

Press Release
Paris, 10 May 2021

EODev & NepTech, winners of the Call for Innovations "Olympic and Paralympic Games Paris 2024 Mobilities "

- Jean-Baptiste Djebbari, Minister Delegate in charge of Transport, named NepTech and EODev amongst the winners of the "Olympic and Paralympic Games Paris 2024 Mobilities" call for innovations in the New Mobilities & Active Mobilities category, "River" section, thanks to their project to design and operate passenger shuttles equipped with a hydrogen propulsion system on the Seine river and in Marseille during JOP 2024.
- The innovative ships designed by NepTech for transporting passengers on the Seine and in Marseille will be equipped with EODev hydrogen solutions, developed in collaboration with Toyota.
- EODev's STSH₂ river and maritime hydrogen distribution station, one of whose strengths is to be self-propelled, will be anchored as close as possible to the Olympic venues. NepTech is responsible for the naval design of the refueling station.

More than a project, two solutions that combine the best expertise

The project, selected among 120 applications, aims to design and operate passenger shuttles equipped with a hydrogen propulsion system on the Seine and in Marseille during the JOP 2024. The project plans to associate the NepTech zero-emission, efficient and intelligent vessels, with the floating hydrogen refueling stations developed by EODev.

The project brings together three players in hydrogen mobility who combine their respective know-how: NepTech for the design of innovative passenger ships powered by hydrogen ; EODev for the development of terrestrial & maritime hydrogen solutions; and Toyota, a technological leader in environmentally friendly solutions and a pioneer in hydrogen mobility. The technology on board NepTech ships is based on the hydrogen fuel cell developed by Toyota and adapted for the maritime and river sector by EODev teams.

NepRiver & NepShuttle, for environmentally friendly river mobility

NepRiver for river use, and NepShuttle for maritime use, have been designed by NepTech. They will have a long range and will be able to carry up to 150 passengers. They are built around a platform with common structural and hydrodynamic characteristics.

NepRiver (21m long, with a cruising speed of 12kmh and maximum speed of 20kmh) and NepShuttle (24m long, with a cruising speed of 35kmh and maximum speed of 40kmh) will be equipped with RexH₂® from EODev and stabilizers in order to guarantee great navigation comfort at high speed in marine environment.

The innovations developed by NepTech allow the vessel's energy consumption to be reduced by around 30 to 40% when compared to a similar vessel. The integration of the hydrogen propulsion supplied by EODDev avoids the emission of CO₂ and fine particulates. The reduction in CO₂ emissions is thus estimated at 1,100 tonnes per year per ship on average.

The use of the hydrogen powered NepTech ships on the Seine & in Marseille do not produce noise pollution, which is known to be particularly damaging to marine species and their communication. The use of recyclable and bio-sourced materials in the manufacturing process of the ships will significantly reduce the carbon footprint, not only in operation, but also during their construction. This equipment will be produced and assembled in France.

Station Ship STH2, the smart solution for refueling with hydrogen

Hydrogen-powered ships cannot be refueled by the land-based hydrogen stations used to date. EODDev has therefore designed and developed a multi-function solution (STSH₂) which could allow the refueling of ships but also of other vehicles within the framework of the development of the French hydrogen sector.

Relying on technologies for combining and optimizing the energy mix from the use of renewable energies tested on board the Energy Observer laboratory vessel, EODDev is thus developing a mobile hydrogen supply station that has the capacity to distribute and / or produce hydrogen on board using a seawater desalination and electrolysis system. NepTech is in charge of the station's architecture and naval engineering, when EODDev takes care of the project management and the integration of the hydrogen storage and distribution system.

As part of the winning project, the station will be able to load up to 480kg of hydrogen in racks of standardized hydrogen tanks, so that it can quickly refuel the NepRiver and NepShuttle units. Equipped with two 80kw electric motors, and 88kWh of batteries, it will have a range of up to 210 nautical miles. The station will thus also be shared for other mobility uses. The first unit is scheduled to be launched for the summer of 2023.

They said

«The NepTech team is delighted to contribute with EODDev to the emergence of a responsible and innovative transport solution. Being the winner of this call for mobility innovation will undoubtedly facilitate the long-term deployment of our solutions in the territories of the JOP 2024 ». **Tanguy Goetz, CEO, NepTech**

«Technically our industrial solutions are already operational, whether on Energy Observer or other maritime & river projects. We are delighted with the collaboration with NepTech and also hope that this call for mobility innovation within the framework of the Paris 2024 Olympic and Paralympic Games will make it possible to accelerate the adaptation of regulations that is necessary for the large-scale deployment of infrastructures not only for production but also for the supply of green hydrogen, in particular for river and maritime use ». **Anthony Vernizeau, Key Account Manager in charge of EODDev's Calls for Innovations**



Illustration 3D: NepRiver Paris © NepTech



Illustration 3D: NepShuttle © NepTech



Illustration 3D: Station Ship STSH₂ © NepTech

About EODev

Created in March 2019, EODev (Energy Observer Developments) is the result of unique experience feedback acquired aboard Energy Observer: the first clean energy and autonomous hydrogen-powered vessel, developing innovative solutions for the environment. The company's mission is to accelerate the energy transition by offering sustainable, reliable, efficient and accessible industrial solutions. EODev's expertise and offer are spread across the entire energy value chain with zero-emission electro-hydrogen generators for land (GEH₂®) or maritime and river (RexH₂®) applications, and floating mobile stations for the production and distribution of hydrogen (STSH₂). In addition to its industrial activities, EODev supports its clients in the design of tailor-made solutions for a successful energy mix with its Energy Designer design office, and facilitates the deployment of hydrogen mobility thanks to its H₂ 360 application. The recent fundraising carried out by EODev and the signing of partnerships with leading manufacturers have enabled the company to launch the industrialization and marketing of these innovative solutions. www.eo.dev

About NepTech

NepTech is designing a new mode of zero emissions, efficient and intelligent naval transport. NepTech ships are new generation 12 to 24m catamarans capable of carrying up to 150 passengers or around 20 tonnes of cargo. From the river shuttle to the maritime shuttle, for passenger transport to the transport of goods, NepTech is developing an innovative product range based on a common platform for several uses. The idea arose out of the desire to combine high-tech engineering, naval expertise and ecodesign techniques in the service of mobility. NepTech's sustainable and comprehensive approach not only decongests urban centers, but also massively reduces the environmental footprint of mobility. www.neptech.co

About Comité des Mobilités



21 projects were selected by the Comité des Mobilités, in collaboration with the Interministerial Delegation of the Olympic and Paralympic Games, the City of Paris, Ile-de-France Mobilités, Paris 2024, Plaine Commune, Paris Terres d'Envol, the regional prefecture of Ile-de-France / DRIEA, the departmental council of Seine-Saint-Denis, SOLIDEO, Voies Navigables de France and Gustave Eiffel University. www.francemobilites.fr

Press contacts EODev - Agence Amalthea

Marie-Laure Martinot : mlmartinot@amalthea.fr | 04.26.78.27.11

Fabienne Boccard : fboccard@amalthea.fr | 04.26.78.27.14

Press contact NepTech

Tanguy Goetz : tanguy@neptech.co | 06.58.12.76.59