

Project ID	DIP015		
Long Title	Cranbrook Solar Thermal District Heating		
Short Title	Cranbrook		
Keywords	Community; Electricity; Heat; Solar PV; Solar Thermal; Hybrid RE Systems; Heat Pumps; District Heating; Microgrid; Alternative Suppliers & Tariffs;		
Location (Town, Region, Country)	Cranbrook	Devon	England
Latitude and Longitude	51.10N	0.53W	
OSGB code	TQ 775 365		
Status	In Test		
Start Date	2015		
End Date	2018		
Description	<p>Star Renewable Energy will design and build an innovative large-scale heat pump system that will work with a solar energy installation to harvest solar energy to supply E.ON's community energy centre in Cranbrook, to the east of Exeter, with renewable heating and hot water.</p> <p>The low carbon-heating venture is the first of its kind in the UK to merge large-scale heat pumps and solar thermal panels with contributions from solar photovoltaic and dedicated heat storage provision in a large-scale district heating network.</p> <p>The emissions-free, community-wide energy scheme secured funding from the Department of Energy and Climate Change (DECC) and is co-pioneered by energy company E.ON, the University of Exeter and technology provider SK Solar. The aim of the project venture is to improve the performance of heat networks, demonstrating how the combined technologies can replace or work alongside the existing combined heat and power (CHP) district heating scheme to provide lower cost and significantly lower carbon heating and hot water.</p>		
Sectors	Multi-sector/Grid		
Funding Sources	DECC Heat Network SBRI		
Budget £	£1 million		
Partners	EON, Star Refrigeration		
Energy vectors	Heat		
Scale (lab/site/small /community/region/national)	Community		
Technologies demonstrated	Solar thermal heat pump, heat network		
Economic models demonstrated			
Other concepts demonstrated	Low carbon retrofit		
Industry engagement	Industry led		
Consumer engagement			

Project Reports (incl. links)	Research paper. <a href="https://www.sciencedirect.com/science/article/pii/S1755008416301089">https://www.sciencedirect.com/science/article/pii/S1755008416301089</a>
Datasets (incl. links)	
Website/social media	<a href="http://www.star-ref.co.uk/news/star-renewable-energy-secures-order-to-supply-uk-first-renewable-heat-network.aspx">http://www.star-ref.co.uk/news/star-renewable-energy-secures-order-to-supply-uk-first-renewable-heat-network.aspx</a>
Information sources	<a href="https://www.gov.uk/government/news/heat-network-innovation-competition">https://www.gov.uk/government/news/heat-network-innovation-competition</a>