

On a greener path

Boeing's environmental progress highlighted in 2009 report

By Jennifer Cram

Last month Boeing issued its 2009 Environment Report, which details its strategy and actions to pioneer environmentally progressive technologies that improve environmental performance and reduce the company's environmental footprint.

"Protecting our planet's environment and finding new ways to harness diverse energy resources continues to be a priority for Boeing—and in 2008 we met a number of significant goals," said Jim McNerney, chairman, president and chief executive officer. "We continued to help lead our industry's efforts to safeguard the environment through action and collaboration."

Boeing is pursuing an aggressive, five-year environmental improvement plan at its operations. The company is targeting a 25 percent improvement by 2012 in energy efficiency, recycling rates and greenhouse gas emissions intensity at its major manufacturing facilities, with a similar goal for hazardous waste reduction. Boeing is on track to meet these goals—and in fact outperformed its 2008 plan in all four areas, according to Mary Armstrong, vice president of Environment, Health and Safety.

"Our targets are transparent and aggressive and they have our full attention, from top company leadership to every employee across the enterprise," Armstrong said.

Water usage is also being reduced and consumption has been lowered by more than 40 percent since 2002.

Building on the company's legacy of driving environmental performance improvements through technology advancements, Boeing's newest airplanes—the 787 Dreamliner and 747-8—will be 20 percent and 16 percent more fuel-efficient, respectively, than the airplanes they replace. And Boeing is committed to improve the fuel efficiency of each new generation of commercial airplane by at least 15 percent. In addition, the company is developing technologies to help government and military customers achieve their goals for energy efficiency and independence.

The report highlights Boeing's major environmental accomplishments over the past year, which include:

- Conducting test flights with Virgin Atlantic, Air New Zealand, Continental Airlines and Japan Airlines to demonstrate



PHOTO: The 2009 Environment Report describes Boeing's efforts in developing progressive technologies that reduce environmental impacts as the company pursues an aggressive five-year environmental improvement plan. GRAPHIC BY MICHAEL CRADDOCK/BOEING

- the technical, economic and environmental viability of sustainable biofuels for aviation.
- Helping demonstrate Air Traffic Management concepts that significantly reduce fuel consumption, emissions and noise.
- Receiving approval from the U.S. Environmental Protection Agency's Climate Leaders program for the company's five-year greenhouse gas emissions reduction target.
- Achieving ISO 14001 environmental certification for all major manufacturing facilities by the end of 2008.
- Developing and deploying a collaboration and engagement strategy with suppliers aimed at reducing environmental impact.

In addition to its environmental commitments for products and operations, Boeing's investment in the community remains strong. In 2008, the company contributed about \$5.7 million to support innovative local environmental programs, from environmental education efforts in Korea, Italy and Washington state to conservation and restoration projects in India, the Amazon River area and California.

The report also showcases the work of employees, who are developing breakthrough technologies and have formed more than 20 employee-led "Green Teams" that seek ways to reduce environmental impact at worksites and in communities. Boeing's employees also collectively donate thousands of hours of their own time each year to company-sponsored environmental volunteer events.

"Today's employees are advancing the same spirit of innovation that has driven Boeing's leadership in aerospace for nearly 100 years," McNerney said. "That spirit will continue to help us meet our commitments to protect our environment and create a better future."

To view the report, visit www.boeing.com/environment. ■

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PHOTO: Boeing driver Rodney Johnson shows off the company's first medium-duty diesel-electric truck, which supports initiatives by Boeing to reduce the environmental impact of its products and operations. **SALLY ARISTI/BOEING**

'Green' machine

Not all green trucks are painted green. In El Segundo, Calif., Boeing transportation is now using the company's first medium-duty diesel-electric truck. It's a 22-foot (6.7-meter) Freightliner with a lift gate—and it's painted white.

"It drives like a regular truck and has comparable torque and horsepower," said driver Rodney Johnson. "But it's more fuel-efficient and is quieter than a regular diesel." The hybrid is powered by a compact version of the widely used Cummins Turbo Diesel engine, supplemented with an electric drive system. Electricity from onboard batteries provides an extra power boost for the truck when starting from a dead stop or pulling a heavy load uphill, reducing diesel fuel consumption. The batteries recharge during normal truck operations.

"We are glad to do our part supporting Boeing's ongoing environmental conservation initiatives," said Jack Ruffino, senior manager of Boeing Transportation Services and Fleet Management. "We hope this will lead to increased use of hybrids in the future."

— Dave Garlick



2 million and counting

Randy Tinseth, who hosts Boeing's popular blog, Randy's Journal (<http://boeingblogs.com/randy>), recently celebrated two milestones: two years of blogging and 2 million reader visits. Tinseth is vice president of Marketing for Boeing Commercial Airplanes. In his blog, Tinseth shares his perspective on the commercial aviation market and airplane programs, as well as stories from his travels around the world, often with unique photos and videos. For example, Randy's Journal featured this view of the 787 the day it traveled to the flight line.

PHOTO: ED TURNER/BOEING



Master and commander

The first painted P-8A Poseidon aircraft rolled out of the paint hangar last month at Boeing's Renton, Wash., facility, displaying its new U.S. Navy livery. Designated T-2, the aircraft is the third of five test aircraft being assembled and tested as part of the System Development and Demonstration contract that the U.S. Department of Defense awarded Boeing in 2004. The first test aircraft, T-1, which successfully completed the program's first flight in April, will be painted in the same paint scheme later this summer. The Navy plans to purchase 108 P-8A anti-submarine warfare aircraft to replace its fleet of P-3Cs. Initial operational capability is planned for 2013. The P-8A is built by a Boeing-led industry team that includes CFM International, Northrop Grumman, Raytheon, Spirit AeroSystems and GE Aviation.

PHOTO: JIM ANDERSON/BOEING