



## Communiqué - Innovation, the driving force of boating

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The Nautic is the primary showcase for marine innovation. The reasons for this are because offshore racing, the only mechanical sport to double its level of performance every 10 years, is historically a driving force of the Parisian meeting, and also because its industry has made innovation its driver of growth. Hydrodynamics, aerodynamics, composites, electronics and artificial intelligence, energy efficiency, motorisation, design: all these skills areas inspire creativity, making the Nautic a gigantic hub of innovation.

### Energy Observer installs an innovative propulsion system: Oceanwings

This Monday at the Energy Observer village at the heart of the Nautic, Victorien Erussard, founder and captain of Energy Observer, and Jérôme Delafosse, expedition leader, accompanied by Marc Van Peteghem, co-founder of the VPLP design firm,

presented its results after the 10,326 miles covered between France and the Mediterranean over the past 16 months, as well as demonstrating the latest technological features, which the crew will carry aboard next year on this now iconic vessel of ecological transition.

"During the stopovers, Energy Observer produced nearly half a tonne of hydrogen thanks to 1,496 hours of operation, with 42% electrolysis output. The hydrogen enabled the supply of up to 60% of the necessary energy for a typical delivery trip, the remaining 40% coming from solar energy, and this was achieved with a fuel cell operating for an average of 6 hours out of 24 hours of navigation and an output of 48%. Today, the crew is able to benefit from a boat that has become nearly 100% automated", explained Erussard, who's set himself a brand new challenge for 2019: Northern Europe. "To pull this off, the sailors and engineers have been involved in a substantial refit since October. A five-month refit will be necessary in total to optimise the vessel and install a unique and ultra-innovative propulsion system, the likes of which has never before been tested on such a large scale on a boat, in partnership with the VPLP naval architecture firm: Oceanwings", explained the captain. The latter innovation, inspired by the fixed wings in the America's Cup, will enable a reduction in the vessel's energy consumption, whilst increasing her speed and, perhaps most importantly, producing energy and hydrogen whilst making headway across the ocean. "Our aim was to offer a safe and simple wind propulsion system that can be automated. As such, we've developed a rig concept that we can put reefs in, that can be collapsed down, which is based on the aerodynamics of the profiles with multiple elements adapted from the Cup", indicated Marc Van Peteghem, well aware that this system is the first step towards reducing the environmental impact of global shipping. Energy Observer is a remarkable floating laboratory and a genuine showcase of European know-how in terms of propulsion using renewable energies, and above all it is the first ambassador of the round the world hydrogen revolution.

In the wake of Energy Observer, a pioneer of clean energies, there is a multitude of initiatives and innovations shaking up the Nautic. Among them is Plastic Odyssey, which is recycling plastic waste and developing economical pyrolyzers, whilst preparing a large boat designed to raise awareness among coastal populations about the various low-tech recycling opportunities. All this because innovation is only worthwhile if it is shared by the greatest number of people. Just 1% of plastic waste remains on the surface, so it's not a question of gathering up 50 years of waste from the oceans, rather it's about finding solutions which will work to reverse the curve and convert plastic into fuel or any other financially viable use. Simon Bernard, the person driving the project, is an engineer from ENSM (French Maritime Academy), who is passionate about technologies, having won the HydroContest, an international competition centred around naval energy efficiency and involving engineering schools. <https://plasticodyssey.org>

The start-up Neoclean, hosted by Vincent Dufour, an oceanographer, with the support of professors from the University of Montpellier, is present at the Nautic to showcase Overboat, his innovative little electric boat prototype, which promises to quarter its fuel consumption by combining self-regulating foils and automatic trim control.

Flying across the water in silence is something that everyone dreams about and now it has become a reality. Motor foilers, like the fantastic Le Foiler by Enata or the SeAir ribs, are already enabling a spectacular reduction in fuel consumption (over 30%). The Overboat intends to make flight available to all, albeit in silence, thanks to its small 3kW engine, which enables it to rise up off the plane in upward of 7.5 knots, before reaching a peak speed of up to 15 knots with a range of around 2 hours. The whole ensemble does not require a licence and there is no risk of a wipeout thanks to its trim control technology.

Innovation colours every sector of the Nautic, including the traditional boats. Indeed, there is a plethora of applications involving artificial intelligence and the power of new processors, like those developed by Outremer catamarans and their E-Maintenance programme. With detailed management of the on-board energy, data acquisition, predictive maintenance, real-time systems monitoring, Outremer's Offshore Connected Maintenance takes the pressure off the fleet owner or manager whilst optimising the maintenance of the boats. Several protagonists are developing innovative tools of this type, including Zodiac and SailSense, whose baseline is: "Boats have a soul, now they have a brain!" They can even communicate all over the world via your mobile if need be.

This year, the Nautic has organised a naval architecture competition, which is a wonderful showcase of French creativity. The foil is a 'must' trend among architectural innovations and the projects unveiled at the Show use it in all manner of guises! Mer Forte, Michel Desjardes' engineering company, has designed an electric rescue catamaran with retractable foils as well as a scow with a retractable rig. Perspective Design is offering the FX-1, an electric jet ski on foils, just like the one exhibited on the Pays de la Loire stand, as well as a tripod design capable of spectacular speeds. Anthenea has designed a live-aboard floating island, which goes hand in hand with another project involving an inflatable floating nest, whilst A de Guise and C Leroy have designed an explorers' refuge which is like an on-the-water platform... Of course, it is still a dream to be able to effortlessly transition from terra firma to navigating the ocean, as echoed in the ambulance project by Navya Samadar, Devi Gophan, Racheeta Rout and Kinnari Desai. For those who cannot wait to make

these futuristic projects a reality, come along to the Nautic to admire the real Iguana, it too futuristic but about to go into production!

Finally, innovation is also everywhere in the service sector too and chartering in particular. The latest illustration of the Boat-Clubs phenomenon is a project launched today by Zodiac and Dream Yacht Charter, which will enable its members to hit the water on modern-day ribs across the countless bases owned by the world leader in chartering. We'll look at this sector in more depth over the coming days as its use in boating circles is undergoing a genuine revolution, which is worth a thorough review later this week...

And Monday at the Nautic is always synonymous with presentations, events and races...

#### [Défi Azimut: change of format](#)

The 9th edition of the Défi Azimut - IMOCA was presented this Monday on the Brittany stand, with the notable presence of a number of skippers, including Sam Davies, Paul Meilhat, Romain Attanasio and Alain Gautier. The main info? Previously spanning two days, the event is now switching format. The 2019 edition will be run over five days, from 18 to 22 September, in Lorient. On the programme? Crewed runs, a long double-handed course of a minimum of 500 miles, prior to a crewed circumnavigation of Ile de Groix, with the aim of improving the reference time over this course, which was set by Vincent Riou aboard PRB in 2015. No fewer than twenty boats are already due to attend, all keen to hone their skills one last time before the famous Transat Jacques Vabre. "The Défi Azimut is a great preparation race. It slots into the race schedule perfectly, added to which the atmosphere there is always very friendly", commented Sam Davies.

#### [Prize for charterer of the year: three companies rewarded](#)

Organised by GlobeSailor, the European leader of the charter boat market, in partnership with Voile Mag, the Federation of Nautical Industries and the Nautic de Paris, the 6th prize-giving ceremony for the charterer of the year was held this Monday afternoon on the Nautic Stage. Presided over by Paul Meilhat, recent winner of the Route du Rhum - Destination Guadeloupe, four companies were rewarded:

Atlantic Charterer Prize: Alternative Sailing

Mediterranean Charterer Prize: Corsazur Marine and Top Charter

French overseas departments and territories Charterer Prize: Punch Croisières

#### [Launch of the DIAL at the Nautic](#)

This Monday, France's lifeboat association presented the Individual Alert and Location Device (DIAL) on the Nautic Stage, in the presence of its creator, Philippe Starck and sailor François Gabart. This object, which resembles a large orange watch, is most definitely an important safety element since it reassures those people who have remained on land by sharing with them its GPS position and, in the event of difficulty, alerts the emergency services. Brand new, the latter will go on sale from 19 December at the sns.m.org shop, however the great news is that it's already available at the Nautic on the association's stand.

