



PivotBuoy® Technology

Cost-effective and scalable floating wind technology proven in real conditions

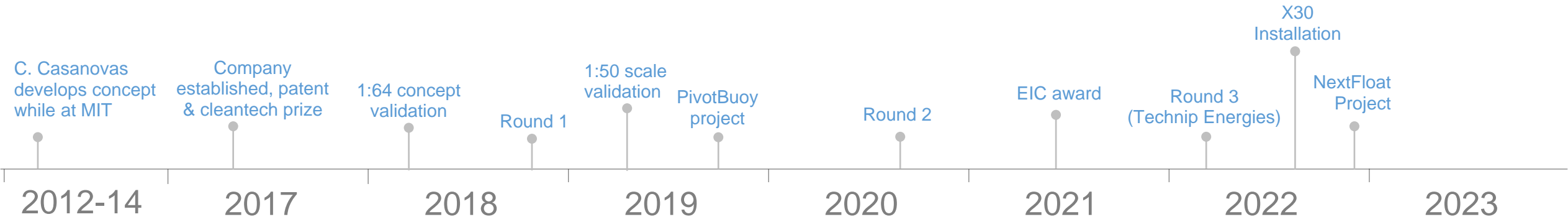
Alex Raventos
CEO & Co-founder



Jornada - L'eòlica marina flotant

Comissió d'Energia dels Enginyers Industrials de Catalunya, 18/01/2023

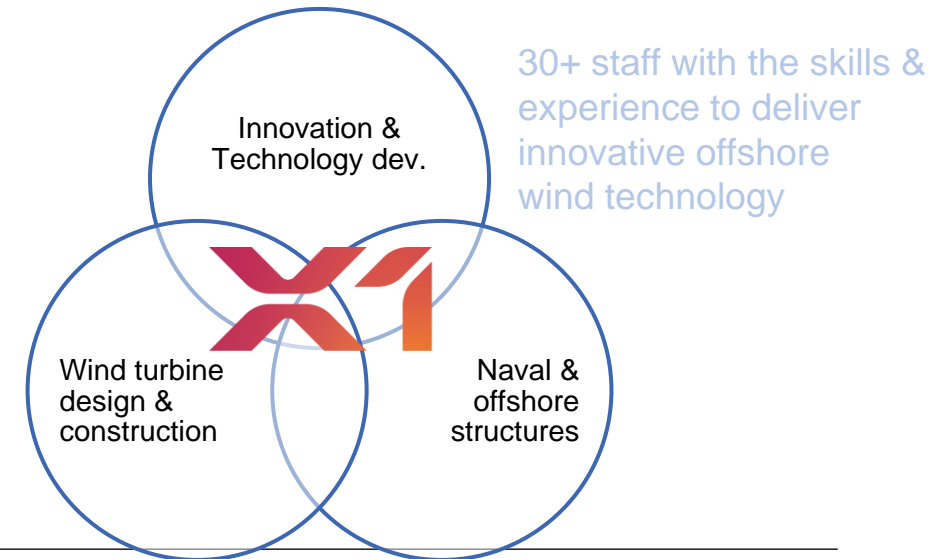
About X1 Wind



Our Shareholders



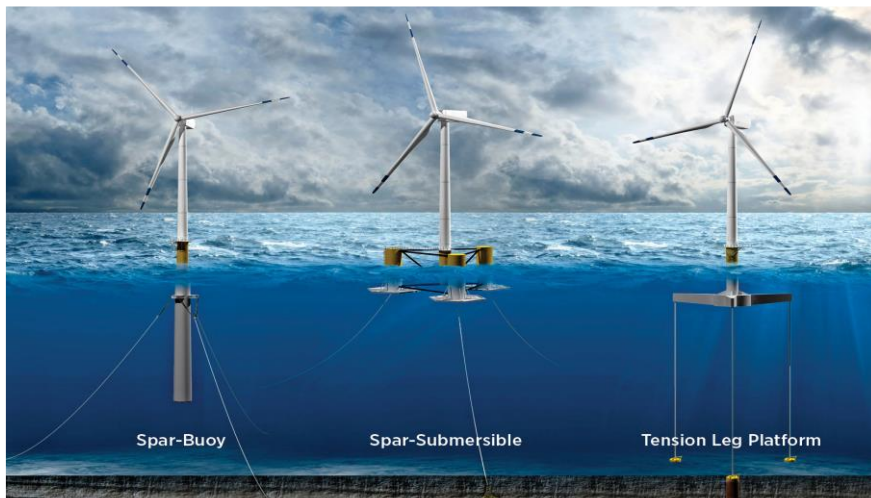
Our team's core competence



The industry's challenge: making floating wind cost-effective

Current technologies face challenges

- “Spar” and “semisub” successfully proven but require large weights for stability
- Tension leg platforms (TLPs) reduce weight but installation is very complex
- Challenge to scale up to >10MW turbines due to increasing bending moments on tower base



How to overcome these?

Re-think the system to take advantage of the **floating environment**, in order to:

- A. Enable substantial **reduction of loads** and steel weight
- B. Improve **scalability** to 15MW+ turbines
- C. Enable cheaper installation in **deeper waters**
- D. Ensure industrialization and **mass production**

Our patented solution



Lighter design

Lower bending moments, less steel required



Easy to Install

Full assembly at Port, installed with local vessels



Reliable

Use of passive systems, downwind configuration



Scalable

Suited for larger turbines (15MW+) & deeper waters



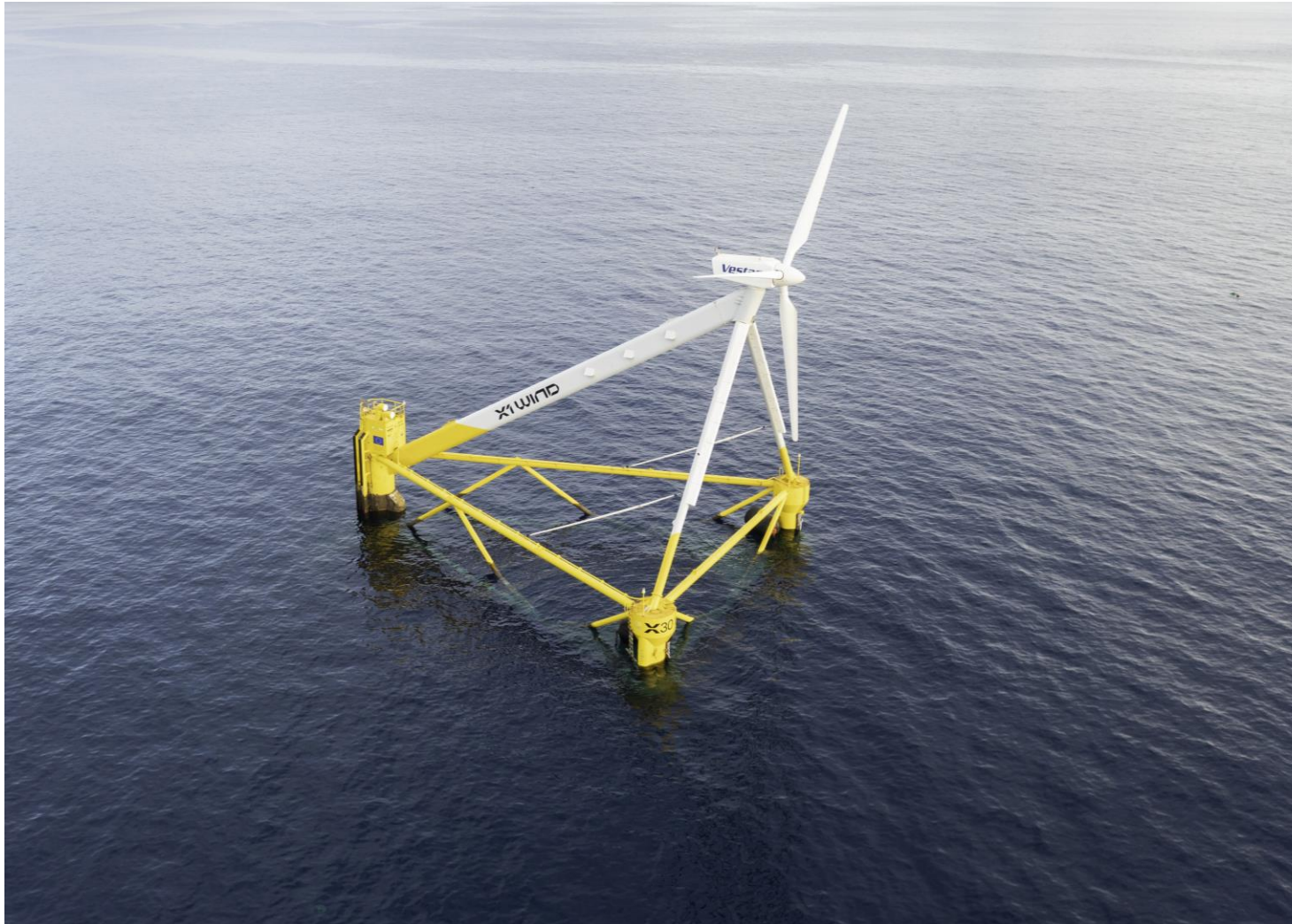
Friendly design

Lowest footprint, less emissions, better compatibility



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PivotBuoy Project: Part-scale technology demo in the Canary Islands



PivotBuoy Project:

- 4M€ project with 9 European Partners
- PLOCAN test site (Canary Islands, Spain)
- Part-scale X30 platform
- 50m water depth
- Vestas V29 + 20kV cable connection

Project partners:

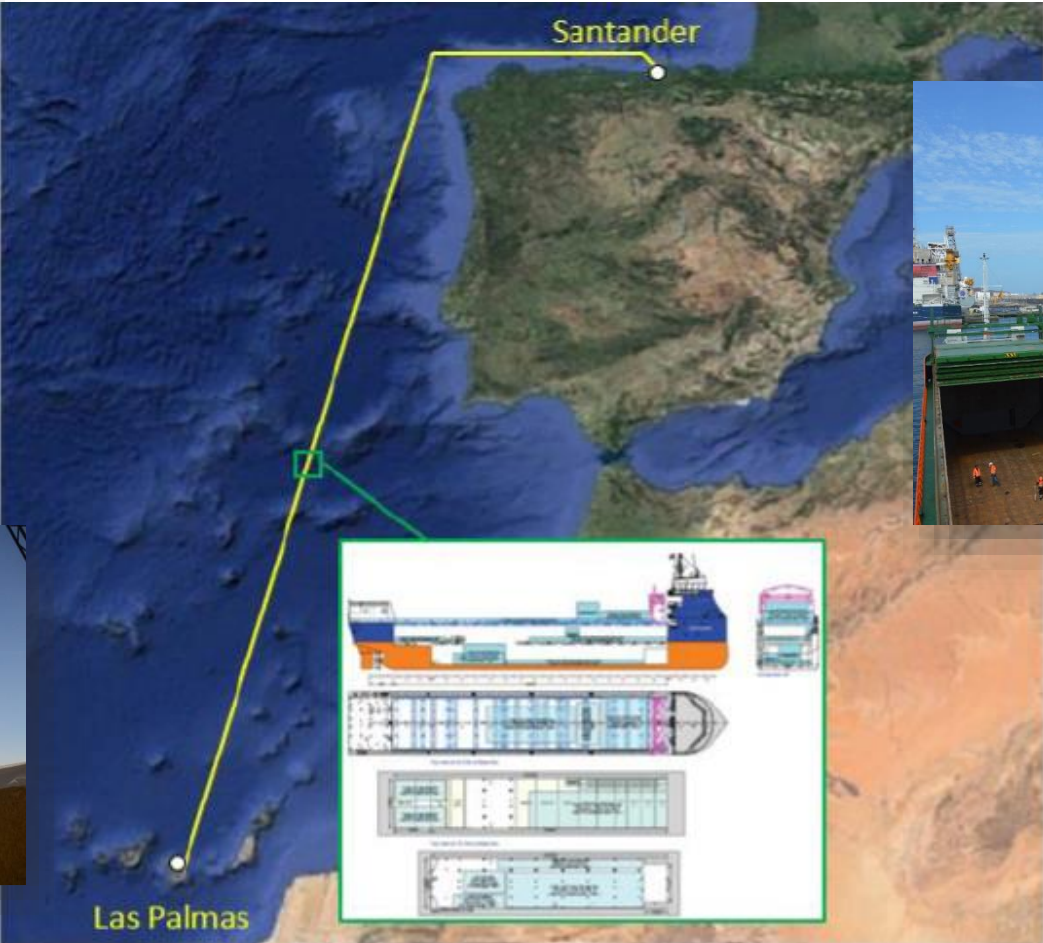


This project has received funding from the European Union's H2020 research and innovation programme under grant agreement N°815159

Manufactured in Santander & shipped to GC



Floater components manufactured at DEGIMA facilities in Santander



Components shipped with Noatum Logistics to Gran Canaria



Loading out at Hidramar Shipyard

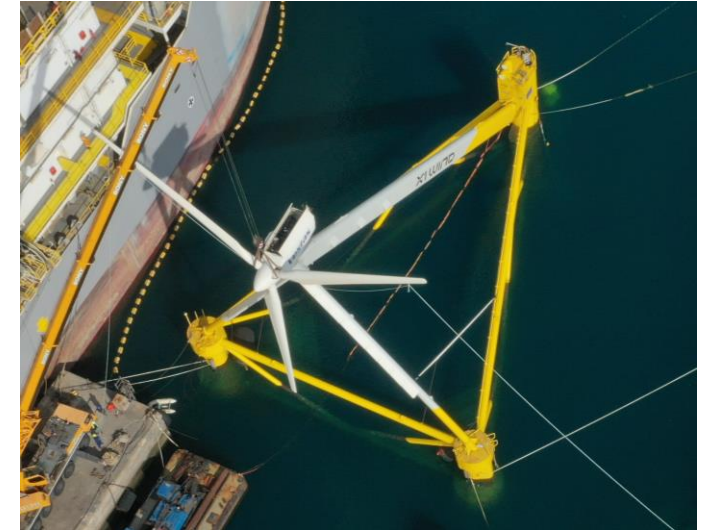
Assembly & load-out completed with local means...



- Positioning of different elements
- Coat Painting
- Welding of the whole structure

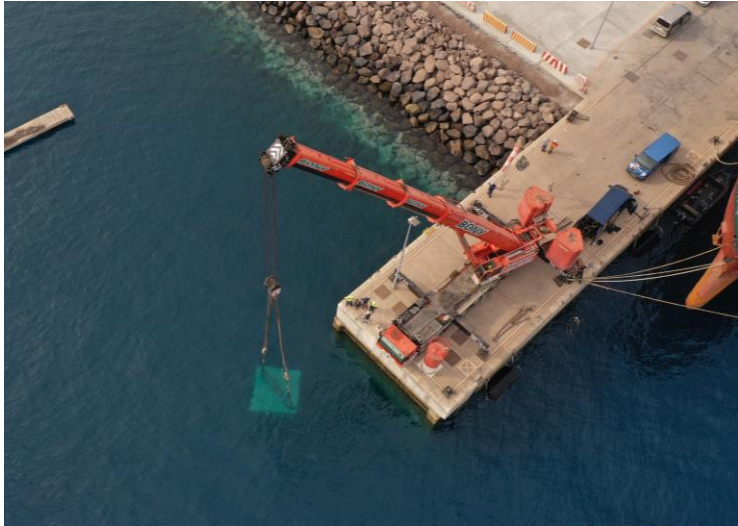


- WT Nacelle assembly
- Electrical equipment integration
- Adaptation Vestas V29 to downwind
- Load-out



- Rotor assembly
- Port acceptance testing

... as well as foundations, cable lay and final installation



- Foundation installation with standard anchor handling tug and local vessel
- Minimized footprint on seabed
- Maximized compatibility with other sea uses



- 20kV dynamic cable
- Installed with local vessel
- 1.4km connecting to PLOCAN smartgrid



- Final installation with local vessels
- Connection to the pre-installed mooring and dynamic cable connected to PLOCAN smartgrid

X1 current floating wind platforms

X30
0.2MW
∅ 30m

X90
6-8 MW
∅ 140-180m

X150
12-16 MW
∅ 220-240m



NextFloat will be the first pre-commercial unit

Project with ambitious goals:

Deploy and test a 6MW unit

- X90 platform with 6MW turbine
- Design for 20+ years lifetime, fabrication, transport and installation
- Testing during 24-month period within NextFloat project but expected extension or relocation

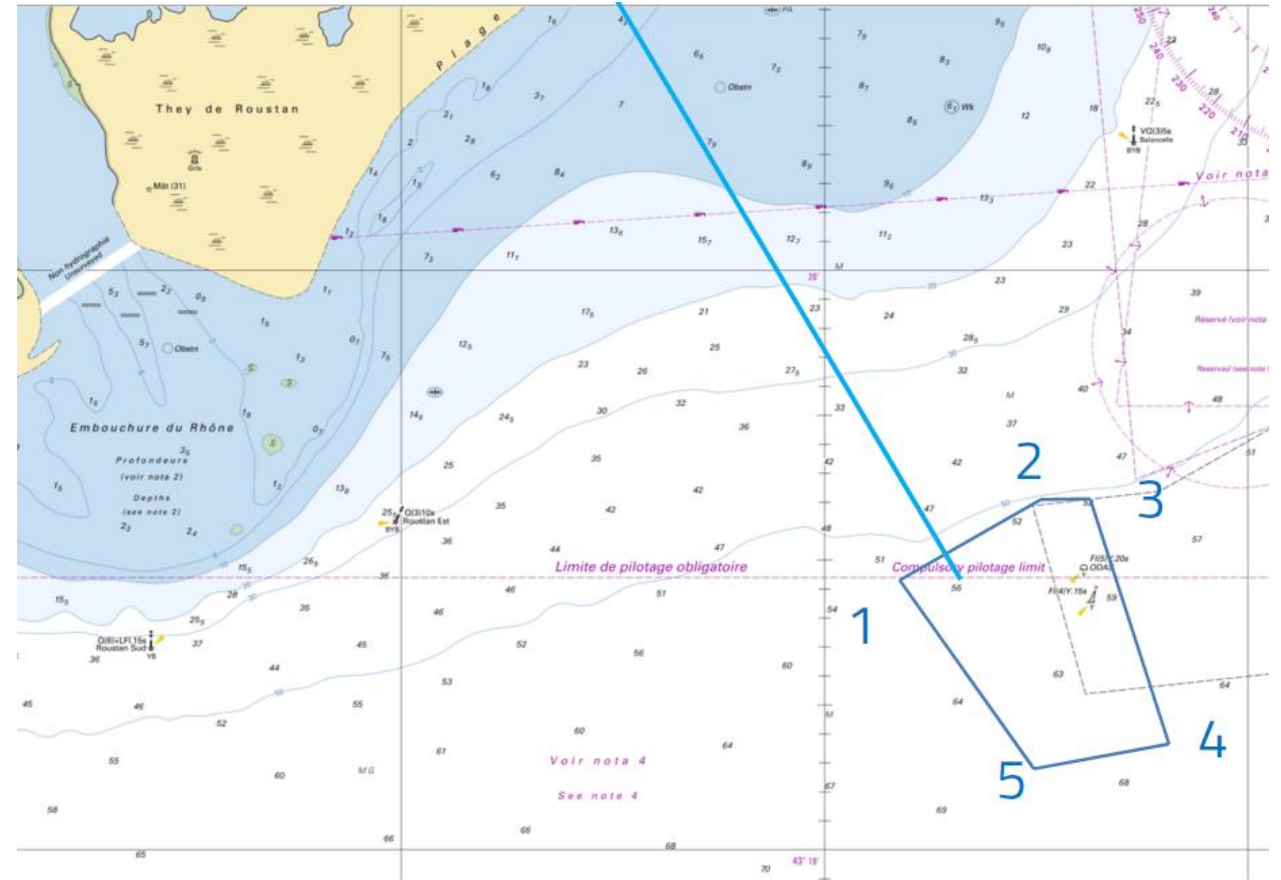
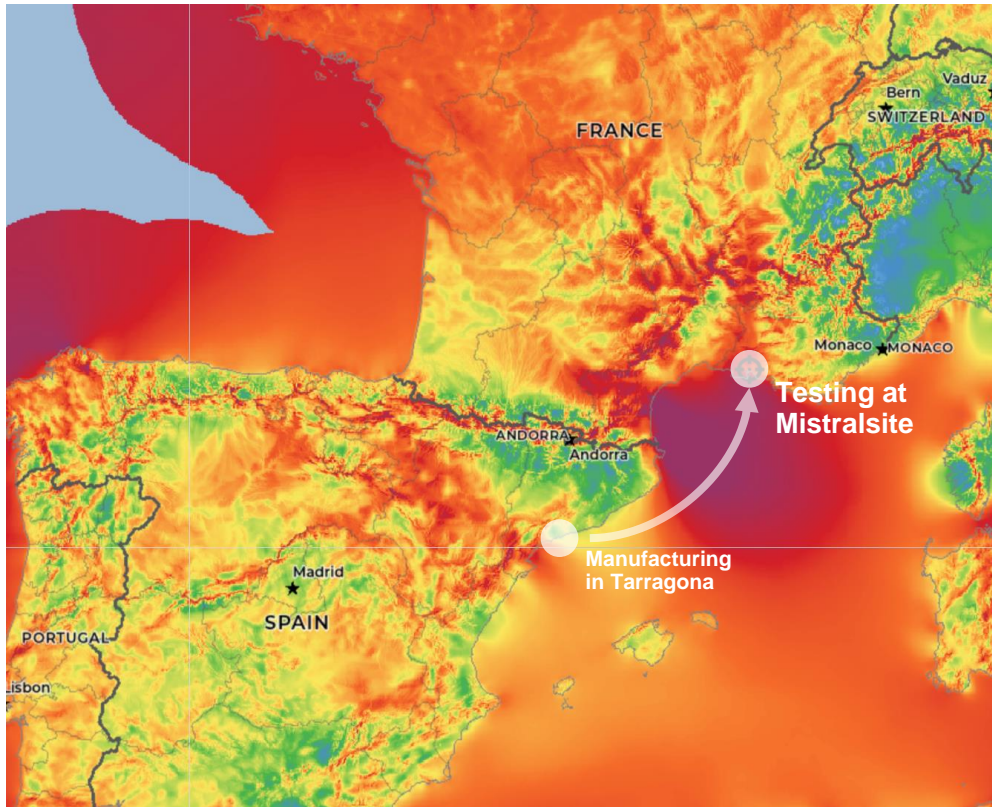
Technology scalability and industrialization

- X150 floater with 14MW+ turbine
- Feasibility of a 20MW+ design
- Fully industrialized design for manufacturing, assembly, transport & installation

Consortium of world-class partners:



Designed in Barcelona, manufactured in Tarragona and then tow to Mistral site in the South of France



The logo for X1 WIND, featuring the letters 'X1' in a stylized, bold font followed by the word 'WIND' in a similar, slightly more spaced-out font.

disrupting
offshore wind

Thank you for your interest!

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