## Carbon-conscious travelers can now sail across the Atlantic in a wind-powered cargo ship







Wind power could be set for a comeback

French company TransOceanic Wind Transport (TOWT) is developing a fleet of cargo ships with sails. It currently has two vessels in operation, which can carry about 1,000 tons of goods each. With multiple routes across the Atlantic, it recently launched a passenger service, offering cabins on its cargo ships for those looking for a low-carbon travel alternative. Look through the gallery to see how wind power could be making a comeback.

Ronan Gladu/TOWT





Editor's Note: Call to Earth is a CNN editorial series committed to reporting on the environmental challenges facing our planet, together with the solutions. Rolex's Perpetual Planet Initiative has partnered with CNN to drive awareness and education around key sustainability issues and to inspire positive action.

(CNN) - Described as world's largest cargo ship with sails, the Artemis docked in New York on Monday afternoon after a 32-day journey from the port of Les Havre in northern France. It unloaded around 1,000 tons of French liqueur, champagne, Vilebrequin swimsuits, Bonne Maman jam - and four passengers.

They were part of a test run by French startup TransOceanic Wind Transport (TOWT), which has just opened up cabins on its fleet of cargo ships, inaugurated last year, to members of the public looking for a greener route across the Atlantic.

With 52-meter-tall (170 feet) carbon masts and a whopping 2,100 square meters (23,000 square feet) of sail surface, these ships travel at an average of 11 nautical miles per hour, sometimes reaching as high as 17 when the winds are in their favor. In comparison, an engine-powered container ship travels at an average of around 14 nautical miles per hour. Although equipped with a backup diesel engine used for steering into port, TOWT estimates that its ships reduce carbon dioxide (CO2) emissions by more than 90% compared to cargo vessels that use fossil fuels.

And they pale in comparison to airplane emissions: "Our carbon footprint is between five and 10 kilos (per person), compared to around a ton of CO2 if you get a plane (from Paris to New York)," says TOWT's CEO, Guillaume Le Grand.



TOWT's ships travel at an average of 11 nautical miles per hour. Ronan Gladu/TOWT

With more and more <u>people choosing not to fly</u> due to climate change, Le Grand noticed an increased demand for low-carbon travel. While trains are a popular alternative overland, he saw a gap in the market for transatlantic routes.



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"If you want to go to America and don't want to emit any carbon emissions, two months ago, you had to swim or take a small sailboat like Greta Thunberg did," Le Grand joked, referring to Thunberg's 2019 voyage from the UK to New York to attend a UN climate conference. "Now, with us, you can come with your family and stay in really decent cabins."

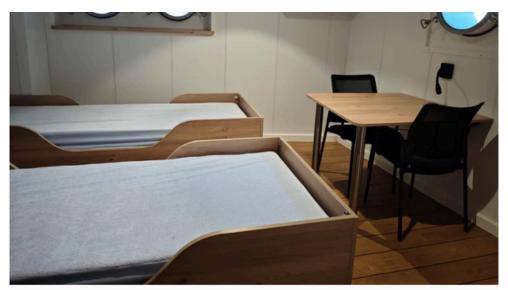
In each ship, there will be up to six double cabins available to passengers, who share the vessel with seven or so crew members, while hundreds of pallets of goods are stored in the holds. TOWT plans to roll out a regular service on its two operational ships, Anemos and Artemis, from March, offering trips between France, the US, Colombia, Brazil and the Caribbean islands of Guadeloupe. The company has six more vessels under construction, and by 2027, it hopes to offer weekly departures across its fleet.

## Not a cruise ship

Still, the ship's primary purpose is to get cargo from A to B. "It's a passage," Le Grand stresses, "you're certainly not coming on a cruise vessel."

The cabins are simple: a paneled room with bunks or twin beds, a desk, a wardrobe and portholes. And while there is a communal area with bookshelves crammed with French classics and more, there is little other entertainment available, besides perhaps some yoga on the deck and the occasional workshop from a crew member, on marine knots or astronomical navigation.

But guests can relax: they can read, or write a diary, observe marine fauna from the deck and get to know the crew. There is good food, Le Grand says, including fresh fish, and there is good broadband. "People could simply work from the vessel," he adds.



Passenger cabins are plain and functional. TOWT

For the France to New York trip, TOWT is currently charging €2,550 (\$2,675), which amounts to around €150 (\$155) per day, but this is expected to rise to around €200 (\$210) per day once it has fine-tuned the service. The price includes accommodation, meals, and internet access, and there is no luggage limit, giving it an advantage over plane travel. But guests do need to have time and flexibility: journeys can typically vary between 15 and 20 days from France to New York; trips to Brazil or Guadeloupe will take up to 25 days, and exact arrival and departure dates may change depending on the weather.

Due to the exceptionally rough weather of the last two weeks, the maiden passenger voyage had to re-route, arriving in New York after 32 days at sea, whereas a container ship would take an average of around 18 days.

According to Tim Williamson, joint managing director of Responsible Travel, an agency specializing in environmentally friendly holidays, who's not involved with TOWT, there is increasing demand for "lower carbon travel choices that help you slow down." He says the agency has seen a 48% increase in enquiries for rail holidays over the last three years, and while he admits he has not seen much demand for transatlantic sailing, more people are looking for experiences that provide a deeper connection with the culture, wildlife and landscapes of the places they are visiting.



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Where TOWT has an advantage is that there are very few alternatives offering Atlantic crossings. While container ships used to offer cabins for passengers, most intercontinental services have dried up since the Covid-19 pandemic, and the vessels consume fossil fuels. There are cruise liners run by shipping line Cunard offering seven-day crossings between Europe and the US, but these also have a considerable carbon footprint. Sailing options are few and far between: Another World Adventures offers transatlantic "adventure sailing" holidays, marketed as an experience

rather than a means of transport, and  $\underline{\text{Voyage Vert}}$ , a travel company looking to create a fleet of wind-powered ferries transporting passengers across the globe, is only in early concept stages.

He estimates that the passenger service will make up around 4% of the company's revenue. The decision to introduce it was less driven by profit, he says, and more by the fact that they wanted to help fight climate change.



## A greener alternative

Decarbonizing the shipping industry has always been TOWT's central goal. The sector accounts for 3% of human-caused global emissions, and despite attempts to adopt alternative fuels or develop wind-assisted technologies, the transition is proving slow.

TOWT, which was founded in 2011, wanted to show that for some goods, sailing is still a viable option, and in 2022, the company upgraded its fleet.

Le Grand says that for around \$500 you can send a pallet, carrying about a ton of goods, from Europe to the US on one of its ships. While prices vary, fossil-fuel powered container ships cost upwards of \$200 per pallet for the same journey.



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He says that in general TOWT is appealing to high-end customers with non-refrigerated goods, such as coffee, olive oil, wine and spirits. These companies don't mind paying a little more for a slightly longer journey with less frequent departures, if it means they can lower their emissions and give their product the "Anemos" stamp – a label with a QR code that shows consumers it has been transported via sailboat.

"We are comfortable with the fact that we premiumize the offer," says Le Grand. "If you come to us, it is like when you go to an organic market. You're not going to get the cheapest, but you're going to have an organic product – something that's making a difference to your health and to the planet."

Yet increasingly TOWT's customer base is diversifying away from solely luxury products. It has received shipments of electronics from companies like Orange Telecom, as well as parts for planes and cars, and cosmetics. Le Grand believes this is a result of <u>a volatile</u> freight market and regulations incentivizing cargo owners to reduce their emissions.

He admits that with only two ships in operation currently – carrying 2,000 tons of goods between them – it may be a drop in the ocean in terms of reducing global emissions. But he hopes that the cargo service, along with the passenger transport, helps to bolster sailing as a realistic, low-carbon alternative for transporting both cargo and people.