

The First Flying Electric Ferry in the U.S. is Coming to Lake Tahoe

Lake Tahoe skiers will reach the slopes faster aboard the world's first electric hydrofoil ferry, the Candela P-12.

- The groundbreaking zero-emission, hydrofoiling ferry will reduce travel times for Tahoe locals and visitors, providing a much-needed north-south connection across the lake, while also helping to cut emissions and mitigate road sediment that threatens the lake's famous cobalt-blue clarity.
- The Candela P-12 is a game-changer for transportation, being the fastest electric vessel in the world with the longest range and significantly lower operational costs than diesel-powered vessels.
- This marks the introduction of electric hydrofoiling passenger ships in the U.S., a crucial step towards decarbonizing maritime transport on American waterways.

With Lake Tahoe attracting over 15 million outdoor enthusiasts year-round, road congestion has become an ever-increasing problem, especially during the winter months. Travelers often find themselves stuck in long car lines due to road closures caused by heavy snowfalls. Even in the summer, locals and visitors face gridlock as the popularity of the lake's water activities, along with biking and hiking, surges.

However, local company [FlyTahoe](#) and the tech company [Candela](#) are set to solve this by introducing a revolutionary zero-emission vessel that will make its U.S. debut: the world's first flying electric ferry, the Candela P-12, subject to regulatory approval. The P-12 [is](#) already in operation on Stockholm's waterways. FlyTahoe will feature a 30-minute cross-lake service, cutting the travel time in half compared to the daily 20,000 car trips along the same route.

The [P-12](#) is the world's first electric hydrofoil ferry, hailed as a "game changer" for waterborne transport by combining long range with high speed and a revolution in energy efficiency. This 30-seat vessel, designed to accommodate both skis and bikes, uses hydrofoil technology—computer-guided underwater wings—to fly above the water's surface at high speeds, unaffected by waves and winds.

The wings lift the hull above the water, significantly reducing drag and cutting energy consumption by a staggering 80% compared to conventional vessels. This is what allows the P-12 to be fully propelled by renewable electricity instead of fossil fuels, while providing a smooth ride above the waves even at high speeds.

Passengers prone to seasickness need not worry. The high-tech vessel's computer Flight Controller uses sensors and software to balance the craft above the waves and amidst the winds, adjusting the foil's angle of attack 100 times per second to provide a silent and smooth ride.

"It basically works like a jet fighter, which is constantly balanced using ailerons. The principle of the P-12 is the same, except our wings fly in water instead of air," says Gustav Hasselskog, CEO and Founder of Swedish tech company Candela.

The P-12's cruising speed of 25 knots (~30 mph) —the fastest for any electric vessel—is crucial for commuters looking to cut travel times. The FlyTahoe ferry will connect the northern and southern parts of the lake in under 30 minutes, while driving around the lake often takes over two hours in the winter. FlyTahoe will create a vital link to the 14 world-class ski resorts encircling the lake, making it an ideal option for tourists and locals alike.

"It's ironic that while millions, myself included, drive around Lake Tahoe to admire its beauty, the road sediment we generate contributes to the largest threat to the lake's famous cobalt blue clarity. Our service will provide a faster transport than cars or buses, while keeping the lake blue," says Ryan Meinzer, Founder & CEO of FlyTahoe.

Since Lake Tahoe, the second deepest lake in the US, never freezes over, the ferry can operate year-round. This added mobility convenience will enhance business and improve the lives of both locals and tourists, providing a versatile zero-emission solution to reduce traffic during both summer and winter seasons.

A detailed analysis by the [Tahoe Transportation District](#) already recognized ferries as the best solution to reduce traffic congestion along Lake Tahoe's north-south route, citing lower costs per user and faster travel times than cars and buses. However, that analysis, conducted before the advent of the P-12 technology, did not account for the electric ferry's ability to reduce energy usage by 80% compared to traditional ferries—a factor that Meinzer says significantly bolsters the unit economics and overall business case.

"This fusion of flight and electric technologies not only unveils a powerful new business opportunity with nearly 10x operational efficiency but also offers an unmatched customer experience of comfort and safety. Plus, we'll not just be moving people faster; we'll be boosting socio-economic mobility by connecting the north and south of the lake," Meinzer adds.

"We're proud to partner with FlyTahoe to bring this revolutionary technology to the U.S. for the very first time. This will not only ensure more efficient commuting around Lake Tahoe and unlock business possibilities for waterfront communities, but it's also a big step toward unlocking the potential of U.S. waterways for zero-emission transport," says Gustav Hasselskog, of Candela.

About the P-12:

Start of Operation in Stockholm

The Candela P-12 is the world's first electric hydrofoil ferry in public transport, with

operations commencing on Stockholm's waterways on October 29. Read the press release [here](#).

Revolutionizing Lake Travel for Skiers and Cyclists

The Candela P-12 will accommodate 30 passengers with ample space for ski gear in the winter and bikes in the summer, offering ultimate flexibility for Tahoe's outdoor adventurers. With Tahoe being a premier destination for biking trails in warmer months, the ferry is poised to become a year-round solution, easing road strain and reducing the environmental impact of car travel.

Preserving Lake Tahoe

FlyTahoe's commitment to sustainability aligns with the efforts to protect the lake's unique ecosystem. Lake Tahoe's iconic blue waters are not only a source of pride but also a driving force behind this new initiative. The Candela P-12's C-POD electric propulsion system ensures zero emissions, preserving the pristine beauty of the lake for future generations. The direct-drive C-POD motors are the first maritime electric drivetrain that eliminates the risk of oil spills. Lacking the mechanical rattling of traditional transmissions, they ensure quiet operation both under and above the water, causing minimal stress to marine wildlife.

No Wakes, No Shoreline Damage

As the P-12 flies above the water, it doesn't displace any water, leading to dramatically smaller wakes at high speeds. Wakes from conventional vessels can otherwise cause damage to docks, moored boats, smaller vessels such as paddleboards, and shorelines but this is no longer an issue with the P-12, as shown in [this video](#). The lack of wake has led to the P-12 receiving a speed exemption in Stockholm, speeding up commutes and cutting travel times in half.

About FlyTahoe

Located in both San Francisco and Tahoe Vista, California, FlyTahoe will elevate sustainable mobility with America's first electric flying ferry.

About Candela

Candela is a Swedish tech company with a mission to accelerate the shift to fossil fuel-free waterways. Its pioneering hydrofoiling technology drastically reduces energy consumption of vessels, enabling Candelas to achieve the elusive combination of long range and high speed on battery power.

Since launching its first leisure model, the Candela C-7, in 2019, Candela has manufactured over 100 vessels to clients around the world, leading electric boat sales in the U.S. In 2024, Candela introduced the world's first electric hydrofoil ferry, the Candela P-12, which has been sold to customers in Saudi Arabia, New Zealand, Berlin, and now, the U.S.

Candela employs over 200 engineers and staff across offices in Stockholm, Sweden; San Francisco, U.S.; and Bangkok, Thailand. The current factory is located in Stockholm, with the U.S. factory underway.

Candela P-12 Specifications

Length: 11.99 meters/39.24 feet

Beam: 4.5 meters/14.76 feet

Weight: 10 tonnes

Capacity: 30 passengers (seated) + 1 crew

Propulsion: 2 x Candela C-POD, 320 kW peak power in total

Charging: Up to 200 kW DC

Service Speed: 25 knots

Range: 40 nautical miles at 25 knots service speed

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