



Communiqué de presse - A new chapter for the Odyssey at the heart of Africa's energy transition

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For the laboratory vessel's 2023 agenda, the team has prepared many highlights:

Africa first, with its countless ecological, demographic, and energy challenges, with layovers in Kenya, Tanzania, and Madagascar, before moving on to South Africa for an eventful stopover with the pedagogical exhibition village in Cape Town.

A rich and original audiovisual production on the challenges and solutions of the energy transition in Africa, that holds a compelling diversity throughout the continent.

A second transatlantic crossing, from Africa to South America and Brazil, and the 100,000 km mark crossed since the beginning of the Odyssey in 2017!

Energy Observer continues the 6th year of its round-the-world Odyssey to discover the energy challenges of the African continent. The first vessel powered by renewable energies and hydrogen, the first French ambassador of the 17 Sustainable Development Goals, will soon cast off after a few weeks of technical stopover to set sail for East Africa.



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From Africa to South America

After crisscrossing South East Asia in 2022, from Indonesia to India through Singapore, Energy Observer is about to cross the Indian Ocean, then the Atlantic Ocean to head towards South America. Dotted with isolated island states, the Indian Ocean witnesses global warming and is highly exposed to energy issues.

At the end of this crossing, the vessel will stop in South Africa, the continent's economic powerhouse with a historical dependence on coal. Then to Brazil, where many alternative energy projects are developing.

2023 will therefore be more than ever focused on observing and deciphering the energy issues of our time in a rapidly changing southern hemisphere.



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Home to 17% of the world's population, Africa accounts for 6% of energy consumption and 3% of greenhouse gas emissions worldwide. Electrification remains a challenge: 43% of the population does not yet have access to electricity, yet it is an essential factor for development, as stated in the 2030 Agenda's SDG 7.

In May 2022, 12 African countries that account for more than 40% of the continent's total CO₂ emissions committed to achieving net zero emissions by mid-century.

Africa also has more than 40% of the world's reserves of cobalt, manganese, and platinum: essential minerals for batteries and hydrogen technologies (source: IEA 2022).

Energy is undeniably a key element for the continent's development, and the necessary infrastructures are immense, as are the needs!

"Africa is a defining continent for the future of the global energy landscape. The potential for the development of renewable energies and green hydrogen production is immense, and the presence of the raw materials necessary for the development of technologies for the energy transition are all exciting issues that we are eager to discover and share through our Odyssey".

Victorien Erussard - President, captain and founder of Energy Observer



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An energy transition with multiple facets

At a time when South Africa, currently the 14th largest emitter of greenhouse gases in the world, is aiming for net zero by 2050, an ambitious roadmap has been acted, upon that includes the development of renewable energy and the production of green hydrogen.

In a country where coal remains at the heart of economic development, creating more than 92,000 jobs, and remains the country's immediate source of energy and electricity - accounting for 71% of primary energy consumption and more than 86% of electricity production - the challenge is significant.

Moving away from coal will be difficult for the continent's most developed economy. As one of the most emblematic countries in terms of constraints and opportunities related to the development of a low-carbon economy, South Africa will have to face a chronic energy production deficit with its aging fleet of power plants while aiming to reduce the use of coal and limit the social consequences of quitting this resource.

With an expected increase in energy demand and a shortage of electrical capacity, diversification of the energy mix has become a priority objective to ensure the security of supply. The most obvious solution is to add cheap renewable energy as soon as possible. As a country that ranks among the top three countries in the world in terms of solar potential and has wind resources, renewables represent a credible low-emission alternative.



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To remain internationally competitive while meeting climate targets, South Africa's mining sector has to reinvent itself by supporting socio-economic development only if it promotes decarbonization. How can this be done? By leveraging its raw material reserves to meet the demand for transition minerals, such as lithium, manganese, and platinum group metals, used in green sectors such as renewable technologies, fuel cells, electrolyzers, and batteries.

During the COP26 in Glasgow, France, the European Union, the United Kingdom, and the United States committed to supporting the Just Energy Transition to accompany South Africa in its gradual exit from coal. The first of its kind, this partnership will serve as a model for all countries on the continent if successful.

A challenging technical shipyard

In preparation for the upcoming navigations, the laboratory vessel has undergone a technical worksite lasting several weeks in the Seychelles archipelago, the time to optimize our onboard hydrogen system and to replace numerous photovoltaic panels that were damaged and tired from navigating in the tropics.



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The crew also took advantage of this shipyard to optimize the cooling circuits of the technologies, which endured severe conditions, particularly with high temperatures. Our engineers have also carried out significant maintenance on the compressors of the hydrogen chain to maintain the initial storage performances.

Considering the cyclonic weather conditions in the south of the Indian Ocean and the necessary optimization and maintenance works, Energy Observer will set sail again at the beginning of April at the end of the cyclonic season, towards Tanzania, Mayotte, Madagascar, and South Africa.

The next destination will be Tanzania, located past the cyclone zone. The catamaran will then be heading south once out of danger.

Seychelles was identified as a strategic location for the optimization shipyard since the archipelago is at the border of the seasonal cyclone zone. For instance, cyclone Freddy generated a 12 m swell (the height of our masts) which could have strongly damaged our laboratory.

A first federating stopover

This technical stopover on the island of Mahé was punctuated by institutional visits with the support of the French Embassy in Seychelles, representatives of the Seychelles government, and the Odyssey's partners such as the Qair Group.

Mr. Ahmed Afif, Vice President of Seychelles, Mr. Flavien Joubert, Minister of Environment and Energy, Mrs. Olivia Berkeley Christmann,

Ambassador of France to Seychelles, and Mr. Tony Imaduwa, Permanent Secretary of the Ministry of Energy, boarded the laboratory vessel to discover the embedded technologies and their potential for deployment in isolated sites.

Energy Observer's educational goal persists with the welcoming on board of many schools of the island of Mahé (including the maritime academy, the international school, and the French school) in partnership with the Alliance Française and the Sustainable Ocean Alliance as well as local NGOs (The Seychelles Islands Foundation, The Seychelles Conservation and Climate Adaptation Trust, The Marine Conservation Society), under the aegis of Energy Observer Foundation.



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Documenting the continent's energy challenges

Several dedicated films are currently in production and will be released in the coming months:

Africa's energy challenges and its extraordinary potential for clean energy.

The challenges and assets of East African countries (Kenya, Tanzania, and Madagascar) in terms of renewable energy production

South Africa's energy challenges, and more specifically, the solutions implemented by the country as part of its roadmap to achieve carbon neutrality.

These 10 to 15-minute films also support conferences, debates, and awareness-raising operations. Produced in English, they will be embodied by Victorien Erussard and our energy expert, Beatrice Cordiano.

The vessel's 2023 program

Mahé, Seychelles, until April 3

Stopover in Zanzibar, Tanzania, from April 13 to 17

Stopover in Mayotte, from April 25 to May 7

Stopover in Majanga, Madagascar, from May 11 to 13

Stopover in Durban, South Africa, from May 25 to 27

Stopover in Cape Town, South Africa, from June 8 to 18

Stopover in Walvis Bay, Namibia, from August 21 to 27

Stopover in Jamestown, St. Helena, from September 6 to 10

Stopover in Salvador, Brazil, from September 29 to October 5

Stopover in Fortaleza, Brazil, from October 14 to 20

Stopover in Kourou, Guyana, from November 2 to 5

Please find the Energy Observer animated route [here](#)

About:

Energy Observer is the name of the first hydrogen-powered, zero-emission vessel to be self-sufficient in energy, advocating and serving as a laboratory for ecological transition. The development of reliable, sustainable, emission-free, and economically accessible energy solutions is at the heart of our odyssey and our industrial subsidiary EODev. We have been sailing around the world for 7 years, stopping in iconic cities to meet pioneers who devote their energy to the development of sustainable solutions that respect the planet.

As the first French ambassador for the 17 Sustainable Development Goals set by the UN, our mission - reinforced by our endowment

fund Energy Observer Foundation - is to raise awareness of the ecological transition issues and explore solutions that prove that another energy future is possible.

Energy Observer has received the High Patronage of Mr. Emmanuel Macron, President of the French Republic. It has the official support of the Ministry of Ecological Transition, UNESCO, the European Union, Irena, and Ademe.

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