



NepShuttle
by NepTech

Zero-emission and intelligent passenger vessel



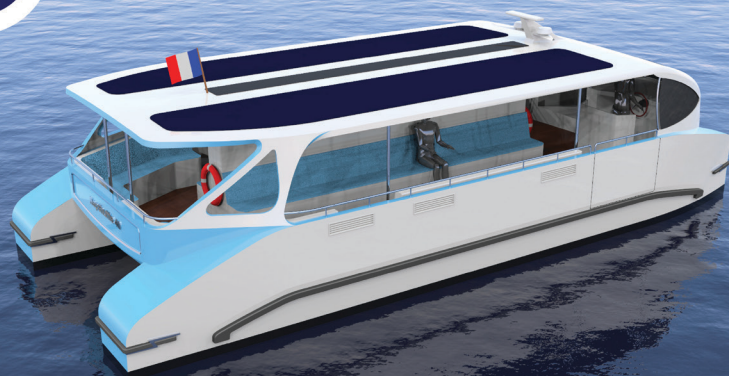
NepRiver
by NepTech

Zero-emission, efficient and intelligent river vessel



NepCargo
by NepTech

Zero-emission and intelligent freight vessel



NepFerry
by NepTech

Zero-emission and intelligent short distance vessel

PRESS KIT



NepTech

Intelligent sea mobility

FOCUSES ON THE VALIDATION OF ITS INNOVATIONS

December 2021

Tanguy Goetz - [tanguy\[a\]neptech.co](mailto:tanguy@neptech.co)

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ÉDITO



« I am delighted to see our projects taking shape! NepTech was born just one year ago, a year marked by great R&D advances and numerous exchanges with ship operators.

We are very proud to have won the «Olympic and Paralympic Games Paris 2024 Mobilities» call for innovations in May 2021 to ensure mobility in Paris and Marseille during the event. With my associates Clément and Corentin and the entire NepTech team, we are proud to be working to offer the naval transport solution of tomorrow.

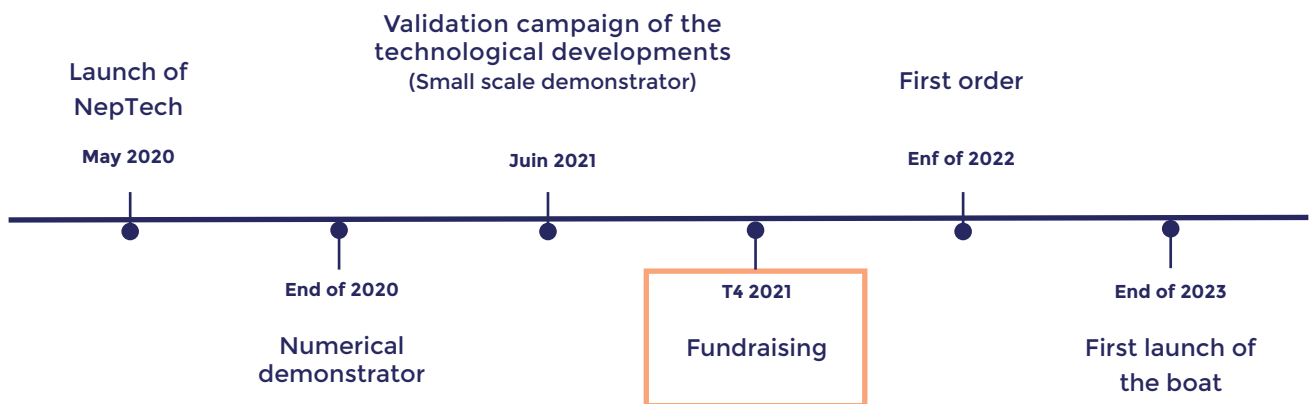
The launching of our technological demonstrator allows us to see the results of our approach and our innovations.

Our vessels are electro-hydrogen powered catamarans of 12 to 24 meters that can carry up to 150 passengers or 20 tons of cargo.

From river shuttles to maritime shuttles, for both passenger and cargo transport, NepTech has developed an innovative product approach based on a common chassis for several uses ».

Tanguy Goetz - CEO & Co-founder

ROADMAP



FUNDRAISING IN PROGRESS

NepTech is opening up part of its capital via a participatory financing campaign open to all on the WiSEED platform in order to pursue its R&D roadmap and the deployment of its ships from 2022/2023.

This campaign is complementary to the mobilization of more traditional investment funds.



The 3 co-founders of NepTech. From left to right: Corentin Bigot, Tanguy Goetz, Clément Rousset.

A MULTIDISCIPLINARY, COMPLEMENTARY AND EXPERIENCED TEAM

30 years of cumulative experience to design the naval mobility of tomorrow

Tanguy Goetz
CEO



Market introduction of more than a dozen new technological products and services

8 years of experience
Aeronautical industry
(Airbus and Safran)
and naval industry

Corentin Bigot
CTO



Design and launch of more than twenty vessels with unique energy performance

15 years of experience
Architecture and shipbuilding
within his own company and
then SeaBubbles

Clément Rousset
Head of Engineering



Integration of zero-emission propulsion systems and conduct of numerical and experimental hydrodynamic studies

7 years of experience
Naval engineering within DGA
Techniques Hydrodynamiques,
Technip and SeaBubbles

A MEANINGFUL AMBITION

The meeting between Clément Rousset, Corentin Bigot and Tanguy Goetz slowly led to a desire to design and innovate, to think of a meaningful solution. Quickly, a double observation was made:

- The strong ecological impact of maritime transport
- The problem of congestion in city centers and the under-utilization of waterways in urban areas.

Indeed, 940 million tons of CO₂ are emitted each year by maritime transport (13% of greenhouse gas emissions related to transport in Europe). Faced with the increase in maritime and river traffic, the IMO requires the

maritime sector to reduce its GHG emissions by at least 50% by 2050. Added to this is the fact that many cities located on the water's edge underestimate the use of waterways, even though they constitute a gas pedal of development, whether logistically, financially or in terms of landscape, and a precious tool for integrating territories, on a small or large scale.

Faced with this, an ambition was born: the desire to develop and market zero-emission, high-performance and intelligent hydrogen-powered transport vessels that match the performance of traditional ships, in order to put waterways back at the center of urban mobility.



NepRiver



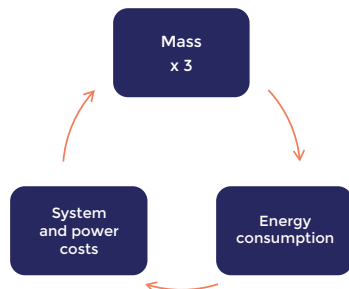
NepShuttle

TOMORROW'S NAVAL SOLUTION

NepTech is revolutionizing the maritime world by offering a zero-emission solution using hydrogen. To achieve this, many challenges must be overcome.

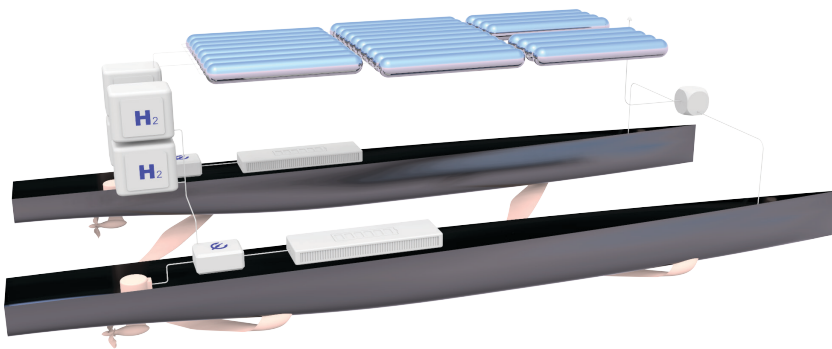
H₂

Hydrogen provides zero-emission propulsion, long vessel range and low maintenance. The H₂ propulsion system represents the only viable zero-emission option for fast, high-performance ships. Green hydrogen is the energy vector that will revolutionize the maritime world, but its use faces several constraints that constitute real challenges, both technological and economic.



With the same performance, the mass of an electro-hydrogen propulsion system is about 3 to 4 times greater than that of a diesel propulsion system. This leads to a higher energy consumption, and therefore cost.

At the economic level, transport operators wish to maintain the operational performance of their current vessels in terms of speed and autonomy while maintaining a reasonable cost level.



The common platform between the different NepTech vessels.
The hydrogen is stored in batteries.

NepTech's technological innovations are aimed at reducing the energy consumption of our zero-emission ships so that they can go faster and further.

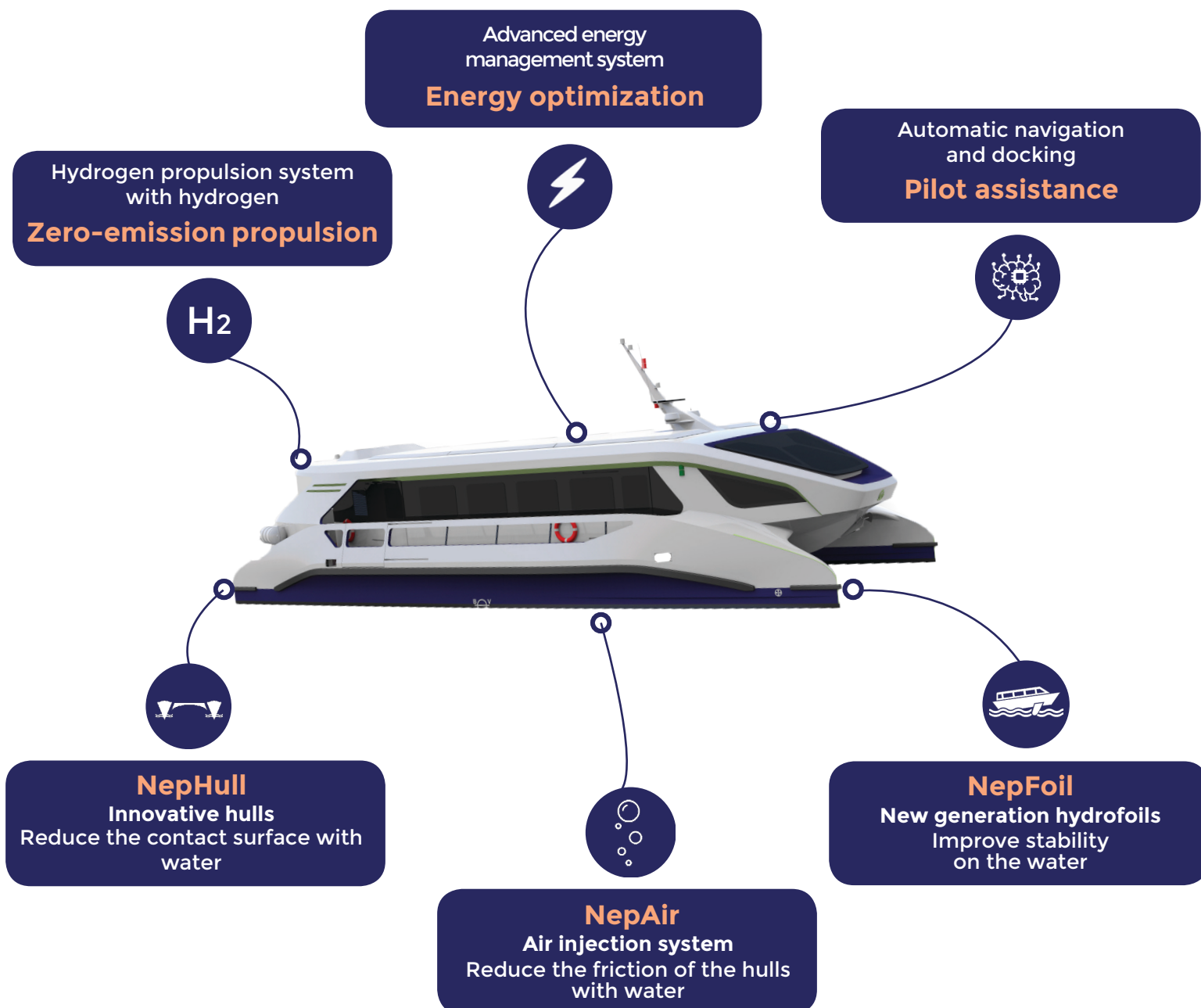


The NepShuttle in the Old Port of Marseille

NepTech is working on two areas of innovation to reduce the energy consumption of the vessel:

Hydrodynamic drag reduction (NepAir, NepHull, NepFoil) : The objective is to reduce the ship's mass as much as possible, as well as wave and friction resistance. These technologies are developed in-house and are the subject of patent applications.

Increasing energy efficiency (zero emission propulsion, advanced energy management system, steering assistance) : NepTech vessels incorporate zero-emission propulsion with an optimized energy management system. In addition, the development of piloting assistance systems will increase energy efficiency.



Eco-design: The vessels are made from flax fiber, bio-based epoxy resin and recycled plastic.

Technological demonstrator

In order to validate the innovations unveiled, NepTech has built a reduced scale technological demonstrator. Scale 1/7th: 2.5 meters long, 1.5 meters wide, 1.5 meters high.



Clément Rousset and Tanguy Goetz with the demonstrator at the Yacht Club of Monaco



Corentin Bigot in front of the demonstrator at VivaTech

The design of the demonstrator meets several objectives:

- Validate the performance performance of the vessel
- Validate the systems of perception and control systems
- Validate the hydrodynamic hydrodynamic performances of the vessel
- Validate the propulsive performances (battery / H2)
- Validate the manufacturing in bio-sourced composite materials



The demonstrator in the port of the Yacht Club of Monaco

First launch of the demonstrator in June 2021.
Exposed in:



The demonstrator exposed at VivaTech

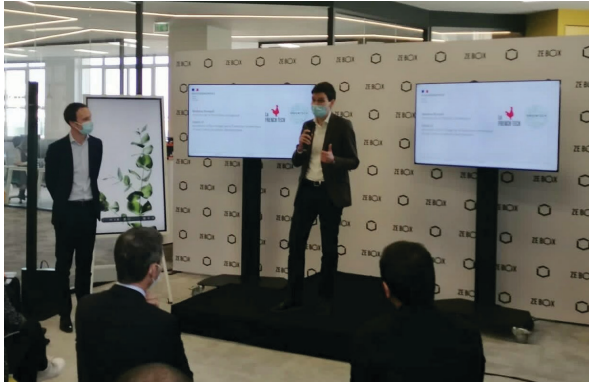
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MONACO
ENERGY BOAT CHALLENGE

Yacht Club de Monaco

seanergy
PAYS DE LA LOIRE 2021, 21-24 SEPTEMBER
NANTES, SAINT-NAZAIRE | FRANCE

Acknowledgements



Since its creation a year ago, NepTech has regularly won awards and calls for projects that highlight the innovative and dynamic nature of the company.

[Left] Tanguy Goetz, CEO of NepTech pitch in front of the Minister of Ecological Transition Barbara Pompili, the Secretary of State in charge of Digital Transition and Electronic Communications Cédric O and the Chairman and CEO of CMA-CGM, Rodolphe Saadé.



Labellisations (NepShuttle)



Awards



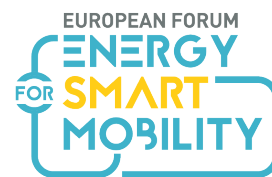
Laureate of the CES® 2022 Innovation Award "Sustainable development, eco-design and intelligent energy"



Laureate of the «Olympic and Paralympic Games Paris 2024 Mobilities» call for innovations



Grand prix CAAP Innov Eco
Laureate of the call for projects «Living and consume local» launch by Le Village CA Alpes Provence à et Capital & Innovation by Crédit Agricole Alpes Provence



Laureate of the Smart Mobility Forum , «hydrogen and biogas solution» category, organized by Capenergies and Greenunivers



Laureate of the national Climate LaunchPad award



Laureate of the mobility challenge Techinnov Online



NepTech

Intelligent sea mobility

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