



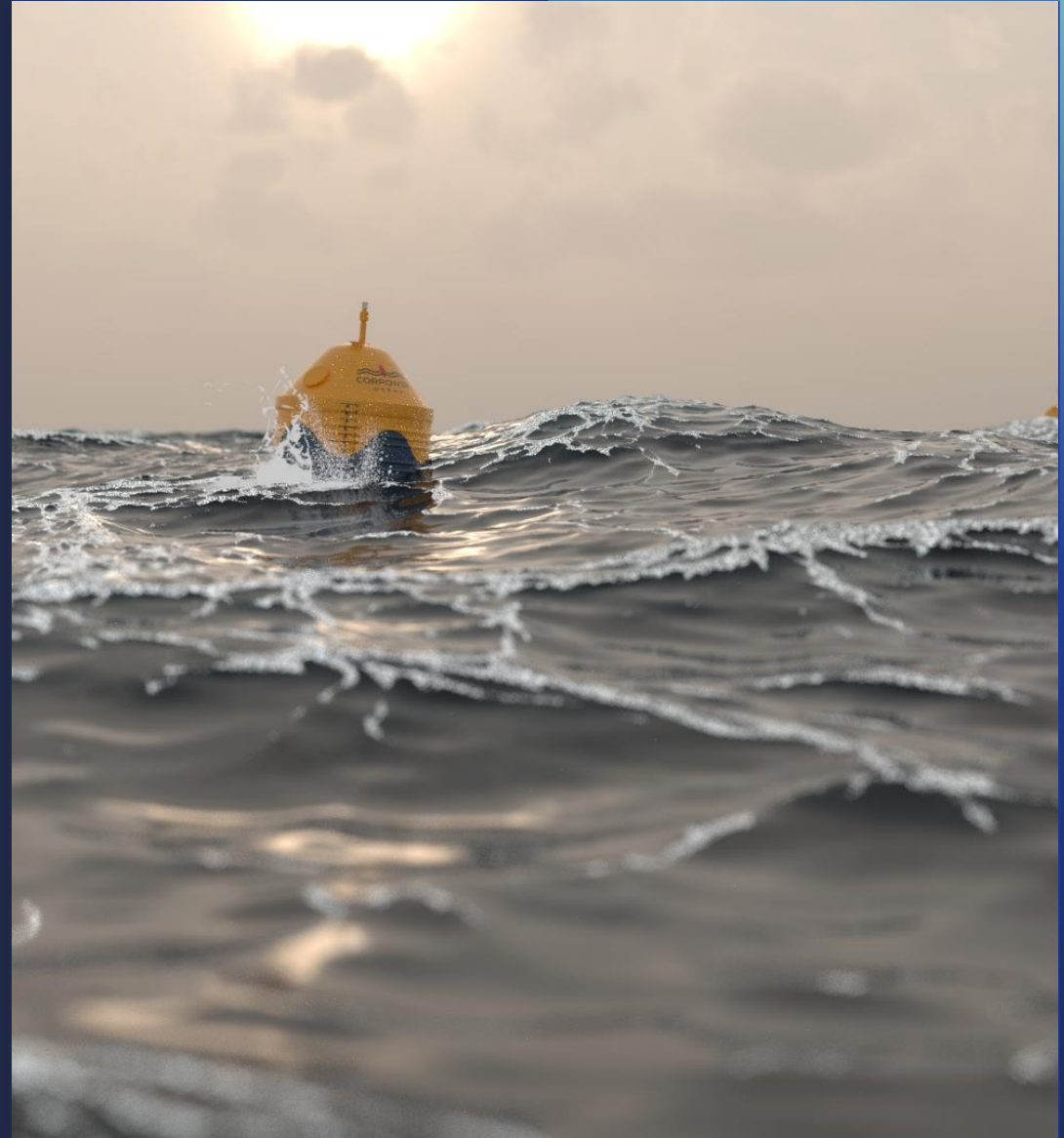
**Simply Blue**  
Group

28/06/2022



**SAOIRSE**  
WAVE ENERGY

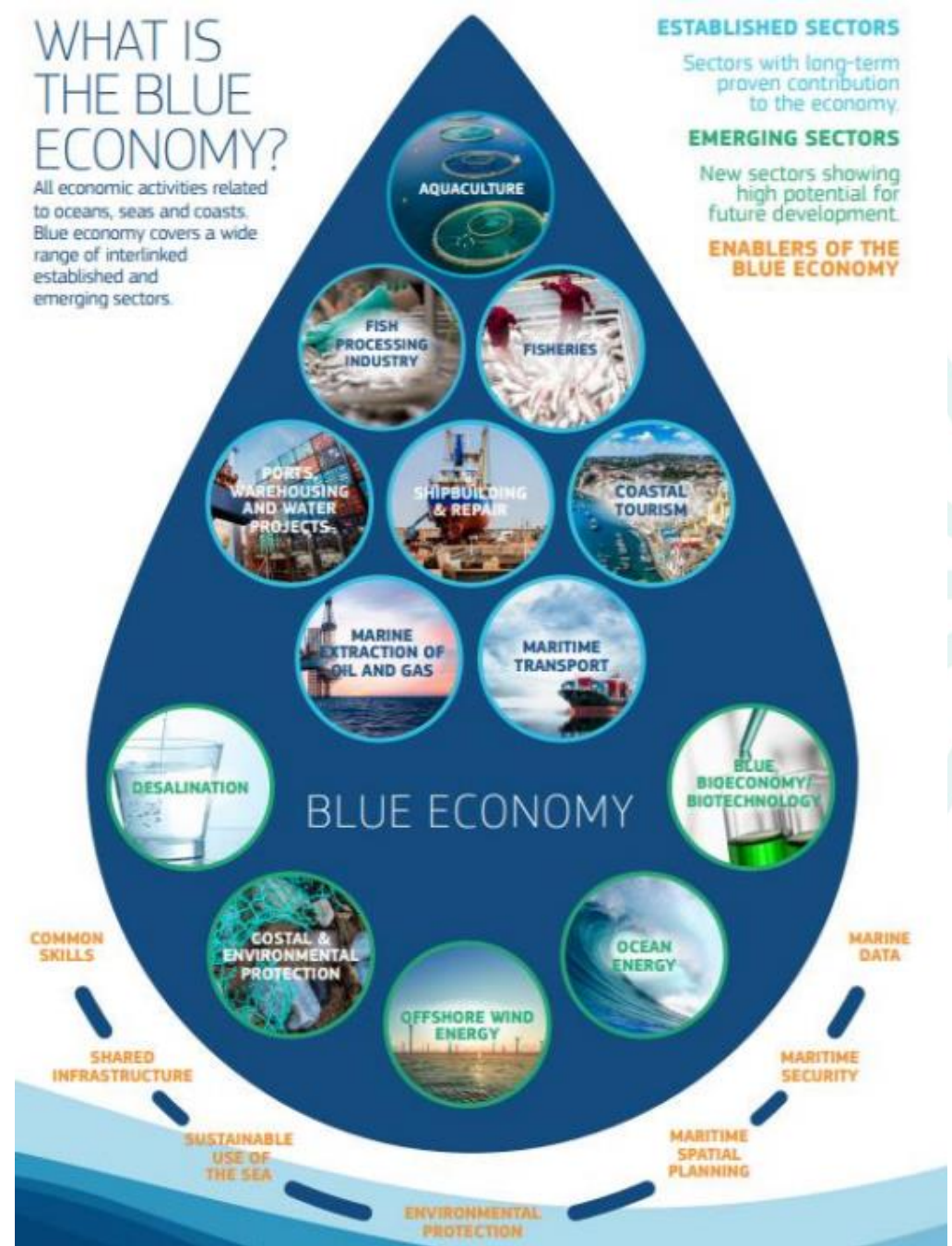
Innovation Fund Workshop



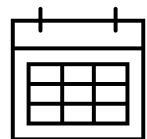
# Simply Blue and the Blue Economy

Simply Blue is an early-stage blue economy project developer working in four areas

- Electricity generation from floating offshore wind (FLOW) and wave energy
- Green hydrogen production through electrolysis powered by offshore-generated electricity
- Sustainable aquaculture and seaweed production
- Carbon sequestration through nature based and artificial solutions



# Key facts about Simply Blue

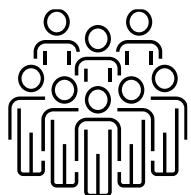


**2011**

Year founded



**7** offices opened and **3**  
more opening in **2022**

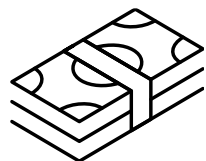


**Team of 82+ people**

of experience in floating wind  
Rapid expansion



Global supply chain  
**relationships**



**> €400m**

Euros raised



Projects in more than  
**10 countries**



**> 10GW**

early stage floating wind  
projects under development



Partnerships with  
**2 O&G supermajors & 1  
National Utility**

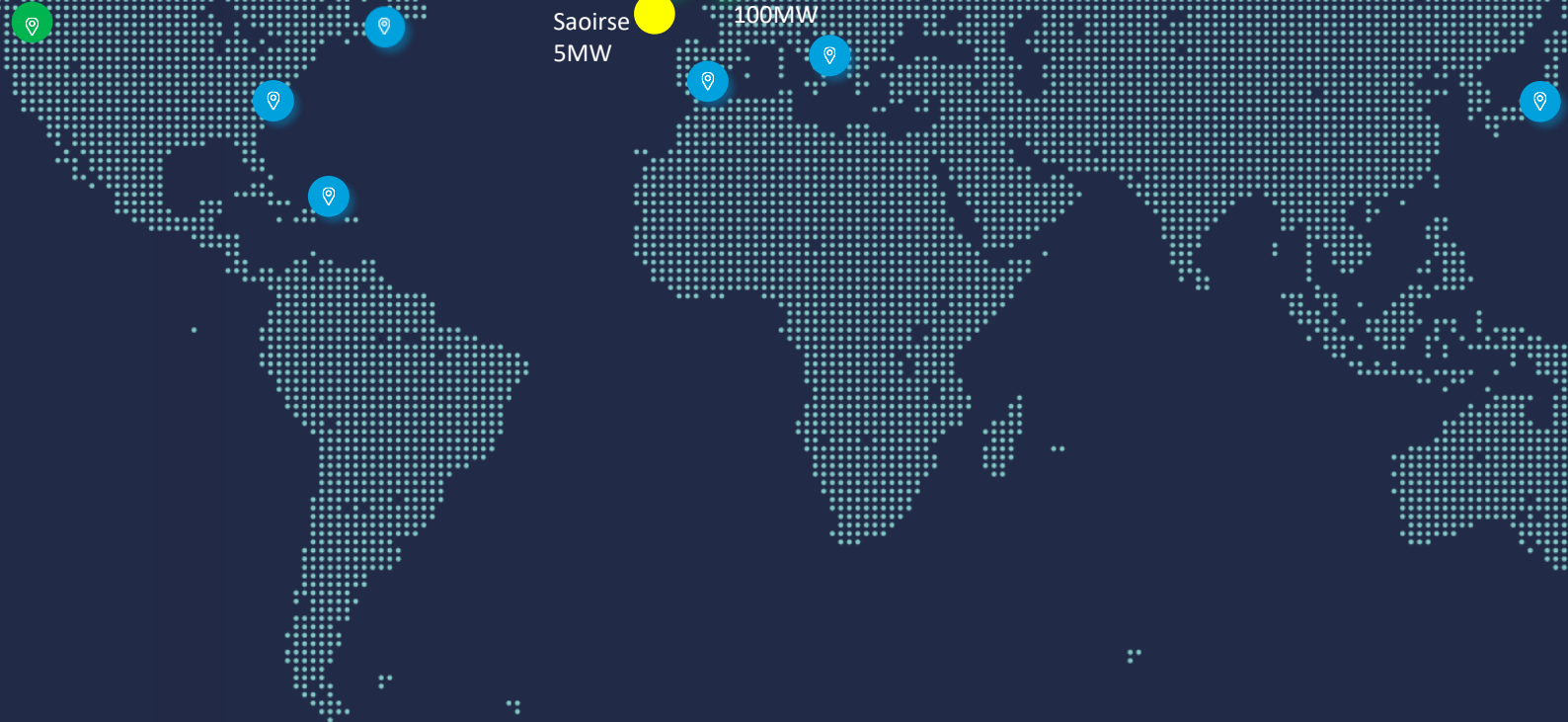


Pipeline of >10 GW  
under development in:

- Europe
- North & South America
- APAC

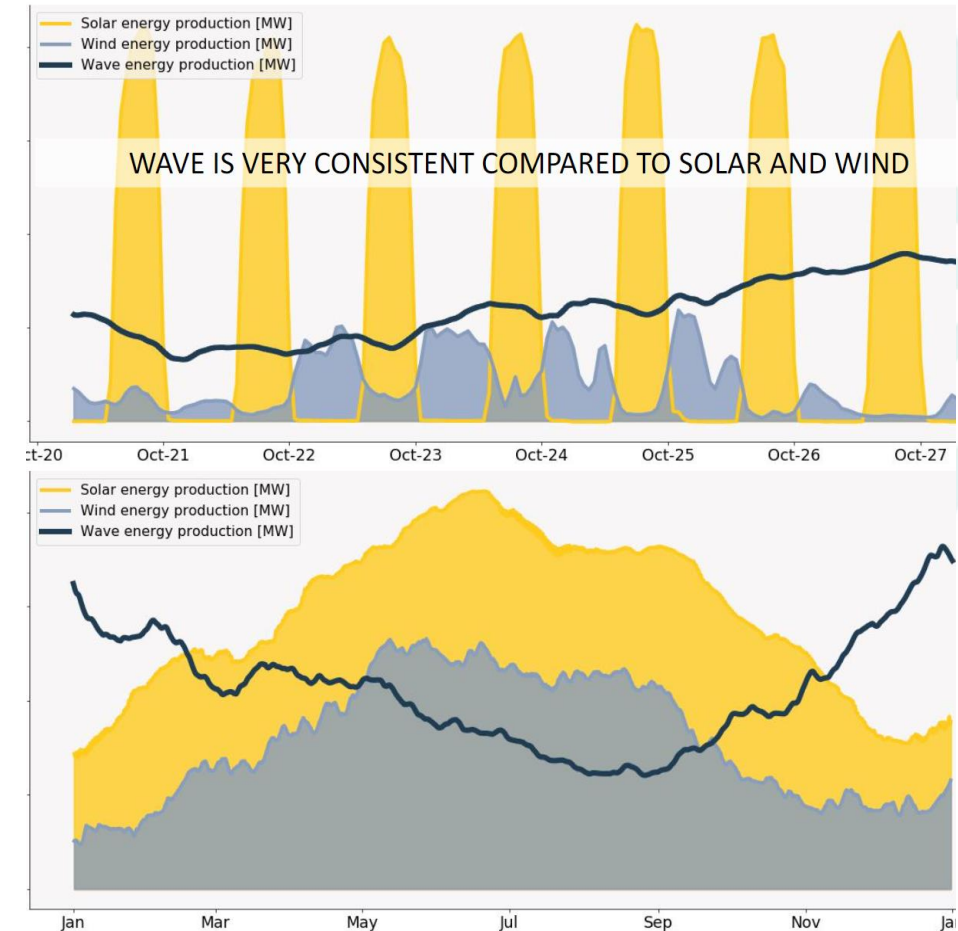
## Legend:

-  Horizon 1 JV  
Projects FOW
-  Horizon 2 JV  
Projects FOW
-  Aquaculture project
-  Wave project



# Why Wave Energy?

- **24/7 carbon free electricity**
- Wave energy helps plug the voids of wind and solar with its consistent and complementary production profile,
- By taking on this critical role of providing stability, one that oil, gas and coal have played in the past, wave energy can make a major contribution to address climate change
- **The biggest battery on earth**
- Created by weather systems, built up over several days across large oceans, travelling uninterrupted, the energy content is concentrated and smoothed.
- This delivers a consistent power profile to coastlines, with the best available wave resources typically at the exposed west coasts of the world, where most people live, and businesses operate.
- **Wave Energy Industry looks like Floating Wind in 2015**



*Images courtesy of CorPower Ocean for California*

## Wave Energy Converter Technology

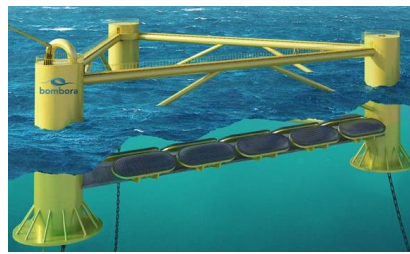
- Simply Blue carried out and published a commercial horizon scanning of all 149 wave concepts in 2015
- Swedish technology provider Corpower came out in top place
- Point absorber type, with a heaving buoy on the surface connected to the seabed using a tensioned mooring system
- Half scale model tested in waves up to 4m off Orkney Islands in 2020
- Full scale 350kW C4 type model prototype deployment in Portugal in Q3 '22
- Saoirse will have a 14 X C4 WEC's or a total of 5MW



*Wello Oy Penguin*



*Mocean Energy*



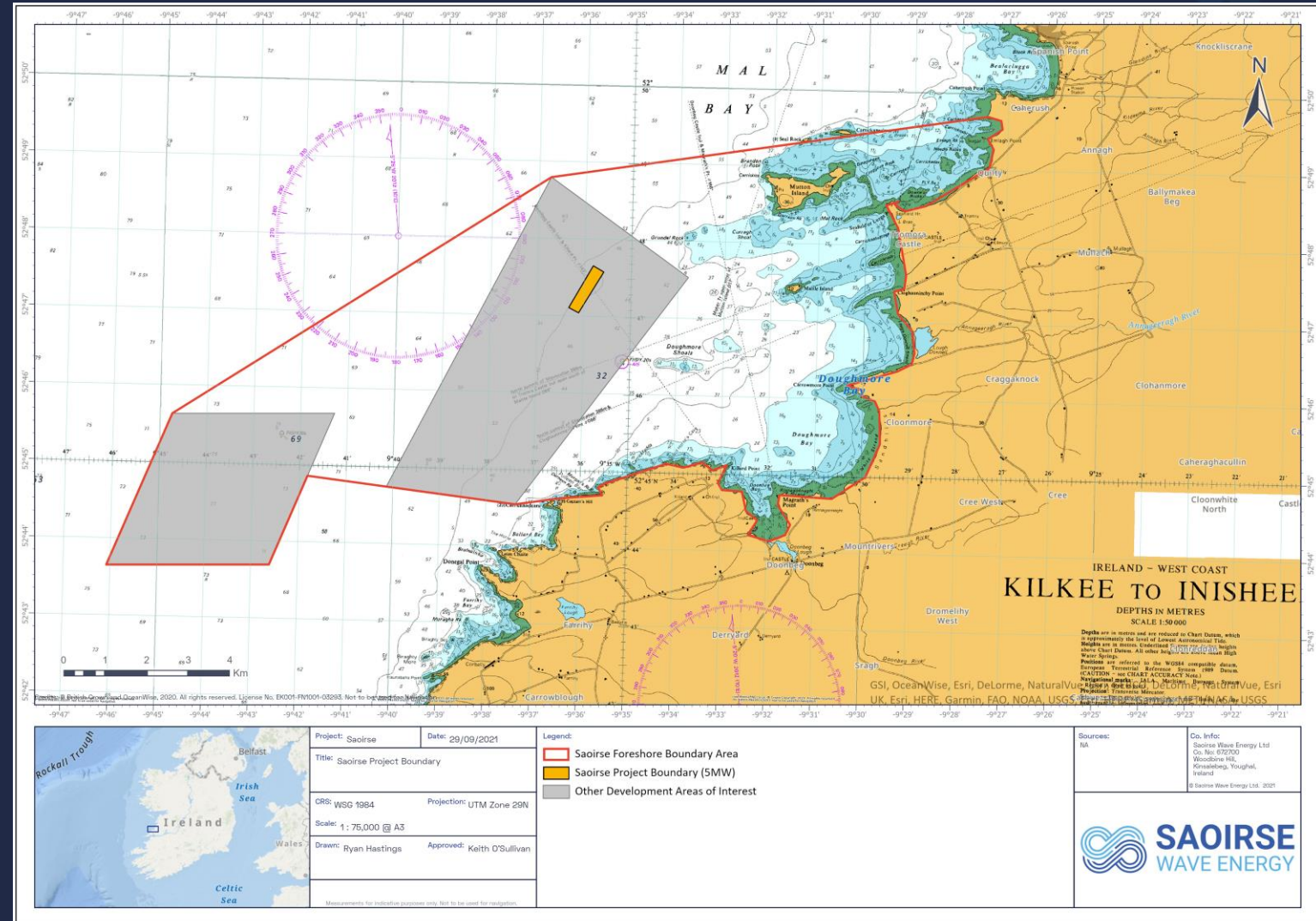
*Bombora*

### Corpower Point Absorber



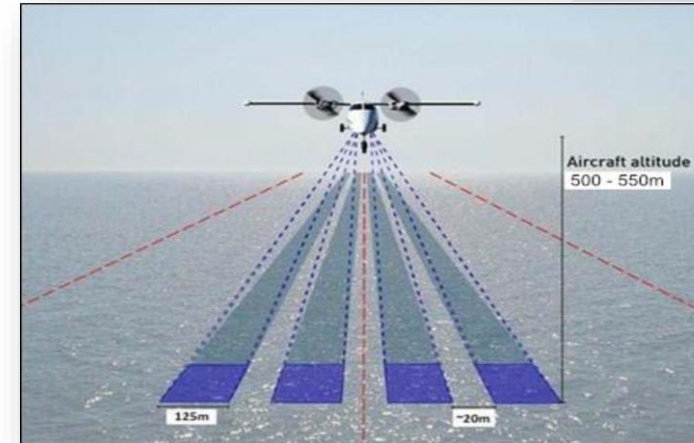
# Saoirse

- 5 MW wave energy demonstration array off the West Clare Coast
- High energy sites for WEC c. 40-50kW/m
- Engaged with CorPower Ocean for technology supply
  - Looking at wide site area
  - Considering additional site for Wello WEC
- Estimated Devex €7.5M and Capex €50M
- Cooperation discussions with Irish State Utility ESB



## Work Undertaken to Date

- €947K of estimated €7.5M Devex expended as of end of May 2022
- **Digital Aerial & Intertidal Ornithology Surveys**
  - HiDef contracted
  - Monthly for 24 months - commenced April 2021
- **Foreshore Site Investigation Application**
  - Submitted to Dept. July 2021
- **Pre-FEED Engineering investigations underway**
- **Onshore infrastructure/routing studies**
  - Grid capacity identified in local substation at Tullabrack
- **Stakeholder Engagement**
  - Dedicated project website ([www.saoirsewaveenergy.com](http://www.saoirsewaveenergy.com))
  - FLO engaged with on-pier meetings commenced
- **Dedicated SBG project team in place**



 An Roinn Tithíochta,  
Pleanála agus Rialtais Áitiúil  
Department of Housing,  
Planning and Local Government

### Investigative Foreshore Licence Application (Offshore Renewable Energy)

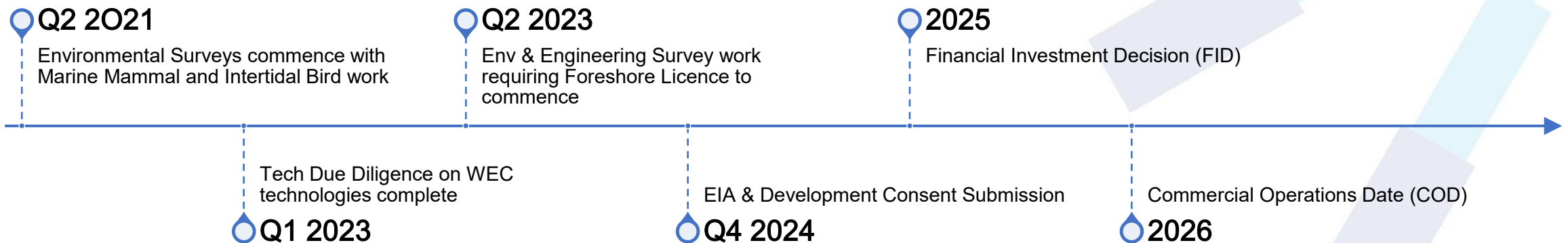
Please indicate project category as appropriate:

Wave:

Tidal:

# Our Objectives

- Develop the world's first pre-commercial wave farm – i.e. the Hywind Scotland of FOW to enable
- Commercialisation of Wave Energy and making the technology bankable
- Demonstrate that WECs can contribute to future energy systems
- At a project level to power 3,500 homes and will displace up to 10,868 tonnes of CO<sub>2</sub> per year
- Develop new ORE aspect to Simply Blue Group



**Ardmore**  
**September 2021**

