





Future Energy Landscapes

Community renewable energy in South Wonston - 15th October 2023.



Summary

A workshop was held in South Wonston for residents of the parish, exploring what types of renewable energy could be acceptable in the future.

This summary of the workshop is to be read in conjunction with the follow-up survey, which is open to all residents here.

The aim is to:

- Create a space for residents to have informed conversations about what renewable energy development would be suitable in their parish (if any).
- Help residents become better informed for future consultations on renewable energy policies.
- Facilitate the emergence of community energy projects. Different business models
 offer different benefits but the primary purpose of energy communities is "to
 provide environmental, economic, or social community benefits rather than
 prioritise profit making..."
- Allow ambitious neighbourhood plans to develop. Neighbourhood plans are written by a community to shape the development and growth of their area.

The workshop format had been developed by the Centre for Sustainable Energy (CSE) in Bristol, commissioned by South Wonston Sustainability (a sub-group of the Parish Council) and kindly funded by both Winchester City Council and South Wonston Parish Council. Dan Stone and Leah Bromley from CSE facilitated the workshop with expertise, remaining neutral throughout.

The event was publicised through email and hand-delivered invitations, on social media and with posters displayed in the local area. It was open to all residents of South Wonston, with a good response of twenty participants on the day.

This is a summary of what was said in the workshop but cannot be assumed to be representative of the full range of opinion in the local community. The workshop should therefore be seen as the start rather than the end of the conversation. The associated survey aims to capture wider public opinion on the workshop discussions.

A final report will then be prepared, summarising the overall outcomes. This will be publicly available, and copies will be sent to the Parish Council and relevant city councillors as well as to participants.

The aims of the workshop were to:

- 1. Map the local landscape, considering areas which are special, liked or disliked.
- 2. Consider types of renewable energy that might be acceptable within the area.
- 3. Consider locations where these technologies might be located.
- 4. Reflect on how the community could benefit from and shape energy development.

1. Landscape change arising from energy generation









Before starting the main workshop task of suggesting potential renewable energy options for the area, residents talked about what they appreciated about their parish and how they felt about potential change.

Many of the participants had been living in the area for around 20 years or more (some for much longer) and/or intended to continue living there in future. They reported a sense of pride in their parish, felt connected with it and cared for it.

Things that were appreciated included the beautiful countryside, the range of facilities and activities available, the wide age range of the population, a feeling of safety and the fact that the village was kept clean and tidy.

Regarding potential changes to the landscape, it was agreed that ground solar was less visible than wind turbines and so could be preferable but that it would depend on the trade-offs and benefits of each. One participant made the point that in the future, South Wonston may well appear unusual if it did NOT have some form of renewable energy generation!

2. Landscape sensitivity

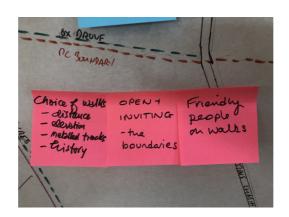
Workshop participants were then asked to review a large hand drawn map of the area and annotate it with different coloured post-it notes to describe their relationship with the landscape.

Pink post-it notes showed positive feelings and enjoyable activities such as walking, birdwatching etc.

Yellow post-it notes showed areas that were useful or important in daily life, eg the school. *Blue* post-it notes showed areas that were not liked (noisy, visually unappealing etc).

Pink - Positive / Cherished Places

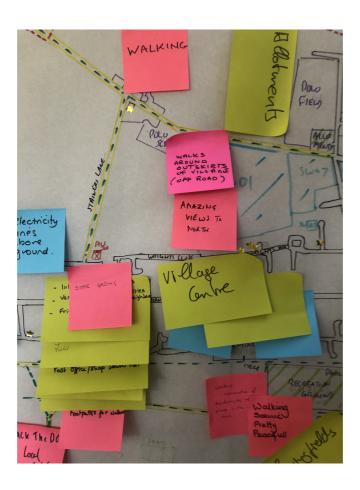
Many participants placed pink post-it notes predominantly on the north and south sides of the village map to show where they walked. They commented specifically on the good choice of walks, that it felt open and inviting and that the people they met were friendly. Bird-watching, a biodiversity of plants and amazing views to the north were also mentioned. One note placed more centrally in the village told of star-gazing.



Yellow - Places that were important or useful in village life

Unsurprisingly, the yellow post-it notes appeared in the more central parts of the village; they spoke of the Drovers social club, the village hall, the allotments, the school and the shop including its post office. Several notes mentioned the well-used recreation ground, children's play area and the Pavilion.

Two comments were made about activities in these places being interesting, well-attended and a valued way to meet neighbours etc.



Blue - Areas that were disliked / noisy

It was the western end of the village that attracted the most blue post-it notes, with remarks about road noise from Christmas Hill, the A34 and too many vehicles along Downs Road (some also too fast).

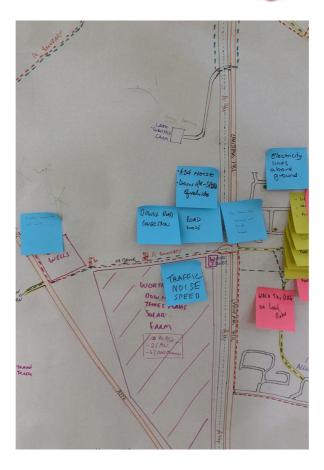
One noted there were overhead electricity cables in the area and another noted that the oil well on the western boundary of the parish was smelly.

Two other blue notes also targeted cars in the centre of the village, specifically how many parked outside the school. It is notable that at least amongst workshop participants, no-one identified the large existing solar farm, which adjoins the parish boundary, as a negative feature in the landscape.









3. Suggested renewable energy

Dan and Leah then presented several videos, which gave an overview of the different types of renewable energy generation that would be technically feasible in the parish. This was based on information from Hampshire County Council, Winchester City Council and - in the case of local wind speeds - from RenSMART (a renewable energy information resource).

Following this, we broke up into four groups, each considering one of the technologies in relation to the post-it notes on the map and to South Wonston's specific geography and character.

They were asked:

What size of your technology would be acceptable? What quantity? Where could it be located?

After the exercise, each group presented their thoughts and conclusions to the room and all participants voted on them.

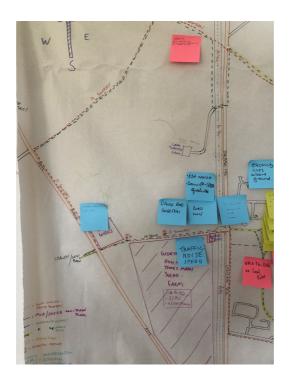


Overall, there was a high level of consensus amongst participants both in terms of how they felt about their village and the kind of changes they thought could be acceptable.

These were:

- Two medium to large (maximum 2.5 MW) wind turbines at either the eastern end of the parish or at the western end, if it was possible to site them close to trees.
- A 25 MW solar farm at the eastern end of the village in the area of the pig farm.
- While many home-owners already have them, there is potential for PV solar panels to be install in our non-domestic locations.
- A goal of 10% of homes to be fitted with air source heat pumps.

One of the suggested location for wind turbines at western end of village, adjoining A272:









The table below summarises the types of renewable energy technology, which carried majority support in the session. This map shows these locations.

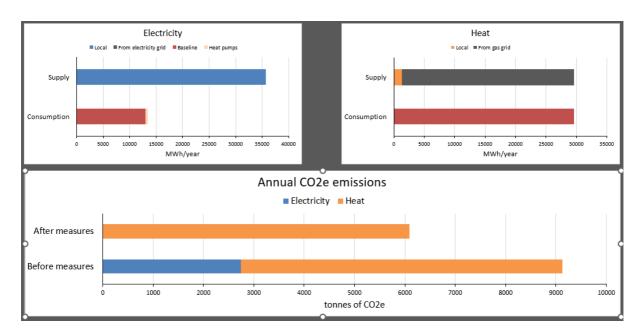
Technology supported	Suggested location	Size / capacity of installation	Points from the discussion.
Wind turbines	At the eastern end of the parish, in the area of the pig farm, perhaps also near the water tower at the western end if the wooded areas are not an issue.	This group proposed two medium to large turbines (with a max hub height of 100 metres), which would supply a max of 11,651MWh of electricity per year.	There was concern over the danger to birdlife, which had to be balanced against the danger to all life if carbon emissions are not dramatically reduced. NB One pink note spoke of bird-watching in the north-west part of the parish and particularly of peregrine falcons around the water tower.
Ground-based solar 'farms' or 'allotments'.	At the eastern end of the parish, in the area of the pig farm.	This group proposed a 100-125 acre or approx. 40 – 50 hectare installation, with a corresponding capacity of 20 - 25 MW (allowing 25 acres per 5MW).	May divert deer routes. Some concern at the proposed size. A number of smaller solar 'allotments' was discussed but it was thought landowners may then be less financiallymotivated. Support conditional on panels not being detrimental to wildlife.
Rooftop solar PV (for electricity, including non- domestic)	None specifically proposed.		The comment was made that many homes in South Wonston are relatively modern so solar PV panels should be easier to fit.
All other technologies: rooftop solar thermal (for hot water), air and ground source heat pumps.		This group proposed a goal of 10% of the homes in South Wonston being fitted with air source heat pumps. These would supply 1,352MWh of heat per year.	The aim was for the electricity required to run heat pumps to be sourced, as much as possible, from solar power. One wild-card suggestion was to somehow harness the heat from the oil that was pumped up at the Star Energy oil well, in the same way as is done from a ground-source heat pump refrigerant!

Extract from completed Cesar tool, showing the impact of the choices around energy selfsufficiency (electricity and heat) on greenhouse gas emissions in South Wonston.

In the top two charts, blue shows electricity currently taken from the national grid, grey shows gas currently taken from the gas grid and red shows our current consumption. Orange shows both the electricity currently needed to power local heat pumps and the heat supplied locally.

The bottom chart shows the impact of the suggested measures on our greenhouse gas emissions (CO2e or 'carbon dioxide equivalent' includes how much a greenhouse gas other than carbon dioxide would contribute to global warming if it were carbon dioxide).

As you see, our emissions from electricity consumption would disappear completely, in fact also providing a surplus to sell.



4. How the community could benefit from and shape energy development

The room then voted on three different funding models for each of these proposals;

- 1. Community-owned (ie owned by residents who wished to invest in the scheme).
- 2. Commercially owned.
- 3. A partnership between the community and a commercial or cooperative provider.

In each case, the community-owned model of funding won majority support. It was agreed that a willing landowner would be essential for delivery.

The combined technologies that were proposed would provide roughly three times more electricity than the parish uses, plus around 10% of its heating needs. Depending on the funding model chosen, this could provide a good return on investment by the community or an outside provider.







Generating an excess of energy would help to offset the higher carbon emissions of those living in cities, with no access to sites for solar or wind power. We also need power for industry, commerce, and transport, all of which the rural community depends on.

If it was decided to reduce the amount generated to better match the parish's needs, the switch away from fossil fuels would still dramatically reduce the village's CO2 emissions and help the transition to a safer, cleaner and more secure future energy supply.

However, as stated above, these proposals are entirely hypothetical and the next step is very much to see whether the outcomes of the workshop are representative of the wider community or not, through the follow-up survey here.

Please do have your say; whatever you think, your voice as a resident is important!

Further information & resources

www.winchester.gov.uk/climate-change-and-energy/climate-emergency-what-we-are-doing-now/investing-in-100-renewable-energy

Magicmaps: https://magic.defra.gov.uk/magicmap.aspx

M.APP Enterprise (detailed solar mapping for rooftop and solar farm): https://mapps.gsi-vip.com/Apps/?tenant=gsi access negotiated through awyse@winchester.gov.uk

CSE Solar Wizard: www.cse.org.uk/my-community/community-projects/solar-wizard-calculator/

The Renewable Energy Hub (blog post for landowners):

https://www.renewableenergyhub.co.uk/blog/everything-you-need-to-know-about-solar-farm-requirements

Solar for Schools - https://www.solarforschools.co.uk/

Solar Together project (discounted group buying project)

https://solartogether.co.uk/landing

Farmers Weekly: https://www.fwi.co.uk/business/diversification/farm-energy/advice-for-farmers-on-letting-land-for-solar-projects

NOAbl Wind speed: www.rensmart.com/Maps#

Hampshire Minerals and Waste Plan:

https://documents.hants.gov.uk/mineralsandwaste/HampshireMineralsWastePlanADOPTE D.pdf

Hampshire minerals and waste safeguarded site list:

https://documents.hants.gov.uk/mineralsandwaste/safeguarding/WinchesterCityCouncil.pd f

& Minerals Consultation areas: https://maps.hants.gov.uk/mineralsconsultationareas/