



# AMPAIRE SUCCESSFULLY TESTS ECO CARAVAN WITH 100% SAF

News / Manufacturer



**Ampaire completed its first ground test utilizing pure 100 percent ASTM D7566 Sustainable Aviation Fuel produced by Dimensional Energy from electricity and carbon dioxide. This breakthrough reimagines 100 percent electric flight by pairing Dimensional Energy e-fuels and Ampaire hybrid electric propulsion systems. Ampaire innovation demonstrates revolutionary efficiency by more than doubling the efficiency of SAF usage. This technology advancement makes more effective use of rapidly scaling technologies advancing the future of eco-friendly flight. Elemental Excelerator's investment into these two companies and their subsequent collaboration have resulted in a more than two-fold increase in the efficiency of SAF.**

Ampaire conducted rigorous ground testing using its Eco Caravan hybrid electric aircraft to validate the performance and viability of Dimensional Energy's pure e-fuel SAF. The results exceeded expectations, demonstrating a remarkable increase in efficiency compared to traditional aviation fuels. Ampaire's AMP-H570 AMP Drive hybrid electric propulsion units are capable of 50 to 70 percent reduction in fuel and emissions as compared to conventional Pratt & Whitney PT6 turboprop engines typically found in Cessna Caravan turboprops. Combining the hybrid electric

propulsion with SAF fuel more than doubles the efficiency and drives emissions to near zero.

Kevin Noertker, CEO of Ampaire, commented: "The successful ground test using pure SAF from Dimensional Energy marks a pivotal moment in our journey towards sustainable aviation. By showcasing the transformative efficiency gains achievable through hybrid electric propulsion, we are driving the future of eco-friendly air travel. For those already recognizing the potential of SAF, its integration into our hybrid electric aircraft enhances its appeal even further."

Jason Salfi, CEO of Dimensional Energy, said: "Technology providers have to collaborate beyond innovation and into execution. By combining Dimensional Energy e-fuels with Ampaire's aircraft technology that can reduce the amount of fuels combusted during flight, we quicken the pace up the steep curve of the energy transition and reduce the need for extraction faster. We are thrilled to collaborate with Ampaire on this groundbreaking initiative. Our partnership underscores our commitment to advancing sustainable aviation fuel solutions that offer tangible benefits to the aviation industry and contribute to a greener future."

Elemental Excelsior, a nonprofit investor focused on scaling climate technologies with deep community impact, has provided project development capital and multiple years of hands-on support to help scale Ampaire and Dimensional Energy's technologies. "Today's announcement by two Elemental portfolio companies, both leaders in their fields, is exactly the kind of collaboration we imagined when investing in Ampaire and Dimensional Energy," said Dawn Lippert, CEO of Elemental Excelsior. "Their innovations reduce pollution and noise in neighborhoods around airports, and make possible a cleaner way to fly."

SAF, derived from renewable resources, has emerged as a key solution to reducing aviation's carbon footprint. Dimensional Energy has two ongoing projects which will add significant inventory to the world's availability of e-fuels. By scaling hybrid electric technology and SAF for aviation, there is an additional opportunity to address the quality and cost concerns associated with SAF, paving the way for even broader use in the aviation industry.

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