

Further success for Waveram project selected for EuropeWave programme

Scottish technology development specialists, 4c Engineering, will collaborate with Basque and Irish firms to develop innovative Wave Energy Converter (WEC) technology. The Inverness Campus based firm have partnered with Irish Waveram Limited (the project lead contractor), and Basque R&D experts TECNALIA, to develop the “Waveram” project. Funding was secured in a competitive for one of seven slots in the [EuropeWave programme](#) for the further development of novel wave energy technology.

The opportunity

Almost exactly 1 year ago, it was announced that The Basque Country and Scotland were planning to launch the EuropeWave project, a five-year collaborative R&D funding programme, is a partnership between Wave Energy Scotland (WES) and the Basque Energy Agency (EVE). Match-funded by the European Commission via its Horizon2020 programme, this transnational collaboration will channel almost €20 million to procure the most promising wave energy technology solutions from developers across Europe and beyond.

Track record of Scottish-Basque and Scottish-Irish collaboration

Although based on the periphery of Europe, The Highlands of Scotland, has a strong track record of maritime links with continental Europe stretching back thousands of years. More recently 4c Engineering have collaborated with Basque partners Ditre and TECNALIA on the Wave Energy Scotland (WES) funded “Quick Connection System” funding call, and with Seapower, an Irish company in two stages of WES’ the demanding “Novel Wave Energy Converter” programme.

Bringing the threads together

When 4c Engineering saw this new call being announced, they reached out to our previous collaboration partners TECNALIA, who made the introduction to William Dick of Waveram Ltd of Ireland. From these early conversations, a consortium of Waveram (Dublin, Ireland), TECNALIA (Basque Region, Spain) & Core Marine (Madrid, Spain) and 4c Engineering (Highlands, Scotland) was formed to structure a project and apply for EuropeWave funding.

Exciting project

The consortium has been awarded 291,000 Euro in funding for a 7 month project to develop Waveram’s exciting Wave Energy Converter technology. The project will involve design, physical prototyping, numerical simulation, and the deployment of a scale model in the world-leading FloWave facility in Edinburgh for testing to investigate survival and performance characteristics, and to demonstrate the potential for further development in further phases leading to open-sea deployment which would happen in Phase 3 of the programme.

Commenting on the project, **Peter MacDonald, Director of 4c Engineering** said:

“The barriers to collaboration are higher now than they even have been for 4c Engineering, with the double hit of Brexit and Covid threatening our ability to collaborate with European partners, which makes the importance of this joint project even more significant. It’s a clear demonstration that a small engineering company based in the Highlands of Scotland can still work with our valued partners from across Europe, and it’s particularly satisfying to be reinforcing 4cEngineering’s existing links with Ireland and the Basque Region”

William Dick of Waveram added:

“This EuropeWave project will provide a most welcome challenge to press ahead with a breakthrough technology, now patented Worldwide. Our best thanks to our excellent partners in Inverness, Bilbao and Madrid who have made this opportunity a reality”

Pablo Ruiz-Minguela, of TECNALIA who are leading the project management said

“We are very happy to offer our expertise in managing highly innovative European projects in the field of ocean energy. The long-standing knowledge of consortium partners about wave energy simulation, engineering, physical testing, offshore operations planning and commercialisation will be key to achieving a cost-efficient technology”

Stewart Nicol, Chief Executive of Inverness Chamber of Commerce added

“I’m delighted that Inverness-based 4c Engineering have been successful with this innovative marine technology research bid. In doing so they have demonstrated the leading edge capability that exists within Highland business and the capacity they have to partner globally with other world leaders in this highly technological market-place. 4c Engineering’s success, along with recent announcements relating to establishing offshore wind tower manufacturing absolutely demonstrates the expertise and ambition the Highlands have across the whole renewable energy sector.”

Cabinet Secretary for Net Zero, Energy and Transport, Michael Matheson, said: “Scotland is ideally-placed to be at the forefront of the global market for marine energy. The Scottish Government has long-supported the sector – not least through Wave Energy Scotland, which continues to help the sector grow and develop through its world-renowned funding programme.

“The EuropeWave project demonstrates Scotland’s desire to collaborate with European partners to drive forward our shared aims and objectives towards green energy, and I look forward to seeing this project support and further develop this technology on our journey to a net-zero economy.”

Further information for editors



4c Engineering

At 4c Engineering our main focus is on technology development. We use our engineering skills to deliver solutions to new and challenging problems. Based in Inverness, Scotland we have significant experience in mechanical engineering, mechatronics, technology development, prototyping and industrial design, working in sectors as diverse as life sciences, forestry and marine energy.

<https://www.4cengineering.co.uk/>



WAVERAM
OCEAN POWER TECHNOLOGY

Waveram Ltd

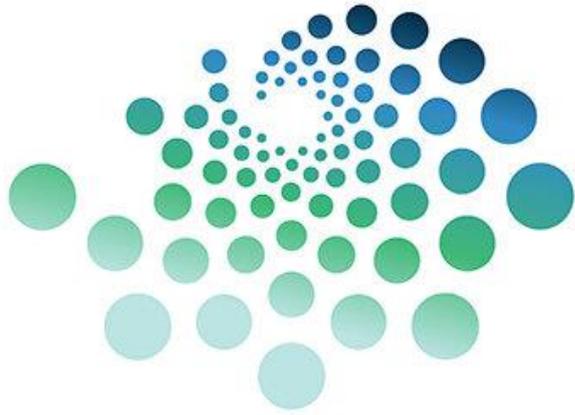
Waveram Limited was incorporated in October 2012, and became a ‘spin in’ campus company of Trinity College Dublin in May 2015. This is a productive relationship, the School of Engineering gaining from Irish state and EC funded R&D plus post-graduate research financed by the Company, in turn providing laboratory facilities and ensuring academic rigour.

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Images

EuropeWave logo



EUROPEWAVE

Information about the EuropeWave Competition:

Following a strong response to the initial call for tenders, seven successful project teams have been selected by a panel of independent experts and will share a budget of €2.4 million to further develop their wave energy device concepts in the first half of 2022.