



Energy Observer



## **“A Journey to Carbon Neutrality” Energy Observer unveils its groundbreaking new expedition (2025–2033)**

**Nice, June 6, 2025** – Driven by its pioneering energy transition laboratory vessel, **Energy Observer** officially announces its new expedition (2025–2033), entitled **“A journey to Carbon Neutrality.”**

Unveiled during the United Nations Ocean Conference (UNOC3), **this new expedition was launched by Mrs. Agnès Pannier-Runacher, Minister for Ecological Transition, Biodiversity, Forest, the Sea and Fisheries.** On this occasion, she awarded Victorien Erussard, founder and president of Energy Observer, the Knight's medal of the French National Order of Merit.

This nine-year journey, structured around seven key missions, aims to explore tangible solutions to the major climate challenges of our time, with one common goal: **identifying the keys to carbon neutrality.**

### **An adventure supported by committed partners**

To carry out this ambitious global expedition and its initiatives to raise public awareness the challenges of the energy transition, Energy Observer can already count on the support of its first official partners, who fully share its vision, values, and goals: **Accor, Delanchy Group, Qair, Natixis, Roullier Group, Toyota, and Chart Industries.** These strategic collaborations provide essential financial, technical, and scientific support to meet the challenge of carbon neutrality and to develop the innovations that will shape the maritime mobility of tomorrow.

## A legacy of innovation and exploration

Since her launch in 2017, the Energy Observer laboratory vessel has proven the **viability of a renewable energy mix** (hydrogen, solar, wind, and hydropower), sailing over **68,000** nautical miles—more than three times around the Earth. During this first seven-year Odyssey, the vessel visited over 50 countries and made 101 stopovers, demonstrating the ability of sustainable technologies to perform under a wide variety of climatic and geographic conditions.

Each stopover offered an opportunity to collaborate with scientists, industry players, and policymakers, allowing us to better understand global energy challenges and explore solutions tailored to each region. This Odyssey confirmed that the energy transition requires an integrated approach, where technologies complement rather than compete with one another. It was also a chance to engage younger generations sharing the keys to understanding a more responsible energy future.

*"The Energy Observer adventure was born from my passion for the sea, combined with a deep awareness of the environmental impact of our maritime activities. Faced with the climate emergency, doing nothing was no longer an option. With Energy Observer, we chose to take action at our own scale,"* said **Victorien Erussard, founder and president of Energy Observer.**

## 2025–2033: Seven missions to investigate the feasibility of carbon neutrality

With this new expedition, Energy Observer begins a new chapter in its journey, focused on exploring concrete solutions to achieve carbon neutrality, while also addressing closely related issues such as biodiversity protection, ecosystem resilience and the adoption of circular models.

The expedition will be structured around seven thematic missions, each exploring key levers to assess the feasibility of reaching carbon neutrality.

- **2025–2026 – Mission 1: Carbon Capture**  
This first mission will focus on analyzing carbon capture, storage, and utilization solutions for CO<sub>2</sub>—the primary greenhouse gas responsible for climate change. Energy Observer will sail across Europe and the North Atlantic to study related industrial technologies, as well as natural ecosystems capable of long-term carbon sequestration.
- **2027 – Mission 2: Sustainable Mobility**  
This year will mark a major milestone with the **launch of EO3**, ten years after the first laboratory vessel, EO1, set sail. The mission, based in Europe, will be dedicated to the **decarbonization of all forms of transportation**: road, rail, maritime, and air.
- **2028 – Mission 3: Artificial Intelligence and the Energy Transition**  
Along the North American coast, EO3 will investigate the role of artificial intelligence in the energy transition—assessing its potential to optimize energy systems and its net environmental benefit, considering its growing energy and material footprint.
- **2029 – Mission 4: Strategic Materials and Circular Economy**  
EO3 will circumnavigate Africa to explore the strategic role of critical metals in the energy transition. The mission will analyze their availability, the environmental and social impacts of extraction, and the global challenges of sovereignty and dependence they pose.

- **2030–2031 – Mission 5: Fossil, Renewable, and Nuclear Energies**  
Over the course of a two-year mission through the Middle East, Asia, and Oceania, EO3 will explore the coexistence of fossil fuels, renewables, and nuclear energy within diverse economic, climatic, and political contexts.
- **2032 – Mission 6: Water, Access to a Vital Resource**  
In South America and as far as the Antarctic Peninsula, this mission will focus on sustainable water management—an increasingly fragile vital resource under the strain of climate change. The mission will examine the tensions between availability, quality, energy use, and essential human needs.
- **2033 – Mission 7: Arctic World Tour**  
To conclude this expedition, EO3 will undertake a polar world tour through the Arctic—an environmental sentinel of climate disruption and a stage for emerging geopolitical shifts. This mission will bring together experts from multiple disciplines to inform long-term adaptation and resilience strategies in the face of climate crises.

### **EO3: A Vessel to Illuminate Tomorrow's Energy Choices**

EO3, the proud successor to EO1, is a next-generation expedition catamaran that embodies the future of low-carbon shipping. In response to the International Maritime Organization's target of a 70% reduction in greenhouse gas emissions by 2040, EO3 stands as a pioneering vessel designed to test and validate new decarbonized maritime solutions.

Its innovative energy system combines multiple complementary sources:

- **A low-carbon fuel: ammonia, an efficient hydrogen carrier;**
- **Electric propulsion powered by batteries and both low- and high-temperature fuel cells;**
- **Solar panels and four wing sails that contribute to propulsion and energy autonomy.**

EO3 is more than a vessel. It is a true innovation hub, designed to host multidisciplinary experts, engineering projects, audiovisual productions, and international events.

*“EO3 is above all a technological demonstrator. Its purpose is not to validate a single solution, but to assess, over time and at sea, several complementary energy architectures. Our goal is to deliver concrete, measurable data on the performance, robustness, and integration of these technologies. It is this experimental, rigorous approach that will help inform future industrial and regulatory decisions,”* **emphasizes Didier Bouix, CEO of EO Concept.**

---

### **About Energy Observer**

**Energy Observer** is first and foremost a name engraved on the hull of a pioneering vessel — both a floating laboratory and an energy manifesto. Launched in 2017, this experimental catamaran was the first in the world to embark a complete hydrogen chain, combined with renewable energies and wind-assisted propulsion, to demonstrate the viability of sustainable solutions in demanding maritime environments.

But **Energy Observer** is also a much broader initiative, at the crossroads of scientific exploration, technological innovation, and environmental awareness. Today, it brings together engineers, sailors, journalists, experts, and artists with a shared mission: to experiment, to decipher, to raise awareness.

The group focuses its efforts on three main goals: experimenting with cutting-edge technologies to reduce emissions in maritime transport, deciphering and explaining global energy challenges, and raising public awareness to help achieve carbon neutrality.

More information: <https://www.energy-observer.org/en/>

Contact: [media@energy-observer.org](mailto:media@energy-observer.org)

First official  
partners  
committed



Official  
supporter



Contractors  
and official  
suppliers

Rockwell Automation | Solbian

Approved service  
providers and  
suppliers

Laurent Perrier | Mapalga | Smeg