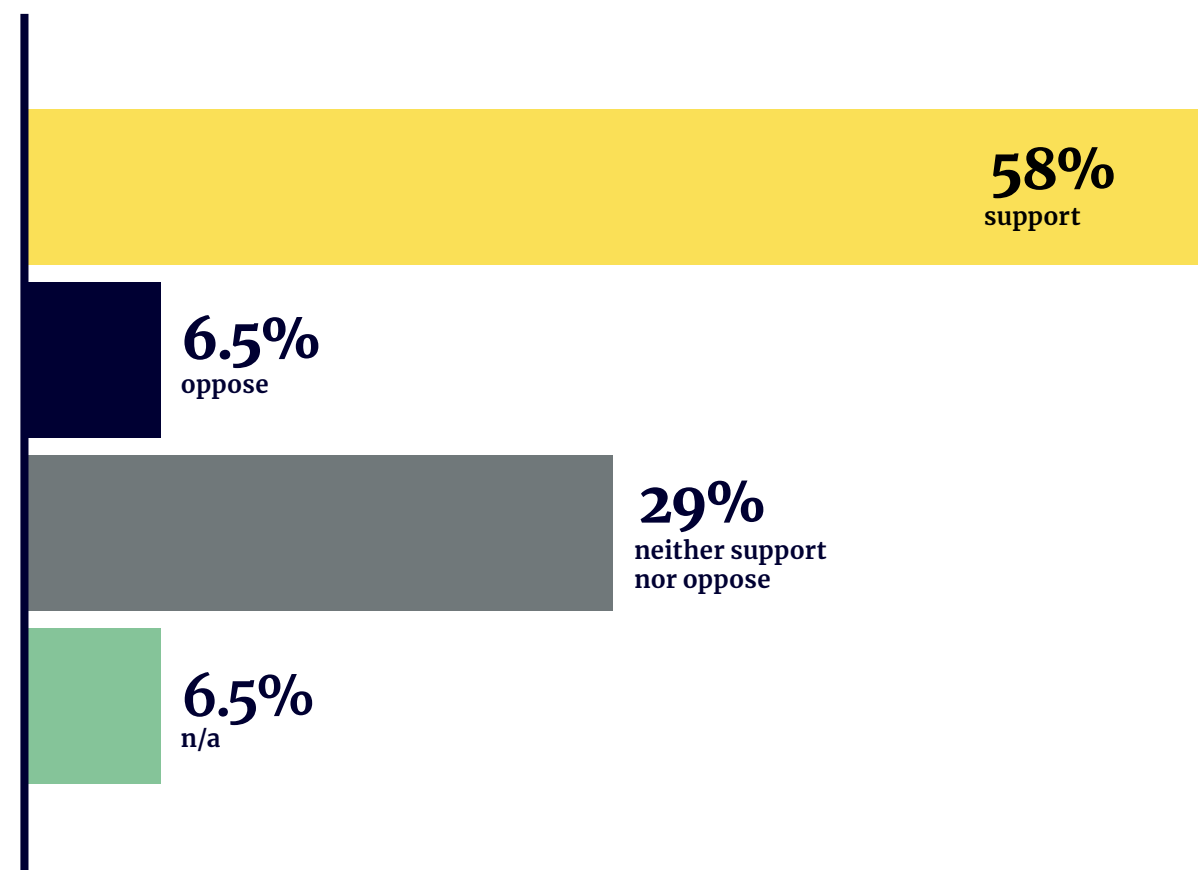
Key Findings



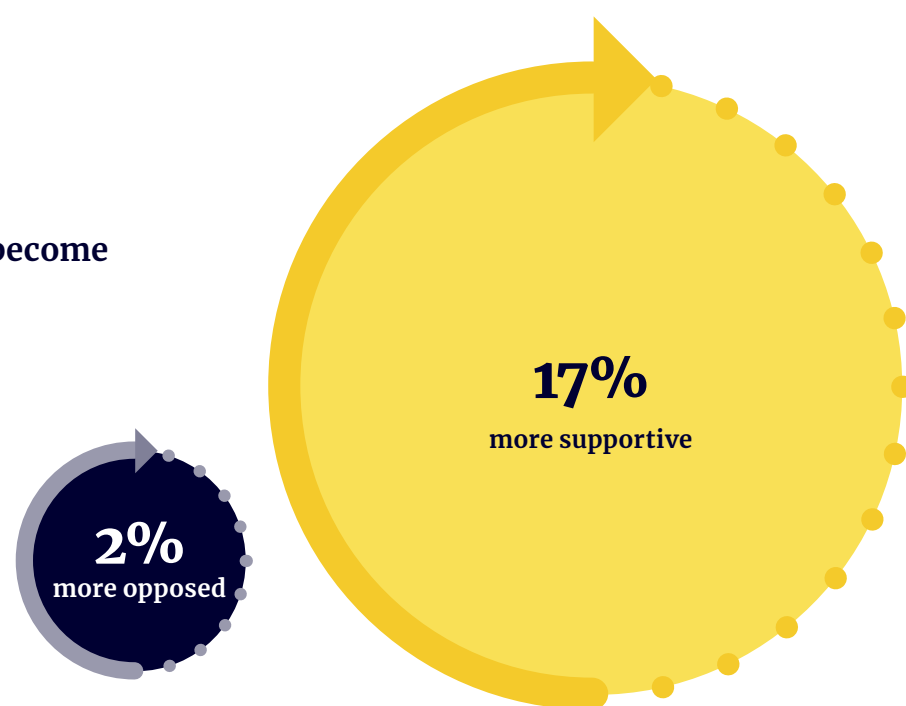
Support for local solar development is very strong among people living near solar farms.



The public supports the prioritisation of solar energy in national planning decisions.



Their support has also become stronger over time.



Solar enjoys public support; minimising environmental impacts and creating jobs are key issues

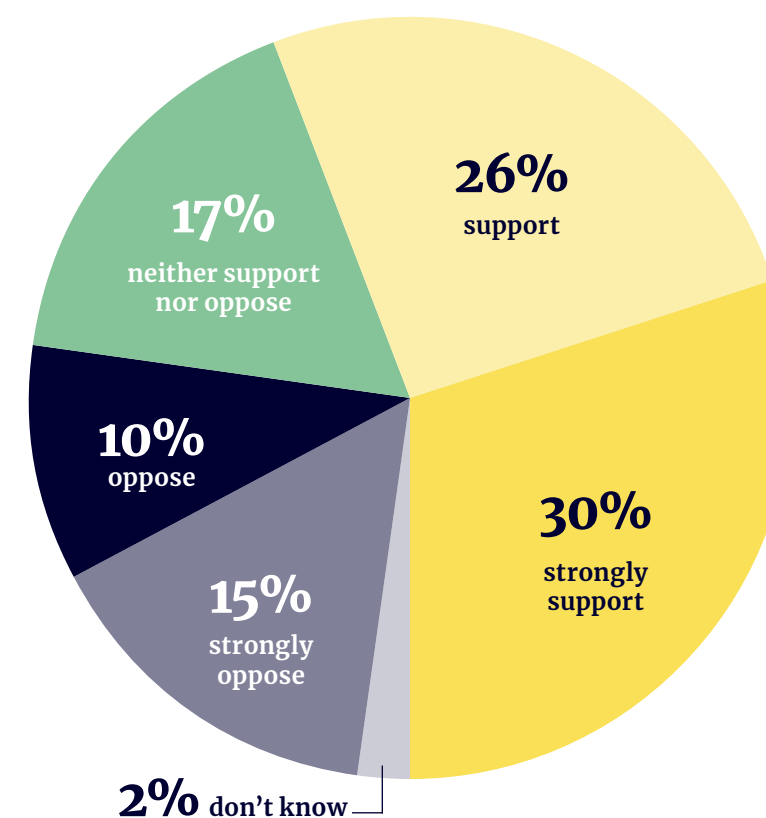
The public supports solar development in their area

More than half (56 per cent) of people surveyed said they support the development of solar farms in their area, with only a quarter opposed to them.

Within this, 82 per cent of adults aged over 55 support such development. This figure stands at 68 per cent for those aged 45 to 54 and 53 per cent for 35 to 44-year-olds.

Support for solar is particularly strong in Northern Ireland (82 per cent), the South West (70 per cent), and Wales (68 per cent).

How would you describe your support for the development of solar energy in your local area?



People become more supportive over time

17 per cent of people who live near a solar farm have become more supportive of solar energy over time. Only two per cent have become more opposed.

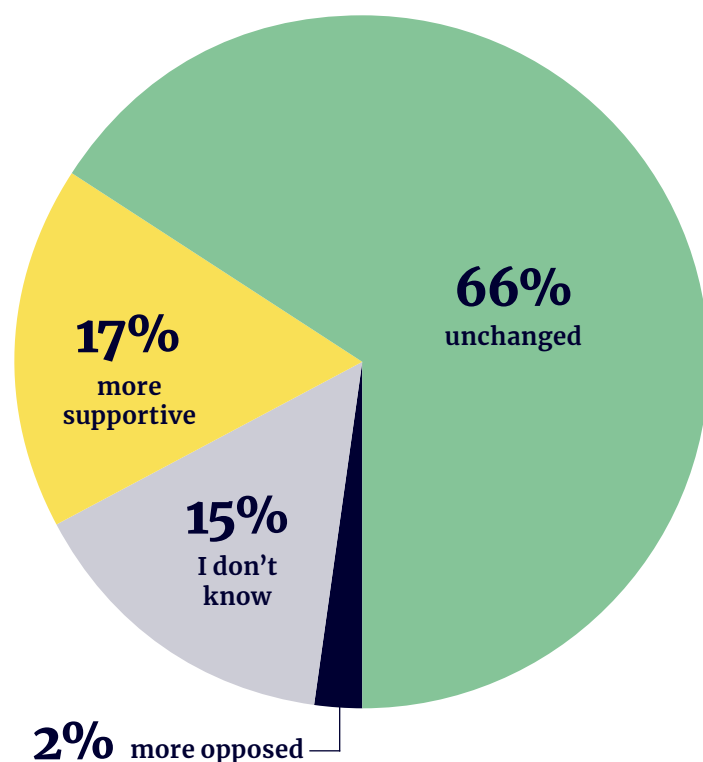
Respondents said they had become more supportive because of their increased awareness of environmental issues and solar’s provision of cheaper electricity and energy security.

Within this, 29 per cent of adults aged over 55 have become more supportive. This figure stands at 16 per cent for those aged 25 to 34 and 16 per cent for 35 to 44-year-olds.

The increase in support has been particularly pronounced in the East of England (26 per cent), the East Midlands (24 per cent), and the South East (21 per cent).

This increase has been most evident amongst those earning annual incomes of £75,000+ (30 per cent), £15,000-25,000 (22 per cent), and £45,001-55,000 (22 per cent).

Would you say your opinion of solar energy has changed over time?



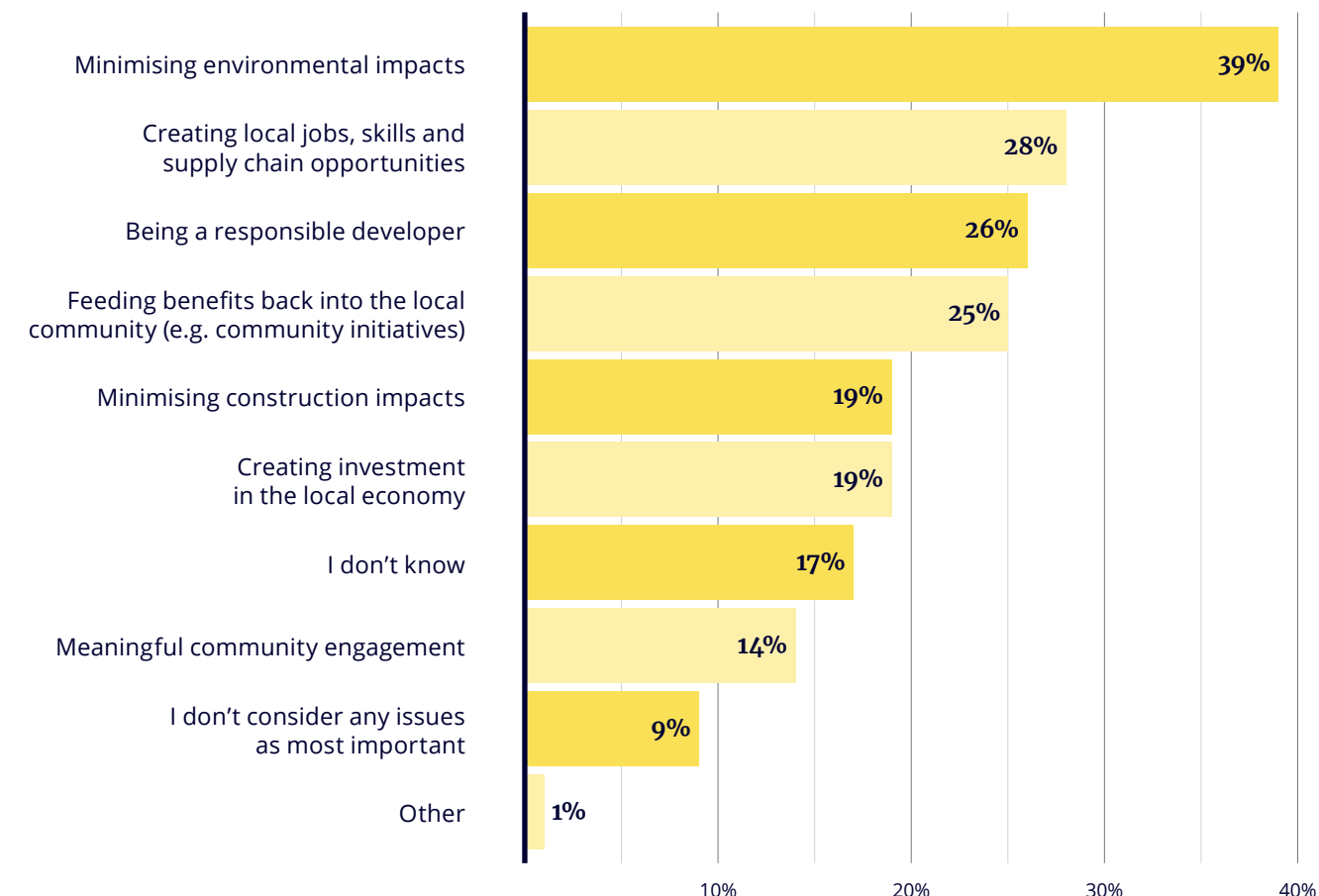
The environment, jobs and being a responsible developer matter most

Members of the public said that solar’s economic and environmental impacts were most important to them.

39 per cent said the most important issue when considering new solar developments is minimising environmental impacts. 28 per cent said that creating local jobs, skills and supply chain opportunities is the highest priority.

Some respondents also expanded on their answers, covering a range of issues, including the weather (i.e. not enough sunlight in the UK), designing the land for multiple use (i.e. solar and grazing on the same land), using land that is low quality agricultural land, and minimising visual impact.

What issues do you consider most important when developing a solar farm?



Government direction should prioritise creating jobs and minimising environmental impact

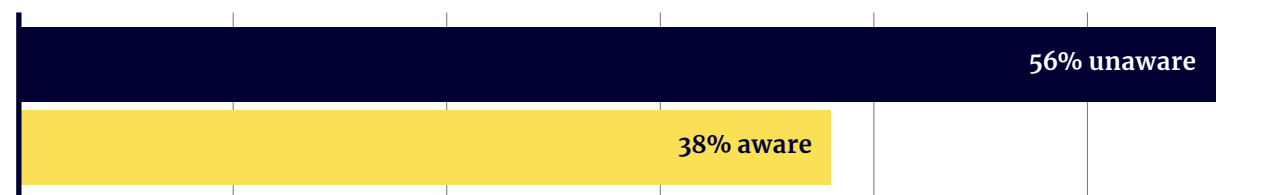


Government intervention would be welcomed by the public where it could create more jobs, skills, and supply chain opportunities.



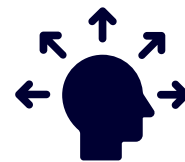
Minimising environmental impacts is the most important issue according to the public.

There is currently minimal awareness that solar farms can deliver net gains in biodiversity.



However, there is clear evidence that well-designed and well-managed solar can support wildlife habitats and meaningfully contribute to achieving national biodiversity targets.⁵

There are a wide range of examples of biodiversity enhancement and natural capital management within the sector, such as projects to improve wetland habitat, create wildflower meadows and native tree habitats, and nesting and roosting sites for birds. Solar farms can directly support agriculture through conservation grazing and promote wider benefits such as increased pollination of crops and improved soil quality, due to minimal land disturbance.



Lack of awareness is enabling misunderstanding – this can lead to opposition

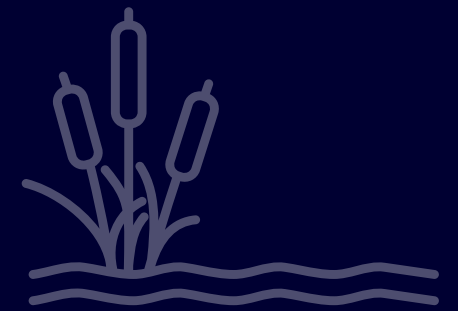
⁵ Solar Trade Association (2019) The Natural Capital value of solar. Eds N. Gall and E. Rosewarne <https://solarenergyuk.org/resource/natural-capital/>

Case Study 1 Wetland and Water Management

Effective land drainage is a critical element of solar farm management. Foresight Group, for example, has employed nature-based solutions to manage and improve drainage on their sites. This is done through a combination of methods, including natural drainage channels, ponds, and hedgerow and shrub planting. These practices make sites suitable for a wide variety of species to flourish while also making them easier to maintain by providing good ground conditions for access to the sites and equipment.

Benefits

- Reduced flood risk
- Provided additional habitat
- Improved visual screening and soil stability



Case Study 2 Biodiversity Net Gain

NextEnergy Capital, in partnership with Wychwood Biodiversity, have developed a strategy to deliver biodiversity net gain across their entire portfolio of solar sites, in line with the aims of Department for Environment, Food and Rural Affairs 25-Year Environment Plan, and The Environment Act. NextEnergy began with 9 pilot sites, developing unique evidence-based Biodiversity Management Plans for each.

Gains

- Community orchard
- Wildflower meadows and grasslands, to provide food and habitat
- Two large ponds and mature hedgerows



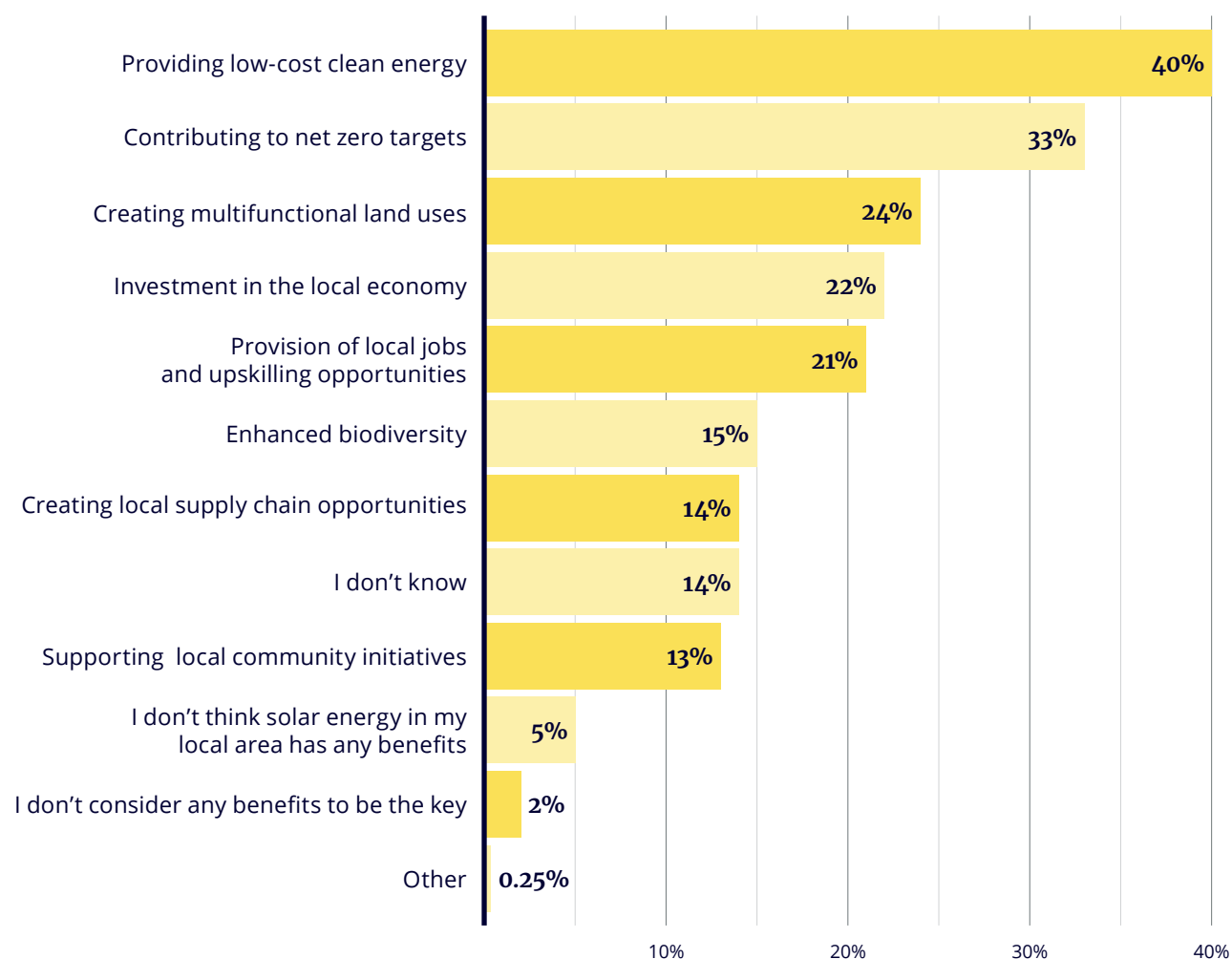
Solar is expected to provide low-cost energy and contribute towards net zero

The public sees providing low-cost clean energy for the local area (40 per cent), contributing towards the Government’s net zero targets (33 per cent), and creating multifunctional land uses (24 per cent) as the three key benefits of solar energy in their local area.

In 2019, the Government committed the UK to achieving net zero by 2050. Based on the

analysis of the Climate Change Committee and the commitments in the Sixth Carbon Budget, this will require the UK to deploy at least 40 gigawatts of solar generation capacity by 2030 to meet its target. The UK currently has 14 gigawatts of solar capacity, meaning the sector will need to roughly triple in size over the next decade to keep the country on track for net zero by 2050.⁶

What would you consider to be the key benefits of solar energy in your local area?



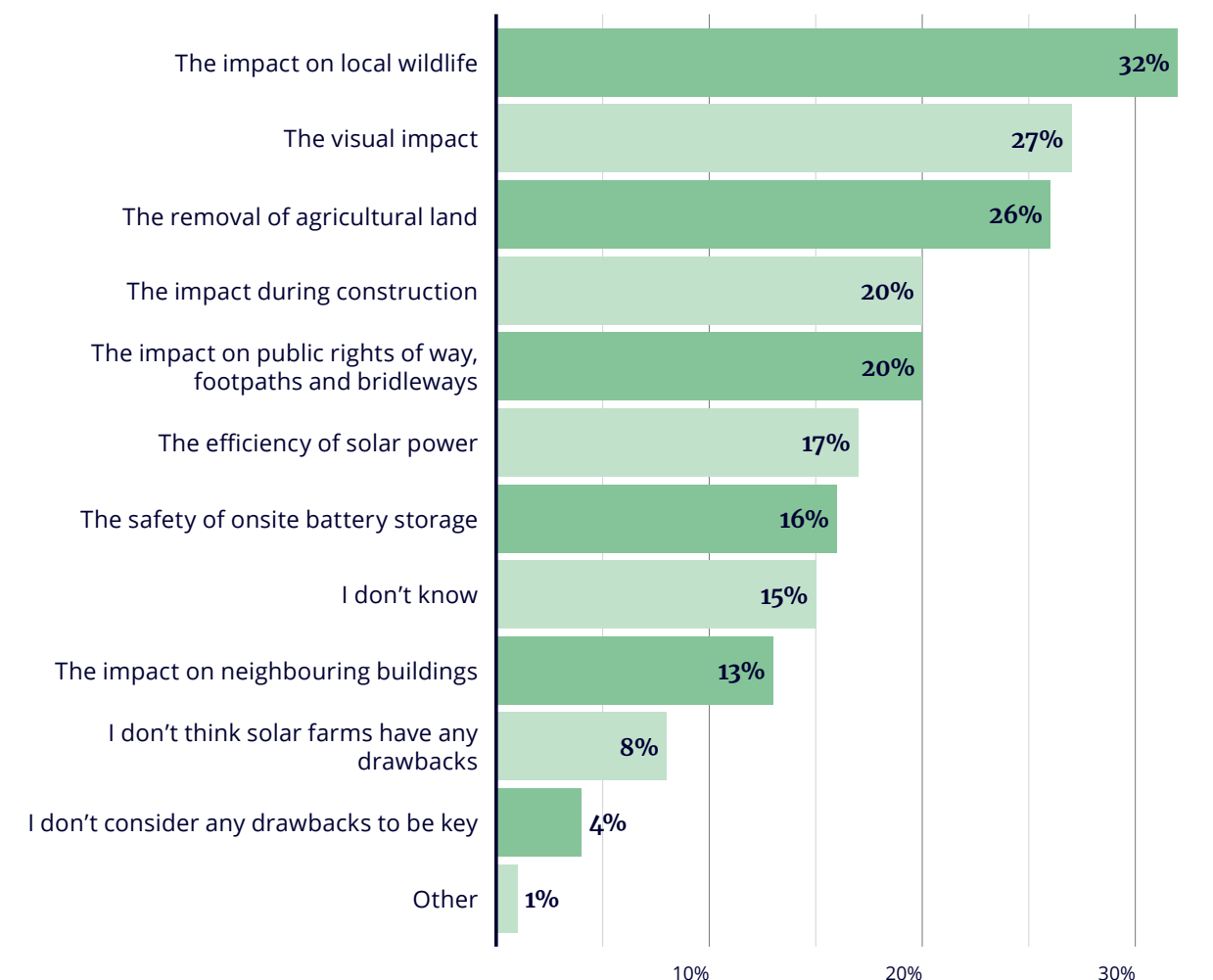
⁶ <https://solarenergyuk.org/resource/lighting-the-way-making-net-zero-a-reality-with-solar-energy/>

Wildlife, views, and agricultural land are the main concerns

The public considers the impact on local wildlife (32 per cent), the visual impact (27 per cent) and the removal of agricultural land (26 per cent) to be the three main drawbacks of solar farms.

Respondents also note cost, inefficient land use, and the environmental impact of making and disposing of solar panels as key drawbacks.

What would you consider to be the perceived key drawbacks of solar farms?

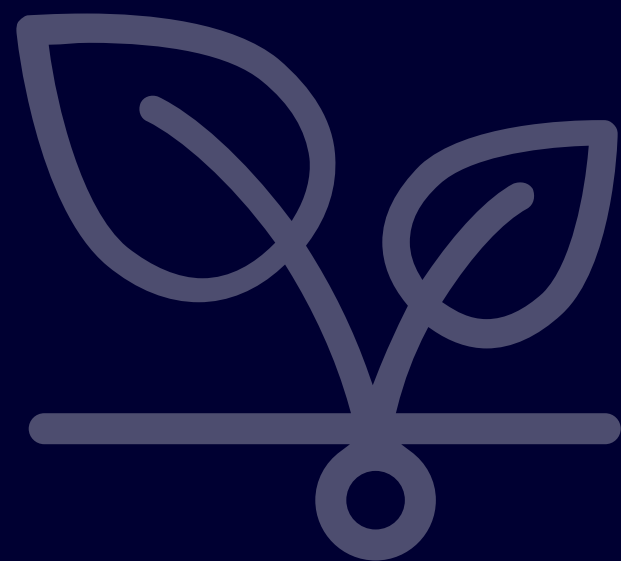


Case Study 3 Biodiversity Enhancement and Sustainable Agriculture

Monitoring and benchmarking is core to how the solar industry manages and improves biodiversity on solar sites. Bluefield LLP, for example, has conducted a rigorous benchmarking study of the biodiversity enhancement measures implemented across their portfolio to identify areas for further improvements.

Benefits

- Provided additional wildflower meadows
- Planted native trees and hedgerows
- Installed bat boxes, bird boxes and beehives
- Collaboratively enabled conservation-focused grazing and pollinator habitat creation



Solar farms could be popular with wildlife groups

The Government has included solar projects in its [Net Zero Strategy](#) and its [Ten Point Plan for a Green Industrial Revolution](#).

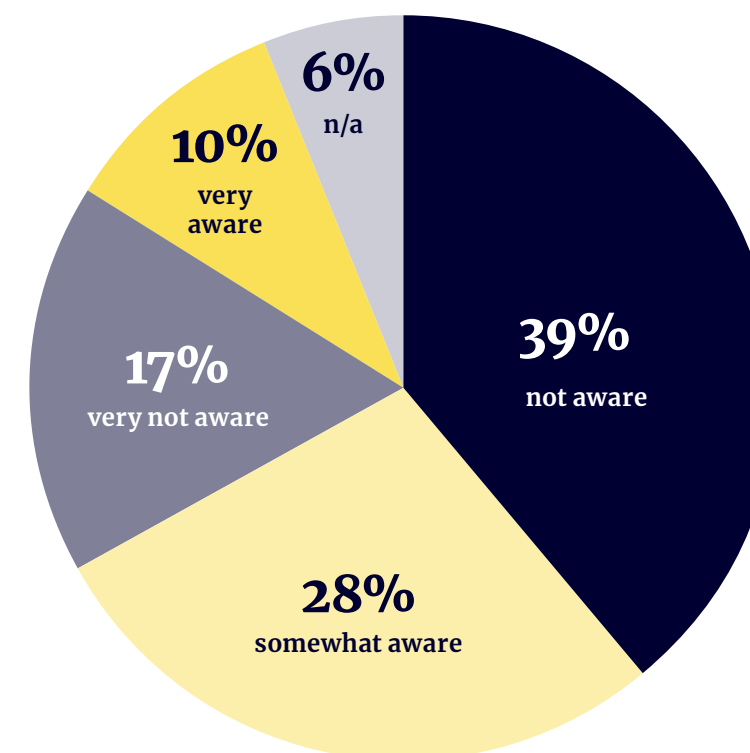
Solar farms present an opportunity to deliver net gains in biodiversity. However, 56 per cent of the public are unaware of this fact and 32 per cent consider the impact on local wildlife to be the main drawback of solar farms. This means there is an opportunity to build more public support – only 38 per cent are currently aware of this opportunity.

That said, 51 per cent of adults aged 16 to 25 are aware of this fact. This figure stands at 45 per cent for those aged 25 to 34 and 38 per cent for 35 to 44-year-olds.

Such awareness is most apparent in Greater London (51 per cent) followed by Yorkshire and the Humber (43 per cent), and the South West (42 per cent).

It is most prevalent amongst those earning annual incomes of £65,001–75,000 (47 per cent), £45,001–55,000 (44 per cent), and £55,001–65,000 (44 per cent).

How aware were you that, through careful site selection and planning, solar farms can deliver a net gain in biodiversity on a site?

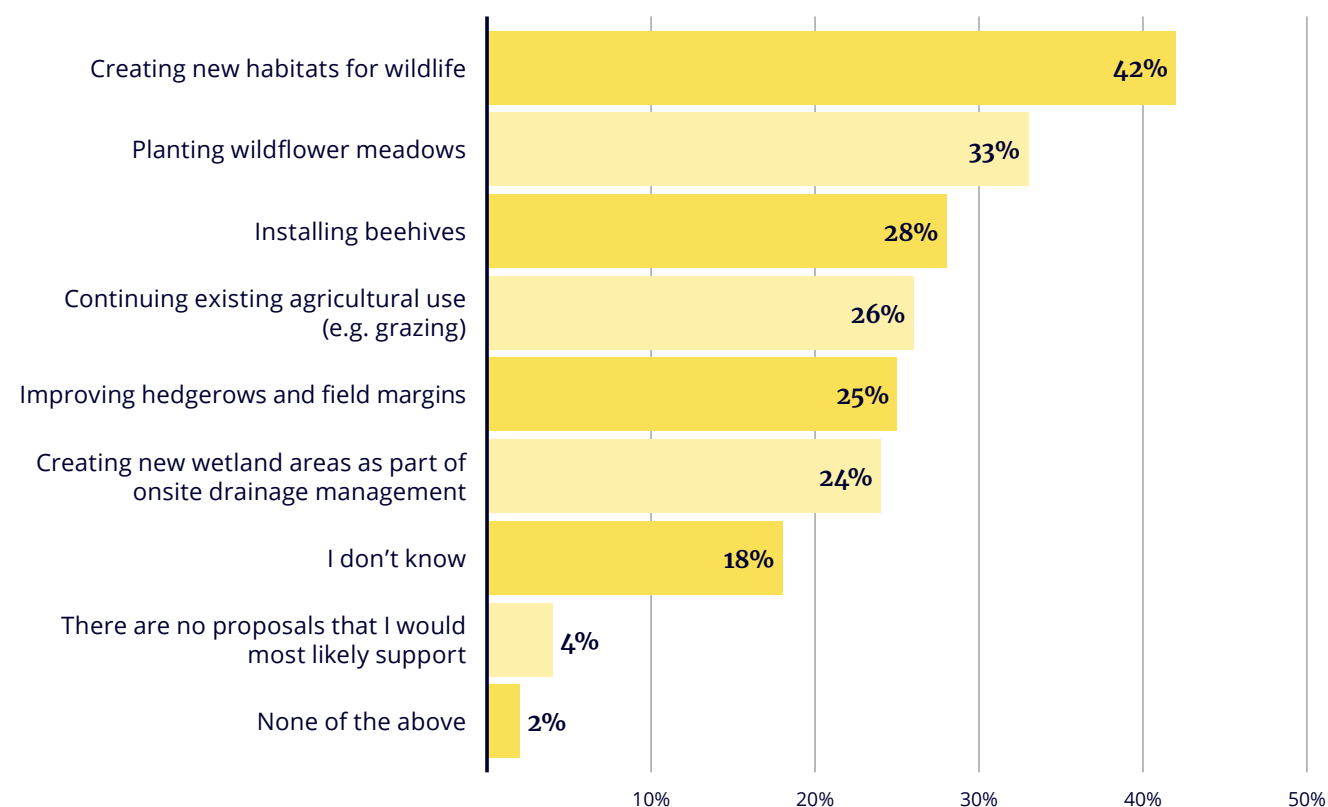


Wildlife habitats are the way forward

The public is most keen on proposals that co-develop solar power and new habitats for wildlife (42 per cent).

Proposals that focused on planting wildflower meadows (33 per cent) or installing beehives (28 per cent) also attract much support.

Newly planned solar farms are increasingly including a range of agri-voltaic proposals which allows for co-developing the same area of land for both solar photovoltaic power as well as for agriculture. Which of the following proposals would you most like?



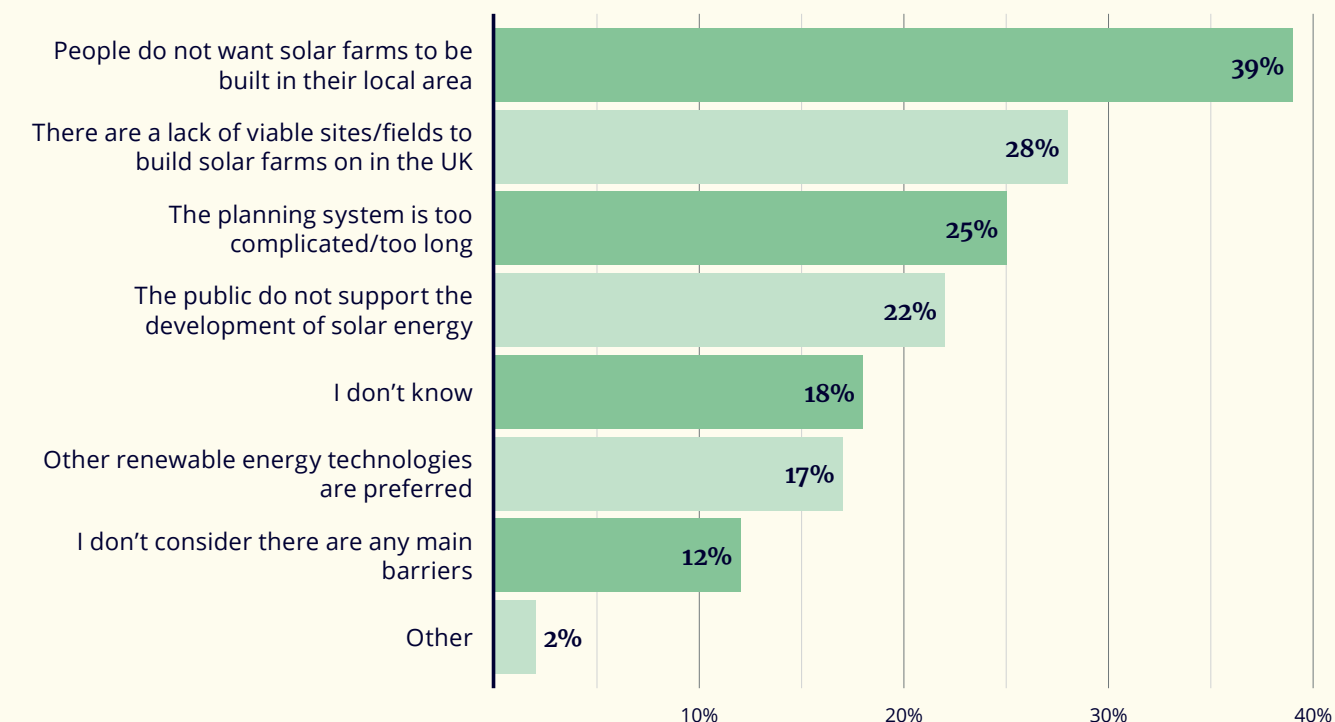
The perception of local opposition is the main barrier to development

Although more than half of the people surveyed said they support the development of solar farms in their local area, the public sees people not wanting them as the main barrier to developing more of them at pace (39 per cent).

A lack of viable sites to build on (28 per cent) and the complicated planning system (25 per cent) are considered to be the other two main barriers.

According to respondents' comments, the weather, high costs, and a lack of awareness regarding the benefits of solar farms are also perceived to be significant barriers.

If any, what do you consider to be the main barriers in the UK to developing more solar farms at pace, helping the UK to achieve its net zero targets?



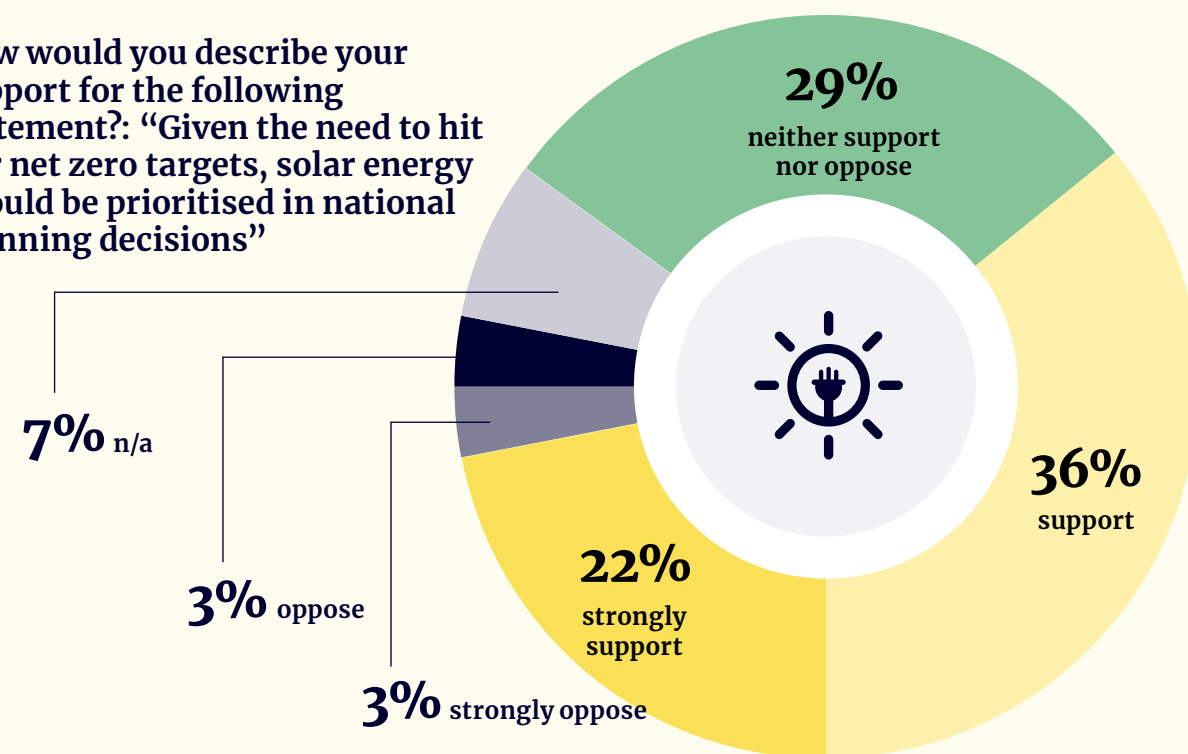
The public wants to prioritise solar

The public supports (or strongly supports) the prioritisation of solar energy in national planning decisions (58 per cent) with a minority opposed (seven per cent).

Within this, 63 per cent of adults aged over 55 say solar energy should be prioritised. This figure stands at 58 per cent for those aged 45 to 54 and 57 per cent for 35 to 44-year-olds.

Such support is particularly strong in the South West (62 per cent), Greater London (62 per cent), and Scotland (60 per cent).

How would you describe your support for the following statement?: “Given the need to hit our net zero targets, solar energy should be prioritised in national planning decisions”



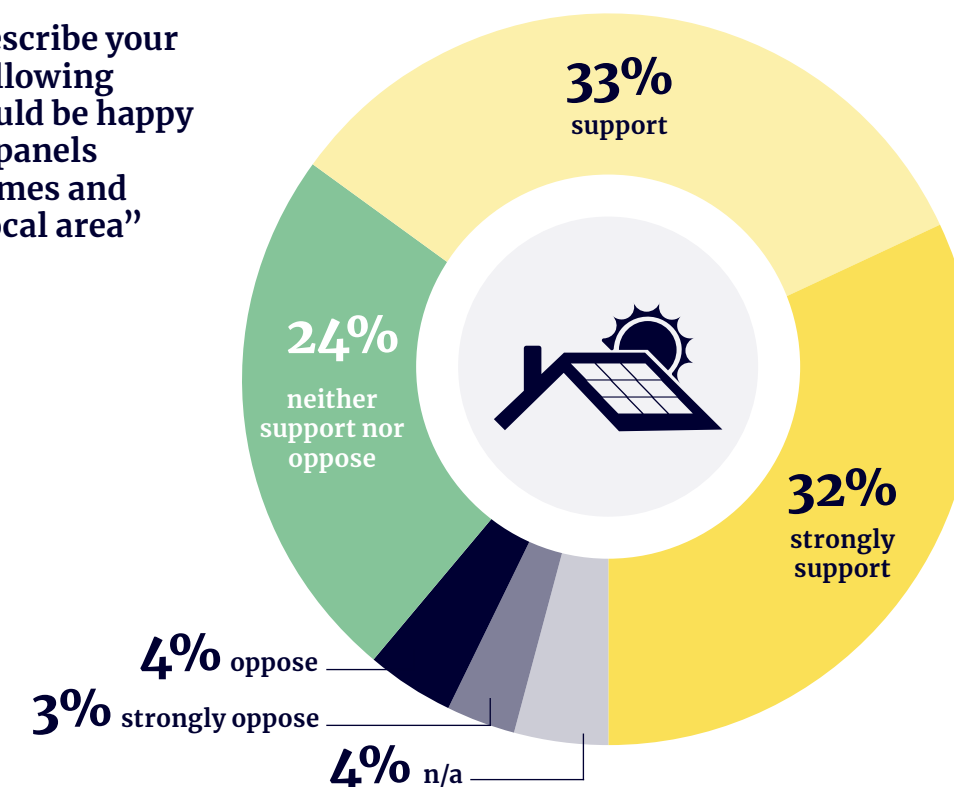
People want more rooftop solar in their area

The public supports the rollout of rooftop solar panels in their local areas. 89 per cent of people said they they would be happy to see more rooftop solar, or that they didn't have a view on it. Only seven per cent are opposed.

70 per cent of adults aged 45 to 54 would be happy to see more rooftop solar in their local area. This figure stands at 69 per cent for those aged 55+ and 63 per cent for 35 to 44-year-olds.

Such support is particularly strong in Yorkshire and the Humber (69 per cent), the East of England (69 per cent), and the South East (68 per cent).

How would you describe your support for the following statement?: “I would be happy to see more solar panels on the roofs of homes and buildings in my local area”



Conclusions

Public attitudes to the key benefits and drawbacks of solar energy are diverse. There is a lot of support, but this is threatened by a lack of awareness and misunderstanding. People want to see more rooftop solar in their areas and consider multifunctional land use to be one of the key benefits of solar energy. Public ambition extends beyond solar development; they expect jobs, skills, and supply chain opportunities too.



Solar creates jobs, skills and supply chain opportunities - much of the public considers this the most important issue when developing a solar farm



Minimising environmental impacts is considered to be the most important issue



Increasing understanding of the positive impact of solar farms on biodiversity and local environments will help capitalise on public support



Strong public support for solar farms in their local area is out of step with public perceptions of opposition to solar

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