

Pill, Portbury & Portishead Community Energy Workshop

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Introduction

In July 2025, Low Carbon Gordano & North Somerset Council hosted a community energy workshop for local residents in Pill. The workshop was led by the Centre for Sustainable Energy, an independent national charity, as part of a project funded by the Energy Industry Voluntary Redress Scheme.

The session aimed to help local people understand the types, scale and potential locations of renewable energy technologies that could be supported in the Pill, Portbury and Portishead area. Participants engaged in discussions about community energy options and explored what renewable solutions might work locally.

This report examines the renewable technologies suggested during the workshop - including wind turbines and solar panels - and estimates how much energy they could generate for local people.

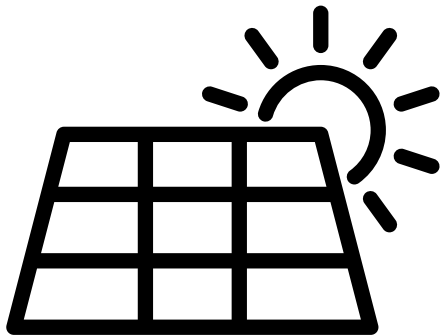
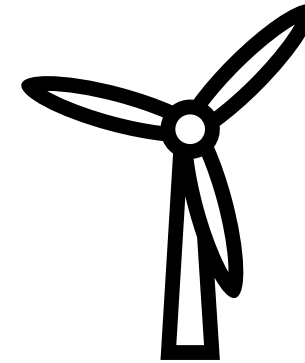
Following the workshop, a survey and community engagement will gather wider public views on the proposals discussed.



This page shows the main suggestions made in the workshop by local people.

14 wind turbines

To reduce their appearance, people felt they were best located near Avonmouth docks



130 acres of solar farms

This is the equivalent of 78 football fields. It would be split into several areas of smaller solar farms across the area. Similarly to wind turbines, people thought they should go by Avonmouth Docks and the motorway. People also felt that having solar farms in fields was preferable to new housing.

Report summary



This page shows some of the thoughts local people shared in the workshop.

“

It's a no brainer to install solar PV on car park areas. It takes no land use, adds shade and provides electricity for EV charging

”

“

We need to think about futureproofing demand that will come in the future as we build more houses and switch to more electric systems

”

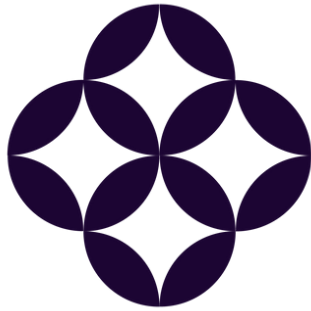
“

The workshop was helpful and educational with the right amount of information. It sets out the big changes needed to achieve climate outcomes

”

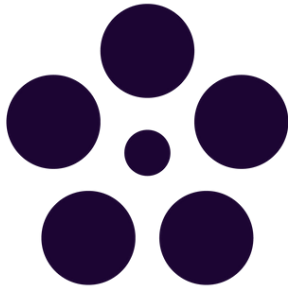


Why did we do the workshop?



Increasing renewables

The way we produce and use energy needs to change. It's the main cause of climate change. We need a lot more energy from renewable sources like wind and solar to meet the UK's climate targets. Nationally, we need to quadruple the amount of renewables that have already been built.



More affordable energy

At the same time, it's difficult for many people in the UK can't keep their homes warm in winter, even though it's essential for their health and wellbeing. Being able to afford to **keep warm in winter is a basic right** for everyone.



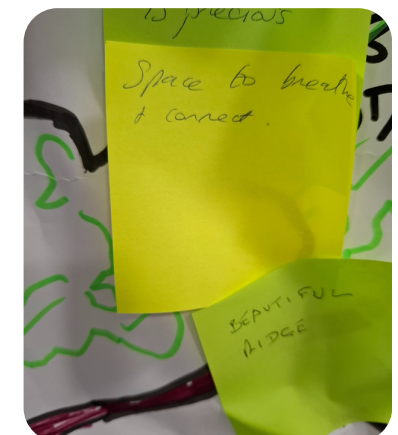
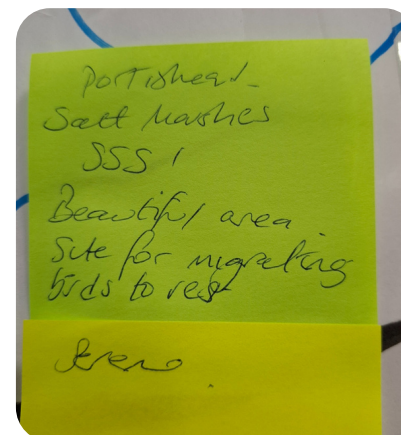
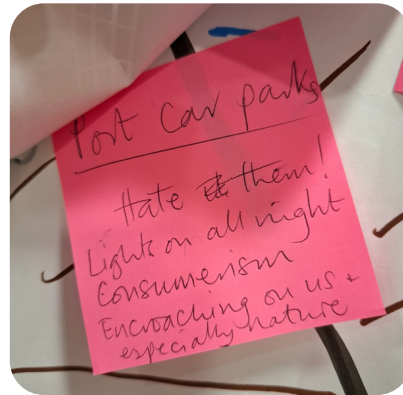
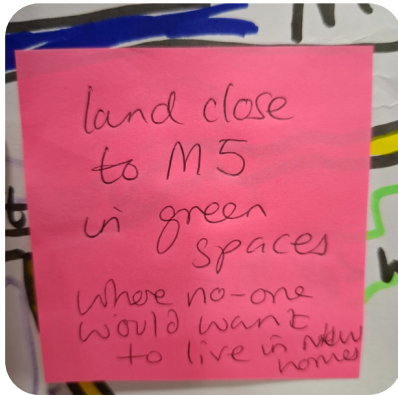
Community energy

Community-led energy projects keep benefits local – from cheaper energy bills to investment in local facilities. When communities lead energy projects, they create solutions that work for everyone – tackling both climate change and rising energy costs. In 2023, community energy projects contributed £12.9million to local economies and saved £4.4m in energy bills. They also reduced carbon emissions by 166 mega tonnes, the same as 209,570 passenger round trips from London to New York.

What is the local area like?



The workshop started with people sharing their thoughts about the local area. They added post it notes to a large handdrawn map of Pill, Portbury & Portishead.



What is the local area like?



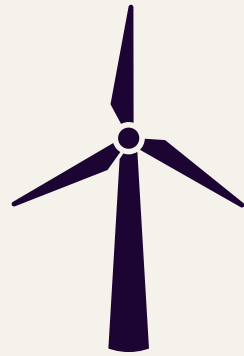
The main thoughts added to the map are shared in the table on this page.

Areas that are special	Areas that are disliked	Other descriptions and thoughts
Lake Grounds in Portishead	Land close to the m5 where no one would want to live in new homes	Space to breathe and connect - Weston Big Wood
Weston Big Wood, ancient woodland is precious	Port car parks - encroaching on the village, lights on all night and highlights consumerism	Portishead Salt Marshes - serene
Portbury Wharf - beautiful nature reserve	Avonmouth & Portbury car parks destroying the area around it	Amazing views from Bomber's Hill
Portishead Salt Marshes SSSI - beautiful area with sides for migrating birds to rest	The docks is car parks and industrial buildings	Watchhouse Hill view is beautiful
Priors Wood - one of the best areas for Buzzards		
Views to Wales along the River Avon		
Woods & Bombers Hill south of Pill - green spaces for walking		
Pill Village Green, Brookside & Pill Paddock - nature haven with spaces to play. Lovely green space for everyone. Mix of wild open & great views		

Choosing renewables



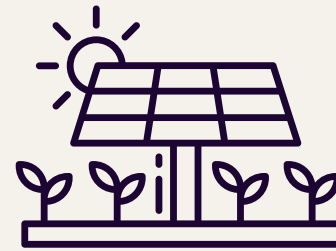
The main part of the workshop brought everyone to 'Sunshine Cafe' where a menu of renewable energy options was shared. This page shows the technology on the menu.



Medium Wind Turbine

Powers 638 homes,
100 metres tall, 1 megawatt.

Maximum **15**



Solar Farm

Each powers 720 homes (2.5
megawatt) per 7 acres, or
about 4 football fields.

Maximum **22**

This menu is based on technical evidence showing what can be built in Pill, Portbury & Portishead. The evidence looks at things like flooding, green belt land and wind speed - so these are already thought about before the maximum number possible is decided. 'Maximum' isn't a number to aim for though, it's a guide of what could technically be delivered, but people in the workshop chose the technology based on what they thought is acceptable for the area.

Choosing renewables

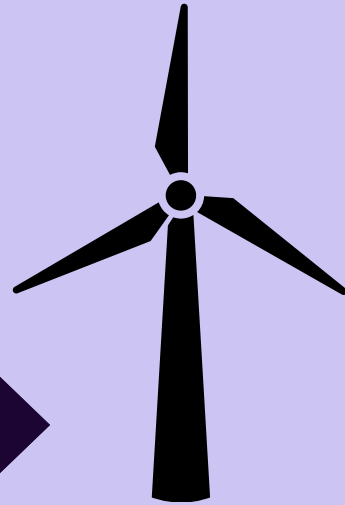




Wind turbine suggestions

People in the workshop suggested a total of...

14 turbines



Which would mean...

75,168 MWh generated



6,185 homes powered

**£57 million
total cost**



Main workshop thoughts shared about wind turbines

Every group in the room selected all the wind locations in Avonmouth docks due the area being brownfield sites already

There was less certainty about placing wind turbines along the M5 corridor in Portbury Parish

Two groups were in favour of wind turbines in the south of Portbury Parish, with one group noting that they would want to see additional information about the areas to be certain including 3D maps

However it was noted they would be in an are of natural beauty so may obstruct the views of some properties

The fourteen wind turbines suggested were split 50/50 between very large wind turbines & large wind turbines

It was suggested the very large wind turbines be placed in Avonmouth docks and the large wind turbines in the other locations suggested across the parishes

It was noted by participants they would prefer wind turbines not on sites of special scientific interest but they would find this ok if they could bring biodiversity enhancements

50 / 50 split between 100m and 160m wind turbines

Suggested locations - wind turbines

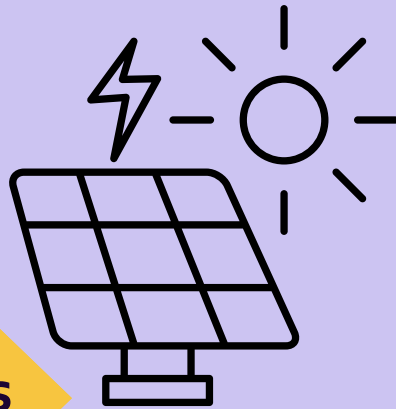




Solar Farm suggestions

People in the workshop suggested a total of...

10 solar farms



Which would mean...

41,600 MWh generated



3,426 homes powered

**£22.5 million
total cost**



Main workshop thoughts shared about solar farms

Attendees were surprised by the size of the 5MW solar farms at 13 acres

There was unilateral agreement across the three breakout groups to place solar farms in all suitable locations in Avonmouth docks

There are a lot of potential green belt locations around Pill that may be allocated for housing developments. Attendees broadly agreed they would rather have solar farms than houses built on these sites

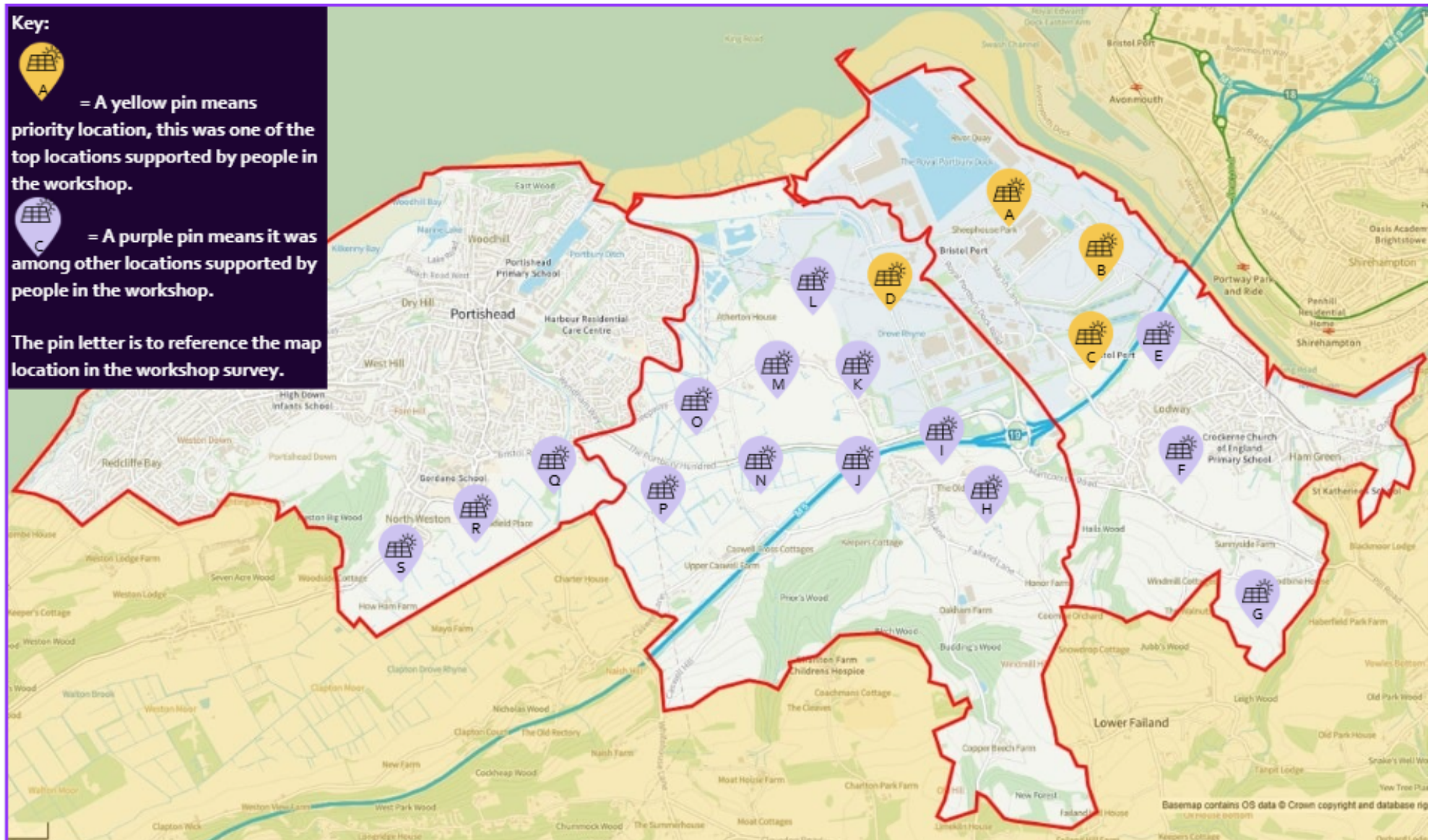
The large car parks in Avonmouth docks were felt to be ideal for solar canopies

The areas around the M5 may have additional complications such as flood risk or biodiversity

There is a particular area north of Pill which they would be keen to see an even split between solar panels, housing and biodiversity

Ground mounted solar could be installed in the land around Avonmouth docks to try and limit its expansion

Suggested locations - solar farms

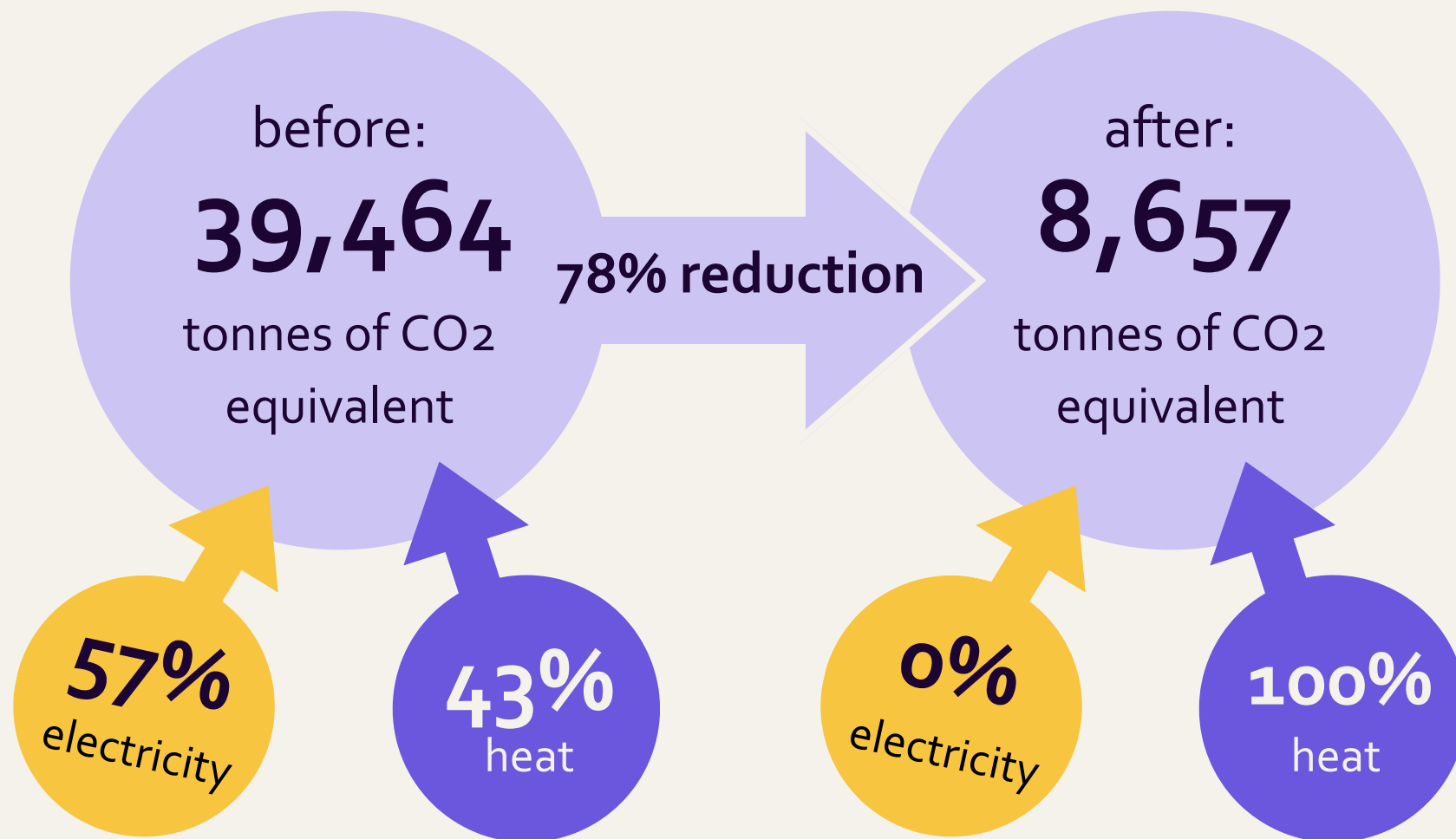


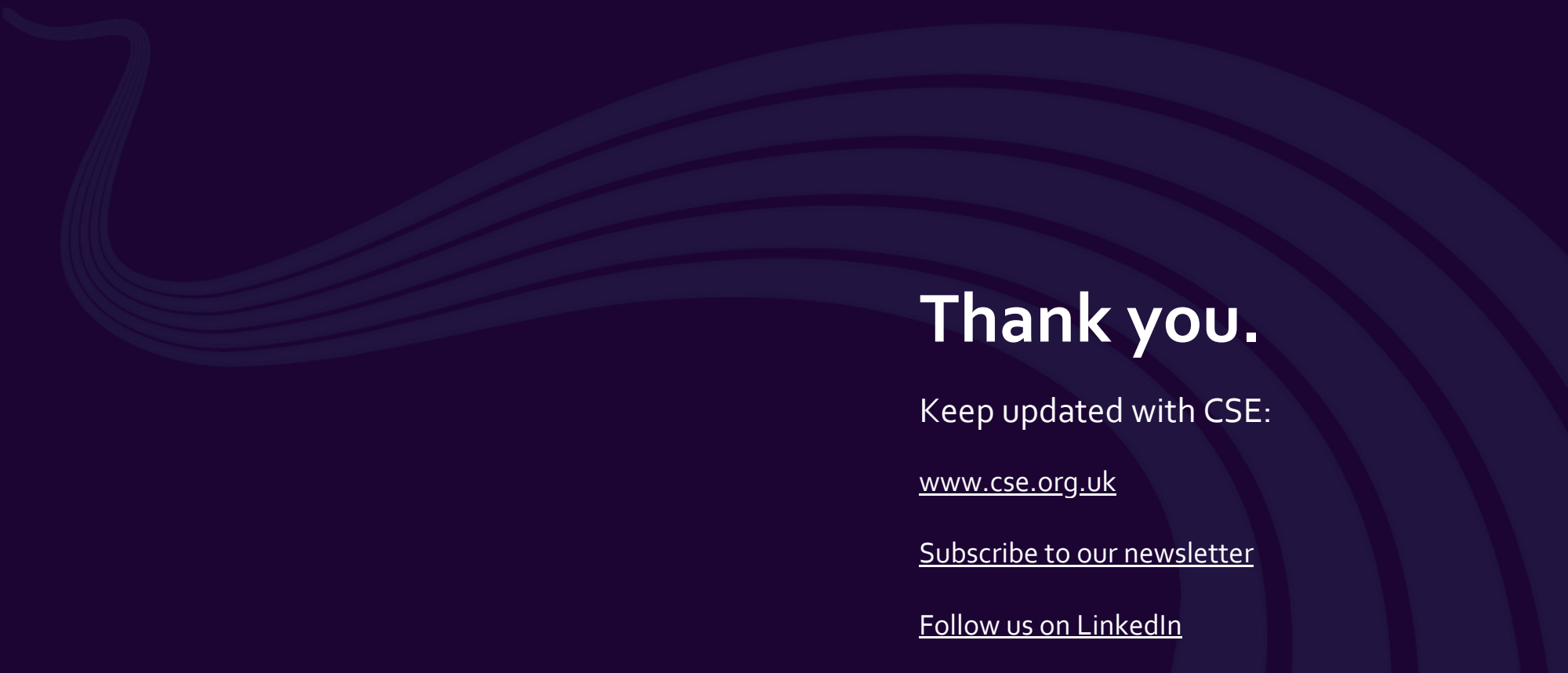
Impact of choices



This page shows the current carbon emissions in Pill, Portbury & Portishead from electricity and heating use. It then shows how much those emissions would be reduced if the technology suggested in the workshop was built and installed.

The annual carbon emissions of Pill, Portbury & Portishead before and after the suggested technologies from the workshop



A series of dark blue, wavy, concentric lines that sweep across the bottom right of the slide, creating a sense of movement and depth.

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