



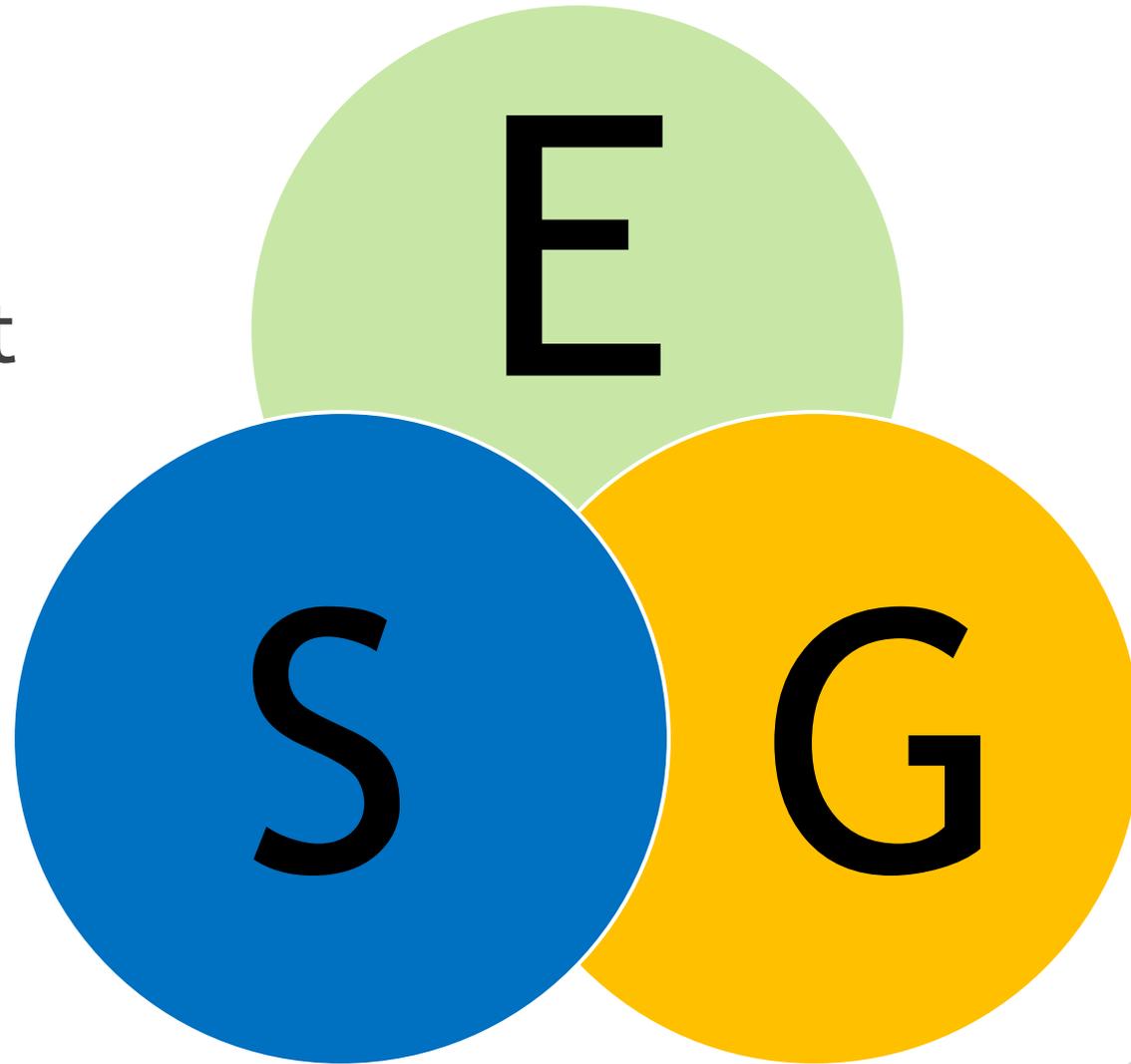
**How do the principles
of ESG apply to
disassembly and
distributors; what are
the expectations?**

Nigel Marsh

AFRA Auditor & Independent Environmental
Consultant

ESG???

- ▶ Environment
- ▶ Social
- ▶ Governance



Today's aims

- ▶ To raise awareness of ESG and share some examples and thoughts
- ▶ For you to consider how relevant ESG is to your company and our organization and what our/your next steps could be
- ▶ Opinions expressed aren't necessarily the views of AFRA and aren't advice!

Nigel Marsh

- ▶ 21 years with Rolls-Royce plc as Head of Environment and Sustainability
 - ▶ EMS & performance improvement
 - ▶ Compliance
 - ▶ Chemicals Management
 - ▶ Auditing and Due Diligence
 - ▶ KPIs and External Reporting on Sustainability
- ▶ Former Board Director with AFRA and IAEG
- ▶ Now an AFRA auditor for European sites
- ▶ Fellow of IEMA and a CEng

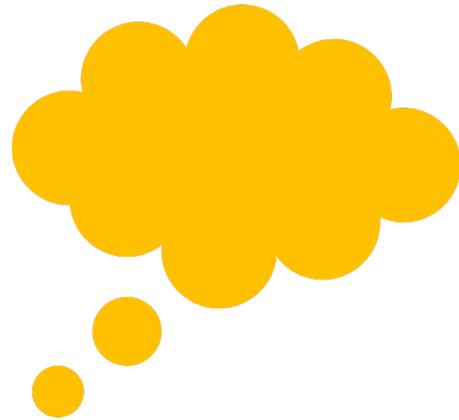


Running order

- ▶ What is ESG?
- ▶ Who are our stakeholders?
- ▶ ESG Reporting
- ▶ What are the material ESG issues for our sector?
- ▶ How should we be responding?
- ▶ Frameworks to track ESG
- ▶ IAEG Initiative on ESG Reporting
- ▶ AFRA KPIs
- ▶ What messages do we want to communicate and how?
- ▶ Summary
- ▶ What else do we need?
- ▶ Q&As

Questions/Contributions?

- ▶ Please ask questions as we go or at the end, whatever works best for you!



What is ESG (1)

- ▶ Not something new!
- ▶ A framework that helps stakeholders understand how an organization manages **risks and opportunities** around sustainability issues
- ▶ ESG has evolved from other historical approaches that focused on OH&S issues, pollution prevention and corporate philanthropy
- ▶ ESG has evolved from a “nice to have” to an essential part of any organization’s disclosures
- ▶ *“ESG is far from a passing phase, it’s at the heart of how better organizations do business”*

What is ESG (2)

- ▶ ESG affects us all
- ▶ Companies not taking it seriously risk being left behind and unable to demonstrate their ability to operate sustainably to stakeholders & potentially even contract for business.

ESG Regulatory Developments

- ▶ US & European requirements (for large companies)
- ▶ An increased emphasis on ‘S’ (human rights) as well as ‘E’
- ▶ Global ESG regulation is set to make a leap with new requirements for private businesses to report on and prevent adverse impacts on climate, the environment and human rights.
- ▶ In the United States, the SEC requires all public companies to disclose information that may be material to investors, including proposals for ESG related investment and GHG emissions

Stakeholders

- ▶ Airlines
- ▶ OEMs
- ▶ Regulators
- ▶ Leasing companies
- ▶ Investors/Financiers
- ▶ Trade Bodies
- ▶ Public
- ▶ Employees
- ▶ Local communities
- ▶
- ▶

ESG Reporting

- ▶ What is ESG reporting?
- ▶ ESG reporting is all about disclosing information covering an organization's operations and risks in three areas: environmental stewardship, social responsibility, and corporate governance
 - ▶ Consumers look to ESG reports to find out if they are supporting a company whose values align with theirs
 - ▶ Investors look for qualitative and quantitative information to help them screen investment opportunities.

All companies are on a journey



- ▶ Different names but an evolving agenda!

Where are we all?

- ▶ How many of you have formally considered ESG as a business issue?
- ▶ How do you consider your current knowledge of ESG?



What are your ESG risks (and Opportunities?)

Environment

What are your ESG risks (and Opportunities?)

Environment

Common set of ESG Risks

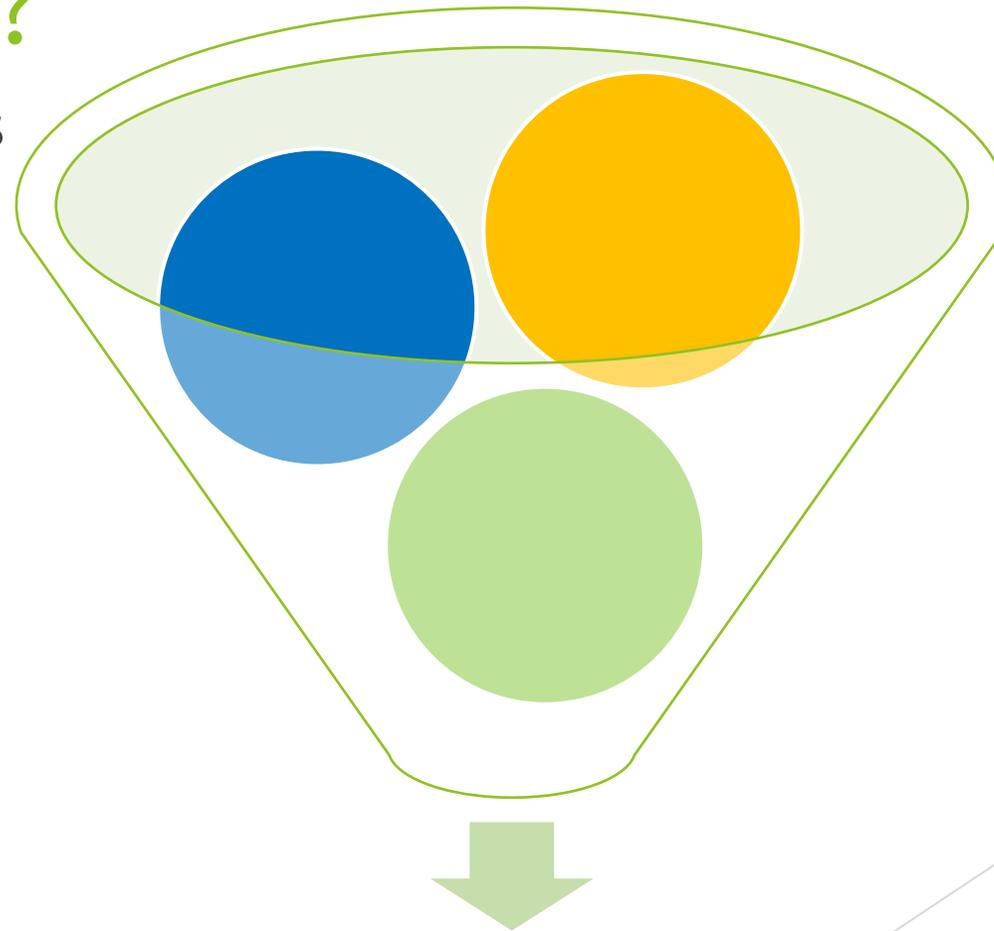
- ▶ Climate change impacts mitigation and adaptation
- ▶ Working and safety conditions
- ▶ Respect for human rights
- ▶ Anti-bribery and corruption
- ▶ Compliance with relevant laws and regulations
- ▶ Environmental management practices and duty of care
- ▶ Supply chain

Supply Chain Duty of Care Obligations

- ▶ Modern Slavery acts
- ▶ Child Labour
- ▶ Employment rights and Ethics
- ▶ Conflict Minerals
- ▶ Fair pay
- ▶ Diversity
- ▶

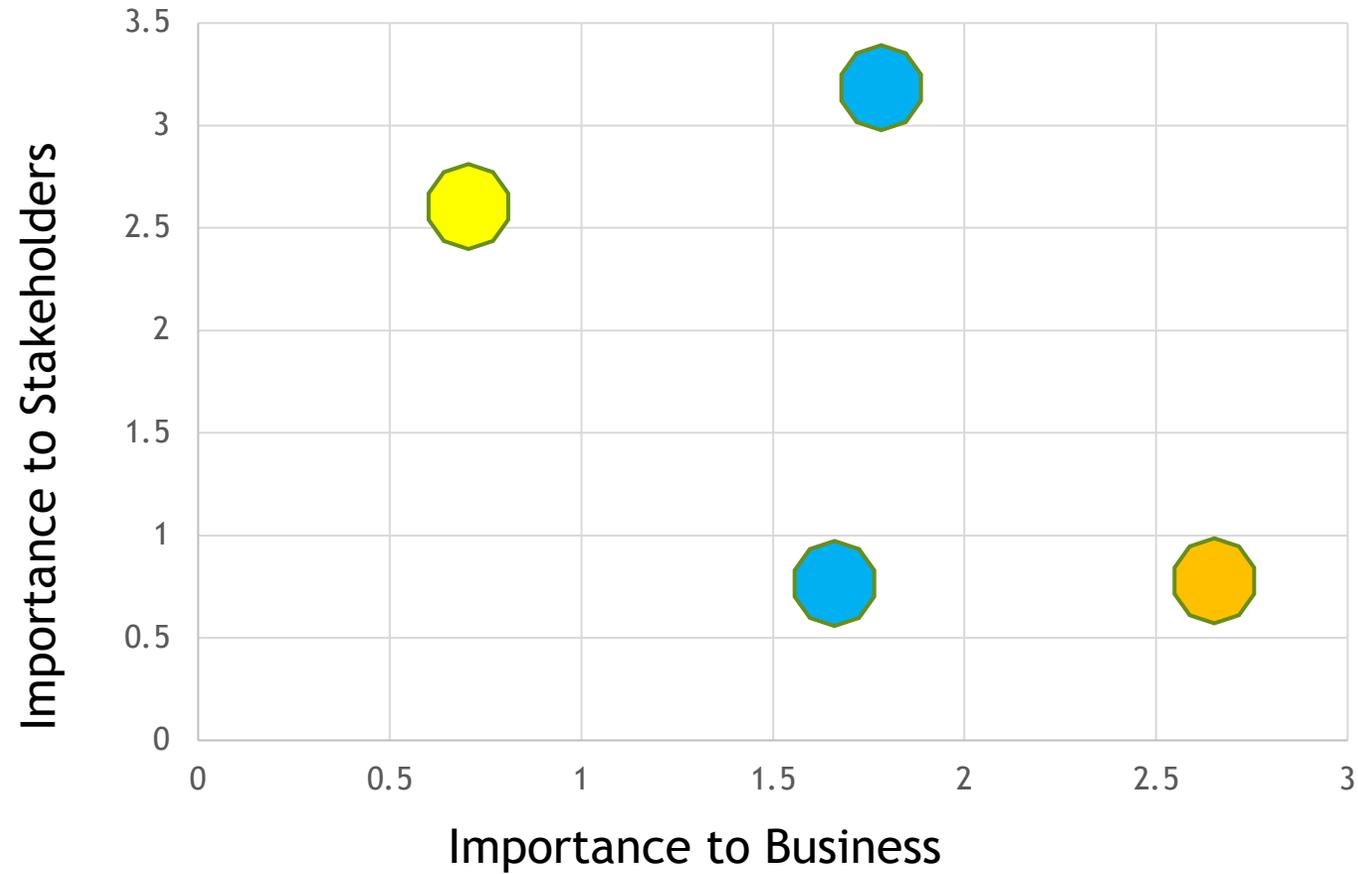
ESG Materiality assessment - what's important/priority?

1. Identify key stakeholders and drivers. Define your company's purpose and strategic objectives for the materiality assessment
2. Identify relevant ESG areas
3. Determine material issues for you and then Key ESG Indicators



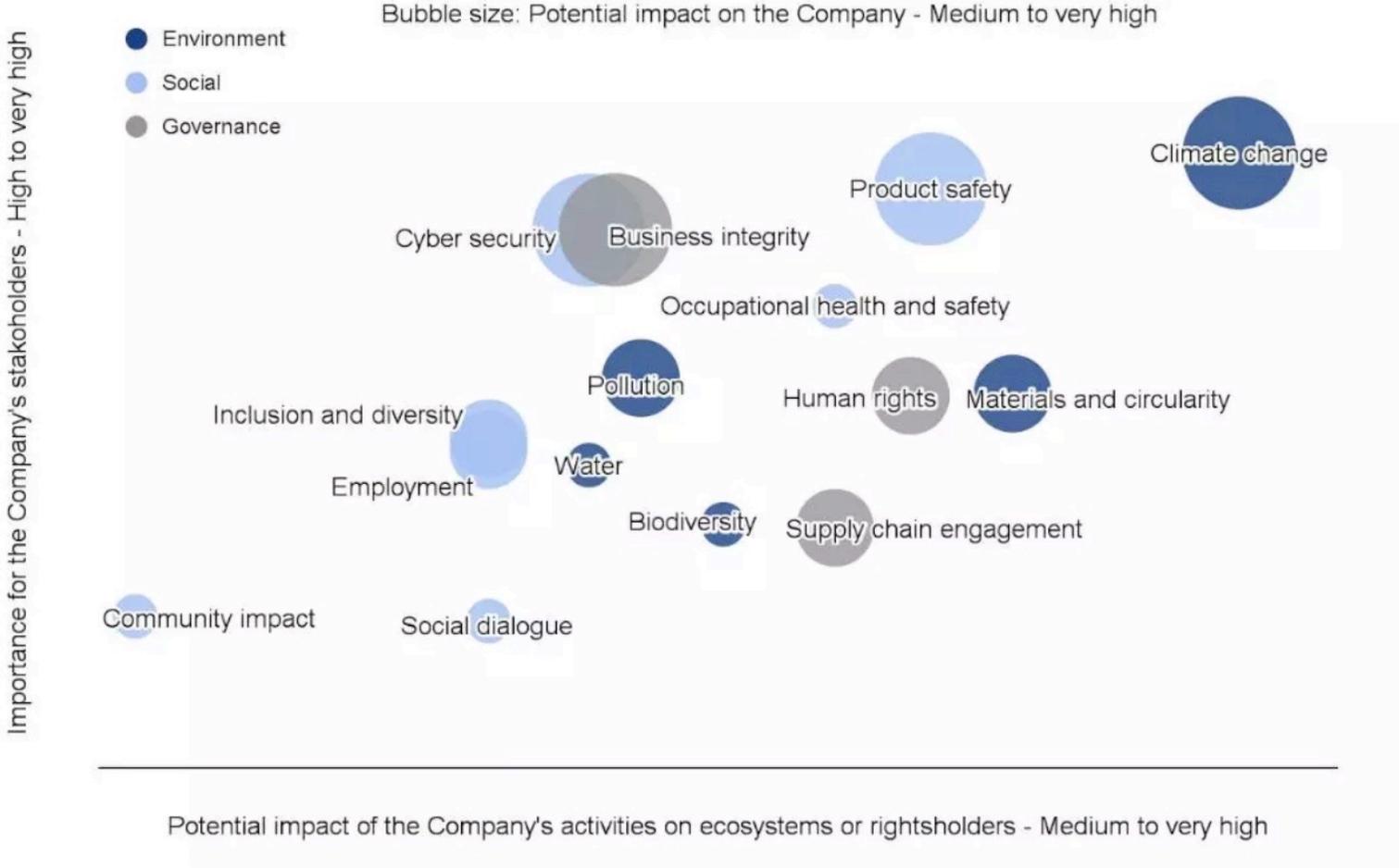
Key ESG Indicators

Example of using a Materiality Matrix, mapping ESG issues of most interest to your stakeholders



ESG Reporting example

Materiality Matrix 2022



Materiality Matrix

Materiality matrix

The stakeholder-driven materiality results of the materiality assessment in 2021 provided us with a recalibrated set of 11 material topics, which were identified from a list of 20 potentially relevant topics. Some issues that were not identified as priority by our stakeholders remain important to us and so we continue to report on them. The table below outlines our most material topics and where to find them in this report.



TOPICS

- P Plastic
- C Climate change
- M Material and waste management
- A Air quality management
- Z Food options
- B Biodiversity
- W Water management
- N Noise management
- F Flight safety and security
- I Infectious disease
- O Occupational health and safety
- E Employee welfare
- T Training & development
- D Diversity & inclusion
- R Responsible sourcing
- Y Community involvement
- V Privacy & data protection
- U Business ethics and anti-corruption
- G Corporate Governance
- S Disclosure & transparency

ESG Framework

Popular Top 3 issues:

- ▶ Decarbonisation
- ▶ Circular economy
- ▶ Human rights



Frameworks to track ESG

- ▶ A number of ESG disclosure frameworks exist to help companies make their disclosures consistent and as relevant as possible
- ▶ Popular frameworks include the SASB Standards, the Global Reporting Initiative (GRI) Standards, and the Task Force on Climate-related Financial Disclosures (TCFD)
- ▶ A single company can use multiple frameworks: for example, according to its sustainability report, Microsoft informs its reporting using the GRI Standards and adapted frameworks from the TCFD and the SASB



Who is likely to communicate more on ESG?

- ▶ Large Corporates
 - ▶ Compliance
 - ▶ Benchmarking
 - ▶ Investment
- ▶ Leaders, those at the vanguard of development and improvement in sustainable business practices
- ▶ Those with material impacts on related issues
- ▶ Companies facing public interest/pressure
- ▶ Companies responding to customer supply chain requirements

ESG Reporting example

Our ESG plan

Our plan follows the OGSM (objectives, goals, strategies and measures) framework, across 11 key areas



Environmental

Environmental footprint
Sustainable aviation



Social

Health and safety
Diversity and inclusion
Employee engagement
Customer satisfaction
Data privacy
Communities



Governance

Board and committees
Ethics and compliance
Responsible supply chain

ESG Reporting example

Environment

- Boeing and the Environment Page
- Boeing Airplane Family Environmental-Improvement Chart
- Boeing CDP Climate Response
- Boeing CDP Water Security Response
- Boeing ecoDemonstrator Program
- Assurance Statements for GHG Emissions and Water Withdrawal
- GHG Emissions Supplement
- Hydrogen Fact Sheet
- ISO 14001 Certificates
- S&P Global Corporate Sustainability Assessment Supplement
- Sustainable Aviation Fuel (SAF) Fact Sheet
- Sustainable Operations Fact Sheet

Social

- Safety & Quality
- Life at Boeing
- Global Equity, Diversity & Inclusion
- Military & Veterans
- Boeing Around the Globe
- Community Engagement
- Education
- Human Rights
- Suppliers
- UK Gender Pay Report 2020
- Weapons
- Political Activities

Governance

- Boeing in Brief
- Boeing Code of Conduct
- Board of Directors Code of Conduct
- Corporate Governance
- Ethics and Compliance
- Investor Information
- Tax Governance & Compliance

ESG Reporting example

Key ESG Data

All data is for the period from Jan. 1, 2020, through Dec. 31, 2020, or as of Dec. 31, 2020, unless otherwise noted. See full report for comprehensive data disclosures, which align to GRI, SASB and TCFD.

2020 Performance Against 2025 Operations Environmental Goals¹

Performance Area	2025 Goal (vs. 2017)	Progress (as of YE 2020)
GHG emissions	Reduce by 25%	Net-zero (absolute reduction of 14%)
Energy consumption	Reduce by 10%	12% reduction
Water withdrawal	Reduce by 20%	23% reduction
Solid waste to landfill	Reduce by 20%	44% reduction
Hazardous waste	Reduce by 5%	34% reduction

1. Operational goals shown are absolute targets and not indexed to production levels or growth. 2020 performance was affected by changes associated with occupancy and operations during COVID-19. The targets were established against a 2017 baseline, and the 2025 goals will act as a milestone to guide actions and progress to the 2030 goals.

Key Environmental Data

Performance Area	2020 Data
Total energy use ¹	16,196 TJ
Total water withdrawal ²	4,350 ML
Scope 1 GHG ³	560,000 MT
Scope 2 GHG – location-based ⁴	800,000 MT
Scope 2 GHG – market-based ⁵	625,000 MT
Scope 3 GHG – business travel	92,000 MT
Scope 3 GHG – use of sold products ⁶	158 MMT
Total hazardous waste generated ⁷	4,935 MT
Total waste to landfill	11,384 MT

- Energy data represents 100% of the company.
- Water data represents 79% of the company by headcount.
- Scope 1 and 2 data represents 100% of the company. For Scopes 1, 2 and 3, we calculate emissions from CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ and NF₃ for this dataset.
- Location-based data is calculated using regional factors for carbon content.
- Market-based data is calculated using carbon content of actual purchased energy.
- Use of sold products emissions are based on estimated lifetime emissions of Boeing Commercial Airplanes product deliveries in 2020, including direct emissions from combustion of fuel (136 MMT) and indirect emissions from production of fuel (22 MMT).
- Waste data represents approximately 70% of operations by headcount.

Community Engagement

Community Giving	Total Volunteer Hours	Number of Community Partners
\$234 million	250,000 hours	13,400

Health and Well-Being

Fatalities	0
Lost workday case rate	0.43
Near-miss/hazard ratio to recordable injuries	24:1
Found/fixed metric	98%

Global Equity, Diversity and Inclusion

Employee Representation¹

Total Boeing employees	141,000
Non-U.S. employees	11%
Total Boeing employees covered by collective bargaining agreements	33%
U.S. employees who are veterans ²	14.8%

1. As of Dec. 17, 2020.

2. Veterans Data: U.S.-based work locations of The Boeing Company, excluding non-fully integrated subsidiaries that are not on Boeing HR systems.

Female Representation¹

Overall (U.S.)	Overall (Non-U.S.)	Board of Directors	Executive Council ²	Executives	Managers	New Hires
22.9%	24.3%	25.0%	13.6%	31.8%	22.2%	22.0%

1. As of Dec. 17, 2020.

2. Executive Council gender data includes both U.S. and non-U.S. members.

Gender Data: U.S.-based work locations of The Boeing Company, excluding subsidiaries except where noted.

Racial and Ethnic Minority Representation¹

Overall	Board of Directors	Executive Council ²	Executives	Managers	New Hires
31.2%	16.7%	35.0%	20.8%	23.0%	37.2%

1. As of Dec. 17, 2020.

2. Executive Council Race and Ethnicity data does not include non-U.S. members. However, Susan Doniz, Chief Information Officer and senior vice president of Information Technology & Data Analytics, openly identifies as Hispanic.

Race and Ethnicity Data: U.S.-based work locations of The Boeing Company, excluding non-fully integrated subsidiaries that are not on Boeing HR systems. Racial and ethnic minorities include Black, Asian, Hispanic, American Indian/Alaskan Native, Native Hawaiian or Other Pacific Islander, and Two or More Races.

ESG Reporting example



[ESG STRATEGY](#)

[CLIMATE CHANGE](#)

[SAFETY](#)

[TEAM MEMBERS](#)

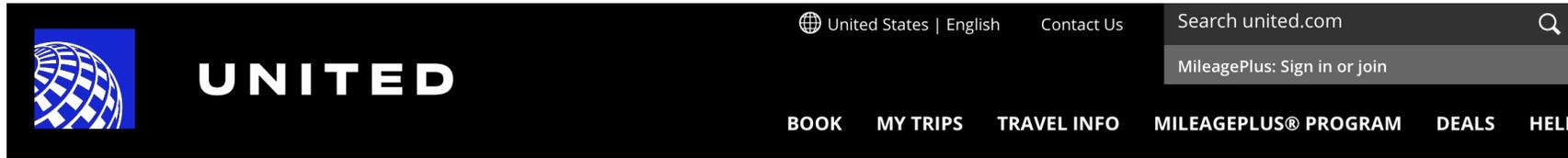
[CUSTOMERS](#)

[COMMUNITY](#)

ESG is an important part of American's long-term strategy. We don't look at ESG and other strategic priorities as either/or decisions. The health of people and planet are not separate from the financial health of our company.



ESG Reporting example



Our environmental commitment



At United, our mission is connecting people and uniting the world. Every day, we celebrate the people and communities across our planet — which is why we understand the need for bold action now to combat climate change. United is committed to reducing our emissions, so that we can continue to appreciate the wonders of this world, today and into the future.

AFRA Member reporting (1)



OUR IMPACT

337

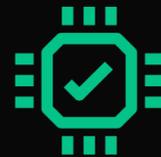
The total number of aircraft disassembled in our history reached 337 by the end of 2022.



Aircraft

16902

We have already delivered more than 16,902 components back into the aviation supply chain in 2023.



Components

186

Our repurposing efforts in 2023 have already seen more than 186 tonnes of surplus material be reutilised rather than recycled.



Surplus

AFRA Member reporting (2)



The image shows a screenshot of the GA Telesis website. The header is dark blue and contains the GA Telesis logo on the left, followed by navigation links: ABOUT, SERVICES, NEWS, CONTACT US, AVAILABLE NOW, 24/7/365 AOG SUPPORT, ENGLISH (with a US flag icon), a user profile icon, and a search icon. Below the header, three lightbulb icons are displayed on a dark blue background. The first is green and contains a white outline of a plant with three leaves. The second is orange and contains a white outline of three stylized human figures. The third is blue and contains a white outline of three interlocking gears. Below each lightbulb is a white text label: ENVIRONMENTAL, SOCIAL, and GOVERNANCE.

GA
TELESIS

ABOUT SERVICES NEWS CONTACT US AVAILABLE NOW 24/7/365 AOG SUPPORT  ENGLISH  


ENVIRONMENTAL


SOCIAL


GOVERNANCE

ESG Aviation Sector Standard for reporting?

IAEG AT A GLANCE

Founding Members



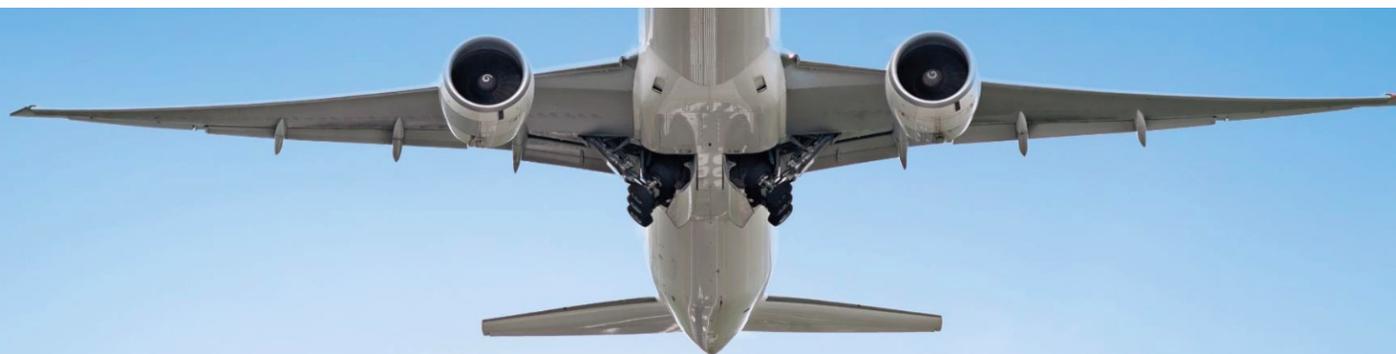
IAEG was founded in 2011 with a vision to advance innovative environmental solutions for the aerospace and defence industry. Starting with 11 Founding members, now at 50 members, this collaboration forum is designed to address pertinent environmental issues that all member companies face. As we have grown, we have found tremendous value and synergy in working these non-proprietary issues together, for the betterment of the industry at large.

Bruno Costes | Board Chair

SOLUTIONS
COMPLEX AND INNOVATIVE PRODUCTS THAT LAST **DECADES** IN THE MARKETPLACE

A graphic containing the text 'SOLUTIONS' and 'COMPLEX AND INNOVATIVE PRODUCTS THAT LAST DECADES IN THE MARKETPLACE'. To the right of the text is an icon of a calendar with a red square on one date and a clock face.

IAEG
VISION
2025



LEADING EDGE
SOLUTIONS
ACROSS THE
VALUE CHAIN



RESPONSIBLE &
SUSTAINABLE
AEROSPACE
INDUSTRY

A RECOGNIZED GLOBAL BODY FOR AEROSPACE & DEFENSE

51 MEMBER
COMPANIES

70% OF GLOBAL AEROSPACE & DEFENSE
INDUSTRY ARE IAEG MEMBERS

\$488B COMBINED ANNUAL 2020 REVENUES
FOR IAEG (FULL) MEMBERS

\$697B TOTAL GLOBAL AEROSPACE
INDUSTRY 2020 REVENUES



ESG Standard for reporting

WORK GROUP 11 - AEROSPACE INDUSTRY ESG ENGAGEMENT

Purpose

To deploy and maintain an enduring aerospace industry voluntary standard, with the support of a proven third-party solution, for assessing Environment, Social and Governance (ESG) practices that enables informed business decisions, duty of care compliance obligations, sustainability reporting, and positive change in environmental & social topics.

ESG Standard for reporting

- ▶ Ecovadis are providing a web-based solution to collect data from members
- ▶ First Sector insights will be delivered at the Paris Airshow (19-25 June '23)
- ▶ A **'Sector Materiality Assessment'** will be provided later in 2023

- ▶ **Customers & OEMs will likely place greater requirements on suppliers to provide ESG data and to take part in related initiatives**
- ▶ AFRA has a key role in the **'Circularity'** of aerospace materials and to providing the EoL element of an aircraft's footprint

Sustainable Airlines Initiative (SAI)

- ▶ Air France, KLM, Transavia, Delta Airlines & Virgin Atlantic
- ▶ Supported by EcoVadis to share supplier ratings on ESG using common standards
- ▶ Greater supply chain transparency and net zero emissions

KPI Planning



AFRA KPIs - stepping out..

- ▶ Feedback on experience to date of applying these
 - ▶ Have you looked at these?
 - ▶ Have you implemented them?
- ▶ What developments would you like to see in KPIs?

BRONZE	SILVER	GOLD	DIAMOND*
KPI MEASUREMENTS:			
<ul style="list-style-type: none">• Number of parts reused.• Recyclability rate.	<ul style="list-style-type: none">• Number of parts reused.• Recyclability rate.• Total Waste.• Total hazardous waste• Core disposal rate	<ul style="list-style-type: none">• Number of parts reused.• Recyclability rate.• Total Waste.• Total hazardous waste.• Core disposal rate.• Reusability rate.	<ul style="list-style-type: none">• Number of parts reused.• Recyclability rate.• Total Waste.• Total hazardous waste.• Core disposal rate.• Reusability rate.• Energy recoverability rate.

What ESG messages do we want to communicate?



What external messages on ESG do we/you want to send?

- ▶ What do we want to be known/recognized for?
- ▶ Zero carbon, Low Carbon, Carbon Neutral, Carbon free, Carbon Positive
- ▶ Sustainability, Circular economy
- ▶ Respect for all, equal opportunities, corruption free, anti slavery
- ▶ Should we be a Leader or a Follower?

Your Company



What can you say about your ESG journey?

- ▶ **Elevator pitch:**

- ▶ *What should your company say about your ESG priorities?*

- ▶ **Strapline:**

- ▶ *A snappy summary of what matters to you*

- ▶ **Position statement:**

- ▶ *A summary of where you are now on ESG.*

Avoid Greenwashing!

- ▶ External reports
- ▶ Website statements
- ▶ Publicity materials
- ▶ Product statements

- ▶ Materiality??
- ▶ Assurance - limited or reasonable??

How do the principles of ESG apply to disassembly and distributors?

- ▶ The same as for everybody else!
- ▶ Transparent reporting (to Stakeholders) based on **material issues** and being informed by recognized standards
- ▶ Materiality - based both on what we and others decide!

Summary

- ▶ ESG is highly relevant to AFRA/ASA members
- ▶ There is a growing expectation from Investors and other stakeholders for us to respond to ESG developments
- ▶ We have a key role in helping develop the sustainable uses of materials through a 'Circularity' approach; a vital part of the life cycle of an aircraft
- ▶ There is likely to continue to be a focus on E and Climate Change but we mustn't ignore S&G
- ▶ AFRA's KPIs are an important part of our journey and will help us to tell our story
 - ▶ Circularity
 - ▶ Sustainable use/re-use of resources

ESG - What else would you like to know more about?



What else do we need to move forwards on ESG?

Thank you!