

The Boeing Company 2014 Summary Environment Report

Build a Better Planet



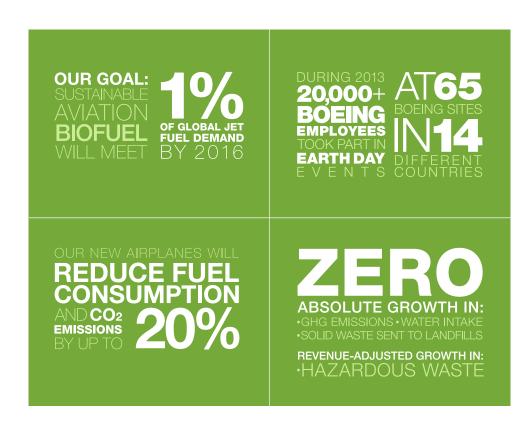
ENVIRONMENTAL POLICY AND STRATEGY

Innovation and technology are at the heart of what we do at Boeing, and they are fundamental to improving environmental performance. As a company, we understand that environmental responsibility is crucial to our long-term success and second century in business.

We are committed to responsible environmental leadership as we serve our customers and as our business and industry grows. Our strategy to achieve this is made up of three tenets: Designing the Future, Innovating to Zero and Inspiring Global Collaboration.

We are continually researching new, innovative technologies to improve our company's and our industry's environmental performance.

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OUR APPROACH: LEADERSHIP MESSAGE



Jim McNerney, chairman and chief executive officer, The Boeing Company and Ursula English, vice president, Boeing Environment, Health & Safety (Boeing photo)

We are building a bigger and better Boeing across the breadth and depth of our businesses and our communities, and we are focused on helping build a better planet.

Every day, Boeing employees find new and innovative ways to serve our global customers, and they are also committed to responsible environmental leadership—both in our products and in how we manufacture, deliver and support them. As we look forward to our second century, we see continued business growth in markets we intend to lead.

Last year, we expanded our modern and fuel-efficient family of commercial airplanes with the launch of the 787-10 and the new 777X — airplanes that will fly passengers farther, in more comfort and with significantly reduced emissions than the airplanes they replace. We are also investing in a cleaner future through our research into lightweight materials, advanced aerodynamics, sustainable new fuel sources, and hybrid-, solar- and electric-powered aircraft, all delivering greater efficiency with reduced or no greenhouse gas emissions.

For example, our Phantom Eye liquid hydrogen—powered unmanned aircraft, which produces only water as a byproduct,

earlier this year earned its experimental status — a major milestone in bringing this capability to market. In developing technology innovations that dramatically improve our products' fuel efficiency, we have increased revenues and earnings by approximately 35 percent over the past four years and secured a backlog of customer orders valued at nearly half a trillion dollars.

And within the walls of our factories and offices, we continue to accelerate improvements in environmental performance. After achieving our first five-year set of absolute-reduction targets, we are committed to zero growth in water consumption, greenhouse gas emissions, hazardous waste and solid waste to landfill — even as our business continues to grow.

Every day, as Boeing employees are exploring new ways to build a bigger, better Boeing, we are also striving to build a better planet—by improving the environmental performance of our company, our industry and our communities worldwide.

DESIGNING THE FUTURE



The Boeing 787 Dreamliner is the most advanced and efficient commercial airplane in its class, setting new standards for environmental performance and passenger comfort. (Boeing image)

Boeing is developing innovative solutions and technologies to meet environmental requirements for its customers and the industry.

Boeing builds and delivers the world's most modern and fuel-efficient fleet of airplanes. This brings enormous value for our commercial and defense customers by finding new opportunities for efficiencies that cut their fuel costs and reduce greenhouse gas emissions while improving the environmental performance of the aerospace industry. With the launch of the 777X and the 787-10 in 2013, Boeing advances the world's most efficient and flexible twin-aisle family.

Cleaner Products Boeing builds and delivers the world's most modern and fuel-efficient fleet of airplanes.

The Boeing 787 Dreamliner is the most advanced and efficient commercial airplane in its class, setting new standards for environmental performance and passenger comfort. Composite materials, advanced engines and a new innovative wing design all help the 787 reduce fuel consumption and CO₂ emissions.

Boeing's newest family of single-aisle airplanes — 737 MAX 7, 737 MAX 8 and 737 MAX 9 — will build on the Next-Generation 737's popularity and reliability while delivering customers unsurpassed fuel efficiency in the single-aisle market. With all-new composite wings and all-new GE9X engines, the new 777X will be the largest and most efficient twin-engine jet in the world. And the 747-8 is 16 percent more fuel-efficient than its predecessor and delivers more passengers, more cargo and more range with lower emissions and noise.

Boeing is building the world's first all-electric propulsion satellites. The all-electric propulsion design of the 702SP (small platform) satellites gives customers new flexibility and next-generation technology for increased performance, more affordable launch options and the ability to nearly double payload capacity.

New Technology Boeing is accelerating the development and testing of new technologies bringing fuel efficiency and environmentally progressive advancement for our customer and communities around the world. This year Boeing will begin using one of its own 787 airplanes to install and test environmentally progressive technologies as a part of the company's ecoDemonstrator Program.

We are also helping our customers and communities around the world, such as in Guam and Canada, expand their use of renewable energy and are leading the industry in developing sustainable fuel sources for aviation.

Future Flight Technology demonstration projects led by Boeing, such as the Phantom Eye, Subsonic Ultra-Green Aircraft Research (SUGAR), and Blended Wing Body, are showing promise of substantially clearer, quieter and more efficient flight. Our liquid hydrogen-fueled unmanned aircraft, the Phantom Eye, which produces only water as a byproduct, received its experimental aircraft status, a major milestone in bringing this capability to market.

INNOVATING TO ZERO



The Boeing Delivery Center in Everett, Washington, was awarded LEED Gold certification by the U.S. Green Building Council, for its lower energy and water consumption and the use of recyclable and locally sourced materials. (Boeing Photo)

Boeing is accelerating improvements in the environmental performance of the company's operations, as business continues to grow.

Building on the demonstrated performance over the last five years, Boeing is committed to maintaining 2012 levels for greenhouse gas emissions, water use and solid waste through 2017, even as our business continues to grow. We also are committed to our hazardous waste generation growing at a rate no more than the rate at which our business is expanding.

Increasingly, Boeing is seeking opportunities to incorporate energy conservation technologies and sustainable materials into new building designs as well as to reduce the amount of water used and waste generated by our facilities. Currently,

- ★ Boeing relies on carbon-free hydroelectric and renewable energy sources for nearly half our total electricity consumption.
- ✓ Carbon-free hydroelectric energy supplies more than 80 percent of the power for Boeing's Everett and Seattle facilities in Washington.
- ★ The North Charleston, South Carolina, site is powered by 100 percent renewable energy, sourced from 10 acres (4.05 hectares) of solar panels on the roof of the final assembly building, and coupled with renewable energy credits purchased from the local utility.

★ Twenty percent of the power that runs Boeing facilities in Southern California comes from wind energy.

This year Boeing earned the 2014 ENERGY STAR® Partner of the Year Sustained Excellence award from the EPA for leadership in energy conservation. Boeing has won the ENERGY STAR award every year since 2011.

Boeing designs all new construction and major renovation projects to meet a LEED Silver rating or higher. More than 60 percent of all Boeing LEED-certified buildings have received Gold-level certification. And more than 50 sites around the world, including all major manufacturing facilities, are certified to ISO 14001 standards.

INSPIRING GLOBAL COLLABORATION

Russia Canada **European Union** The Netherlands Air Traffic Efficiency Digital Aviation Services Renewable Energy Airline Efficiency Air Traffic Efficiency **United States United Kingdom** India Aircraft Coatings Environmental Air Traffic Efficiency Stewardship Renewable Energy Carbon Fiber Recycling UAE **Italy** Hong Kong **Environmental** Improved Engine Performance Biofuel Education **Turkey** Spain Japan Advanced Air Filtration Air Traffic Efficiency **Biofuel** Malaysia Brazil Saudi Arabia Solar Energy **Biofuel** Biofue Air Traffic Efficiency **South Africa** Indonesia **Biofuel** Conservation To learn more about how Boeing is engaging the industry around the world, Guam **Australia** visit the interactive map online. Solar Energy **Biofuel** Boeing is leading global collaboration, finding solutions for complex environmental challenges for the aerospace industry and our communities around the world.

Boeing is leading global collaboration, finding solutions for complex environmental challenges.

Boeing works with organizations, institutions, customers and governments around the world to drive environmental improvements throughout our industry and across the globe.

Sustainable Aviation Biofuel As part of our core commitment to protect the environment and support the long-term sustainable growth of aviation, Boeing is the industry leader in global efforts to develop and commercialize sustainable aviation biofuel. A new sustainable jet fuel is essential to reduce commercial aviation's carbon emissions, reduce our industry's reliance on fossil fuel, and reach our industry's goal of carbonneutral growth from 2020.

Boeing is focused on "drop-in" sustainable biofuel, which can be blended directly with the traditional petroleum jet fuel supply with no changes to airplanes, engines or fueling infrastructure. Boeing's goal is that by 2016, sustainable biofuel will address 1 percent of global jet fuel demand, equivalent to 600 million gallons (2,271.25 million liters) of jet fuel. In early 2014, Boeing announced that it had identified a significant new supply of price-competitive biofuel for jets: "green diesel," a renewable fuel that today is used for truck transport. Boeing is now working with the U.S. Federal Aviation Administration and other stakeholders to gain approval to use green diesel in commercial aviation.

Engaging the Industry Our work includes improving the operational efficiency of commercial aviation, advocating for a global emissions framework for aviation that can best be achieved through the International Civil Aviation Organization (ICAO), and helping the aerospace industry meet the growing and expanding requirements and information

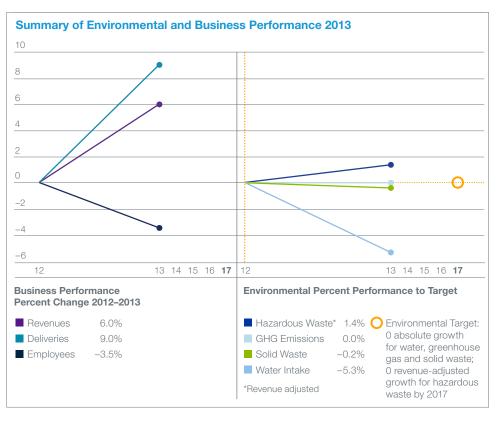
requests about the use of chemicals and hazardous materials contained in its products or use in production processes. Additionally, Boeing employees and executives work with local, national and international environmental organizations in a number of voluntary and professional capacities.

Employee Engagement Boeing employees are constantly improving the way we design and build our products, including making them more efficient and cleaner. Every day, employees come up with innovative ideas for how to improve environmental performance of our products, supply chain and operations. Through thousands of employee teams, as well as dozens of volunteer-based Green Teams, Boeing employees are finding ways to reduce energy, water use, and the generation of solid and hazardous waste. Boeing employees also take seriously their stewardship role in the community, to make the places where we live and work cleaner and better for all. In 2013, more than 20,000 Boeing employees took part in Earth Day events at 65 Boeing sites in 14 countries.

Building Better Communities Worldwide

As a committed, responsible environmental leader focused on healthy global growth, we collaborate with research institutions, customers, universities and governments to solve problems and partner with local communities about the importance of environmental protection and preservation. In 2013 Boeing supported almost 100 projects around the world focused on environmental education, energy efficiency and conservation efforts. To learn more about how Boeing is building better communities worldwide, read our Global Corporate Citizenship report.

2013 PERFORMANCE



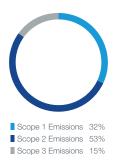
While our business continues to grow, we are committed to zero growth for our environmental targets.

Boeing continues to accelerate improvements in the environmental performance of the company's operations. Building on the demonstrated performance of the first set of five-year targets, and as business continues to grow, Boeing is committed that our greenhouse gas emissions, water intake and solid waste to landfills will remain the same by the end of 2017, as they were at the end of 2012. Additionally, we are committed to limiting our hazardous waste generation to no more than the rate at which our business is growing.

All charts on this page reflect the 2013 environmental performance of the majority of Boeing facilities. Each chart is represented by its own data set that is described in accompanying footnotes available in the <u>full 2014</u> Environment Report.

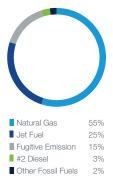
Corporate Inventory Greenhouse Gas Emissions

Our corporate greenhouse gas inventory emissions represents our Scope 1, 2 and 3 emissions submitted to CDP. Scope 2 emissions comprise the largest segment of our greenhouse gas emissions, followed by the direct emissions of our facilities (Scope 1) and then our business travel (Scope 3).



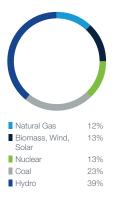
Scope 1 Emissions

Our reported Scope 1 emissions include our consumption of electricity, natural gas, fuel oil and the jet fuel used in our flight-test programs. Other fossil fuels include #5 and #6 fuel oil, gasoline, aviation gasoline, propane and liquid petroleum gas.



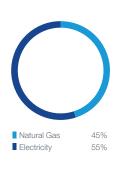
Electricity Generation Sources

Boeing uses carbonfree hydroelectric and renewable energy sources for nearly half of our total electricity consumption.



Energy Sources

Improving energy efficiency across Boeing continues to be a key focus for the company. About half our energy is derived from electricity, the other half by natural gas.





The Boeing Company

100 North Riverside Chicago, Illinois 60606 www.boeing.com/environment Boeing is a responsible partner, neighbor and citizen to the diverse communities and customers we serve. We are building a better future with innovative products that are cleaner, more efficient and set a new standard for performance. Boeing follows responsible business practices and promotes positive changes in the lives of people around the world while growing shareholder and customer value in a competitive global marketplace.

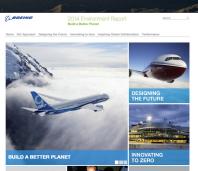




Visit us at boeing.com to learn more about Boeing and how extraordinary innovations in our products and services are helping solve the world's toughest problems.



Visit us at boeing.com/ investorrelations to view our annual reports and to find additional information about our financial performance and Boeing business practices. Photo above: With all-new engines and composite wings, the 777X will be the largest, most efficient twin-engine jet in the world.



Visit us at boeing.com/ environment to view the complete 2014 Environment Report and information on how the people of Boeing are developing ways to build a better planet and create a better tomorrow.



Visit us at boeing.com/ community to view our Corporate Citizenship Report and other information about how Boeing is working to improve communities worldwide.

