Renewable Energy

Yorkshire village to pioneer solar battery power

Trial designed to smooth flow to grid cuts electric bills for 40 households



Elaine Marsh has a soft spot for a coal fire but is happy with her solar panels © Darren O'Brien/Guzelian

5 HOURS AGO by: Pilita Clark and Andy Bounds

A village in the heart of one of Britain's former coalfields is to host a groundbreaking trial that could pave the way for tens of thousands more homes to run off solar power.

People in 40 council homes in Oxspring, South Yorkshire, are being given batteries that can store electricity from rooftop solar panels, in the latest sign of interest in <u>energy</u> storage (http://next.ft.com/content/b62b356e-2d10-11e6-bf8d-26294ad519fc) systems.

The batteries, which normally have a starting price of about £2,000, will be hooked up to a "virtual power plant" that will aim to smooth out how much solar power is exported to the grid, enabling more homes to have solar panels.

The growth of solar power has been held back in many parts of the country, including the borough of Barnsley, which takes in Oxspring, because of the extra strain it puts on local grids.

Operators have to keep voltage levels within strict limits but this is difficult if solar panels are generating a lot of power on a bright day but dip sharply as clouds pass by.

"We can do all sorts of things to address this," said Jim Cardwell, head of trading and innovation at Northern Powergrid, a distribution network operator taking part in the £250,000 Oxspring trial.



Villagers taking part in the trial in Oxspring have been given the batteries which normally cost at least £2,000 © Darren O'Brien/Guzelian

But most solutions, such as digging up the road to lay fatter cables, are costly and disruptive, he said.

Oxspring's residents will be testing an alternative remedy: using home batteries to soak up excess power when needed so voltages can be kept at the right limits and more solar panels can be installed on other properties.

"The physics would suggest there is value there," said Mr Cardwell. But it depends on how people use their battery and solar systems.

Elaine Marsh, a pensioner in Oxspring, said she was "highly delighted" with her panels, which were saving her several pounds a month on her electricity bills.

She grew up with a coal fire and was in her 50s before she installed central heating in her old home. "You can't beat a coal fire," said Mrs Marsh, 81. "But we have got to move

forward. I am big believer in moving forward."

She does her best to use energy at its cheapest. That means using the cooker at lunchtime in winter when it's light. "I like eating my main meal in the evening and I shall be able to do that again [with the battery]. I will also be able to run the washing machine and cooker at the same time," she said. "I am very frugal."

Mrs Marsh, a widow, lives alone in the two-bedroom bungalow and has had the panels for a year. Some villagers refused them, she said. "I don't understand. Even if you just save £1 it is better in your pocket than the energy company's."

UK housebuilding

Investors refurbish Green Deal home improvement scheme (h ttp://next.ft.com/conten t/23888c90-db2d-11e6-8 6ac-f253db7791c6)

Abandoned programme to be turned into one-stop eco-friendly energy shop

The Oxspring trial is the latest in a growing number of efforts to see if batteries can help ease pressure on power grids as renewable energy spreads.

Centrica, the UK's largest retail energy supplier, is testing another scheme in Cornwall (http://ne xt.ft.com/content/c4c03096-b7f5-11e6-ba85-95 d1533d9a62) that will see if a mix of batteries and green energy systems can turn nearly 160 homes and businesses into a new independent power market.

Simon Daniel, chief executive of Moixa, the battery company involved in the Oxspring trial, said if the scheme was successful it could boost renewable energy significantly. "We could see tens of thousands more solar homes," he said.

That should help cut power bills, according to <u>Energise Barnsley (http://www.energisebarnsley.co.uk/</u>), a community energy company that works with local authorities to install rooftop solar.

Andy Heald, a company director, said some people with solar panels were already saving up to 50 per cent on their energy bills and batteries could push this up to as much as 80 per cent.

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