



Indigo Civilization
the ocean dwellers

FAQs

What is Indigo Civilization?

Indigo Civilization is a French non-profit and public-interest organisation, founded in 2023. It structures an international ecosystem of multidisciplinary skills necessary for the design and testing of sustainable adaptation solutions for territories threatened by rising water levels.

Its mission is to demonstrate that it is possible to adapt to climate change and rising sea levels without fighting or fleeing the sea. Its ambition is to initiate a new form of symbiotic collaboration with aquatic environments, in order to transform current and future constraints into opportunities.

Indigo Civilization is working on modelling and experimenting with a long-term symbiotic adaptation solution. Its Smart Offshore Ecosystem concept aims to bring together modular, floating, multifunctional and biophilic infrastructures, operating beyond the coasts to mitigate anthropogenic pressures on these ecosystems that are often fragile or even saturated.

Indigo Civilization federates and leads an international network of multidisciplinary expertise to co-construct, experiment and validate viable and adaptable models. From ideation to operational execution, Indigo Civilization ensures the interests and buy-in of all stakeholders: investors, public authorities, local community and biodiversity.

Its transdisciplinary experimental methodology combines in-depth state-of-the-art, oceanic foresight, local experimentation, close cooperation between public and private actors, and international collaboration:

- Structuring territorial studies and modelling.
- Implement and interact technological, technical and social building blocks: renewable marine energies, housing, marine permaculture, regenerative architecture, circular economy, governance and insurance, mesology, economic engineering, sustainable tourism.
- Develop pilots and demonstrators in France and abroad.
- Develop replicable models, including for resource-limited settings.

Why is Indigo Civilization considering its concept, offshore, beyond the coast?

Given the challenges ahead, consequences of climate change, humanity will need the Ocean to meet its needs, food and energy in particular. This inevitable development of the blue economy presents significant economic and ecological risks. How can we relearn to work in symbiosis with the Ocean, for the benefit of all living beings? How can we reconcile economic development and socio-cultural resilience through a biophilic and integrated blue economy?

As coasts are very often saturated and present many demographic, social, economic and ecological conflicts of interest, it seems wise to us to move away from them, whether a few hundred metres or a few kilometres depending on the context.



Is the objective of Indigo Civilization to make people live at sea?

Peoples around the world have learned to live on water: the Bajau and the Moken in Southeast Asia, the Sama-Bajau in East Africa, the Malaita people in Oceania, the Uros in South America, the Venetians from the 5th century, or more recently, the Dutch in Europe. These populations have often settled on the water to escape environmental threats or invasions. They have adapted brilliantly given the low-tech solutions available to build resilient aquatic infrastructures: kelong, pile dwelling, lakeside city, hausboote...

In addition, we estimate that about 3 million people are currently living at sea for extended periods of time: navy and military personnel, oil and gas platforms, tourist liners, etc. Living on the water is not a utopia. This is already a plural reality.

Yet, we do not believe that humans will spontaneously go to live full-time at sea in the current state of affairs unless they are forced to do so, by a lack of resources or an environmental upheaval such as rising sea levels.

In the medium term, we think humans will go to work more and more at sea, and gradually further and further from the coast. This will require infrastructure capable of accommodating them over more or less long periods.

In the long term, humans may want to live at sea full-time for reasons of productivity, comfort or resilience. In our view, the habitat at sea will be primarily the consequence of necessary activities at sea. In the meantime, our Smart Offshore Ecosystem concept will make it possible to understand how humans could work and live in symbiosis with and on the Ocean according to an alternative philosophy: welcoming the sea rather than fighting or fleeing it.





Indigo Civilization the ocean dwellers



What will a Smart Offshore Ecosystem be used for?

The concept of the Smart Offshore Ecosystem is not fixed and unique. Protean according to the environmental and social context, it aims to produce a nexus [energy + food + water] in a symbiotic way that benefits all living beings.

More than a shared maritime infrastructure, a Smart Offshore Ecosystem defines a new model of modular aquatic urbanism within an environment that is by definition agile. It aims to intelligently combine, within a modular 3-dimensional space, co-activities to create new profitable and sustainable synergies. Depending on the global context, this priority nexus can be supplemented by other co-activities, subject to their relevance: eco-tourism, research and education, biotechnologies, exploration, monitoring, housing, depollution, etc.

Who is the Smart Offshore Ecosystem solution initiated by Indigo Civilization for?

Our solution aims to learn to work in symbiosis with the marine world to transform constraints into opportunities. Small island territories are particularly relevant to study insofar as they synthesize many challenges, both present and future: scarcity of resources and low self-sufficiency (food, fresh water, energy), climate change (rising and acidification of waters, loss of biodiversity), low economic diversification, etc.

If we want to propose a symbiotic, efficient and sustainable blue economy model, thanks to shared and biophilic offshore infrastructures, we want to gradually understand how communities could ensure their socio-cultural adaptation and resilience in the decades to come.

Thus, our approach intends to contribute to the adaptation and development of any vulnerable island or coastal community in the medium and long term. By the end of the 21st century, we estimate according to various sources (IPCC, WEF) that between 400 and 800 million people could be affected.



Indigo Civilization
the ocean dwellers

How could our solution be a global response to climate change and its consequences?

Our approach is as much scientific as it is philosophical. Through our research and innovation project, we want to offer an alternative vision of the interaction between humans and Nature. We want to demonstrate that it is possible to reconcile human needs and environmental balance. We want to prove that it is possible to adapt in a timely way, to transform inevitable constraints into alternatives and opportunities.

Why is Indigo Civilization a non-profit and public-interest organisation?

Our initiative, which is as much scientific and technical as it is philosophical, is complex and aims at a viable and harmonious long-term result. Its gradual research/action process will engage many stakeholders, civil, public and economic. Our project aims to bring together sometimes divergent interests.

To be free to think and innovate, we want to avoid dogmas and conflicts of interest. We believe that a balanced philanthropic consortium is the best option to meet this urgent need and complete the first phase of our ambitious project. In addition, we want to reassure local stakeholders about the integrity of our approach.

Why is our project not utopian?

Indigo Civilization draws its ambitious and avant-garde vision from a very rich state of the art. We estimate that at least 90% of the techniques and technologies necessary to experiment with our Smart Offshore Ecosystem concept are already available.

Our research/action project is mainly about understanding how existing solutions, more or less mature, can be combined in order to create new synergies: "the whole is greater than the sum of its parts" - Aristotle.

Our main challenge is complex project management and consists of getting complementary expertise with different priorities to work together, in a transdisciplinary way, in order to define, model, simulate, experiment and make reliable a global, sustainable and economically viable solution.

Why join a philanthropic consortium for such a project?

Joining our philanthropic consortium, whether as a natural or legal entity, allows us to contribute to the general interest while benefiting from substantial tax advantages, which vary from one country to another (see documentation proposed by [the European Fundraising Association](#)).

Beyond an altruistic approach, philanthropy rationally makes it possible to de-risk impact investing on a larger scale and to prepare disruptive innovations and future business models.



Why the island of Bora Bora? Are there other territories involved?

The island of Bora Bora, in French Polynesia, is the first territorial partner of La Indigo Civilization. Other European overseas territories with complementary issues are interested in contributing to and participating in our project, whether in the Pacific Ocean, the Indian Ocean or the Caribbean.

Our project to work beyond the coasts and lagoons in a symbiotic way is part of a sustainable development approach initiated on the island of Bora Bora about twenty years ago.

This Polynesian territory, a real laboratory for an exemplary and sustainable future, has a favourable environmental and climatic context. However, land pressure is very high and the municipality has just imposed the first protected marine reserve in the world: nearly 700 hectares to ensure the resilience of its legendary lagoon.

In this context, the Smart Offshore Ecosystem project will be considered as a territorial extension of the island aimed not only at alleviating the pressure on the coasts and congested land but also at transforming constraints into opportunities: energy and food self-sufficiency, jobs and economic diversification, socio-cultural resilience, international exemplarity.

The open sea is a very demanding environment. Is it realistic to settle there?

If living on the water is already a reality, considering it in the open sea may seem worrying. At this stage of our knowledge, the location of a Smart Offshore Ecosystem cannot be considered anywhere. This is why we are considering experimenting with the Smart Offshore Ecosystem concept not far from the coast.

For questions of infrastructure reliability, safety, stability and comfort at sea in the event of a storm, many parameters will have to be analysed prior to any experiment: sea state, winds, currents, bathymetry, meteorology, study of the water column, etc.

How is this project de-risked as much as possible?

Our project follows a gradual development process over a period of ten years.

The first theoretical phase of 3 years aims at the transdisciplinary study, modeling and simulation of the Smart Offshore Ecosystem (digital or via small physical demonstrators). This step does not present any risk since no pilot is built and installed in a real environment. This is a pre-R&D phase intended to attract the support of public, civil and economic stakeholders with a view to an experimental phase. This phase is being framed by a philanthropic consortium involving public and civil stakeholders.

The second phase of our program is dedicated to the incremental construction and experimentation of a pilot in a real environment over 7 to 10 years. It is a question of learning by doing, even if it means sometimes making mistakes, but on a small scale, hence a limited risk. This crucial step is supervised by a public-private consortium involving public, civil and economic stakeholders.

Then, the experience curve will allow us to propose a proven, replicable, viable, efficient and sustainable ocean solution to vulnerable coastal or island territories wishing to adapt.



Indigo Civilization
the ocean dwellers

How does our project differ from other artificial island projects?

The Smart Offshore Ecosystem concept advocated by Indigo Civilization is sometimes compared to other artificial island projects that do not correspond to our vision.

Our project is modular and minimally invasive since it uses floating infrastructure, anchored beyond the coast. It is not a question of creating artificial islands from embankments that are particularly destructive of the local natural ecosystem. A Smart Offshore Ecosystem must above all be biophilic and symbiotic.

Our project aims to create an ecosystem of co-activities that interact with each other to create synergies and a circular economy. Schematically, our initial concept aims to produce energy in a sustainable process that will promote the creation of a new food web and the development of local biodiversity. This will allow for the development of integrated multi-trophic aquaculture around the infrastructure to produce food. This will turn the Smart Offshore Ecosystem into a blue carbon sink.

Our multi-use and holistic concept is driven by the general interest, both of local communities and of biodiversity or public and private economic actors. A Smart Offshore Ecosystem is not a billionaire's paradise or a purely industrial infrastructure. It is an integrated and aesthetic multifunctional ecosystem, serving a triple social, ecological and economic benefit.

How can this project be a real lever for progress for local communities?

We believe that the best way for a society to thrive is to be self-sufficient and to have the ability to finance its adaptation and its progress curve. A Smart Offshore Ecosystem plans to meet this need, as an area of socio-economic activities: production of energy, food and co-products, research laboratory, educational platform advocating the symbiotic blue economy, scientific eco-tourism centre, or even a housing area in a context of rising sea levels. All of these co-activities are an opportunity to gradually create a sustainable sector of excellence, to diversify the economic levers, synonymous with jobs and collective development.

The applied research process of the local Smart Offshore Ecosystem concept is inherently participatory and inclusive. It consults and involves the population in the project's orientations to strengthen collective intelligence and validate the relevance of the project. In addition, experimentation in a real environment will be supervised by local public authorities, representatives of civil society.

What is the genesis of Indigo Civilization?

Indigo Civilization was initiated by its President Frédéric Pons in 2022 and then legally registered in France, as a non-profit and public-interest organisation in 2023.

In 2020, Frédéric survived a sudden health problem. Since then, every day has been a gift for him and every day must be used to live life to the fullest and contribute to a bright collective future. This is why he decided to devote most of the rest of his life to a meaningful project that was consistent with his values of progress, audacity and harmony. Frédéric started this project alone and gradually surrounded himself with a community of international talents and ocean experts to nurture and grow this ambitious project, which is as scientific as it is philosophical.



Indigo Civilization
the ocean dwellers