

# A GREENER VISION

Nicolas Lapp explains why Sunreef Yachts is developing its own solar panels, batteries and green materials for its new range of Eco catamarans, both power and sail.

he yachting industry's biggest and most important challenge for the years to come should be the development of green technologies. I feel that, all in all, we're not doing enough to reduce the negative impact boating can have on the environment.

Being at sea has always been part of people's lives. Whether it's leisure, exploration, transportation or fishing, the human race has always had a special connection with the seas. Now, if we love and need the seas so much, we also owe them more respect.

As boat builders, we feel this sense of responsibility should be a fundamental element of boat design, build and use. Companies should do whatever they can to come up with more sustainable craft. Our response at Sunreef Yachts is the Eco range that we had been developing for quite some time before we announced it in April 2020.

My father and I had long discussions with the team about the solutions we could envision for our Eco yachts. After launching two fantastic electric sail cats, we were ready for another big step forward: redefining solar panels for yachts.

Some time ago, my father had the idea to fit a mast with solar panels throughout. As we started working on this somewhat eccentric idea, we realised there was a way to integrate solar panels with composite.

This sparked another idea: solar panels all over the hulls, superstructure and every surface possible. It was a gamble, but today our R&D office has the know-how and integration is under way.

All of this wouldn't be possible without top-quality cells. We found solar cells that ticked all the boxes for us: they are unbelievably light, flexible and shock resistant.

We now have a system that can maximise solar power generation and, on top of that, is easy to maintain and repair. We also wanted it to look nice as we didn't want any compromise on aesthetics. If you want sustainability to be 'cool', the appeal of the product is vital.

Energy storage is just as important as energy generation. We wanted our Eco boats to be as efficient as possible, so we use custom-engineered batteries.

We considered a lot of factors in the process. Of course, capacity is vital and so is density. You don't want heavy batteries, as this will impact the performance and autonomy of the boat. We reached a density that made our batteries close to 30 per cent lighter than those typically used in the industry.



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Lastly, the lifespan of our batteries was also on the priority list. After 10 years of use they will still have 80 per cent of their original capacity. Durable components are what make your boat sustainable.

The manufacturing process is another crucial matter for bringing more sustainability into the yachting world. We've been studying the characteristics of basalt and flax fibre for some time and made some important progress towards building furniture using greener composites.

The process of sourcing flax and basalt is energy efficient and clean, and the physical properties of both are amazing. It's clear to me that this is the way forward for composite yachts and we are already conducting tests to use flax and basalt for bigger structural elements.

While working on the Eco range, we did our best to make every aspect of our boats more environmentally friendly. We knew we wanted something more than catamarans with electric engines. We also thought the moment was right to reassess the way we think of yacht interiors. Our team of designers did a great job sourcing sustainable décor materials. We realised it only takes a little bit of goodwill and some research to be able to provide our customers with a wide selection of sustainable luxury materials.

There are mineral and plant-based structures that can be used for sinks or bathtubs. We can use compressed recycled paper for our countertops. Tiles can be made of recycled monitors, while curtain fabrics can be made of old t-shirts and plastic bottles. It sounds incredible, but all of this is possible without any compromise on quality.

We are on the right path now. I feel optimistic because I can see that our client base shares the same point of view. Ultimately, it's the owners who will shape the future of the industry. If the demand is there for sustainable yachts, then we're bound to see a positive response from builders worldwide.

#### NICOLAS LAPP

Lapp is R&D Strategy Consultant at Sunreef Yachts, overseeing the green technology created for the Polish builder's new Eco range of solar-powered luxury catamarans. He has been involved with the company since it was founded in 2002 by his father, Francis, the company's President, and worked in various departments including design, construction and charter.

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## SUNREEF EXPANDS POWER RANGE

Polish builder launches 60 Power, designs 60 Power Eco and delivers first 80 Power in Asia.

unreef Yachts has launched the 60 Sunreef Power, which joins the 80 Sunreef Power that made its show debut at the 2019 Cannes Yachting Festival. The two models are part of the Polish builder's new range of powercats, which includes the upcoming 70 and 100 models.

The flybridge on the 60 Sunreef Power can house a spa pool, bar, dining area and oversized sunpads, while other outdoor areas include the large bow terrace. Aft, the large cockpit offers plenty of space for covered dining and lounging, while the hydraulic platform can carry a tender or be used as a beach club. The garage can house a large selection of water toys along with a jetski and refuelling station.

The saloon enjoys natural light from the skylight and panoramic glazing, while the layout is customisable, with hull one featuring a dining table to port and a lounge to starboard. A galley-up layout can fit up to six guest cabins with two crew cabins forward, although the yacht can be managed without crew.

The 60 Sunreef Power is now also offered in an Eco version as part of the builder's new range of 'eco-responsible' catamarans announced in April 2020.

Sunreef has developed its own proprietary solar-power system featuring panels fully integrated with the hull sides, superstructure and curved areas all over the yacht. Solar panels on the 60 Sunreef Power Eco will cover up to 68.6sqm (738sqft) of surface area, extending the solar-energy generation to 13kWp.

The model will also use "cutting-edge electric engines powered from the ultra-light battery bank for silent, vibration-free cruising", according to the shipyard. Other green features include wind generators and eco-responsible finishing materials.

The 60 joins 70, 80 and 100 models in the Eco power range, while the Eco sailing range comprises 50, 60, 70 and 80 models.

Nico Rosberg, the 2016 Formula 1 world champion and now sustainability entrepreneur and Sunreef Yachts Eco Ambassador, said: "It is great to see that the world's most outstanding manufacturer of luxury catamarans shares my commitment to sustainable technological innovation. I am immensely proud to drive this development forward with Sunreef Yachts."

Meanwhile, an 80 Sunreef Power has been delivered to China, marking the model's first unit in Asia. Sunreef has described the 24m motor yacht with a 12m beam as "currently the largest private leisure power catamaran in China".

Speedo Marine managed the deal with the experienced yacht owner, who said: "We have achieved something exceptional together. Sunreef Yachts is an outstanding shipyard and I want to thank Speedo Marine for their commitment."

The yacht has twin 1,200hp engines and a bespoke interior distinguished by a dark colour scheme. The saloon includes a large sofa to portside and a dining table to starboard that can seat 12, while forward is a cosy reading spot and a well-equipped wet bar by the entrance to the foredeck.

Three guest cabins include an opulent master suite, while the crew quarters, galley and pantry are accessed from the aft cockpit for privacy.

The flybridge has an open layout and offers seating all around, oversized sunpads and a wet bar with barbecue. In the cockpit, a modular cockpit sofa conceals a garage housing a large jetski and water toys, while the hydraulic swim platform carries the tender and provides lounging space by the sea. §

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#### SUNREEF SUPPORTS ROSBERG XTREME RACING

Luxury catamaran builder backs Nico Rosberg's RXR team in new Extreme E racing series.



unreef Yachts has become a partner of the Rosberg Xtreme Racing team, which will compete in the inaugural season of the Extreme E off-road racing series this vear. Extreme E will consist of five races between electric SUVs in remote areas of Saudi Arabia (March 20-21), Senegal (May 29-30), Greenland (August 28-29), Brazil (October 23-24) and Argentina (December 11-12), with the circuit designed to draw attention to climate

change and environmental damage.

Nico Rosberg, Principal of Rosberg Xtreme Racing, said: "We are thrilled to unveil Rosberg Xtreme Racing as a new addition to Extreme E. The series represents an amazing opportunity to not only drive awareness but also inspire action in the fight against climate change – the single biggest threat to our planet today."

Since retiring from Formula 1 after winning the 2016 World Championship, Rosberg has become a sustainability entrepreneur, shareholder in Formula E and, since 2020, Brand Ambassador for Sunreef's new Eco line of luxury catamarans. His collaboration with the Polish builder to promote solar-electric yachts now extends to electric rally cars.

Francis Lapp, Sunreef's founder and President, said: "We are more than excited about this partnership as it takes our sustainability action to a new dimension. I believe the Sunreef Yachts Eco philosophy can cross oceans and continents. Being a partner of Rosberg Xtreme

Racing gives us a unique chance to focus the world's attention on pressing environmental issues."

In April 2020, Sunreef announced its new Eco line of motor and sail catamarans, which feature a proprietary solar power system, electric propulsion, cutting-edge batteries and environmentally sustainable build materials to offer a fully sustainable cruising experience.

Meanwhile, the RXR team will support environmental awareness through various off-track activities. One of the first projects the team will support in its opening season is an initiative by the Prince Albert II of Monaco Foundation, which works with rural communities in Senegal to monitor available water resources and the status of vegetation.

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### SUPERYACHT SAFETY WITH XS INTERNATIONAL

XS International provides protection ranging from anti-drone technology to armed security.

S International and its partners offer a range of security solutions for superyachts including anti-drone technology. Drones present a variety of threats including paparazzistyle photography and video recording of yachts and their owners and guests. XS International and its partner, MyDefence, a world leader in counter-drone devices, provide a range of solutions for combating drones that approach the airspace near yachts.

Some sensors can detect that someone in the vicinity of the yacht is preparing to use a drone as soon as the drone is turned on. The defence technology can automatically alert the owner, captain, crew or security team that it's time for guests to cover up with a towel, leave the jacuzzi and move inside the yacht.



XS International's maritime security specialists not only help in detection but also eliminate the threat by using jammers. The antidrone technology can detect all the FRQ bands of commercial drones and let security know a drone is approaching from up to 3km away. With the detector connected to the jammer, the jammer will create a 'fence' up to 1km away, meaning the drone cannot come any closer.

MyDefence jammer also has an algorithm that counters FRQhopping drones. For example, if a drone senses FRQ noise from the jammer or other interference on 2.4GHz, it may switch to 5.8GHz and continue flying, but the algorithm in the MyDefence jammer counters that and jams the drone anyway, unlike a conventional jammer.

Another advantage of MyDefence jammers is that they cover 60 degrees, with no need for the operator to see or aim a drone. A small drone 100m-200m away is hard to discover and hit with a usual jamming riffle. XS International provides a 10 per cent discount on MyDefence equipment; customers who contact MyDefence directly can secure the discount by mentioning 'XS International'.

XS International also offers armed security to increase the chances of safe passage through high-risk areas. The threat to commercial shipping by piracy in the Indian Ocean has created uncertainty in that part of the world and cast a shadow over neighbouring cruising destinations, so XS International can provide an armed escort through such areas. As well as maritime security services, the company can deliver in-depth risk evaluation analysis to combat piracy. §

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