

Project ID	DIP038		
Long Title	Flexible Integrated Energy Systems		
Short Title	FLEXIS		
Keywords	Region; Multi-sector/Grid; Electricity; Heat; Transport; Hydrogen; Fuel Generation; Fuel Cell; Storage; Power Quality & Grid Integration; Active Network Management; Alternative Fuel Vehicles; Policy; Energy Strategy Development;		
Location (Town, Region, Country)	Swansea	West Glamorgan	Wales
Latitude and Longitude	51.36N	3.50W	
OSGB code	SS 730 920		
Status	Ongoing		
Start Date	2017		
End Date	Undefined		
Description	<p><b>FLEXIS (Flexible Integrated Energy Systems) is a £24 million research operation designed to develop an energy systems research capability in Wales, which will build on the world-class capability that already exists in Welsh universities.</b></p> <p>The operation is led by Cardiff University, Swansea University and the University of South Wales, and will be delivered in two geographical areas, West Wales and the Valleys, and East Wales. FLEXIS has received £15 million in funding support through the Welsh European Funding Office (WEFO). Through the FLEXIS operation we will focus on developing flexible energy systems, which is an urgent priority in energy generation and supply. We will make a significant economic impact through supporting and developing the internationally renowned research in this area, and more specifically through the new technologies and new jobs that will follow this work.</p> <p>The research will also be based on four main pillars, as follows</p> <ul style="list-style-type: none"> <li>• Sustainability</li> <li>• Security of Energy Supply</li> <li>• Socio Economic Issues</li> <li>• Welsh “Place Based” Demonstrator</li> </ul> <p>These four pillar are further broken down into Work Packages with integrated research development and innovation activities spanning the two core stages of the transformation of our energy systems, namely, the Transition to the Low Carbon Future and Low Carbon Future itself.</p> <p>The energy systems related work-packages are as follows:  WP1 - Integrated Energy Supply Systems  WP3 - Energy Storage to Power  WP5 - Hydrogen Energy Storage  WP9 - Smart Thermal Energy Grid  WP15 -Energy Vectoring through Hydrogen</p>		

	WP17 - Social Acceptability and Responsible Development of Energy Systems WP18 - Smart Energy Management
Sectors	Domestic, Non-Domestic
Funding Sources	Welsh European Funding Office
Budget £	£24 million
Partners	Primary - Cardiff University, Swansea University and the University of South Wales plus work package specific partners
Energy vectors	Electricity, Heat, Transport
Scale (lab/site/small /community/region/national)	Region
Technologies demonstrated	Hydrogen generation, fuel cells, storage, active network management, hydrogen vehicles, flexible baseload generation
Economic models demonstrated	
Other concepts demonstrated	
Industry engagement	
Consumer engagement	
Project Reports (incl. links)	
Datasets (incl. links)	
Website/social media	<a href="http://www.flexis.wales/">http://www.flexis.wales/</a>
Information sources	As above