Boeing and MIT Commit Research Project to Help Decarbonize Aerospace

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- Collaboration focuses on research that will inform a more sustainable aerospace future
- Announcement builds on existing relationships between researchers at Boeing and MIT to combat climate change

FARNBOROUGH, UK, July 19, 2022— Today Boeing [NYSE: B.A.] announced a three-year project, called *Pathways to Sustainable Aviation* with MIT to evaluate technical and economic factors that contribute to a more sustainable aerospace future.

Throughout the project, findings will be integrated into Cascade, a model that provides real-time visualization of carbon emission reductions in aviation based on four decarbonization levers: fleet renewal, operational efficiencies, renewable energy sources, and advanced technologies. Boeing announced <u>Cascade</u> at the Farnborough Air Show. *Pathways to Sustainable Aviation* will examine operational and advanced technology scenarios which, when combined with Cascade, will help determine the most effective pathways to make aviation more sustainable.

"Addressing how the aerospace industry reduces its environmental footprint is critical to the future of air travel," said R. John Hansman, T. Wilson (1953) Professor in Aeronautics and Director of the International Center for Air Transportation at MIT, who is the lead principal investigator. "For this new project, we are excited to work with Boeing to quantify the systems-level impacts of potential approaches in order to reduce the carbon emissions from aviation."

The Pathways to Sustainable Aviation project builds on a long-standing relationship between Boeing and MIT.

- In January 2021, Boeing became a founding member of the MIT Climate and Sustainability Consortium (MCSC), which brings together a broad range of industries to accelerate large-scale, real-world implementation of solutions to address the threat of climate change.
- Research teams at Boeing and MCSC have exchanged technical data on the economics related to sustainable aviation fuels, informing Boeing's strategy to decarbonize aviation and help its customers meet their commitment to net zero carbon emissions by 2050.
- Boeing contributed to MIT's new Wright Brothers Wind Tunnel, the most advanced in U.S academia, helping to fuel innovation in aerodymanics and fluid mechanics.
- Boeing is opening a 10,000 square foot Aerospace and Autonomy Center on the MIT campus this fall. The
 facility will bring together engineering teams to accelerate development of sustainability and future
 mobility solutuions.

"Climate change is one of the greatest challenges of our time for our industry and world," said Brian Yutko, Boeing's Vice President and Chief Engineer of Sustainability and Future Mobility. "We are committed to work across industry and academia, collaborating and investing in the scientific research and developments that are crucial to achieve a sustainable aerospace future. MIT shares this sentiment and we are honored to continue our work with them on important projects that will allow our world to stay connected, safely and sustainably."

Last year, Boeing participated in several initiatives across the industry to decarbonize aerospace, including with SkyNRG, Alaska Airlines, Etihad Airways, NASA, Rolls-Royce, and <a href="United Airlines. The company also joined the First Movers Coalition working with leading companies across sectors to accelerate the development of new technologies to reduce emissions. Boeing continues to make progress through its joint venture, Wisk, which is working to bring to market the first all-electric, self-flying air taxi in the U.S., helping decarbonize transportation while enabling new business opportunities centered on Urban Air Mobility.

Learn more about Boeing's sustainability commitments, collaborations, and efforts in its recently released <u>2022</u> <u>Sustainability Report</u> and on <u>Boeing's sustainability website</u>.

As a leading global aerospace company, Boeing develops, manufactures and services commercial airplanes, defense products and space systems for customers in more than 150 countries. As a top U.S. exporter, the company leverages the talents of a global supplier base to advance economic opportunity, sustainability and community impact. Boeing's diverse team is committed to innovating for the future, leading with sustainability, and cultivating a culture based on the company's core values of safety, quality and integrity. Join our team and find your purpose at boeing.com/careers.