

£9.2m EU-backed programme to help Welsh industry reduce carbon emissions

The Reduced Industrial Carbon Emissions (RICE) initiative, led by the Energy Safety Research Institute (ESRI) at Swansea University in partnership with University of South Wales, will draw on world-class expertise to reduce carbon dioxide emissions from large and heavy equipment and facilities, and help drive a stronger and greener economy.

Backed with £5.9m of EU funding, RICE will work with local supply chain companies to test how carbon dioxide produced from heavy industrial processes can be innovatively used to make high value products and industrially important chemicals.

The technologies to be tested will also explore the production of green hydrogen, which can be used to fuel cars, other modes of transport, and energy production processes, further helping to reduce our carbon footprint.

As part of the project, large-scale demonstration systems will be set up with global steel manufacturer Tata Steel, as well as Welsh Water, to support the testing of technologies that can capture carbon dioxide and convert it into high-end products such as pure proteins for animal feed and DHA omega-3 fatty acids for human use.

Cabinet Secretary for Energy, Planning and Rural Affairs said:

“As a Government, we are committed to addressing both the threat and impact of climate change and making the most of the opportunities. If we are to meet our climate change targets, we and our partners must work innovatively with industry to develop new cutting-edge, innovative processes and technologies that have the potential to significantly reduce carbon emissions across Wales, creating a cleaner environment for existing and future generations.”

The initiative is also expected to lead to the creation of new businesses and employment in the region.

Professor Andrew Barron said:

“Industry is one of the largest emitter of carbon dioxide emissions in Wales, suggesting that decarbonising industrial processes is one of the most impactful way to reach our own and the Paris climate agreement targets. Working with industry, RICE will test and drive the use of low-carbon technologies and also facilitate the creation of new industries which can maximise these next generation technologies to provide significant employment opportunities.”