

Low carbon research

Find out how you can benefit from our **low carbon research**



The Low Carbon Research Institute will have a stand at the Royal Welsh Show in Builth for the first time. Businesses in Wales can come and talk to LCRI to find out first hand about our cutting edge low carbon research.

Since its launch in April 2008, the LCRI Energy programme has secured some £50m pounds to support research in Welsh universities to help industry develop new products, technologies and services.

The LCRI is aiming to assist longer-term economic growth and job creation, to enable Welsh businesses to develop a new low carbon industry infrastructure in Wales.

LCRI is also establishing its international reputation, with links being developed with China and India.

LCRI's research addresses five main themes:

Photovoltaics (PV) – Glyndwr University's Solar Photovoltaic Academic Research Consortium (SPARC) will be carrying out work with novel PV installations, looking at new thin film and dye sensitised solar cell technology (DCCS).

Hydrogen – The University of Glamorgan, a major research centre for hydrogen



A low carbon office building

technologies, leads this strand. It will explore the use of hydrogen as an energy store, hydrogen as a transport fuel, the generation of biologically derived hydrogen from sustainable organic sources, development of

hydrogen fuel cells, utilisation of industrial waste and integration of hydrogen into the national gas grid.

Marine energy generation – This research, led by Swansea University, aims to enable,

support and build a sustainable marine energy sector in Wales.

Large scale power generation – This research, led by Cardiff University's School of Engineering, will develop existing gas turbine technology to use new renewable gases with the potential to allow existing gas power stations to run on sustainably and renewably produced gases.

Low carbon built environment – Cardiff University's Welsh School of Architecture leads this strand. It focuses on themes that include innovative building components (energy generating facades, lighting and consumer goods), research into the design of low and zero carbon buildings, and the development of computer simulation tools to analyse and monitor energy performance and carbon emissions.

Businesses in Wales keen to move into the low carbon economy are encouraged to contact the LCRI to ensure that they can use the research outputs to the best advantage, and help shape future research programmes. If you are interested in finding out how your business could be supported by the LCRI, contact Helen John on 029 2087 0003, or email johnhr@cardiff.ac.uk

LCRI

Low Carbon Research Institute

Shredding can help you reach recycling targets

SINCE signing up for Go Green South Wales Shredding have taken the initiative to new heights.

Currently we recycle more than 700 tonnes of paper per year, which is increasing month on month. This in turn reduces landfill.

Reducing the amount of waste we produce is the most important thing we can do to protect our environment. Landfill produces hazardous by-products, which could be harmful to our wildlife.

South Wales Shredding makes sure that recycling is high on its list, so that less waste goes to landfill.

With one of the biggest security threats in the modern day being the misuse of confidential data, it is more important than ever to make sure that your confidential waste is disposed of correctly. In doing this you can help the environment and reach your recycling targets, as 100% of all paper shredded at customers' premises is recycled.

The introduction of our new 7.5 tonne Hino lorry also plays a part in reducing CO2 emissions. We have reduced the



Sheryl Capaldi and Catherine Eley of South Wales Shredding

company's CO2 emissions by 20%. The new lorry not only helps the environment, but caters for our customers' needs more efficiently.

We can service any size business large or small, making sure that even the smallest business is reducing, reusing and recycling, and making our country a much greener one.

