

EC Joint Research Centre Synergies with R&I Funds in Wales BioComposites Centre, Bangor University



Llywodraeth Cymru
Welsh Government

The following case study offers [Bangor University's BioComposites Centre](#) as an example of how synergies in the implementation of the various research and innovation funds are delivering the 'Stairway to Excellence' effect in Wales.

BioComposites Centre

Established since 1989, the BioComposites Centre undertakes collaborative research to develop sustainable biobased technologies that minimise the impact of materials on the environment. A core skill of the Centre is the translation of applied science into commercial opportunities and it has facilities that enable an idea to be progressed from bench to pilot scale.

Structural Funds - 'upstream' funding

The BioComposites Centre is a key partner in the [BEACON project](#) which was established with nearly £8 million from the European Regional Development Fund (ERDF) under the 2007-13 Programme and enabled the creation of the BEACON Biorefining Centre of Excellence in the field of conversion of biomass into biobased products.

The BioComposites Centre's participation in BEACON utilised ERDF funding to strengthen the Centre's research and innovation capacity, including infrastructure and equipment in pilot scale processing and increased R&I collaboration between academia and industry.

In 2014 the BEACON project went on to win the prestigious European Commission [RegioStars Award in the "Sustainable growth: Green growth and jobs through Bio-economy"](#) category

Successive 'upstream' funding

Improvements in R&I capacities via BEACON have acted as a stepping stone to leverage further key R&I investments from a variety of sources comprising Welsh Government, InnovateUK, UK Research Councils, and other EU-funded schemes. Examples include: a Welsh Government funded Technical and Commercial Feasibility Study in partnership with the National Renewable Energy Laboratory, Colorado; a number of Biotechnology and Biological Sciences Research Council (BBSRC) awards including 'United States Partnering Awards', 'International Science Interchange Scheme', and 'Networks in Industrial Biotechnology and Bioenergy ([NIBB](#))', and a series of investments from the EU-funded [SMART Expertise programme](#) administered by the Welsh Government (formerly A4B Collaborative Industrial Research Programme).

Supporting innovation with the European ecosystem

BEACON is a founding member of BioPilots UK, a collaboration of open access biorefining centres that recognise the importance of partnerships to develop bio-based value chains.

The BioComposite Centre's recognised expertise has also led to their engagement in European networks and increased international cooperation, including: **COST** (European Cooperation in Science & Technology) where the BioComposites Centre was on the Management Committee for a [COST Action](#) as well as an active member of one of the working groups on biomass pre-treatment; the [Vanguard Initiative](#) where BioComposites Centre sits on the Steering Group for the Bioeconomy Pilot raising awareness of Welsh and UK Government policy on industrial biotechnology and the bioeconomy; and the Centre's pilot scale processing equipment is also registered on the list of [EU Key Enabling Technology Centres](#) and a **European database of pilot scale facilities** through the EU funded project [Pilots4U](#).

Horizon 2020 success

Part of the BioComposites Centre's progression has involved actively exploring opportunities to secure additional R&D funding through Horizon 2020 and the Centre has collaborated on a number of applications to the [Bio-Based Industries Joint Undertaking \(BBI JU\)](#) which were not funded.

A series of awards from the [Welsh Government's SCoRE Cymru](#) helped further facilitate targeted engagement with BBI JU, funding the Centre's attendance at a BBI information day in Brussels and a consortium building meeting in Copenhagen.

In December 2017 the BioComposites Centre's persistent engagement paid off with success in securing BBI JU funding via participation in the [PRO-ENRICH](#) project.

The PRO-ENRICH project started in early 2018 and consists of a diverse, complimentary mixture of 16 academic and industrial partners across 7 European countries. The project will run for three years and develop value added products from different agricultural and food processing residues for applications in a range of industry sectors, including food, cosmetics, pet food and adhesives.

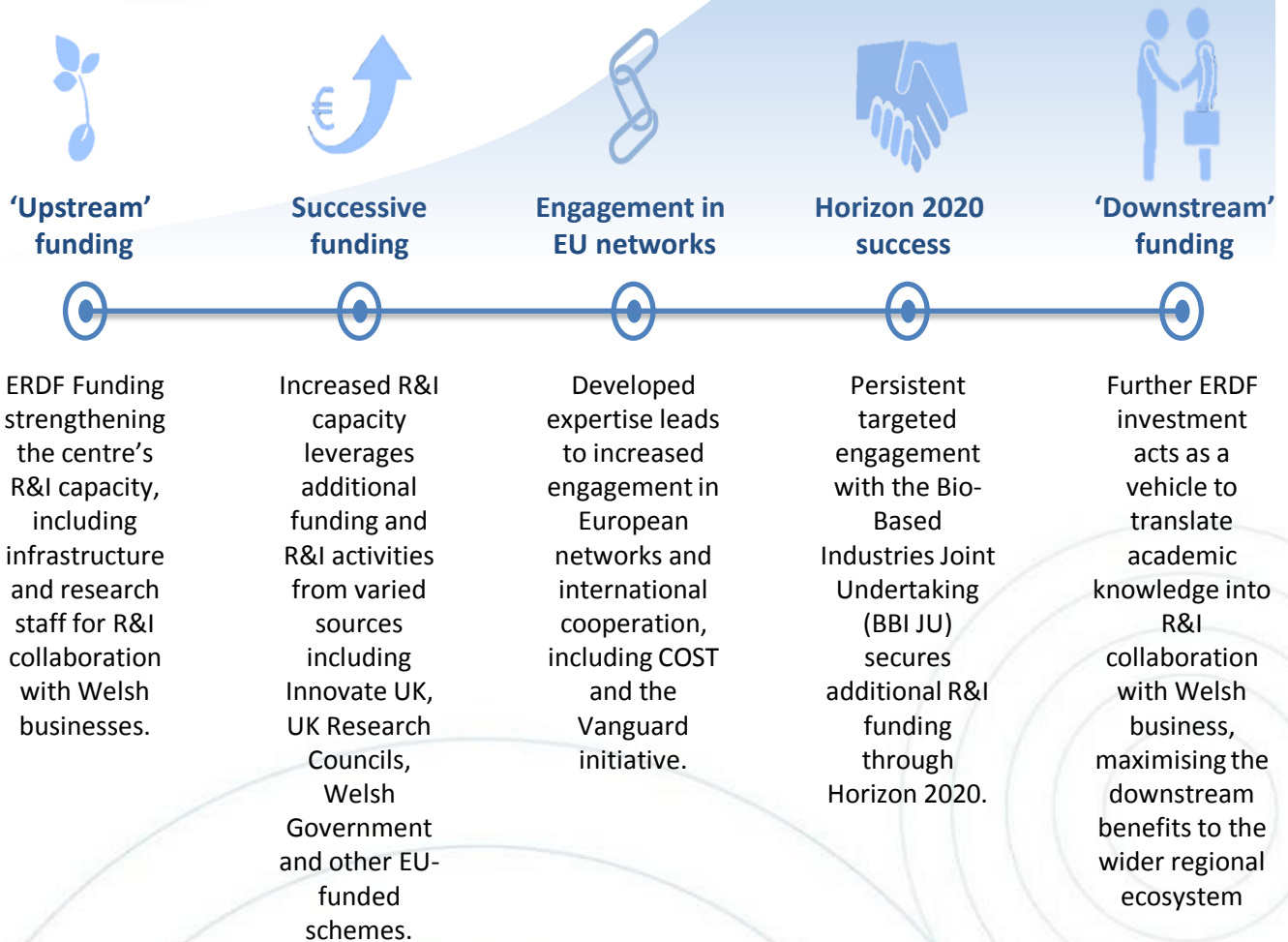
Key to the successful delivery of this project will be the utilisation of the BioComposites Centre's pilot scale processing equipment and academic expertise secured through support from the ERDF and Welsh Government.

Innovation, knowledge transfer and access to market - 'Downstream' funding

A further £8 million of ERDF funding under the 2014-20 Programme has been awarded to support BEACON Plus.

The Beacon Plus project builds on the success and clear smart specialisation of BEACON and will support further R&D collaboration with Welsh businesses to translate the academic excellence into commercial products. The strategic delivery of Beacon Plus will ensure that the BioComposite Centre's European engagement and BBI funded activity delivers maximum downstream benefits to the Welsh regional ecosystem.

Increasing impact



Further information

Mail to: Horizon2020@wales.gsi.gov.uk

For more EU funds news visit: wefo.gov.wales

Twitter: twitter.com/wefowales

YouTube: <https://www.youtube.com/user/welshgovernment>