

Hyundai's Supernal and Embraer-backed Eve Air Mobility see future in electric-powered air taxis

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Hyundai's Supernal's CEO Shin Jaiwon speaks to The Associated Press during an interview along the Singapore Airshow in Singapore, Thursday, Feb. 22, 2024. As the aviation sector seeks ways to make air travel less polluting and more sustainable, aerospace company Embraer and South Korean automaker Hyundai are among the companies betting on a new form of air travel, air taxis. Credit: AP Photo/Vincent Thian

As the aviation sector seeks ways to make air travel less polluting and more sustainable, aerospace company Embraer and South Korean automaker Hyundai are among the companies betting on a new form of air travel -- air taxis.

Hyundai's Supernal and Embraer-backed Eve Air Mobility are developing electric aircraft that take off and land vertically. The idea is that such air taxis might provide a sustainable form of air transport for densely populated cities and areas with less developed public transport networks.

Experts say they could help offset [carbon emissions](#) from the traditional aviation sector, but there are plenty of technological and regulatory challenges to making air taxis commercially viable.

Falling battery prices, advancements in technology and the participation of big players like Hyundai mean that such aircraft could soon be a reality, experts say.

Hyundai's advanced air mobility unit Supernal and Embraer-backed Eve Air Mobility hope to officially launch electric-powered air taxis within the next two to four years.

"Ground transportation is evolving and improving, but to support all the mobility demands of ... people in urban areas, ground transport will not be sufficient," Supernal's CEO Shin Jaiwon said in an interview. "We have to open the skies above the cities."

Supernal's S-A2 [electric aircraft](#), equipped with eight rotors, is designed to carry a pilot and four passengers. The battery-powered air taxi will have a range of about 25 to 40 miles and will be able to take off and land

vertically. It's similar to a helicopter, but quieter and more sustainable in that it can help offset carbon emissions generated from traditional [air travel](#), Shin said.

Supernal plans to test its first full-scale technology demonstration version in California this year and is in contact with the U.S. Federal Aviation Administration and the E.U's aviation safety agency about policies and certification issues.

Earlier this week, Supernal and Singapore's civil aviation authorities and officials in [economic development](#) formed a partnership to jointly develop the advanced air mobility sector in terms of research and regulatory frameworks.

Brazilian firm Eve Air Mobility, a spin-off of the third-largest aircraft manufacturer Embraer, also is testing and developing an electric vertical take-off and landing (eVTOL) aircraft which it hopes to launch by 2026.

Like Supernal's S-A2, the Eve Air Mobility's aircraft is also expected to carry between four to six passengers with a range of 60 miles, without generating any local carbon emissions.

Johann Bordais, CEO of Eve Air Mobility, says that the electric-powered aircraft could be a new alternative for getting around in cities or areas lacking good public transport but they're not replacements for traditional aircraft.



Visitors look at Brazilian firm Eve Air Mobility, a spin-off by third largest aircraft manufacturer Embraer, in Singapore, Thursday, Feb. 22, 2024. As the aviation sector seeks ways to make air travel less polluting and more sustainable, aerospace company Embraer and South Korean automaker Hyundai are among the companies betting on a new form of air travel, air taxis. Credit: AP Photo/Vincent Thian

"We're going to be putting more people in the air, we're giving an alternative — just like [electric vehicles](#) are on the ground in 2D, we want to make sure that we can make the same thing that happens but in 3D," Bordais said.

Air taxis are just one of many ways that the aviation sector is considering to improve sustainability. Airlines are moving toward using a

blend of sustainable aviation fuel made from renewable sources, with the industry aiming for net zero emissions by 2050. Aviation firms are also designing more fuel-efficient aircraft and engines.

The effort also requires regulatory changes.

"For the aviation industry to really take off in a sustainable manner, we have to look at how government policies can help create a conducive environment for new technologies and industries to take shape on a global level," said Mabel Kwan, managing director of Alton Aviation Consultancy.

For now, the air taxi industry and other forms of air mobility still have hurdles to cross, such as the battery costs, devising new regulatory and safety frameworks for such travel, and certifying such aircraft.

With suitable regulatory changes, the technology has developed to the point, however, where air taxis are feasible, said Brendan Sobie, an independent aviation analyst based in Singapore.

"There's the feasibility of operating in various environments, various air spaces, various cities and urban environments," said Brendan Sobie.

Supernal's Shin acknowledged that battery costs are still high for vehicles like air taxis.

"However, as battery technologies continue to improve and further develop over time, we believe that manufacturing will also be improved and developed, so the overall cost of making such vehicles will be going down," he said.

Supernal can tap into Hyundai's know-how and mass production capabilities to achieve high quality and bring down the costs of making

its air taxis, Shin said.

Eve Air Mobility's Bordais was also upbeat, saying his company can draw on Embraer's decades of certifying and manufacturing aircraft.

"We know what we're doing, we've done it," he said.

"We don't want to be the first one. We want to be the right one," Bordais said. "We're here for the long run. You'll see these (aircraft) flying around in 2026."

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