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By [Keumars Afifi-Sabet](#) Published January 10, 2025

A new type of passenger plane will adopt a design that blends wings into the aircraft's body, which its creators say will cut fuel consumption by 50% and reduce noise.

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(Image credit: An 3D rendition of the new passenger plane mid-flight.)

A novel passenger jet could take to the skies in the next five years that has a completely different shape than any currently flying.

The plane uses a "blended wing" design, which could improve

fuel efficiency by 50%, JetZero and Siemens representatives said Wednesday (Jan. 8) in a press conference held at CES 2025 in Las Vegas.

The concept of blended-wing aircraft, in which the wings blend seamlessly into the body, is more than 100 years old, having been first described by Russian pilot [Nicolas Woevodsky](#), but it is most commonly associated with military aircraft.

Passenger jets have conventionally adopted a long, tubular body with wings that do not blend into a single flat plane. This is because switching to a novel plane design has been deemed commercially risky. Blended-wing aircraft, by contrast, can reduce fuel consumption and be quieter, thanks to [higher lift-to-drag ratios and better integration of the noisy propulsion systems](#).

A new plane based on a 100-year-old design



(Image credit: Future/Keumars Afifi-Sabet)

JetZero representatives say their blended-wing design requires a shorter and wider fuselage that is blended like the wing to provide lift, in turn reducing the surface area that is needed and creating a lighter plane with less drag. The size of the engines is also reduced, thanks to the reduced weight and drag, meaning more passengers can fit into a relatively smaller aircraft.

The new plane will be 100% compatible with sustainable aviation fuel as well as being capable of accommodating hydrogen fuel – with the long-term aim being to fly with zero emissions. It will hold 250 passengers and have a range of

5,750 miles (9,250 km).