

European funding

Helping Wales secure a low carbon future

The Welsh Assembly Government – a devolved UK administration – is putting in place a robust energy strategy with European Structural Funds providing vital resources to achieve this goal.

The €37.4m Low Carbon Research Institute's Energy Programme (LCRI) is backed with €16.5m from the European Regional Development Fund. It is aimed at meeting Assembly Government targets for reducing carbon dioxide emissions by exploiting the knowledge in Welsh universities and helping industry develop new products, technologies and services, turning them into commercially viable products.

Ground-breaking research projects are underway as part of the programme, focusing on areas such as solar energy to produce electricity in buildings, hydrogen to power transport, and power generation using biomass and photovoltaic (PV) technology to generate electricity. The programme is also undertaking cutting-edge research to develop zero carbon buildings and marine renewable energy sources.

Fundamental to the success of the programme is the unique collaboration of Welsh Universities led by Cardiff University, to build, sustain and export its energy research expertise.

Professor Phil Jones, Head of Cardiff University's Welsh School of Ar-

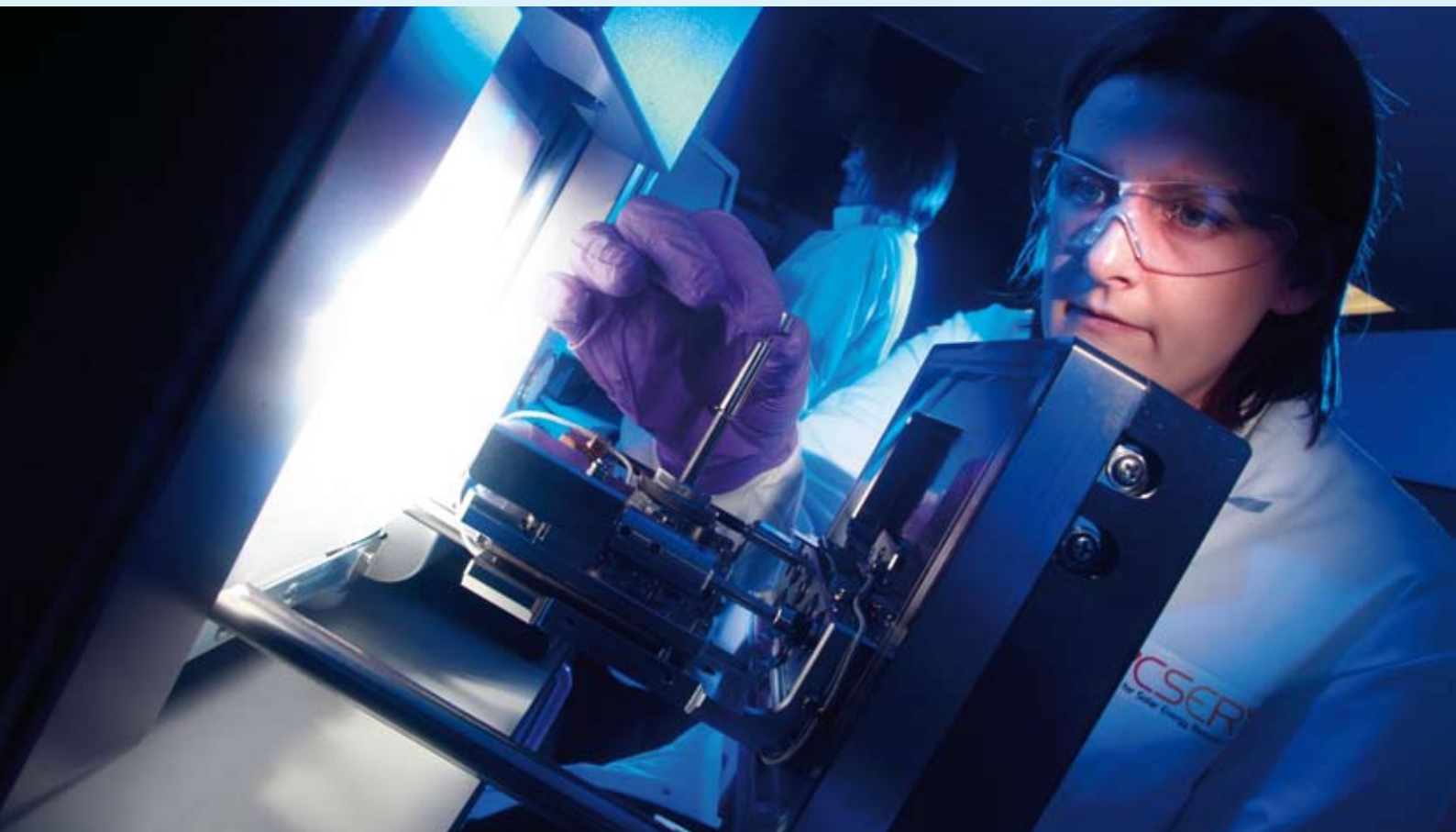
chitecture and Chair of the Low Carbon Research Institute (LCRI) said:

'The LCRI Energy Programme is a collaboration of Welsh Universities partnering local industries to provide a comprehensive cross disciplinary energy research base to support the Assembly Government's low carbon policies.'

'It will significantly add to the LCRI's research capacity to establish Wales as an international leader in low carbon research.'

LCRI was established in 2008 to develop research capacity. One of the initiatives already underway is CymruH2Wales whose key aim is to increase the use of hydrogen technologies. Led by the University of Glamorgan, the project is investigating how such technologies can be developed to better manage existing and future renewable electricity generation using hydrogen as an energy store during times of peak generation. This energy can then be released back to the grid on demand. The project is also looking at how hydrogen can be used as transport fuel to replace fossil fuels such as petrol.

Leading the project, Professor Alan Guwy said: "CymruH2Wales addresses many of the critical aspects in the development of hydrogen and fuel cells as vital emerging energy technologies and aims to establish green jobs in this important new energy industry."





“The project will involve researchers from the faculties of health, sport and science, and advanced technology, and will employ 18 new research staff over the next three years and will create 63 permanent jobs in hydrogen energy.”

Another example is SPARC Cymru (Solar Photovoltaic Academic Research Consortium) – a pioneering research project aimed at developing new, low cost photovoltaic (PV) materials to convert solar energy into clean electricity for wide-scale use in the home and on roofs of commercial buildings.

From the centre’s base in North Wales the project is focusing on research and development into thin film, flexible photovoltaic (PV) materials to create a new generation of products.

SPARC Cymru is a consortium of partners from Glyndŵr, Swansea and Bangor Universities with a number of industrial partners across Wales.

Project Director Professor Stuart Irvine said: “This is a unique opportunity to bring together some world-class academic and industrial expertise to transfer exciting new ideas into technology demonstration.

“We expect this project to lead to new lower cost PV solar products that will in turn widen the access to clean low carbon electricity generation”.

The Assembly Government’s Deputy First Minister and Minister for the Economy and Transport, Ieuan Wyn Jones AM, said: “There is huge potential for linking economic advance with the need to combat climate change and curb greenhouse gas emissions, and European funding gives us extra impetus in helping to meet this goal.

“As part of our policy, Economic Renewal: a new direction, we have identified energy and the environment as one of six sectors where targeted intervention can secure Wales’ competitive advantage and a growing market share.

“Our Structural Funds programmes in Wales are closely aligned to this policy direction as well as those of the EU. We have already invested around €3.2 billion to a range of beneficial projects, which are helping to create a more resource efficient, greener, and sustainable economy, recognising the opportunities for research and innovation, and investing in the skills and future of our people.”

Welsh European Funding Office

(WEFO) website address: www.wefo.wales.gov.uk

Contact details:

For enquiries on the European Structural Funds in Wales please contact the WEFO Helpline on:

Tel: 0845 010 3355

Email: enquiries-wefo@wales.gsi.gov.uk

Low Carbon Research Institute: www.lcri.org.uk

