



SUSTAINABLE
AEROSPACE
TOGETHER



Contents

Introduction

Approach & Governance

People

Products & Services

Operations

Communities

Reporting

Contents



3 Introduction /

- 3 President and CEO Message
- 5 CSO Message
- 7 2022 Highlights

9 Approach & Governance /

- 10 Company Profile
- 11 Advancing Our Sustainability Journey
- 12 Sustainability Goals
- 13 Governance and Risk Management
- 15 Enhancing a Sustainability Culture
- 16 Ethical and Compliant Business

18 People /

- 19 Workplace Safety
- 21 Employee Well-Being
- 24 Global Equity, Diversity and Inclusion
- 26 Professional Development, Education and Learning

27 Products & Services /

- 28 Global Aerospace Safety
- 31 Sustainable Product Life Cycle
- 33 Innovation and Clean Technology

49 Operations /

- 50 Quality
- 52 Sustainable Operations
- 62 Responsible Supply Chain
- 66 Enterprise Security and Data Privacy

67 Communities /

- 68 Community Engagement
- 69 Our Heroes
- 70 Our Homes
- 72 Our Future

73 Reporting /

- 74 Key ESG Data
- 79 GRI Index
- 91 SASB Index
- 93 TCFD Index
- 94 U.N. Sustainable Development Goals
- 97 Awards and Recognition
- 98 Select Memberships and Partnerships
- 99 Forward-Looking Statements



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

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**.

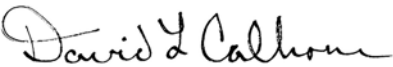
Our employees are also at the heart of our **community work**. Through our global community engagement efforts across

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

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

Sustainable Aerospace Together

2022 Highlights

Contents

Introduction

President and CEO Message

CSO Message

2022 Highlights

Approach & Governance

People

Products & Services

Operations

Communities

Reporting

January 2022



Wisk secured \$450 million from Boeing to advance certified autonomous electric flight

February



Purchased 2 million gallons (7.6 million liters) of SAF for Boeing's commercial airplane operations

April



Announced multiyear commitment to Yale Center for Natural Carbon Capture

May



Named ENERGY STAR Partner of the Year

June



Unveiled 2022 ecoDemonstrator, a 777-200ER serving as a test bed for 30 new technologies to help decarbonize aviation

July



Debuted Cascade, a data modeling tool that visualizes how to get to a net-zero carbon emission future for commercial aviation



Boeing and MIT announced research project to help decarbonize aerospace



Became founding member of UK Innovation Hub to drive SAF development



Boeing and Mitsubishi Heavy Industries partnered on innovative climate change solutions



Announced research project with the University of Cambridge to further advance Aviation Impact Accelerator



Boeing and Alder Fuels partnered to scale SAF globally



Debuted future flight concepts at Farnborough Airshow

August



Opened Japan Research Center and expanded sustainability partnerships



Announced as the aviation sector champion in First Movers Coalition, global alliance established by the U.S. government and World Economic Forum

September



Boeing and Wisk unveiled concept of operations for urban air mobility



New Boeing Additive Manufacturing facility in Auburn, Washington, uses 3D printing to produce essential components, reducing waste

October



Wisk unveiled world's first autonomous, four-seat, all-electric, vertical takeoff and landing air taxi



ecoDemonstrator program collaborated with NASA to test SAF emissions



ecoDemonstrator technology testing featured in Aviation Week

November



Partnered with Avolon, an aircraft leasing company, to scale SAF in Ireland

January 2023



Selected for NASA Sustainable Flight Demonstrator award

Connecting Globally to Advance Sustainable Aerospace



Americas

Brazil — Boeing Sustainability Forum: Boeing celebrated its 90th anniversary in Brazil at an inaugural summit with the Roundtable on Sustainable Materials and Brazilian-American Chamber of Commerce in São Paulo in September.

U.S.

- Summit of the Americas: Hosted a roundtable on sustainable aviation with IATA as part of Summit of the Americas in Los Angeles in June.
- Decarbonizing Aviation “Everything for Zero”: Hosted an event in Washington, D.C., in November, sharing Boeing’s vision and a Cascade demo with U.S. and non-U.S. policymakers, legislators and think tanks.

Asia-Pacific

Australia — Indo-Pacific Clean Energy Forum: Co-hosted a high-level SAF panel discussion in July in Sydney.

China

- Peking University Institute of Energy’s Report Launch: Supported the report launch in October, which compiled results of SAF research.
- Boeing participated at the 1st China Civil Aviation Green Development Forum, which was sponsored by CAAC and in the Annual Civil Aircraft Industry International Forum.

Japan — Boeing Tokyo Sustainability Summit: Hosted a two-day sustainability summit to celebrate a new research center opening in August.

Indonesia, Malaysia, Vietnam — Supported aviation industry forums and workshops with regulators, airlines and academics, sharing key aviation decarbonization priorities and strategies.

Singapore

- Singapore Airshow: Engaged with key industry and policy stakeholders to advocate for sustainable aviation initiatives and partnerships.
- Singapore Sustainable Air Hub Report: Contributed key sustainability insights as part of international advisory panel established by the Civil Aviation Authority of Singapore.

Europe

Belgium

- European Parliament Sustainability Event: Organized a joint event with Ryanair in October, engaging with members of the Parliament, media, industry and EU stakeholders about ongoing policies and regulations that contribute to accelerating SAF supply and use.

- Conference on National Armaments Directors: Joined NATO’s first Industry Symposium on Climate Change and Capabilities, which brought together over 150 representatives from NATO Allies and industry. Participants discussed the military challenges of a climate changed world, navigating the energy transition and the national security opportunities of technologies like SAF.

Germany — Berlin Air Show: Briefed media about Boeing’s work to decarbonize both commercial and defense products.

United Kingdom

- Farnborough Airshow: Unveiled Cascade and announced several sustainability initiatives, including partnerships with University of Sheffield Energy Innovation Centre, Cambridge – Aviation Impact Accelerator, Alder Fuels, Mitsubishi Heavy Industries and MIT. Joined UK Ministry of Defense and industry partners to discuss how sustainability enhances operational effectiveness and resilience.
- Jet Zero Council: Boeing hosted the Council meeting in London in February 2023, showcasing both Boeing’s UK presence and the Cascade modeling tool, which informs future climate policy choices such as UK SAF mandates.

Republic of Ireland — Airfinance Journal Dublin: Joined a panel on carbon offsetting and operational strategies for carbon reduction.

Middle East & North Africa

United Arab Emirates — Power-to-Liquid Report Launch: Supported and joined the launch event of the Power-to-Liquid roadmap led by the UAE government in July.

Egypt — COP27: Engaged government, industry, civil society partners and local and international media.

Bahrain — Energy & Sustainability Forum MENA 2023: Joined panel and discussed opportunities for alternative fuels, rising importance to diversify and build out low-carbon fuels and green chemical industry to create development opportunities.

Contents

Introduction

Approach & Governance

Company Profile

Advancing Our
Sustainability Journey

Sustainability Goals

Governance and
Risk Management

Enhancing a
Sustainability Culture

Ethical and Compliant
Business

People

Products & Services

Operations

Communities

Reporting



APPROACH & GOVERNANCE

Transparent and Accountable

Boeing global headquarters in Arlington, Virginia campus just outside Washington, D.C. (Boeing photo)

Company Profile

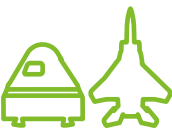
The Boeing Company

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 and sustainability. Learn more at [boeing.com](https://www.boeing.com).



Commercial Airplanes

This business develops, produces and markets commercial jet aircraft, principally to the commercial airline industry worldwide. We are a leading producer of commercial aircraft and offer a family of commercial jetliners designed to meet a broad spectrum of global passenger and cargo requirements of airlines. This family of commercial jet aircraft in production includes the 737 standard-body model and the 767, 777 and 787 widebody models. We ended production of the 747 widebody model in 2022. Development continues on the 777X program and the 737-7 and 737-10 derivatives.



Defense, Space & Security

This business engages in the research, development, production and modification of manned and unmanned military aircraft and weapons systems for strike, surveillance and mobility, including fighter and trainer aircraft; vertical lift, including rotorcraft and tilt-rotor aircraft; and commercial derivative aircraft, including anti-submarine and tanker aircraft. In addition, this segment engages in the research, development, production and modification of the following products and related services: strategic defense and intelligence systems, including strategic missile and defense systems, command, control, communications, computers, intelligence, surveillance and reconnaissance, cyber and information solutions, intelligence systems, satellite systems, including government and commercial satellites and space exploration.



Global Services

This business provides services to our commercial and defense customers worldwide. Boeing Global Services sustains aerospace platforms and systems with a full spectrum of products and services, including supply chain and logistics management; engineering, maintenance and modifications; upgrades and conversions; spare parts; pilot and maintenance training systems and services; technical and maintenance documents; and data analytics and digital services.



- \$23B Defense, Space & Security
- \$26B Commercial Airplanes
- \$18B Global Services
- \$0.2B Boeing Capital

- 10-Year Served Market**
- \$2.8T Defense, Space & Security
 - \$3.5T Commercial Airplanes
 - \$3.3T Global Services

- 13% Outside the U.S.**
- 16,961 Defense, Space & Security
 - 41,256 Commercial Airplanes
 - 20,523 Global Services
 - 77,614 Enterprise

Advancing Our Sustainability Journey

Stakeholder-Driven Transparency

Boeing is committed to transparency. Boeing considers stakeholders’ interests to identify and prioritize the most relevant issues and to assess the most significant challenges and risks facing the company. Through our annual disclosure and reporting cycle, we compile and share a broad set of data, information and operating examples that are relevant to our stakeholders, including our employees, customers, industry partners, investors, regulatory authorities, communities and others. These diverse groups of stakeholders have been identified by Boeing as being key to the business because of their potential to influence or be affected by Boeing’s mission to protect, connect and explore our world and beyond. Using widely applicable disclosure frameworks, Boeing reports each year on our financial performance and company priorities; our employee demographics and progress toward achieving equity, diversity and inclusion goals; our sustainability performance; our community investments and advocacy; and our industry-leading aerospace market outlooks.

Throughout 2022, we maintained a comprehensive engagement strategy that focused on engaging with key stakeholders through proactive ongoing dialogue, surveys, industry forums and events, and monitoring external data, some of which is discussed throughout this report. This dialogue and collaboration informs our approach, goals and actions to drive sustainable, long-term value for our stakeholders. We look forward to continuing to evolve and refine our stakeholder engagement strategy throughout 2023 and beyond.

Embedding Sustainability at Boeing

We continue to embed sustainability practices across our business, learning and evolving to meet stakeholder

expectations. We have organized our sustainability efforts around four key pillars: People, Products & Services, Operations and Communities. Our sustainability priorities and enterprise initiatives are managed through these pillars, with key goals and metrics monitored by company leaders including our Global Sustainability Council (**See Page 13**). Our efforts reflect the shared value we create with our key stakeholders. You will see our sustainability priorities, listed below, emphasized in this report. Our collaborative relationships inform these priorities and our sustainability goals, driving long-term value for our stakeholders.

- Global Aerospace Safety
- Employee Safety and Well-Being
- Climate Action
- Environmentally Responsible Operations
- Global Equity, Diversity & Inclusion
- Ethical and Compliant Business
- Data Privacy and Information Security
- Professional Development, Education and Learning
- Community Engagement
- Responsible Supply Chain
- Economic Performance

Reporting Approach and Alignment

To address the diverse interests of our stakeholders, we have provided a detailed overview of our sustainability activities and data in this report. We are providing indexes with alignment to the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), Task Force on Climate-related Financial Disclosures (TCFD) and the United Nations Sustainable Development Goals (U.N. SDGs) in the Reporting section.

To supplement this report, we publish additional information at boeing.com/sustainability.

Stakeholder Group	Engagement Channel
Employees	• Annual and quarterly surveys
	• Employee forums and meetings
Customers	• Internal websites
	• D&I committees
	• Boeing resource groups
	• Airshows
Commercial	• Trade shows
	• Customer meetings and summits
Defense	• Airshows
	• Customer meetings and summits
Investors	• Industry groups and forums
	• Investor conferences
Regulators	• Investor meetings and summits
	• NGO events and forums
Suppliers	• Government regulator meetings
	• Industry groups and forums
Flying Public	• Boeing supplier conferences
	• Supplier communications
Flying Public	• Industry groups and forums
	• Third-party surveys
Flying Public	• Media
	• Media

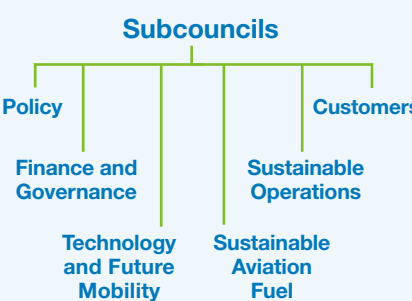
Sustainability Goals

Goal Statement	2030 Target	Progress
Employee Safety & Well-Being Value human life and well-being above all else and take action accordingly; strive to prevent all workplace injuries	<ul style="list-style-type: none">• Top quartile recordable injury rate (among sector benchmarked performance).• ≥90% believe their manager supports their well-being.	<ul style="list-style-type: none">• We continue to strive to be in the top quartile of recordable injury rates among benchmarked peers.• In 2022, COVID-19-related impacts led to a 39% increase in recordable injury rate. When normalized for COVID-19 impacts we saw a 4% reduction in recordable injury rate, suggesting continued progress as COVID-19 subsides.• Read more about Workplace Safety on Pages 19-20.• In 2022, 91% of employees reported that their manager supported their well-being.• Read more about Employee Well-Being on Pages 21-23.
Global Aerospace Safety Drive aerospace safety to prevent accidents, injury or loss of life with our Boeing culture and actions rooted in safety	<ul style="list-style-type: none">• Drive aerospace safety via global aerospace safety initiatives to maintain downward trend of worldwide commercial jet fleet 10-year moving average fatal accident rate.	<ul style="list-style-type: none">• Established a dedicated ombudsperson for FAA Organization Designation Authorization representatives.• Inducted a new real-time data and analytics platform called Boeing Safety Intelligence into our Safety Management System.• Introduced Boeing Virtual Procedures Trainer and Maintenance Synthetic Trainer for pilots and mechanics to provide experiential training and complement current training.• Delivered competency-based training and assessment (CBTA) courses to four commercial customers; Boeing Next-Generation 737, MAX and 787 CBTA training courses were approved by multiple regulatory agencies.
Equity, Diversity & Inclusion Address representation gaps and strengthen equity, diversity and inclusion so that all team members feel supported and inspired to reach their full potential	<ul style="list-style-type: none">• Increase representation of women globally and underrepresented racial/ethnic minorities in the U.S.	<ul style="list-style-type: none">• Increased women and U.S. racial/ethnic minority representation at Boeing at nearly every level of the company.• Tied inclusive hiring processes to incentive compensation: 92% of candidate interview slates for manager or director-level roles included at least one woman globally, or at least one woman or racial/ethnic minority in the U.S. Read more on Page 25.• Read more in our GEDI Report.
Sustainable Operations Maintain net-zero future for Boeing operations through conservation and renewable energy	<ul style="list-style-type: none">• Achieve 55% absolute reduction in Scope 1 and Scope 2 GHG from 2017 base year.¹• Maintain net-zero emissions for Scope 1 and Scope 2.• Achieve 100% renewable electricity.	<ul style="list-style-type: none">• Achieved 16% absolute GHG reduction at year-end 2022 from 2017 base year toward 2030 goal (Scope 1 and 2).• Achieved net-zero at manufacturing and work sites, for a third year, by emphasizing and incentivizing employee conservation and increasing renewable electricity use while procuring verified offsets for the remaining GHG.• Achieved 35% renewable electricity in 2022 by purchasing renewable electricity and renewable energy credits.
Partner with supply chain for responsible business practices	<ul style="list-style-type: none">• Work with our suppliers to increase GHG reporting and proactively address risks driven by climate change-driven risks.	<ul style="list-style-type: none">• Implemented supplier code of conduct aligned to ESG elements including climate change and environment priorities.• Launched supplier engagement via CDP Climate Change submissions to report emissions, assess reduction targets/progress and identify collaboration opportunities.
Innovation & Clean Tech Enable the transition to carbon-neutral aerospace through investments and partnerships for fleet efficiency improvements, SAF and future platform technologies	<ul style="list-style-type: none">• Current and future commercial airplanes will be 100% SAF compatible.• Build and certify our first zero-emission, electric, autonomous aircraft via Wisk joint venture.• Support the commercial aviation industry's ambition to achieve net-zero carbon emissions for global civil aviation operations by 2050.	<ul style="list-style-type: none">• Established plan for all materials, systems and part compatibility testing required to support qualification, certification and implementation of SAF compatibility by 2030.• Developed jet reference fluids (JRFs) composed of the simple chemical compounds found in SAF. These JRFs will help standardize testing and evaluation of how SAF interacts with airplane materials and systems.• Wisk became the first autonomous air mobility company to join the FAA's voluntary Safety Management program.• Built trust with regulators with the public release of Wisk's Concept of Operations (ConOps).• Selected by NASA to lead the development and flight testing of a full-scale Transonic Truss-Braced Wing demonstrator airplane.• Introduced the Boeing Cascade Climate Impact Model, or Cascade, a dynamic modeling tool that quantifies the power of aviation's major strategies to reduce emissions.
Community Engagement Build better, more equitable communities through corporate investments, employee engagement programs and advocacy efforts	<ul style="list-style-type: none">• Expand opportunities for more than 12.5 million youth, veterans, veterans' families and underserved individuals across communities around the world.	<ul style="list-style-type: none">• Expanded opportunities for over 7 million youth, veterans, veteran's families and underserved individuals across communities around the world in 2022.• Read more about our Boeing 2023 Community Impact Portfolio.

1. The 2030 GHG reduction target is set with an operational boundary of The Boeing Company, and includes all Scope 1 and Scope 2 emissions.

Governance and Risk Management

Oversight of Sustainability



Corporate and Sustainability Governance

The Board of Directors has extensive oversight of strategy development, company culture, political and charitable contributions, corporate sustainability and key strategic, operational and compliance risks. Please see our [corporate governance materials](#) for more information.

Sustainability is rooted in Boeing's values. The Board, and specifically the Governance and Public Policy (GPP) Committee, oversees a variety of sustainability topics and Boeing's Chief Sustainability Officer (CSO), Chris Raymond, is an Executive Council member reporting to Boeing's CEO. As CSO, Raymond reports the progress of Boeing's sustainability objectives and stakeholder-oriented reports regularly to the GPP Committee and the full Board. The Board reviews and provides input on the sustainability report.

Read the [Governance and Public Policy Committee's Charter](#).

Oversight of Political Activity

Together, the Board, the GPP Committee and senior leadership are committed to aligning political activities with the company's values, business strategies, long-term shareholder interests and long-term strategic imperatives. This includes regular discussions about the company's public policy priorities; the company's memberships in and payments to trade associations and other tax-exempt organizations; Boeing Political Action Committee (BPAC) strategy and expenditures; and the company's network of compliance procedures related to these activities.

Risk Management

With over 100 years at the forefront of innovation, Boeing has established processes to identify, assess, mitigate and manage risk. It is the responsibility of the Board and senior management to ensure that we avoid imprudent risks and mitigate the strategic, technological, operational and compliance risks we face, all with our core values of safety, quality, integrity and sustainability at the forefront. Our Board has significant climate change risk expertise and management skills and experience, which is described further in the [Proxy Statement](#). Senior management is responsible for day-to-day management of risk, including the creation of appropriate risk management policies and procedures.

Boeing has two overarching risk processes: Enterprise Risk Management (ERM) and Compliance Risk Management (CRM). All functions and business units participate in both ERM and CRM, including the Global Enterprise Sustainability organization. Global ERM and CRM risk assessments are completed annually to determine the most critical risks to Boeing.

Boeing's sustainability organization, informed by internal and external stakeholders and augmented by a digital tool, determined the most relevant sustainability priorities to our business. You can learn more about our 11 sustainability priorities on [Page 11](#).

To learn more about our lobbying and political activity governance, see:

- [Boeing's Oversight and Compliance Procedures for Political Activity](#)
- [BPAC Contributions](#)
- [2022 Trade Association Memberships](#)

- Contents
- Introduction
- Approach & Governance
 - Company Profile
 - Advancing Our Sustainability Journey
 - Sustainability Goals
 - Governance and Risk Management
 - Enhancing a Sustainability Culture
 - Ethical and Compliant Business
- People
- Products & Services
- Operations
- Communities
- Reporting

The results from the risk assessments and sustainability priority assessment are compared for commonality, and overlapping risks receive additional monitoring and management. For example, Innovation and Clean Tech is a key priority for Boeing and our 2030 goal of 100% SAF-compatible current and future commercial airplanes is a key component to the commercial aviation industry's climate goals. Within the ERM process, Boeing mitigates and manages the key strategic risk to this priority and goal — the ability to scale SAF supply to meet the demand needed to achieve the commercial aviation industry's net-zero ambitions. SAF as a drop in fuel is currently approved to be blended at 50/50 blend with Jet A and works with existing airplanes and offers the largest potential to reduce carbon emissions over the next 20 to 30 years in all aviation segments. Boeing's intent is to help catalyze SAF scaling through subject matter expertise, investments in product compatibility work, purchasing SAF for our own fuel use, and our partnerships and policy advocacy. As mentioned on [Page 45](#), Boeing continued to make key investments to scale SAF in 2022.

Within the sections of this report, we will continue to discuss our governance, risk identification and management of our key priorities.

Business Continuity Management

Boeing strengthens its resiliency through Business Continuity Management (BCM), managing and mitigating risks should a significant incident disrupt business operations. This entails five key preparedness programs: Business, Emergency, Information Technology, Supply Chain and Human Resources, working together to facilitate company resiliency. The primary objective of these preparedness functions is to develop and maintain guidelines, standards, processes and tools that enable business units and functions to mitigate risk and recover critical programs, applications and suppliers.

Enterprise Risk Management and Compliance Risk Management

Audit Committee

The Audit Committee receives annual reports on Boeing's Enterprise Risk Management (ERM) and Compliance Risk Management (CRM) processes and regular reporting on the company's compliance and ethics programs from the Company's Controller and Chief Compliance Officer (CCO).

Enterprise Risk Management

The full Board of Directors reviews enterprise risks on a regular basis as well as conducts regular reviews of our ethics and compliance programs. ERM assesses strategic risks to the company and industry, including topics within the environmental, social and governance elements of sustainability, such as climate and policy change.

Compliance Risk Management

The CRM process is overseen by the Compliance Risk Management Board (CRMB), chaired by Boeing's chief compliance officer. The CRMB includes senior company leaders who provide oversight on Boeing's CRM process designed to identify, evaluate and prioritize the most significant compliance risks; assess mitigation strategies; and provide visibility to Boeing's CEO and Audit Committee of the Board of Directors.

Annual Employee Training

All employees, from senior leaders to entry-level, receive annual training on compliance risk areas tailored to their specific duties and responsibilities, such as U.S. Department of Defense procurement rules, proper handling of sensitive information, safety training, Seek, Speak & Listen Habits and anti-corruption.

Boeing navigated challenges in 2022 that added to the company's risk profile, including:

- Social and political issues
- Organizational and structural challenges
- Regulatory review of the 737 MAX

BCM continues to identify risks and to implement strategies and processes to mitigate those risks to our people, programs, infrastructure, network and supply chain.

Tax Governance and Compliance

We are committed to being a responsible taxpayer wherever we operate. Our global tax team is responsible for maintaining the highest compliance standards, being transparent in our dealings with authorities and sustaining robust internal controls for risk management. Boeing's principled tax approach is grounded in ethical business practices and tax guidance that follows business substance.

Learn more about Boeing's approach to [global tax governance and compliance](#).

Enhancing a Sustainability Culture

Annual Incentive Plans Reinforce Sustainability Goals

Starting in 2022 and continuing into 2023, Boeing enhanced its enterprise annual incentive design to incorporate climate and equity, diversity and inclusion metrics into the Company Performance Score formula, which determines payouts under the company's largest employee incentive plans. These include the Performance-Based Incentive Plan, the Employee Incentive Plan, the Management Incentive Plan, and the Executive Annual Incentive Plan.

The climate metric is designed to incentivize and reward employee behavior that reduces our energy consumption across the enterprise, and along with equity, diversity and inclusion and our other operational goals, accounts for 25% of the overall Company Performance Score driving payouts under our incentive plans. Individual performance is also taken into account in determining individual employee payouts under most of our incentive plans.

Learn more about Boeing's 2022 company performance in our [Proxy Statement](#).

Good Habits: Seek, Speak & Listen

Teammates across the company continue to build Seek, Speak & Listen habits, which are fundamental to how we work together. These habits are foundational to our culture of integrity and inclusion, and they enable us to improve — in safety, quality, production, performance and inclusion. Individual performance is also assessed using our Seek, Speak & Listen habit framework.

By embracing these simple habits, we make better decisions, drive innovation and build connection. We seek out the places where things aren't going well and where potential issues could arise, so we can learn and address issues before they become problems. We get all perspectives on the table and ensure every team member feels safe to speak up. We listen to each other with humility and grace. This is a key part of our commitment to collective progress, lasting cultural change and enhancing trust from within.

The habits are simple acts of caring so our people can be their best at work and in life. We will continue to embed the habits into our daily work, processes, systems and communications to hold ourselves accountable.

Our Habits



Seek

Because awareness
can teach us and help
us improve



Speak

Because it's the right
thing to do and every
voice matters



Listen

Because listening
builds trust and leads
to better decisions



The Olathe Pollinator Prairie, near Kansas City, is an ecological habitat supported by Boeing. (Boeing photo)

Ethical and Compliant Business

Boeing recognizes that the company’s long-term interests are advanced when employees are responsive to the concerns of employees, customers, public officials, investors, suppliers and the communities we serve. This starts with our Board who actively fosters a corporate culture that puts safety, quality, integrity and sustainability at the forefront of all that we do.

Board members commit to, and use, a Code of Ethics as guiding principles; the Code emphasizes the importance of compliance with all applicable laws, rules and regulations; maintaining confidentiality; avoiding any conflicts of interest; and reporting of illegal or unethical behavior.

The Audit Committee and the full Board oversee our compliance and ethics programs through close collaboration with Boeing’s Chief Compliance Officer and periodic reviews of program metrics. These touch points provide visibility to the Board of significant compliance and ethics risks, as well as specific cases that are identified through the company’s various reporting channels.

Learn more about our [Ethics and Compliance Program](#).

The Boeing Code of Conduct

At Boeing, our first commitment is to the people and customers who rely on our products and services to protect, connect and explore our world and beyond. Each Boeing employee has a personal responsibility to honor that promise and to serve as stewards of Boeing’s legacy of aerospace excellence and innovation. New employees sign the Code of Conduct and complete Recommitment training when they join the company — and we all reaffirm this commitment every year. Learn more about our [Code of Conduct and Recommitment](#).

Our annual Code of Conduct signing and Recommitment remind all of our employees of their obligation to speak up and be a voice for others when something does not align with our values.

Robust Anti-Corruption Program

Integrity is a core company value and Boeing strictly forbids bribery and corruption of any kind. Boeing’s robust anti-corruption program includes extensive controls, rigorous policies and procedures, and an annual risk assessment to ensure effectiveness and identify potential enhancement opportunities. Learn more about our [anti-corruption program](#).

Boeing publishes an internal policy that explains its anti-corruption and anti-bribery requirements and expectations for employees, while making its guidelines for ethical business conduct publicly available to employees and other stakeholders. The company also makes employees aware of their federally protected whistleblower rights, which are designed to protect employees against retaliation for reporting potential wrongdoing by a U.S. contractor or subcontractor.

Understanding Ethical Concerns: 2022 Data¹



1. Data reflects the reporting period of November 2021 through October 2022.
2. Inquiries comprise Requests for Guidance and Information Requests. Requests for Guidance are situations where employees are seeking guidance when facing ethical dilemmas or when they need assistance in understanding company policies or expected behaviors. Information Requests are situations where employees are seeking general information. Both demonstrate awareness of Boeing’s Compliance and Ethics program, but Requests for Guidance are viewed as the most positive types of contact.
3. Investigated matters are considered unsubstantiated when investigation findings demonstrate that no misconduct occurred or where there is a lack of evidence to support a finding of misconduct.
4. Ongoing evaluations demonstrate that Boeing’s substantiation rate is slightly higher than other published benchmarks, indicating an effective investigation process and informed reporting by company employees.

Contacting Ethics

Boeing encourages employees, subsidiaries, suppliers and external stakeholders to promptly raise concerns about safety, quality or potential violations of the law or Boeing policies. For more information, visit our [Boeing Ethics website](#).

Contents

Introduction

Approach & Governance

Company Profile

Advancing Our
Sustainability Journey

Sustainability Goals

Governance and
Risk Management

Enhancing a
Sustainability Culture

Ethical and Compliant
Business

People

Products & Services

Operations

Communities

Reporting

Commitments and Actions
on Human Rights

Boeing is committed to responsible business practices and promoting positive change while simultaneously creating value for our customers, shareholders and other stakeholders. In recognition of this commitment, the company has developed policies and practices designed to enforce our Code of Basic Working Conditions and Human Rights. [Learn more about our approach to human rights.](#)

Through our [Supplier Code of Conduct](#), we establish foundational expectations of prospective and active suppliers, including adherence to human rights standards.

Strengthening compliance engagement through localized support

In 2022, Boeing continued to make tangible improvements to its compliance program and meaningful progress toward strengthening its culture of compliance and safety at locations around the globe. The company deployed two localized teams — the Site Compliance and Ethics Officers (SCEOs) and the Ethics Ambassadors — both of which are embedded within the business and serve as amplifiers for the company’s compliance and ethics efforts, resulting in thousands of engagements with employees.

The SCEOs are physically deployed at 22 locations around the globe, leading localized and targeted compliance activities. SCEOs partner with company leaders, leveraging site-specific data to proactively address risks and foster a speak-up culture. SCEOs also serve as an on-site resource for employees, engaging through floor walks and team

meetings, new employee outreach, and manager trainings to answer questions, provide guidance, and help address compliance and ethics concerns.

The Ethics Ambassador Program, originally piloted in 2021, is currently deployed at sites including North Charleston, South Carolina; Mesa, Arizona; Michoud Assembly Facility in New Orleans; San Antonio; and St. Louis. Ambassadors are emerging leaders embedded within the business who extend the reach of the company’s compliance program by fostering a culture of compliance and integrity by amplifying our values, listening to teammate concerns and encouraging them to speak up. Ambassadors also work with their designated SCEO to promptly elevate local risks and issues to site leadership.

Mesa Ethics Ambassadors: SCEO Larry Thompson (left) joins Mesa Ethics Ambassadors, employees and community members to help assemble 1,200 meal packages for local families as part of a volunteer event for United Food Bank in Mesa. Thompson along with SCEOs across the Boeing enterprise work each day to positively influence our workplaces and communities. (Boeing photo)



- Contents
- Introduction
- Approach & Governance
- People**
 - Workplace Safety
 - Employee Well-Being
 - Global Equity, Diversity and Inclusion
 - Professional Development, Education and Learning
- Products & Services
- Operations
- Communities
- Reporting



Reginald Douglas at St. Louis paint shop. (Boeing photo)

PEOPLE

Healthy and Empowered

Workplace Safety

Boeing knows that operating to keep ourselves and our teammates safe in the workplace is everyone's responsibility. Safety is central to everything we do for ourselves, those we care about and our communities. The Safety Guiding Principles provide a framework to achieve the goal of zero workplace injuries so every person who works at, or visits, a Boeing site leaves as safe and healthy as when they arrived. Boeing's workplace safety program, Go for Zero – One Day at a Time, takes a holistic approach to worker safety, striving for a goal of zero injuries, which is underpinned by the belief that every injury is preventable.

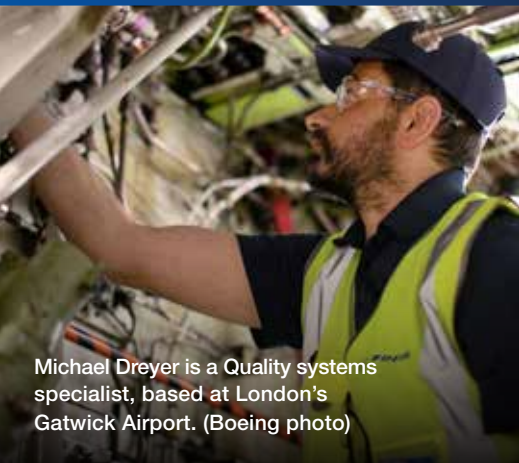
Our occupational health and safety management system is modeled after the International Organization for Standardization (ISO) 45001. As of 2022, four sites are certified to ISO 45001 with multiple sites conforming to ISO 45001 in support of our business objectives.

Celebrating 10 years of Go for Zero

Go for Zero was introduced to help increase safety in our workplaces. Today, we take a look at how our company has performed in workplace safety since 2013.



Alexa Callanan and Michael Douangdara at Renton factory in Washington. (Boeing photo)



Michael Dreyer is a Quality systems specialist, based at London's Gatwick Airport. (Boeing photo)



787 chief mechanic Kevin Landy inspects a forward pressure bulkhead join surface. (Boeing photo)



Continuous improvement
The goal of zero injuries **IS** possible

↓ **26%** decrease
in serious injuries
(since 2015)



↓ **39%** decrease
in recordable injuries
(since 2013)

↑ **31%** increase
in lost workday cases
(since 2013)

↓ **71%** decrease
in ergonomic injuries
(since 2013)



- Contents
- Introduction
- Approach & Governance
- People
 - Workplace Safety
 - Employee Well-Being
 - Global Equity, Diversity and Inclusion
 - Professional Development, Education and Learning
- Products & Services
- Operations
- Communities
- Reporting

Boeing's Lifesaving Rules

Safety is a core value at Boeing. Some operations performed at Boeing are recognized as High Hazard Processes due to their potential for a serious injury or fatality. Lifesaving Rules go beyond regulatory requirements and are intended to reduce or eliminate the risks created when around or performing these processes and prevent life-critical incidents by increasing accountability for following safety policies and procedures.



Pedestrian/Vehicle

Follow safe driving and walking rules.



Chemical Processing

Control sources of hazardous chemical exposure.



Crane Operations

Plan lifting operations and control the load path.



Machine Operations

Operate machines safely.



Aircraft Towing

Keep myself and others safe during aircraft towing operations.



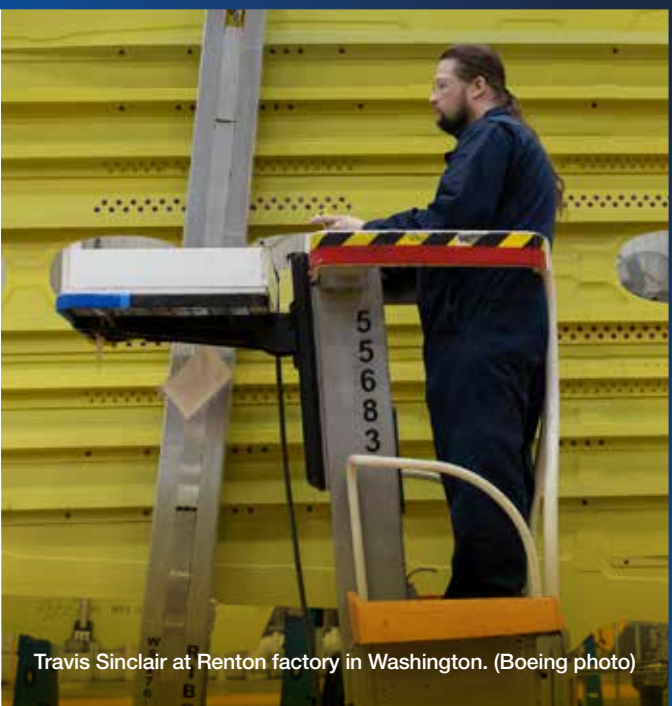
Hazardous Energy

Verify control of hazardous energy or a zero-energy state before work begins.



Working at Heights

Protect against falls and dropped objects while working at heights.



Travis Sinclair at Renton factory in Washington. (Boeing photo)



Mark Grenlund at Renton factory in Washington. (Boeing photo)

2022 Workplace Safety by the Numbers:

44:1

Near Miss to Hazard¹

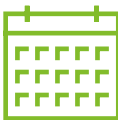
98%



Found/Fixed Metric²

1,096

Health and Safety Training Courses Available



1.2

Lost Workday³
(includes COVID-19 cases)

1. Represents global data.
2. Represents global data.
3. Represents U.S., Canada, Australia and UK data.