

## A CUT ABOVE YACHTING

## Superyachts clean up in drive for efficiency

PARIS

Though built to impress, luxury vessels are being retooled for green values

BY PAIGE DONNER

Superyachts are built for luxury. Sustainability and energy efficiency have tended not to be among their top design requirements.

"Superyachts are the most backward form of transportation on Earth. Even roller skates are more efficient," said the naval architect Richard Sauter, head of design at Sauter Carbon Offset Design in Bali, Indonesia.

Steel, the material in which most luxury yachts have traditionally been built, "is the worst hull you can have," added Mr. Sauter, whose concept design for a sustainable super luxury yacht, Ocean Supremacy, envisages an epoxy composite hull and a 9-megawatt solar hybrid propulsion system.

Ocean Supremacy's combination of advanced materials, aerodynamic profile and hybrid power plant (using biodiesel and wind, wave and solar energy) could give the boat a pirate-proof top speed of 53 knots, which is close to 100 kilometers per hour, or more than 60 miles per hour, and an economical cruising speed of 18 knots, Mr. Sauter said in an interview.

"It doesn't cost you any more to design the right way than the wrong way. And by default this would increase speed," he said by Skype from Indonesia.

It could also help cut the costs of luxury cruising, both operational and environmental: as a certified carbon offset project, the yacht would qualify for the various carbon offset credit programs that have emerged from the 1997 Kyoto Protocol on fighting global warming, Mr. Sauter's company says.

For now, Mr. Sauter's vision remains on the drawing board, but a number of other technologies that are already in the mainstream of boat design offer a potential for significant advances in sustainability and efficiency within a short time frame.

Multihull catamaran or trimaran designs can be as much as 50 percent more fuel-efficient than traditional monohulls because of the reduced drag on



AMELS/FLYING FOCUS

approach to motor yachts. Once known for pharaonic "floating island" designs, the company switched tack after the global financial crisis rammed a hole through the luxury yacht business.

"After the economic crisis hit, we re-sized our WHY designs," Mr. Bassani said, referring to the Wally Hermès Yacht, a floating mansion jointly designed with the French fashion house Hermès that never got built.

The result took to the water this summer. Kanga, the first Wally Ace, a new 26-meter pocket-superyacht design, is powered by a low-noise, low-vibration,

ing consumption and emissions, he said. Better still than fuel efficiency is no fuel at all.

In May, Turanor PlanetSolar, equipped with 537 square meters, or 5,780 square feet, of photovoltaic panels, arrived home in Monaco after completing the first round-the-world voyage powered solely by sunlight, in 535 days.

PlanetSolar had a top speed of 10 knots. Today, a new-generation solar-powered vessel could probably be built to go twice as fast with a smaller solar cell surface, said Raphaël Domjan, the

**This year, Sea Rhapsody, a 65.5-meter Amels 212, became the first super luxury motor yacht to be awarded a Green Passport by Lloyd's Register.**

yacht's Swiss-born captain. "Like a house, when you build it for the first time, you learn a lot," Mr. Domjan said.

While few in the yachting world may go as far down the sustainability route as Mr. Domjan, it seems likely that the trend toward ecologically friendly boats is here to stay.

In March this year, Sea Rhapsody, a 65.5-meter Amels 212, became the first super luxury motor yacht to be awarded a Green Passport by Lloyd's Register — a similar program to the RINA Green Star certificate.

Increasingly, certification looks set to become not only environmentally but also financially desirable — a marketable plus.

"We feel that a vessel which can demonstrate its recognizable environmental credentials will stand out when marketed against other yachts of the same age," said Daniel Küpfer, a director at the Swiss-based yachting service company Ocean Management. "In addition, we are sure that as this gathers momentum over the next couple of years it will become a compulsory requirement."