

Sustaining the momentum toward sustainable growth

International cooperation and action will ensure long-term, environmentally responsible growth of the aviation industry



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– Jim McNerney, Boeing chairman, president and chief executive officer

This month, as aviation leaders gather for the biennial Paris Air Show, our industry finds itself confronting substantial global economic challenges. Airlines, lessors and equipment manufacturers are all feeling the pressure and adjusting their business plans to weather the storm. So, too, are many governments as reduced economic activity has impacted tax revenues.

I believe it’s vital even in these tough times that our industry and its governmental stakeholders continue advancing our commitment toward long-term sustainable growth. It’s not only the right thing to do for the future of our planet, but it’s a smart business decision that will help ensure the health of our industry over the long term.

Today, aviation contributes about 2 percent of global man-made carbon dioxide (the main greenhouse gas associated with climate-change concerns), according to the United Nations’ Intergovernmental Panel on Climate Change. And IPCC estimates this number could grow to 3 percent by 2050.

We can and must prevent that from happening. Our industry took an important step in that direction in 2008, when customers, suppliers and competitors at an Air Transport Action Group meeting in Geneva, Switzerland, jointly committed to a pathway toward carbon-neutral growth and the aspiration of a carbon-free future.

The four areas where the aviation industry has near-term opportunities to make big environmental improvements are:

FUEL EFFICIENCY

Over the past 50 years, Boeing—through improving the fuel efficiency of its jetliners—has reduced carbon emissions by about 70 percent per passenger. We remain committed to making each generation of our commercial airplanes at least 15 percent more efficient than the airplanes they replace. Our competitors have also demonstrated a similar commitment.

An important next step is to advocate for a global fuel efficiency standard for new airplane designs—one defined by a widely respected group like the International Civil Aviation Organization. ICAO has a strong track record for successfully establishing global standards, having done so for both airplane noise and emissions of nitrogen oxide. Establishing a global

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PHOTO: Specially shaped nacelle trailing edges on the 787 Dreamliner reduce engine noise to communities by controlling the way air mixes after passing through and around the engine.

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fuel-efficiency standard for new designs is a straightforward approach that is easier to implement and regulate than a standard for commercial airplane operators, or managing multiple, potentially dissimilar, regional solutions.

SYSTEM EFFICIENCY

We believe that air traffic management improvements provide the greatest short-term opportunities to improve the environmental and fuel-efficiency performance of the transportation system. This is a major challenge that transcends national borders and industrial competitors, which is why international cooperation is so important.

Boeing has worked together with Airbus, a number of airlines and several nations' air-traffic officials to accelerate system-efficiency solutions and ensure global interoperability. In particular, we have worked to implement a fuel-saving tactic called Tailored Arrivals, one component of which allows airplanes to make steady and continuous descents all the way into an airport instead of the stair-step approach typically used today. Trials have shown this tactic can save up to 2,400 gallons of fuel per flight for larger aircraft. Imagine that kind of savings spread across the entire fleet. And once we add in the environmental benefits that would accrue from quickly implementing the many other efficiency-enhancing ideas government and industry have developed, the savings become even more dramatic.

SUSTAINABLE FUELS

Developing sustainable biofuels will help the existing airplane fleet reduce carbon dioxide emissions and will move us closer to carbon-neutral growth. Boeing has joined with airlines and engine manufacturers to conduct ground tests and commercial aviation demonstration flights that use sustainable biofuels mixed with traditional kerosene-based fuel. Enhancing cooperation between government and industry would further accelerate the development and introduction of advanced-generation biofuels that do not compete with food stocks or for water resources

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but still reduce our industry's use of oil and our greenhouse gas emissions.

OPERATIONAL EFFICIENCY

It is not enough for us to meet our customers' expectations for environmentally progressive products; we must also work as an industry to improve the efficiency of our facilities and manufacturing processes. Boeing, for instance, has achieved ISO 14001 certification (an internationally recognized environmental standard) at every one of our major manufacturing facilities and is pursuing aggressive five-year goals for environmental improvement in our operations. As we improve our recycling rates, use less energy to produce our products and lower the amount of harmful chemicals and byproducts we create, both our industry and our planet will be the better for it.

CONCLUSION

Because of the tremendous benefits aerospace brings to the world, our industry has enjoyed steady growth—with just a few pauses—over the past half-century. Despite the current economic challenges, the cooperative efforts of government and industry—on a global basis—are needed to ensure long-term, environmentally responsible growth of the aviation industry and the resulting global economic opportunity it will create. I am confident we will rise to the challenge.

I'm proud of the people of Boeing for their lengthy record of improving the environmental performance of our products, services and operations. And I'm honored to be part of an industry that takes its responsibilities to our planet so seriously. Together, we will make the future brighter for all of us.

Boeing has created an annual Environment Report (see Page 10) to detail our efforts to protect the environment. The 2009 report is available at www.boeing.com/environment. ■