



Oceanic Renewables in Galicia: Promoting a happy coexistence

OCEANIC
RENEWABLES
SUMMIT

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1. INEGA

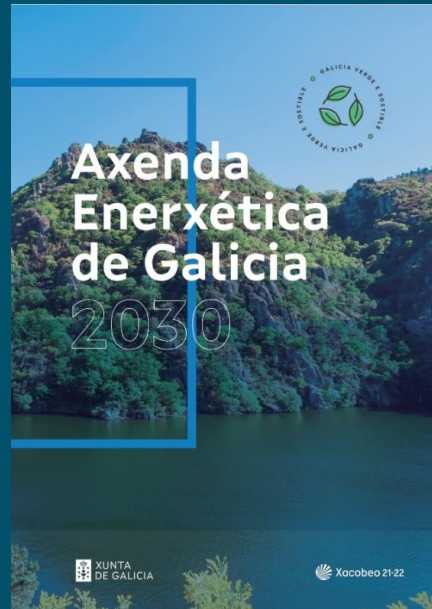
1. INEGA

The Galicia Energy Institute – **INEGA** is a **regional public agency** of the **Galician Government** whose main objectives are the promotion and implementation of initiatives for **research, study and support** of actions related to **energy, energy efficiency, optimal management of energy resources and renewable energies**.



1. INEGA

- ✓ 57 employees.
- ✓ 2024 Budget: ~ 80 M€ → Most part of it dedicated to project grant funds for companies, households, public administration, etc. for projects related with energy efficiency and renewable energies.
- ✓ Our roadmap for the next years is:



55% de reducción nas emisións de gases de efecto invernadoiro totais respecto ás de 1990
58% de renovables no consumo de enerxía final
84,8% de renovables na xeración de enerxía eléctrica

For its achievement:

- 7 Axis of action.
- 23 Actions.
- 56 Measures.

2. Renewable energies in Galicia

2. Renewable energies in Galicia



Reference region in terms of potential and energy generation from renewable sources:

- ✓ 4th region in Spain in wind energy installed electric power.
- ✓ 3rd region in Spain in wind energy electric power generation.



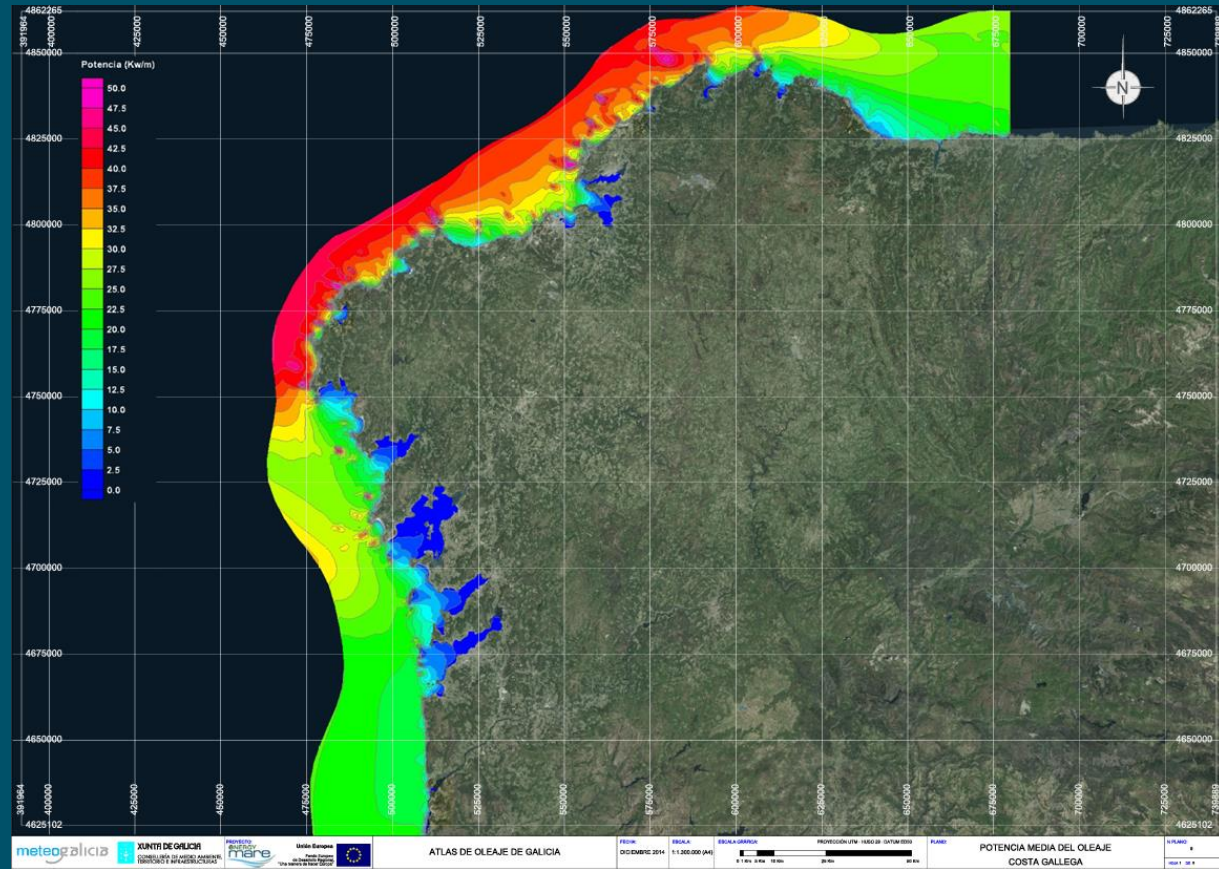
Despite Galicia is the 7th region by extension in Spain

In the wind sector Galicia has 3.905 MW in operation and more than 4.100 MW in process, generating, in 2023, 9.086 GWh of electric power.

3. Oceanic renewable energies potential

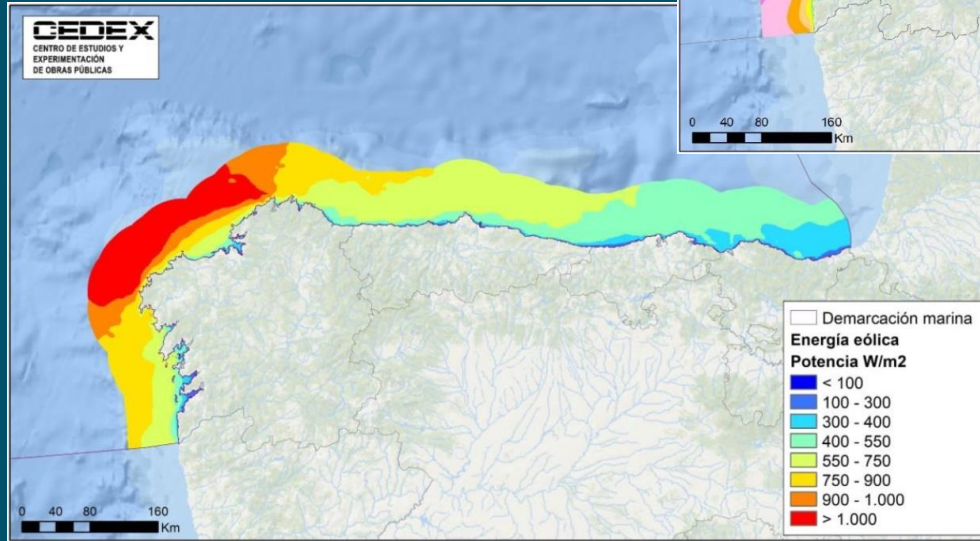
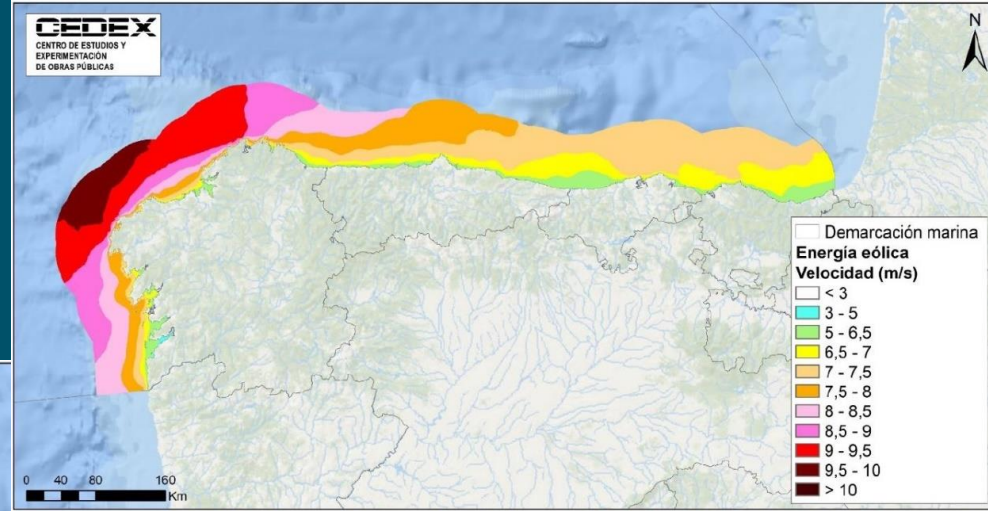
3. Oceanic renewable energies potential

Waves energy:



3. Oceanic renewable energies potential

Off-shore wind:



4. Capabilities

4. Capabilites



✓ Off-shore wind sector in Galicia (*):

- 225 companies.
- 800 direct workers.
- 400 indirect workers.

AGENTES EMPRESARIALES



- › Navantia
- › Reganosa
- › Iberdrola
- › Windar
- › Edp
- › Naturgy
- › Endesa
- › Greenalia
- › Magallanes Renovables
- › Galenergy
- › Josmar
- › ACSM
- › GRI
- › Norvento enerxía
- › Seaplace
- › Nervi3n industries
- › Maessa
- › Armaduras metálicas San Juan
- › Acebron group

CENTROS TECNOL3GICOS



- › CETMAR
- › Energy Lab
- › Itg
- › Aimen
- › Gradiant

UNIVERSIDADES



- › Universidad de La Coruña
- › Universidad de Santiago de Compostela
- › Universidad de Vigo

ASOCIACIONES Y CLÚSTERES



- › Asime
- › Cluergal
- › Aclunaga

5. Knowledge and coexistence promotion

5. Knowledge and coexistence promotion

5.1 Test sites

- Promotion of ocean energy technologies, including floating offshore wind, in Galicia.
- Generation and dissemination of knowledge about ORE.
- Studies development of the marine environment and biodiversity.
- Attraction of technologists and companies.
- Creation of new business and employment opportunities in the Galician industry.
- Development of an innovation ecosystem around ocean energy and offshore wind in Galicia.

5. Knowledge and coexistence promotion

5.1 Test sites – Galician ORE test site in operation

MAIN FEATURES OF THE SITE:

Annual average energy flow: 20-30 kW/m

Surface: 2,2 km²

Depth: 20-60 m

Distance from dock: 500 m

Signaling: AIS-AtoN (virtual)



5. Knowledge and coexistence promotion

5.1 Test sites – Galician future Floating Off-shore Wind test site



FOW test site main features:

- The test site will be **located 10 km from the shore** and it is on a sandy seabed.
- **Technical developers** will be able to **test and validate** their devices and components **under real operation conditions**.
- It will have an infrastructure on land to technical work, warehouse, workshop, meeting area, etc.
- It respects the traditional and sustainable economic activities carried out in its surroundings, such as fishing.

5. Knowledge and coexistence promotion

5.2 Galician Off-shore Wind Observatory

- ✓ Established in **June 2021**, as a **meeting point** for the **generation of knowledge and the identification of opportunities in relation to the development of offshore wind power in Galicia**, always with the premise of respect for all the activities that are already being developed in the sea.
- ✓ **Forum for dialogue, meeting and analysis** for the search for the **coexistence and compatibility** of the potential development of offshore wind power in Galicia **with all existing activities**, with special attention to maritime-fishing activities.
- ✓ **Members:**
 - Galician Administration: Ministry of Economy, Industry and Innovation; Ministry of the Sea and Ministry of the Environment, Territory and Housing of the Xunta de Galicia.
 - Fishing sector: Federations of Fishermen's Associations and the Galician Fisheries Council.
 - Industrial sector: Association of Metal Industries and Associated Technologies of Galicia – ASIME.
 - Tecnical secretary: Galicia Energy Institute – INEGA.

- ✓ **Working groups:**

- WG 1 – Regulatory Analysis and Planning.
- WG 2 – Technology and Innovation.
- WG 3 – Social impact.

- ✓ Until now: 23 meetings held in the different working groups.



The background features a dark teal base with two large, wavy, overlapping shapes. The upper shape is a lighter teal color, and the lower shape is a vibrant blue color. Both shapes have a soft, gradient-like appearance.

Obrigado!
Thank you!