

Project ID	DIP095		
Long Title	Smart Operation for a Low Carbon Energy Region		
Short Title	SOLCER		
Keywords	Single Site; Domestic; Electricity; Heat; Solar PV; Solar Thermal; Heat Pumps; Waste Heat Recovery; Thermal Storage;		
Location (Town, Region, Country)	Cardiff	South Glamorgan	Wales
Latitude and Longitude	53.36N	0.10W	
OSGB code	TF 40 87		
Status	Complete		
Start Date	2012		
End Date	2015		
Description	<p>General: SOLCER will focus on combining low carbon technologies from each part of the energy system including:</p> <ul style="list-style-type: none"> • renewable energy supply; • appropriate storage; • efficient, reduced demand. <p>Low carbon systems will be implemented and modelled for individual buildings, community and industrial sites and at a local authority/regional scale.”</p> <p>SOLCER House: “The Welsh School of Architecture have designed and built Wales’ first low cost energy smart house. The Solcer House is capable of exporting more energy to the national electricity grid than it uses, in an attempt to meet tough new targets for zero carbon housing. “The UK Government – and governments across the world – has set a target of achieving zero carbon housing by 2019. This means that as an academic community we have to rise to that challenge and come-up with innovative new ways to build houses of the future” according to Professor Phil Jones. “Through this project we have risen to this challenge and used the latest design and technology to build Wales’/UK’s first smart energy positive house,” he added.</p>		
Sectors	Domestic		
Funding Sources	Low Carbon Research Institute EU Convergence Programme		
Budget £	Undefined		
Partners	Cardiff University, Swansea University, SIPs Wales		
Energy vectors	Electricity, Heat		
Scale (lab/site/small /community/region/national)	Site		
Technologies demonstrated	Smart controls, waste heat recovery, heat pumps, solar PV, LED lighting, low energy buildings, solar thermal, thermal storage		

Economic models demonstrated	
Other concepts demonstrated	
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	http://www.solcer.org/outputs/ (empty as of 4/18)
Datasets (incl. links)	
Website/social media	http://www.solcer.org/ http://sites.cardiff.ac.uk/architecture/news-items/solcer-house/
Information sources	http://www.lcri.org.uk/lcri-projects/smart-operation-for-a-low-carbon-energy-region/