

CSO Message

Mapping the Sustainable Aerospace Future Together

Decarbonizing aerospace is both the challenge and opportunity of our lifetime. We have long maintained that decarbonizing aerospace will take everything — technology, policy, capital, energy, entrepreneurship — and everyone — employees, customers, financiers, regulators, academics and business partners. For that reason, we just convened global thought leaders and decision-makers from across these communities to review our progress to date and discuss the way forward toward achieving Sustainable Aerospace Together.

Aerospace is more than an industry. We connect people around the globe and promote an understanding of different cultures; we protect through national security and humanitarian relief; we contribute to the global economy with jobs, trade, technology and commerce; and we inspire young minds to seek careers in STEM. Commercial aviation also generates about 2.5% of the world’s carbon emissions and 12% of transport emissions, so we must find ways to further decouple forecasted growth of aerospace from greenhouse gas emissions (GHG) ... and continue to do so safely and transparently.

The engagement was energizing and encouraging as sector leaders leaned into the issues and potential roadblocks that could slow the commercial aviation industry’s progress toward meeting its net-zero 2050 ambition. What struck me was the collective decision in tackling this issue together for the greater good of the industry and humanity at large. It was also a reminder that this hard to abate industry has historically solved hard challenges — from inventing flight to discovering the universe. It’s with humility and resolve that we collectively take on the challenge of more sustainable aerospace.

During the event, we also launched a public version of Cascade, a web-based application that uses public aviation and energy data to visualize how **various approaches might be combined to lower emissions**. It was rewarding to see our partners and stakeholders engage with the tool, and we can’t wait for the global user community to further refine Cascade over time. We invite everyone to check it out at SustainabilityTogether.aero.

This Sustainable Aerospace Together Forum was a culmination of many activities and events that took place throughout 2022 with the same common theme — together. We made important progress over the past year with valued partners around the globe.

Together ...

We launched Cascade. At the Farnborough International Airshow in July 2022, we announced Cascade and provided a live demonstration of Version 1.0. Cascade was developed to visualize the climate impact of aviation across the world and explore scenarios to most effectively decarbonize commercial aviation by 2050: fleet renewal, operational efficiency, sustainable aviation fuel (SAF) and new aviation technologies such as transonic truss-braced wing structures, hybrid-electric, all-electric or hydrogen airplanes. This tool allows stakeholders across the industry — in particular customers and policymakers — to make informed decisions and trade-offs about how to best reach the commercial aviation industry’s net-zero 2050 ambition. We look forward to the additional feedback from the recent public launch and will continue to invest in Cascade through collaborating with founding members of the Community to include IATA, NASA, University of Cambridge’s Whittle Laboratory and the MIT Laboratory for Aviation and the Environment.



Chris Raymond, Chief Sustainability Officer