

Welcome to the Selkie Project newsletter

SELKIE is a cross-border project which aims to boost the marine energy industry in Wales and Ireland by bringing together leading researchers and businesses to improve the performance of marine renewable devices and technologies. <u>University College Cork</u> are leading the project in partnership with <u>Swansea University</u>, <u>Marine Energy Wales</u>, <u>Menter Môn</u>, <u>DP Energy Ireland</u> and <u>Gavin & Doherty Geosolutions</u>.

The project is funded by the European Regional Development Fund through the Ireland Wales Cooperation programme.

Find out more about the Selkie Project

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Selkie Tools and Models progress

As part of the Selkie Project, multi-use technology tools, templates, standards and models are being created for use across the Marine Renewable Energy industry; which will be tested and validated on wave and tidal pilot demonstration technologies. The pilot testing will advance knowledge and improve marine energy devices in terms of their reliability, survivability, operability, stability and commercial viability.

These tools include:

- 1. GIS Techno-economic Models
- 2. Foundations and Mooring Design
- 3. Physical and Numerical Array Modelling
- 4. Sensor Optimisation and Data Analysis
- 5. Operations and Maintenance (O&M) and Logistics Models



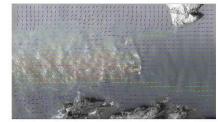


Image showing one frame from a video used to estimate currents with PIVIa

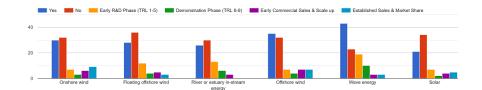
In this edition of the Selkie Project newsletter, we will be delving deeper to learn more about the Selkie tool being developed using **Drones to measure surface currents at tidal stream energy sites**. Read our Selkie Tool Series blog to find out more about the progress being made and how you can input in to the development of these tools. We are also looking for input to the development of two other Selkie open-source tools; Foundations and Mooring Systems and a GIS-Technoeconomic model. We would welcome your comments to the surveys below.

BLOG - Selkie Tool Series: Using drones to measure surface currents at tidal stream sites

SURVEY - Selkie GIS-Technoeconomic Tool

SURVEY - Foundations and Mooring Systems Tool

Selkie Innovation Survey



The overall aim of the Selkie Project is to support the acceleration to commercialisation for Offshore Renewable Energy (ORE) in Ireland and Wales. To ensure the sustainability of the Selkie aims beyond the project, a detailed survey has been designed to obtain firm level data on the innovative and networking activities, resource capacities, and performance of firms within the ORE sector and its potential supply chain.

The survey is extensive to ensure rich insight can be obtained on many different areas including green innovation, university and government interactions, policy mix characteristics for low-carbon innovation and COVID-19 impacts on current operations. The information collected will serve as a major milestone in identifying future directions to advance ORE, providing essential direction on the development of ORE innovation systems to maximize socioeconomic growth, energy security as well as developing tools for achieving inclusive and sustainable goals.

Find out more and fill our survey

Spotlight on the Selkie Network





Join our growing network of businesses! We are looking to bring together Welsh and Irish fabricators, engineers, marine operators, consultancies, marine energy device developers and more. Some of the companies already signed up are Bombora Wave Power, Orbital, Sabella SA, Magallanes Renovables, Ocean Energy, Mainstay Marine Solutions, FAUN Trackway, Alpha Marine and Bartlett Engineering, to name a few.

This month we are putting a spotlight on two businesses that have joined the Selkie Network;

Limerick Wave and Interek. Read more about the companies and how they've been involved so far.

What do you get from signing up to the network?

You will become part of a growing network of enterprises and businesses receiving support and opportunities for training, seminars and workshops on topics including techno-economic support, business planning and R&D grant preparation as well as the opportunity to network and gain contacts with both industry and academics.

Contact sophie@mentermon.com for further details on joining the Selkie Network.

Read more about Limerick Wave

Read more about Intertek

Selkie Events

Selkie Webinar series

We are currently running a series of public information and supply chain webinars on themes associated with marine renewable energy. The materials for our first four webinars including recordings and presentations can be found on our <u>website</u>.

Around 100 attendees joined us for our most recent webinar in February focused on 'Skills for the Marine Energy sector'. This webinar highlighted the current skills shortages for the sector and the importance of developing a local skilled workforce to deliver this growing Marine Energy industry and to keep the economic benefits locally too.

Thank you to our brilliant speakers from RWE, Pembrokeshire College, Bombora, Mainstay Marine, Green Rebel Marine, Regional Learning and Skills Partnership and Aquatera.

Selkie Skills webinar materials



Selkie Networking events

As we move through 2021, it is clear that making connections under the current circumstances is an on-going challenge faced by businesses across a number of sectors. With the fast-growing marine renewable energy industry, facilitating connections across the supply chain is key to keeping the momentum of the sector rolling. As part of providing support opportunities for businesses in the sector, the Selkie project

held its first networking session in collaboration with Enterprise Hub (Hwb Menter) during late January. We will be hosting further networking sessions in Spring, please get in touch if you're interested in taking part.

Read more about Selkie's first networking event

Selkie Tool Development workshops

In line with developing the Selkie tools, we are hosting a series of tool development workshops to provide industry and other academics with the opportunity to input to this process. Our first workshop took place in December and focused on the Selkie Computational Fluid Dynamics (CFD) tool. This tool uses CFD to predict the energy captured by an array of tidal turbines and the wake behind each one. The aim is to provide an open access, clearly documented tool for the marine renewable energy industry to help design devices and to facilitate array layout optimisation for energy output maximisation.

The interactive workshop considered the features and user support of this tool and industrial stakeholders provided their views and perspectives. Twelve professionals attended the event, including representatives from Blackfish Engineering Design, DP Energy, EMEC, Intertek, Marine Energy Wales, Minesto, Orbital Marine, ORE Catapult, Sabella and Simec Atlantis

Energy.

Further tool development workshops are planned in the coming months for the other Selkie tools listed above.

Read more about Selkie's Computational Fluid Dynamics workshop

Marine Energy Wales conference 2021

In January, the Selkie team was at the Marine Energy Wales's Annual Conference to raise awareness of the project with an exhibition stand, speaking slot on the research panel and a side event on the Selkie GIS tool.



Watch Selkie's GIS side event at the MEW Conference

Upcoming events



Selkie event with Swansea University on the 'Year in Industry' placement for students - 24th March

The placement scheme for engineering disciplines at Swansea University is a year in industry embedded in the students' curriculum. They undertake their placement in the penultimate year of their studies, which brings near-graduate-level recruits to their host companies.

Is your company interested in participating? We are organising an employer event with Swansea University for their students focusing on marine renewable energy and sustainable engineering on **Wednesday 24th March**. We invite industrial participation to present your activities to the students and any opportunity for placements. After the presentations, we also invite you to participate in a panel session focused on *skills for the renewable energy sectors* where a discussion and exchange with the students will aim to highlight what the challenges are in the renewable energy sector and how prospective engineers can develop the right skills to start their careers.

Read more about the placement scheme and upcoming event

Selkie 'Meet the Expert' events

We are in the process of organising a series of 'Meet the Expert' events that will be aimed at relatively new companies to the marine renewable energy companies. These events will provide business support and information on key topics ranging from funding, insurance, tender applications, testing and validation, legal services and many more. It will also be an opportunity for companies to meet and network.

More information about event dates and registration coming soon.



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