

Turning the Tide

An eco-friendly superyacht may seem like an oxymoron, but the industry is navigating towards a sustainable future with a ripple effect on cruise ships.

Words: Lauren Ho

On the face of it, the superyacht business, with all its extravagances, might not seem like the most eco-conscious of industries. But with shipyards, owners and designers showing a greater concern for the environment, it seems change is on the horizon and there's a steer towards a cleaner, greener future.

In fact, the growing number of eco-friendly superyachts already sailing our seas is proof that consumer demand for going green is on the rise. Among these is the gleaming 80m Artefact, which German shipyard Nobiskrug outfitted with a hybrid diesel-electric system and smart dynamic positioning that allows for stability without the need for an anchor; the Oceanco-built Black Pearl, said to be one of the world's most advanced zero-impact superyachts that can reportedly cross the Atlantic without fuel thanks to its three impressive DynaRig carbon masts and a hybrid propulsion system; and the mighty 109m Bravo Eugenia, another pioneering Oceanco offering, which along with its forward-thinking naval architecture, is equipped with a smart hybrid-engine configuration that demonstrates size is not an obstacle when it comes to power and fuel-efficiency.

Aqua by Sinot is the world's first hydrogen-powered superyacht promising silent, zero-emission sailing.



Futura by Vripack is a fossil-free hybrid designed to run on biofuel made from waste food

A number of sustainability-focused yacht design studios are also thinking big with innovative concepts that show the world it's possible to be both environmentally-friendly and good looking. "Sustainability has to be regarded as a design challenge," says Marnix J. Hoekstra, Partner and co-Creative Director at Dutch design studio, Vripack. "We don't need to wait for yacht owners to request sustainable design. For us, creating something that looks beautiful, performs flawlessly and leaves minimum ecological impact is always at the forefront of our mind."

Indeed, the masterminds behind Futura, Vripack is certainly carving its own path in the industry. Slender and lightweight with a glass superstructure, Futura is a fossil-free hybrid designed to run on biofuel made from waste food and is equipped with revolutionary bio-based 100% biodegradable batteries – made from salt, sand, water and plants and charged by an electricity-generating kite. Moving away from a traditional deck setup, the yacht's layout is versatile, flowing openly with a loft-style split mezzanine configuration that intertwines and interconnects. "Attitudes towards sustainability are changing for the better," says Hoekstra. "Sustainability is integrated into our industry on many levels and we are really pleased with that. Sustainability is our mission; it comes included in our products, whether it is requested or not. We see it as our design obligation."

Dutch design firm Sinot meanwhile has made a splash with the unveiling of its game-changing concept, Aqua, the world's first hydrogen-powered superyacht, which promises silent, zero-emission sailing that doesn't scrimp on design thanks to a curvaceous five-deck set-up inspired by the swell of the ocean and featuring a cascading water-covered staircase. "Our challenge was to implement fully operational liquid hydrogen and fuel cells in a true superyacht that is not only groundbreaking in technology, but also in design and aesthetics," explains its designer, Sander Sinot.

In London, Winch Design is taking interior

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MARNIX J. HOEKSTRA, VRIPACK

design to new levels with Life Worth Living, a three-year road map with the goal to create a fully sustainable interior. "Winch has been working hard to build a rolodex of suppliers who offer beautiful alternatives to typically non-sustainable finishes such as rare woods, leathers, horn and coral," says Jim Dixon, Director of Yachts & Aviation. Well on its way to achieving its mission, the firm has, in fact, recently announced its first totally sustainable interiors concept for the new Amels 60 range, a series of semi-custom yachts. Revealed through a light, tactile and relaxed beachy aesthetic are 'corals' made from eggshells, waste-negative terrazzo-effect 'marble' made from offcuts of timber, palm wood – a fast-growing, sustainable softwood from the coconut palm tree – and pineapple leather, whereby the

fruit's leaves undergo a mechanical and non-chemical process resulting in a lightweight, versatile and hardwearing leather alternative. "Sustainability within the construction and design of superyachts is integral to ensuring the future of the industry," continues Dixon. "We are consistently integrating sustainability conversations within our initial client meetings, developing our own confidence and theirs as we demonstrate that sustainability is synonymous with top-end bespoke design, executed at the highest level."

In a ripple effect, the cruise industry is also taking a proactive approach towards sustainability. A task easier said than done, a number of big-name brands are taking things a step further from the usual practices such as banning plastic straws and water bottles, by investing in top sustainable technology. Crystal Endeavor, the new expedition ship from Crystal Cruises, is kitted-out with various water treatment systems – including a biological process that cleans wastewater before it's discharged back into the sea – and subaquatic features like environmentally-friendly lubricants for bow thrusters and stabilisers, a propulsion system specifically designed to reduce lifecycle costs, and smart offshore dynamic positioning. It is also outfitted with state-of-the-art underwater sonar technology from marine navigation company Far Sounder, which helps the ship navigate at shallower depths without leaving a trace on the environment. "Sometimes, the greatest impact comes from making as little impact as possible," notes Mark Spillane, Director of Sales & Marketing. "This is the case aboard Crystal ships, where extensive efforts are made every day to ensure that waste and other materials generated on board leave little to no footprint on the environments we travel. Our commitment to sustainability is steadfast while looking at ways to evolve practices and expand capabilities to continuously improve."

Aurora Expeditions is equally committed. CEO Monique Ponfoort comments: "Sustainability



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across the industry is becoming increasingly important. It is key to protect the beautiful, marine places visited by expedition ships to ensure that only footprints are left behind and only memories are taken away.”

Indeed, Greg Mortimer, the cruise line’s purpose-built expedition ship is the first passenger vessel to feature the revolutionary Ulstein X-Bow, a specially-designed hull – first launched by Norwegian ship designer Ulstein – that penetrates the waves, creating a smoother, faster ride, meaning fewer emissions and a 60% less fuel consumption.

Awarded most environmentally friendly cruise line by the Nature & Biodiversity Conservation Union (NABU) in 2020, French operator Ponant continues to lead the way with the recently launched Le Commandant Charcot. The world’s first hybrid-electric polar exploration ship powered by liquefied natural gas, the vessel also has two on-board laboratories for scientific research, a low level of noise and vibration that reduces the impact

on marine wildlife, and is the brand’s first plastic-free ship. In it for the long run, by 2023, the cruise line has plans to increase its energy efficiency by 20%, recycle 85% of its waste, and allow its entire fleet to be used for scientific research. “Ponant was founded by sailors keen to share their passion for the sea,” says Wassim Daoud, Head of Sustainability & CSR. “For more than 30 years, we have taken our guests to the most secret places on the planet, where nature reigns supreme. This choice brings with it responsibilities towards the environment and the local populations that we meet. We take our profession and our commitment to promoting sustainable tourism very seriously.”

While it’s true that both the superyacht and cruise industries have a way to go yet, the past few years have already seen a rise in technology and innovation, as well as consumer demand. This, along with the pioneering spirit and shared sustainability mission of shipyards, designers and cruise lines alike will, in time, hopefully turn the tide.

