



CHARTING A COURSE TO A MORE SUSTAINABLE FUTURE

Climate change ranks among the greatest challenges of our time, demanding ambitious action on a global scale. The U.S. commercial aviation manufacturing industry is committed to playing our part to combat climate change by enabling the decarbonization of aviation.

That is why we are announcing a net-zero-by-2050 target for the U.S. aviation sector's carbon emissions. This commitment joins the pledges outlined by several U.S. airlines and the industry association Airlines for America (A4A). Other international aviation industry organizations, such as the International Coordinating Council of Aerospace Industries Associations and the Air Transport Action Group have also announced a net-zero by 2050 goal.

The 21st century has seen progress towards aviation sustainability. In 2009, 191 global members of the International Civil Aviation Organization (ICAO) gathered to set international climate goals and commit to decarbonizing the aviation industry, fueling the sustainability movement even further. But the U.S. was involved in sustainability efforts long before then. For the past several decades, improvements in U.S. aircraft energy efficiency have eclipsed those in any other form of transportation, improving by 130% since 1978.

As commercial aviation activities continue to expand and novel aircraft takes to the skies, the need for greener processes becomes more pressing. Advances in three prominent focus areas in recent years have led to the development of Sustainable Aviation Fuel (SAF), Hybrid-Electric Propulsion (HEP) systems, and advanced aircraft technology and modernization.

SAF is any form of non-traditional fuel deriving from sources ranging from plant matter to municipal solid waste, which decreases carbon emissions and improves fuel efficiency. Since the first SAF-fueled commercial flight in 2008, the U.S. has been working towards increasing the production and deployment of SAF. To achieve a 35% reduction in greenhouse gas emissions from airplane flights by 2035, the Sustainable Aviation Fuel Act was introduced in the House in February 2021. If passed, the bill will provide incentives for the use of SAF and establish standards for reducing greenhouse gas emissions.

HEP systems refer to systems that combine traditional gasoline- or diesel-based propulsion with electric propulsion to decrease carbon emissions, noise, and fuel burn. Though this technology is only a decade old, industry leaders have already made massive strides in harnessing its potential, ushering in the future of aircraft.

Innovation is the driving force behind any substantial change. From the implementation of the Reduced Vertical Separation Minimums standard in 2005 for air traffic management improvement to the development of novel engines and other aircraft components, advanced aircraft technology and modernization could decrease the aviation industry's carbon footprint in ways unseen before the 21st century.



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By engaging with these efforts, we aim to play our role in decarbonizing aviation by:

1. Expanding our investments in leading-edge technology like advanced and zero-emission propulsion
2. Advocating for policies that facilitate the increased use of sustainable aviation fuels across the globe
4. Partnering with the government to enable and accelerate advancements in technology
5. Collaborating with the government to develop the proper regulatory framework to enable commercialization of new technologies
6. Partnering with other stakeholders to realize efficiency improvements through the modernization of our airspace
7. Advancing climate action under the ICAO, which relies on a global approach to address aircraft emissions
8. Working with international partners toward our common goal by sharing information and resources and coordinating with governments around the world

To strengthen this commitment while technologies mature and new government policies are implemented, AIA is exploring ways for our commercial aviation members to achieve net-zero emissions through in-sector measures, including offsets to address residual emissions.
