

Project ID	DIP011		
Long Title	Cockle Park Farm		
Short Title	Cockle		
Keywords	Single Site; Rural; Non-domestic; Electricity; Heat; Solar PV; Bioenergy; Heat Pumps; CHP; Anaerobic Digestion; Hydrogen; Fuel Generation; Waste Management; Direct Electric Storage; Microgrid; Environmental Impacts; Energy Strategy Development;		
Location (Town, Region, Country)	Morpeth	Northumberland	England
Latitude and Longitude	54.34N	1.41W	
OSGB code	NZ 201 912		
Status	Ongoing		
Start Date	2016 (CESI Start)		
End Date	Undefined		
Description	<p>Cockle Park Farm is a working 307-hectare mixed farm situated near Morpeth. The farm is owned and operated by Newcastle University.</p> <p>The energy system at <a href="#">Cockle Park Farm</a> includes:</p> <ul style="list-style-type: none"> <li>• Grid-connect anaerobic digester</li> <li>• Solar photovoltaics</li> <li>• Electricity power</li> <li>• Combined heat pump</li> </ul> <p>The farm's energy system are used to learn more about:</p> <ul style="list-style-type: none"> <li>• Harvesting by-products from the anaerobic digester</li> <li>• Making use of excess heat or humidity from animal barns to use in a farm heat network</li> <li>• How we can calculate the carbon footprint of the farm</li> <li>• How to meet the energy trilemma for the farm, balancing cost, carbon and resilience</li> </ul>		
Sectors	Non-domestic		
Funding Sources	Centre for Energy System Integration		
Budget £	Undefined		
Partners	University of Newcastle		
Energy vectors	Electricity, heat		
Scale (lab/site/small /community/region/national)	Site		
Technologies demonstrated	Anaerobic digestion – waste feedstock, solar PV, heat pumps		
Economic models demonstrated			
Other concepts demonstrated	Waste-to-energy, sustainable farming		
Industry engagement			
Consumer engagement			

Project Reports (incl. links)	Brochure. <a href="http://www.ncl.ac.uk/media/wwwnclacuk/instituteforsustainability/files/Cockle%20Park%20Farm%20leaflet.pdf">http://www.ncl.ac.uk/media/wwwnclacuk/instituteforsustainability/files/Cockle%20Park%20Farm%20leaflet.pdf</a> Research paper. <a href="https://ieeexplore.ieee.org/abstract/document/8315825/">https://ieeexplore.ieee.org/abstract/document/8315825/</a>
Datasets (incl. links)	
Website/social media	<a href="http://www.ncl.ac.uk/cesi/research/demo/cpf/">http://www.ncl.ac.uk/cesi/research/demo/cpf/</a>
Information sources	As above