

Contents

Introduction

President and CEO Message

CSO Message

2022 Highlights

Approach & Governance

People

Products & Services

Operations

Communities

Reporting



Neil Titchener, Ellen Ebner and Chris Raymond unveil the public version of Cascade during the Sustainable Aerospace Together Forum in Renton. (Boeing photo)



The Sustainable Aerospace Together Forum, presented by Boeing in partnership with the Financial Times, brought together the aviation, energy, finance and policy sectors. (Boeing photo)



Boeing President and CEO Dave Calhoun discusses the importance of working together for a sustainable aerospace future with Boeing communicator Elisa Hahn at the pre-forum reception. (Boeing photo)

We advanced SAF. Nearly all industry and governmental decarbonization road maps conclude that SAF is the biggest lever we have to reduce GHG emissions from commercial aviation. Our company is focused on multiple areas to catalyze SAF scaling, including investing in airplane efficiency and compatibility, purchasing SAF for our own fuel use in our operations, engaging global regulators on smart policies, promoting robust sustainability criteria, and investing in Cascade to further industry partnerships and policy advocacy to scale up SAF supply and bring down cost.

We continue to make progress on the technical journey working with our suppliers to ensure our commercial airplanes are 100% SAF compatible by 2030. We are seeing exciting SAF innovation occurring in sustainable feedstocks and partnering on technologies including waste-and-biomass-based SAF, power-and-biomass-to-liquid and power-to-liquid enablers that can make existing and future SAF pathways more sustainable over time.

We purchased 5.6 million gallons (21.2 million liters) of blended SAF to support our commercial operations. The challenge remains scaling SAF availability and lowering its cost. Together, we’ve made important progress this year on building the industry. Governments around the world are unlocking policy mechanisms to scale SAF, including a blending mandate and corresponding offtake requirement in Europe, and incentives such as the Blenders Tax Credit for SAF producers in the U.S. These policies and incentives are beginning to attract necessary capital to scale production.

Finally, the Boeing ecoDemonstrator team partnered with NASA on emissions testing to better understand SAF and contrails.

We advanced the future of flight. While SAF is a necessary lever to decarbonize commercial aviation, we have a “SAF and” view and not a “SAF or” approach to achieving the commercial aviation industry’s net zero goal by 2050. Together with partners, we continue to explore the safety and viability of other renewable energy carriers and technologies for aircraft. You’ll read about several of these developments in this report, including our Wisk joint venture’s announcement of the world’s first self-flying, all-electric four-passenger vertical takeoff and landing (eVTOL) air taxi. As Wisk’s go-to-market aircraft, the latest generation of this aircraft represents the first-ever candidate for type certification by the U.S. Federal Aviation Administration of an autonomous eVTOL. We also value our partnerships around the world to advance sustainable technologies, such as the new Boeing Research and Technology center in Japan with a focus on sustainability. We are also honored to be selected by NASA for the Sustainable Flight Demonstrator program, which will inform future designs that could lead to breakthrough aerodynamics and future efficiency gains.

The aforementioned Boeing ecoDemonstrator program embodies our “together” theme and is celebrating its 10-year anniversary this year. The ecoDemonstrator takes promising technologies out of a lab and tests them in operational environments with a variety of partners,

including airline customers, suppliers and regulatory agencies. From the first ecoDemonstrator in 2012 through this year’s effort, the ecoDemonstrator program will have evaluated more than 225 technologies with approximately one-third of those getting implemented. Projects include technologies that reduce fuel use, emissions and noise, enhance safety and incorporate more sustainable materials.

Sustainable Aerospace starts within our four walls and Boeing continues to make progress on our 2025 operational targets as outlined on [Page 53](#).

See [Page 7](#) for a more comprehensive snapshot of our accomplishments last year and [Page 45](#) for an overview of how we partnered around the globe to advance sustainable aerospace together.

Together as an industry, we’ve made modern jet travel a reality, helped defend freedom around the world, and made space exploration possible. We now enter the era of more sustainable aerospace. The foundation we are laying now will be carried forward by future generations to preserve and grow the societal benefits of this industry. We are proud to be on this journey — together — with so many capable and committed partners around the globe.

Chris Raymond
Chief Sustainability Officer