Solar Summit 18th November 2022

Community Energy & how does it work 2.30-3pm



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Sustainable Business and Solar Summit November 18 2022







Big energy consumers – industry & manufacturing











The Solutions - Solar power





The Solutions – Energy Storage

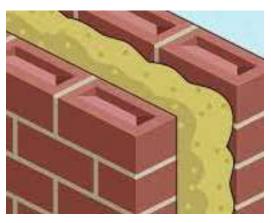






Options for improving energy efficiency







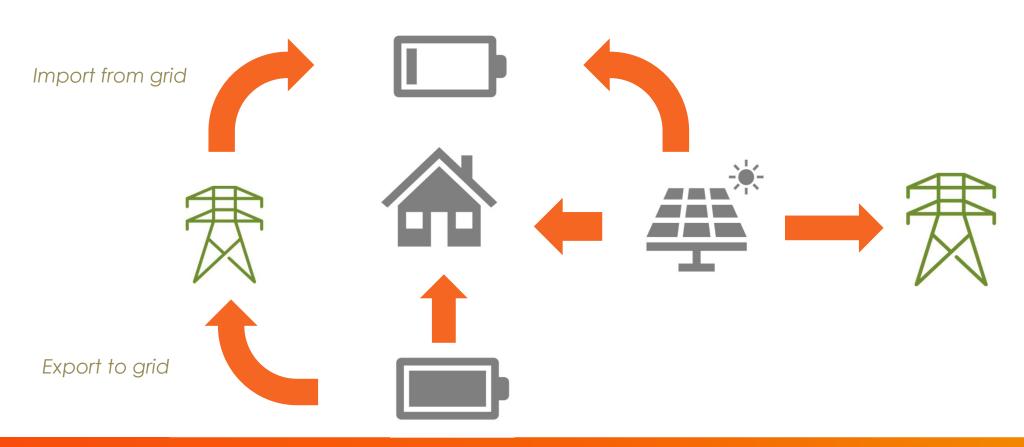








The Solutions – Energy Trading/ Flexibility Services





The Solutions – Air Source Heating









The Solutions – Ground Source Heating

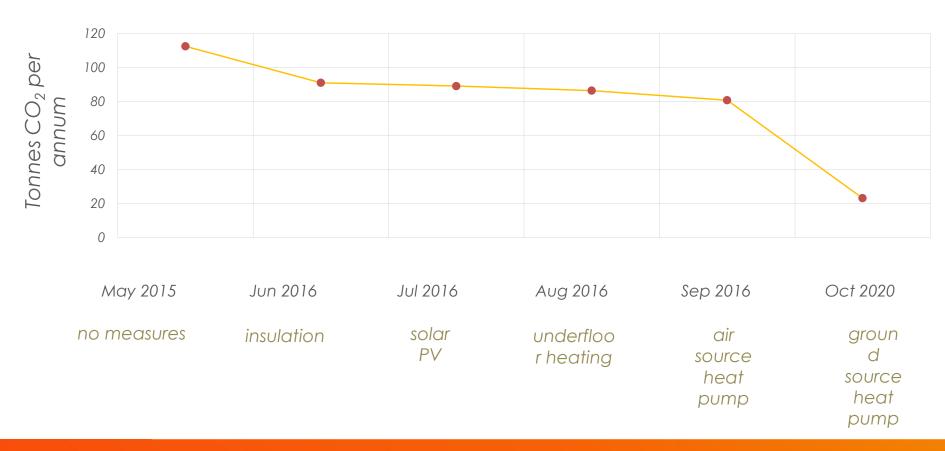








Case Study – Energy efficiency in a phased plan





Questions?



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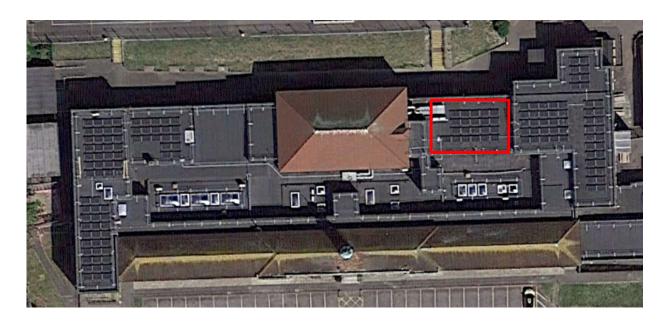
Enabling Community Carbon Reduction



OVESCO's vision

Our vision is for a future in which 100% of our energy needs are generated locally from renewable sources



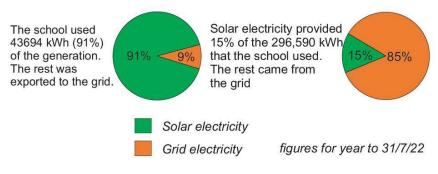








Last school year, the school's solar panels generated 47,951 kWh of electricity.



Cavendish School Eastbourne 50kW's of community solar PV 172 solar panels provide 15% of your school's electricity





Merston 5MW Solar Farm near Chichester is producing **5,000+ MWh** of electricity per year & sufficient to meet the annual electricity consumption of 1,235 typical homes. Community benefit fund for Help Our Kelp & will be going to local energy advice 2024







To get near to the Lewes's <u>domestic</u> electricity usage of **26,000 MWh** we would need **5 Meadow Blue Community Energy Solar Farms**











Lewes Town

Domestic **electricity** usage = 26,000 MWh

Nondomestic **electricity** usage = 12,000 MWh

Domestic gas usage = 91,000 MWh

Nondomestic gas usage = 31,000 MWh

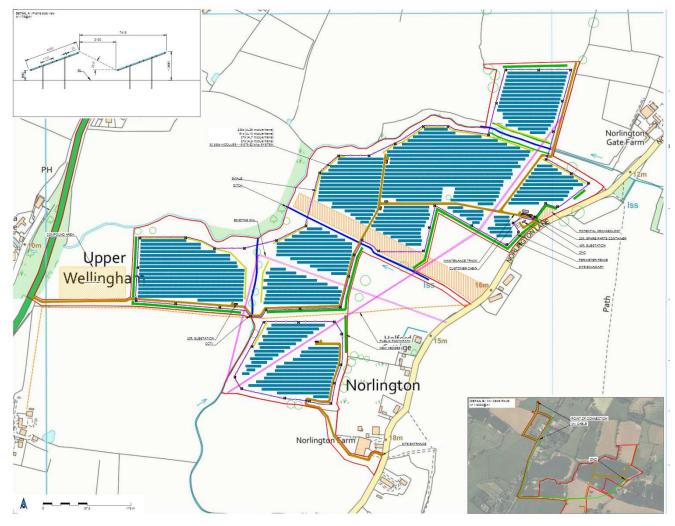
Total Energy Use **160,000 MWh** (does not include transport or goods we buy in)

Population of Lewes roughly 17,300 (Eastbourne is about 103,000)





17MW MW Solar Farm North for Lewes District estimate **17,000+ MWh** per year & sufficient to meet the annual electricity consumption of roughly **4800 typical homes**. About 65% of Lewes Towns domestic electricity supply



RCEF Funded to get the project to planning, taken 2½ years, in area of grid constraint 65 acre site, 230% biodiversity increase, community ownership and fund

CommuniHeat Roadmap



CommuniHeat: to develop the roadmap which aims to understand how rural communities can switch to low-carbon heating using electricity in a way that ensure future comfort, affordability and a smooth transition.

Setting up a Village Members Co-operate where local people can invest in local renewables and also receive support from their local energy champions and the Co-operative:

- Establish a trusted local energy service
- Establish a trusted local installer network
- Investment opportunities harnessing community wealth
- Enable low interest loans for retrofits
- Offer a local energy bill tariff
 - A time of use energy tariff
 - Flexing and trading with energy market
 - Sharing profit with members through our energy bills
- Harnessing benefit and resilience
- Supporting vulnerable
- Enabling smooth transition







CommuniHeat Roadmap



CommuniHeat – Results for the Roadmap

20% energy saving

In annual electricity demand vs uncoordinated approach

27% reduction in household overall energy costs

Compared to the uncoordinated approach in both 2030 & 2050, driven by lower energy costs

Retrofits

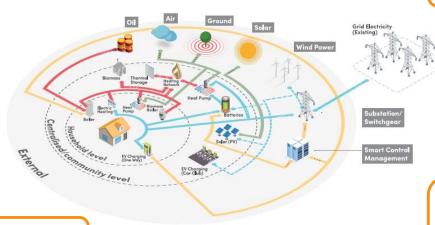
430 homes with building fabric retrofits

500 heat pumps installed

Compared to 340 installed in the uncoordinated approach

Community renewables deliver 37% of total electricity demand

£4m community investment needed



17 renewable sites

15 PV farms - 4.5 MWp 2 wind farms - 1.6 MWp



75% saving in network reinforcement costs

Compared to the uncoordinated approach



BURO HAPPOLD





Ouse Valley Climate Action – 2023-26 provides OVESCO with a Project Manager, Technical Manager & 5 part time Climate & **Energy Champions** for Ouse Valley. OVESCO is one of many partners to benefit from this Lottery funder project.



Thank you



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