

# *Communiqué -* Energy Observer sets sail from France on an entirely self-sufficient 4-year voyage around the world

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On the 2020 programme, the negotiation of 2 major oceans via 9 stopovers spanning 2 continents.

Highlights: Tokyo during the Olympic Games then 3 major cities within the State of California, the cradle of America's ecological transition.

Next stopover: Bound for Morocco or the Canaries according to the weather conditions.

Energy Observer, the first vessel powered by renewable energies and hydrogen, cast off this Tuesday 3 March on her epic 4-year round the world voyage.

Aboard the boat on leaving Saint Malo in northern Brittany is a substantial team that includes her two historical leaders, the two captains, the ship's engineers as well as engineers from Energy Observer Developments, who will be present to keep an eye

on the setting in motion of all the innovative systems in what still promises to be a difficult sea state as far as Portugal. A boisterous introduction awaits then, but this is a key phase in the bid to make the most of a small weather window in the slew of storms sweeping across the North Atlantic in recent weeks.

On the horizon is a highly colourful 2020, which will see the French vessel cross 2 major oceans and make 9 stopovers, with its two leaders, Victorien Erussard and Jérôme Delafosse, helping to relay the Olympic flame to Japan in early July.



### New on-board technologies

After 3 years navigating her way round Europe having all her on-board technologies tested and developed, Energy Observer has been further optimised over the course of the winter. Equipped with a new Toyota fuel cell, additional solar panels, now notably vertical and using screen-printing technology (increasing the park's total surface area to 202m<sup>2</sup>), as well as new variable pitch propellers and two optimised and fixed Oceanwings®, Energy Observer, which is powered by a combination of several sources of renewable energies and a green hydrogen-fuelled production and storage system, is all systems go for her future sea passages, completely self-sufficient in energy.

## Some key stopovers to document the revolution in energy and hydrogen and meet up with more protagonists involved in ecological transition

There are 20,000 nautical miles or nearly 37,000km to be covered in 2020, which equates to nearly the circumference of the earth. After Morocco or the Canaries, then on to Saint-Barthélemy's in the French West Indies. The negotiation of the Panama Canal (and a stopover in the eponymous capital) will enable the crew to make Hawaii and finally Tokyo, from July 24 to August 9, during the Olympic Games.

"These Games, where the dominant theme is hydrogen, will be the opportunity for Energy Observer to bear witness to a series of spectacular initiatives in this direction! For example, considerable investment has gone into developing infrastructure and transport. In this way, the government has set itself a target of having 40,000 vehicles running on fuel cells in circulation in the country this year and no fewer than 800,000 by 2030. A prime example of clean mobility!" Victorien Erussard, Chairman, captain and founder of Energy Observer

The fuel cell already equips over 250,000 Japanese households for their energy supply. Several hydrogen production facilities have already been installed. Air Liquide is a key protagonist in this transition, with a profusion of infrastructure projects, and Toyota will supply some 500 hydrogen cars, as well as around a hundred hydrogen buses during these Games.

As such, like its Korean and Chinese neighbours, Japan has witnessed a sea change in the hydrogen revolution, and Energy Observer is keen to bear witness to this clean, respectful, decentralised, digitalised society that is self-sufficient in energy and to which future generations aspire.

### Documenting the ecological transition in California

After this historic 3-week Japanese stopover, another Pacific crossing will follow, destined for California with three main stopovers, San Francisco in October, Los Angeles in November, and San Diego in December.

"Today this State is demonstrating a remarkable pioneering spirit in terms of energy and ecological transition, in a country largely fuelled by hydrocarbons elsewhere. The State of California, which is particularly exposed to climate change, water stress, large fires and a rise in water levels, has switched course and now invests heavily in sustainable solutions, which we're eager to document through our audiovisual productions."

Jérôme Delafosse, Expedition leader and film director

Hydrogen is also used widely here and along the entire Californian coast: in 2019, 7,000 cars ran on hydrogen, with a target of 5-million zero-emission vehicles in 2030, compared with 350,000 today.

In Los Angeles, the first hydrogen-powered lorries have been designed and this fuel is becoming widely available at filling stations. The country's largest solar park, Solar Star, features over 1.7-million photovoltaic panels and the State of California has committed to the "100% clean energy act", which plans to switch over from using 30% renewable energies today to nearly 100% by 2045!

Breaking new ground on a global scale in terms of waste management, San Francisco is a model city. Indeed, with 80% of its waste recycled today, it still aims to secure a 100% record by the end of the year. The digital economy is also a key element of San Francisco's identity of course, as is the sharing of mobilities and technological innovation. Beneath the Golden Gate Bridge, the first hydrogen-powered aluminium ferry, Water-Go-Round, is being built using robust technologies, akin to those used on Energy Observer.

San Diego is an equally important stopover for the zero-emissions vessel due to its strong maritime culture born from the presence of a massive Marine base and its rich history linked to the America's Cup. Today, the city benefits from significant university activity, notably thanks to the University of San Diego, whose programmes and local initiatives are recognised for their relevance regarding climate change and biodiversity. With the Isla Guadelupe, a sanctuary for white sharks, the Sea of Cortez and its whales, San Diego is surrounded by sites brimming with exceptional biodiversity: a paradise for divers and shark aficionados. Naturally, it is the perfect opportunity to film some spectacular images and get out and meet those who are committed to protecting this biodiversity.

#### About Energy Observer

Energy Observer is the first energy self-sufficient vessel, with zero CO2 emissions, zero fine particles, and zero noise, producing its own hydrogen onboard from seawater using a mix of renewable energies. This vessel of the future has already traveled more than 18,000 nautical miles around the world.

Designed as a floating laboratory, Energy Observer experiments and validates all sorts of embedded soft mobility innovations. This real floating smart-grid, prefiguring the energy networks of tomorrow, draws its energy from nature without damaging it or wasting its resources.

She sails around the world, stopping in many iconic cities to meet the pioneers of the ecological and solidarity transition, but also elected officials, decision-makers, shipowners and major economic players. Energy Observer demonstrates on a daily basis that fully carbon-free, decentralized and digitized energy has become a reality within everyone's reach, applicable at various scales (remote sites, districts, cities...).

Next to its innovation program, Energy Observer is developing a mission of general interest to help raise awareness on the challenges of the ecological transition among all audiences, through its audio visual productions, exhibitions, and meetings with scientists. Like as modernday Calypso, the boat and her crew relate their journey around the world, in an original documentary series called « The Odyssey for the future® ». Energy Observer also produces a web-series "Solutions" with a permanent focus on the 17 Sustainable Development Goals, allowing as many people as possible to discover new concrete solutions for the future.

Energy Observer has received the High Patronage of Mr. Emmanuel Macron, President of the French Republic. French ambassador for the UN's sustainable development goals, supported by the Ministry for Ecological and Inclusive Transition, UNESCO, the European Union, Irena, Ademe, and all the institutions concerned with ecology, Energy Observer is the inspiring and positive voice of the vital ecological transition.

