

**Scott Carson**  
**Keynote Address**  
**Paris Symposium**  
**“Our Commitment to a Better Future”**  
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My friends and colleagues—good morning. I am honored to be here with you in Paris in this historic setting. A setting that for more than 300 years has honored biological and ecological diversity, its origin, role and sustainable management through the sciences.

I am also humbled to be in a location that recognizes the tremendous contributions that the sciences have contributed to France, but also to the global community and to the aviation industry.

Before I begin, I would like to applaud the Boeing France team for bringing us together to share ideas and for fostering an open and candid dialog about one of the most significant challenges we face as an industry—our collective impact on the environment.

As an industry, we are accustomed to overcoming the challenges and increasing demands that are being placed on how we conduct business. As we move further into today's program and ask crucial questions of ourselves, our answers will help define this industry for the 21<sup>st</sup> century. Successfully tackling these issues will be critical to ensuring a safe, efficient and environmentally responsible air transportation system for future generations of travelers. I'd like to share my perspective on several of the key challenges and opportunities we face.

We all recognize that air transportation plays a vital and important role in continued global economic growth. Eight percent of the world's GDP growth can be attributed to air travel...making it essential to the global economy. In Europe alone, aviation is responsible for more than 1.5 million jobs.

Aviation is vital to lifting the standard of living for less advantaged nations by increasing their access to goods and services, access to global markets and to the contributions that tourism can bring to their local economies. As their standard of living improves, so does their ability to reduce their own environmental footprints, something that benefits

all of us. Leaving these nations behind by capping aviation growth simply is not an option.

The most immediate challenge is to continue to allow the global economy to prosper, and to grow our industry responsibly, while minimizing our collective impact on the global ecosystem. Already, we've come a long way. But this is a journey without an end. And there are regions of the world where air transportation efficiencies have yet to be realized, global growth and prosperity are being challenged, and additional restrictions and taxation are being proposed based on misinformation.

Here in Europe, the EU is considering proposed legislation that would include aviation in an emissions trading scheme, in efforts to make the industry more accountable for its environmental performance. But we've always been accountable. The challenge is how can we get better?

As manufacturers, Boeing, Airbus and other companies strive to be relentlessly vigilant in ensuring the state-of-the-art integrity of our products to ensure that they are as safe and as environmentally progressive as they can be.

But our industry's approach to the environment is not an issue of competition. Like our industry's approach to safety, this is a global issue that beckons for global solutions, not regional ones, and our belief is that ICAO is best suited to develop that global ETS framework – which could include ETS or other approaches. Coincidentally, approximately one-half of the ICAO committee addressing this issue is European, so Europe is indeed helping to shape the path forward. The challenge will be to develop a framework and solution that everyone can join – a way for everyone to participate and move forward.

As we actively work these issues, we must balance our need for reduced environmental impact without disrupting the flow of people and commerce. We also must seek global solutions that incentivize industry for technological innovation, rather than ones that penalize. Our's is an industry of solving things that are hard, and not accepting what some say cannot be done.

I believe that technology remains the best approach to achieving this balance. It allows us to identify and implement the most feasible solutions, while recognizing the need to use our limited resources wisely.

Similar to safety and security improvements, the environmental challenge sounds a familiar and critically important refrain—it demands strong working partnerships between industry and world governments.

Collectively, we must take an ownership role in defining how we can work together to deal with this sensitive and emotional issue of aviation and its impact on the world in which we live. It's an imperative if we are to achieve our commitment to a better future.

As an industry we have a strong foundation on which to build. An environmental track record of accountability driven by technological gains. Over the past 40 years, we've reduced noise footprints by **90%**. We've reduced specific CO<sub>2</sub> emissions by **70%**. We've virtually eliminated hydrocarbon emissions and soot.

And aviation's carbon footprint today is approximately **2%** of global CO<sub>2</sub> emissions. We are good global citizens, as an industry. But we have done a terrible job of telling our story.

I am always reminded of that special evening at Boeing Field last July, the evening before our 787 rollout. We flew in every 7-series airplane, from the 707 to the 777...you could see—and hear—that 707 well before it landed at Boeing Field.

But, more remains to be done and technology is the key that unlocks the future. Boeing is committed to a 25% efficiency improvement in worldwide fleet fuel use and CO<sub>2</sub> emissions by 2020 through the introduction of new, more efficient products; improvements to the current global fleet, as well as improved carrier and airport operations. As an industry, we must come together to identify new solutions. Then we must do a better job of telling our story, again and again.

Our 787 Dreamliner—to which many of you have contributed time and resources—is 20% more fuel efficient than comparable models and we are committed to pioneering new technologies that will improve upon these types of efficiencies and make that—and all subsequent airplanes—more efficient.

At Boeing Commercial Airplanes our commitment includes leveraging our Research and Development investments on environmental improvements for future aircraft generations with an emphasis on CO<sub>2</sub>, noise and exploring alternative fuels that make us less reliant on fossil fuels.

For example, we are conducting the first bio-fuel demonstration on a commercial airplane using sustainable fuel sources. This is part of our work to unlock the potential of future environmentally progressive fuels. As you know, we are partnering with Virgin Atlantic, and GE, as well as Air New Zealand and Rolls-Royce on bio-fuel demonstration flights scheduled for next year.

An additional challenge we must address is our air traffic management system and how we operate our airplanes more efficient in the air and on the ground. As our skies and runways increasingly become more crowded by air traffic growth, demands on the air transportation system are increasing dramatically.

Congestion already has reached a crisis level in some regions. In the US we had more delays in the first half of 2007 than in any year since 1995, when government began tracking the number. Clearly, these delays point to the antiquated processes and systems in our existing air traffic management system. Similar challenges exist here in Europe, as many of you are well aware.

To that end, Boeing is proud to be a participant in the joint Atlantic Interoperability Initiative to Reduce Emissions between the Federal Aviation Administration and the European Commission, which we announced at the Paris Air Show this past summer. This partnership is an important step in improving our air traffic management systems, and it is an important step in further reducing carbon emissions and airplane noise levels.

I think we can all agree that the current air transportation system cannot be scaled to meet forecasted demands – there is no question about it. And we can't just upgrade the current system we have – we really need to transform the way the system operates.

This is a global problem, and it cannot be handled regionally or in isolation. Global interoperability is critically important for aviation. We need our collective governments to be working together to ensure seamless operations. Joint flight trials and air traffic management concept demonstrations will really help to put the emphasis on outcomes, not just discussions.

At the end of it all, people want to fly. They fly to do business, to visit loved ones, to get away from it all—or to get back in touch. Thoughtful and collaborative approaches to capacity increases are the only effective solution to balancing the public's desire and need to travel with reducing future environmental impacts.

It is a complex road that lies ahead of us. We must remain focused on the need to work together to fund, integrate and implement the technologies and operational changes that are necessary and not be diverted by short-term fixes.

This work has just begun. Boeing recognizes that the environmental efficiencies must be achieved globally in order to realize their full potential.

But as an airplane manufacturer, we recognize that many of the environmental efficiencies that we have to accomplish will not be achieved if the airplanes we build cannot operate efficiently in the airspace system.

For instance, even the most fuel-efficient airplane can't achieve its highest level of efficiency if it is forced to fly indirect routes and to circle overhead waiting to land. Therefore, it is crucial that we do everything in our power to make improvements to the air transportation system a reality.

The challenges before us to grow responsibly, improve our environmental performance, while increasing our calls for a more efficient air transportation system are just that...they are challenges. But, they are also **real** opportunities for us to help define the legacy of our industry for generations to come. We at Boeing are up for the challenge, and I am convinced that together, we can succeed at this. We can find ways to be quieter and cleaner.

But we need your help. Today we come together to focus on industry collaboration. Working together we can identify new technologies and solutions and approaches that can help our industry address environmental challenges regardless of geographical markets—and in the process result in a healthier, more environmentally progressive aviation industry that delivers value to all of us and to all of our customers.

It is truly an honor to participate here today. Our aviation predecessors started a wonderful journey nearly 100 years ago. Let's do everything we can to leave tomorrow's leaders with a healthy, exciting and environmentally responsible aviation industry.

Thank you.