



SUSTAINABLE
AEROSPACE
TOGETHER



Contents

Introduction

Approach & Governance

People

Products & Services

Operations

Communities

Reporting

Contents



3 Introduction /	49 Operations /
3 President and CEO Message	50 Quality
5 CSO Message	52 Sustainable Operations
7 2022 Highlights	62 Responsible Supply Chain
	66 Enterprise Security and Data Privacy
9 Approach & Governance /	67 Communities /
10 Company Profile	68 Community Engagement
11 Advancing Our Sustainability Journey	69 Our Heroes
12 Sustainability Goals	70 Our Homes
13 Governance and Risk Management	72 Our Future
15 Enhancing a Sustainability Culture	
16 Ethical and Compliant Business	
	73 Reporting /
18 People /	74 Key ESG Data
19 Workplace Safety	79 GRI Index
21 Employee Well-Being	91 SASB Index
24 Global Equity, Diversity and Inclusion	93 TCFD Index
26 Professional Development, Education and Learning	94 U.N. Sustainable Development Goals
	97 Awards and Recognition
27 Products & Services /	98 Select Memberships and Partnerships
28 Global Aerospace Safety	99 Forward-Looking Statements
31 Sustainable Product Life Cycle	
33 Innovation and Clean Technology	



On the cover: Habitat restoration in Seattle; Reginald Douglas at St. Louis paint shop; ecoDemonstrator sustainability test bed; Jacqueline Mercier, Defense Procurement. (Boeing photos)

Introduction

President and CEO Message

CSO Message

2022 Highlights

Approach & Governance

People

Products & Services

Operations

Communities

Reporting

President and CEO Message

Sustainability

Alongside our strong commitment to safety, quality, and integrity, sustainability is tightly woven into the fabric of our values, our culture and our aerospace industry. Aviation is integral to our modern world, touching many sectors of the global economy and enabling personal human connections. That’s why we title our report “Sustainable Aerospace Together.” Each of us has a role to play to ensure we make the world better for future generations.

In this report, you’ll see examples of our collective efforts and partnerships to advance environmental stewardship, human development and inclusion — underpinned by transparency at every level as we strive to make aerospace more sustainable, together.

Working Together for the Environment

Collaboration with global industry partners, the energy sector, governments, nongovernmental organizations, higher education institutions and other stakeholders to advance sustainable solutions is more necessary than ever. To increase education around the commercial aviation industry’s carbon footprint, and its ambition to reach net-zero carbon emissions by 2050, Boeing created an innovative visual data modeling tool known as Cascade, which you will learn more about in this report. Cascade models the climate impact of the commercial aviation industry and explores paths to decarbonize and reach net zero by 2050.

Within our manufacturing operations, it is not just what we build, but how we build our products. We increasingly look at every stage of the product life cycle through a sustainability lens. Our people have worked hard to reduce our environmental impact by investing in conservation and procuring more renewable electricity.

... continued on next page



Contents

Introduction

President and CEO Message

CSO Message

2022 Highlights

Approach & Governance

People

Products & Services

Operations

Communities

Reporting

President and CEO Message

Working Together for Our Employees and Communities

We also continue our focus on providing a transparent, inclusive workplace culture in which teammates' voices are heard and managers are empowered to make meaningful change when necessary. Our latest progress and efforts in 2022 are seen within our **Global Equity, Diversity & Inclusion** report, including an increase in women's representation in our global workforce and racial/ethnic minority representation in the U.S. workforce and connecting incentive compensation to inclusion.

We routinely **encourage use of our Seek, Speak & Listen habits in internal interactions**. Quarterly enterprise culture surveys indicate that a majority of our **teammates are comfortable discussing concerns with managers and feel comfortable telling others at work when they have made an error**. Our goal is to **provide a safe environment so that each employee's voice is heard**.

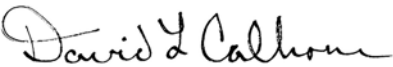
Our employees are also at the heart of our **community work**. Through our global community engagement efforts across

Boeing, we support science, technology, engineering and math (STEM) education initiatives; assist military members, veterans and their families; promote environmental stewardship; advance racial equity; and provide for communities in need — including disaster recovery and relief.

Transparency at Every Level

We continue to **prioritize safety, quality, integrity and sustainability** every step of the way. Trust is earned one airplane and one interaction at a time. Our leadership team also works closely with the Boeing Board of Directors to help ensure industry standards and ethical practices are followed. Our Board and specifically the Governance & Public Policy Committee provides oversight and holds us accountable to our sustainability policies, practices and strategy.

We are in the era of **more sustainable aerospace**, and together, we look forward to achieving it.



David L. Calhoun
President and CEO

Our Values

How We Operate

Start with engineering excellence

Be accountable — from beginning to end

Apply Lean principles — eliminate traveled work

Crush bureaucracy

Reward predictability and stability — everywhere in our business

How We Act

Lead on safety, quality, integrity and sustainability

Foster a Just Culture grounded in humility, inclusion and transparency

Import best leadership practices

Earn stakeholder trust and preference

Respect one another and advance a global, diverse team

Innovate and operate to make the world better

[Read more about our values](#)

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