

# **Building for the future: Manufacturing excellence in Ontario**

A speech by

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to

**The Canadian Club**

**Toronto, Ontario**

**May 29, 2012**

Good afternoon ladies and gentlemen.

I am truly honoured to have this opportunity to share my thoughts from a podium that has hosted so many distinguished speakers over the years.

One of the most hotly debated topics across the country is whether or not Ontario's manufacturing sector has a future. Why is this debate so heated and fierce?

Because manufacturing has long been Ontario's economic engine — and as Ontario's manufacturing industry goes, so has gone the rest of Canada. Even with the growth of the energy sector out west, the importance of manufacturing to the provincial and federal economies cannot be overstated.

Many argue that manufacturing in Ontario is doomed to die a slow death. I beg to differ. Manufacturing's demise in the province is neither inevitable nor irreversible. And I will tell you why in a moment.

One fact that is inarguable is that the province's manufacturing base has been seriously eroded. The culprits? A strong Canadian dollar, uneven demand south of the border and the low cost of labour in emerging markets have certainly taken their toll.

Ontario now sits below the Canadian average for output and income per capita with both the Drummond Report and the Conference Board of Canada putting the province's long-term economic growth at 1.9%, well below historic norms.

Yes the outlook is bleak, but as I have seen first-hand at Bombardier, outlooks can change — and quite dramatically.

The truth is, Ontario's current manufacturing crisis is really an innovation and productivity crisis. Innovation fuels productivity, which in turn creates a thriving manufacturing sector. There is no getting around this virtuous cycle, which is why it is the subject of recent reports such as the Council of Canadian Academies Report and the Jenkins Report as well as those I mentioned a moment ago.

The Jenkins Report decries the Canadian private sector's lacklustre performance in innovation compared to that in other OECD countries. And yet the manufacturing sector, which represents only 14% of our GDP, contributes nearly 60% of all R&D investments by Canadian business. Manufacturing is the single most powerful driver of innovation in our country. I can tell you that we are doing our share at Bombardier. In fact, our significant R&D spending is very often what keeps me up at night.

It is a universal truth — in today's competitive global marketplace, success in the private sector goes to those who remain on the cutting edge.

Bombardier's presence in Ontario was also born out of a crisis in the manufacturing sector not unlike the one today. In 1992, we acquired de Havilland and the Urban Transportation Development Corporation or UTDC at a time when the province's rail and aerospace sectors were faltering.

Because we believed in these sectors' fundamental strengths, we invested in facilities, established partnerships, and worked together to create new jobs and capacity in Ontario.

Today I am proud of the fact that Bombardier employs more than 6000 people at five facilities across the province, and generates more than \$650 million worth of business for some 300 Ontario-based suppliers. Our aerospace operations alone generate \$2.7 billion in economic output for the Ontario economy on an annual basis.

I am also proud to be celebrating 20 years of delivering world-class rail and aerospace products made in Ontario to customers here and around the globe. Highly skilled employees at our facilities in Thunder Bay, Kingston, North Bay, Downsview and Mississauga design, build and help maintain complex and innovative products, the majority of which are exported worldwide.

This includes the Q400 NextGen turboprop, the Global family of business jets and our state-of-the-art INNOVIA monorail chosen by cities more than 10,000 kilometres away.

At Bombardier, we continue to believe that manufacturing in Ontario makes sound business sense and that it has a bright future. The province's fundamental strengths create an excellent jurisdiction for innovative, capital-intensive manufacturing. These strengths include a very skilled and adaptive workforce, a topnotch research infrastructure and a supportive policy environment. These are the reasons that brought us to Ontario and have kept us here.

But in this day and age, no company, university or government can afford to rest on its laurels.

I firmly believe that we can breathe new and sustainable life into Ontario's manufacturing sector, but it will require a willingness shared by many to do things differently. All progress is rooted in the spirit of change — the mindset to challenge the established, to look for the better solution and to strive for the faster, smarter and more efficient way of doing things. This spirit accepts risk, perhaps even failure, because the rewards are both significant and compelling.

At Bombardier, we have been investing in creating better ways to move the world since 1942 when my grandfather invented a tracked vehicle to transport villagers across Québec's snowbound rural roads. This innovation ultimately gave birth to the Ski-Doo snowmobile and the Sea-Doo watercraft, launching two new recreational sports in the process.

As you heard in Nicholas Chambers' opening comments, we hold leadership positions in two industries worldwide — rail transportation and aerospace. This leadership requires constant renewal and depends largely on our ability to innovate continuously.

It explains how, since 1989, we have generated 30 new aircraft programs that have created, led and revitalized entire categories. It also accounts for rail vehicles that are increasingly sophisticated, aerodynamic and energy efficient. Our Downsview, Kingston and Thunder Bay facilities all played a role in this innovation.

At Bombardier, innovation drives the Evolution of Mobility, which is the global promise we make to all stakeholders. Across our organization, we have developed an 'innovation reflex.' This means that we are constantly asking ourselves "what's next?"

In fact, investing in leading mobility solutions is one of our key growth strategies. Among numerous advancements, it has given us our industry-leading portfolio of ECO4 energy-saving technologies. These breakthrough technologies drive down the environmental footprint of mass transit. One example is PRIMOVE — it promises to reshape transportation by providing wireless and contactless emission-free mobility for all electric rail and road vehicles including cars, buses and Trams.

In Aerospace, our investments in leading mobility solutions; are behind the six new aircraft programs scheduled to enter into service between 2012 and 2017, including ones that will be built right here in Toronto.

And it is not just management asking “what’s next?” We also ask our stakeholders. Through our recently launched Green Fund, we solicit and implement the best employee ideas for improving our sites’ energy efficiency.

Asking ourselves what’s next also inspired us to launch the rail industry’s first open innovation community called YouRail. This online design competition invited the general public to imagine and share their ideas for rail car interiors of the future. The global competition was so successful that we recently launched Bombardier YouCity, which invites innovators to share their vision of the future of urban mobility in both developed and emerging cities.

In my opinion, Ontario has no choice but to sharpen its innovation reflex to improve productivity and keep higher value jobs at home. So let’s ask ourselves: what’s next for Ontario’s manufacturing sector?

I have given this question quite a bit of thought and I would like to highlight five imperatives that, I believe, require urgent attention by all stakeholders in Ontario.

The first imperative for saving Ontario’s manufacturing sector is the need to forge unbeatable public-private partnerships.

If we pool our expertise and resources, and work together to achieve common goals, nothing will stand in our way.

Such partnerships have the power to spawn leading-edge manufacturing processes, innovative collaborative research and effective public policies.

A good example of these collaborative partnerships is the Canadian Green Aviation Research and Development Network or GARDN. We are a proud partner in this transformative aerospace initiative. GARDN brings together the industry, universities and government to invest in and promote aerospace technologies that protect the environment.

And GARDN is producing very tangible results. On April 17 of this year, Porter Airlines flew a Bombardier Q400 turboprop from Toronto City Airport to Ottawa using a 50/50 blend of biofuel and jet A1 fuel. This successful two-year research program culminated in the first biofuel-powered revenue flight in Canada. Such are the benefits of focused collaboration and the forward-looking policies that foster it.

The second imperative for saving Ontario’s manufacturing sector is to improve its track record in strategic procurement.

To have credibility and clout in the global marketplace, a company needs to be successful in its own backyard.

Ontario has figured prominently in our success at Bombardier. This includes innovative projects such as Toronto's Go Train, which is the commuter car platform now used by 14 customers in North America. It also includes the Toronto Rocket subway that began service last year as well as Porter Airlines which is a fantastic showcase for the Q400 aircraft's capabilities. These successes bolster our reputation at home and abroad. The strategic infrastructure investments that made them possible, in turn, strengthen Ontario.

The provincial government recently committed to investing \$35 billion in public infrastructure and mass transit. Let's use this tremendous opportunity to develop policies, programs and partnerships that encourage us to take calculated risks that will prop up innovation and move Ontario and its manufacturing sector up the value chain.

A third area requiring a shift in thinking is the need to embrace global value chains. Today we are no longer competing against global companies but rather against entire global value chains. This is the new world order and it represents an opportunity, not a threat.

A recent Conference Board of Canada report stated and I quote: "Canadians need to come to grips with the rise of global value chains and what it means for the future. Failure to understand the central importance of this phenomenon not only means missed opportunities. It also risks basing trade strategies and policies on outmoded assumptions of what modern trade is all about."

Two major competitive strengths at Bombardier are our commitment to innovation and our ability to localize activities.

Two decades ago, we became the first aircraft manufacturer to forge risk-sharing partnerships with established aerospace suppliers from around the globe. When we launched the Global Express development program in the early nineties, it came with a billion-dollar price tag. We enlisted Japan's Mitsubishi as our main external partner responsible for designing and manufacturing the jet's wing and centre fuselage.

Initially born out of necessity, this new risk-sharing model proved to be a significant competitive advantage. It allowed us to reduce our technical risk and share the cost of developing new aircraft programs. It also gave us access to broader technical expertise and supplier resource pools, as well as spread out program management across the supplier base.

Today in our C Series commercial aircraft program, the fuselage is produced in China, the wings in Belfast, and the cockpit and final assembly in Montréal along with components from Ontario. For the Global 5000 and Global 6000 aircraft, Toronto handles the final assembly, Belfast the forward fuselage and horizontal stabilizer, Montréal the interior completion, and Mexico the aft fuselage. And as you heard in Nicholas Chambers' introductory remarks, Downsview will take care of the final assembly of our new Global 7000 and Global 8000 business jets.

With our INNOVIA Monorail, the design and engineering happens in Kingston for projects in Brazil and Saudi Arabia. This collaboration creates additional opportunities for local suppliers to connect with our global value chain.

In short, developing a global value chain is by no means a zero sum game. It is all about sharpening our competitive edge and expanding markets on the global stage.

A fourth imperative is the need to address the province's skills gap. Ontario's aging workforce requires our immediate attention. At our Downsview facility, 30% of the workforce will reach retirement age over the next five years. We are currently partnering with nearby Centennial College to train the next generation of aerospace workers. This benchmark collaboration between industry and academia will create a specialized and skilled labour force equipped with the knowledge to innovate and improve manufacturing processes as well as keep Ontario competitive.

Collectively I believe that we have more work to do in terms of making our youth aware that a university degree is not the only option available to them, and that graduating from a technical vocational training program at one of Ontario's excellent colleges can be the starting point of a very successful career. We all have a role to play in making these fields more attractive. Developing policies and programs that support assembly line apprenticeships may well be part of the solution.

And finally, the fifth imperative calls for us to take a serious look at the benefits of a sectoral approach to manufacturing. As a province, the road to success does not lie in being a jack of all trades. Some sectors offer distinct and compelling competitive advantages that the province would be foolish to ignore. For example, Canada's aerospace, space and rail transportation sectors are innovative, globally competitive and poised for growth, especially in emerging markets.

In rail transportation, our Kingston facility provides 300 high value jobs. It is an integral part of an innovation ecosystem that includes Queen's University. Due to this vibrant ecosystem, we chose Kingston as our global centre of expertise for monorails and today this facility is working on innovative contracts around the world.

But nothing is a given in the global marketplace and success cannot be sustained by relying on the status quo. Competitors are moving rapidly. Both the U.K. and the U.S. are talking about a manufacturing renaissance and the government, educational institutions and labour are teaming up to make it happen.

A good example of this teamwork here in Ontario is the province's potential aerospace cluster. At Bombardier, we have spearheaded successful aerospace clusters in Québec and Mexico. Clusters drive innovation, improve productivity and can help us climb up the value chain.

That is why we welcome the Canadian government's current review of the aerospace sector. This sector already ranks fifth in the world with annual revenues of \$22 billion. We would do well to protect its 80,000 jobs and build on its valuable assets in Canada.

The manufacturing-innovation-productivity challenge falls squarely on all of our shoulders. If we decide to let Ontario's manufacturing sector tank, innovation and productivity in Canada will go down with it.

That is why we need to truly understand and embrace the world we are operating in today and take bold and ingenious steps to shrewdly exploit certain niches.

Globalization can generate higher value jobs and drive a higher standard of living, but it is also fuelling a race worldwide, with both developed and emerging countries competing to attract investment, accelerate innovation, as well as entice and develop the most skilled talent.

A recent World Economic Forum report states that in recent years, manufacturing accounted for more than 25% of global foreign direct investment projects, creating an additional one million jobs annually; innovative companies grew net income and market capitalization two times faster; and due to the widening skill gap, an estimated 10 million jobs in manufacturing cannot be filled today worldwide.

Competing globally is not for the faint-hearted. At the same time, competing globally is not a question of choice for businesses, policy-makers or civil society. It is a matter of necessity to achieve prosperity.

In the end, it is true that global companies will operate where they can maximize their return on investment. However, Ontario has created and, I am confident, will continue to create an environment where companies like Bombardier and its partners can innovate, contribute and thrive.

We are committed to the future of Ontario's manufacturing sector, as we have been for the last 20 years. Together we have successfully weathered challenging times and restored prosperity to this sector in the past. I am confident that we can do so again.

