



# **DECC's Energy Entrepreneurs Fund – Progress to date**

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# Innovation Funding in the UK

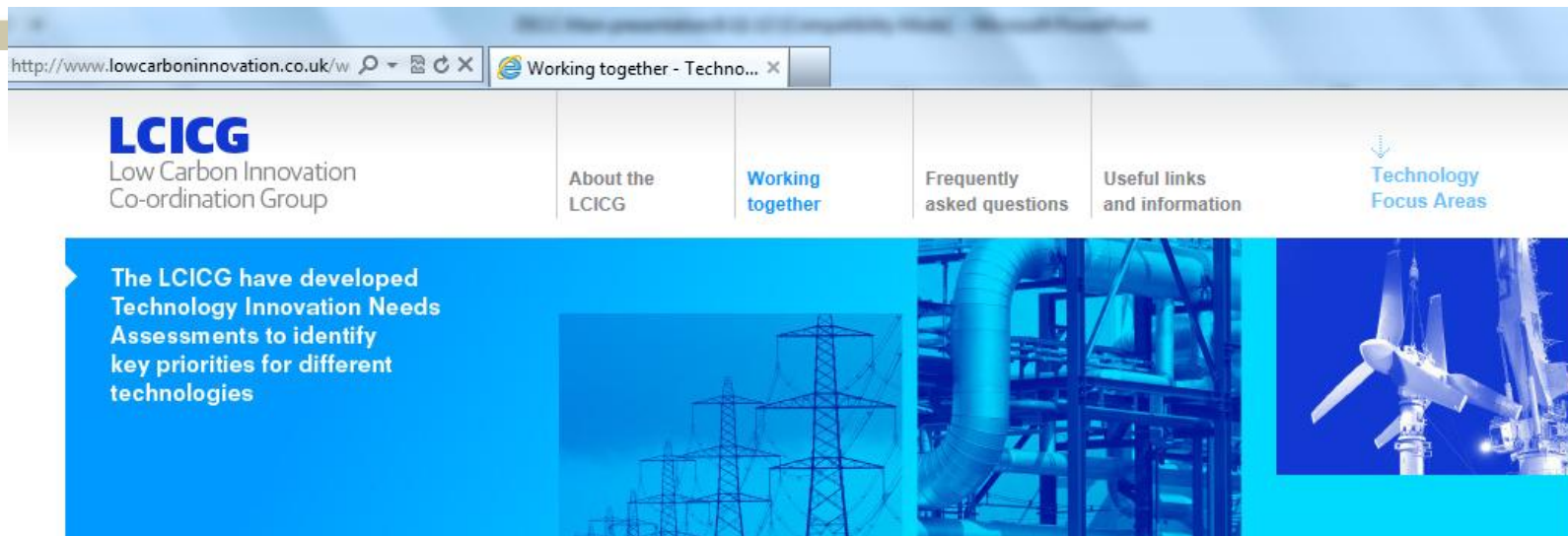


Department  
of Energy &  
Climate Change

- £1bn available over the Spending Review period to support the development of innovative low carbon technology  
[www.lowcarbonfunding.org.uk](http://www.lowcarbonfunding.org.uk)
- DECC has c.£185m innovation funding from April 2011 to 31<sup>st</sup> March 2015
- Focus on those technologies and programmes where there are clear market failures and where intervention will have greatest impact on meeting the Government's climate change and energy objectives.
- DECC has been working alongside other funding bodies to understand knowledge gaps and opportunities for collaboration



# LCICG resources and TINA analysis



For more information on Technology Focus Areas, please click on the links below

### Technology Focus Areas

- > Overview
- > Bio-energy
- > Carbon Capture and Storage
- > Domestic Buildings
- > Electricity Networks & Storage
- > Heat
- > Hydrogen
- > Industrial Sector
- > Marine
- > Non-domestic Buildings
- > Nuclear Fission
- > Offshore Wind

### Technology Focus Areas

There are many low carbon technologies that could make a valuable contribution to the UK's energy objectives. This is reflected in the diverse low carbon innovation interests of the LCICG membership. Deciding how and where to prioritise innovation support is challenging for the UK Government and the private sector. The LCICG commissioned the Technology Innovation Needs Assessment (TINA) project to identify priority technology areas which require support.

#### Technology Innovation Needs Assessments

The Technology Innovation Needs Assessment (TINA) project, led by the LCICG, is being used to inform the prioritisation of public sector investment in low carbon innovation. The TINAs aim to identify and value the key innovation needs of specific low carbon technologies. The TINA project considers eleven low carbon technology focus areas and uses consistent methodology to examine the potential for innovation within each.

For each low carbon technology, the TINA:

- Analyses the potential role of the technology in the UK's energy system
- Estimates the value to the UK economy from cutting the costs of the technology through innovation

# £185m DECC innovation funding for Low Carbon Technologies



Department of Energy & Climate Change

**£20m Marine Energy Array Demonstrator**

**£20m Innovative CCS Technologies**

**£19m split between Electricity Storage and Hydrogen**

**£20m Nuclear Schemes**

- £3m Contribution to TSB-led supply chain competition
- Test facilities

**Up to £35m Buildings Innovation Programme**

- £10m Invest in Innovative Refurb scheme for non-domestic buildings
- Up to £3m Advanced Heat Storage
- Up to £2.8m for Domestic Buildings Thermal Storage

**£35m Energy Entrepreneurs' Fund**

- Up to £20m for Energy Efficiency in Buildings
- Up to £15m for Power Generation Technologies

**Up to £30m for Offshore Wind Technologies**

- Up to £15m for Component Technologies

**£15m for Bioenergy Innovation**

- Up to £8m ERANET Programme

**Up to £30m for CT Legacy Programmes**

- Up to £15m Carbon Trust Offshore Wind Accelerator
- Up to £5m for Polymer Fuel Cells
- Up to £7m Carbon Trust Pyrolysis Challenge

# Phase 3 Energy Entrepreneur Fund Launched 28 Jan



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- Broadest innovation programme
- Targeted at
  - Energy costs / CO<sub>2</sub> reduction
  - Commercial potential
  - Value for money
  - UK enterprise and growth

# Summary of Energy Entrepreneur Funding

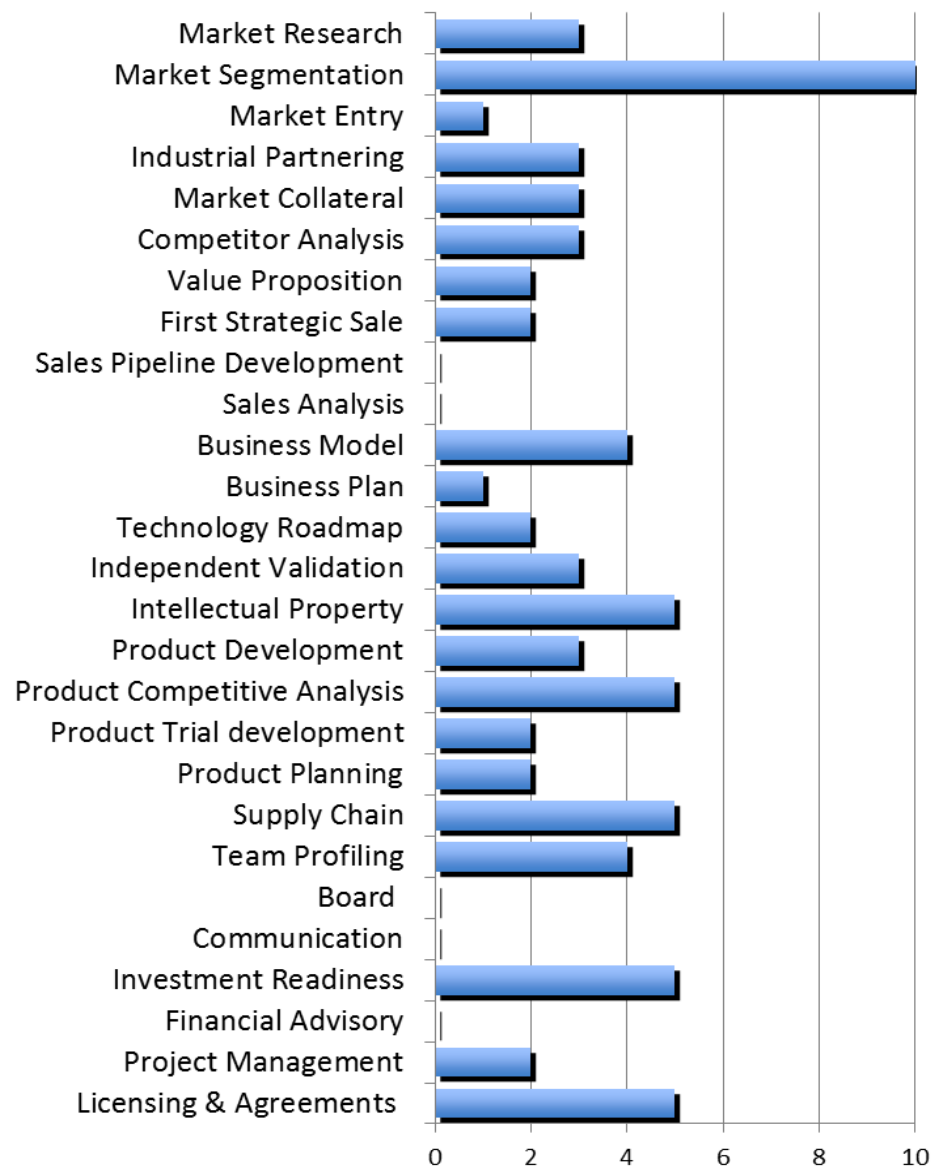
Phase 1 & 2: 50 Companies awarded grants. Committed £25 million

Number of Eligible Applications Received	327
Total project values	£236m
Total grants requested	£146m
Number Successful Applications	50
Total project values	£43m
Total grants issued/offered	£25m
Average project size	£851,137
Average grant size	£494,692
Average funding intensity	58%



# Incubation Support

- 31 Phase 1 companies receiving support
- Total 74 support tasks in progress
- Further 40 potential support tasks identified



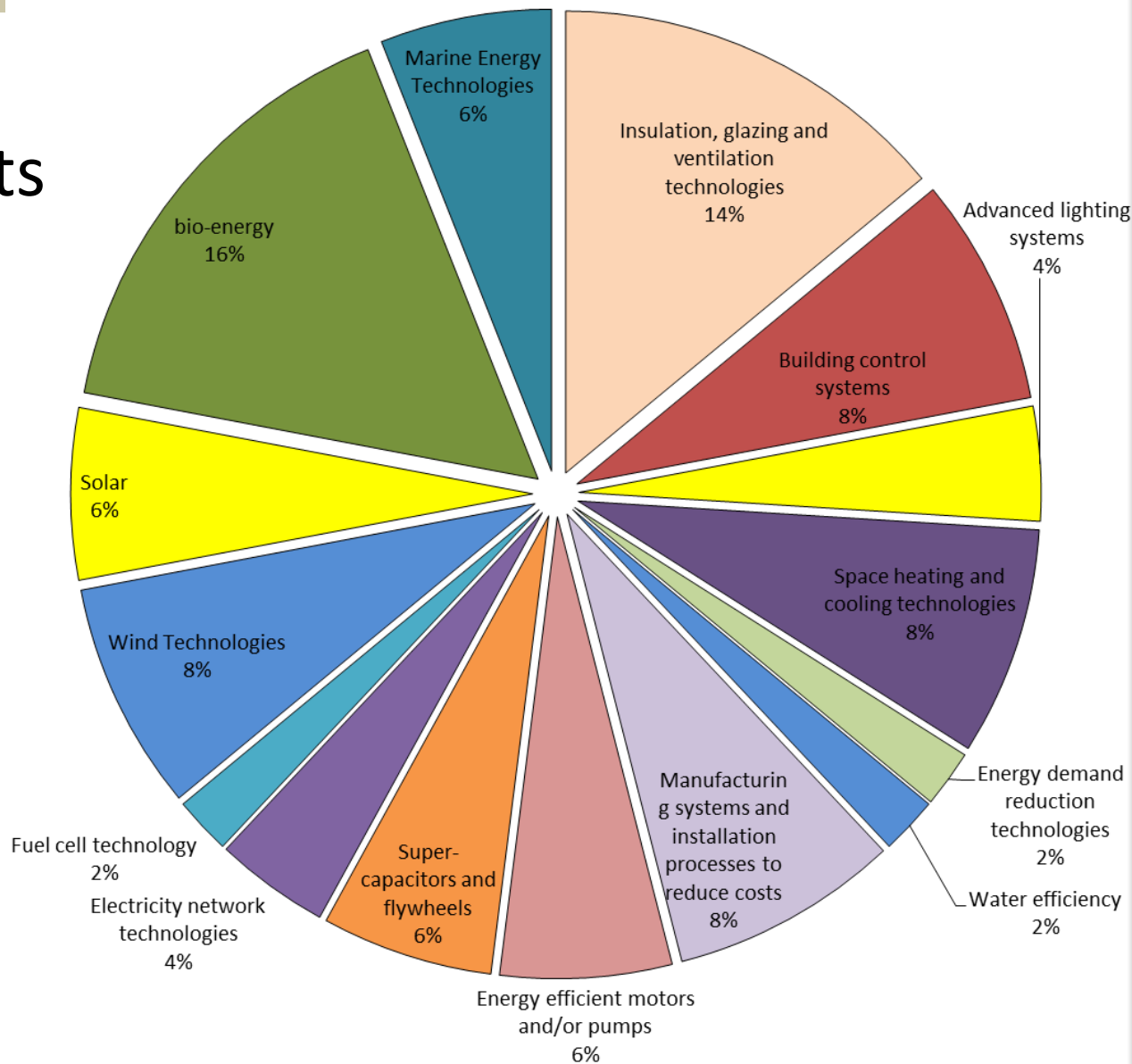
- On-going process nearly all companies engaged
- Receiving and seeing results from initial tasks
- All projects are resource constrained; start-ups or corporate
- Commercialisation can be complex: a range of views and inputs generally make for a better solution
- DECC are providing support and expertise to assist commercialisation activities





# 50 Grant recipients Phase 1 & 2 by technology

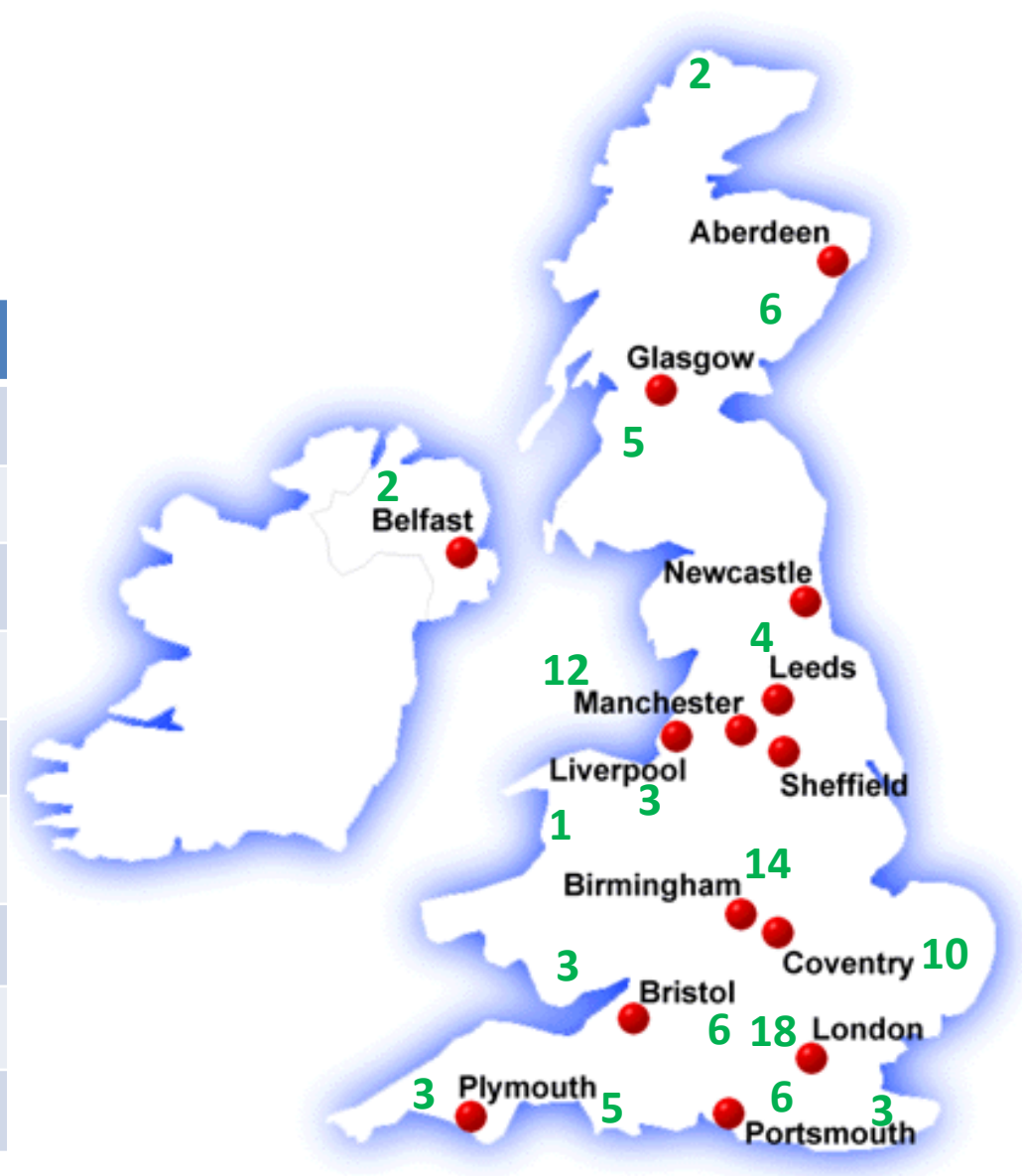
38% generation  
10% storage/enabling  
52% energy efficiency



# Grant Application Locations



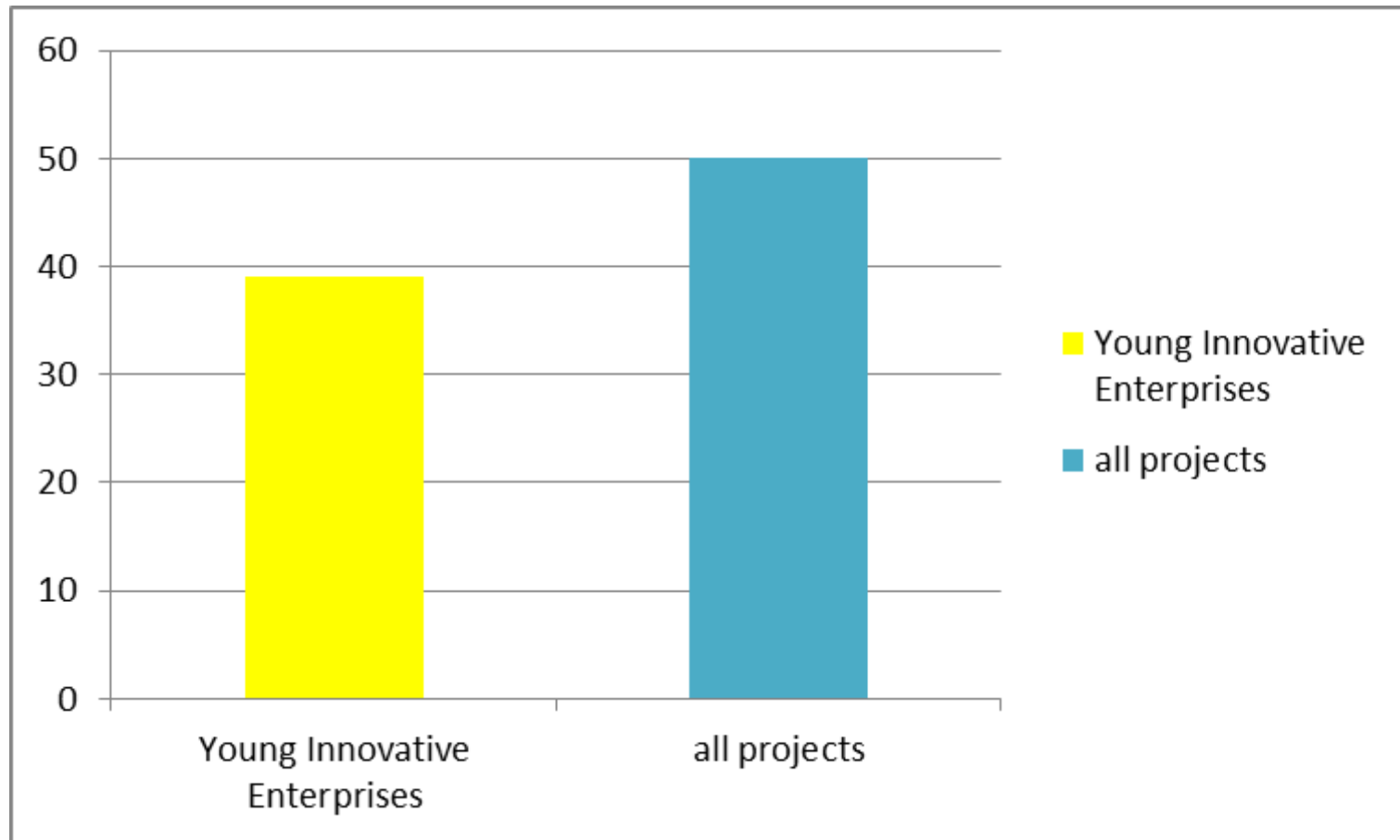
Region	Applications
London	18
Manchester	12
East Anglia	10
Midlands	14
Scotland	13
Leeds/Newcastle	4
South East	12
Cornwall	8
Other Areas	31






# 78% Young Innovative Enterprises



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Company	Location	Company and Project Summary	DECC ENERGY ENTREPRENEURS FUND
 <p><b>SolaQuaGen</b></p>	Aylesbury	<p>The project leverages the experience and knowledge gained by SolaQuaGen™ (SQG) during a highly successful TSB supported project during 2012. This developed a new technology for desalination using waste heat and this project extends the application to the treatment of waste or dirty water. The project is based at a SITA UK landfill site in north west of England where the company plan initially to treat leachate outflows and demonstrate the commercial viability of the technology. Initial analysis has indicated potential returns on investment to landfill operators that create a financial incentive to adopt the technology in addition to its environmental benefits.</p>	
<p><b>Industrial Phycology</b></p>	Bath	<p>Industrial Phycology has designed a novel process to capture and recover excess nutrients in wastewater effluent. The process would provide final stage effluent treatment and the algal biomass produced can potentially be combusted or digested to produce renewable low carbon electricity or biogas with very little waste. The process has the potential to reduce the carbon impact of water treatment and allow wastewater operators to emit effluents that meet legal frame works for water treatment, and provide a fuel or energy feedstock all in one process.</p>	
 <p><b>Yorkshire Water &amp; Intervate</b></p> 	Bradford	<p>The project will be run by the partnership of Intervate Ltd and Yorkshire Water Services Ltd with the specific objective of building a commercial scale Close Coupled Configuration Gasification module that will be designed to provide an innovative treatment template for the processing of both primary and secondary sewage sludge and other waste water treatment works' residues such as screenings, fats, oils and greases. The facility will process blends of sewage sludge with other waste feed-stocks, such as low grade waste wood and refuse derived fuels to produce renewable electricity and renewable heat. The renewable electricity generated will be used to power the process and export to the grid, whereas the renewable heat generated will be used in a closed loop system to dry sewage sludge to a level at which it can be blended to create a homogeneous gasification feedstock of the required physical characteristics</p>	



# Thank-you Ian Ellerington

Details of how to apply for funding can be found here:

<https://www.gov.uk/government/publications/energy-entrepreneurs-fund-phase-3-documents>

A full list of the previous projects that have been awarded grants under phases one and two of the Fund can be found here: <https://www.gov.uk/innovation-funding-for-low-carbon-technologies-opportunities-for-bidders#the-energy-entrepreneurs-fund-scheme>