



THE DIFFERENCE ONE SOLAR BOAT CAN MAKE

Nominated by TIME Magazine as 2006 invention of the year, sun21 is a Swiss engineered catamaran and the first solar powered vessel to complete a transatlantic crossing. The journey, underwritten by the Transatlantic21 Association, shows the feasibility of utilizing clean energy sources and the positive impact it can have on our lives.

Just compare sun21 to a diesel yacht...

- **By the time sun21 reaches New York (its final port of call), it will have traveled some 7,000 miles without using a drop of oil.**
 - A diesel yacht needs 3-4 liters of diesel per hour – 72 liters (19 gallons) every 24 hours.
- **sun21 crossed the open seas from the European mainland to Martinique in 52 days at sea. It travelled a total of 3,500 nautical miles on the open sea and went up to 107 miles a day, with a zero expenditure of non-renewable resources.**
 - To cover the same distance in the same time frame, a diesel yacht would use, 3,744 liters (988 gallons) of diesel – an expenditure of almost 3.1 tons of fossil fuel.
 - The truth is, a diesel yacht of comparable size to sun21 would not be able to travel the 3,500 nautical miles across the open sea because it would not be able to carry enough fuel for the journey!
- **While crossing the open sea from the European mainland to Martinique, sun21 harvested 2,000kWh of solar energy. It created solar energy valued at \$1,280 US dollars in today's market.**
 - The diesel yacht would have burned through more than \$4,700 US dollars of new renewable resources during the same journey.
- **Upon arrival in Martinique the sun21 crew estimated that there were some 1,200 yachts with diesel engines in this harbor alone. A reasonable assumption is that each yacht runs its diesel engine for an average of 60 hours a year burning 3 liters per hour. If these diesel engines were replaced with solar electromotors, more than 216,000 liters of diesel (valued at over \$275,000 US dollars) would be saved each year.**

*(** Energy values and fuel costs in this analysis are based on current market values in Switzerland the country of origin for sun21).*