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Introduction

Welcome to Montreal, our hometown and certainly for the next two weeks the aviation capital of the world.

The Commercial Aviation industry has to be proud of its achievements.

- In just over 100 years we have gone from the first powered flight to a world in which, according to ATAG, aviation supports 7.5% of global GDP or approximately \$3.6 T annually through direct and indirect impact such as tourism.
- We have made getting anywhere on the globe, faster, safer, more affordable and much more convenient.
- We are facilitating trade, relationships, leisure and quality of life and economic development.

The prospect of continued growth is exciting;

- Demand for air travel has a direct link to economic growth
- Big investments in airlines and aviation infrastructure continue, particularly in growing economies,
- Aviation is meeting the needs of new businesses and growing middle class populations who are gaining wealth and consequently ability & propensity to travel by air
- Canadians, Americans and Western Europeans flying on average twice per year, whereas in China there is still only one flight per year for every 10 persons. Similar statistics apply to other rapidly growing economies and it isn't hard to imagine the growth potential of the industry.

But as a whole the airlines are not making any money... and as we all know, not making money is not sustainable.

- Recent IATA forecast projects a \$8.9B net profit, a significant improvement over the past two years of losses and just \$4B shy of the record year of \$12.9B in 2007...

- but given that annual revenues are in excess of \$550B – the industry is struggling to reach a 2% margin -- not a record to be proud of.

And aviation's impact on the environment including 2% of world CO₂ emissions albeit small in global terms is not negligible and needs to be aggressively addressed.

The industry has a good track record (for example 70% improvement in fuel efficiency in 40 years) our stakeholders (ultimately our passengers) are demanding continued improvements in order to meet the ambitious targets we all agree are necessary to keep air travel environmentally sustainable.

These challenges are over and above the fundamental imperatives of safety and security of air travel.

I know the commercial aviation community is innovative and resilient. My career has spanned 5 aviation cycles, and during that time I have seen new products; new business models, tremendous successes and dismal failures... I know we will build a sustainable industry and take-on the challenges of cost control, revenue generation, protection of the environment, increasing safety, and introducing a security and legal framework to make it all work.

... But success won't come without hard work.

So what must OEM such as Bombardier do to address the challenge of sustainability in the industry?

Develop optimized products. Optimized fleets drive airline profitability through cost savings and revenue growth and development of new airline business models.

Bombardier's competitive advantage among OEMs comes from developing, delivering and supporting the aircraft that meet the demands of operators and passengers.

- Quality, safety, customer support,... are fundamental
- To rise above the rest, we need to be the best at anticipating market requirements and integrating technology into optimized platforms.

Developing more environmentally friendly aircraft

Growing environmental awareness and new regulations such as emissions trading are adding to the economic pressure from oil prices volatility.

Environmental regulations are expected to increasingly influence airlines and operators fleet choices.

In this new business environment, we see the continuous reduction of our products' environmental footprint as a competitive advantage and an opportunity to strengthen our customer's engagement.

For this reason we are applying Design for Environment (DfE) principles to our in-development aircraft programs and making energy efficiency an integral part of our approach to aerodynamics, structural materials and navigation.

Bombardier builds both commercial and business aviation products and played a leading role in rallying the business aircraft industry to make commitments on environmental sustainability.

For the first time the commercial industry represented by ATAG and the business aircraft industry represented by IBAC submitted a joint paper to ICAO, demonstrating the unity of the industry behind the goals of carbon neutral growth from 2020, 1.5% per year of improved fuel efficiency and 50% reduction of CO₂ emissions by 2050 (using 2005 as the reference point).

Bombardier has become the leader in both commercial aircraft and business aircraft markets by aggressively targeting efficiencies.

Example #1 – the CRJ Revolution – all about trip costs

The CRJ Series of Regional Jets revolutionized our travel experience and changed the way airlines build networks

Regional jets are optimized to deliver a small unit of capacity at lower trip cost and with the speed, range and comfort to reach medium-haul markets

- On a typical weekday morning, mainline jets depart Montreal for 17 North American cities
- But that same morning, Regional jets depart for an additional 21 unique non-stop destinations
- Adding single connections, regional jets connect Montreal to 134 cities within 5 hours travel time including multiple frequencies to many of those destinations

This technology not only allowed airlines to develop new routes and increase frequency of service, but they also cut costs by reducing the number of empty seats on smaller markets.

And as consumers got more choice, airlines were forced to remain competitive

Over the years we have continued to optimize and evolve the CRJ family by introducing new models aligned with evolving needs.

- increasing seating capacity from 50 to 100 seats as markets grew;
- offering more on-board amenities and comfort (dual-class) and range to allow longer flights
- All-the-while maintaining a focus on keeping costs down. For example, taking advantage of fleet commonality to allow the airlines to grow efficiently.

Before year-end, we will certify and deliver the latest member of the CRJ family, the 100-seat CRJ1000 NextGen.

And like the CRJ200, CRJ700 and CRJ900 when they were introduced to their respective segments, it will become the lightest, most fuel efficient 100-seat class aircraft in service.

In fact, on a typical 500 NM mission the CRJ1000 will burn 3.33 litres per seat per 100 km; or for those of you like used to the American automobile advertizing – a very impressive 70 Miles Per Gallon.

Ultimately, innovations like the regional jet drive more choice and more affordable travel for the passenger by increasing network efficiency and airline competition.

Example #2 – The Q400 – TurboProfits – Prop Propulsion is the most efficient and cleanest

Bombardier is the only OEM of both regional turboprops and regional jets.

We build both because there is a fundamental advantage to operating turboprop aircraft for short-haul markets.

Turboprops are optimized for:

- high-cycle operations
- access to challenging airfields;
- reduced noise footprint and
- more fuel-efficient and cost-efficient on short flights where time in cruise is short.

With the Q400 NextGen, we created the turboprop for the 21st century by re-introducing many of the advances airlines and passengers benefited from in the developments of regional jets back into the turboprop.

- We made the aircraft more productive – with up to 80 seats and increased cruise speeds, the Q400 generates up to 30% more ASK than the previous generation of large turboprop.
- Modern systems such as a more capable digital cockpit able to perform RNP approaches, Category III landings; electronic prop/engine control; and our patented NVS - Noise and Vibration Suppression system -- to minimize the noise and vibrations associated with earlier technology turboprops
- In addition to NVS, to close any perceived gap to “jet-service”, we offer our NextGen cabin, with the same enhancements as our latest CRJ Series such as LED lighting, larger overhead bins.
- In fact, most passengers should not be able to distinguish the inside of a Q400NextGen from that of a regional jet, but on short-haul flights the Q400 will burn up to 30% less fuel and produce 30% lower emissions.
- For reference, Q400 fuel burn on 500 NM is 3.0 liters per seat per 100 km or 79 MPG per seat.

We know we have a successful formula when we see airlines such as Continental reverse last decade’s trend of going all-jet and optimize their fleet with a modern Q400 turboprop to take advantage of the cost and fuel savings.

Our current production of 70-100 seat CRJ regional jets and Q400 NextGen is aligned with continued demand for larger, more capable regional aircraft forecast to reach 5,900 deliveries industry-wide over the next 20 years and we will continue to innovate and develop in that segment

Example #3 – The CSeries – a game-changer for the 100-150 seat market the latest technology in Jet Propulsion, materials, aerodynamics and systems

The 100- to 150-seat market segment represents the latest opportunity for Bombardier to innovate and integrate new technology to meet the needs of airlines and passengers.

Forecast for this segment predicts 6,700 deliveries over the next 20 years including replacement of 3,000 units expected to be retired

No optimized aircraft family of aircraft has been developed in this segment since the 1990's and by introducing the latest airframe and engine technology we intend to offer significant fuel and cost improvements as well as a reduced environmental footprint over the existing fleet.

Using our Design for Environment approach, environmental footprint including fuel, noise, emissions, but also manufacturing process and end of life recycling and disposal were all considerations influencing the design trade studies we considered for the CSeries.

- Advanced materials will reduce its weight by more than 2,000 pounds
- PW Engine selection considered not only low fuel burn and low maintenance costs but also emissions and community noise
- Leading-edge fly-by-wire, advanced aerodynamics and navigation systems also helped gain benefits to the environmental footprint

The results of an optimized design are significant, proving that the technology in aircraft design can still net out great gains towards sustainability targets.

- 20% lower fuel burn and 20% less CO₂ compared to in-production aircraft
- where the CSeries replaces the previous generation of aircraft the advantage is on the order of 40% and in some cases up to 70%
- The CS300 fuel burn on typical coast-to-coast mission is just 2.2 litres per seat per 100 km or over 100 MPG—that is better fuel economy than a Smart Car and in the same category as the much larger B787 or A380 flying long-haul missions
- 50% reduction in NO_x compared to the current CAEP 6 standards
- An aircraft that is 4 times quieter for the communities surrounding airports than the aircraft in production today.

The CSeries will be the first to offer these advantages to the single aisle market when it enters service in 2013, and while I would like to be alone offering this advantage, with such significant improvements possible, other OEM will also be challenged to lower fuel burn and reduced environmental footprint of their products – a win for sustainability. And the program is on schedule.

Reducing Footprint of our Operations

Beyond the development of sustainable aircraft, Bombardier must “walk the talk” and ensure sustainability of our production processes and waste management when designing and building our aircraft.

Since fiscal 2004, we have reduced our manufacturing sites' energy consumption by 14% and waste generation by 23%.

In fiscal 2010, we conducted a site-by-site assessment of energy-efficiency opportunities and, working with management at all sites, set realistic reduction targets.

Conclusion

We look forward to playing a big part in the success and continued growth of our customers and their passengers by developing, delivering and supporting innovative products like the Q400, CRJ Family and CSeries.

And to be successful we must consider environmental footprint in our design decisions and accept responsibility for the impact of our own operations.

OEM have a fundamental role to play in the technology pillar to help the industry achieve sustainability targets – We want to be part of the solution... And are committed to a profitable, sustainable future for aviation.

I wish you a successful ICAO general assembly and pleasant stay in our hometown of Montreal
