

Project ID	DIP016		
Long Title	Creative Energy Homes		
Short Title	CEH		
Keywords	Small-scale; Urban; Domestic; Electricity; Heat; Solar Thermal; Heat Pumps; Direct Electric Storage; Microgrids; District Heating; Demand Response; Smart Devices; Social Impacts; Stakeholder Engagement & Behaviour Change;		
Location (Town, Region, Country)	Nottingham		England
Latitude and Longitude	52.94N		1.20W
OSGB code	SK 541 382		
Status	Ongoing		
Start Date	2016		
End Date	2019		
Description	<p>Creative Energy Homes is a £1.9m project that is a key resource, particularly with respect to micro-smart grids, energy storage, demand-side management and occupants' acceptance of innovative technologies.</p> <p>The seven-house development provides a living test-site for leading firms including; E.ON, David Wilson Homes, BASF, Roger Bullivant, the Mark Group, Tarmac and Saint Gobain, to work with the University to investigate the integration of energy efficient technologies into houses.</p> <p>The Energy Technologies Institute (ETI) is to invest nearly £500,000 to support the continued development of the University of Nottingham's Creative Energy Homes project.</p> <p>The existing Creative Energy Homes scheme at the University Park Campus in Nottingham consists of four detached and three semi-detached properties built to different building regulations and acts as a test bed for the integration of new energy efficient technologies into houses.</p> <p>The ETI investment into the three-year project will further develop the existing Creative Energy Homes scheme allowing it to become a fully flexible integrated community smart heat and power network demonstration test facility. A new small-scale heat network with heat storage capability to provide heat directly to the homes on the scheme will be introduced.</p>		
Sectors	Domestic		
Funding Sources	Internal		
Budget £	£1.9million (CEH) / £500,000 (Smart Grid)		
Partners	University of Nottingham, E.ON, David Wilson Homes, BASF, Roger Bullivant, the Mark Group, Tarmac, Saint Gobain, ETI.		
Energy vectors	Electricity, Heat		

Scale (lab/site/ small/community/region/national)	Small
Technologies demonstrated	Smart controls, demand response devices, heat pumps, battery storage, low energy buildings, microgrids, heat network, solar thermal, biomass boiler, micro-CHP, micro wind
Economic models demonstrated	
Other concepts demonstrated	Demand response, post occupancy studies
Industry engagement	Industry partners
Consumer engagement	
Project Reports (incl. links)	Microgrid paper. https://ieeexplore.ieee.org/document/6837018/
Datasets (incl. links)	
Website/social media	https://www.nottingham.ac.uk/creative-energy-homes/index.aspx http://www.eti.co.uk/news/eti-to-invest-500000-to-further-develop-the-university-of-nottinghams-creative-energy-homes-project
Information sources	As above