

Sustainable Operations: 4-Walls

Boeing has maintained workplace net-zero carbon emissions, specifically at manufacturing sites and other facilities (Scope 1 and 2) and in its business travel (Scope 3, Category 6) since 2020. The company is continuously increasing renewable energy use, conserving resources, and using carefully selected offsets to sustain this achievement.

Environmental Focus Areas

Increasing Renewable Energy

- Boeing continues to take large strides towards its goal of being powered by 100% renewable electricity by 2030 and achieved 28% renewable electricity in 2021.
- In 2021, Boeing factories in Renton, Washington and Charleston, South Carolina; most sites in Illinois, Indiana, Ohio, Pennsylvania, Texas, and the UK; and a large data center in Arizona used 100% renewable electricity.

Conserving Resources

- Boeing provides internal sustainability training that inspires and highlights conservation actions employees can take within their respective work roles.
- Boeing engages employees through enterprise-wide conservation competitions and environmental action campaigns throughout the year, such as Battle of the Buildings, Earth Day, the Environmental Leadership Awards and Energy Awareness Month.
- Boeing has Conservation Teams implementing best practices and providing the tools employees need to conserve resources.

Verified Offsets

- Boeing chooses offsets that meet rigorous requirements set by Verified Carbon Standard (VCS), American Carbon Registry (ACS), or Gold Standard (GS).
- Many projects leverage the power of nature and are designed for the protection and restoration of forests. A few of the certified forestry offsets Boeing invested in include: Winston Creek Forest Carbon Project, Liangdu Afforestation Project, and Indigenous Reservation of the Mataven Forest.

HIGHLIGHTS



Since 2007, Boeing has **reduced greenhouse gas emissions** from our operations **by 51%***



Achieved 28% renewable electricity in 2021.



To date, Boeing employees have established **53 Conservation Teams** across more than **13 countries** focusing on sustainability within their work and home communities



Received EPA Energy STAR Partner of the Year Award for Sustained Excellence for the past **11 years**, since initially achieving Partner of the Year status in 2010



In 2022, the EPA ranked Boeing **#32** on its **Green Power Partnership Fortune 500 Partners List**

* Greenhouse gas (GHG) emissions from our operations is calculated using GHG emissions from the electricity and natural gas consumption at Boeing's Core Metric Sites. Core Metric Sites represent the majority (70%) of Boeing's GHG footprint from operations. This is an absolute reduction in GHG emissions; no normalization has been applied.

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Boeing invests in sustainable operations to drive our extremely high levels of industrial performance at our manufacturing sites. As we demonstrate progress on our goals for 2030, our previously set 2025 targets will act as a milestone to guide our actions. All of our 2025 goals are absolute targets and are not indexed to production levels or growth. Our progress on these 2025 goals is shown in the table and reflects how our performance was affected by changes associated with occupancy and operations during the COVID-19 pandemic in 2021.

Environmentally Responsible Operations: Goals & Progress

Performance Area ¹	2025 Goals vs 2017	2021 Progress Toward 2025 Goals ³	2030 Goals
 Greenhouse Gas Emissions	Reduce emissions by 25% ²	25% reduction Greenhouse gas emissions were 10% under plan, primarily due to reduced production activities and procurement of renewables.	<ul style="list-style-type: none"> • Net-zero emissions⁴ • 55% GHG reduction from 2017 • 100% renewable electricity
 Energy	Reduce energy ⁵ consumption by 10%	12.2% reduction Despite cold northwestern U.S. weather in December, energy continued to be under plan overall for the enterprise, ending the 2021 reporting year at 9.8% under plan. Remote working conditions; reduced production activities; and conservation gains contributed.	<ul style="list-style-type: none"> • 10% energy-intensity reduction from 2025
 Water	Reduce water withdrawal by 20%	26.4% reduction Water consumption was 18.9% under plan in 2021, primarily due to remote working conditions and reduced production.	<ul style="list-style-type: none"> • 5% reduction from 2025
 Solid Waste	Reduce solid waste to landfill by 20%	53% reduction Solid waste was steady at 44% under plan in 2021. Reduced production rates and work-from-home operations throughout 2021.	<ul style="list-style-type: none"> • 30% reduction in waste produced from 2025 • Over 90% diversion from landfill or incineration • Zero solid waste where applicable at major sites
 Hazardous Waste	Reduce hazardous waste by 5%	28% reduction Hazardous waste was 16% under plan in 2021. Key events, including improvements in treatments lines, were positive.	<ul style="list-style-type: none"> • 5% hazardous waste reduction from 2025

- Operational goals shown are absolute targets and not indexed to production levels or growth. 2021 performance was affected by changes associated with occupancy and operations during the COVID-19 pandemic, as well as conservation and changes in how Boeing purchases energy. The targets were established against a 2017 baseline. The 2025 goals will act as a milestone to guide actions and progress to the 2030 goals.
- The 2025 GHG reduction goal was set with an operational boundary of the Core Metric Sites, which represent the majority (70%) of Boeing's operations, and includes emissions from electricity use and natural gas.
- The 2030 GHG reduction goal is set with an operational boundary of The Boeing Company, and includes all Scope 1 and Scope 2 emissions.
- The net-zero achievement covered Scope 1 and Scope 2 emissions for all manufacturing and work sites within the company's operational control as well as Scope 3 – Business Travel.
- Energy includes natural gas, other fuels, and electricity.