



# Low Carbon Opportunities Programme



# Low Carbon Opportunities Programme

- ERDF funded programme to support SMEs with Low Carbon Innovation or Renewable Energy Generation projects
- Offers Free Business Assists from specialist advisors and grants up to £100k (up to 40% of project cost)

# Low Carbon Opportunities Programme Eligibility

- Be situated within and trading in Worcestershire/Shropshire
- Employ fewer than 250 employees
- Have a turnover of less than 50 million euros per annum or a balance sheet of less than 43 million euros

Excluded businesses:

Cannot support industries such as primary agriculture, social welfare and education facilities, banking and insurance

# Low Carbon Opportunities Programme Grants

Examples of projects that could be supported:

Renewable Energy Generation projects:

- Solar PV array
- Biomass boiler
- Energy storage
- Heat network – to name a few!



## Identification of suitable innovative businesses

Businesses aiming to implement innovative ideas that would eventually reduce or eliminate CO<sub>2</sub>e emissions

This could include ideas on:

- Processes and policies
- Ways of generating renewable energy
- Manufacturing processes
- More efficient fleet, production, freight or transport processes

# Low Carbon Opportunities Programme Grants

Possible Low Carbon Innovation projects:

- Low carbon product, process or service development
- Commercialisation or implementation
- Market Research and assessment
- IPR Protection
- Prototyping and demonstration or testing of new products
- Manufacturing scale up or market rollout and so on..





## CASE STUDY

# HERU (The Home Energy Resources Unit)

## Manik Ventures

The Home Energy Resources Unit (HERU) is a world-first global solution that literally gives you the power of generating hot water for your home from everyday items you previously had little option but to discard as waste.

Manik Ventures, the company behind the HERU, have a laboratory near Evesham and it is from here that this ground-breaking technology has been developed over the last few years. The unit utilises a well-known industrial heat treatment technique known as pyrolysis, but at lower temperatures than normal (300°C). Pyrolysis is a thermochemical decomposition process, converting substances, in the absence of oxygen, into oil, synthesised gas (syngas) and char.

The project demonstrates the results that can be obtained when businesses and academia work together. The breakthrough engineered and patented by the team and by Brunel University London is the development of heat pipe technology which makes the pyrolysis chamber the most effective ever developed.

The HERU enables every household to become a micro energy generation centre, generating hot water and gas which can be used in a domestic boiler. This reduces the household fuel bill by up to 15%, helping to address fuel poverty and reducing a household's carbon footprint.

The unit is extremely energy efficient, generating an average of 2.5kWh of energy for every 1kWh required to power the unit. By empowering the home owner to avoid discarding items, continuing instead to keep them as a resource, the amount of waste created is reduced. If deployed on a big scale, this would reduce waste collections by the local authorities, which would further reduce carbon emissions.

The Low Carbon Opportunities Programme is designed to support low carbon technology development such as the HERU, so it was fantastic when this development, taking place in Worcestershire, was discovered. The programme has supported the development of the HERU with free consultancy support, provided by Isle Utilities, and a grant of approx. £42,000. The grant is helping to fund the manufacture and build of the units to be used in the trial phase, with the costs of the trial itself also funded.

Through the programme, which is partially funded by the European Regional Development Fund and by Worcestershire Councils, businesses developing low carbon technologies can receive grants of up to 45% of project costs.



### FACTFILE

 **GRANT FUNDING**  
over £42k

 **PROJECT SIZE**  
over £90k

 **LENGTH OF PROJECT**  
18 months

 **PURPOSE OF GRANT**  
to develop, install and monitor three field trial units





## CASE STUDY

# "THE MURB"

## Murcott Energy

Murcott Energy has developed a wind turbine for urban locations, called the Murb. It has novel patented and proven design features that enhance performance in variable and fluctuating conditions, typical of urban environments.

The Murb is primarily an 'off-grid' building mounted system, providing 'distributed' energy to supplement use by urban, domestic, and commercial buildings.

Conventional wind turbines have historically not performed in urban environments despite the advantages such as infrastructure and immediate demand for energy. It is predicted that the world population will become more urbanised over the coming decades. Cities and towns are to become more energy efficient, cleaner, and better placed to run on distributed energy sources. The Murb seeks to supply this demand with the following key objectives:

- Reduce carbon emissions
- Provide a quality, cost effective and attractive alternative to fossil fuels.
- Promote renewable energy technologies in urban locations as part of the 'Energy Revolution'.

With initial tests complete, the Murb is soon to be installed on a building in the Worcester area for longer term 'Duration' testing. The tests will inform performance, durability, and compliance with other requirements such as building regulations, noise, maintainability, and safety.

The venture is supported by the Low Carbon Opportunities Programme, which is run by Worcestershire County Council and partially funded by the European Regional Development Fund.


Murcott Energy received a Business Support Assist, supplied by Isle Utilities, as part of the programme. The specialist advice advanced the business plan, identified opportunities, and presented a plan of action in a Recommendations report. The Low Carbon Opportunities Programme then provided a 45% match funded grant towards the development of the duration model. In addition, through the Worcestershire Clean Tech Innovators Network, the programme continues to support the project with regular networking events.

For more information about the Murb, contact [benmurcott@murbwt.com](mailto:benmurcott@murbwt.com)




### FACTFILE

 GRANT FUNDING  
over £4k

 PROJECT SIZE  
£9,500

 LENGTH OF PROJECT  
up to 9 months

 PURPOSE OF GRANT  
to assist with development of duration model



# LOCOP in Shropshire

- We are looking to support approximately 10 businesses
- We have grant funding for £100,000 capital and £100,000 in revenue projects
- CREST will be doing initial assists
- We need to support CREST with 5 events

# LOCOP in Shropshire

## Expected deliveries

- 10 business supports
- 1 new enterprise supported
- 3 business collaboration with research institutions
- 4 new to the firm products

# Business Energy Efficiency Programme Update



Business Energy  
Efficiency Programme



European Union  
European Regional  
Development Fund

# What is the Business Energy Efficiency Programme?

A European funded programme covering Telford & Wrekin, Herefordshire & Worcestershire, **and Shropshire** offering:

- **Free reviews & advice**
- **Grants to reduce energy usage, costs and carbon.**
- **Business Support**

Available to small and medium size enterprises, ERDF eligibility criteria applies.

The key aims of the programme are to help businesses to reduce energy costs, improve competitiveness, raise environmental awareness and reduce CO<sub>2</sub>e emissions



# Programme Targets

	Assists	Grant Funding	Greenhouse Gas (CO2e) Reduction (tonnes)
Herefordshire	60	£244,800	591
Shropshire	60	£244,800	592
Telford & Wrekin	60	£244,800	592
Worcestershire	160	£625,600	1,512
<b>Total</b>	<b>340</b>	<b>£1,360,000</b>	<b>3,287</b>



Business Energy  
Efficiency Programme



**European Union**  
European Regional  
Development Fund

# Who have we helped and are helping in Shropshire

<b>BEEP1</b>				
<b>A V Birch Ltd</b>	<b>Gobowen Station Building Unit (1B) T/A OSBT</b>	<b>Lindstrand Technologies</b>	<b>Peter Maddox &amp; Associates Ltd</b>	<b>Syspal Ltd</b>
<b>Beaverfit Ltd</b>	<b>Hobsons Brewery &amp; Co Ltd</b>	<b>Ludlow Brewing Company Ltd</b>	<b>Shelley Signs Ltd</b>	<b>Uvox Ltd</b>
<b>Billcar Precision Eng Ltd</b>	<b>Jenvey Dynamics Ltd</b>	<b>Manuscript Pen Company Ltd</b>	<b>Shirenewton Sailplanes</b>	<b>Wynnstay Oswestry Limited</b>
<b>Clickingmad Ltd</b>	<b>K&amp;M Engineering (Shropshire) Ltd</b>	<b>Minshall Construction (UK) Ltd</b>	<b>Shropshire Metal Design</b>	
<b>Cold Move Limited</b>	<b>Kecol Pumping Systems Ltd</b>	<b>Oriental Food Express Ltd</b>	<b>Spencer Manufacturing LTD</b>	
<b>Dow Mus-Max Ltd</b>	<b>Leonardt Ltd</b>	<b>Outsource Corporation Ltd</b>	<b>Staysafe PPE Ltd</b>	

<b>BEEP2</b>				
<b>Arrow County Supplies</b>	<b>EvaStore Limited</b>	<b>Gobowen Station Building Unit 2 T/A OSBT</b>	<b>Label Uk Automatic Door Solutions Ltd</b>	<b>Salop Design &amp; Engineering Ltd</b>
<b>Creamore Mill</b>	<b>GHVIL</b>	<b>J.A Milton Upholstery Supplies Ltd</b>	<b>Muller Holdings Ltd</b>	<b>Shropshire Light Aviation</b>
<b>Danielles Coffee Ltd</b>	<b>Globestock Limited</b>	<b>Kudos Blends Ltd</b>	<b>Oakleys Limited</b>	<b>Teme Valley Laundry Ltd</b>



# Hitherbest Ltd

Dear Carrie

I just wanted to drop you a line to express Hitherbest Ltd's satisfaction in being part of the BEEP project, I am pleased to say it was very successful for us and I am particularly grateful for the ease of application and communication

Kind regards, Peter Grant

Grant = 17K improvements  
to powder coating line

Annual Savings

£7,350

42 CO2e tonnes

£7,400 raw materials



Business Energy  
Efficiency Programme



European Union  
European Regional  
Development Fund

# What the ideal customer looks like

- SME (with straight forward ownership structure!)
- Sector - Manufacturing / Engineering / Production
- A Landlord
- Based in a Warehouse / Factory of older building stock
- Growing with need for more power and therefore concerned about rising energy costs and also interested in investing in new machinery that is energy efficient
- Medium – Large energy bill
- Haven't previously invested much in energy efficiency or have energy efficiency ideas that have already progressed into ready to go projects and will convert into grants quickly.



Business Energy  
Efficiency Programme



European Union  
European Regional  
Development Fund





Example of very dirty sky lights and fluorescent lighting system, resulting in a very dark and poorly lit manufacturing space.



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# How to register to access support

- 1 Download a registration form at [www.business-central.co.uk/beep](http://www.business-central.co.uk/beep) or call 01905 677888
- 2 Complete and return it.
- 3 We will assess eligibility.
- 4 An energy efficiency advisor will contact you to arrange a visit.
- 5 You will receive a energy efficiency report and presentation
- 6 This will provide you with the business case to access grant funding of up to £20,000.



Business Energy  
Efficiency Programme



**European Union**  
European Regional  
Development Fund

# THANK YOU

Programme Officer – Worcestershire County Council

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