

# Deepening our commitment

**MOVING FORWARD RESPONSIBLY** 

BOMBARDIER

2010 Corporate Social Responsibility Overview

# Our Approach

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# Our Approach

We are pleased to share our third annual Corporate Social Responsibility (CSR) Report with you.

Like last year, our complete 2010 CSR Report is available exclusively online. This reflects best practices and improves access to the report, while minimizing its environmental footprint.

For an overview of our performance, please download our 2010 Corporate Social Responsibility Overview.

"Deepening Our Commitment" is the theme of this year's report. It refers to recent steps taken to ensure we act responsibly as a public company, employer, neighbour and partner.

Receiving your feedback is an important part of our stakeholder dialogue process. Your opinions help us focus on the issues that matter most to our diverse stakeholder groups. Please either email us your thoughts on our efforts to move forward responsibly at <u>csr@bombardier.com</u> or complete our online survey.

# A Message from the Corporate Social Responsibility Committee Chairman

### Intensifying Our Efforts

Since our report last year, we've made steady progress along our sustainability journey. We are especially encouraged by the fact that corporate social responsibility is increasingly embedded throughout our organization. In ever-greater numbers, our employees are coming up with creative suggestions and initiatives to move us forward in CSR. This growing engagement around sustainability motivates and compels us to intensify our efforts. Open and effective CSR communication is key to stimulating broader engagement. That's why we have improved, and will continue to improve, our CSR reporting with enhanced communication tools such as our new CSR website. Step by step, day by day, we're achieving our long-term vision of well-planned CSR initiatives driven by engaged employees and rooted in our operations.

Daniel Desjardins Senior Vice President and General Counsel

### **Report Scope**

This report focuses on our CSR performance at all of our facilities worldwide. This includes joint ventures where we have operational control.

The report's quantitative data reflects our performance in fiscal year 2010 (February 1, 2009 to January 31, 2010). Qualitative data and information cover fiscal year 2010 as well as the period between February and September 2010. All amounts are in U.S. dollars unless otherwise indicated.

### **Key Material Impacts**

Our 2010 Corporate Social Responsibility Report documents programs, initiatives and processes that impact our stakeholders and our business. In other words, it covers the issues that matter most to our company and our major stakeholders.

### Methodology

We used Global Reporting Initiative (GRI) principles to define our report's content. We took into account our organization's overall footprint and the current global sustainability context as well as:

### Stakeholder Feedback

- Employee surveys
- Individual meetings with key stakeholders, among others, investors, non-government organizations (NGOs), government representatives and sustainability analysts
- Stakeholder surveys
- · Customer surveys (conducted by third parties and Bombardier)

### Third-party Sustainability Reporting Guidelines

- Global Reporting Initiative (GRI) G3 framework
- United Nations Global Compact
- International Association of Public Transport (UITP)

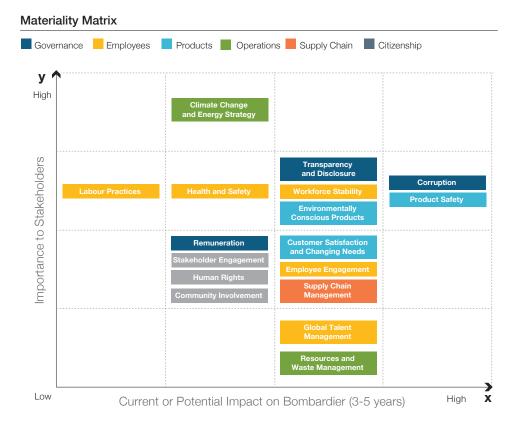
### **Internal Priorities**

• We identified our corporate social responsibility priorities based on an internal assessment of their potential business impact and on stakeholder feedback.

The materiality matrix below summarizes pertinent sustainability issues and highlights the priorities we share with our stakeholders.

On the x axis, we ranked issues based on their potential impact on our company over the next three to five years. This includes the impact on financial results and risks associated with new regulations or stakeholder actions.

The y axis represents the importance specific issues hold for our stakeholders: issues positioned at the bottom are those with low stakeholder awareness and concern. The issues positioned at the top indicate a higher level of awareness and concern.



## Definition of Issues

### Governance

**Corruption:** Recent scandals and cases of corruption in corporations worldwide highlight the need for strong and responsible governance with clear business conduct guidelines.

**Remuneration:** Executive remuneration policies are increasingly perceived as a key factor impacting a company's reputation, financial performance and business practices.

**Transparency and Disclosure:** The significant impact businesses have on communities and markets necessitates enhanced transparency and disclosure in corporate communication.

### Employees

**Employee Engagement:** With the growth of global competition for skilled labour, corporations are seeking to harness the full potential of their employees. Employee engagement translates into greater motivation, a better overall performance and improved customer engagement.

**Global Talent Management:** Demographic changes are creating talent management challenges. Corporations need well-defined human resources strategies to ensure their sustainable growth.

**Health and Safety:** The health and safety of employees is a clear priority. A strong health and safety performance enhances our employees' well-being and, ultimately, their productivity.

**Labour Practices:** Corporations are expected to uphold high standards of labour practices, including the freedom of association, abolition of child labour and elimination of discrimination in the workplace.

**Workforce Stability:** The effects of the recent economic crisis and the evolution of CSR practices underscore the need for corporations to manage workforce fluctuations responsibly and find ways to aim for stability.

#### Products

**Customer Satisfaction and Changing Needs:** Enhancing customer satisfaction secures their loyalty and increases market share against a backdrop of fierce competition and rapid technological change.

**Environmentally Conscious Products:** With the rise of concerns over climate change, building environmentally conscious products should be an important goal for businesses.

**Product Safety:** The quality and safety of a company's products are key considerations for all users. A perceived lack of safety can significantly undermine a corporation's performance and success.

#### Operations

**Climate Change and Energy Strategy:** As responsible citizens, corporations must preserve the environment and strive to mitigate their impact on climate change.

**Management of Resources and Waste:** The efficient management of resources benefits both the environment and a company's bottom line.

#### Supply Chain

**Responsible Supply Chain Management:** Responsible supply chain management ensures a corporation's long-term sustainability, improves business practices within its broader sphere of influence and reduces reputational risk.

### Citizenship

**Community Involvement:** Companies are citizens generating and receiving benefits from the community in which they evolve. Their role now involves being active in environmental and industry-related debates, engaging with communities through volunteer activities, advancing issues of mutual interest and contributing financially when appropriate.

Human Rights: Globalization has put the spotlight on human rights. Corporations are expected to respect fundamental human rights in all jurisdictions.

**Stakeholder Engagement:** Corporations must play a key role in their industry and communities as well as in society at large. Engaging in meaningful dialogue is essential to improving communication and advancing interests shared by businesses and civil society.

### **Verification Assurance**

In fiscal 2010, we implemented two data management systems to enhance the consistency and accuracy of our reporting in health, safety and environment (HSE) and in community involvement. During the coming year, we will also explore ways to implement audit procedures in our CSR reporting.

# 1.1 Executive Messages



# Deepening Our Commitment

"Our employees remain at the heart of our success. Nowhere is this more evident than in the sphere of corporate social responsibility." Pierre Beaudoin President and Chief Executive Officer Bombardier Inc.

As corporate social responsibility gains momentum across Bombardier, we are deepening our commitment to moving forward responsibly. This was reflected in both the big and little things we did to advance our CSR agenda over the past year.

One of our bigger achievements was successfully navigating the economic downturn with its far-reaching impact on the aviation industry. Despite the recession, we maintained good profitability, liquidity and capital structures. We also leveraged the short-term lower volume and demand in our Aerospace group to focus our employees' considerable talent on better execution to build efficiency, further streamline costs and improve customer satisfaction.

Our strong balance sheet allowed us to continue investing in innovative, eco-conscious products like the *CSeries* commercial aircraft, *ZEFIRO* very high speed train and *ECO4* energy-saving rail technologies. These investments position us to compete successfully in a world that is rapidly moving towards a carbon-constrained economy. We also intensified our focus on the five priorities of our corporate-wide initiative, Our Way Forward. This includes strengthening our CSR commitment.

Our employees remain at the heart of our success. Nowhere is this more evident than in the sphere of corporate social responsibility. In the past year, we witnessed numerous instances where our employees brought their ingenuity to bear, zeroing in on solutions to sustainability challenges and setting the stage for greater prosperity.

### Addressing Talent Challenges

Because our employees are our greatest strength, we began implementing several short- and long-term initiatives to improve workforce stability and ensure we have sufficient skilled workers. In terms of workforce stability, more flexible work schedules in some of our Aerospace teams will help minimize the impact of the layoffs triggered by the reduced demand for certain aircraft caused by the recession.

Our new Global Talent Management Roadmap will enable us to better manage our talent challenges worldwide, which include attracting and retaining skilled employees. Through our Transportation group's STARS initiative in South Africa, we are helping educate future generations of technicians, engineers and scientists while addressing our long-term need for a skilled and motivated workforce in the country.

### Preparing for a Low-carbon Economy

We believe that industries can and must play a constructive role in establishing meaningful emission reduction targets. This is why we took a leadership role in setting greenhouse gas reduction targets for the business aircraft industry.

At the same time, we continued to take steps to shrink our own environmental footprint. In fiscal 2010, we managed to reduce energy consumption by 7%, greenhouse gas emissions by 12% and waste generation by 13% compared to last year. We are committed to driving down our energy consumption by an additional 10% between fiscal 2010 and 2015. We will also strive to achieve our ultimate goal of becoming operationally carbon neutral by 2020.

### Additional Highlights

In September 2010, we were listed on two Dow Jones Sustainability Indexes for the fourth year in a row. These indexes track the leading sustainability-driven companies worldwide.

We implemented several new initiatives to boost our contribution to communities where we operate worldwide. We also launched a more focused Donations, Sponsorships and Community Involvement Policy and established an employee volunteer program with the Red Cross in Montréal.

### **Promoting UN Global Compact Principles**

We took various actions to promote and uphold the UN Global Compact principles. This included updating our Code of Ethics and Business Conduct to more explicitly integrate these principles. At the China Development Forum in March 2010, I highlighted the Global Compact as an innovative and promising model of collaboration between governments, corporations and civil society. I firmly believe that this type of collaboration is the key to effectively tackling issues of an increasingly global nature.

As you review our 2010 Corporate Social Responsibility Report, you will note that it is organized into the same six sections as last year: governance, employees, products, operations, suppliers and responsible citizenship. Keeping the same structure will make it easier for you to track our progress. We trust that you will see how, in each of these areas, we have deepened our commitment to moving forward responsibly.



# Putting Strategy into Action

"Collectively the aerospace industry has set ambitious environmental targets —reducing aircraft CO<sub>2</sub> emissions by 50% by 2050 and achieving carbon-neutral growth by 2020. At Bombardier Aerospace, we are duty-bound to spearhead advances that drive us ever-closer to these goals." Guy C. Hachey President and Chief Operating Officer Bombardier Aerospace

As the world heads into a new decade, our stakeholders have new and higher expectations of us in terms of environmental and social performance. They count on us to move beyond commitments and strategies, and show measurable progress through concrete actions. To meet these expectations, sustainable principles must be embedded in our day-to-day business. This is true for both Bombardier Aerospace and the entire aerospace industry.

### New Planet, New Planes

This new decade will bring many changes in the aviation industry. Collectively our industry has set and is committed to achieving ambitious environmental targets. They include reducing aircraft  $CO_2$  emissions by 50% by 2050 and achieving carbon-neutral growth by 2020.

At Bombardier Aerospace, we are duty-bound to spearhead advances that drive us ever-closer to these goals. As airlines seek to improve fleet efficiency by progressively replacing older aircraft, aircraft manufacturers like us need to deliver game-changing technologies. We must develop greener aircraft that employ lighter materials and equipment, more aerodynamic configurations and more efficient engines and systems. And to reduce our industry's dependence on carbon-intensive fossil fuels, we must explore alternative sources of energy. Biofuels seemed a remote possibility a few years back, but today the industry is certifying these fuels for use in aircraft.

While the world may currently be focusing on CO<sub>2</sub> emissions, as airframers we need to be aware of how our technological choices impact the industry's overall environmental footprint. Some technologies might reduce emissions but increase noise. We must identify technologies capable of tackling all environmental matters simultaneously. Strong across-the-board environmental performance translates into significant cost savings for operators, which proves that focusing on the environment makes good business sense.

That is why we chose Pratt & Whitney's PurePower engine for our new *CSeries* aircraft family. It delivers both unparalleled fuel efficiency and noise and  $NO_x$  reductions. Our *CSeries* aircraft will burn 20% less fuel and will emit 20% less  $CO_2$  and 50% less  $NO_x$ . It will also be four times quieter than other aircraft currently in production in the same category.

### **Our Operational Footprint**

Beyond aircraft operations, we must ensure the sustainability of our production processes and waste management when designing and building our aircraft. Over the past five years, we have reduced our manufacturing sites' energy consumption by 13% and waste generation by 24%. 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.

To achieve these targets, we are creating a Green Fund in Aerospace dedicated to capital investments in energy-saving initiatives. Each site will be able to enter proposed projects in a competition with the best ideas receiving funds from this central budget. This is one of our new ways of supporting employee suggestions for shrinking our environmental footprint.

### Social Responsibility in Action

Our products not only help reach global environmental targets, they also assist communities in need. In the wake of Haiti's devastating January 2010 earthquake, a Bombardier *Global* aircraft left Toronto carrying nine medical volunteers from the Canadian Medical Assistance Team (CMAT) and almost 450 kilograms of medical supplies, including a small field hospital. In Haiti, the volunteers set up in Léogâne, a community that had been almost completely destroyed by the quake. Flexjet also organized aid flights to Haiti.

From donations to relief flights to raffles, our employees responded to the crisis with urgency and compassion. Using our aircraft to help disaster-struck communities is just one example of how we translate our corporate responsibility commitment into concrete actions.



# Advancing Sustainability on Many Fronts

"Our comprehensive approach to corporate social responsibility permeates all levels of our organization and every area of activity. It ensures we embed sustainability not only in our products but also in our culture and mindset." André Navarri President and Chief Operating Officer Bombardier Transportation

As a global leader in rail, our stakeholders expect more from us than just the timely delivery of great products. They expect our innovation to help reduce their carbon footprint and operating costs while improving their performance. They also look to us to lead by example in sustainable behaviour and corporate social responsibility. Today our comprehensive approach to corporate social responsibility permeates all levels of our organization and every area of activity. It ensures we embed sustainability not only in our products but also in our culture and mindset.

### **Our Operations**

As you will read in this report, our Corporate Social Responsibility (CSR) m efforts and achievements are trending in the right direction. Despite a significant increase in business volume, we reduced our energy use by 14%, greenhouse gas emissions by 18%, water consumption by 32% and waste generation by 9% during the past five years. And we continue to raise the bar even higher.

For example, this year we set a target of achieving a carbon-neutral manufacturing footprint by 2020, along with site-specific CO<sub>2</sub> reduction targets. We also developed funding and implementation options for energy projects, such as purchasing green electricity and switching to renewable sources of heating energy. Addressing the emissions caused by our travel and car policies gave birth to a new green car policy and green train travel policy.

### Our People

Our teams around the world are embracing the spirit of CSR through their constant drive to optimize our products' environmental criteria, minimize our operations' environmental footprint, strive for zero work-related incidents, extend these standards to our global supply chain and give their time to community projects. Safeguarding our employees' well-being and investing in their development are aspects of this spirit.

In fiscal 2010, we continued to reinforce our zero-accident culture by further reducing our accident frequency rate to less than 0.4 accidents for 200,000 hours worked. We supported the development of over 500 managers through our "Making Great Leaders" training program as we work towards a more enabled and empowered operating culture. And our employees worked diligently to secure a commitment from our 400 master vendors to either adhere to the Bombardier Supplier Code of Ethics and Business Conduct or to demonstrate their commitment to equivalent codes of conduct.

### Our Community Involvement

Along with our successful business operations in India, China and South Africa comes the responsibility to make a positive contribution. That is why in India our employees are enhancing their communities' prosperity and sustainability by harvesting rainwater, planting trees and fostering local entrepreneurship. In South Africa's Gauteng Province, our STARS program provides engineering and technical education to help build and sustain a trained professional workforce in transportation-related fields. And in China, we supported disaster recovery efforts in the aftermath of the devastating earthquake in Sichuan province.

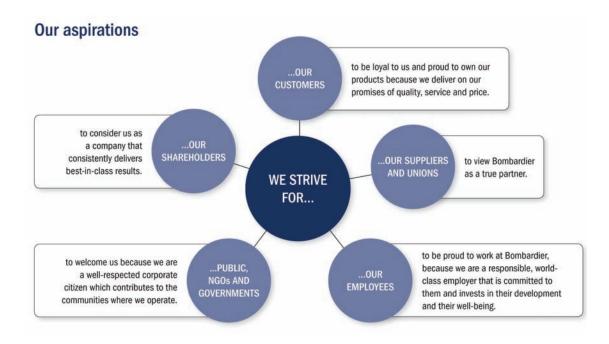
### **Our Newest Eco-conscious Product**

In September 2010, we launched what is arguably the most exciting example of how our CSR approach contributes to sustainability: the *ZEFIRO* 380 very high speed train. This newest member of our *ZEFIRO* family of high speed trains takes long-distance travel to new heights by combining speed and capacity with game-changing design and environmental performance. Equipped with our *ECO4* technologies, the *ZEFIRO* 380 will set new standards in all-round environmental and operating performance, passenger comfort and sustainable mobility. It is just one of the reasons we continue to say "The Climate is Right for Trains."

# 1.2 Our Strategy

#### **Our Way Forward**

Introduced in the spring of 2009, Our Way Forward will enable us to build a sustainable future by addressing our key challenges in the years to come. This company-wide initiative consists of five business priorities that are aligned with our mission and aspirations. We will begin assessing the performance of our organization and senior management on the basis of these five priorities in fiscal 2011.



### Five Business Priorities for the Future

The five priorities of Our Way Forward reflect our vision for the future. Together they will pave the way to sustainable growth. Delivering on these priorities will enable us to take advantage of global trends while strengthening our ability to navigate through difficult economic cycles. Each priority is headed up by a member of our senior management team.

- Be #1 in customer satisfaction through flawless execution: Achieve best-in-class execution discipline in each step of every business process along the value chain to radically improve customer satisfaction. This entails flawlessly delivering on our promises in everything we do.
- Raise our game in global talent management: Intensify our efforts as a world-class employer invested in the development of skilled, engaged and proud talent around the globe.
- Actively manage risks: Develop our insight and transparency in the management of key risks that drive value while proactively mitigating, managing or transferring risks that do not create value and further embedding risk management in all core functions across the organization.
- Establish local roots in all key markets: Develop an effective "local roots" organizational model targeting our major markets worldwide and using synergy between our Aerospace and Transportation groups. This will allow us to readily capture new business opportunities and deliver best-in-class value for customers and overall profitability.
- Enhance our corporate social responsibility: Enhance our commitment to corporate social responsibility by reducing the environmental footprint of our products and operations, further promoting employee health and safety in our daily decisions and actions, and actively contributing to the development of communities where we operate.

# 1.3 Company Profile

Headquartered in Montréal, Canada, we operate two industry-leading businesses: Bombardier Aerospace and Bombardier Transportation. Our innovative products range from commercial aircraft and business jets to rail transportation equipment, systems and services.

For fiscal years ended January 31	FY2010	FY2009	FY2008	FY2007	FY2006
Revenues (in billions of dollars)	19.43	19.7	17.5	14.9	14.8
Net income (in millions of dollars)	707	1,026	325	278	254
Earnings per share (diluted, in dollars)	0.39	0.56	0.26	0.14	0.11
Free cash flow (in millions of dollars)	(215)	342	1,963	610	532
Order backlog (as at Jan. 31, in billions of dollars)	43.8	48.2	53.6	40.7	31.6
Workforce (as at Jan. 31)	62,900*	66,935	59,760	56,428	55,643

\* Workforce 2010: This figure does not include some 1,000 inactive employees in our Transportation group

#### Worldwide Presence

For fiscal year 2010, 95% of our revenues were generated outside Canada, with Europe *accounting* for 48%. We have 68 production and engineering sites in 23 countries, and a worldwide network of service centres. We have customers in over 100 countries.



# Our products and services

### Bombardier Aerospace-The world's third largest civil aircraft manufacturer



Business jets: Learjet, Challenger and Global



**Commercial aircraft:** *CRJ* Series, *Q-Series* and *CSeries* 



Amphibious aircraft and specialized aircraft: Bombardier 415, Bombardier 415 MP and specialized aircraft



Customer services



Fractional ownership: Flexjet and Skyjet programs in the U.S.

### Bombardier Transportation-A worldwide leader in rail technology



Rail vehicles: Very high speed, high speed (ZEFIRO); intercity (REGINA); commuter and regional trains (AGC, SPACIUM, TALENT, ELECTROSTAR, TURBOSTAR, BiLevel and multilevel); metro cars (MOVIA); and light rail vehicles (FLEXITY)



Locomotives and Equipment: locomotives (TRAXX); bogies (FLEXX); and propulsion & controls (MITRAC)



Transportation systems: Automated People Mover (APM), advanced rapid transit (ART) and monorail systems (*INNOVIA*); mass transit systems; operations and maintenance



Services: fleet maintenance, refurbishment and overhaul, and material solutions



Rail control solutions: mass transit (*CITYFLO*); mainline (*INTERFLO*); and *EBI* family of products

### **Bombardier Aerospace**

We are a leading provider of innovative aviation products and services for business, commercial, amphibious and specialized aircraft. Here is an overview of our aerospace business as of January 31, 2010:

- Headquarters: Montréal, Canada
- Employees: 28,900
- Facilities: 10 manufacturing and engineering sites
- Countries: Present in 23
- Revenues: \$9.4 billion
- Customers: Airlines, corporations, governments, high net worth individuals, civil aircraft owner-operators and aviation service providers in over 100 countries

### **Bombardier Transportation**

We are a global leader in the rail industry. The following describes our rail transportation business as at January 31, 2010:

- Headquarters: Berlin, Germany
- Employees: 33,800
- Facilities: 58 production and engineering sites; 40 services centres at customer premises worldwide
- Countries: Present in 35
- Revenues: \$10 billion
- Customers: Public and private railway operators including national railways and municipal transit authorities

# 1.4 Objectives

# GOVERNANCE

Corporate Social Responsibility (CSR) Governance		
Fiscal 2010 Objective	<ul> <li>Continue improving collaboration between the Corporate and two business group CSR committees to effectively implement and manage CSR initiatives</li> </ul>	
What We Did	<ul> <li>Maintained a stringent meeting schedule for CSR Committee throughout fiscal 2009 and 2010, holding meetings once every two months</li> <li>Strengthened the CSR team by appointing CSR strategy director in our Transportation group</li> <li>Improved coordination and increased the number of company-wide initiatives such as updating the Donations, Sponsorships and Community Involvement Policy as well as developing partnerships with external organizations</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Ensure strong alignment between the groups' CSR strategies and develop key areas for collaboration</li> </ul>	
CSR Priorities		
Fiscal 2010 Objectives	<ul> <li>Develop a long-term action plan and begin implementing new community investment, stakeholder engagement and employee volunteering programs</li> <li>Continue improving CSR communication and reporting</li> </ul>	
	<ul> <li>Adopted the 3E approach to community involvement, which focuses on Environment, Education and Entrepreneurship, and enhanced monitoring with a new software</li> <li>Added an employee volunteering component in our new community involvement policy</li> </ul>	
What We Did	<ul> <li>Intensified our engagement with industry association stakeholders and developed a more formal and strategic stakeholder engagement process, which will initially focus on NGOs</li> <li>Developed and launched a dedicated CSR website to enhance accessibility and better communicate our CSR progress</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Reassess our medium- and long-term CSR priorities</li> <li>Further refine our CSR communication activities and reporting and heighten general awareness of our CSR initiatives</li> <li>Implement 3E approach over next five years (80% of donations and sponsorships aligned with 3E)</li> </ul>	

Ethics and Business Conduct		
Fiscal 2010 Objective	<ul> <li>Enhance our Code of Ethics and Business Conduct to better reflect the principles of the UN Global Compact</li> </ul>	
What We Did	<ul> <li>Added the UN Global Compact principles to our Code of Ethics and Business Conduct</li> <li>Launched the second phase of e-learning modules to train managers and professionals on specific provisions of the Code</li> <li>Rolled out a quarterly newsletter to increase awareness of the Code</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul><li>Finalize the rollout of the second wave of ethics training</li><li>Conduct our internal controls survey</li></ul>	

## **EMPLOYEES**

Health and Safety (H&S)		
	Improve our H&S performance throughout the corporation	
	<ul> <li>Increase the standardization of H&amp;S practices across our organization by developing a Bombardier H&amp;S Excellence System</li> </ul>	
Fiscal 2010	Embed H&S considerations in our product design processes	
Objectives	<ul> <li>Complete OHSAS 18001 certification at the remaining eligible Aerospace sites by the end of fiscal 2010</li> </ul>	
	<ul> <li>Continue monitoring our leading indicators using our new HSE Information Management System (HSE IMS)</li> </ul>	
	Continued to decrease our accident frequency and severity rates in both business groups	
	<ul> <li>Integrated H&amp;S considerations into both groups' operating systems</li> </ul>	
What We Did	• Strengthened focus on off-site safety in our Transportation group by developing a new directive and standards on safety planning and training	
	Began integrating H&S aspects into product design in Transportation's Systems division	
	Completed OHSAS 18001 certification of all eligible Aerospace sites	
	<ul> <li>Began corporate-wide monitoring and reporting on two new leading indicators (safety observations and HSE training hours) and expanded near-miss reporting</li> </ul>	
Progress		
	Continue improving our H&S performance by achieving accident frequency rates of 0.85 and 0.2 in our Aerospace and Transportation groups respectively	
Fiscal 2011	<ul> <li>Continue developing a standardized HSE system to achieve our ultimate target of zero occupational illness/injury</li> </ul>	
Objectives	<ul> <li>Include H&amp;S deliverables in product design processes and increase our design community's awareness of H&amp;S issues</li> </ul>	
	• In our Transportation group, improve the impact of near-miss reporting using a modified KPI, i.e., timely mitigation of issues to motivate employees to report	

Global Talent Management		
Fiscal 2010 Objective	<ul> <li>Begin implementing our new Global Talent Management Roadmap to better attract, retain and develop engaged leaders and employees</li> </ul>	
	Established a talent governance organization across Bombardier	
	<ul> <li>Agreed on a global promise ("We move people") as the foundation of our Employment Value Proposition (EVP)</li> </ul>	
What We Did	<ul> <li>Enhanced coordination of our efforts to promote diversity and employment equity by creating a cross-group work team</li> </ul>	
	<ul> <li>Aligned our key talent management components across Bombardier</li> </ul>	
	<ul> <li>Created Bombardier Talent Management dashboard with common KPIs and targets</li> </ul>	
	<ul> <li>Implemented the first global HR system for succession planning, including company-wide alignment on high potential definitions and key positions</li> </ul>	
Progress		
	Continue implementing the Talent Management Roadmap, including:	
	<ul> <li>Embed and leverage the EVP in our talent acquisition processes to improve our ability to attract, source, select and hire the best candidates to meet our business objectives</li> </ul>	
Fiscal 2011 Objectives	<ul> <li>Improve the current performance management process to strengthen alignment with business objectives and clarify desired behaviours and competencies</li> </ul>	
	<ul> <li>Ensure compensation programs support our Talent Management Roadmap</li> </ul>	
	• Expand our leadership training program ("Making Great Leaders") across Bombardier	
Employee Engagement		
Fiscal 2010 Objective	<ul> <li>Continue to improve employee engagement as measured by employee engagement surveys, continuous improvement programs and transversal initiatives</li> </ul>	
	Conducted an annual employee engagement survey at both our Corporate Office and Aerospace group and an employee pulse survey in our Transportation group	

<ul> <li>In Aerospace survey, achieved 86% employee participation and maintained 69% on engagement index despite the recession's negative impact</li> </ul>

<ul> <li>In Transportation survey, improved communication between leaders and employees by 5% for a</li> </ul>
score of 67% compared to 62% last year
• 00% of Acrospace amplexase extified Silver and 100% of appier management completed the Cold

- 99% of Aerospace employees certified Silver and 100% of senior management completed the Gold level training of the Achieving Excellence System
- In Transportation, increased average BOS (Bombardier Operations System) rating from 1.9 in fiscal 2009 to 2.1 in fiscal 2010, with the "PEOPLE Involvement" health and safety initiative improving from 2.1 to 2.3 during the same period (4 represents world-class performance)

Progress	
	Continue to improve our employee engagement
Fiscal 2011	<ul> <li>Align and consolidate yearly employee surveys across the company</li> </ul>
Objectives	<ul> <li>Increase communication at all levels of the organization</li> </ul>
	Continue to support survey-specific action plans as effective drivers of employee engagement

What We Did

# PRODUCTS

Customer Satisfaction		
Fiscal 2010 Objective	Continue to improve customer satisfaction as measured by independent and internal surveys	
	<ul> <li>Continued to organize Aerospace customer forums (e.g. Customer Advisory Boards, Technical Steering Committees, Operator Conferences, etc.) and conduct annual customer surveys, which revealed increases in customer satisfaction for all business units</li> </ul>	
	Noted improvement in our survey results	
What We Did	<ul> <li>Conducted survey with key Transportation customers worldwide as part of our Customer Management Program, highlighting satisfaction in innovative product offering, strategic alignment and communication</li> </ul>	
	<ul> <li>In Transportation, rated among two best suppliers of service materials by Deutsche Bahn (improved more than 20 positions from two years ago)</li> </ul>	
Progress		
Fiscal 2011 Objectives	Continue to improve customer satisfaction as measured by independent and internal surveys	

Product Environmental Footprint		
Fiscal 2010 Objectives	<ul> <li>Continue deploying Design for Environment (DfE) capabilities on the <i>CSeries</i> and <i>Learjet 85</i> programs and release Environmental Product Declarations (EPDs) when new aircraft enter service</li> <li>In line with our long-term commitment, develop an EPD for each new Transportation product platform; issue four additional EPDs in fiscal 2010, two of which to undergo EMAS (Eco-Management and Audit Scheme) validation</li> </ul>	
What We Did	<ul> <li>Distributed a DfE manual to Aerospace product development teams, including <i>CSeries</i> and <i>Learjet 85</i> teams and established an environmental intelligence quarterly report</li> <li>Certified by the Aircraft Fleet Recycling Association (AFRA) for the dismantling of <i>CRJ100/200</i> models</li> <li>In Transportation, issued EPDs for our <i>SPACIUM</i> and <i>TALENT</i> 2 commuter trains and the first EPD for a vehicle component (<i>MITRAC</i> - TC 3300 MS V04 converter), opening the door to additional modular EPDs</li> <li>In December 2009, received approval from the International EPD Committee for common rail industry PCRs (Product Category Rules<sup>1</sup>) for rail vehicles developed within UNIFE</li> <li>Completed a study to ensure compliance with new European Community regulation on chemicals (REACH)</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Continue deploying DfE capabilities on the <i>CSeries</i> and <i>Learjet 85</i> programs</li> <li>Leverage the Green Aviation Research and Development Network (GARDN), the Canadian Aviation Environment Technology Roadmap (CAETRM) as well as key European frameworks to develop green technologies for aviation (e.g. biofuels, aircraft recyclability, etc.)</li> <li>Develop additional EPDs for our rail products and follow the rail industry's common PCRs</li> <li>Develop a standard on recyclability calculation and recycling strategies for rail systems</li> </ul>	

<sup>1</sup>PCR defines the requirements on environmental parameters to be included in an Environmental Product Declaration (EPD).

Greenhouse Gas Emissions		
	• Promote the Bombardier Carbon Offset Program as part of our portfolio of aircraft services available to all business aircraft customers	
Fiscal 2010 Objectives	<ul> <li>Support our Aerospace customers in establishing their compliance plan for new environmental regulations such as the European Union Emission Trading Scheme (ETS)</li> </ul>	
	• Demonstrate the positive impact of <i>ECO4</i> technologies for rail operators with respect to energy and greenhouse gas emissions reduction	
What We Did	In Aerospace, developed an ETS compliance plan, supported our customers in establishing their own plan, and evaluated potential compatibility with our Carbon Offset Program	
	<ul> <li>In Transportation, completed tests using our <i>EBI</i> 50 driver assistance system in Sweden, which showed an approximate 20% reduction in energy consumption</li> </ul>	
Progress		
	<ul> <li>Continue to support our Aerospace customers in establishing their compliance plan for new environmental regulations such as ETS</li> </ul>	
Fiscal 2011 Objectives	<ul> <li>Collaborate with the World Economic Forum (WEF), International Civil Aviation Organization (ICAO) and Air Transport Action Group (ATAG) to establish the global sector framework for managing aviation emissions</li> </ul>	
	• Increasingly implement ECO4 technologies in our rail transportation customer projects and broaden the range of ECO4 products	

Industry Leade	ership in CSR
Fiscal 2010 Objectives	<ul> <li>Play a leadership role in the aviation industry's environmental efforts</li> <li>Continue leading the rail industry in CSR and promoting Transportation's environmentally friendly <i>ECO4</i> technologies</li> </ul>
What We Did	<ul> <li>Spearheaded the creation of the Business Aviation Commitment on Climate Change, while collaborating with industry associations and key competitors</li> <li>Played an active role in ICAO's High-Level Meeting on Climate Change, Committee on Aviation Environmental Protection and Environment Colloquium</li> <li>Continued to lead the Association of the European Rail Industry's (UNIFE) Transport and Environment working group, which has since become the Sustainable Transport Committee (STC)</li> <li>Elected Chair of the German Rail Industry Association (VDB)</li> </ul>
Progress	
Fiscal 2011	<ul> <li>Continue to expand our leadership role in the aerospace industry by engaging, supporting and guiding industry associations, regulatory agencies and government bodies, and by ensuring strong Bombardier participation in key industry events</li> <li>Support the growing role of ICAO's Committee on Aviation Environmental Protection (CAEP) in defining future noise, NO<sub>x</sub> and CO<sub>2</sub> emission targets, both in policymaking and technical aspects</li> </ul>
Objectives	• Continue increasing our leadership role in the rail industry with respect to DfE, EPDs, energy and GHG management, and health and safety performance
	Become the first business in the rail transportation industry to be certified to BS8901 for sustainable event management
Ir Approach Boy	mbardier loc. 2010 Online CSR Report 20 /

Safety	
Fiscal 2010 Objective	Be an industry leader in product safety
	• Progressed in the deployment of our Safety Management System, a framework adding new proactive safety measures to our current processes and practices
What we did	<ul> <li>Created a Safety Office responsible for safety oversight in our Aerospace group and reporting to our Corporate Safety Board</li> </ul>
	<ul> <li>Held Safety Standdown forums with Aerospace customers in the U.S. (Wichita) and in Europe (EBACE)</li> </ul>
Progress	
Fiscal 2011 Objectives	Continue deployment of our Safety Management System (full deployment by 2015) and leverage our expertise to guide the industry
	<ul> <li>Continue existing Safety Standdown forums, expand to Brazil (August 2010) and leverage web- based tools to increase reach (e.g. podcasts, webinars, etc.)</li> </ul>
	Benchmark our Transportation group with product safety leaders from other industries

# OPERATIONS

Energy and Carbon Management		
	Conduct a more detailed assessment of energy-efficiency improvement and GHG emission reduction     opportunities for the most relevant sites	
Fiscal 2010 Objectives	• Complete an inventory of available renewable energy resources in the countries where we operate and assess the feasibility of progressively switching to this type of energy	
	<ul> <li>Reduce our energy consumption and GHG emissions, achieving an additional 10% between fiscal 2010 and 2015</li> </ul>	
	• Completed a detailed inventory of energy sources and GHG emissions at all manufacturing plants and established site-specific targets for reducing our operations' environmental footprint	
	• In Transportation, collected increasingly reliable data on energy efficiency improvement (committed versus achieved) from our Energy Efficiency at Our Facilities (ENEFA) projects	
What We Did	<ul> <li>Completed an inventory of available renewable energy providers (including costs) for our European operations and began assessing the feasibility of progressively switching to this type of energy</li> </ul>	
	<ul> <li>Increased data reliability and enhanced understanding of our energy and carbon footprint with our new HSE Information Management System (HSE IMS)</li> </ul>	
	- Decreased energy consumption by 6.7% and $\rm CO_2$ emissions by 12.3% compared to fiscal 2009	
	Offset carbon emissions generated by company events	
Progress		
	Launch an annual Green Fund across the company to finance energy-saving initiatives	
Fiscal 2011	• Establish site-specific $\rm CO_2$ reduction targets for our Transportation sites	
Objectives	Implement program to achieve carbon neutrality	
	• Increase focus on travel-related emissions and begin implementing a green business car policy	

Environmental Pe	erformance Management
Fiscal 2010 Objectives	<ul> <li>Start implementing our HSE Information Management System (HSE IMS) to improve environmental data accuracy and consistency</li> <li>Begin monitoring our new environmental indicators</li> <li>Adopt company-wide green building guidelines for new facilities based on third-party certification requirements</li> </ul>
What We Did	<ul> <li>Deployed first module of HSE IMS and enhanced reporting scope with new environmental indicators</li> <li>Completed HSE Management System certification (ISO 14001) at all remaining eligible Aerospace sites</li> <li>Established green building principles for new Aerospace facilities (all new facilities must obtain third-party environmental certification, including CIASTA in Mirabel, <i>CSeries</i> wing plant in Belfast and <i>Learjet 85</i> plant in Queretaro)</li> </ul>
Progress	
Fiscal 2011 Objectives	<ul> <li>Further enhance our centralized HSE IMS, integrating health, safety and environmental data collection and site-specific management programs and tools</li> <li>Begin monitoring new environmental indicators (waste valorization index, use of volatile organic compounds (VOCs) and number of environmental incidents) across Bombardier</li> <li>Enhance existing environmental reporting using these new indicators to better fulfill GRI requirements</li> <li>Achieve third-party environmental certification (e.g. LEED) for our new facilities</li> <li>Explore applying green building guidelines to existing buildings</li> </ul>

## SUPPLY CHAIN

Supply Chain Ma	nagement	
Fiscal 2010 Objective	Implement the first phase of a compliance program for the Supplier Code of Conduct	
	• As of August 31, 2010, obtained the commitment of 200 Aerospace suppliers representing 83% of aircraft-related spend and 406 Transportation master vendors to respect our Supplier Code of Conduct or adhere to equivalent codes of conduct	
	<ul> <li>Started working with Aerospace suppliers to reduce hexavalent chromium use in products (already done in Transportation)</li> </ul>	
What We Did	<ul> <li>Worked closely with industry stakeholders to develop strategies to enhance competitiveness of small and mid-sized businesses</li> </ul>	
what we Did	<ul> <li>Established an innovative collaboration with Cascades to benefit from their environmental expertise and increase our use of eco-responsible paper products</li> </ul>	
	<ul> <li>Strengthened our relationship with universities on supply chain matters and shared best practices/ expertise</li> </ul>	
	<ul> <li>Worked with rail industry associations such as the German Rail Industry Association (VDB) and German Electrical and Electronic Manufacturers' Association (ZVEI) to develop a common code of conduct for rollout across Europe</li> </ul>	
Progress		
	• Develop a comprehensive five-year roadmap and plan to reduce restricted and hazardous substance use in supplied products and work with other aerospace Original Equipment Manufacturers to harmonize, where feasible, supplier requirements to accelerate overall industry progress in this area	
Fiscal 2011	Continue deployment of our compliance program for our Supplier Code of Conduct	
Objectives	• Explore options to harmonize our Code of Conduct and an associated verification approach with the European rail industry (UNIFE) to reduce monitoring efforts	
	<ul> <li>In Transportation, launch a supplier survey focusing on supplier relations management and communication which will involve at least 30% of our master vendors</li> </ul>	

# **RESPONSIBLE CITIZEN**

Stakeholder Eng	agement
Fiscal 2010 Objective	• Establish a proactive dialogue with our key stakeholders regarding the most relevant CSR issues
What We Did	• Developed a more formal stakeholder engagement strategy and an initial materiality matrix to better focus our resources on priority CSR issues
	<ul> <li>Significantly increased our international presence and relationships with industry associations and government bodies</li> </ul>
	Initiated relationships with key NGOs in the field of aviation and the environment
	<ul> <li>Established multiple mechanisms to obtain feedback from key stakeholders, including stakeholder perception surveys</li> </ul>
Progress	
Fiscal 2011	• Focus on reinforcing our relationship with key groups and individuals in the communities where we operate worldwide
Objectives	Begin implementing our stakeholder engagement strategy and process with selected NGOs
Community Invo	vement

	Volitoite	
Fiscal 2010 Objectives	<ul><li>Adopt a focused approach to community involvement by defining specific investment areas</li><li>Progressively introduce a company-wide employee volunteer pilot project</li></ul>	
What We Did	<ul> <li>Finalized a new Bombardier-wide donations and sponsorships policy based on our 3E approach (Entrepreneurship, Environment and Education) to community involvement</li> <li>Deployed a global reporting software to manage all community involvement activities</li> </ul>	
	<ul> <li>Introduced an employee volunteer pilot project in the Montreal area (Red Cross "Ready When the Time Comes" program) to increase the percentage of our workforce involved in volunteer activities</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Ensure progressive migration of community-related spending to our 3E approach (80% of our donations and sponsorships budget to be aligned with 3E by 2015)</li> <li>Provide a structured framework for employees interested in volunteer activities</li> </ul>	

# 1.5 Recognitions

GOVERNANCE			Calendar year
	Recognized annually for our sustainability commitment since September 2007		
Dow Jones Sustainability Indexes	Recognized in SAM's 2010 Yearbook as one of the sustainability leaders in the aerospace and defence sectors	Bombardier Inc.	2007-2010
	Classified as a SAM Gold Class member		
RiskMetrics Group	Upgraded to "AAA" from "BBB" in recognition of our sector best practices and performance on three out of four key benchmarked issues (Carbon, Bribery and Corruption, Hazardous Waste and Health and Safety)	Bombardier Inc.	2010
Reputation Institute	Recognized as the third most admired company in Canada	Bombardier Inc.	2010
Corporate Knights	Ranked among the Best 50 Corporate Citizens in Canada in 2010 and #1 in the Environment category	Bombardier Inc.	2010
Les Affaires Newspaper	Recognized among the Best 20 Corporate Citizens in Québec in 2009	Bombardier Inc.	2009

EMPLOYEES			
Canada's Top 100 Employers	Recognized as one of the top 100 employers in Canada	Aerospace Group	2010
Trans-Canada Trophy (Canada's oldest aviation award)	Awarded to one of our employees for his outstanding achievements in air operations by the Canadian Aeronautics and Space Institute (CASI)	Aerospace Group	2009
Gold Excellence Award for "Internal Communications Program"	Recognized by the Société québécoise des professionnels en relations publiques for the excellence of our Annual Accomplishment Award program, which is open to all employees	Aerospace Group	2009
Top Ten Leaders of Technology Innovation – China's Transportation Industry Prize	Awarded to our Chief Country Representative in China for his outstanding leadership and influential management of employees in China's transport industry by "People's Railway", "Rail Transit" and the China Rail Transit Promotion Alliance	Transportation Group – China	2009
Contract Partner of the Year Award – Manchester, United Kingdom	Recognized at First TransPennine Express Annual Customer Excellence Awards for our singular customer focus, high quality maintenance service, open and honest relationship and flexibility	Transportation Group	2009
GO Transit Service Centre – Toronto, Canada	Recognized for remarkable safety record for the past ten years by WSIB Chairman (Ontario)	Transportation Group	2010
PRODUCTS			
Prix québécois de l'entreprise citoyenne 2010	Won for our "Business Aviation Commitment on Climate Change" project	Aerospace Group	2010
Frost & Sullivan Asia Pacific Aerospace & Defense Awards	Won the Airframe OEM of the Year Award at the Singapore Air Show	Aerospace Group	2010
Sustainability Star Awards: Vancouver 2010 Olympic Torch and Streetcar Demonstration Project – Vancouver, Canada	Recognized for creating an Olympic Torch with a modern, innovative design and a limited environmental footprint Recognized for our innovative partnership with the City of Vancouver on the Olympic Line, which provided Metro Vancouver residents and visitors with an opportunity to experience modern streetcars as a sustainable public transportation option	Bombardier Inc.	2010
Robb Report	Named "Best of the Best" in flight services	Flexjet	2010

Aero Magazine and			
2009 Latin American Business Aviation Convention & Exhibit (LABACE) - Brazil	Named Challenger 300 jet "Best Business Aircraft"	Aerospace Group	2009
Engineering Excellence Award	Presented with the Engineering Excellence Award for <i>ORBITA</i> technology at the prestigious 2009 HSBC Rail Business Awards	Transportation Group	2009
CUTA National Transit Corporate Recognition Award - Canada	Received for the 60-day Olympic Line streetcar demonstration project in Vancouver, Canada in the "Exceptional Performance and Outstanding Achievement" category as part of the Canadian Urban Transit Association's (CUTA) national award program	Transportation Group	2010
Research Award - Lille, France	Received for our FERROCOTS project, highlighting Crespin engineering expertise and our commitment to collaborative projects in the region	Transportation Group	2009
Top Tech Innovation Awards, Mass Transit Magazine - United States	Recognized our web-based learning management system at New Jersey Transit as one of the year's technological advances that made a significant contribution to the public transit industry	Transportation Group	2009
Asset Management Innovation Award - Institution of Engineering and Technology - London, United Kingdom	Won a second Innovation Award for our <i>ORBITA</i> solution, recognizing our leadership in rail vehicle maintenance	Transportation Group	2009
Innovation Award Berlin-Brandenburg	Received for the modular design of our <i>TALENT</i> 2 commuter and regional train	Transportation Group	2009
Award for Engineering at the Railway Innovation Awards - London, United Kingdom	Received for our innovative and groundbreaking service capability, <i>ORBITA</i>	Transportation Group	2009
Silver Innovation Award - Utrecht, Netherlands	Won for our <i>PRIMOVE</i> technology, which enables catenary-free and contactless tram operation, at RailTech Europe 2009 (NL-Utrecht)	Transportation Group	2009
Public Transport Innovation Award - Freiburg, Germany	Received by the local transport company Rhein- Neckar-Verkehr GmbH at the 4th Public Transport Innovation Congress for deploying our <i>MITRAC</i> Energy Saver	Transportation Group	2009
Golden and Silver Spanner Awards - London, United Kingdom	Won four out of five Golden Spanners for being "best in class" and four out of five Silver Spanners for "most improved fleets" for our <i>ELECTROSTAR</i> trains and officially ranked as the UK's most reliable train fleet	Transportation Group	2009

EC Quality Certification UNE- EN 13816 - Madrid, Spain	Awarded the EC Quality Certification UNE-EN 13816 for passenger transportation services by AENOR (Spanish Association of Standardization and Certification) for our Automated People Mover (APM) at the Madrid-Barajas airport	Transportation Group	2009
Golden and Silver Spanner Awards - United Kingdom	Awarded seven out of 10 Golden and Silver Spanners at the Modern Railways UK Reliability Awards for the reliability of our train fleets	Transportation Group	2009
iF Product Design Award 2010 - Germany	Received the International Design Award in the "Transportation" category for our <i>FLEXITY</i> tram operated by Berliner Verkehrsbetriebe (BVG)	Transportation Group	2010
Universal Design Consumer Favourite 2009 Award - Hannover, Germany	Won in the "Mobility" category for our <i>FLEXITY</i> Swift light rail vehicle operated by the Frankfurt Transport Authority (VerkehrsGesellschaft Frankfurt am Main, VGF)	Transportation Group	2009
APTA 30th Annual AdWheel Award	Won first place in the "Video Presentation" category for our <i>ECO4</i> video	Transportation Group	2009
Harvey Communication Measurement Award	Received for achieving the highest readership response for our <i>ECO4</i> and new <i>FLEXITY 2</i> tram ads in the April issue of "Congressional Quarterly Today"	Transportation Group	2009
Exhibition Marketing Award of the International Association of Public Transportation (UITP) - Vienna, Austria	Received at the opening ceremony of the 58th UITP World Congress and Exhibition in recognition of our comprehensive, highly professional and diversified marketing strategy	Transportation Group	2009
Intermedia-globe Silver Award - Hamburg, Germany	Received in the "Public Relations: Environment- Conservation-Recycling" category at the WorldMediaFestival for our <i>ECO4</i> video featuring our new formula for Total Train Performance and our ecoactive technologies	Transportation Group	2009

OPERATIONS			
Mention d'excellence "Mieux consommer"	Recognized by Hydro-Québec for our hangar ventilation and air compressor optimization project	Aerospace Group – Mirabel, Canada	2009
Laureate of Énergia Award for "Geste durable" (Sustainable Action)	Recognized by the "Association québécoise pour la maîtrise de l'énergie" for substantially reducing our jet fuel consumption during engine testing	Aerospace Group – Mirabel, Canada	2009
ICI ON RECYCLE! (Here, we recycle): Certificate of Performance by Recyc-Québec	Recognized for significant improvements in waste and energy management	Aerospace Group – Saint-Laurent, Canada	2009
Réseau Écoélectrique	Recognized by Hydro-Québec for substantially reducing our electricity consumption by participating in Hydro's energy-saving program	Aerospace Group – Dorval and Saint- Laurent, Canada	2009
ARENA Network 11th Environmental Benchmarking Survey	Recognized for being in the top quintile in terms of managing environmental impacts (scored >80%)	Aerospace Group – Belfast, U.K.	2009
FAA Diamond Award	Received by our service centres in Dallas, Fort Lauderdale, Wichita and Hartford for their commitment to the highest standards of safety	Aerospace Group	2009

RESPONSIBLE CITIZEN			
Partners in Humanity Award from the Canadian Red Cross	Recognized for our commitment to improve the lives of disadvantaged people in Canada	Bombardier	2010
20/20 Vision Award	Recognized for our significant social impact in Northern Ireland during the past 20 years	Aerospace Group – Belfast, U.K.	2009
Mention d'excellence "Entreprise secteur aéronautique"	Recognized by the École de technologie supérieure for our exceptional collaboration in a co-op university program	Aerospace Group	2009
Florida Business Award	Recognized by the International Business Council of Florida for our achievements and positive contribution to the state	Aerospace Group	2009
First Prize for Environmental Behaviour, AENA - Spain	Received from AENA (Madrid Bajaras International Airport operator)	Transportation Group	2010

# Responsible Governance

### 2.1 Objectives

### 2.2 Corporate Governance

- 2.2.1 Mission, Core Values and Leadership Attributes
- 2.2.2 Board of Directors
- 2.2.3 Risk Management
- 2.2.4 Executive Compensation
- 2.2.5 Internal Controls Survey

### 2.3 Ethics

- 2.3.1 Code of Ethics and Business Conduct
- 2.3.2 Governance of the Code
- 2.3.3 Code Training and Commitment
- 2.3.4 Supplier Code of Conduct

### 2.4 Corporate Social Responsibility (CSR) Governance

- 2.4.1 Governance Structure
- 2.4.2 Cross-Functional CSR Committee
- 2.4.3 CSR Governance in Our Business Group
- 2.4.4 CSR Reporting and Communication
- 2.5 UN Global Compact



# Responsible Governance

# 2.1 Objectives

### GOVERNANCE

Corporate Social Responsibility (CSR) Governance		
Fiscal 2010 Objective	<ul> <li>Continue improving collaboration between the Corporate and two business group CSR committees to effectively implement and manage CSR initiatives</li> </ul>	
What We Did	<ul> <li>Maintained a stringent meeting schedule for CSR Committee throughout fiscal 2009 and 2010, holding meetings once every two months</li> </ul>	
	Strengthened the CSR team by appointing CSR strategy director in our Transportation group	
	<ul> <li>Improved coordination and increased the number of company-wide initiatives such as updating the Donations, Sponsorships and Community Involvement Policy as well as developing partnerships with external organizations</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Ensure strong alignment between the groups' CSR strategies and develop key areas for collaboration</li> </ul>	

CSR Priorities	
Fiscal 2010 Objectives	<ul> <li>Develop a long-term action plan and begin implementing new community investment, stakeholder engagement and employee volunteering programs</li> <li>Continue improving CSR communication and reporting</li> </ul>
What We Did	Adopted the 3E approach to community involvement, which focuses on Environment, Education     and Entrepreneurship, and enhanced monitoring with a new software
	<ul> <li>Added an employee volunteering component in our new community involvement policy</li> </ul>
	<ul> <li>Intensified our engagement with industry association stakeholders and developed a more formal and strategic stakeholder engagement process, which will initially focus on NGOs</li> </ul>
	<ul> <li>Developed and launched a dedicated CSR website to enhance accessibility and better communicate our CSR progress</li> </ul>
Progress	
Fiscal 2011 Objectives	Reassess our medium- and long-term CSR priorities
	<ul> <li>Further refine our CSR communication activities and reporting and heighten general awareness of our CSR initiatives</li> </ul>
	Implement 3E approach over next five years (80% of donations and sponsorships aligned with 3E)

Ethics and Business Conduct		
Fiscal 2010 Objective	<ul> <li>Enhance our Code of Ethics and Business Conduct to better reflect the principles of the UN Global Compact</li> </ul>	
What We Did	<ul> <li>Added the UN Global Compact principles to our Code of Ethics and Business Conduct</li> <li>Launched the second phase of e-learning modules to train managers and professionals on specific provisions of the Code</li> <li>Rolled out a quarterly newsletter to increase awareness of the Code</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul><li>Finalize the rollout of the second wave of ethics training</li><li>Conduct our internal controls survey</li></ul>	

# 2.2 Corporate Governance

## Strategic Priority: Be Among the Leaders in Matters of Corporate Governance

### 2.2.1 MISSION, CORE VALUES AND LEADERSHIP ATTRIBUTES

Our mission, core values and leadership attributes are the building blocks of governance at Bombardier.

Governance starts with our mission: To be the world's leading manufacturer of planes and trains and to deliver best-in-class value for customers and profits for shareholders.

Our core values guide the actions we take and decisions we make to fulfill this mission:

- Integrity
- Commitment to excellence
- Customer orientation
- Shareholder focus

Our leadership attributes remind all employees what it means to "be our best":

- We put people first.
- We work together.
- We have a passion for winning.
- We have a drive for results.

### 2.2.2 BOARD OF DIRECTORS

Our Board of Directors is responsible for supervising the management of our company to increase profitability and enhance shareholder value.

### Role

As part of its stewardship role, the Board advises management on significant business issues and assumes the following responsibilities:

- Approves corporate strategy
- Monitors financial matters and internal controls through its Audit Committee
- Oversees pension fund matters through its Finance and Risk Management Committee
- Monitors environmental, occupational health and safety matters through its Human Resources and Compensation Committee
- Assesses and oversees the succession plan of the President and Chief Executive Officer and senior executives through its Human Resources and Compensation Committee
- Monitors corporate governance issues through its Corporate Governance and Nominating Committee

Our corporate governance policies and practices comply with and, in some cases, exceed legal requirements. These policies and practices evolve to reflect new regulations and best practices.

### Composition

At January 31, 2010, our Board of Directors consisted of 14 members. Nine of our Board directors are independent and two are women.

### 2.2.3 RISK MANAGEMENT

In today's fast-paced world, risks can materialize more rapidly than ever. In May 2007, the Board created the Finance and Risk Management Committee, making risk management a central focus.

Every year, the Corporate Audit Service and Risk Assessment (CASRA) team thoroughly assesses our major risks. Senior management and the Audit Committee review the results and develop an annual action plan to address these risks. The Board's Finance and Risk Management Committee captures and follows up on risk mitigation, including social and environmental risks such as future carbon costs.

Occupational health, safety and environmental risks are mitigated through management systems and compliance audits. Supply chain risks are reduced through our supply chain management practices, including the Bombardier Supplier Code of Conduct.

Key risks are reported internally to the Board's Audit Committee, the Finance and Risk Management Committee and to the Board itself on a quarterly basis. In our annual reports, the Management's Discussion and Analysis communicates our risks to external stakeholders.

Overall our goals are to:

- Better link our risk management strategy and practices into a company-wide risk framework
- Further embed risk management across all key functions
- Improve our insight into risks
- Increase transparency regarding how we manage key risks that drive value
- Mitigate, manage or transfer risks that do not create value
- Engage stakeholders in our risk management culture

In fiscal 2010, we focused on proactively managing strategic and operational risks across the company.

In our Aerospace group, we were able to establish more effective risk mitigation strategies and ensure an appropriate reward for any risks assumed by:

- Adjusting our production schedules and resizing the organization to better reflect the current economic reality
- Formalizing the use of scenario analysis as part of our strategic planning process
- Reducing cost variations and volatility by securing long-term pricing agreements with major suppliers

In our Transportation group, we also raised our risk management capabilities to a new level by:

- Implementing a common risk framework and identifying our emerging and long-term business risks
- Establishing more effective group-wide monitoring to help mitigate risks as they arise
- · Rolling out a tool to analyze our suppliers' financial health
- Preparing a mitigation plan to react quickly and improve our risk profile
- Conducting an in-depth study of megatrends affecting the rail industry until 2025 and developing possible scenarios

### 2.2.4 EXECUTIVE COMPENSATION

Executive compensation remains a topic of growing concern for shareholders and society at large. At our 2010 Annual General Meeting, some shareholders asked for an advisory shareholder vote on our executive compensation policy.

Shareholders elect the members of our Board every year, mandating them to oversee all business matters including our executive compensation policy. This policy is aligned with the most recent regulatory requirements and best practices.

While some corporations have granted a consultative "Say on Pay" vote, we believe that our current process for responding to questions generates mutual benefits. Nonetheless, we will continue to **monitor trends in executive compensation** and adjust our

policy as recommended by our Human Resources and Compensation Committee. Please refer to pages 21 to 50 and 69 to 70 of our 2010 Management Proxy Circular for more information.

### 2.2.5 INTERNAL CONTROLS SURVEY

Every year, our Director of Ethics and Compliance conducts a confidential survey with senior management on our internal controls. The survey findings enable us to improve corporate governance related to our:

- Board of Directors and Audit Committee
- Integrity and ethical values
- Risk management philosophy
- Commitment to competence
- Management philosophy and operating style
- Organizational structure and assignment of authority and responsibilities
- Human Resources policies and practices

The survey was last conducted in March 2010. While the results were positive, we developed various initiatives to improve our controls in the lower-scoring areas.

In our Aerospace group, we began an inventory of all our Human Resources policies and practices. Our objective is **to better communicate and raise awareness** of these policies and practices.

We also launched a quarterly company-wide newsletter to raise awareness of our Code of Ethics and Business Conduct. The newsletter enhances our employees' understanding of integrity and ethical issues.

The next Internal Controls Survey will be conducted in March 2011.

## 2.3 Ethics

## Strategic Priority: Promote and Adhere to the Highest Standards of Ethical Behaviour

## 2.3.1 CODE OF ETHICS AND BUSINESS CONDUCT

High ethical standards are essential to sustain our success. The standards of behaviour required of all Bombardier Board members and employees are laid out in our Code of Ethics and Business Conduct. The Code is available in 14 languages on our website.

The Code ensures we promote ethical conduct in the work environment, including employment practices, harassment and personal security issues, and health, safety and the environment. It also addresses ethical conduct in our business practices and external stakeholder relationships.

## 2.3.2 GOVERNANCE OF THE CODE

Our **Ethics Advisory Council** directs and oversees the Code's implementation. The Council refers sensitive or potentially harmful violations to the President and Chief Executive Officer or to the Board of Directors, as appropriate.

In addition to the Director of Ethics and Compliance, the Ethics Advisory Council is composed of senior executives from Finance, Human Resources, Legal Services, Corporate Audit Services/Risk Assessment and Public Affairs. Both our Aerospace and Transportation groups appoint a representative to sit on the Council.

The Director of Ethics and Compliance is responsible for ensuring adherence to the Code through:

- Ongoing ethics training
- Continuous communication
- Ad-hoc training to support specific business group requirements

The Director of Ethics and Compliance also handles employee grievances and complaints. Employees have several options for reporting potential breaches of the Code.

### 2.3.3 CODE TRAINING AND COMMITMENT



In 2006, we launched the **first phase of an e-learning program** on our Code of Ethics and Business Conduct. This awareness training focuses on recognizing unethical situations, identifying resources and reporting violations.

All **25,000 professionals and office employees**, including 3,000 managers, have completed this phase of the program. All new employees must complete this **awareness training** as part of our new employee orientation process.

Every year, senior management (director level and above) must also renew their commitment to the Code. By March 2010, all of our 1,510 senior managers had reaffirmed their commitment.

We launched the **second phase of the e-learning program** in November 2009. This series of e-learning modules is available in English, French, German and vSpanish. It trains managers on specific provisions of the Code such as:

- · How to deal with various ethics-related issues
- Bribery and corruption
- Anti-trust laws
- · Conflict of interests
- Employment practices
- Fraud

As of August 2010, the first module on adequately dealing with unethical issues had been completed by our 3,000 managers worldwide. The second module on conflict of interests is being deployed throughout the organization to managers, professionals and office employees.

#### **Continuing to Raise Awareness**

In July 2010, we launched a quarterly newsletter to raise awareness of our Code of Ethics and Business Conduct and related issues. The newsletter provides updates on ethics training and information on Code governance and **United Nations Global Compact principles**.

### 2.3.4 SUPPLIER CODE OF CONDUCT

In 2008, we extended our Code of Ethics and Business Conduct to suppliers. Our Supplier Code of Conduct further demonstrates our commitment to promoting high standards of corporate social responsibility. It also embodies the principles of the UN Global Compact, which we signed in 2007.

Issues covered in our Supplier Code of Conduct include:

- Legal compliance
- Labour (child and forced labour, freedom of association, respect and dignity, and discrimination)
- · Health and safety
- Environment
- Anti-corruption
- Conflict of interest/ethics
- Governance

## 2.4 Corporate Social Responsibility Governance

## 2.4.1 GOVERNANCE STRUCTURE

A strategic approach to corporate social responsibility is an integral part of Our Way Forward. This approach includes stronger governance of corporate social responsibility across Bombardier.

In fiscal 2009, we revamped our corporate social responsibility (CSR) governance structure. The new structure improves communication, alignment and collaboration between CSR committees at the corporate and business group levels.



## 2.4.2 CROSS-FUNCTIONAL CORPORATE SOCIAL RESPONSIBILITY COMMITTEE

Our governance structure includes a cross-functional Corporate Social Responsibility Committee with broad representation from across Bombardier. The committee is chaired by Daniel Desjardins, Senior Vice President and General Counsel.

The committee develops corporate social responsibility guidelines and initiatives. It aligns and oversees the various CSR projects developed by the groups and their business units.

The committee's chair is accountable to Bombardier's CEO and provides him with regular updates on our corporate social responsibility performance. He also presents the Board with annual progress reports.

In fiscal 2010, the Committee met once every two months to review its portfolio of CSR projects and plan future initiatives.

#### **CSR** Committee Composition

The Corporate Social Responsibility Committee includes executives and senior managers from our Corporate Office and our two business groups. Business group members also sit on their respective Aerospace and Transportation CSR committees. This ensures an effective flow of communication between our three CSR governing bodies.

Our central CSR Committee includes representation from the following functions:

- Public Affairs and Communications
- Legal Services
- Health, Safety and Environment
- Investor Relations
- Compliance and Ethics
- Government Affairs
- Human Resources
- Web Strategy

## 2.4.3 CSR GOVERNANCE IN OUR BUSINESS GROUPS

Our CSR committees and designated functional representatives ensure that corporate social responsibility is not a mere top-down initiative. Embedding CSR within our groups and various functions improves engagement and reporting. It also encourages the development of local initiatives.

#### Aerospace

In our Aerospace group, the Corporate Social Responsibility Review Board provides orientation on CSR matters and approves CSR projects. CSR portfolio decisions are based on an analysis of the external environment, key industry trends as well as our internal reality.

The board is composed of 20 executives, including five members of the Aerospace Leadership Team, and is chaired by Hélène V. Gagnon, Vice President, Public Affairs, Communications and Corporate Social Responsibility. Members represent several functions and business units.

Key elements of corporate social responsibility are also an integral part of Aerospace's new "Enterprise Strategy for 2020," which is aligned with Our Way Forward initiative. This includes the commitment "to develop innovative and environmentally friendly products and services that meet customer needs globally."

#### Transportation

Our Transportation group's Corporate Social Responsibility Committee is composed of six senior executives and functional vice presidents. This core committee is led by Pierre Attendu, Vice President, Operations and Procurement, who is accountable for CSR in the Transportation Leadership Team. Other functions represented include Communications and Public Affairs, Strategy, Human Resources, Project Management and Technology, Health, Safety and Environment, and Corporate Social Responsibility.

In fiscal 2010, we continued to strengthen the CSR Committee in our Transportation group by appointing a CSR strategy director.

The extended CSR Committee consists of nine additional members and areas of expertise. These senior functional leaders link to internal networks, project task forces and employee-related activities across the business group. They identify CSR projects and priorities through structured stakeholder dialogue as well as materiality and megatrend analyses. In this way, strategy and decisions are fully aligned with stakeholder issues and priorities.

### 2.4.4 CSR REPORTING AND COMMUNICATION

In fiscal 2010, we made significant efforts to improve our corporate social responsibility reporting and communication activities. This included:

- Launching a dedicated website to make CSR-related information more accessible and better communicate our CSR progress
- Speaking at numerous events worldwide about our CSR performance and vision
- Actively participating in industry associations and standardization bodies that address CSR issues

## 2.5 UN Global Compact

## Strategic Priority:

## Uphold UN Global Compact Principles

We are a signatory to the United Nations Global Compact, the world's largest corporate citizenship and sustainability initiative. As a signatory, we uphold the Global Compact's 10 universally accepted principles, which cover:

- Human rights
- Labour standards
- Environment
- Anti-corruption

The table below provides examples of how we promote these principles internally and externally.

## HUMAN RIGHTS - BUSINESSES SHOULD:

Actions to Promote UN Global Compact Principles	Corresponding GRI Indicators	Other References
Principle 1. Support and respect the protection of internationally proclaimed human rights		
Our Code of Ethics and Business Conduct, our Supplier Code of Conduct, and our Health, Safety and Environment Policy formalize our commitment to safeguard internationally proclaimed human rights. In fiscal 2010, we modified our Code of Ethics and Business Conduct to incorporate the UN Global Compact principles.	LA4, LA6-7, LA13, HR2-3, HR5-7, SO5, PR1, PR5	Governance/Ethics Suppliers/ Supplier Code of Conduct
Principle 2. Make sure they are not complicit in human rights abuses		
We continue to roll out our new Supplier Code of Conduct across our global supply chain. The Code is aligned with the principles of the Global Compact. Every new supplier contract automatically involves adherence to the Code.	HR2-3, HR5-7	Suppliers



## LABOUR STANDARDS – BUSINESSES SHOULD UPHOLD:

Actions to Promote UN Global Compact Principles	Corresponding GRI Indicators	Other References
Principle 3. The freedom of association and the effective recognition of the right to collective bargaining		
We acknowledge our employees' right to freedom of association based on applicable legislation and maintain a constructive dialogue with all labour unions and work councils active in our operations. Among our Aerospace and Transportation employees, 51% and 56% respectively were covered by collective agreements in fiscal 2010.	LA4, HR2-3, HR5, SO5	Employees/Engagement/ Listening
Principle 4. The elimination of all forms of forced and compu	Isory labour	1
Our Code of Ethics and Business Conduct governs the protection of employee rights to evolve in a safe work environment. Our Supplier Code of Conduct also includes a specific reference to forced labour. For example, supplier employees must be free to leave work or terminate their employment with reasonable notice, and they are not required to surrender any government issued identification, passports or work permits as a condition of employment.	HR2-3, HR7, SO5	Governance/Ethics, Employees, Suppliers/Supplier Code of Conduct
Principle 5. The effective abolition of child labour		
Our Supplier Code of Conduct clearly stipulates our position against child labour. By child labour, we mean employees under the age of 15. However for employment or work whose nature or circumstances are not suitable for a person under the age of 18, child labour refers to employees younger than 18.	HR2-3, HR6, SO5	Suppliers
Principle 6. The elimination of discrimination in respect of employment and occupation		
In November 2009, we launched the second phase of our e-learning program on ethics, which includes specific modules on discrimination. As of August 2010, all of our 25,000 professionals and office employees, including 3,000 managers, had completed the first phase of the training program.	LA13, HR2-4, SO5	Governance/Ethics

## ENVIRONMENT — BUSINESSES SHOULD:

Actions to Promote UN Global Compact Principles	Corresponding GRI Indicators	Other References	
Principle 7. Support a precautionary approach to environme	ntal challenges		
Through a risk assessment approach, our Environmental Management System helps us identify significant environmental aspects and take appropriate action for continuous improvement. Energy and resource consumption, along with waste generation, are our most significant environmental impacts. For example, we are involved in collaborative R&D projects in Europe through our Belfast Aerospace facilities. All projects are aligned with regional or national strategies and their environmental objectives, including ACARE (Advisory Council for Aeronautics Research in Europe) and NATS (National Aerospace Technology Strategy) in the United Kingdom.	EC2, EN18, EN26, SO5	Operations, Responsible Citizen/ Stakeholder Engagement	
Principle 8. Undertake initiatives to promote greater environmental responsibility			
<ul> <li>Our Health, Safety and Environment Policy calls on us to remain vigilant and seize every opportunity to constantly improve our performance and minimize our environmental impact.</li> <li>We are pursuing two core opportunities to reduce the environmental footprint of our global operations:</li> <li>Decrease our consumption of inputs and resources such as energy, water and materials</li> <li>Reduce and, where possible, eliminate unwanted outputs, including greenhouse gas emissions, volatile organic compound emissions, wastewater release and the generation of general, hazardous and waste materials</li> <li>We are playing a leadership role in industry efforts to define future environmental targets and communicate environmental achievements and challenges.</li> </ul>	EN4-8, EN16- 19, EN22, EN24, EN26-27, SO5	Employees, Products, Operations	

<ul> <li>We chair the Canadian Aerospace Environmental Technology Roadmap (CAETR), established in fiscal 2009. The roadmap focuses on creating technologies that will allow our industry to better compete globally. Targeted technologies address environmental impacts throughout the aircraft lifecycle, including emissions, noise, fuel consumption and recyclability.</li> <li>Our Aerospace group sits on the board of the Air Transport Action Group (ATAG). ATAG is a global association that represents all sectors of the air transport industry. Its mission is to promote aviation's sustainable growth for the benefit of global society.</li> <li>In our Transportation group, our <i>ECO4</i> portfolio of energy-saving products, services and technologies addresses rail transit operators' most pressing concerns: rising energy costs, operating efficiency and global climate change.</li> <li>Our <i>ECO4</i> portfolio balances energy, efficiency, economy and ecology through solutions that range from new aerodynamically enhanced train designs to innovative technologies for optimizing the energy efficiency of new and existing fleets. <i>ECO4</i> technologies can yield overall energy savings of up to 50%. Investments in ongoing research will enable us to continually enhance and expand our <i>ECO4</i> portfolio.</li> </ul>	EN4-7, EN18, EN26-27, SO5	Products, Responsible Citizen/ Stakeholder Engagement
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## ANTI-CORRUPTION — BUSINESSES SHOULD:

Actions to Promote UN Global Compact Principles	Corresponding GRI Indicators	Other References
Principle 10. Work against all forms of corruption, including e	extortion and bribery	
Every year, our managers must renew their commitment to our Code of Ethics and Business Conduct. As of March 2010, all of our 1,510 senior managers worldwide had reaffirmed their commitment. The Code clearly explains our position regarding corruption and illegal and improper payments. We also launched the second phase of our e-learning ethics program for managers, which includes specific modules on bribery and	SO3-5	Governance/Ethics
for managers, which includes specific modules on bribery and corruption, anti-trust laws and conflicts of interests.		

# Talented Employees

### 3.1 Objectives

- 3.2 Global Talent Management
- 3.3 Diversity

## 3.4 Improving Health and Safety

- 3.4.1 Performance
- 3.4.2 Initiatives and Priorities

## 3.5 Engagement

- 3.5.1 Listening
- 3.5.2 Developing
- 3.5.3 Rewarding
- 3.5.4 Recruiting



## Talented **Employees**

## 3.1 Objectives

#### **EMPLOYEES**

Health and Safety (H&S)		
	<ul> <li>Improve our H&amp;S performance throughout the corporation</li> </ul>	
	<ul> <li>Increase the standardization of H&amp;S practices across our organization by developing a Bombardier H&amp;S Excellence System</li> </ul>	
Fiscal 2010	<ul> <li>Embed H&amp;S considerations in our product design processes</li> </ul>	
Objectives	<ul> <li>Complete OHSAS 18001 certification at the remaining eligible Aerospace sites by the end of fiscal 2010</li> </ul>	
	<ul> <li>Continue monitoring our leading indicators using our new HSE Information Management System (HSE IMS)</li> </ul>	
	Continued to decrease our accident frequency and severity rates in both business groups	
	<ul> <li>Integrated H&amp;S considerations into both groups' operating systems</li> </ul>	
	<ul> <li>Strengthened focus on off-site safety in our Transportation group by developing a new directive and standards on safety planning and training</li> </ul>	
What We Did	Began integrating H&S aspects into product design in Transportation's Systems division	
	<ul> <li>Completed OHSAS 18001 certification of all eligible Aerospace sites</li> </ul>	
	<ul> <li>Began corporate-wide monitoring and reporting on two new leading indicators (safety observations and HSE training hours) and expanded near-miss reporting</li> </ul>	
Progress		
	<ul> <li>Continue improving our H&amp;S performance by achieving accident frequency rates of 0.85 and 0.2 in our Aerospace and Transportation groups respectively</li> </ul>	
Fiscal 2011 Objectives	<ul> <li>Continue developing a standardized HSE system to achieve our ultimate target of zero occupational illness/injury</li> </ul>	
	<ul> <li>Include H&amp;S deliverables in product design processes and increase our design community's awareness of H&amp;S issues</li> </ul>	
	<ul> <li>In our Transportation group, improve the impact of near-miss reporting using a modified KPI, i.e., timely mitigation of issues to motivate employees to report</li> </ul>	

Global Talent Mana	igement
Fiscal 2010 Objective	<ul> <li>Begin implementing our new Global Talent Management Roadmap to better attract, retain and develop engaged leaders and employees</li> </ul>
	Established a talent governance organization across Bombardier
	<ul> <li>Agreed on a global promise ("We move people") as the foundation of our Employment Value Proposition (EVP)</li> </ul>
What We Did	<ul> <li>Enhanced coordination of our efforts to promote diversity and employment equity by creating a cross-group work team</li> </ul>
	<ul> <li>Aligned our key talent management components across Bombardier</li> </ul>
	<ul> <li>Created Bombardier Talent Management dashboard with common KPIs and targets</li> </ul>
	<ul> <li>Implemented the first global HR system for succession planning, including company-wide alignment on high potential definitions and key positions</li> </ul>
Progress	
	Continue implementing the Talent Management Roadmap, including:
Fiscal 2011 Objectives	<ul> <li>Embed and leverage the EVP in our talent acquisition processes to improve our ability to attract, source, select and hire the best candidates to meet our business objectives</li> </ul>
	<ul> <li>Improve the current performance management process to strengthen alignment with business objectives and clarify desired behaviours and competencies</li> </ul>
	<ul> <li>Ensure compensation programs support our Talent Management Roadmap</li> </ul>
	• Expand our leadership training program ("Making Great Leaders") across Bombardier

Employee Engagement		
Fiscal 2010 Objective	<ul> <li>Continue to improve employee engagement as measured by employee engagement surveys, continuous improvement programs and transversal initiatives</li> </ul>	
What We Did	<ul> <li>Conducted an annual employee engagement survey at both our Corporate Office and Aerospace group and an employee pulse survey in our Transportation group</li> <li>In Aerospace survey, achieved 86% employee participation and maintained 69% on engagement index despite the recession's negative impact</li> <li>In Transportation survey, improved communication between leaders and employees by 5% for a score of 67% compared to 62% last year</li> <li>99% of Aerospace employees certified Silver and 100% of senior management completed the Gold level training of the Achieving Excellence System</li> <li>In Transportation, increased average BOS (Bombardier Operations System) rating from 1.9 in fiscal 2009 to 2.1 in fiscal 2010, with the "PEOPLE Involvement" health and safety initiative improving from 2.1 to 2.3 during the same period (4 represents world-class performance)</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Continue to improve our employee engagement</li> <li>Align and consolidate yearly employee surveys across the company</li> <li>Increase communication at all levels of the organization</li> <li>Continue to support survey-specific action plans as effective drivers of employee engagement</li> </ul>	

## 3.2 Global Talent Management

## Strategic Priority: Become a World-Class Employer

#### Implementing Our Global Talent Management Roadmap

World-class employees are crucial to preserving our leadership and ensuring our continued growth at Bombardier. So is engaging our employees, fostering their development and inspiring them to be their best.



In recent years, we intensified our efforts to join the ranks of the world's top employers and today we continue to make significant progress. In fiscal 2010, we rolled out our Global Talent Management Roadmap to address challenges in both established and emerging markets. These challenges include:

- Skill shortages
- Demographic changes
- Increased competition for the best people
- Maintaining effective recruiting strategies in our key markets
- · Developing and retaining the best talent
- Sharing best practices across Bombardier
- Continually improving our health and safety performance

#### **Raising Our Game in Talent Management**

Our Global Talent Management Roadmap is enabling us to intensify our efforts to develop skilled, engaged and proud talent around the globe. The result is a coherent, company-wide approach to talent management based on best practices. The roadmap consists of robust initiatives in the following areas:

- Sourcing and recruiting
- Performance management
- Learning and development
- Succession planning
- Leadership development
- Compensation
- Competency management

In fiscal 2010, we made significant headway implementing our roadmap. Among other actions, we established a new talent governance organization and aligned our key talent management components across Bombardier. This led to the creation of a

Bombardier Talent Management dashboard with common key performance indicators (KPIs) and targets. These KPIs include among others:

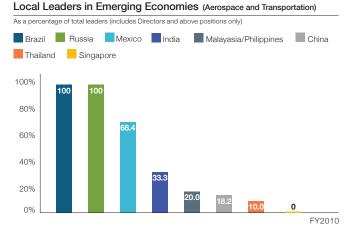
- Percentage of women in overall workforce and leadership positions
- Percentage of local leaders in emerging economies
- Turnover rates
- Number of high-potential employees and leaders
- Employee engagement index

We also implemented the first global Human Resources system for succession planning, which aligns our high-potential definitions and key positions worldwide.

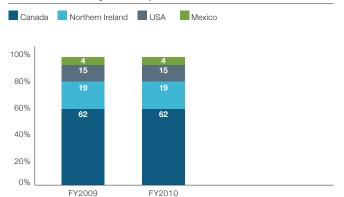
## 3.3 Strengthening Our Workforce Diversity

## Strategic Priority: Increase Employee Diversity to Sharpen Our Competitive Advantage

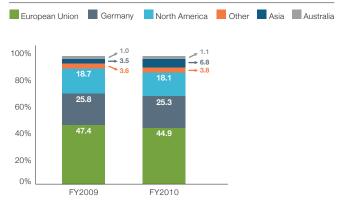
As a global company, we are proud of our employees worldwide. Their diversity and skills drive our competitive advantage and fuel innovation. Our commitment to employee diversity and equal opportunity is captured in our Code of Ethics and Business Conduct. It is also reflected in our various Human Resources policies that are enforced across Bombardier every day.



Workforce Diversity at Aerospace (40 nationalities)



Workforce Diversity at Transportation (89 nationalities)



To better coordinate our diversity and employment equity initiatives, we created a cross-group work team in fiscal 2010. We also developed key performance indicators (KPIs) to improve our ability to track our progress and plan our future needs. These KPIs include, among others, the number of local leaders in our operations in emerging economies and the percentage of women in overall workforce and leadership positions.

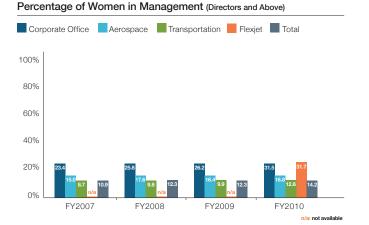
#### **Increasing Gender Diversity**

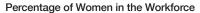
Gender diversity is essential to any organization's success and development. That's why increasing the number of women in leadership positions is a key objective across Bombardier.

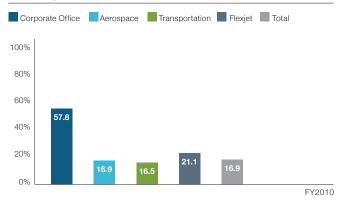
In **Aerospace**, our Talent Acceleration Pool (TAP) process will help us increase women in management to 20% by 2012. Women in management increased from 16.4% in fiscal 2009 to 16.8% in fiscal 2010. The proportion of women in our TAP program reached 30% in 2010, accelerating these employees' access to leadership positions. We are leveraging stretch jobs/assignments, special projects, feedback and coaching to fast-track high-potential female employees. In turn, these women participated in our new Diversity Forum, helping us attract and coach other future female leaders.

In **Transportation**, our objective is to recruit and retain more female engineers. Participation in campus fairs, industry networks and mentorship programs is helping us meet this objective. So is our cross-functional Female Engineering Network (FEN), created in April 2008 by seven female engineers from seven different sites.

The FEN is making Bombardier a more exciting and attractive place for women to work. Today this network connects over 140 women in 20 different sites. Members participate in job fairs and conventions, support education in technical fields and hold regular meetings. The FEN recently became the only private organization to receive funding (265,000 euro) through a German/European Union initiative.v In our Transportation group's Systems division, the Women in Leadership (WiL) Network also provides support, development and growth opportunities to our diverse workforce. The WiL Network helps women at all levels of our Pittsburgh facilities, including professionals, administrative assistants and manufacturing employees, reach their full potential. Most WiL Network training opportunities and special events are also open to men.







The WiL Network includes a mentoring program, leadership training and in-house guest speaker events featuring female executives from across our Transportation group. Recent external special events and sponsorships range from the Pennsylvania Governor's Conference for Women to the 9th annual United Way Women's Leadership Council Breakfast. Women in the network are also involved in community service events such as Pittsburgh's Dress for Success clothing drive.

We intend to expand the WiL Network to our Kingston, Canada office and service delivery centres throughout the United States.

#### Addressing Today's Shifting Demographics

Today many companies struggle to address the issue of demographic change. In numerous countries where we operate, declining birth rates intensify competition for skilled young workers. At the same time, our existing workforce is aging.

As employees retire, we must ensure that we safeguard our valuable knowledge base. We are addressing the "age gap" to effectively share expertise between generations by:

- Strengthening our succession planning process
- · Proactively planning future workforce needs in light of demographic shifts
- · Facilitating interactions between younger and older employees to transfer knowledge
- Selectively introducing progressive retirement

We also continue to support employees as they reach retirement age. We accommodate their needs, as best we can, by adjusting their responsibilities to fit their experience and expertise.

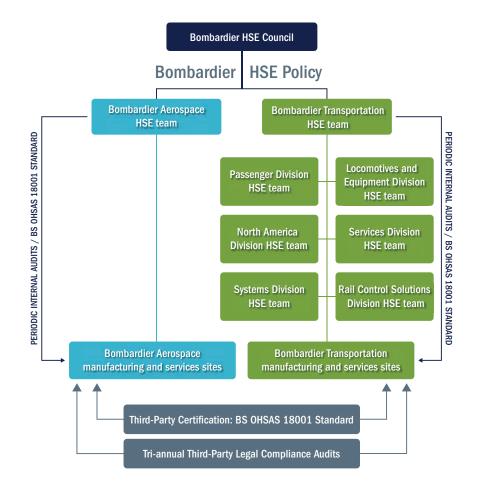
## 3.4 Improving Health and Safety

## Strategic Priority: Achieve A Zero Accident Performance

#### HSE Governance at Bombardier

The challenging objective of achieving zero accidents and occupational illnesses lies at the heart of our employee health and safety initiatives. Our revised Health, Safety and Environment (HSE) Policy allows us to better manage HSE risks and foster a zero accident culture.

Adhering to the OHSAS (Occupational Health and Safety Assessment Series) 18001 standard also helps us proactively identify and mitigate health and safety hazards and risks. In fiscal 2010, we completed OHSAS 18001 certification at all eligible Aerospace sites. All of our eligible Transportation sites are also OHSAS 18001 certified.



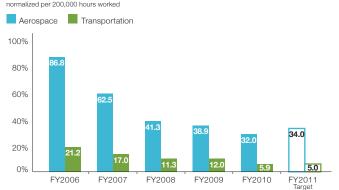
Cross-functional committees and working groups oversee HSE performance at all levels of our organization. Our HSE Council develops company-wide HSE strategy and reports to the Board.

Operating group and site HSE teams develop and implement action plans aligned with the Council's policies, directives and objectives. Every three years, HSE legal compliance audits are conducted by external auditors. Following the OHSAS 18001 standard systematically and integrating it into our operating systems drives continuous improvement.

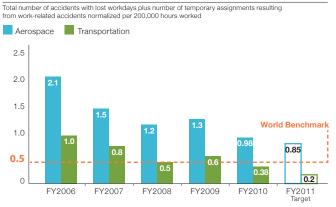
## 3.4.1 OUR HEALTH AND SAFETY PERFORMANCE

#### Accident Severity Ratio (total lost time cases)

Severity of work-related accidents that have resulted in lost workdays and days of temporary assignments



#### Accident Frequency Ratio (total lost time cases)



We are clearly trending in the right direction on our journey to zero accidents and occupational illnesses. Once again this year, our safety record improved significantly as we continued to intensify our prevention activities and moved closer to an injury-free workplace.

Over the past five years, our total lost-time cases continued to decline. During this period, we reduced our accident frequency rate by 67% at Bombardier Aerospace and 71% at Bombardier Transportation. We also decreased our accident severity rate by 73% in both our Aerospace and Transportation groups.

In **Aerospace**, we decreased our recordable accident frequency rate from 1.32 in fiscal 2009 to 0.98 in fiscal 2010. This represents a 26% year-over-year improvement. Our accident severity rate dropped from 38.9 to 31.9 during the same period. This represents a 15% reduction. We improved our overall health and safety performance by 21%.

In **Transportation**, we decreased our record accident frequency rate from 0.60 in fiscal 2009 to 0.38 in fiscal 2010, a 37% year-overyear improvement. Our accident severity rate fell from 12.0 to 5.9 during the same period translating into a 51% reduction.

#### **3.4.2 INITIATIVES AND PRIORITIES**

#### Taking Steps to Achieve Zero Accidents

Despite ongoing progress, our safety results still leave room for improvement. In September 2009, an accident claimed the life of a service engineer in our Transportation group. While working at a customer depot in Germany, the 48-year-old engineer was fatally electrocuted.

This tragic incident led us to develop and implement even more stringent directives for off-site employee activities. It also reminds us of the importance of reaching zero accidents. Today, several initiatives are under way to further improve our health and safety performance.

#### Improve Health and Safety Monitoring

As announced last year, we have begun implementing a new Health, Safety and Environment Information Management System (HSE IMS). This system will enable us to better track our performance and monitor new leading indicators. It will allow us to more proactively manage our health and safety risks.

The HSE IMS covers more than 200 reporting entities across both business groups. Over 280 users feed data into the system. The HSE IMS will be fully implemented by the end of calendar year 2011.

In fiscal 2010, we began using the HSE IMS to monitor the following new leading indicators:

- Number of health, safety and environment training hours
- Implementation of our Safety Observation Program to foster a proactive prevention-first attitude
- Trained safety observers perform a specified number of observations, focusing on key local risks, and report their feedback to employees at a minimum every month
- Number of employee reports of near misses and, in our Transportation group, of dangerous situations and behaviours

#### 2. Harmonize Health and Safety Practices

Depending on the country or business group, different sites still have different health and safety procedures. Our objective is to standardize our approach by developing one Health and Safety Excellence System built on leading practices to oversee our worldwide activities. This will ensure the same health and safety standards and procedures at all sites, simplifying training from site to site.

We plan to fully implement the new Health and Safety Excellence System in 2012 at our Aerospace group. In Transportation, where OHSAS 18001 has been well established for several years, the focus is on ensuring our off-site activities comply with the Health and Safety Excellence System.

#### 3. Further Integrate Health and Safety into Business Systems

Our business systems incorporate diverse health and safety principles and directives. This includes the Achieving Excellence System (AES) at Bombardier Aerospace and the Bombardier Operations System (BOS) at Bombardier Transportation.

The first element of the AES Balanced Scorecard is safety. It incorporates the following health and safety indicators:

- Accident frequency
- Incident rate
- Safety Observations
- 5S+Safety

A key element of BOS is "**creating a safe workplace for employees**." We assess our performance relative to this goal in part by tracking the following indicators in the BOS scorecard:

- Accident frequency
- Resolved near misses and dangerous behaviours and situations

We are constantly adjusting AES and BOS to ensure that occupational health and safety considerations are an integral part of all processes and procedures. In fiscal 2010, health and safety were integrated into Aerospace's AES scorecards and master plans. We also continued to integrate health and safety considerations into our product design processes to foster the safety of the people who manufacture, maintain and use our products.

In fiscal 2010, our Transportation group also began developing a new directive and standards on safety planning and training. We also launched a project focusing on design for health and safety in the Systems division, which will be linked to similar activities in the Locomotives/Equipment and Passenger divisions.

#### 4. Promote Bombardier Health and Safety Standards across Supply Chain

We are committed to encouraging all suppliers to adopt our health and safety standards. Most contractors and suppliers under our management are already integrated into our health and safety management and reporting systems.

However some contractors and suppliers not under our control apply their own standards, which may not fully align with ours. By continuing to leverage our **Health, Safety and Environment Policy** and our **Supplier Code of Conduct**, we actively promote high health and safety standards across our supply chain.

#### 5. Invest in Health and Safety Leadership Training

In the spring of 2011, we will hold the first annual **HSE Leadership Conference** to bring together all top level HSE representatives across Bombardier. The two-day conference will encourage knowledge sharing and provide a forum for learning about best practices and new challenges.

#### Providing Emergency Support to Employees and Their Families

In October 2009, we expanded an existing employee aid and support fund to cover all Transportation sites in Germany. This registered association provides one-time financial and in-kind donations to employees, former employees and surviving dependents facing emergencies such as:.

- Fire, catastrophes and other events where insurance coverage is insufficient
- Severe illnesses and accidents resulting in long-term or permanent loss of employment
- Death
- Assaults or other events affecting health or property .

Since its inception in 1998, the fund has provided 40,000€ to individuals involved in more than 20 emergencies. The association is financed almost solely through employee membership fees.

## Our Health and Safety Priorities in Fiscal 2011

#### Aerospace

- Integrate health and safety concepts into our product design processes starting with Learjet 85 and CSeries aircraft design
- Continue developing and implementing the HSE Excellence System (second year of a three-year project to standardize health and safety practices across all sites)
- Continue implementing our Safety Observation Program across all sites
- Strengthen our HSE training strategy
- · Continue our hexavalent chromium substitution initiatives (coatings and sealant)
- Focus on ergonomics issues and related unsafe behaviours.

### Transportation

- Integrate work-related health and safety concepts into our product design processes of *INNOVIA* 200 and 300 (automated people movers) and our **KAFD monorail project in Saudi Arabia**
- Revise current procedures and practices for off-site activities (e.g. in customer premises)
  - New directive released in early fiscal 2011 with follow-up audits later in the year
- Enhance management follow-up on health and safety KPI performance
  - Regular reports to employees, workplace audits, incentive programs, monthly root cause analysis and action plans if deviate from frequency/severity targets
- Improve management systems to cover performance
  - Yearly comprehensive health and safety performance report per site with a focus on the quality of risk assessment and accident investigation

## 3.5 Engagement

## Strategic Priority: Continuously Improve Employee Engagement

#### **Engaging Our Employees**

Employees are arguably our most important stakeholder group. Our very success hinges on their full engagement. Engaged employees are innovative, dedicated and productive.

In fiscal 2010, initiatives promoting the well-being, growth and development of our employees took many forms. They revolved around **listening to**, **developing**, **rewarding** and **recruiting employees worldwide**.

At Bombardier, we foster employee engagement through the following continuous improvement programs:

- Achieving Excellence System in our Aerospace group
- Bombardier Operations System in our Transportation group

#### Aerospace

The Achieving Excellence System (AES) is our Aerospace group's integrated management system. It drives progress towards business objectives and fosters both employee and customer engagement. The system is divided into five levels — from Bronze to Diamond.



With Silver certification essentially completed (99%), we are now deploying the Gold level with its focus on common behaviours and tools. This includes the PDCA (Plan, Do, Check, Act) cycle approach to problemsolving and the use of balanced scorecards. We are leveraging Gold level training, coaching and practice to roll out these tools across our Aerospace group.

Balanced scorecards are a central component of AES. The balanced scorecard helps us translate our strategy into actions and provides a series of key performance indicators (KPIs) for uncovering deviations from planned objectives.

By using these scorecards, AES seeks to engage employees and focus our organization on six operational levers:

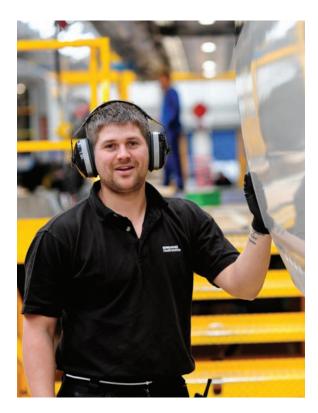
- Safety (product safety, employee health and safety, and the environment)
- Quality
- Productivity
- Human development
- Cost
- AES deployment

To date, our AES Gold level accomplishments include:

- 100% of Gold level training completed for senior management
- · 69% of teams implemented the Gold level's five basic tools

#### Transportation

The Bombardier Operations System (BOS) integrates proven methods, techniques and concepts such as Six Sigma, World-Class Manufacturing (WCM) and Lean. It guides our way of working across the Transportation group.



BOS is composed of five principles, including People Involvement ("I know how to contribute to world-class products") and Continuous Improvement ("I perform better every day"). All BOS principles are scored from zero to four with four representing world-class performance.

The **People Involvement principle** covers the following elements:

- Team concept
- Safe and green workplace
- Communication and mission/vision deployment
- Strategic competence management
- Shop-floor management

Our PEOPLE initiative spells out the systems and processes needed to acquire and develop talent and competencies. It helps create an **engaged**, **boundary-less organization** where ideas, knowledge and talent are readily shared.

In fiscal 2010, we increased our average BOS rating from 1.9 in fiscal 2009 to 2.1 in fiscal 2010. Our PEOPLE involvement principle improved from 2.1 to 2.3 during the same period. This includes a significant increase in suggestions for improvements from shop-floor employees.

### 3.5.1 LISTENING

<b>FY</b> 2010		
3.80 %		
1.80 %		
2.40 %		
3.20 %		
3.20 %		
Engagement - Engagement survey participation rate		
98 %		
86 %		
72 %		
74 %		
N.A.		
Engagement - Employee engagement index <sup>1</sup>		
84 %		
69 %		
76 %		
78 %		
N.A.		

<sup>1</sup>Employee engagement index is calculated as a percentage of favourable responses to a subset of each group's survey topics.

#### **Engagement Surveys**

We hire our employees for their know-how, insight and skills. That's why we have much to gain from listening to them. Our employee engagement surveys provide us with an excellent opportunity to learn from our global, multi-talented workforce. These surveys help identify key drivers of engagement and focus our action plans to improve our organization's performance.

Our Corporate Office and two business groups hold annual employee engagement surveys. All surveys now include questions related to our corporate social responsibility performance.

Managers receive detailed reports on survey results and assistance developing action plans to address identified focus areas. Progress in achieving the goals laid out in these plans is tracked and reported.

#### **Corporate Office**

In November 2009, our Corporate Office conducted its second annual survey to assess employee satisfaction and engagement. Based on the survey, 84% of Corporate Office employees had an overall favourable opinion of Bombardier, down 1% from the year before. In addition, 92% of employees said they had confidence in the senior leadership team.

Employees also highlighted advancement opportunities within Bombardier and communication between the Corporate Office and the groups as areas requiring improvements. Managers met with their teams to review the results and establish action plans to build on our strengths and implement improvements. Our next survey will be conducted in fall 2010.

#### **Aerospace**

Every year since 2004, we have hired an external firm to conduct our Employee Engagement Survey. Giving our employees the opportunity to express how they feel about their workplace helps us understand what motivates them.

The survey's 86% participation rate in fiscal 2010 speaks to the value our employees see in this process. Despite the recession's negative impact, this is only slightly lower than the fiscal 2009 rate of 89%. Employee engagement remained stable year-over-year at 69%.

These high participation rates provide us with significant input about what our employees think and feel. Based on fiscal 2009 survey findings, last year's action plans focused on issues relating to quality. This explains why fiscal 2010 survey scores improved by 3% for questions pertaining to quality.

Analyzing the fiscal 2010 survey results uncovered that employees see efficient communications as a key issue. For this reason, our leadership team asked all levels of management to focus their action plans on improving how they cascade information and foster dialogue with employees.

Our next survey will take place in fall 2010.

In fiscal 2010, we also underwent a significant exercise to define our group's culture as part of our organizational transformation. Our leaders listened to over 10,000 employees via informal "listening cafés." Feedback from these forums is helping us define who we are as an organization and further align our transformation efforts.

#### **Transportation**

In February and May 2010, our Transportation group conducted an Employee Pulse Survey. Based on the survey's findings, 76% of employees are highly engaged, especially in terms of pride, commitment and loyalty. The survey showed a 12% improvement in employees' understanding of our direction and priorities, from 73% in fiscal 2010 compared to 61% in fiscal 2009.

Enabling employees to be productive, in part by providing tools and equipment, was a key area needing improvement. All divisions and major sites are currently identifying one concrete action to help employees do their job more effectively. These initiatives will be integrated into and monitored through a Common Action Tool.

Our next full Employee Engagement Survey will be conducted in the first quarter of 2011 and, after that, annually.

#### **Unions and Work Councils**

At Bombardier, labour unions and work councils are key stakeholders. They play a role in ensuring a safe and rewarding workplace. Unions and work councils are informed of and, when required, participate in restructuring decisions and procedures.

At **Bombardier Aerospace**, 51% of employees are covered by collective agreements, while 55% are covered at **Bombardier Transportation**.

With the support of a central group, individual sites generally handle their own negotiations and consultation activities. Different countries vary tremendously in their approach to these activities. For example, many European sites have employee representatives and a large number of co-determination issues.

In our Aerospace group, we hold a **Global Union-Management** Forum every fall. Representatives from our Aerospace unions worldwide attend this two-day event. The forum fosters dialogue and shared awareness of the priorities and issues in our diverse operations. In recent years, the forum has addressed a broad range of topics, including corporate social responsibility.

In fiscal 2010, we began meeting with two non-government organizations (NGOs) that work closely with our unions in Quebec: *Centre international de solidarité ouvrière (CISO)* and *Coalition québécoise contre les ateliers de misère (CQCAM)*. Discussion topics include sustainable procurement and the new ISO 26000 standard.

In 2001, the European Work Council was established for both business groups. The council meets annually to address a variety of social and economic matters as well as corporate social responsibility. Between these annual meetings, the Council's Liaison Committee communicates and collaborates with both group's senior management teams.

### 3.5.2 DEVELOPING

#### **Our Performance Management Process**

Our Performance Management Process (PMP) focuses on developing white-collar employees across the company. This businessdriven process helps employees achieve individual performance and personal development objectives through an ongoing dialogue with managers.

Employees take ownership of the process. Managers work with employees to set expectations and provide ongoing feedback and support. They monitor employee progress and actively help employees achieve their goals. Human Resources plays a key role by providing appropriate tools and coaching.

Our goal is to continually increase the value of this process to our employees and managers.

## **Developing Strong Leaders**

Supporting our leaders and developing their competencies are top priorities across Bombardier.

#### Aerospace

Our goal is to attract, develop and retain unbeatable leaders who engage employees in delivering exceptional results for our customers and key stakeholders.

#### Leadership and Organizational Development Centre of Expertise

Our Leadership and Organizational Development Centre of Expertise fosters common processes for leveraging the full potential of our talent pool. Throughout fiscal 2010, we broadened our global leadership development curriculum by introducing new programs.

In fall 2010, we will roll out several new programs for our first line supervisors and middle and senior leaders. Our new Women in Leadership Forum will strengthen the diversity of our leadership teams by accelerating the development of our female leaders.

#### **Talent Review Meetings**

Talent review meetings are held across our organization as part of our Annual Leadership Review process. This process helps us identify high-potential employees at both the professional and leadership levels. A robust personal development plan is put in place for each of these individuals.

#### Talent Acceleration Process

As an element of our talent management strategy, the Talent Acceleration Process (TAP) formalizes the development of high-potential candidates for senior/executive leadership positions. These candidates benefit from accelerated development opportunities, an exhaustive leadership potential assessment and internal learning coach as well as mentors. Their career plans are reviewed every quarter by the group's President and COO.

Compared to fiscal 2009, the number of employees in our TAP program grew by 42% to 200 candidates in fiscal 2010. We monitor and measure the progress of all TAP employees monthly using a key performance indicator on our dashboard.

### **Transportation**

Our Transportation group instituted formal leadership training programs in 2006. These programs help build a culture of management excellence across the group. Since 2006, more than 800 employees have attended leadership courses. In fiscal 2010, another 700 were invited to attend sessions and an additional 200 employees were offered coaching.

Our leadership training curriculum includes:

- Diagnostic tools such as 360° reviews, EQ (Emotional Intelligence), leadership styles and climate surveys
- Targeted programs for leaders at different stages of development
  - Bombardier Transportation Management Skills
  - Making Great Leaders
  - Executing Strategy
  - Competitive Advantage Program
  - Global Graduate Program

These programs increase our leaders' self-awareness and incorporate personal action plans to improve skills and effectiveness. We measure our progress in developing leaders through our employee engagement surveys. We also track progress based on the action plans employees develop for themselves.

#### 3.5.3 REWARDING

#### Formal Recognition Programs

Several programs exist to recognize and reward employees who contribute to our company's innovation, continuous improvement and success.

#### Aerospace

In our Aerospace group, three key employee recognition initiatives are:

- Health and Safety Awards
- Annual Accomplishment Award
- Achieving Excellence System certification

We are also currently implementing the Xcell program. This program offers a structured way for employees to submit improvement ideas that, if selected, they can implement themselves. These employees then receive monetary compensation in recognition of their efforts.

#### Health and Safety Awards

Safety is about more than numbers. It is about people. Our Health and Safety Awards recognize our employees' efforts to prevent occupational illness and work-related accidents. These awards are given to the manufacturing site and service centre with the:

• Lowest accident frequency rate (Total number of accidents without lost workdays plus number of temporary assignments resulting from work-related accidents normalized per 200,000 hours worked)

- Lowest accident severity rate (Severity of work-related accidents that have resulted in lost workdays and days of temporary assignments normalized per 200,000 hours worked)
- Greatest overall improvement

## WINNERS OF OUR FIFTH ANNUAL HEALTH AND SAFETY AWARDS:

Fiscal 2010 Health and Safety Awards	Manufacturing/Assembly Sites	Service Centres
Lowest Accident	Wichita	Hartford & Dallas
Frequency Rate	0.23	0
Lowest Severity Rate	Querétaro	Hartford
	2.65	0
Greatest Overall Improvement	Wichita	Hartford
	72.2%	100%

#### Annual Accomplishment Award

Our Annual Accomplishment Award rewards cross-functional initiatives that result in sustained improvements for our employees, customers and business. These initiatives are shared with the entire organization. As of fiscal 2009, the two award-winning teams each receive \$10,000 Cdn to invest in local communities.

In fiscal 2010, the fourth edition of the program generated record participation: 88 projects, representing over 3,000 employees across all sites, were submitted. This is a testament to the level of dedication in our Aerospace group.

The fourth edition also introduced a special Green Ribbon award. The following four projects were honoured for their contribution to advancing corporate social responsibility in our Aerospace group:

- Business Aviation Commitment on Climate Change
- The Vancouver 2010 Olympic Torch
- Implementation of a Non-Chromated Primer for Composite Parts
- Commercial Aircraft Technical Publications Paper Reduction

#### The 2010 Annual Accomplishment Award recipients are:

The Customer Rejections (RTV) and Vendor Management (MRB) team from Belfast significantly reduced the backlog of defective inventory, removed a considerable source of waste and substantially improved their performance ratings from internal partners. Our Belfast team donated its \$10,000 Cdn award to Tor Bank Special School. Opened in 1968, the school caters to students with severe learning difficulties.

The Aircraft Readiness project team from Dorval inspired plant employees to take ownership for product quality. By improving processes, the team increased product quality from the customer's perspective, all within a stringent timeframe. Our Dorval team donated its \$10,000 Cdn award to the Pat Roberts Centre, an adapted preschool for children with special needs.

These donations are in line with Bombardier's 3E focus of supporting initiatives in education, entrepreneurship and environment.

## Transportation

Our Transportation group's two major employee recognition awards are the:

- BOS Best Practice Awards
- Innovation Award

#### **BOS Best Practice Awards**

The BOS Best Practice Awards underscore the importance of transferring best practices by recognizing sites that excel at it. Best practice sharing is central to BOS's Continuous Improvement principle. Bestowed every two years, these awards encourage employees to learn and share ideas with colleagues across the group.

In fiscal 2009, teams at our Crespin (France) and Trapaga (Spain) sites took home the first BOS Best Practice Awards. Our Crespin Passengers site received an award for implementing the highest number — 15 in all — of best practices.

Also in Crespin, our Bogies site won for contributing the highest number of new best practices — a total of eight— to be shared across our Transportation group.

Our Propulsions and Controls (PPC) Trapaga facility received a BOS Best Practice Award for developing the best practice adopted by the most sites. Twelve sites implemented Trapaga's best practice for standardized work instructions.

The next BOS Best Practice Awards will be handed out in fiscal 2011.

#### **Innovation Award**

The Innovation Award recognizes innovation as a key driver of our profitable growth and competitive advantage. It seeks to reward those teams who continually push the envelope in innovation.

In fiscal 2010, 14 very strong nominations were received and selecting only one winner was a tough task. We selected a study on a new metro bogie concept, which allows a reduction in weight of up-to 30%. Our Innovation Team, which includes representatives from each division, made the initial selection. Our group President and Chief Technical Officer selected the final winning team: the Passengers RS3 Industrial Design Team responsible for the *ZEFIRO* high speed train project.

Designing the ZEFIRO high speed train meant developing a train capable of operating at 380 kilometres per hour that also offered unrivalled aesthetic appeal. Collaborating with internal and external experts, the design team achieved both objectives. The team's innovative designs deliver best-in-class functionality and speed in a stunning rail vehicle. The unique visual design of our trains increasingly distinguishes us from our competitors.

### 3.5.4 RECRUITING

#### **Our Employment Value Proposition**

Improving our ability to attract, engage and retain employees is essential to achieving our business goals.

As part of our Global Talent Management Roadmap, we developed an employment value proposition (EVP) to better communicate our strengths as an employer. "We Move People" is the foundation of our new EVP. It is the global promise that will now drive our various talent management processes and marketing activities.

"We Move People" means that we not only move people around the globe, but we create moving experiences, promote international mobility, develop our employees and more.

Our main focus for fiscal 2011 will be to embed and leverage "We Move People" in our talent acquisition processes to better attract, source, select and hire the best candidates to meet our business objectives.

# Sustainable **Products**

## 4.0 Products

### 4.1 Objectives

## 4.2 Our Approach

#### 4.2.1 Design for Environment

- 4.2.1.1 Aerospace
- 4.2.1.2 Transportation

### 4.2.2 Lifecycle Assessments

- 4.2.2.1 Aerospace
- 4.2.2.2 Transportation

### 4.2.3 Environmental Product Declarations

- 4.2.3.1 Aerospace
- 4.2.3.2 Transportation

## 4.3 Greenhouse Gas Emissions

- 4.3.1 Aerospace
  - 4.3.1.1 Emissions and Targets
  - 4.3.1.2 Carbon Offset
  - 4.3.1.3 Emission Trading Scheme
- 4.3.2 Transportation

## 4.4 Aerospace Products

- 4.4.1 CSeries Commercial Aircraft
- 4.4.2 Learjet 85 Business Aircraft
- 4.4.3 Q400 Turboprop
- 4.4.4 CRJ1000 NextGen
- 4.4.5 Alternative Fuels
- 4.4.6 Recyclability

## 4.5 Transportation Products

- 4.5.1 ECO4 Technologies
- 4.5.2 ZEFIRO Very High Speed Train
- 4.5.3 Alternative Fuels
- 4.5.4 Recyclability

## 4.6 Safety

- 4.6.1 Aerospace
- 4.6.2 Transportation

## 4.7 Engaging Customers

- 4.7.1 Aerospace
- 4.7.2 Transportation



## Sustainable Products

## 4.0 Products

## Strategic Priority: Advance Sustainable Mobility

Sustainable mobility is built on products that mitigate the diverse impacts of climate change, air pollution, resource scarcity and rapid urbanization. Such products consume less energy and non-renewable materials. During their use and maintenance, they generate less noise, waste and detrimental air emissions.

At Bombardier, we are tackling today's sustainable mobility challenges on several fronts. We do this by:

- Developing responsible products
- Developing safe products
- Engaging our customers and suppliers in product responsibility

## 4.1 Objectives

Customer Satisfaction		
Fiscal 2010 Objective	Continue to improve customer satisfaction as measured by independent and internal surveys	
	<ul> <li>Continued to organize Aerospace customer forums (e.g. Customer Advisory Boards, Technical Steering Committees, Operator Conferences, etc.) and conduct annual customer surveys, which revealed increases in customer satisfaction for all business units</li> </ul>	
	Noted improvement in our survey results	
What We Did	<ul> <li>Conducted survey with key Transportation customers worldwide as part of our Customer Management Program, highlighting satisfaction in innovative product offering, strategic alignment and communication</li> </ul>	
	<ul> <li>In Transportation, rated among two best suppliers of service materials by Deutsche Bahn (improved more than 20 positions from two years ago)</li> </ul>	
Progress		
Fiscal 2011 Objectives	Continue to improve customer satisfaction as measured by independent and internal surveys	

Product Environmental Footprint		
Fiscal 2010 Objectives	<ul> <li>Continue deploying Design for Environment (DfE) capabilities on the CSeries and Learjet 85 programs and release Environmental Product Declarations (EPDs) when new aircraft enter service</li> </ul>	
	<ul> <li>In line with our long-term commitment, develop an EPD for each new Transportation product platform; issue four additional EPDs in fiscal 2010, two of which to undergo EMAS (Eco- Management and Audit Scheme) validation</li> </ul>	
	<ul> <li>Distributed a DfE manual to Aerospace product development teams, including CSeries and Learjet 85 teams and established an environmental intelligence quarterly report</li> </ul>	
	<ul> <li>Certified by the Aircraft Fleet Recycling Association (AFRA) for the dismantling of CRJ100/200 models</li> </ul>	
What We Did	<ul> <li>In Transportation, issued EPDs for our SPACIUM and TALENT 2 commuter trains and the first EPD for a vehicle component (MITRAC - TC 3300 MS V04 converter), opening the door to additional modular EPDs</li> </ul>	
	<ul> <li>In December 2009, received approval from the International EPD Committee for common rail industry PCRs (Product Category Rules<sup>1</sup>) for rail vehicles developed within UNIFE</li> </ul>	
	<ul> <li>Completed a study to ensure compliance with new European Community regulation on chemicals (REACH)</li> </ul>	
Progress		
	Continue deploying DfE capabilities on the CSeries and Learjet 85 programs	
Fiscal 2011 Objectives	<ul> <li>Leverage the Green Aviation Research and Development Network (GARDN), the Canadian Aviation Environment Technology Roadmap (CAETRM) as well as key European frameworks to develop green technologies for aviation (e.g. biofuels, aircraft recyclability, etc.)</li> </ul>	
	Develop additional EPDs for our rail products and follow the rail industry's common PCRs	
	• Develop a standard on recyclability calculation and recycling strategies for rail systems (UNIFE)	

<sup>1</sup> PCR defines the requirements on environmental parameters to be included in an Environmental Product Declaration (EPD).

Greenhouse Gas Emissions			
	• Promote the Bombardier Carbon Offset Program as part of our portfolio of aircraft services available to all business aircraft customers		
Fiscal 2010 Objectives	<ul> <li>Support our Aerospace customers in establishing their compliance plan for new environmental regulations such as the European Union Emission Trading Scheme (ETS)</li> </ul>		
	• Demonstrate the positive impact of <i>ECO4</i> technologies for rail operators with respect to energy and greenhouse gas emissions reduction		
What We Did	<ul> <li>In Aerospace, developed an ETS compliance plan, supported our customers in establishing their own plan, and evaluated potential compatibility with our Carbon Offset Program</li> </ul>		
	<ul> <li>In Transportation, completed tests using our <i>EBI</i> 50 driver assistance system in Sweden, which showed an approximate 20% reduction in energy consumption</li> </ul>		
Progress			
Fiscal 2011 Objectives	<ul> <li>Continue to support our Aerospace customers in establishing their compliance plan for new environmental regulations such as ETS</li> </ul>		
	<ul> <li>Collaborate with the World Economic Forum (WEF), International Civil Aviation Organization (ICAO) and Air Transport Action Group (ATAG) to establish the global sector framework for managing aviation emissions</li> </ul>		
	<ul> <li>Increasingly implement ECO4 technologies in our rail transportation customer projects and broaden the range of ECO4 products</li> </ul>		

Industry Leadership in CSR			
Fiscal 2010 Objectives	<ul> <li>Play a leadership role in the aviation industry's environmental efforts</li> <li>Continue leading the rail industry in CSR and promoting Transportation's environmentally friendly <i>ECO4</i> technologies</li> </ul>		
What We Did	<ul> <li>Spearheaded the creation of the Business Aviation Commitment on Climate Change, while collaborating with industry associations and key competitors</li> <li>Played an active role in ICAO's High-Level Meeting on Climate Change, Committee on Aviation Environmental Protection and Environment Colloquium</li> <li>Continued to lead the Association of the European Rail Industry's (UNIFE) Transport and Environment working group, which has since become the Sustainable Transport Committee (STC)</li> <li>Elected Chair of the German Rail Industry Association (VDB)</li> </ul>		
Progress			
Fiscal 2011 Objectives	<ul> <li>Continue to expand our leadership role in the aerospace industry by engaging, supporting and guiding industry associations, regulatory agencies and government bodies, and by ensuring strong Bombardier participation in key industry events</li> <li>Support the growing role of ICAO's Committee on Aviation Environmental Protection (CAEP) in defining future noise, NO<sub>x</sub> and CO<sub>2</sub> emission targets, both in policymaking and technical aspects</li> <li>Continue increasing our leadership role in the rail industry with respect to DfE, EPDs, energy and GHG management, and health and safety performance</li> <li>Become the first business in the rail transportation industry to be certified to BS8901 for sustainable event management</li> </ul>		

Safety			
Fiscal 2010 Objective	Be an industry leader in product safety		
What we did	<ul> <li>Progressed in the deployment of our Safety Management System, a framework adding new proactive safety measures to our current processes and practices</li> </ul>		
	<ul> <li>Created a Safety Office responsible for safety oversight in our Aerospace group and reporting to our Corporate Safety Board</li> </ul>		
	<ul> <li>Held Safety Standdown forums with Aerospace customers in the U.S. (Wichita) and in Europe (EBACE)</li> </ul>		
Progress			
Fiscal 2011 Objectives	<ul> <li>Continue deployment of our Safety Management System (full deployment by 2015) and leverage our expertise to guide the industry</li> </ul>		
	<ul> <li>Continue existing Safety Standdown forums, expand to Brazil (August 2010) and leverage web- based tools to increase reach (e.g. podcasts, webinars, etc.)</li> </ul>		
	Benchmark our Transportation group with product safety leaders from other industries		

## 4.2 Our Approach to Developing Responsible Products

## Strategic Priority: Remain a Leader in Responsible Products

Our Health, Safety and Environment (HSE) Policy incorporates the guiding principle of designing products with minimal environmental impact. It commits us "to continuously improve the environmental performance of our activities and products and to gradually apply a total lifecycle view in their design while maintaining their competitiveness."

Aligned with our HSE Policy, our product responsibility strategy includes three cornerstones for advancing sustainable mobility:

- Design for Environment
- Lifecycle Assessments
- Environmental Product Declarations

These cornerstones are helping us design, build and deliver more advanced products using greener technologies and materials — from lighter and more advanced materials and equipment, to more aerodynamic configurations and more efficient engines and systems.

## 4.2.1 DESIGN FOR ENVIRONMENT

#### **Designing It Right from the Start**

Designing products with minimal environmental impacts throughout their entire lifecycle is one of our guiding principles at Bombardier. Together with safety-oriented design, our Design for Environment (DfE) approach is central to our product responsibility strategy. Our **proprietary DfE guidelines** help us design products with:

- Increased recyclability and energy and resource efficiency
- Reduced noise and detrimental air emissions, waste, restricted substance and non-renewable resources
- Minimal use of hazardous substances

This process of continuous improvement allows us to maintain our competitive edge while ensuring compliance with all legal and customer environmental requirements.

## **REDUCING CRADLE-GRAVE-CRADLE ENVIRONMENTAL IMPACTS**

Stage	Environmental Aspects	Involved Parties
Design	<ul><li>Material selection, processes and requirements</li><li>Components and parts reuse</li><li>Recycled materials use</li></ul>	Bombardier Suppliers
Supply Chain Production	<ul> <li>Energy use</li> <li>Emissions to air, land and water</li> <li>Water use</li> <li>Land use</li> <li>Materials use</li> <li>Waste generation</li> </ul>	Suppliers
In-house Manufacturing and Testing	<ul> <li>Energy use</li> <li>Emissions to air, land and water</li> <li>Water use</li> <li>Land use</li> <li>Materials use</li> <li>Waste generation</li> </ul>	Bombardier
Product Use and Maintenance	<ul> <li>Energy use</li> <li>Emissions related to energy use/fuel consumption</li> <li>Materials used for product maintenance</li> <li>Noise emissions</li> <li>Waste from maintenance activities</li> <li>Land use</li> <li>Ground operations</li> </ul>	Operators Bombardier Maintenance organizations Airports/Rail stations
End of Life	<ul> <li>Air emissions and energy associated with disposal, recycling materials or incinerating Non-recyclable materials for energy recovery</li> <li>Land use</li> <li>Waste generation</li> </ul>	Operators Bombardier Third parties

#### 4.2.1.1 DESIGN FOR ENVIRONMENT AT AEROSPACE

#### **Strengthening DfE**

In our Aerospace group, our DfE approach focuses on reducing the environmental impact of our aircraft. In fiscal 2009, a new R&D product innovation engineering team boosted our DfE capabilities. The team works closely with DfE colleagues at the Transportation group. These teams share knowledge and expertise on material use, lifecycle analysis, processes and acoustics.

Applying DfE principles fuels advances that enable our customers and industry to face increasing regulatory pressures. These advances include:

- Improved engine and system efficiencies
- · Leading-edge composite and alloy materials to reduce weight
- Enhanced aerodynamics

#### **DfE Guidelines and Training**

To ensure our DfE guidelines are readily understood by engineers, we organize design criteria by product lifecycle stages. This makes it easy to consult the guidelines and understand the environmental impact of certain design decisions. In this way, engineers are better informed and able to make environmentally conscious design decisions.

These guidelines will continue to be updated as DfE principles are fully integrated into design processes and our understanding of the environmental impact of design decisions evolves.

We are currently developing a comprehensive DfE training program, including an e-learning module.

#### **New DfE Manual**

In fiscal 2010, the DfE team at Aerospace released a DfE manual. The manual incorporates many of Transportation's DfE guidelines to address aerospace issues such as:

- Reducing energy consumption and emissions during the aircraft manufacturing process across the supply chain
- Eliminating restricted substances in our manufacturing, testing and maintenance processes
- Minimizing the impact of aircraft during operation (fuel consumption, noise and emissions) through new technologies and operational procedures
- Decreasing the impact of aviation (noise and air quality) on communities near airports
- Improving the recyclability of aircraft parts at the end of the product's lifecycle

## Learn More About Aerospace'S DfE Manual

#### Aerospace's Design for Environment Manual

In fiscal 2010, we created and rolled out our Design for Environment (DfE) Manual to all product development teams. It explains our DfE principles, which are aligned with Bombardier's environmental and overall corporate social responsibility commitment. Topics covered include:

- Vision
- Design
- Supply chain
- Manufacturing and testing
- Operations and maintenance
- End of life
- Environmental assessments, reporting and case studies
- DfE checklist

#### **Our New Carbon Calculator**

In fiscal 2010, our engineers began using a carbon calculator to determine how their design decisions impact the CO<sub>2</sub> emitted by aircraft. The CO<sub>2</sub> calculator measures fuel burn. Engineers use this information to figure out how much CO<sub>2</sub> emissions will be

reduced through weight savings in the aircraft design. The accepted industry standard is that, for every kilogram of weight saved, fuel consumption is reduced by 0.03 kilogram per hour of flight.

#### **Environmental Intelligence Report**

Also in 2010, we started publishing user-friendly environmental intelligence reports to update key internal stakeholders on the latest environmental news. Published on a quarterly basis, e-IQ carries a wide range of stories that may shape or influence our decisions regarding environmental matters.

#### 4.2.1.2 DESIGN FOR ENVIRONMENT AT TRANSPORTATION

In our Transportation group, the integration of environmental sustainability into product development has long been a core function in designing state-of-the-art rail transportation equipment. Our unique Design for Environment (DfE) and complete lifecycle approach reduces our products' environmental impacts and helps us address customer and end-user needs. It also ensures compliance with current legal requirements while anticipating future and potentially stricter environmental regulations.

Product responsibility also encompasses social considerations. We design our products to provide comfort, space, reliability, style and security as well as promote convenient and safe passenger accessibility. This includes catering to the mobility needs of the elderly and people with disabilities.

#### Our DfE approach consists of the following elements:

- Applying a lifecycle perspective examining environmental impacts at the production, use and disposal stage of a product's lifecycle
- Maximizing recyclability and recoverability using materials featuring high recyclability and a high recycled material content; marking plastic components and batteries according to associated standards as well as other components that need special end-of-life treatment
- Eliminating hazardous substances screening out the presence of hazardous substances as well as related toxic emissions
- Ensuring transparent communication communicating our products' environmental efficiency through Environmental Product Declarations (EPDs) with complete transparency by applying associated ISO standards
- Investing in technologies improving energy efficiency and reducing air emissions, resource consumption and waste
- **Involving suppliers** ensuring our suppliers comply with our environmental, social and quality standards and, through our Supplier Code of Conduct, uphold the UN Global Compact's environmental requirements

#### **DfE Training**

We have developed various DfE training modules for our management, engineering and procurement employees to:

- Create greater awareness and understanding of DfE
- Increase their environmental competence to ensure an effective response to current and future legal and customer environmental requirements

Since launching DfE training in 2001, more than 930 employees within engineering and procurement have benefited from these courses.



Design for Environment training conducted for engineers from various Divisions in February 2010

#### **Defining Environmental Performance Indicators**

In 2005, our Centre of Competence for DfE established key Environmental Performance Indicators (EPIs) for designing new products. These EPIs enable us to improve our products' overall environmental performance. They fall into the following three categories:

- Material EPIs restricted substances, renewable materials, recyclability and hazardous waste
- **Process EPIs** DfE training and publications such as the number of Lifecycle Assessments (LCAs) and Environmental Product Declarations (EPDs)
- Energy EPIs onboard and traction-related energy consumption and energy recovery

#### **DfE Goals and Future Targets**

Our ultimate goal is to apply DfE and EPIs to all new orders and product development projects. To meet the growing need for DfE expertise, we will offer training in this area to all employees. We will also track the number of DfE training sessions as one of our Environmental Performance Indicators (EPIs).

#### **Engineering Centres of Competence**

Our Centre of Competence (CoC) organization dates back to the early 1990s. Since then, experts at our various CoCs have spearheaded several design breakthroughs in sustainable rail travel, notably our *ECO4* technologies.

Our DfE CoC is one of ten engineering CoCs. It is located within the Passengers Division in Sweden, the United Kingdom, Germany and France. This CoC ensures DfE is used across all divisions, engineering offices and production sites. It also connects and supports our core DfE team, which consists of some 25 DfE experts around the globe.



DFE expert core team members are specially trained in the comprehensive implementation of DFE. They act as internal consultants to improve the performance of products.

#### Role of DfE CoC Experts

Our core DfE team acts as internal consultants focused on improving the environmental performance of our products. These experts

- provide lead DfE engineers for product development and ordered projects;
- interpret and respond to customer and legal environmental requirements;
- identify resource- and energy-efficient design solutions;
- help select sustainable materials;
- conduct Lifecycle Assessments (LCAs);
- analyze Environmental Performance Indicators (EPIs) during product design and development;
- conduct DfE training;
- provide input for the development of relevant environmental legislation; and
- produce environmental communication materials such as Environmental Product Declarations (EPDs).

#### Sharing Our DfE Expertise

Due in part to our DfE expertise, we lead the Environment and Transportation group of the Association of the European Rail Industry (UNIFE). The group monitors and advises on European environmental legislation and policy initiatives. It provides standards and tools as well as supports cross certification.

The group also serves as a forum for developing industry-wide standards. It promotes sector dialogue on energy and climate change with customers' environmental experts. These exchanges create financial and ecological benefits for customers. One area of focus is harmonizing requirements for suppliers, including material declarations, lists of prohibited and restricted substances, EPDs and recyclability.

# 4.2.2 LIFECYCLE ASSESSMENTS

## Our Lifecycle Management Approach

#### LCAs: Part of DfE

DfE principles go hand in hand with Lifecycle Assessments (LCAs). DfE is the philosophy that helps improve the environmental impact of a product over its lifetime. A product's design determines up to 80% of its downstream environmental impact. LCA is the evaluative process used to measure a product's environmental impact at any point or over its whole lifetime. Identifying a product's environmental



impact or "hot spots" in turn pinpoints areas for improvement.

Our lifecycle management approach embeds sustainable development principles in our products design and processes. LCAs help us **minimize the environmental impacts** of our products at all stages. These comprehensive assessments also form the basis of our Environmental Product Declarations (EPDs).

#### Lifecycle Assessment Standards and Tools

The **ISO (International Standards Organization) 14040** series of standards spells out the principles and framework for Lifecycle Assessments. These standards guide our LCAs. They also allow us to further enhance product performance by comparing environmental impacts with those of other solutions and designs.

When serving as a basis for Environmental Product Declarations (EPDs) [Link to 4.2.3 Environmental Product Declarations], LCAs are either issued with a self-declaration of conformity (ISO 14021) or are verified by a third party in accordance with ISO 14025. ISO 14025 establishes the principles and procedures for developing advanced EPDs.

In our Transportation group, the following **software tools** help us gather information on materials, track environmental performance and conduct LCAs:

- Bombardier Certification and Environmental Materials Database (CE-Mat) This central online database is used to gather, store, track and report on our products' environmental performance. It facilitates the creation of a materials inventory. We plan to use CE-Mat with our suppliers to reduce the time needed to collect environmental information from them.
- Material Declaration Template This spreadsheet-based tool helps us gather information on materials from all suppliers and subcontractors. We verify and approve the information prior to migrating it to the CE-Mat database.
- **GaBi 4** This powerful software collects, organizes, analyzes and monitors the environmental performance of products and processes. Additional sustainability-related criteria such as costs and social impacts can also be integrated.

Our Aerospace group also uses the Material Declaration Template and GaBi 4.

# Learn More About Impacts Associated With Using Our Rail Products

#### Impacts Generated by Using Our Rail Products

A significant portion of the environmental impacts associated with our products occurs during their use. LCAs show that 99% of primary energy consumption occurs during this phase. CO<sub>2</sub> and other emissions produced when generating electricity also contribute significantly to these impacts. The exact percentage, however, depends on the energy source selected by the operator.

The product use phase also accounts for some 20% of total materials consumed over the rail vehicle's lifecycle. Materials used to maintain our products account for most of this consumption.

# 4.2.3 ENVIRONMENTAL PRODUCT DECLARATIONS

#### **Transparent Communication of Environmental Efficiency**

Environmental Product Declarations (EPDs) summarize and communicate the environmental efficiency of our products. Applying the ISO 14025 standard and the guiding principles of the international EPD® system ensures standardization and complete transparency. This important environmental documentation provides relevant, verified and comparable information to meet customer and market requirements.

EPDs improve our environmental reporting. They facilitate dialogue with customers and help us meet their growing requirements. These declarations set a baseline for further product-related environmental improvements. They allow our customers and engineers to **benchmark our products** against those of other companies.

We also partner with our suppliers to provide input on the **lifecycle attributes** captured in our EPDs such as:

- Resource use
- Recyclability
- Energy and fuel efficiency
- Greenhouse gases, noise and other emissions

Thirteen EPDs already exist for several Transportation products with more to come in the near future. We are also currently developing EPDs for our new aircraft programs.

#### 4.2.3.1 ENVIRONMENTAL PRODUCT DECLARATIONS AT AEROSPACE

In our Aerospace group, EPDs are a key step forward in reducing the lifecycle environmental impacts of our products. We will begin issuing EPDs in 2013 when our *CSeries* commercial aircraft and *Learjet 85* business aircraft enter into service. These EPDs will enable our customers to understand the environmental impact of the aircraft they buy and/or operate.

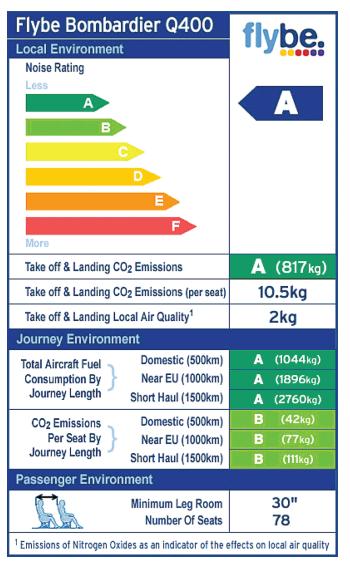
Our EPDs will detail the overall environmental performance of the aircraft, including:

- Hazardous material use
- Raw material use
- Recyclability of maintained parts
- Recyclability at end of life
- Aircraft performance data (based on key assumptions)
- Noise data
- Emission data

#### **CSeries and Learjet 85 Aircraft Programs**

In fiscal 2010, we continued the detailed environmental impact assessment of our benchmark *CSeries* aircraft program. The assessment identifies impacts and opportunities for performance improvements throughout the aircraft's entire lifecycle. The result will be a more environmentally focused aircraft.

The assessment will also allow us to publish both an EPD and an environmental scorecard for the *CSeries* commercial aircraft. The scorecard will summarize the aircraft's environmental performance in a single fact sheet.



We are carrying out the same process for our *Learjet 85* business aircraft program. This will enable us to share important improvement information across our commercial and business aircraft programs.

We will integrate the lessons learned along the way into our Design for Environment process. This will set the stage for continuous improvements in our future aircraft programs. It will also help us understand more fully the overall environmental impact of an aircraft throughout its whole lifecycle.

#### Flybe Eco-Label for Q400 Turboprop

Marking an industry first, British airline Flybe developed an environmental scorecard or "eco-label" for all aircraft in its fleet, including the *Q400* aircraft. The eco-labels demonstrate that the airline's investment in younger aircraft translates into lower fuel burn and reduced environmental impact.

On its Flybe eco-label, the *Q400* aircraft scores an "A" for overall environmental performance. The regional aircraft burns 30% less fuel compared to similar capacity older-generation aircraft.

The innovative eco-labels can be viewed by customers during Flybe's online ticket-booking process, in its in-flight magazines and on the side of each aircraft. To ensure transparency, Deloitte and Touche LLP validated all information appearing on the labels.

We are building on Flybe's idea by creating environmental scorecards for all our current and future aircraft. These scorecards will be used at the Aircraft Portfolio Strategy Board to rapidly assess the environmental performance of proposed future products. They will also strengthen our internal focus on designing fuel-efficient aircraft that respect the highest environmental standards.

## 4.2.3.2 ENVIRONMENTAL PRODUCT DECLARATIONS AT TRANSPORTATION

EPDs provide insight into the environmental efficiency of our products at all lifecycle phases. They follow ISO 14025:2006 as well as the Product Category Rules for Rail Vehicles<sup>1</sup> developed by the Association of the European Rail Industry (UNIFE) to ensure complete transparency and comparability. They are validated by an independent external verifier approved by the Technical Committee of the International EPD® System (IEC).



Bombardier EcoEfficient products are delivered with an EPD according to the ISO 4025 standard. They are available at both the vehicle and component levels.

Our EPDs detail the overall environmental efficiency of the rail vehicle/ product, including:

- Material composition used in the product as well as during maintenance
- Energy consumption
- Noise emission
- Recyclability and recoverability rate at end of life
- PM10 and NO<sub>x</sub> (for diesel vehicles)
- Resources used, waste generation and environmental impact (carbon footprint)

In 1999, Bombardier became the first rail manufacturer to develop an EPD. Since then, we have produced more than a dozen EPDs at both the vehicle and component level.

# Product Category Rules for Rail Vehicles (PCR 2009:05)

When developing an EPD according to ISO 14025, the EPD must meet and comply with specific and strict methodological prerequisites called Product Category Rules (PCRs). This enables us to:

- Meet high market expectations
- Track LCA-based information across the supply chain
- Compare different EPDs for products fulfilling the same function

From June 2008 to October 2009, our Transportation group led UNIFE's Transport and Environment working group to develop the industry-wide PCR for rail vehicles. The working group followed the international EPD® system, with approval provided by the system's Technical Committee. The PCR 2009:05 was finalized in October 2009 and revised in April 2010. It is available at www.environdec.com. Train manufacturers and their suppliers will use this PCR when conducting Lifecycle Assessments (LCAs), which form the basis of EPDs.



Product Category Rules for Rail Vehicles – PCR 2009:05, UNCPC CODE:495

#### Third-party Validation of EPDs

The European Union's Eco-Management and Audit Scheme (EMAS) is a management tool for evaluating, reporting and improving environmental performance. Many of our EPDs are validated externally using the EMAS approach. They also comply with the ISO 14021 or ISO 14025:2006 standard, depending on their intended audience.

EPDs issued in fiscal 2010 apply the new PCR 2009:05 and are validated by an independent external verifier or approved by International EPD® system or according to EMAS.

In fiscal 2010, we issued two new EPDs for rail vehicles:

- SPACIUM EPD
- TALENT 2 EPD

# 4.3 Greenhouse Gas Emissions

# Strategic Priority: Drive Down Industry Emissions

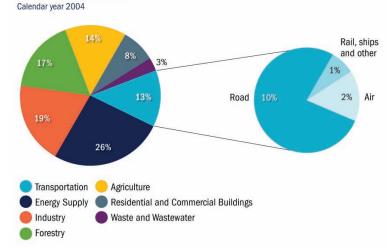
Being a manufacturer of aerospace and rail transportation solutions allows us to leverage knowledge from both industries to address the issue of emissions and mitigate their impact on climate change.

## 4.3.1 AEROSPACE

With the international spotlight on climate change, aviation — like other global industries — is under close scrutiny. As mentioned in Our Products section, developing increasingly efficient aircraft is crucial to our industry's strategy to contain and eventually reduce emissions.

Today aviation contributes 2% of worldwide man-made  $CO_2$  emissions. With the forecasted 5% annual growth in air traffic every year, this contribution could well increase if nothing is done. In the last two years, we have worked with industry stakeholders to develop aggressive aircraft emission targets.

#### World GHG emissions



## Learn More About Aviation Emissions

#### **Aviation's Emissions Impact**

Burning hydrocarbon-based fuel releases greenhouses gases, which contributes to global warming. These gases include sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), water vapours and especially carbon dioxide (CO<sub>2</sub>). To mitigate these adverse impacts, all industries must take action to reduce, and ultimately eliminate, these emissions. The aviation industry is no exception.

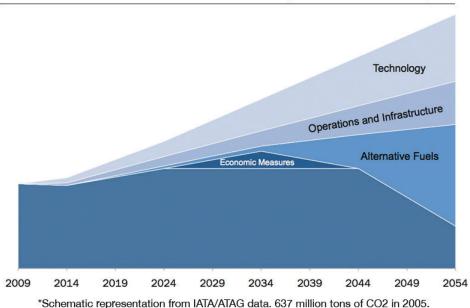
While the impacts of  $SO_x$ ,  $NO_x$  and  $CO_2$  are well understood scientifically, this is not the case for water vapour. Evidence is emerging that suggests aviation-emitted water vapour may play an indirect role in influencing the climate via radiative forcing.

According to the United Nations Intergovernmental Panel on Climate Change (IPCC), aviation's contribution to global CO<sub>2</sub> emissions is 2%. Its contribution to total greenhouse gas emissions is approximately 3%.

The aviation industry contributes approximately 8% to the world's gross domestic product. Aviation growth is projected to be 5% to 6% per year. By 2050, the IPCC forecasts aviation's share of global carbon emissions will grow to 3% and its contribution to total greenhouse gas emissions will be 5%.

To learn more about what the industry is doing to improve its environment footprint, visit http://www.enviro.aero, or consult the Beginner's Guide to Aviation Efficiency, a document co-produced by Bombardier to help the general public understand the industry's environmental efforts.

#### 4.3.1.1 EMISSION TARGETS



#### NORMALIZED COMMERCIAL AVIATION CO2 EMISSIONS (REFERENCE YEAR = 2005\*)

#### **Commercial Aviation Emission Targets**

In fiscal 2009, the commercial aviation industry established three global emission-related targets:

- A cap on aviation CO<sub>2</sub> emissions starting in 2020 (carbon-neutral growth)
- An average improvement in fuel efficiency of 1.5% per year from 2009 to 2020
- A reduction in CO<sub>2</sub> emissions of 50% relative to 2005 levels by 2050

These targets, along with an aggressive strategy for meeting them, were developed by the following industry players:

- Air Transport Action Group (ATAG)
- International Air Transport Association (IATA)
- Airports Council International (ACI)
- Civil Air Navigation Services Organisation (CANSO)
- International Coordinating Council of Aerospace Industries Associations (ICCAIA)

In October 2009, these targets were acknowledged by the member states of the International Civil Aviation Organization (ICAO) at its High Level Meeting on international aviation and climate change.

No other industry has made such a commitment at a global level. To deliver on this commitment, we must address four key enablers:

- Technological development
- Alternative fuels availability
- Operations and infrastructure optimization
- · Economic measures such as carbon offsetting if required

#### **Business Aviation Emission Targets**

In fiscal 2010, we leveraged our commercial industry experience to spearhead an industry initiative to create the Business Aviation Commitment on Climate Change. In business aviation, the General Aviation Manufacturers Association (GAMA) and the International Business Aviation Council (IBAC) also set the following ambitious targets:

- A cap on aviation CO<sub>2</sub> emissions starting in 2020 (carbon-neutral growth)
- An average improvement in fuel efficiency of 2% per year from 2009 to 2020
- A reduction in CO<sub>2</sub> emissions of 50% relative to 2005 levels by 2050

#### **Beyond Copenhagen**

In December 2009, our industry came well-prepared to the 2009 United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP), commonly known as the Copenhagen Conference or COP 15.

However, despite widespread industry consensus, aviation emissions were not specifically addressed in the Copenhagen Accord. Industry stakeholders continue to work closely with the ICAO to prepare a global framework for managing aviation's emissions.

The framework will be discussed at the ICAO Assembly in September 2010 and will serve as input at the 16th Conference of the Parties (COP 16) during the UNFCCC in December 2010.

Meetings are also under way to develop fuel efficiency standards for new aircraft along with a far-reaching alternative fuels initiative.

#### **Collaborating with Stakeholders**

To address the climate challenge, aviation industry stakeholders are increasingly working together to find viable, equitable and sustainable solutions. These stakeholders include:

- Aircraft manufacturers
- Engine makers
- Airports
- Air traffic management services
- Airlines
- Governments

This international industry-wide cooperation is focused on:

- Developing more efficient technologies and sustainable alternative fuels
- Optimizing aviation operations and infrastructure
- Establishing effective legal and economic incentives

We continue to actively work with the Air Transport Action Group (ATAG) to ensure a greener future for flight. We are also helping the International Civil Aviation Organization (ICAO) establish a global framework for managing aviation's emissions.

We sit on the steering committee of a World Economic Forum (WEF) initiative, involving the ICAO and ATAG, to develop a sector-wide approach to aviation emissions. This includes building and evaluating options for appropriate fiscal and legal frameworks (economic measures, incentives, sources of funding and R&D investments). It also entails assessing the impact of these options on the overall aviation industry and by country clusters (developing versus developed countries).

We are also taskforce members on another WEF project entitled "Repowering Transport." The project promotes cross-industry dialogue to identify policy, partnership and financing priorities to drive short- to mid-term energy diversification and higher energy efficiency. The project will present a white paper at the WEF's Annual Meeting in Davos 2011. Bombardier's presence in two major transportation sectors — aviation and rail — enables us to provide unique insight for this project.

Over the last year, we also actively participated in several environmental conferences and events.

#### October 2009:

- ICAO's High-Level Meeting on Climate Change (Montréal)
- GAMA's Environment Committee Meeting (Washington, D.C.)

#### November 2009:

• Future of Business Jets Conference (London)

#### February 2010:

 ICAO Committee on Aviation Environmental Protection (CAEP/8) (Montréal) as well as many ICAO CAEP subcommittee meetings during the entire year

#### May 2010:

- Annual meeting of Association québécoise pour la maîtrise de l'énergie (AQME) (Levis, Québec)
- ICAO's Environment Colloquium (Montréal)

#### June 2010:

- Aerospace group president and COO participated in the Environment Panel during IATA's Annual General Meeting (Berlin)
- Air Transport World Eco-Aviation Conference (Washington, D.C.)
- American Association of Airport Executives (AAAE) Second Transatlantic Aviation Issues Conference (Brussels)

#### September 2010

- Air Transport Action Group's (ATAG) Aviation and Environment Summit (Geneva)
- ICAO 37th Assembly (Montréal)

#### ICAO Council's Committee on Aviation Environmental Protection (CAEP): Latest Developments

From February 1 to 12, 2010, CAEP assembled for the eighth time (CAEP/8) in Montréal. The committee, which meets every three years, considered major environmental policy issues tabled by the council or states. The council also established its work program for the next three years, leading to CAEP/9 in 2013. The current focus is on NO<sub>x</sub>, noise and CO<sub>2</sub> emissions.

The top priority for the next CAEP cycle is developing a new  $CO_2$  standard for aircraft. This new standard could be defined as early as February 2013, with an applicability date of at least three years later. Bombardier will be actively involved in this activity to ensure a level playing field in its key markets — commercial aircraft and business aircraft.

#### 4.3.1.2 CARBON OFFSET

In October 2008, we extended our industry-leading program to our Flexjet fractional owners. Now both our business aircraft and Flexjet customers can offset the climate impact of the aircraft they own and/or operate. We also voluntarily offset carbon emissions resulting from:

- Our own corporate flights on our business aircraft
- Our demonstration fleet
- Our PartsExpress flights through Flexjet

We administer our Carbon Offset Program through leading offset provider ClimateCare. ClimateCare invests the fees paid to purchase Verified Emission Reduction (VER) credits in a portfolio of projects to reduce an equivalent amount of CO<sub>2</sub>. Adhering to internationally recognized standards, these projects focus on:

- Renewable energy replaces non-renewable fuel such as coal, gas and non-renewable wood sources
- Energy efficiency reduces the amount of fuel needed

#### Offering Carbon Offsetting as a Service

In April 2009, we further improved the program by offering it to our business aircraft customers "by the hour." Enrolled customers are charged a fixed cost per flight hour. Rates vary depending on the aircraft model. Operators with a mixed fleet of Bombardier and competitor products can also enrol their aircraft in the program.

#### 4.3.1.3 EMISSION TRADING SCHEME

#### New Aviation Emission Obligations in Europe

On February 2, 2009 the European Union (EU) incorporated aviation into its Emission Trading Scheme (ETS). By the time the legislation becomes law on January 1, 2012, this will have created numerous obligations for commercial and business aircraft operators.

The ETS is a cap-and-trade system designed to help the EC meet its Kyoto Protocol objectives. The ETS establishes a cap on industry emissions and then issues allowances that permit participants to emit a specific amount of CO<sub>2</sub>.

A cap on emissions will be fixed at 97% (2012) and 95% (2013 to 2020) of CO<sub>2</sub> emissions from 2004 to 2006 levels. Participants will also be able to purchase carbon credits that are publicly traded to offset emissions not covered by their allowances.

The ETS will apply to both commercial and private operators flying into, within and out of European Union airspace.

Some fear that the ETS will lead to "carbon leakage" (an increase in  $CO_2$  emissions in one country due to an emissions reduction by a second country with a strict climate policy). As a result, long-haul airlines may choose to "hub" outside the EU. In addition, some governments are questioning the EU's right to impose charges on  $CO_2$  emitted outside EU airspace.

According to International Air Transport Association (IATA), the application of the EU ETS to non-EU airlines violates several treaty provisions in the Convention on International Civil Aviation (commonly referred to as the "Chicago Convention"). Perhaps most significantly, the treaty (in Article 1) states that countries have sovereignty over the airlines in their own airspace. And yet by its terms, the EU ETS provisions regulate foreign airlines in foreign airspace.

The aviation industry must help mitigate the impact of climate change but through a global approach coordinated by the International Civil Aviation Organization (ICAO). This will ensure efficiency, prevent inequities and avoid measures with no real environmental benefit. If this global approach includes cap-and-trade mechanisms, at least part of these levies must be reinvested in:

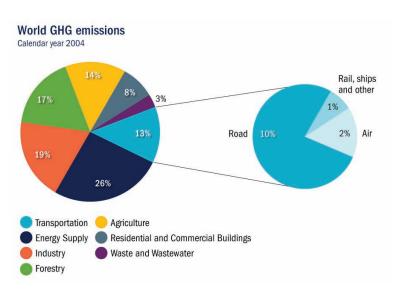
- Green aviation technology
- Improved airport infrastructure
- More efficient air traffic management

#### Helping Customers Meet EU ETS Obligations

As an aircraft operator and while we wait for a global ETS, we are currently complying with the EU ETS requirements. We are also working with other operators to ensure these requirements do not become a financial and administrative burden with no tangible environmental benefits. Specifically:

- We continue to monitor the scheme rollout for aviation and ensure adequate communications with key stakeholders.
- We ensure our flight operations comply with the scheme's monitoring, verifying and reporting (MRV) requirements.
- We continue to provide our customers with official and relevant information related to the ETS through our business aircraft and commercial aircraft customer websites, cic.bombardier.com and www.iflybombardier.com respectively.
- We began investigating service proposals to reduce the administrative burden and carbon trading costs for our business aircraft customers. Given the uncertainties in the upcoming allowances and the scheme's application after 2012, we postponed this research. We recommend that our business aircraft customers use Universal Weather and Aviation Inc.'s free weather/flight planning service to fulfill their MRV requirements.

# 4.3.2 TRANSPORTATION



When it comes to emissions and energy consumption, rail transportation is the world's most sustainable mode of mass transit. It generates less than 1% of global greenhouse gas emissions. In addition to climate change, the industry faces significant challenges, including:

- Resource scarcity
- Rising fossil fuel and raw material costs
- Stricter emission, noise and land-use regulations

As a global leader in rail technology, we are duty-bound to help develop innovative solutions to these challenges.

#### **Collaborating with Stakeholders**

While the transport sector is largely exempted from greenhouse gas emission trading, electricity generation

is not. Electricity is one of the rail operator's most important energy sources.

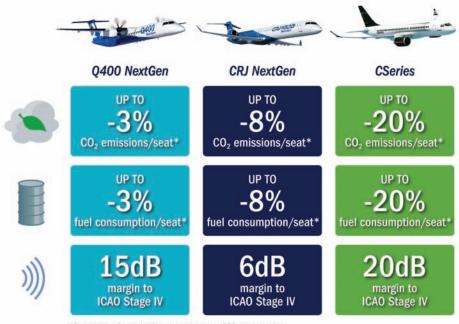
Our customers — railway operators — are developing a comprehensive roadmap to ultimately achieve a zero-carbon impact. Through UNIFE (Association of the European Rail Industry), we and other major rail manufacturers are working with the UIC (International Union of Railways) — our customers' organization — to align our strategies. Our two most recent joint meetings took place in September 2009 and March 2010.

As we work with stakeholders, we continue to provide concrete solutions to the challenge of sustainable transportation. We also continue to invest in products that contribute to the environmentally sound transportation of people and goods.

# 4.4 Aerospace Products

In fiscal 2010, we continued to develop the most fuel-efficient aircraft with the lowest noise and emissions in their category.

# EXAMPLES OF OUR ENVIRONMENTALLY FOCUSED PRODUCTS INCLUDE:



#### \*Compared to in-production competitors over 500 nautical miles.

# 4.4.1 CSERIES COMMERCIAL AIRCRAFT

Compared to in-production aircraft in the same category at a distance of 500 nautical miles, our advanced 100- to 149-seat CSeries commercial aircraft will:

- Generate up to 20% less CO<sub>2</sub> emissions
- Burn up to 20% less fuel
  - Translates into a 15% savings on cash operating cost for airlines
  - $\circ~{\rm Saves}$  4,000 tonnes of  ${\rm CO_2}$  annually for each CSeries aircraft flying
  - Compares favourably in fuel consumption per passenger to small or hybrid cars
  - Consumes about the same amount of fuel as larger aircraft such as the Boeing 787 and A380 (less than three litres per 100 kilometre per passenger)
- Reduce the noise footprint on takeoff by four times\*
- Emit 50% less nitrous oxide (NO<sub>x</sub>) than the most stringent standard limit (Committee on Aviation Environmental Protection CAEP6)

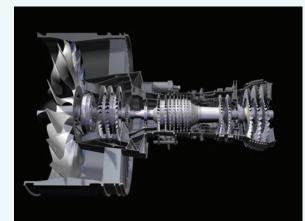


\*For 70 dBA footprint

Pratt & Whitney's PurePower® engine accounts for half of the *CSeries*' enhanced fuel efficiency. The other half comes from improvements to the airframe and on-board systems. Using 70% advanced materials, including composites and aluminum lithium, will substantially reduce the aircraft's weight. The fourth-generation, numerically optimized wing design will significantly reduce drag, leading to direct savings in fuel burn. Integrated avionics and advanced systems will also optimize energy use onboard the aircraft.

# Learn More About Geared Turbofan Technology

#### Geared Turbofan PurePower®





Source: Pratt & Whitney 2010

Long used in smaller aircraft engines, geared turbofan technology allows the engine's fan to operate at a slow speed while the low-pressure compressor and turbine run at much higher speeds. The result is:

- Increased engine efficiency
- Reduced fuel consumption, greenhouse emissions and noise levels

In 2013, the *CSeries* will become the first narrowbody commercial aircraft to employ this game-changing engine technology. New models of the geared turbofan should continue to improve efficiency at a rate of 1% per year or more.

#### What CSeries Customers Are Saying

With an industry-wide target of carbon-neutral growth by 2020, operators are taking action to help achieve this target. They are poised to reap both economic and environmental benefits by incorporating next-generation aircraft in their fleet as early as 2013 and by progressively retiring older-generation aircraft.

# "We are proud to be the launch customer for the *CSeries* family of aircraft which meets our requirements for sustainable fleet development including significant reductions in fuel burn and noise, as well as offering flexibility for the future."

Nico BUCHHOLZ Senior Vice President, Lufthansa Source: Bombardier Press Release, issued on March 11, 2009

"The CS300 will help us dramatically reduce our fuel consumption and impact on the environment. No other aircraft can match the attributes it brings to the market. The CSeries aircraft's leading-edge technologies bring unmatched economics, operational flexibility, reduced environmental impact and passenger comfort."

Bryan BEDFORD CEO, Republic Airways Source: Republic Airways Press Release, issued on March 25, 2010





# 4.4.2 LEARJET 85 BUSINESS AIRCRAFT

In **business aircraft**, our revolutionary clean-sheet *Learjet 85* is setting the standard in environmental performance in its category. Our largest *Learjet* features:

- Our next-generation wing design for optimal aerodynamics to reduce fuel consumption and emissions
- An all-composite airframe for dramatic improvements in parts count, weight, fatigue resistance and corrosion resistance
- A 21st-century engine (PW307B) for low noise, emissions and fuel burn

Development of our *Learjet 85* business jet is on schedule with entry into service planned for 2013. With the second proof-of-concept fuselage and all wind tunnel testing completed, construction of expanded production and final assembly sites for our largest *Learjet* aircraft is now under way. The *Learjet 85* business jet targets a high speed cruise of Mach 0.82 and a transcontinental range of 3,000 nautical miles.



## 4.4.3 **Q400 TURBOPROP**

On Earth Day, April 22, 2010, we celebrated the entry into service of our 300th Q400 turboprop aircraft, a Q400 NextGen model, at

our facility in Toronto, Canada, with customer Porter Airlines. The milestone aircraft is the 20th *Q400* turboprop in the Toronto-based airline's fleet.

The lower-emission, fuel-efficient, "Comfortably Greener" *Q400* and *Q400 NextGen* aircraft balance passenger comfort and operating economics with a reduced environmental footprint. On average, these turboprops burn 30% less fuel and emit 30% fewer carbon emissions than the jets they typically replace.

The first *Q400* was delivered in January 2000. Our *Q400* and *Q400 NextGen* aircraft are now used by some 30 airlines and other operators in Europe, the Americas, Asia-Pacific, Africa and the Middle East.



# 4.4.4 CRJ1000 NEXTGEN



The latest member of the CRJ family of regional jets is in its final stage of certification. Our flight tests confirm that the CRJ1000 will continue the CRJ family's status as the light...est, most fuel-efficient regional jets in their respective seat segments.

Over a typical 500 nautical mile mission, the 100-seat CRJ1000 NextGen will consume as little as 3.33 litres per 100 kilometres per seat. It will produce 85 grams per kilometre per seat of CO<sub>2</sub>, setting a new standard for 100-seat class regional jets.

The CRJ1000 will enter service later this year with launch customers Brit Air in France and Air Nostrum in Spain, allowing these wellestablished CRJ operators to continue growing their airlines in a sustainable way.

# **4.4.5 ALTERNATIVE FUELS**

In our Aerospace group, we continue to support collaborative research initiatives in cleaner alternative fuels.

In fiscal 2010, the aviation industry significantly advanced biofuel research and development. In fact, the first level of certification was granted in the fall of 2009 for an alternative fuel enabling a 50% blend. The next level of certification is expected in 2010 for a 50% hydro-processed renewable jet fuel. The industry's focus is on biofuels sourced from second- or new-generation algae, jatropha and camelina biomass.

We are currently conducting our own biofuel research to ensure our in-service and new aircraft are ready to burn these fuels. We are also carrying out an in-depth study in alternative fuels. This program explores a number of energy sources, including kerosene enhancement.

Carrier	Aircraft	Partners	Date	Alternative Fuels	Blend
atlantic	B747-400	Boeing, GE Aviation	23 Feb 2008	Coconut & Babassu	20% one engine
<b>چ</b> Air New Zealand	B747-400	Boeing, Rolls-Royce	30 Dec 2008	Jatropha	50% one engine
Continental Airlines	B737-800	Boeing, GE Aviation, CFM, Honeywell UOP	07 Jan 2009	Algae & Jatropha	50% one engine
JNL	B737-300	Boeing, GE Aviation, CFM, Honeywell UOP	30 Jan 2009	Camelina, Jatropha, Algae blend	50% one engine
	A340-600	Airbus, Shell	12 Oct 2009	Gas to liquid (not biofuel)	50% four engines
	B747-400	GE, Honeywell UOP	23 Nov 2009	Camelina	50% one engine
// UNITED	A319	Rentech	30 April 2010	Gas to liquid (not biofuel)	40% two engines

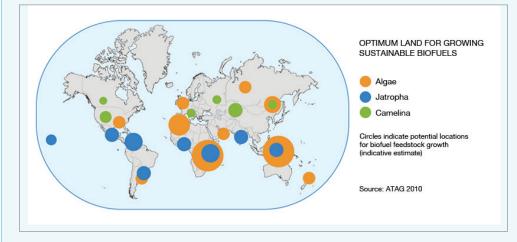
#### Main Potential second-generation biofuel feedstocks



Source : ATAG 2010

**Jatropha** is a plant that produces seeds containing inedible lipid oil that can be used to produce fuel. Each seed produces 30 to 40% of its mass in oil. Jatropha can be grown in a range of difficult soil conditions, including arid and otherwise non-arable areas, leaving prime land available for food crops. The seeds are toxic to both humans and animals and are therefore not a food source.

**Camelina** is primarily an energy crop, with high lipid oil content. The primary market for Camelina oil is as a feedstock to produce renewable fuels. The left over "waste" from the oil extraction can also be used as feed for chickens in small proportions. Camelina is often grown as a rotational crop with wheat and other cereal crops when the land would otherwise be left fallow (unplanted) as part of the normal crop rotation programme. It therefore provides growers with an opportunity to diversify their crop base and reduce mono-cropping (planting the same crop year after year), which has been shown to degrade soil and



reduce yields.

Algae are potentially the most promising feedstock for producing large quantities of sustainable aviation biofuel. These microscopic plants can be grown in polluted or salt water, deserts and other inhospitable places. They thrive off carbon dioxide, which makes them ideal for carbon capture (absorbing carbon dioxide) from sources

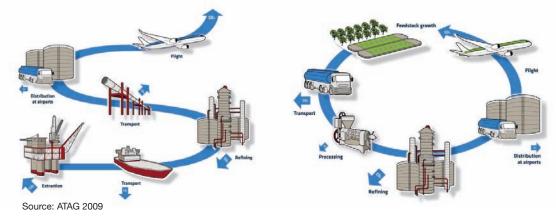
like power plants. One of the biggest advantages of algae for oil production is the speed at which the feedstock can grow. It has been estimated that algae produces up to 15 times more oil per square kilometre than other biofuel crops. Another advantage of algae is that it can be grown on marginal lands that aren't used for growing food, such as on the edges of deserts.

#### **Biofuels and Alternative Fuels in Aviation**

Biofuels are derived from recently grown biological materials while fossil fuels come from biological material dead for millions of years. When burned, biofuels emit only the amount of CO<sub>2</sub> that they had absorbed during growth.

Biofuels are made from a wide variety of plant material. In numerous countries, they power road vehicles either as a blend with fossil fuels or as a stand-alone source of energy. Just three years ago, using biofuels in aviation was seen as a dream. Now biofuels have been shown to reduce carbon emissions by up to 80% over their lifecycle in some industries. However some of these so-called first-generation sources of fuel compete with food production.

Aircraft are exposed to extreme temperatures, making it impossible to use many first-generation biofuels. The most suitable fuels for aviation are the so-called "drop-in" fuels, which are much like today's kerosene. Drop-in fuels can directly supplement or replace petroleum-derived jet fuels. They can be mixed with petroleum-based fuel without requiring changes in aircraft engines or fuel infrastructure.



Between 2008 and 2010, a total of five test flights were made with one engine running on a 50/50% mix of second-generation biofuels and jet kerosene (Virgin, Air New Zealand, Continental, JAL and KLM).

These test flights clearly demonstrated that the use of biofuel as "drop-in" fuels is safe and technically sound. Biofuels can be blended with existing jet fuel in increasing quantities as they become available.

#### Certification

The aviation fuels subcommittee of the American Society for Testing and Materials International (ASTM), the international standards development organisation, gave final approval for a new jet fuel specification of 50/50% blend of synthetic fuels from the Fischer-Tropsch process (e.g. coal, gas or biomass to liquids). The next step is to produce 50% hydro-processed renewable jet fuel based on bio-jet blends by early 2011. The industry's short-term target is to secure certification for a 100% Fischer Tropsch blend jet fuel by 2012 and 100% hydro-processed renewable jet fuel by 2013.

#### **Second-generation Biofuels**

The aviation industry is developing the appropriate methodology to measure the potential lifecycle impact of aviation biofuels. The sector is focusing on biofuels from second-generation sources. These fuels can be produced sustainably and don't compete with food crops for land and fresh water usage.

Promising research includes second- and third-generation biofuels made from waste material such as sawdust, harvest remnants and municipal waste, or from plants like jatropha (an oil-rich tropical plant growing on very dry and otherwise unusable land) and algae. Beyond first-generation biofuels that compete with food crops for land, advanced generation non-food crops, such as jatropha curcas, carmina and algae, are likely to become the leading contenders for sustainable bio sources of aviation fuel.

Research is progressing very rapidly in these areas, with test flights undertaken by a number of airlines and engine, aircraft and biofuel manufacturers. Algae oil is showing promise as either a fuel blend or a stand-alone fuel source. Algae oil has similar energy properties as current jet fuel, is very fast growing and can be cultivated under inhospitable conditions.

#### **Current Initiatives**

- Launched in May 2010, the Brazilian Alliance for Aviation Biofuels (ABRABA) includes ten organizations.
- In the U.S., the Commercial Aviation Alternative Fuels Initiative (CAAFI) was set up in 2006 as a cooperative effort to bring commercially viable, environmentally friendly alternative aviation fuels to market. Since 2006, we have been involved in the CAAF's R&D and environment committees.
- In Canada, we are working with Porter Airlines to complete the first biofuel trial on a Q400 turboprop in early 2012. Led by Targeted Growth Canada, the project consortium will demonstrate camelina-based biofuel supplied by Sustainable Oils. Other partners are Q400 engine supplier Pratt & Whitney and Honeywell subsidiary UOP. Funding is provided by the consortium partners, Sustainable Development Technologies Canada (SDTC) and Green Aviation Research and Development Network (GARDN).

#### **Key Implementation Issues**

- Availability and supply To replace all traditional jet fuel currently used with aviation biofuel would require vast crop fields. Some sources such as algae need much less land. The aviation industry will likely rely on a range of biofuels from different sources.
- Crop sustainability issues Sustainability issues related to crops such as jatropha have been highlighted, such as land versus food crop use and toxins emitted during processing.
- **Operational and economic issues for airlines** To be feasible as an alternative fuel for airlines, biofuels need to be available as a commodity. This means issues related to supply chain reliability and economic viability must be resolved.

Please consult the full Beginner's Guide to Aviation Biofuels on www.enviro.aero.

# 4.4.6 RECYCLABILITY

#### End-of-Life Challenges

Energy-efficiency issues and higher raw material costs increase the focus on end-of-life issues during product development. More stringent environmental requirements and improved recycling technologies will improve recoverability rates.

The aerospace industry faces significant aircraft end-of-life challenges. Over the next 20 years, approximately 250 commercial aircraft will be withdrawn from service every year. Due to the lack of dedicated infrastructure and profitable recycling processes, more than half of these aircraft will be abandoned in deserts or warehouses.

At Bombardier, our goal is to improve the recyclability of aircraft parts. With the Consortium for Research and Innovation in Aerospace in Québec (CRIAQ) and other industry partners, we are dismantling a Bombardier *CRJ100/200* regional jet to determine which parts are truly recyclable. This research will help us make recommendations for the recovery, revalorization and redistribution of reusable and disposable parts and materials at the end of an aircraft's life.

#### **Dismantling Operations Certified**

In fiscal 2010, we became the first original equipment manufacturer to obtain certification from the Aircraft Fleet Recycling Association (AFRA) for our dismantling operations. AFRA is the global industry leader in defining environmental and technical standards in managing end-of-life aircraft. It promotes best practices for salvaging and recycling components taken from aging aircraft during disassembly.

AFRA conducted a two-day audit of our *CRJ100/200* regional jet teardown efforts at our service centres in West Virginia and Arizona. The accreditation recognizes our commitment to environmental best practices and operational excellence in aircraft dismantling and parts recycling.

In August 2010, we joined forces with Magellan Aircraft Services of Charlotte, North Carolina to disassemble *CRJ100/200* regional jets, refurbish useable components and remarket them to operators. We estimate that each of the 10 *CRJ100/200* aircraft covered under the initial agreement has some 1,500 serviceable parts, including 300 line replaceable units (LRUs).

# 4.5 Transportation Products

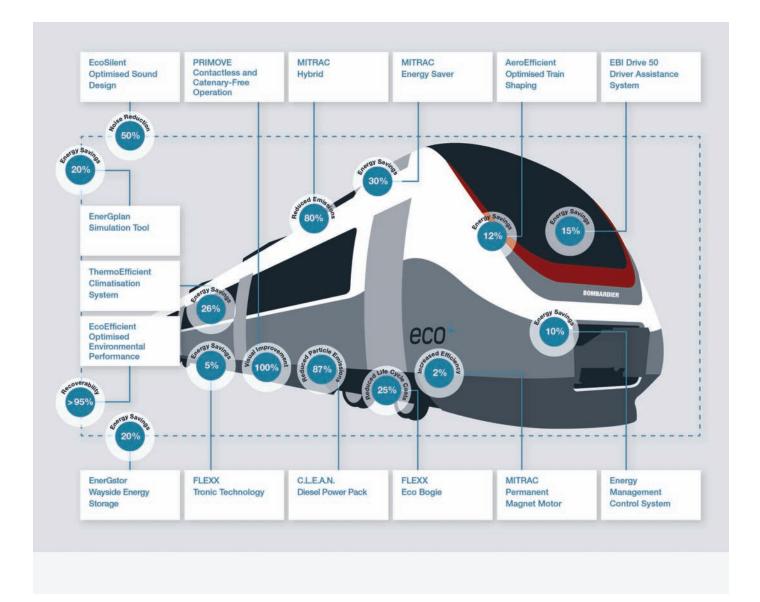
In fiscal 2010, we made the world's most sustainable mode of mass transit even more environmentally sound. At the same time, we continued to develop new technologies that:

- · Increase the energy efficiency of our vehicles
- Enable drivers to optimize vehicle energy consumption

# 4.5.1 ECO4 ENERGY-SAVING TECHNOLOGIES

#### The Most Efficient Way to Save the Planet

As our world grapples with global climate change, congestion, population growth and rapid urbanization, rail operators face volatile energy costs, the need to improve operating efficiency and tough competition. Achieving sustainable mobility and optimal efficiency are crucial to society and the rail industry alike. Our EcoActive technologies advance these goals by reducing overall energy consumption by up to 50%.



#### The Climate is Right for Trains

Our "The Climate is Right for Trains" concept and *ECO4* technologies advance sustainable mobility. Launched in 2008, *ECO4* is both a product portfolio and a roadmap for action in the transport community. Our *ECO4* technologies are built on the four cornerstones of Energy, Efficiency, Economy and Ecology, delivering overall energy savings of up to 50% compared to current solutions. They represent a unique and market-leading combination of new and proven products that:

- Improve total train performance
- Enable unprecedented levels of efficiency
- Reduce energy consumption
- Minimize carbon footprints

In this way, our ECO4 technologies are "The Most Efficient Way to Save the Planet."

#### Worldwide Success with Rail Operators

By spearheading EcoActive technologies in the rail industry, we are the only rail manufacturer currently offering a comprehensive, flexible portfolio of green rail technologies. Today our *ECO4* solutions are adopted by rail operators and incorporated into our most recent rail projects worldwide. This includes our:

- ALP-45 locomotives
- ZEFIRO very high speed train
- OMNEO
- TWINDEXX high capacity vehicles
- Metro solution for downtown Singapore

Today a total of fifteen *ECO4* products, including five industry-first technologies, are used in approximately 120 applications. Together they are paving the way for a new era in rail technology with unprecedented reductions in costs and emissions.

#### New Breakthrough Technologies at InnoTrans

At InnoTrans 2010 in September, we unveiled the following three new ECO4 breakthroughs:

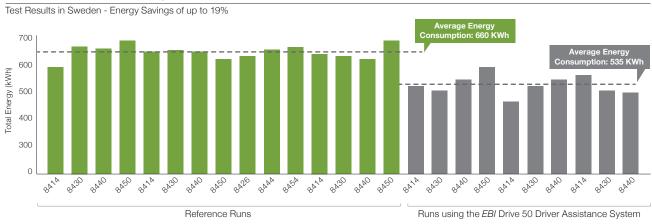
- EcoSilent Optimized Train Sound, a tool for acoustic design that makes trains one of the quietest ways to travel
- EnerGstor Wayside Energy Storage, a modular super-capacitor technology for wayside storage of regenerated braking energy
- EcoEfficient Optimized Environmental Performance, a solution for optimizing the choice of materials and design, including recyclability and recoverability, and providing full environmental transparency through externally certified product declarations

With *ECO4*, we take into account how each subsystem impacts a train's overall efficiency and attractiveness. We also work closely with rail operators to ensure excellent functionality in a broad range of technical environments. This collaboration has resulted in:

- Lighter weight, lower maintenance bogies with reduced wheel and track wear
- Intelligent, comfort-driven interior climate control
- Optimized aerodynamic performance for very high speed trains
- Catenary-free tram operation
- Energy-saving driver assistance technology

#### EBI Drive 50

#### EBI Drive 50 Driver Assistance System



Our *EBI* Drive 50 system helps drivers optimize their trains' energy consumption. This smart software makes recommendations concerning velocity and acceleration or deceleration. This minimizes the energy needed to run a train. Smoother operation of the train also reduces wear on the wheel sets, engines, brakes and tracks. This, in turn, drives down operational costs.

During tests in Sweden, the system enabled energy savings of up to 19% compared to the same trip made by the same driver but without the *EBI* Drive 50 system.

## 4.5.2 ZEFIRO VERY HIGH SPEED TRAIN



Today's rail passengers want more than very high speed (VHS) trains. The new priorities in rail transportation for all stakeholders are customized comfort, high capacity, energy efficiency and sustainable solutions to society's mounting ecological challenges. Our new *ZEFIRO* portfolio of VHS trains addresses each of these priorities.

Our breakthrough definition of VHS rail travel establishes benchmarks in very high speed, performance, passenger comfort and energy efficiency. The *ZEFIRO* 380 train will attain an operating speed of up to 380 kilometres per hour, making it one of the world's fastest trains. It will also deliver the lowest energy consumption and best economics per seat in the VHS segment.

The ZEFIRO 380 combines advanced industrial design with our ECO4 technologies to optimize:

- Energy efficiency
- Eco-friendliness
- Configuration flexibility
- Rail operator profitability

#### **4.5.3 ALTERNATIVE FUELS**

In our Transportation group, we continue to support collaborative research initiatives in cleaner alternative fuels. We actively participated in product innovation research to explore biodiesel alternatives. Trials on a Virgin Voyager train set confirmed the feasibility of  $CO_2$  emission reductions of up to 14% with biodiesel fuel.

# 4.5.4 MATERIAL USE AND RECYCLABILITY

#### **Environmentally Preferable Materials**

We carefully select the materials and substances used in our new vehicles to minimize environmental impacts throughout the entire lifecycle. Materials play an important role in the overall environmental impact during manufacturing and assembly. To a large extent, they also determine end-of-life properties such as recyclability and amount of hazardous waste.

At present, we are focused on two issues:

- Maximizing our products' recyclability
- Minimizing the use of hazardous substances

#### End-of-Life Challenges

Effective end-of-life solutions are a priority across Bombardier. End-of-life options for rail vehicles include:

- Recoverability
  - Reuse
  - Material recycling
  - Incineration with energy recovery
- Disposal (usually in landfill sites)

In our Transportation group, we achieve a rail vehicle recoverability rate of more than 95%. Recoverability includes reuse, material recycling and incineration with energy recovery. Using recyclable materials and avoiding the blending of materials increases a vehicle's recoverability.

New recycling techniques have also evolved over the past couple of years. A complete material declaration together with a recycling manual will reduce end-of-life costs. These tools facilitate proper environmental documentation, which improves end-of-life options.

We are also working with the Association of the European Rail Industry (UNIFE) to harmonize end-of-life definitions across the industry. Within UNIFE, we have agreed to apply the ISO 22628 standard (Road vehicles - Recyclability and recoverability - Calculation method) when calculating recoverability and recyclability rates. Applying the ISO standard ensures that figures are comparable and transparent for our customers.

#### **Recyclability and Recycled Material Content**

We strive to maximize the recyclability of our vehicles and increase the amount of recycled content used in our vehicles. A typical rail vehicle is composed of metals, organics, plastics, rubbers, chemicals and other materials.

Starting in the early design stages, we take steps to facilitate efficient, end-of-life dismantling, material recycling and use of recycled materials. We apply several tools to increase the recyclability of our products.

- DfE recycling guidelines user-friendly guidance on designing products that are easier to dismantle to enhance component reuse and materials recycling
- CE-Mat (Certification & Environmental Materials Database) and Lifecycle Assessments tools for tracking recyclability figures on a continuous basis
- List of Prohibited and Restricted Substances for ensuring that hazardous substances are eliminated from our products
- ISO standards guidance on labelling polymers to facilitate their recycling at end of life

We also prepare recycling manuals to document materials content, recyclability and special handling instructions.

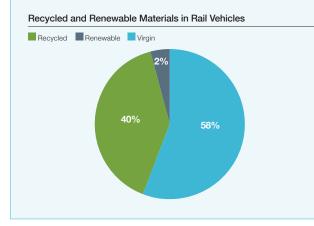
#### **Product Recyclability Goals and Future Targets**

Our vision is to ultimately achieve 100% product recyclability and 100% use of renewable and recycled materials to manufacture our products.

#### Recent Study: Recycled and Renewable Materials in Rail Vehicles

In fiscal 2010, a study concluded that a general passenger vehicle consists of 40% recycled material, 2% renewable material and 58% virgin material.

The study concludes that the market for recycled metals is more or less self-propelled and initial efforts should focus on



increasing the use of recycled polymers and renewable materials.

We are currently working with our suppliers to increase the use of recycled polymers and renewable materials in our train interiors. This will decrease:

- Material costs
- Energy use, carbon emissions and costs
- Waste, in particular landfill

As a result, the material properties for recycled polymers will improve.

#### Minimizing Our Use of Hazardous Substances

In our **Transportation group**, our List of Prohibited and Restricted Substances identifies those substances that are either completely banned from use or which are only to be used in certain applications. Restricted substances require specific approval and are only permitted when it is absolutely necessary such as for safety reasons.

We update this list on a continuous basis to reflect new and upcoming legal requirements. All major European rail manufacturers have started harmonizing their lists of forbidden or restricted substances to assist sub-suppliers.

To comply with regulations, including the European Union REACH regulation, we implemented a systematic approach to measure, track and manage chemical risks throughout our supply chain. A central group helps each of our operating units interpret our REACH obligations and implement any necessary changes and actions. We will continue to work with our suppliers to build our knowledge of chemical risks and identify alternatives to hazardous substances.

Within our **Aerospace group**, our Banned and Restricted Substances List takes into account environmental, health and safety issues. This list helps us:

- Eliminate banned substances and reduce the use of restricted substances
- Comply with related legal requirements
- Target the replacement of substances that are restricted now but may be banned in the future

We share our Banned and Restricted Substances List with our supply chain and require our suppliers to specify the substances they use. This enables us to track and ensure that supplied products and sub-assemblies comply with our requirements. It allows us to indicate where products on the list have been used in the aircraft. This practice also makes it possible to work with suppliers to substitute, as appropriate, any substance used.

We review our list annually, adjusting the status of substances or adding new materials based on changes in global regulatory frameworks.

# 4.6 Our Approach to Developing Safe Products

# Strategic Priority: Promote Product Safety

At Bombardier, we are committed to leading through innovation and outstanding product safety, efficiency and performance.

### 4.6.1 AEROSPACE

Every three seconds, a Bombardier aircraft takes off or lands around the globe. At August 31, 2010, our worldwide fleet included more than 3,816 business jets, 2,501 regional jets and turboprops, and 152 amphibious aircraft.

Product safety and reliability have always been top priorities at Bombardier Aerospace. That's why we continuously seek new ways to improve our performance in these areas. Our Product Safety Policy promotes a proactive approach to safety. This is essential to prevent accidents and provide our customers with outstanding products and services.

Five key elements advance product safety within our Aerospace group:

- A stringent certification process based on requirements imposed by regulatory bodies and airworthiness authorities
- Proactive safety training including Safety Standdown
- Implementation of a comprehensive Safety Management System by 2015
- · Airworthiness directives to address identified deficiencies
- Full participation in accident investigations

#### Product Safety Management System

While our product safety record is solid, we must continually push beyond the status quo. The public rightly expects product safety to keep pace with the growing number of aircraft in service. As such, the industry and its regulatory authorities are moving towards a more stringent management of safety.

In fiscal 2010, we made significant progress towards deploying our Safety Management System (SMS), which is aligned with industry standards and integrates leading safety processes. Our SMS provides a framework for adding new proactive safety measures to our current processes and practices. Ultimately it defines how we manage product safety overall in our Aerospace group.

The Employee Safety Reporting System (ESRS) is one of our SMS processes. This non-punitive and, if requested, confidential process allows our employees to report issues that they believe affect product safety. It serves as an additional "safety net" to capture potential issues not addressed by existing reporting and corrective action processes. We are currently deploying the ESRS across all Aerospace manufacturing and maintenance sites.

Our newly created Safety Office reports to the Corporate Safety Board and is responsible for safety oversight in all areas of our Aerospace group. The office:

- · Develops tools for evaluating current safety practices
- · Identifies areas for potential safety improvements
- Establishes processes for ensuring compliance with internal policies and diverse regulatory requirements
- Monitors our organization's safety performance and reports on it through the Aerospace Dashboard
- Oversees our hazard identification and risk management activities
- Manages our Employee Safety Reporting System (ESRS)
- Is responsible for SMS deployment across our organization

#### Safety Standdown

Our Safety Standdown program is the aerospace industry's most respected and valued safety seminar of its kind. Offered at no charge, the program is open to all aviation professionals worldwide regardless of the type of aircraft they operate. To date, over 4,200 pilots, crew members, safety specialists and industry officials have graduated from our Safety Standdown seminars.

Studies reveal that the majority of aviation accidents are caused by human error, not equipment failure. Safety Standdown promotes knowledge-based training and personal rigour to reduce accidents triggered by human error. The seminars are designed to change the way operators think about safety. They also provide tools to improve risk mitigation as well as operational procedures and processes.

#### **Expanding Safety Standdown**

We have held annual Safety Standdown seminars in the United States since 1996 and in Europe since 2007. In fiscal 2010, we took the following steps to expand our global Safety Standdown program:

- Added a one-day seminar in Brazil
- Increased our European Business Aviation Conference and Exhibition (EBACE) workshop from one to two days
- Added half-day events for manufacturers and operators in Hong Kong
- Began creating a Safety Standdown Advisory Council composed of industry experts and operators to provide guidance on future topics and speakers

In fall 2010, we will begin providing podcasts of our key Safety Standdown speakers with limited access webinars to follow. We also intend to engage more of our workforce by developing an internal Safety Standdown Ambassadors program. Our objective is to provide all of our customer-facing employees with Safety Standdown training.

#### Step Back for Safety!

This new Aerospace training program promotes a better understanding of the safety issues facing the aerospace industry. It also reinforces the importance of having a strong safety culture. The agenda addresses accidents and incidents involving Bombardier products, and the lessons learned from these events.

In 2010, our Toronto site hosted our first Step Back for Safety! forum specifically designed for managers, chiefs and manufacturing leads. Sponsored by the site's senior management, the forum welcomed over 200 leaders, reaffirming the importance of safety in everything we do.

The forum provided insight into the important links between manufacturing quality, the SMS and air safety investigation organizations. The need to continuously improve quality standards as well as incident and accident reviews was also underscored. All attendees received a "Commitment to Safety" certificate at the end of the session. Participants' feedback confirmed a high level of support for this type of forum.

#### 4.6.2 TRANSPORTATION

In our Transportation group, product responsibility encompasses both environmental and social considerations. We design our products to provide end-users with optimal comfort, space, reliability, style and security. This covers convenient and safe access for all passengers, including the elderly and people with disabilities.

#### **Product Safety Policy**

Launched in 2004, our Transportation group's Product Safety Policy is based on the same principles as our corporate Health, Safety and Environment (HSE) Policy. As such, health and safety is a fundamental corporate social responsibility and a priority governing all our activities.

Our focus is on making safe trains, not making trains safe. This means that safety is an integral part of our design process, not an afterthought. Our Safety Management Process (see diagram below) includes the following hierarchy of governing documents, which help us ensure that our products are safe for their intended use:

- 1. Product Safety Policy (the "why" of our Safety Management Process)
  - Captures our commitment to develop, provide and maintain products that are safe for passengers, operators and other stakeholders
- 2. Product Safety Management Organization Directive (the "what" and "who")
  - Explains what we do and the roles, responsibilities and structures to achieve our global product safety objectives and policy
- 3. Design for Product Safety Process Procedure (the "how")
  - Outlines how we meet our goals within the defined structures, details the processes and suggests best practices and plans

To support this documentation and the safety management process, we adhere to our Product Safety Management System.

#### Product Safety Management System

Implemented in fiscal 2005, our Product Safety Management System specifies the roles, responsibilities and cycles for ensuring continuous improvement. It:

- Defines product safety requirements based on applicable laws and regulations in each country and on customer, regulator and other legitimate third-party criteria
- Ensures that safety requirements are fulfilled during the development and delivery of products and services, including a demonstration of compliance
- Proactively analyzes incidents and accidents to review and improve product safety performance
- Continually monitors and assesses the safety management process

# Hierarchy of Safety Management Process Documents at Transportation



#### Design for Safety Approach

Our design for safety approach focuses us on identifying, controlling, mitigating and eliminating hazards. Every project design team is responsible for collecting and integrating safety analyses conducted by the subsystem teams. This data is then summarized in a Safety Case Report prepared by the project's lead safety engineer.

Our objective is to design trains that protect the safety of the people making, using and maintaining our products. We do this by ensuring that we:

- Avoid hazards by using proven design and materials as well as diverse, redundant or fail-safe components
- Implement safety requirements at all stages of the project
- Include safety requirements in the project's Requirements Management documentation and procurement specifications
- Include safety requirements in all operation and maintenance documentation
- Maintain product safety through subsequent product changes or modifications that fall within our scope

# 4.7 Engaging Customers in Product Responsibility

Strategic Priority: Engage Our Customers in Sustainability

# 4.7.1 AEROSPACE



#### **Carbon Offset Program**

Becoming a truly sustainable organization requires the engagement of many partners, including customers.

In 2007, we became the first aircraft manufacturer to offer a Carbon Offset Program to business aircraft customers. This program allows aircraft operators to offset their emissions by funding projects worldwide that reduce an equal amount of emissions.

#### **Designing Aircraft with Our Customers**

In our new aircraft programs, design teams meet frequently with customers to align product specifications with their needs. These working groups allow us to gradually integrate crucial customer feedback.

Customer surveys conducted early on in the design phase help shape our new products, as do customer focus groups held worldwide throughout the development process. These activities ensure that the final product fulfills customer requirements.

For new aircraft programs, customer-led Advisory Committees meet on a semi-annual basis to provide feedback on performance, new services required and issues in the field.

#### **Amazing Customer Experience Initiative**

In our Aerospace group, customer relationships are managed through the Achieving Excellence System (AES), which includes our "Amazing Customer Experience" initiative. This initiative seeks to place customers at the heart of everything we do. It focuses our energy and resources on improving the customer experience during:

- Aircraft purchase
- Aircraft delivery
- Services and support

By anticipating their needs, we strive to create customers who are passionately loyal and proud to own and operate Bombardier aircraft. Developed by customer-facing employees, our Customer Credo also supports this goal. It outlines the employee behaviours required to deliver an amazing customer experience. Customer success stories posted on our intranet provide employees with examples of our Customer Credo in action.

As part of our sharpened customer focus, employees are working together to evaluate service delivery at every touch point. They are also establishing shared best practices. Among the changes, customer care representatives at our Business Aircraft Delivery Centres from Wichita to Dorval now dress in similar attire. Reception areas at these sites also have a common look and feel, and service delivery is handled in the same manner.

#### Annual Customer Surveys

We regularly conduct and communicate the results of independent surveys on a variety of areas, including customer engagement and product and service support. We share our targets for these surveys with employees and customers through written communications, videos, conferences and scorecards.

Past industry surveys revealed customer issues with our aircraft-on-ground response times and replacement part availability. As a result, we invested heavily to increase aircraft reliability, improve parts distribution and expand our maintenance capacity and technical support. Over the last 24 months, our survey results have improved significantly, indicating that these investments are paying off with customers.

In both the 2010 *Professional Pilot and Aviation International News* (AIN) product support surveys, customers continued to report increased satisfaction in several areas. Customer satisfaction with our newer *Learjet* and *Global* aircraft accounted for the largest increase among all OEMs in the AIN survey. In the Professional Pilot survey, the gap between the first- and last-placed companies narrowed, indicating that while we are improving so is the competition.

As a result of these positive trends and customer feedback, we will accelerate the pace of our improvement plans moving forward.

For more information, view our customer service and support videos on YouTube.

#### **Prospective Customer Legitimacy**

In our Aerospace group, "Know Your Customer" guidelines ensure our compliance with the U.S. Patriot Act and Canada's antimoney laundering laws. Performing "Know Your Customer" due diligence protects us from becoming an unwitting participant in illegal transactions.

## **4.7.2 TRANSPORTATION**

#### **Trends in the Design Process**



YouRail's final winner: Slava Saakyan and his " Bombardier Journey" design

For many years, operators were in charge of designing rail vehicles. With the advent of privatization, manufacturers increasingly took over the design work. More recently, large and often state-owned rail operators started moving certain design activities back in-house. They provide manufacturers with very detailed specifications, right down to the type of lubricant and paint.

Despite this recent trend, we continue to rely on customer feedback to guide certain vehicle and component designs such as manmachine interfaces and vehicle interiors. Our Customer Relationship Management Program also helps us understand customer strategies, business priorities and requirements. We also reach out to our customers' customers — the passengers — soliciting their input to create more attractive and effective products. One example is our **YouRail** contest held in fiscal 2010. This online open innovation competition solicited design ideas for innovative train interiors from rail enthusiasts worldwide. With this project, Bombardier became the first company in the rail industry to involve Internet users in the future design of trains. An accompanying presence in social media channels like Facebook and Twitter helped to generate tremendous interest in the competition throughout the world. The 2,184 members of our open innovation community submitted 3,807 configured designs and 423 freely created designs. Community members selected the best designs. From these designs, our jury committee chose the final winners. A total of \$7,000 and nine netbooks were awarded.

#### **Designing Rail Solutions with Our Customers**



Extensive joint definition design workshops also allow us to integrate customer feedback into our projects and products. At these workshops, customers and design teams discuss projects and align product specifications with customer needs. Results from customer surveys are also thoroughly analyzed and strategic plans are adjusted accordingly.

Developing our *ECO4* products in collaboration with customers yielded flawless functionality in a broad range of environmental technologies

Another example of close customer collaboration is the Gröna Tåget or Green Train research program in Sweden. With our numerous partners, we are adapting a new generation of energy-efficient, sustainable high speed trains to the Nordic climate and traffic. The Gröna Tåget is equipped with two *ECO4* technologies to maximize total train performance and energy-efficient operation:

- FLEXX Tronic technology with radial self-steering (RSS) suspension and active lateral suspension (ALS)
- MITRAC Permanent Magnet Motor drive

The Gröna Tåget is enhancing the competitiveness of rail compared to other modes of transportation. Its objectives are to consume up to 50% less energy and to reduce emissions, travel times and operational costs.

The Gröna Tåget is running at higher speeds with heightened safety and low track deterioration. It set a new Swedish speed record at 303 kilometres per hour. In tests, we are also operating efficiently using the current rail structure, despite sharing the same tracks with cargo and regional trains.

#### Maintaining Customer Dialogue

Our rail transportation customers are frequently state rail operators and projects take three to five years to complete. It is crucial to maintain an open dialogue throughout this process to ensure customer satisfaction.

Our Chief Country Representatives (CCRs) are appointed in countries with significant business opportunities to:

- Liaise with customers, governments and their agencies, labour unions and all other stakeholders
- Develop and execute country-specific strategies in cooperation with all our divisions
- · Coordinate customer interfaces and activities
- · Help rapidly resolve key issues with all relevant stakeholders

We also appoint Regional Sales Executives (RSEs) in selected emerging markets to perform the same role as our CCRs.

#### **Measuring Customer Satisfaction**

In 2007, we launched our Customer Intimacy Program (CIP) with our top 25 customers who together account for more than 70% of our annual order intake. The CIP:

- Strengthens relations with our key customers
- Helps us better understand their business priorities, business models and investment programs
- Provides a sustainable platform to identify key issues and resolve them in a prompt manner

As part of CIP, we created key accounts to address all issues with a given customer. Each account is headed by a senior executive who is often the respective CCR. This program is part of our LEAD initiative, which is one of the TOPSEVEN initiatives aimed at maintaining and expanding our market leadership.

TOPSEVEN is a performance program focusing on six improvement initiatives, including market and customer approach. Customercritical aspects are addressed in various LEAD initiatives and progress is reviewed on a monthly basis with steering committees and on a quarterly basis at the top management level.

In 2009, we launched a customer satisfaction measurement program as part of CIP. Twice a year, we measure the level of customer satisfaction with our performance and present the results to management. Working with customers, we develop action plans to address areas requiring improvement. Involving customers in this process significantly increases their trust and loyalty.

During project execution, monthly operational reports track key indicators, including delivery performance and customer satisfaction.

In fiscal 2010, major customer Deutsche Bahn ranked us among its two top service materials suppliers. This is a significant improvement over our fiscal 2008 ranking.

#### Product Roadmaps Geared to Long-term Customer Needs

For each division and major product line, we develop product roadmaps based on technology trends and future customer needs.

Our ECO4 program is an excellent example. It is built on the four cornerstones of energy, efficiency, economy and ecology. With ECO4, we are setting new standards in profitable, sustainable mobility for our customers by radically improving total train performance.

*ECO4* consists of fully operable products and solutions that can be easily customized to a specific fleet. It assists train operators in enhancing fleet reliability and performance while reducing their carbon footprint and energy costs.

#### **BOS: Excellence in Execution**

Our Bombardier Operations System – Excellence in Execution (BOS) program supports our commitment to excellence and our customer orientation. BOS integrates all aspects of the operations systems. Its five pillars — results, processes, principles, values and customers — guide our efforts to deliver superior results.

For our customers, superior results means:

- Built-in quality
- Short lead time
- People involvement
- Standardization
- Continuous improvement

BOS assessments and best practices are helping us create an integrated Lean production system to consistently meet customer expectations. We also gather data using our Advanced System for Project Information (ASPI) to predict, monitor and understand our customers' future needs.

#### **PRO Audit: Internal Audit Process**

PRO Audit, our internal project management audit process, is deployed at regular intervals during a customer's project lifecycle. It helps us:

- Monitor progress
- Identify and schedule improvement actions and additional resources if required
- Assess how well we are meeting stakeholder needs

We are currently planning to implement PRO Audit in our Aerospace Group.

# Operating Sustainably

- 5.0 Operations
- 5.1 Objectives
- 5.2 Our Environmental Performance
- 5.3 Energy and Carbon Management Strategy

# 5.4 Environmental Initiatives

- 5.4.1 Renewable Resources
- 5.4.2 Green Building Policy
- 5.4.3 Energy Efficiency
- 5.4.4 Events' Carbon Footprint
- 5.4.4 HSE Data Management
- 5.4.4 New Environmental Targets



# Operating Sustainably

# 5.0 Operations

# Strategic Priority: Reduce Our Environmental Footprint

We strive to continuously reduce any detrimental environmental impact generated by our products and operations. Lifecycle analysis confirms that customer use and maintenance of our products generates the greatest impact. Nonetheless, the environmental footprint of our service and manufacturing facilities remains an ongoing focus.

In fiscal 2010, the Bombardier Health, Safety and Environment (HSE) Council fine-tuned our vision for minimizing our operations' environmental impact as part of Our Way Forward initiative. The vision builds on the principles and commitments of our HSE Policy.

Our overriding objective is to **achieve carbon-neutral operations by 2020**. Other key long-term environmental goals include:

- Switching to renewable materials where possible
- · Continuously decreasing the amount of water, energy and raw material used in our production processes
- · Eliminating the use of restricted substances\*
- Delivering a "zero waste" performance

Greater innovation and efficiency improvements in production processes, along with significant investments, will be essential to achieve these goals.

\* Restricted substance: A material or substance classified by Bombardier as restricted, but is not prohibited by law. These substances shall not be used by Bombardier or in its products if they can be technically and cost-effectively avoided.

# 5.1 Objectives

# **OPERATIONS**

Energy and Carbon Management		
Fiscal 2010 Objectives	<ul> <li>Conduct a more detailed assessment of energy-efficiency improvement and GHG emission reduction opportunities for the most relevant sites</li> </ul>	
	<ul> <li>Complete an inventory of available renewable energy resources in the countries where we operate and assess the feasibility of progressively switching to this type of energy</li> </ul>	
	<ul> <li>Reduce our energy consumption and GHG emissions, achieving an additional 10% between fiscal 2010 and 2015</li> </ul>	
What We Did	<ul> <li>Completed a detailed inventory of energy sources and GHG emissions at all manufacturing plants and established site-specific targets for reducing our operations' environmental footprint</li> </ul>	
	<ul> <li>In Transportation, collected increasingly reliable data on energy efficiency improvement (committed versus achieved) from our Energy Efficiency at Our Facilities (ENEFA) projects</li> </ul>	
	<ul> <li>Completed an inventory of available renewable energy providers (including costs) for our European operations and began assessing the feasibility of progressively switching to this type of energy</li> </ul>	
	<ul> <li>Increased data reliability and enhanced understanding of our energy and carbon footprint with our new HSE Information Management System (HSE IMS)</li> </ul>	
	• Decreased energy consumption by 6.7% and v emissions by 12.3% compared to fiscal 2009	
	Offset carbon emissions generated by company events	
Progress		
Fiscal 2011 Objectives	Launch an annual Green Fund across the company to finance energy-saving initiatives	
	<ul> <li>Establish site-specific CO<sub>2</sub> reduction targets for our Transportation sites</li> </ul>	
	<ul> <li>Implement program to achieve carbon neutrality</li> </ul>	
	<ul> <li>Increase focus on travel-related emissions and begin implementing a green business car policy</li> </ul>	

Environmental Performance Management		
Fiscal 2010 Objectives	<ul> <li>Start implementing our HSE Information Management System (HSE IMS) to improve environmental data accuracy and consistency</li> <li>Begin monitoring our new environmental indicators</li> <li>Adopt company-wide green building guidelines for new facilities based on third-party certification requirements</li> </ul>	
What We Did	<ul> <li>Deployed first module of HSE IMS and enhanced reporting scope with new environmental indicators</li> <li>Completed HSE Management System certification (ISO 14001) at all remaining eligible Aerospace sites</li> <li>Established green building principles for new Aerospace facilities (all new facilities must obtain third-party environmental certification, including CIASTA in Mirabel, <i>CSeries</i> wing plant in Belfast and <i>Learjet 85</i> plant in Queretaro)</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Further enhance our centralized HSE IMS, integrating health, safety and environmental data collection and site-specific management programs and tools</li> <li>Begin monitoring new environmental indicators (waste valorization index, use of volatile organic compounds (VOCs) and number of environmental incidents) across Bombardier</li> <li>Enhance existing environmental reporting using these new indicators to better fulfill GRI requirements</li> <li>Achieve third-party environmental certification (e.g. LEED) for our new facilities</li> <li>Explore applying green building guidelines to existing buildings</li> </ul>	

# 5.2 Our Environmental Performance

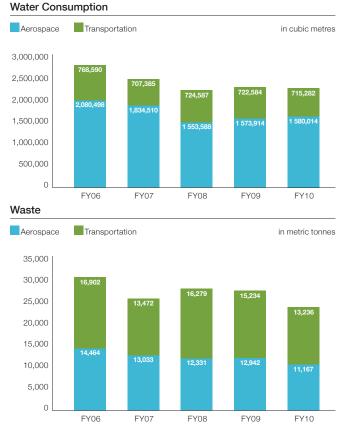
# Strategic Priority: Continuously Improve Our Environmental Performance

Here is an overview of our operations' consolidated environmental performance (absolute values).

# Water Consumption

We decreased our water consumption by 35% or 1,233,911 cubic metres between fiscal 2004 and 2010. This reduction is equivalent to the volume of **water contained in 411 Olympic-sized swimming pools.** 

Our water consumption remained relatively stable compared to fiscal 2009. This is partially due to a leak in the water system at our







Mirabel site. We have since repaired the leak and are exploring other possible reasons for the rise in water consumption in our Aerospace group.

# Waste

We reduced waste generation by 22.9%, from 31,659 metric tonnes in fiscal 2004 to 24,403 metric tonnes in fiscal 2010. This is equivalent to **taking more than 200 fully loaded merchandise trucks off the road**.

In fiscal 2010, we decreased our waste generation by 13.4% or 3,773 tonnes compared to fiscal 2009. This is equivalent to **removing more than 100 fully loaded trucks from the road.** Much of the decrease is due to the recession-driven slowdown in our aviation activities. In Aerospace, we reduced the nonhazardous waste sent to landfill sites by 13.7%. In Transportation, the reduction of 1,998 tonnes resulted from the completion of two one-off projects in Matranovak and Camden, which generated extra waste in fiscal 2009.

**Note:** Waste generation represents the total quantity of nonreusable, non-recyclable hazardous and non-hazardous waste generated. A significant portion of our Transportation group's waste results from service operations — for example, waste generated by users of our products — for which we do not have complete control. In fiscal 2011, we will begin monitoring a new waste-related index called the waste valorization index. This index will help us track our progress in recycling waste. It defines the amount of waste valorized or recycled versus the total mass of waste.

# Hazardous Waste

We decreased hazardous waste by 24.8%, from 13,496 metric tonnes in fiscal 2004 to 10,146 metric tonnes in fiscal 2010. This is comparable to **taking 96 fully loaded merchandise trucks off the road**.

Compared to fiscal 2009, we produced 9.7% or 1,091 less tonnes of hazardous waste in fiscal 2010. The slowdown in Aerospace helped reduce hazardous waste production to 2004 levels.

Most notably, we have generated 46% less hazardous waste in our Transportation group since 2004. More stringent hazardous waste guidelines as prescribed by our list of restricted substances drove the improvement.

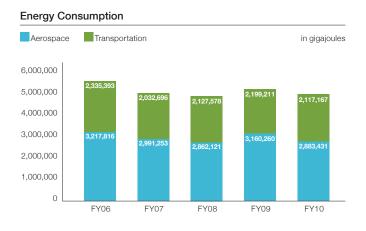
# **Energy Consumption**

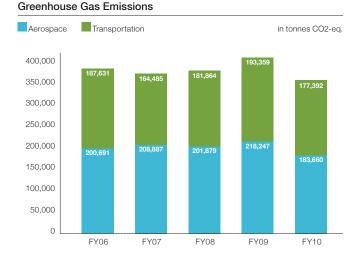
We considerably reduced our absolute energy consumption compared to fiscal 2004. Over the past six years, our manufacturing and service network achieved an overall 20.3% or 1,271,916 gigajoule reduction in energy consumption. This saving would **power the streetlights of a city of about 4.2 million people for over a year**.

In fiscal 2010, we decreased our energy consumption by 6.7% or 358,873 gigajoules compared to fiscal 2009. The production slowdown in our Aerospace group accounted for much of this reduction. In addition, our Belfast, St-Laurent and Wichita sites implemented ingenious energy-efficiency projects.

Despite a 4% increase in working hours at our Transportation sites, energy consumption dropped by 3.5% year-over-year. This reduction is due to energy-efficiency projects in sites such as Crespin and Bruges, as well as decreasing activities in less energy-efficient sites.

Restatement: Fiscal 2009 figures for our Aerospace group are higher than in last year's report due to a new energy baseline





completed during 2010, as well as the inclusion of a larger number of sites in our energy inventory.

# **Greenhouse Gas Emissions**

Between fiscal 2004 and 2010, our manufacturing and service network achieved an overall 19.9% reduction, or approximately 90 kilotonnes in absolute figures, in total annual  $CO_2$  emissions. This is equivalent to **removing more than 16,300 cars from the road every year**.

Compared to fiscal 2009, we lowered our  $CO_2$  emissions by 12.3% or 50,554 tonnes in fiscal 2010. This is comparable to **removing over 9,175 cars from the road every year**. The decrease is mainly attributable to the slowdown in Aerospace and the improved energy-to- $CO_2$  performance of our electricity providers as they retired older energy-generation plants.

With the implementation of our new data management system, we decided to include the performance of smaller, previously unmonitored sites. Had we not included these sites in our fiscal 2010 data, the figure would have been lower and the year-over-year reductions even more significant.

We are currently reviewing the scope of our energy and GHG coverage to obtain the most accurate picture of our consumption. However, we believe that this re-scoping exercise will have a limited impact on our data and trends.

**Restatement**: Fiscal 2009 figures for our Aerospace group are higher than in last year's report due to a new greenhouse gas baseline completed during 2010, as well as the inclusion of a larger number of sites in our greenhouse gas inventory.

# **Data Accuracy**

Our environmental data is compiled on a quarterly basis by our sites and submitted to the Corporate HSE function for inclusion in our Environmental Reporting database. Once recorded, an internal quantitative accuracy review is conducted to identify any inconsistencies from the previous year.

# **Data Verification**

The information provided for our five environmental indicators is only partially verified by an external party. Energy and greenhouse gas emissions data from our Aachen and Belfast sites are verified by external parties under the European Union Emission Trading Scheme (EU ETS). In addition, eight German sites and the Wroclaw sites in Poland receive annual external verification of all environmental data under the EU Eco-Management and Audit Scheme (EMAS).

With the successful implementation of our new HSE data management solution, we have enhanced the accuracy and consistency of our data, which will prepare us for broader external verification.

# 5.3 Our Energy and Carbon Management Strategy

At Bombardier, we are determined to minimize the impact of our operations on the globe's climate. This requires that we continue to drive down our operations' carbon footprint. Our Energy and Carbon Management Strategy (EMCS) is helping us do just that.

# Three-pronged Strategy

Our ECMS calls on us to minimize our overall carbon footprint through a three-pronged approach focused on:

- Improved energy efficiency
- Increased use of renewable energy sources
- Carbon offsetting if required either due to the unavailability of regenerative energy or for economic reasons

This will allow us to achieve our vision of delivering carbon-neutral operations by 2020.

# **Energy and Carbon Targets**

As part of our ECMS, we established the following target:

• Reduce our facilities' energy consumption and GHG emissions by an additional 10% between fiscal 2010 and 2015.

This target builds on our 20.3% reduction in energy consumption and 19.9% reduction in GHG emissions achieved between fiscal 2004 and 2010.

In fiscal 2010, we completed a detailed inventory of energy sources and GHG emissions at all manufacturing plants, services centres and main offices. This inventory allowed us to begin establishing site-specific targets for reducing the environmental footprint of our operations.

Also in fiscal 2010, we completed an inventory of available renewable energy sources in the countries where we operate and began assessing the costs and feasibility of progressively switching to this type of energy.

Based on theses inventories and studies, our Transportation group began a preliminary analysis to evaluate the options available for delivering carbon-neutral operations. At this stage, further studies and validation are required.

The approach is based on three fundamental principles: energy efficiency, renewable energy use and carbon off-setting.

# 5.4 Environmental Initiatives

Over the years, efforts to reduce our environmental footprint have become an integral part of our day-to-day activities. Several programs are in place to promote local actions that help conserve energy, reduce emissions, save water and generate less waste.

# **5.4.1 FOCUSING ON RENEWABLE RESOURCES**

Some of our major manufacturing sites are located in Québec, Canada, a province with significant renewable hydro-electricity. In fiscal 2010, Bombardier's total use of renewable energy accounted for approximately 32% of our global energy consumption compared to 29% in fiscal 2009.

In fiscal 2010, we completed a study to obtain a more comprehensive understanding of our sites' green energy use worldwide as well as the availability and cost of renewable energy. This will help us identify opportunities to harness new sources of renewable energy and further reduce our environmental footprint.

# **5.4.2 GREEN BUILDING POLICY**

In fiscal 2010, we started developing a Green Building Policy within our Aerospace group. The policy stipulates minimum requirements for environmental certification with third parties such as LEED (Leadership in Energy and Environmental Design) for all new Bombardier facilities.

Certification requirements cover:

- Land on which the facility is built
- Use of renewable energy and optimization of energy performance
- Indoor environmental quality, including air and lighting quality
- Efficient usage of water
- Materials used to build the facility

Despite our expanding manufacturing footprint due to the *CSeries* and *Learjet 85* aircraft programs, we will continue our energy reduction trend. We are building our new *CSeries* and *Learjet 85* facilities to meet third-party certification requirements such as LEED. These facilities will be more energy efficient, increase the use of recyclable materials and decrease the amount of waste generated during construction.

In our Transportation group, the Systems division will seek LEED certification for its existing buildings in fiscal 2011.

# 5.4.3 ADVANCING ENERGY EFFICIENCY AT OUR SITES

In our Transportation group, the Energy Efficiency at Our Facilities (ENEFA) project allowed us to assess our sites' energy-efficiency performance against internal benchmarks.

As part of our energy-efficiency focus, we completed an energy survey of our Transportation group's 26 major production sites. This enabled us to identify energy consumption and key emission sources.

Based on the assessment, we targeted and initiated projects at nine sites, which should save approximately 50,000 MWh every year. This saving represents 15% of the annual consumption of our major production facilities. To date, five sites have implemented energy-efficiency programs. Additional sites will follow in the near future.

Site-based projects include building renovations, heating system upgrades, energy source and lighting system optimization, and conversions to district heating instead of site-based heating. These measures were partly identified in cooperation with external partners such as the Carbon Trust for United Kingdom sites.

Our sites also adjusted heating and cooling systems to automatically maintain pre-set heating levels and lower night-time temperatures in office buildings, workshops and production sites.

You will find below more information on local efforts to reduce our environmental footprint across all Bombardier sites.

# Employee Awareness

### All Aerospace sites

- Produced and distributed a corporate social responsibility video on a yearly basis to all Aerospace sites to raise awareness of environmental and other social responsibility issues and achievements
- Conducted an awareness campaign in Bfocus, our employee publication, to promote our environmental strategy, including our Design for Environment principles and lifecycle approach
- Provided employees with regular updates on our environmental performance results while leveraging key dates during the year such as Earth Day on April 22

# Derby, England (Transportation)

- Appointed additional energy champions
- · Completed an energy checklist for two-thirds of site
- Established a poster campaign
- Initiated climate change toolbox talks

### Baroda, India (Transportation)

• Launched an energy-efficiency awareness program

### La Pocatière, Canada (Transportation)

• Established an "Energy Zero" program

#### Plattsburgh, United States (Transportation)

• Created a resource conservation team and a green team; included energy efficiency in the Bombardier Operations System (BOS)

# **Building Construction**

#### Mirabel, Canada (Aerospace)

• Built the Complete Integrated Aircraft Systems Test Area (CIASTA) to meet third-party environmental certification such as LEED (Leadership in Energy and Environmental Design) (January 2010)

#### Belfast, U.K. (Aerospace)

• Built the CSeries aircraft composite wing facility to meet third-party environmental certification such as LEED (July 2010)

#### Querétaro, Mexico (Aerospace)

• Built the Learjet 85 assembly facility to meet third-party environmental certification such as LEED (July 2010)

# Intelligent and High-Efficiency Lighting

#### Administrative Centre (Aerospace)

• Implemented a new lighting schedule aligned with employee needs at the Administrative Centre to conserve energy

# Wichita, United States (Aerospace)

• Installed building automated control systems to enhance energy conservation management. These systems allow us to monitor and adjust lighting with automatic shutoffs, motion sensors and zoned areas.

# Dorval (GCC), Canada (Aerospace)

• Replaced metal halide lamps with fluorescent lamps in the shop to reduce energy consumption

### Belfast, U.K. (Aerospace)

• Installed energy-efficient lighting within Newtownabbey facility using efficient fittings and intelligent control devices

### Saint-Laurent (DBF), Canada (Aerospace)

• Replaced metal halide lamps with fluorescent lamps in the shop

# Toronto, Canada (Aerospace)

- Replaced old hangar lights in Bay 5, resulting in annual savings of 49,000 kWh and a 35% increase in lighting (completed in January 2010)
- Replaced old hangar lights in Bay 9, resulting in annual savings of 180,000 kWh (completed in August 2010)
- Replaced old hangar lights in Bay 7, resulting in annual savings of 27,000 kWh (completed in June 2010)
- These combined efforts reduced the equivalent of 100 60-watt light bulbs burning for more than four-and-a-half years.

# Several Transportation sites, including Australia; Derby, England; Goerlitz and Mannheim, Germany; Pittsburgh and Kanona, United States

• Installed modern lights to reduce overall energy consumption

# Derby, England; Hennigsdorf, Germany (Transportation)

• Installed motion detectors to reduce lighting levels when no employees are on shop floors

### Vienna, Austria; Baroda, India (Transportation)

• Installed timers and light sensors for exterior lights

# **Renewable Energy Sources**

#### Belfast, U.K. (Aerospace)

- Launched a detailed feasibility study to evaluate the potential of using anaerobic digestion as an energy source
- Launched a pilot study to extract groundwater from an underlying aquifer for cooling purposes

# Mirabel, Canada (Aerospace)

• Installed two walls of solar panels to pre-heat fresh air inlets in the hangars

# **Thermal Insulation and Energy Recovery**

#### Ceska Lipa, Czech Republic (Transportation)

• Installed anti-draught air curtains and frequency transformers in lifting devices. Along with other energy-efficient measures, this saves up to 1.4 GWh annually. This is equivalent to powering the streetlights of a city of 50,000 inhabitants for three months.

# Hennigsdorf, Germany; Bruges, Belgium; Derby, England (Transportation)

· Installed roof insulation and thermal efficient windows

# Baroda, India (Transportation)

• Began monitoring the ventilation plant to improve the heating system

# Goerlitz, Germany (Transportation)

• Started using air control systems with heat recuperation to improve the heating system

# Bruges, Belgium (Transportation)

Installed stratificators to improve the heating system

# Vienna, Austria (Transportation)

• Started using waste heat from the compressor unit to generate warm water

# La Pocatière, Canada (Transportation)

• Began using heat generated by compressors and the laser-cutting machine to heat parts of the workshop. This has contributed to annual heat savings of 112,000 KWh, which is equivalent to powering 100 60-watt light bulbs for more than two years.

# Belfast, U.K. (Aerospace)

- Converted space heating requirements at our Crawfordsburn Road Facility and Aircraft Assembly Building to direct-fired gas heaters
- Modified the condensate recovery system and installed heaters to use recoverable steam for space heating in the Newtownabbey facility

### Dorval (GCC), Canada (Aerospace)

• Upgraded the shop with new insulation and windows, reducing overall energy consumption

# **Process and Equipment Improvement**

### Belfast, U.K. (Aerospace)

- Installed inverter controls on various production pumps, saving in excess of 160,000 kg CO<sub>2</sub>
- Installed a variable speed air compressor, saving 210,000 kWh or 113,000 kg of CO<sub>2</sub>
- Automated the Penetrant Fracture Detection plant, significantly reducing liquid hazardous waste removal from the site, maximizing the filter lifespan and ensuring compliance with discharge consent limits

#### Dallas, USA (Aerospace)

• Reprogrammed the air-conditioning system to automatically turn on and off at specific times, saving 154,680 kWh in fiscal 2010

#### Tucson, USA (Aerospace)

• Installed a compressed air unit in our wastewater plant, saving 174,875 kWh annually on demand. This represents energy savings equal to 100 60-watt light bulbs burning for more than three years.

#### Wichita, USA (Aerospace)

- Replaced two existing transformers with one, more efficient transformer, reducing load losses
- Installed automated building control systems to enhance energy conservation. These systems allow us to monitor and adjust HVAC with automatic shutoffs.

#### St-Laurent, Canada (Aerospace)

- Implemented a non-chromated low VOC primer to protect composites parts
- Conducted an energy-efficiency study to support continuous improvement initiatives throughout the plant

#### St-Laurent (DBF), Canada (Aerospace)

• Replaced an air compressor with a more energy-efficient system, reducing energy consumption

# Reduce, Reuse and Recycle Program

# Fort Lauderdale, USA (Aerospace)

• Initiated a recycling program to recycle 60% of the waste and cut landfill by 90%

• Improved recycling of metallic residues and dust coming from the aluminum chips cyclone drying system (recycled 35 metric tonnes)

# Dorval, Canada (Aerospace)

• Initiated the first phase of a process to design and reuse the container used to ship certain parts from external suppliers to the Challenger business jet assembly plant

# Montreal Sites (Aerospace)

• Agreed to purchase eco-responsible products, such as bathroom tissues and hand towels from Cascades

# Water Conservation

### Administrative Centre, Canada (Aerospace)

• Installed automatic faucets and flush control systems in all public facilities to reduce water consumption

# 5.4.4 REDUCING OUR EVENTS' ENVIRONMENTAL FOOTPRINT

# **Annual Meeting of Shareholders**

As we did in fiscal 2009, we held a carbon-neutral Annual Meeting of Shareholders on June 2, 2010 in Montréal, Canada. We purchased carbon offset credits from Offsetters, a Canadian-based provider, to neutralize the 23 tonnes of carbon emissions generated by the meeting due to:

- Travel and lodging for out-of-town participants
- Energy, food and paper consumed at the event

All Offsetters funds are invested in renewable energy and energy-efficiency projects.

# 2010 Vancouver Olympic Winter Games Sponsorship

We received two "Sustainability Stars" from the Vancouver Organizing Committee for the 2010 Olympic and Paralympic Winter Games (VANOC). These awards recognized our efforts to help improve the sustainability of the 2010 Winter Games. One of the Stars was for designing and manufacturing the 2010 Olympic Torch and 2010 Paralympic Torch. The other recognized our partnership with the City of Vancouver in developing "The Olympic Line," Vancouver's 2010 streetcar.

We also bought carbon offset credits from Offsetters to compensate for the GHG emissions resulting from our sponsorship of the 2010 Vancouver Olympic Winter Games. This enabled us to offset a total of 175 tonnes of CO<sub>2</sub>, generated primarily by travel and accommodations.

# **Olympic Torch**

Working in collaboration with VANOC, we created an Olympic Torch with a modern, innovative design and minimal environmental footprint. Ninety per cent of the materials used to produce the 2010 Olympic and Paralympic Torches, including the sheet moulding compound, are recyclable. The combustion system minimizes greenhouse gas emissions.

Both the aluminum from the cylinders and remaining fuel were recycled following the 2010 Torch Relay. We designed and assembled the torches in Canada.

# **Environmental Responsibility at Industry Fairs**

In our Aerospace group, we launched our recycling program at the Farnborough Airshow in 2008. We provided the recycling bins found throughout the entire site. We brought this program to the Paris Airshow in 2009 and again to the Farnborough Airshow in 2010.



Find out more about our recycling program on YouTube.

Our purpose-built exhibition and meeting facility at airshows also exemplifies our commitment to reduce our environmental impact. Since 2002, this facility has incorporated sustainable architectural features and workspaces using recycled materials. It promotes responsible manufacturing practices through its reusable modular design. For example, exhibition material used at the Farnborough Airshow in July 2010 was originally employed at the Paris and Dubai Airshows in 2009 followed by the Singapore Airshow in early 2010.

Similarly in our Transportation group, we also reuse furniture and displays across the diverse industry fairs. For example,

modules used at the Railtex exhibition in the U.K. were then shipped to Rail-Tech in the Netherlands, MetroRail in the U.K. and the UITP exhibition in Austria.

# 5.4.5 IMPROVING HSE DATA MANAGEMENT

In fiscal 2010, we successfully implemented our new HSE Information Management System (HSE IMS) across the company. This centrally managed system enables us to:

- Improve data quality, integrity and traceability for reporting purposes
- Monitor additional performance measures
- Make better strategic decisions about HSE policies, programs and resources
- Present more clearly our HSE progress in fiscal 2011

# **Environmental Standards and Certifications**

In fiscal 2010, our Aerospace group completed ISO 14001 certification at all of its eligible manufacturing and service sites.

In Transportation, we hold a consolidated, multisite certification to the ISO 9001: 2000 quality standard, and 100% of our eligible facilities have been ISO 14001 certified since the early nineties. Nine of our European facilities at eight locations comply with the European EcoManagement and Audit Scheme (EMAS). Our component manufacturing sites comply with the International Railway Industry Standard (IRIS) and are certified to the ISO 9001 quality standard.

Focused on continuous improvement, the ISO 14001 EMS standard guides our efforts to identify and manage our activities' environmental aspects and impacts. It enables us to track and improve environmental impact reduction programs across our manufacturing, service, maintenance and engineering operations.

# **New Key Performance Indicators**

In fiscal 2010, our Transportation group began monitoring the three new environmental key performance indicators (KPIs) highlighted below. We will roll out these KPIs across the rest of our organization in fiscal 2011.

#### Waste valorization index

This index defines the amount of waste valorized or recycled versus the total mass of waste. It enables us to monitor our progress in waste treatment. Examples of waste valorization are material recycling and energy recovery.

While we focus on optimizing our recycling rates, we must never overlook opportunities to reduce or reuse waste at source. Reducing or reusing waste, as opposed to recycling it, remains our first choice.

# Use of volatile organic compounds

Our long-term goal is to eliminate air emissions generated by the use of chlorinated solvents in our processes. Volatile organic compounds (VOCs) readily evaporate into the air. Their contribution to ground-level ozone formation makes them potentially harmful to both humans and the environment.

Sources of VOCs include the solvents in paints, adhesives and degreasing agents. Ongoing initiatives to reduce VOCs include replacing solvent-based paints with water-based paints. Several of our sites are taking steps to reduce their use of VOCs, including:

- Ceska Lipa, Czech Republic
- Randers, Denmark
- Thunder Bay, Canada
- Pittsburgh, United States

In fiscal 2011, we will establish our baseline and a VOC reduction target for Bombardier.

# Number of environmental incidents

These incidents include significant spills and non-compliance situations. Although we already monitor non-compliance situations, we are aligning our reporting with industry practices to better analyze and prevent environmental incidents.

# 5.4.6 NEW ENVIRONMENTAL TARGETS

# **Energy and Carbon**

Our Energy and Carbon Management Strategy (ECMS) calls on us to minimize our overall carbon footprint through a three-pronged approach focused on:

- Improved energy efficiency
- Increased use of renewable energy sources
- Carbon offsetting if required either due to the unavailability of regenerative energy or for economic reasons

Our overriding objective is to deliver carbon-neutral operations by 2020. As part of our ECMS, we established the following target:

• Reduce our facilities' energy consumption and GHG emissions by an additional 10% between fiscal 2010 and 2015

This target builds on our 20.3% reduction in energy consumption and 19.9% reduction in GHG emissions achieved between fiscal 2004 and 2010.

In fiscal 2010, we completed an inventory of available renewable energy sources and related costs in the countries where we operate. In fiscal 2011, we will assess the feasibility of gradually switching to this more environmentally focused energy.

# Water and Waste

In fiscal 2010, we also established the following reduction targets for water consumption and waste generation:

### Water consumption

• Achieve an additional annual 3% reduction until fiscal 2013 based on fiscal 2010 figures

### Waste and hazardous waste

• Achieve an additional annual 3% reduction until fiscal 2013 based on fiscal 2010 absolute values

# Waste valorization index

• Establish a baseline and targets at the HSE Council Meeting in November 2010

# Engaged Suppliers

- 6.0 Supply Chain
- 6.1 Objectives
- 6.2 Supplier Code of Conduct
- 6.3 Suppliers and Sustainability

# 6.4 Supplier Relationship

- 6.4.1 Performance
- 6.4.2 Communication
- 6.4.3 Suppliers and the Community



# Engaged Suppliers

# 6.0 Supply Chain

# Strategic Priority: Engage Our Suppliers in Sustainability Matters

Our global supply chain is constantly evolving and increasingly integrated within our activities. More than ever, our suppliers' expertise plays a critical role in designing and manufacturing advanced components for our planes and trains. This makes suppliers key partners in our success.

Along with this changing dynamic, the global economic recession created significant supply chain challenges. It is more crucial than ever to work closely with our suppliers and manage our supply chain responsibly. This means:

- Ensuring the efficiency and economic viability of our supply chain
- Enhancing the sustainability of our procurement processes
- Promoting respect for human rights and internationally sanctioned labour standards across our supply chain

# 6.1 Objectives

Supply Chain Management		
Fiscal 2010 Objective	Implement the first phase of a compliance program for the Supplier Code of Conduct	
What We Did	<ul> <li>As of August 31, 2010, obtained the commitment of 200 Aerospace suppliers representing 83% of aircraft-related spend and 406 Transportation master vendors to respect our Supplier Code of Conduct or adhere to equivalent codes of conduct</li> </ul>	
	<ul> <li>Started working with Aerospace suppliers to reduce hexavalent chromium use in products (already done in Transportation)</li> </ul>	
	<ul> <li>Worked closely with industry stakeholders to develop strategies to enhance competitiveness of small and mid-sized businesses</li> </ul>	
	<ul> <li>Established an innovative collaboration with Cascades to benefit from their environmental expertise and increase our use of eco-responsible paper products</li> </ul>	
	<ul> <li>Strengthened our relationship with universities on supply chain matters and shared best practices/ expertise</li> </ul>	
	<ul> <li>Worked with rail industry associations such as the German Rail Industry Association (VDB) and German Electrical and Electronic Manufacturers' Association (ZVEI) to develop a common code of conduct for rollout across Europe</li> </ul>	
Progress		
Fiscal 2011 Objectives	• Develop a comprehensive five-year roadmap and plan to reduce restricted and hazardous substance use in supplied products and work with other aerospace Original Equipment Manufacturers to harmonize, where feasible, supplier requirements to accelerate overall industry progress in this area	
	Continue deployment of our compliance program for our Supplier Code of Conduct	
	<ul> <li>Explore options to harmonize our Code of Conduct and an associated verification approach with the European rail industry (UNIFE) to reduce monitoring efforts</li> </ul>	
	<ul> <li>In Transportation, launch a supplier survey focusing on supplier relations management and communication which will involve at least 30% of our master vendors</li> </ul>	

# 6.2 Our Supplier Code of Conduct

# Strategic Priority: Ensure a High Standard of Corporate Responsibility Across Our Supply Chain

Launched in 2008, our Supplier Code of Conduct embodies the United Nations Global Compact principles. We are now developing a monitoring and compliance program, primarily based on self-evaluation, to ensure our suppliers respect the Code's principles. This program will also include our ability to ensure suppliers address any breach or behaviour not in line with the Code's principles in a timely manner.

# Aerospace

As of August 2010, a total of 200 suppliers committed to respecting the principles of our Supplier Code of Conduct, compared to 83 in fiscal 2009. Of those, 84 are aircraft equipment suppliers representing 83% of our total aircraft-related procurement spend. The remaining 116 suppliers provide non-aircraft related goods and services, representing 64% of our non-aircraft-related spend.

In the CSeries program, suppliers accounting for 100% of the aircraft-related spend have committed to adhering to our Code.

# Transportation

By the end of fiscal 2010, all 406 main Transportation suppliers, accounting for 80% of our procurement spend, were compliant with our Supplier Code of Conduct compared to just over 120 in 2009. Compliant means:

- They have signed our Code, or
- They have signed equivalent industry association codes, or
- They have confirmed that their corporate responsibility system covers our Code and we have verified this fact, or
- The supplier's commitment to our Code is covered by its parent company's commitment.

Our Transportation group only asks its master vendors to sign the Code. Master vendors are strategic suppliers and suppliers with high annual spend. By the end of fiscal 2010, all of our incumbent master vendors were compliant with our Code. Our goal is to ensure that all of our master vendors remain committed to actively adhering to the Code.

In fiscal 2010, we explored solutions for assessing compliance with the Code. When doubts exist, we have decided to ask the supplier to conduct a self-assessment and report back to us. If a second step is required, we will audit the supplier ourselves.

Supplier Code of Conduct issues are part of our ongoing Supplier Evaluation and Approval Process. We are currently exploring options to harmonize our compliance programs and external audits within the UNIFE (Association of the European Rail Industry) framework to reduce both monitoring efforts and compliance burdens on suppliers.

# 6.3 Suppliers and Sustainability

# Strategic Priority: Improve Our Suppliers' Sustainability

Engaging our suppliers through our Supplier Code of Conduct strengthens their commitment to adhere to our health, safety and environment (HSE) standards. So does actively involving suppliers in product responsibility through our Design for Environment and Lifecycle Assessment processes.

# Safeguarding Supplier Health and Safety

When we updated our HSE Policy in fiscal 2009, we clarified our HSE vision for all stakeholders present on our sites, including suppliers. In fiscal 2010, we continued to leverage our HSE Policy, HSE directives and our Supplier Code of Conduct to enforce high standards across our facilities and entire supply chain. Committing to OHSAS 18001, ISO 14001 or equivalent HSE standards is also an integral part of all our supplier contracts.

# Involving Suppliers in Product Responsibility

We systematically involve suppliers in design decisions early on in our product development process. This enables us to explore optimal designs with them and influence their decisions to reduce our products' lifecycle impacts on the environment.

We actively encourage suppliers to:

- Reduce and progressively eliminate their use of restricted substances and hazardous materials
- Select materials and processes that enhance our products' end-of-life recyclability

We also work with other aircraft and rail technology manufacturers to drive, when feasible, harmonized roadmaps and requirements to reduce and eliminate certain substances.

For example in fiscal 2010, our Aerospace group began working with suppliers to reduce the use of hexavelent chromium, a hazardous substance, in certain products. In fiscal 2011, we will develop a five-year roadmap and plan to reduce restricted and hazardous substance use in supplier products. We will also partner with other aerospace Original Equipment Manufacturers to harmonize, where feasible, supplier requirements to accelerate overall industry progress in this area.

# Joint R&D Projects

Ongoing joint research and development activities with our suppliers continue to yield new technologies that further improve our products' environmental performance.

In our **Aerospace group**, we are collaborating with several suppliers to develop key technologies for more electrical aircraft and increased use of composites. These technologies help us achieve our Design for Environment goals.

In our **Transportation group**, we partnered with the engine manufacturer MTU to repower and modernize 42 Type Rc2 electric locomotives and 62 Type T44 diesel locomotives in Sweden. The oldest of these locomotives was built in 1968. The PowerModules with MTU 12V 4000 R43 engines represent the most advanced and ecologically friendly rail traction technology currently available. They are also among the first to meet the new emission limits in force.

The repowering of the locomotives for the end-user Green Cargo was achieved in record time. Fitted with third-generation common-rail fuel injection, these engines employ phased fuel injection electronically controlled by a computer. The high pressure at which the fuel is injected optimizes combustion and lowers the amount of fuel required. The result is less emission of nitrogen oxides, particulates and carbon dioxide.

In addition to the engine's reliability, the MTU Series 4000:

- Reduces fuel consumption by 20%
- Lowers emissions by 75% percent lower
- Significantly decreases external noise levels

# Joint Environmental Initiatives

In fiscal 2010, our Aerospace group signed an agreement with Cascades, a Québec-based paper company, to purchase more ecoresponsible paper products. In turn, Cascades will share its energy-efficiency expertise with Aerospace. In concrete terms, Cascades will begin by conducting the first energy-efficiency audit at our Saint-Laurent facility.

Switching to Cascades recycled paper products in our Montréal-based sites generates the following benefits:

- Saves 1,390 trees per year
- Reduces the water required to make paper by 6,575,997 litres per year, the equivalent of the water consumed by a four-person household over 44 years
- Reduces transportation-related greenhouse gas emissions by the equivalent of the emissions generated by a car travelling 13,390 kilometres or a return journey between Montréal and Vancouver

# 6.4 Supplier Relationship Management

# Strategic Priority: Optimize Supply Chain Performance

Both our business groups have programs in place to optimize supply chain performance. These programs help ensure compliance with our sourcing strategy through:

- A rigorous selection process to ensure supplier quality and qualifications, including mandatory adherence to our Supplier Code of Conduct principles
- Regular business reviews with top suppliers to discuss current projects, operational issues, R&D and future commercial targets

Across Bombardier, we will continue to encourage our current and new suppliers to commit to respecting the principles of our Supplier Code of Conduct.

# 6.4.1 MONITORING SUPPLIER PERFORMANCE

# Aerospace

In our Aerospace group, we accelerated the deployment of our supplier value creation approach (SOFE) and other continuous improvement programs. Examples of these programs include our five star approach for fabricated metal parts suppliers and specific quality improvement plans developed with suppliers.

Through these initiatives, we work with suppliers to collaboratively:

- Improve productivity and quality
- · Remove non-value activities from our supply chain
- Integrate processes
- Implement Lean techniques

In fiscal 2009, we launched a new supplier performance indicator tool called BASIS (Bombardier Aerospace Supplier Improvement System) to track supplier quality and delivery performance. We share this data with suppliers to ensure they maintain their performance at the required levels. In fiscal 2010, we rolled out this tool to our top 30 suppliers. This enabled efficient discussions with these suppliers around improving performance and better execution.

#### Monitoring Supplier Performance at Aerospace

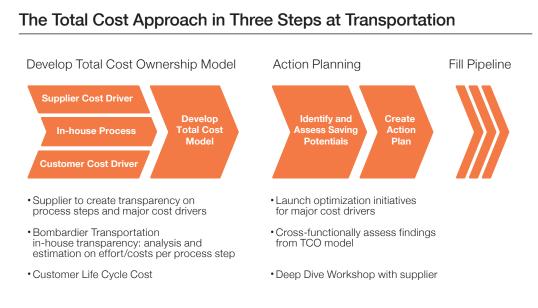


In fiscal 2009, we also started conducting executive reviews with key suppliers, allowing all stakeholders to drive root cause analysis and permanent resolution of issues based on facts. In fiscal 2010, we increased the number of strategic suppliers involved in these executive reviews.

# Transportation

In our Transportation group, our Supplier Relationship Management Program targets the same objectives as SOFE. A master vendor list fosters collaboration with key suppliers. It also supports the systematic measurement and management of supplier performance.

The program incorporates case-driven, "deep dive" workshops. These workshops use a "total cost of ownership" (TCO) approach to optimize our value chain (see figure). TCO includes the purchase price of a product, transportation costs plus indirect costs such as handling, inspection, quality, rework, maintenance and all other follow-on costs associated with the purchase. A supplier performance dashboard for master vendors as also helps us evaluate supplier quality, on-time delivery and financial stability.



In fiscal 2010, we conducted 42 deep-dive TCO workshops. The TCO workshops helped us:

- Create strategic partnerships with our suppliers
- Enhance transparency on both sides
- Remain cost efficient in our bids and projects
- Assure our suppliers of a long-term business relationship with committed spend

# 6.4.2 SUPPLIER COMMUNICATION INITIATIVES



Our supplier communication plan fosters strategic long-term alliances with key suppliers and improves supply chain performance. Our supplier advisory and technical boards facilitate collaboration on market strategies, technology roadmaps and business continuity. Supplier forums engage suppliers in discussions on key market issues, ensuring a common understanding of challenges and strategies.

#### **Aerospace**

In Aerospace, we launched the Bombardier Suppliers Advisory Board in 2007 to build strategic alliances with major suppliers. This board includes eight of our key suppliers and several panels on topics such as strategy and technology roadmaps.

At our 2010 Strategic Supplier Executive Meeting (SSEM), we discussed market issues and key strategies with 35 strategic suppliers. The meeting also provided

us with the opportunity to solicit supplier feedback on how we are doing relative to our objective of being our partners' "customer of choice." Here is a sample of what we heard from our suppliers:

- "BA is willing to proactively partner with suppliers to solve problems"
- "BA provides visibility and alignment with our suppliers and direct access to top management"
- "BA builds partnerships based on trust and candour."



At the end of fiscal 2009, a challenging aerospace market prompted us to institute regular calls between our vice presidents and major suppliers to foster dialogue and optimize communication.

Other supplier touch points include regular program reviews and a supplier web portal. Ad-hoc surveys with specific suppliers are an important part of our collaborative continuous improvement sessions. These sessions help resolve major irritants in our internal processes and communication channels.

In fiscal 2011, we established a supplier recognition program called BASE (Bombardier Achieving Supplier Excellence) at Bombardier Aerospace that will be deployed in the first quarter of next fiscal year.

# Transportation



In Transportation, approximately 400 master vendors account for 80% of our spend. Every year, we invite 120 to 140 master vendors to our Suppliers Day to discuss market developments and current business issues. More than 200 quarterly business reviews held with our main suppliers allowed us to address operational and financial issues and discuss business strategies.

# 6.4.3 SUPPLIERS AND THE COMMUNITY

In Aerospace, we increased our presence and participation in supply chain initiatives and forums driven by industry associations and clusters. These activities aim to enhance the global competitiveness, visibility and long-term viability of small and mid-sized businesses in key communities where we operate.

In fiscal 2010, we focused our efforts in North America and the United Kingdom.

### Activities included among others:

- Member of the steering committee of the Montréal cluster (AeroMontreal) "Supply Chain working group"
- Main sponsor of Québec government's MACH initiative led by AeroMontreal and focused on developing Québec SMEs
- Key sponsor and supporter of AeroMontreal in organizing its Global Supply Chain Summit in Montréal
- Key partner and sponsor of Aeromart forums (global business-to-business events where suppliers meet potential clients)
- Member of the Aerospace Industries Association (AIA) Supply Management Council

We also worked with universities on supply chain matters, sharing best practices and expertise.

# Responsible **Citizen**

- 7.0 Responsible Citizen
- 7.1 Objectives
- 7.2 Human Rights
- 7.3 Community Involvement

# 7.4 Stakeholder Engagement

- 7.4.1 Strategy
- 7.4.2 Surveys
- 7.4.3 Financial Markets
- 7.4.4 Academia
- 7.4.5 Industry
- 7.4.6 Non-government Organizations
- 7.4.7 Government



# Responsible Citizen

# 7.0 Responsible Citizen

# Strategic Priority: Strengthen Our Ability to Make a Difference

Today fuelling the economy is no longer the only role businesses are required to play. Our input is also increasingly solicited to help address diverse social and environmental issues. We are expected to participate in public debates and continuously improve our ability to make a positive contribution.

At Bombardier, being a responsible corporate citizen means advancing the development of our communities by:

- Being an active participant in environmental or industry-related policy debates
- Respecting human rights within our sphere of influence
- Providing financial support through donations and sponsorships
- Encouraging our employees to volunteer
- Partnering with academic institutions and local organizations

# 7.1 Objectives

# Stakeholder Engagement

Fiscal 2010 Objective	• Establish a proactive dialogue with our key stakeholders regarding the most relevant CSR issues
What We Did	<ul> <li>Developed a more formal stakeholder engagement strategy and an initial materiality matrix to better focus our resources on priority CSR issues</li> </ul>
	<ul> <li>Significantly increased our international presence and relationships with industry associations and government bodies</li> </ul>
	<ul> <li>Initiated relationships with key NGOs in the field of aviation and the environment</li> </ul>
	<ul> <li>Established multiple mechanisms to obtain feedback from key stakeholders, including stakeholder perception surveys</li> </ul>
Progress	
Fiscal 2011 Objectives	<ul> <li>Focus on reinforcing our relationship with key groups and individuals in the communities where we operate worldwide</li> </ul>
	Begin implementing our stakeholder engagement strategy and process with selected NGOs

Community Involvement		
Fiscal 2010 Objectives	<ul><li>Adopt a focused approach to community involvement by defining specific investment areas</li><li>Progressively introduce a company-wide employee volunteer pilot project</li></ul>	
What We Did	<ul> <li>Finalized a new Bombardier-wide donations and sponsorships policy based on our 3E approach (Entrepreneurship, Environment and Education) to community involvement</li> <li>Deployed a global reporting software to manage all community involvement activities</li> <li>Introduced an employee volunteer pilot project in the Montreal area (Red Cross "Ready When the Time Comes" program) to increase the percentage of our workforce involved in volunteer activities</li> </ul>	
Progress		
Fiscal 2011 Objectives	<ul> <li>Ensure progressive migration of community-related spending to our 3E approach (80% of our donations and sponsorships budget to be aligned with 3E by 2015)</li> <li>Provide a structured framework for employees interested in volunteer activities</li> </ul>	

# 7.2 Human Rights

# Strategic Priority: Respect Human Rights Within Our Sphere of Influence

Signing the United Nations Global Compact formalized our commitment to respect and protect human rights within our sphere of influence. Some sustainability firms, institutional investors and non-government organizations asked us how we act on this commitment. The answer is by implementing various policies and codes such as our:

- Code of Ethics and Business Conduct
- Health, Safety and Environment Policy
- Policy on Harassment Prevention
- Employment Equity Policy
- Human Resources Policy
- Data Privacy Policy
- Supplier Code of Conduct

To reinforce our commitment in this area, we launched an inventory of all policies and codes related to human rights in fiscal 2009. We also recently began conducting a scope analysis to better understand human-rights risks specific to our industries. This analysis will help us assess the effectiveness of our current policies and plan our future stakeholder engagement initiatives. The analysis should be completed by the end of fiscal 2011.

# 7.3 Community Involvement

# Strategic Priority: Optimize and Better Measure the Impact of our Contribution

We have always believed in taking a long-term vision to cultivating sustainability. This is how Bombardier was built. Our community involvement rests on the same belief.

# New Donations, Sponsorships and Community Involvement Policy

In the fall of 2010, we finalized our new Donations, Sponsorships and Community Involvement Policy. This policy aligns community investments across Bombardier and tightens our community investment focus. It also helps us leverage our presence and strengthen our local roots in all key markets.

The policy's "3E" approach concentrates our community investments on the following:

# Education

- Education helps alleviate poverty and build a sustainable skilled workforce, which ultimately benefits our organization and the industries in which we operate. We support educational initiatives and educational institutions that among other things:
  - Provide at-risk populations with a positive learning environment
  - $\circ~$  Foster literacy and greater self-esteem as well as promote ongoing learning
  - Trigger an interest in the fields of science and technology, including a passion for planes and trains

# Environment

- Working to reduce our impact on the environment is vital to a sustainable future for our company and our stakeholders. Our company is focused on reducing the environmental footprint of our operations and products. We also encourage our key community stakeholders to develop environmental protection programs. In this way, we support programs and initiatives that:
  - · Promote greater environmental responsibility, leadership, accountability and lifecycle stewardship
  - Encourage the development and diffusion of environmentally friendly practices, skills, knowledge, products and technologies
  - Protect biodiversity and the quality of the environment where these are potentially impacted by Bombardier's operations and/or products

# Entrepreneurship

- Our entrepreneurial spirit has consistently fuelled our industry leadership. Entrepreneurs play a major role in developing sustainable communities and the companies and solutions of tomorrow. For this reason, we support programs and initiatives that:
  - · Create opportunities for individuals with an entrepreneurial mindset who would not otherwise have such opportunities
  - Promote the development of entrepreneurial skills and spirit
  - Support entrepreneurs through training, funding and mentoring

Our objective is to allocate 80% of our donations and sponsorships budget to these three areas by 2015. We also want to define more specific key performance indicators (KPIs) to help us better measure the impact of our contributions.

In line with our new policy, we seek to support activities and organizations that:

- Contribute to the prosperity, well-being and sustainability of the communities where we operate
- Match our business priorities as a world-leading provider of aerospace and rail transportation solutions

Our contributions come from all levels of our organization.

# Improving How We Monitor Community Involvement

In early fiscal 2011, we implemented a web-based global reporting software, SPONSORIUM, to manage all community involvement activities across Bombardier. We also provided training to all key users.

This tool will allow us to facilitate the management of donation and sponsorship requests and enhance the monitoring of our community involvement strategy. This includes monitoring our progress in aligning our community investments with the 3E approach.

Learn more about SPONSORIUM at www.bombardier.sponsor.com.

# **Employee Volunteering**

Last year, an Employee Volunteering Working Group reviewed and benchmarked our current related practices. The working group prepared a detailed proposal for a new employee volunteer program. The objective was to align our support of employee volunteering with our local, national and international community involvement approach.

After evaluating the resources required to implement the program, it was decided to adopt a phased approach. We began by launching our new **Donations, Sponsorships and Community Involvement Policy** before deploying a full company-wide employee volunteer program. We believe that by leveraging employee volunteering, we can foster even greater employee engagement.

In fiscal 2010, we joined forces with the Québec Red Cross to launch "Ready When the Time Comes." This employee volunteer pilot project aims to increase the percentage of our workforce involved in volunteer activities.

By July 2010, 667 employees from our Corporate Office and Aerospace group in the Montréal area had registered in the project, with 294 completing the disaster relief training.

For the first time this year, we estimated what percentage of our employees receives corporate support for volunteering activities. In fiscal 2010, approximately 5% of our employees obtained direct support through flexible scheduling or accommodating their community involvement during normal working hours. We also wish to acknowledge that many more of our employees currently volunteer on their own time, creating tremendous value in the communities where we operate.

# 7.3.1 MAJOR PROJECTS

Here are the highlights of our major community investment projects in fiscal 2010.

# **SOUTH AFRICA: STARS**

# Program

In 2010, we continued a long-term investment in South Africa through our STARS program. STARS completed the second year of operation as a public/private partnership focused on creating a network of education, training and innovation in sustainable transportation. STARS is managed in-region by the **Students' Health and Welfare Centres Organisation** (SHAWCO).

SHAWCO is a non-profit organization that operates as a component of the University of Cape Town.

The goal of STARS is to build a skilled workforce capable of delivering African solutions to African transportation challenges. STARS encompasses the following programs:

- **STARS Boost Program** Supported by Bombardier and aligned partnerships, the Boost Program provides extra tutoring through a Saturday School intervention program to students in grades 10 through 12 who need help honing their math, science and English skills before enrolling in higher learning institutions.
- **STARS Scholars Program** This merit-based Scholars Program supports students in university and technical colleges. It also provides internship opportunities.

• **STARS Innovation Program** – The Innovation Program engages post-graduate level students in the long-term research of sustainable rail infrastructure in South Africa. Pilot work has examined the strategic partnerships necessary to fund these programs.

# STARS Students

In fiscal 2010, 212 South African students from 34 different school districts in the Cape Town area participated in the Saturday School program with a 91% attendance rate. Thirty students, grades nine through 12, also received scholarships at the Ithemba Institute in the



Soweto Township of Johannesburg. Through the Scholars Program, four students obtained scholarships to attend the University of Cape Town and are pursuing their studies as Science majors. They also receive regular career counselling and mentoring. At the same time, they are giving back by volunteering in the Saturday School program and their communities.

# Progress Year at a Glance

In fiscal 2010, we invested more than \$340,000 in STARS programs. This included launching the 2010 STARS Saturday School program. Saturday School students listen to motivational speakers from the townships, develop skills such as study techniques to achieve their

goals, and receive career counselling from the University of Cape Town. These students also prepared for and took the South Africa National Benchmark Test (NBT) exams.

Educational outings included the Two Oceans Aquarium and completing laboratory work at the University of Cape Town's science and chemistry labs. To date, approximately 90% of Saturday School students have applied to tertiary institutions, with some planning gap years.

# **Next Steps**

STARS partners will focus on expanding the SHAWCO Saturday School program. Due to the program's popularity, SHAWCO is instituting internal sustainability programs to ensure the Saturday School program continues at its current level of excellence. Within our Transportation group, we intend to integrate the STARS program model into our bid process, which will help us develop outreach programs in minority communities at key Bombardier project sites.

# TIBET: BOMBARDIER TIBET PROFESSIONAL TRAINING PROGRAM FOR THE RURAL POOR

# Program

Over the past three years, we invested close to \$1 million to provide tourism management training to rural Tibetan students. The training enables participants to benefit from the increased tourism in their region, created in part by the new Goldmud-Lhasa railway.

Agriteam Canada acted as the Canadian project manager and coordinated the efforts of the two participating academic institutions, Changzhou Institute of Technology (CIT) and Holland College from Prince Edward Island, and our Tibet Academy of Agricultural and Animal Husbandry Sciences (TAAAS), the program's local partner.



# Students

Twenty students were selected to complete the three-year program. They came from the Tibetan prefectures of Shigatse, Lhoka, Lhasa and Nakqu.

# Progress

We are proud to report that all 20 students graduated in July 2010 and completed a two-week ecotourism training program. They received a diploma from the Canada-based Holland College of Prince Edward Island. The graduates returned to Changzhou in September to complete an adult education exam, the last step before receiving their Chinese diploma in tourism management.

# **Next Steps**

Over the next few months, we will make every effort to help these students secure employment in the hotel and tourism industry. This will ensure that our project has a positive and lasting impact.

# MEXICO: SIERRA GORDA WORLD BIOSPHERE RESERVE

# Program

In October 2008, we became a long-term supporter of the Sierra Gorda World Biosphere Reserve in Querétaro, Mexico. Our assistance with three environmental and economic development projects will benefit the reserve's 23,000 residents directly and the



more than 90,000 people in the region indirectly.

The projects involve reforesting devastated areas of the reserve and commercial plantations and restoring the community's watershed. They also focus on developing sustainable and diversified work projects in the reserve's northern region.

In the 383,567-hectare reserve in the mountains of Querétaro in central Mexico, northern and tropical species intersect. Northern firs grow as well as desert plants and tree ferns typical of humid mountainside forests. The reserve is also home to endangered and threatened animal species, such as jaguars and otters, as well as 650 species of butterflies.

# **Participants**

A local organization called the Sierra Gorda Ecological Group manages the projects while we provide long-term funding.

# Progress

Since the beginning of the program, our support of these three projects has helped enable:

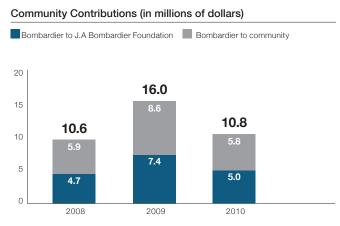
- Watershed and soil restoration
  - 111 information sessions on watershed restoration delivered in Sierra Gorda communities
  - · 870 people participated in the sessions
  - · 78 workout committees helped carry out the restoration activities
  - · 709 technical sessions conducted
  - 2,081 field trips held
- Reforestation
  - 191 hectares reforested
  - · Reforestation information sessions conducted to build awareness and support among Sierra Gorda residents
  - 80 hectares of pine trees and 20 hectares of fruit trees to be planted by the end of 2010

- Economic development projects
  - A dairy factory called "Mini Vaca", which specializes in cheese, yogurt and other dairy products, established in 2009
  - Professional tourism training provided for the people of Sierra Gorda
- Complementary actions
  - 200 fire brigades created
  - · Access to water improved by purchasing 20,000-litre water containers that are used as wells

# Next Steps

We are working with the Sierra Gorda Ecological Group to develop a reporting system to accurately measure the impact of our contribution to the various projects on the environment and local residents.

# 7.3.2 CONTRIBUTIONS WORLDWIDE IN FISCAL 2010



The following table summarizes our direct and indirect contributions over the past three fiscal years to the communities where we operate worldwide:

# CANADA

# Montréal, Québec

# **FIRST Robotics**

We continued our three-year sponsorship of FIRST Robotics, a competition that encourages teenagers to pursue their studies in engineering and math. Participants have six weeks to build a robot, from start to finish. In fiscal 2010, we mentored six teams,

two of which won awards. One of the two teams went to the championships in Atlanta, United States.

# ICAO Colloquium on Aviation and Climate Change

We were the platinum sponsor of this important international conference held in May 2010, which drew stakeholders from around the world. It provided us with an excellent opportunity to promote our leadership in sustainable aviation. We also initiated discussions with key NGOs working with the International Civil Aviation Organization (ICAO), such as the International Coalition for Sustainable Aviation (ICSA).

# Engineers Without Borders

In January 2010, we participated in the national conference of Engineers Without Borders (EWB). Attending the career fair enabled us to meet numerous students. EWB is one of Canada's most respected development organizations, combining the rigorous problemsolving of engineers with a sustainable approach to human development.

# Eureka Festival

We sponsored a special educational zone at the Eureka Festival in June 2010 at Montréal's Old Port. During the three-day festival, 20 volunteers from Aerospace's Strategic Technology team spoke about aircraft manufacturing and interiors, our Flight Test Centre and, among other topics, experimental technologies. They also helped school children create hot-air balloons.

# Fondation des pompiers pour les Grands Brulés

In June 2010, 12 Bombardier employees rode in the annual five-day bike tour for the Fondation des pompiers pour les Grands Brûlés. The tour helps raise awareness and funds for burn victims. The tour's lead organizer is a Bombardier employee.

### Jeux de Genies

We sponsored the Québec Engineering Games in January 2010. This five-day competition attracts more than 500 engineering students from 12 engineering faculties in Québec.

# **Red Cross**

We joined forces with the Québec Red Cross in fiscal 2010 to launch "Ready When the Time Comes." With assistance from the J. Armand Bombardier Foundation, a long-time contributor to the Québec Red Cross, the pilot project is creating a team of employee volunteers, trained and ready to assist with local relief efforts. The goal is to train between 800 and 1,200 Bombardier employee volunteers over the next three years.

# Morgan Arboretum: Chalet Pruche Restoration Project

In fiscal 2009, four Bombardier employees helped restore the chalet at Morgan Arboretum, a forest reserve managed by McGill University Macdonald Campus.

# Haiti Disaster Relief



We actively contributed to the Haiti relief effort. In January 2010, we provided air and ground transportation for nine medical volunteers from the Canadian Medical Assistance Teams (CMAT), a disaster relief organization. At the same time, we transported 450 kilograms (1,000 pounds) of medical supplies, including a small field hospital.

With Corporate Aircraft Responding in Emergencies (CARE), Flexjet also transported a nine-person trauma team from Omaha to Haiti on a Challenger 300 aircraft. It also funded transportation for almost 900 kilograms (2,000 pounds) of supplies delivered in partnership with Doc to Dock and Partners in Health.

The Beaudoin-Bombardier family and the

**J. Armand Bombardier Foundation** contributed \$1.15 million to the Canadian Red Cross and Médecins du Monde. In early February, the Foundation staged a special week-long online fundraising campaign to secure donations for the Red Cross.

Across Bombardier, employees also held diverse fundraising events to raise funds for Haiti. This included an £11,000 donation from our Belfast employees to the British Red Cross.

# La Maison Jean Lapointe

Bombardier organizes an annual golf tournament to help raise money for this not-for-profit organization. In fiscal 2010 — the 11th year of this commitment — the "Mon indépendance, j'y tiens!" program raised awareness about the risks of alcohol consumption and drug use among close to 12,000 youths aged 12 to 14 in the Montréal area. Over the years, the money raised by the tournament has also been used to develop and evaluate this awareness program.

# Centraide/United Way of Greater Montréal

We contribute to Centraide/United Way through an annual employee fundraising campaign. The campaign is supported by about 250 volunteers and senior management from each site who encourage the participation of other Bombardier employees. In calendar year 2009, we donated \$1,865,350 to Centraide through employee contributions, activities and the Employee Charity Fund. The money raised helps fund 360 community organizations in their continuing effort to improve the quality of life of some of society's neediest members.

# Ontario

# Canada Aviation Museum - Tour of Duty Gala

In November 2009, we supported the fourth annual Tour of Duty Gala held at the Canadian Aviation and Space Museum in Ottawa. The gala closed the "100 Years of Flight in Canada" celebrations. The funds raised help underprivileged and disabled children as well as veterans.

# Young Engineers Forum – University of Ottawa

Our Fly-By-Wire Program Management Lead spoke at the Young Engineers Forum in April 2010. The forum is organized by the student branch of the American Society of Mechanical Engineers (ASME) at the University of Ottawa. Mechanical engineers in their final semester of studies, mechanical engineering graduate students and young engineers attended. The forum supports our focus on education. It provides us with an opportunity to meet, speak and cultivate relationships with young engineering students, a key target group for our recruiters.

### Pathways to Education

In October 2008, we continued our sponsorship of Pathways to Education, an organization that works to lower dropout rates among at-risk youth and prepare them for post-secondary education and meaningful employment. Pathways has helped reduce dropout rates from 56% to as low as 10% and quadruple the number of graduates going to post-secondary education in Toronto's Regent Park area. Pathways sites include Lawrence Heights, Rexdale and Scarborough in the Greater Toronto Area as well as sites in the cities of Hamilton, Kitchener, Ottawa and Verdun.

# Vernon, British Columbia

# WL Seaton Secondary

In fiscal 2010, we helped purchase robotics equipment for this secondary school in Vernon, British Columbia, which has a large First Nations student population. The school hopes to send a robotics team to compete in the province's FIRST Lego Robotics competition. We are also creating an engineering component for the school's science curriculum.

# MEXICO

# NAFI

We sponsored the North American Forum on Integration (NAFI), which held a five-day event in June 2010 in Querétaro. The event was attended by university students from Mexico, Canada and the United States. It simulated a parliamentary meeting and international negotiations.

# Hogares Providencia



In fiscal 2010, our Querétaro plant and the Fundación Merced continued to provide funding and moral support to the area's largest orphanage, Hogares Providencia. The facility is currently home to 51 children of all ages, including adolescents. The children participated in plant-sponsored festivities. Causa Querétaro, the plant's volunteer committee, organized activities at the orphanage.

Causa Querétaro also supports the Santa Rosa de Lima orphanage. To date, Causa Querétaro organized seven different activities, leaving its mark in five different communities.

#### Garabatos Ludotheque

Some 65 employees from our Quérétaro plant helped to build a playground and beautify the grounds of Garabatos Ludotheque. The organization coordinates activities for about 500 children.

# 2010 Family Day: Building Together

The fourth annual Family Day brought employees and their families together to enjoy activities at a Querétaro amusement park. The event was attended by more than 1,900 people. It included presenting awards to the winners of the plant's second annual drawing contest for employees' children. "How do my family and I take care of the environment?" was the contest's theme.

# **UNITED STATES**

# Habitat for Humanity

Eighteen employees helped Habitat for Humanity build affordable housing at sites across the country.

# United Way

Our Transportation Systems division contributed \$76,500 to the United Way of Allegheny County, which supports agencies that address critical community needs.

In fiscal 2009, our Wichita Aerospace plant donated its \$10,000 Cdn Annual Accomplishment Award to the United Way's local Laid-Off Workers Fund. The plant's civic-minded employees have also made donations to the Lord's Diner since 2004. This local charity serves an average of 400 hot meals daily to the city's hungry and poor.

### The Charles Lindbergh Memorial Lecture

The Charles Lindbergh Memorial Lecture is one of the signature events held by the National Air and Space Museum in Washington, D.C. This high-profile public lecture supplements the educational benefits of the museum's exhibitions. Each May, Bombardier co-hosts a prestigious, private dinner for 50 select guests. Invited guests include the lecture speakers, aviation industry leaders, National Air and Space Museum board members, museum benefactors, Capital Hill representatives and, among others, our customers.

### Wichita River Festival's Bombardier Learjet Legends of Rock

The Wichita River Festival, a 39-year Wichita tradition, is a nine-day community celebration held every spring. Attended by some 300,000 people, it includes concerts, children's activities, Cajun food fest, parades, athletic competitions, block parties, fireworks, water ski and jet-ski competitions and more. The highly popular Bombardier *Learjet* Legends of Rock concerts are held on Riverfest's opening Friday.

# Bombardier Learjet Indoor Practice Facility

Bombardier *Learjet* pledged \$1.2 million to the Wichita State University (WSU) practice facility project. Our contribution to WSU shows a strong commitment to Wichita and the surrounding Sedgwick county community. The Bombardier *Learjet* Indoor Practice Facility is essential to the future success of various WSU athletic programs, including the nationally ranked Shocker baseball program. The 29,000-square-foot facility was completed in December 2009. The practice facility helps student athletes achieve their goals of competing at their highest level, while obtaining an education.

# Sedgwick County Zoo Event: Zoobilee

In July 2009, Bombardier *Learjet* supported the Sedgwick County Zoo's annual fundraiser: Zoobilee. The event provides an evening of entertainment, samples from local restaurants and a live auction to raise money for this internationally recognized organization. The zoo's mission is to inspire discovery, appreciation and respect for animals, nature and the environment. The not-for-profit organization has received national and international awards for its support of field conservation programs and successful breeding of rare and endangered species. It is the number one outdoor family destination in Kansas and is home to more than 2,000 animals of nearly 400 different species.

#### **UNITED KINGDOM**

#### The Prince's Trust

In Transportation, our donation of more than \$36,500 to the Prince's Trust helped provide disadvantaged unemployed youth with training and workplace experience. In fiscal 2009, more than three out of four young people helped by the Trust, a charity run by the Prince of Wales, found employment.

#### Belfast, United Kingdom

#### **Business in the Community**

In 2009, close to 80 Bombardier first-year apprentices helped make Divis Mountain more accessible and secure by fixing holes, fencing, pathways and stonework.

#### McArthur Nursery School / St Luke's Primary School

In 2009, some 20 Bombardier apprentices built two playground trains for a nursery school in East Belfast and a primary school in Twinbrook.

#### The Flight Experience

As part of our extensive educational outreach program, we joined 458 Belfast students in The Flight Experience 2010, a primary school science and technology program. The program promotes aerospace career opportunities, green aircraft design, bird and wildlife conservation, as well as Bombardier as an engaged local employer.

#### Employers' Forum - 20/20 Vision Award

In 2009, we received the 20/20 Vision Award, a lifetime achievement award for corporate social responsibility sponsored by Invest Northern Ireland. Judges commended our leadership and vision in driving an Employers' Forum in Belfast to help long-term unemployed people return to the workplace. To date, this forum has helped more than 700 people find jobs.

#### **AUSTRALIA**

Through our Passengers division, we joined forces with our employees to provide financial support to the Red Cross Bushfire Relief in Victoria. The February 2009 bushfires were Australia's worst natural disaster. They took 180 lives and destroyed over 2,500 homes, leaving thousands of people homeless. We raised \$37,500 to help the affected families.

#### GERMANY

#### **PlaNet Finance Deutschland**

During our three-year partnership with PlaNet Finance Deutschland, we contributed €120,000 to advance economic development through microfinance institutions in Africa and the Middle East. These institutions provide small business entrepreneurs with microcredit and basic financial services.

PlaNet Finance Deutschland partnered with Free University Berlin to foster exchanges between microfinance institutions in developing countries and German universities.

#### Kindergarten for Children with Disabilities

To underscore the 170th anniversary of our Transportation site in Aachen, we provided \$30,000 to a local kindergarten school that integrates children with disabilities.

#### **Passengers Division Sponsorships**

Through our Passengers division, we sponsored the following activities:

• The Frankfurt 2009 Dragonboat Festival, a major regional event that promotes teamwork, fairness and tolerance

- The Kuota Senges cycling team, which competes in numerous fundraising races
- The international opera festival of the "Kammeroper Schloss Rheinsberg, Germany", which gives highly talented young singers the experience of performing opera on stage

#### POLAND

#### Flood Disaster Relief

In Transportation, we donated 500,000 zloty, approximately €125,000, to the victims of Poland's flood disaster in summer 2010.

#### INDIA

#### Water Access at Savli High School

In fiscal 2010, we invested approximately \$11,000 to repair the water access system and install new equipment in a high school close to our manufacturing plant in Savli. The system will provide drinking water to the school's 1,500 students and 80 teachers.



#### Project 11 for 1: Tree Plantations

In the summer of 2010, our Vadodara Transportation site employees teamed up with some 500 students and their teachers to plant 200 saplings at Nalanda International School. Another successful tree-planting event took place with 850 students at Delhi Public School in Vadodara. Students staged performances about the environment and another 200 saplings were planted. A third event at Bharatiya Vidya Bhavans School involved 600 students.

#### **Bangalore School Project**

In Aerospace, our involvement in the Bangalore School project continued. In fiscal 2009, we donated funds and recruited volunteers to renovate the computer room, plant trees in the schoolyard and provide each student with notebooks.

#### **CHINA**

# Bombardier Hope Project Fund – Disaster Relief in Sichuan Province

When a massive earthquake hit Sichuan province in May 2008, we donated RMB 1 million (\$145,773) to the China Youth Development Foundation (CYDF) to:

- Rebuild schools
- Support orphanages
- Provide counselling for children traumatized by the disaster



Our employees in China also donated more than RMB 65,000 (\$8,750) to the CYDF, a non-profit, non-government organization dedicated to

developing Chinese youth with an emphasis on education. The Chinese government selected the CYDF as a priority charity during the earthquake crisis.

The CYDF used our donations to establish the Bombardier Hope Project Fund. Among other initiatives, the fund helped build temporary schools and classrooms. It was also used to provide 30 young students from Sichuan with a free two-year education program to prepare for employment as electricians.

# 7.3.3 J. ARMAND BOMBARDIER FOUNDATION

The **J. Armand Bombardier Foundation** is a private family foundation established in 1965 to advance the humanitarian work of Joseph-Armand Bombardier, the founder of the company.

The Foundation actively supports Bombardier's vision of social responsibility. We, in turn, transfer a percentage of our pre-tax income to the Foundation.

Over four decades, the Foundation has donated more than \$98 million Cdn to Canadian organizations and institutions working in four key areas:

- Education
- Community support
- Healthcare
- Arts and culture

In February 2009, the Foundation launched a new website to further strengthen its links to communities.

# 7.4 Stakeholder Engagement

# Strategic Priority: Building Mutually Beneficial Relationships

In today's interconnected world, nurturing good relations and dialogue with key stakeholders is more vital to our success than ever. At Bombardier, we engage with our stakeholders in the following ways:

<b>EMPLOYEES</b> Employee engagement surveys, union-management forums and work council consultations	<b>CUSTOMERS</b> Customer-led advisory committees, focus groups and customer satisfaction surveys	SHAREHOLDERS, INVESTORS AND FINANCIAL ANALYSTS Annual meeting of shareholders, quarterly conference calls and one-on-one meetings
SUPPLIERS Supplier forums and joint design work	<b>COMMUNITIES</b> Community investments and employee volunteering	ACADEMIC PARTNERSHIPS AND COLLABORATIVE RESEARCH Joint research projects
INDUSTRY PARTNERSHIPS AND ASSOCIATIONS Association memberships and participation in committees and working groups	NON-GOVERNMENT ORGANIZATIONS One-on-one meetings and conference calls	GOVERNMENTS AND REGULATORY AUTHORITIES Official meetings and briefings to government officials and regulatory filings

# 7.4.1 STAKEHOLDER ENGAGEMENT STRATEGY

In fiscal 2010, our Stakeholder Engagement Working Group worked with the London-based **International Business Leaders Forum** to develop a broader stakeholder engagement strategy and process. Together we:

- Benchmarked our industry peers
- Prioritized our stakeholders
- Deepened our understanding of stakeholder expectations
- Mapped their expectations and prioritized issues
- Selected stakeholder engagement mechanisms

A review of stakeholder feedback allowed us to identify the main issues with the greatest potential impact on our company. This exercise, based on the GRI principles for defining report content, resulted in our materiality matrix. This matrix enables us to better focus our corporate social responsibility (CSR) reporting and our resources on priority CSR issues.

We will begin implementing our new strategy and process by the end of fiscal 2011 and continue through fiscal 2012.

In our Aerospace group, we also significantly increased our international presence and relationships with government authorities and industry associations in fiscal 2010. We also initiated relationships with environmental and aviation NGOs such as the **International Coalition for Sustainable Aviation** (ICSA).

# 7.4.2 ENGAGEMENT SURVEYS

#### **Employee Engagement Surveys**

Our Corporate Office, along with both of our business groups, conducts regular employee engagement surveys. These surveys provide us with an excellent opportunity to listen to and learn from our employees. See "Listening to Employees" for more information.

#### Bombardier Aerospace Stakeholder Perception Survey

This in-house survey asks our key stakeholders for feedback on a wide variety of issues impacting our reputation. It targets journalists, industry associations, governments, NGOs, site visitors as well as people attending our shows and events.

#### Bombardier Transportation Stakeholder Survey

At Bombardier Transportation, we conducted our first international stakeholder survey in mid-2008. The survey provided us with feedback on:

- Our existing corporate social responsibility (CSR) activities
- Trends, risks and opportunities in the railway industry, especially around sustainable mobility
- Material issues with regard to reporting
- Stakeholder concerns and suggestions

An independent consultant conducted interviews with 20 stakeholders from 10 countries. A majority of stakeholders (69%) believed that our CSR activities were "good" or "very good." More than half perceived our Transportation group as an industry role model in CSR.

A new stakeholder survey is planned for fiscal 2011.

# 7.4.3 FINANCIAL MARKETS

#### Shareholders, Investors and Financial Analysts

We are focused on creating sustainable shareholder value through the development of profitable products and projects and through sound business management. We strive to be proactive, responsible, transparent and consistent in all our investor communications.

As part of our efforts, we met with most of our major shareholders over the last year. We also engaged with current and prospective investors by conducting roadshows in Montréal, Toronto, New York, Chicago, Los Angeles, London, Paris, Frankfurt, Edinburgh, Milan and Tokyo.

We hosted many presentations and plant tours, including three events at the Farnborough Airshow, and made presentations at several sell-side conferences. More than 250 people attended our Annual Meeting of Shareholders on June 2, 2010 and many more followed it through our webcast.

# 7.4.4 ACADEMIC PARTNERSHIPS AND COLLABORATIVE RESEARCH

Academic partnerships are key to talent management and development at Bombardier. These collaborations spur technological innovation and provide an excellent pipeline for recruiting high calibre candidates. They help ensure our continued leadership in engineering and manufacturing technologies meets evolving market requirements.

Through our Aerospace and Transportation groups, we are involved in education at all levels, from post-doctorate programs to elementary schools. Our involvement takes the form of cash and in-kind contributions, material, expertise, lectures and governance.

In fiscal 2010, we continued to build sustainable relationships with targeted universities and business schools worldwide. This includes academic institutions with an international reach and excellent engineering and business faculties and research programs. These partnerships continue to fill our innovation pipeline, enrich our knowledge and build our reputation as an industry leader.

#### Aerospace

In Canada, through the J. Armand Bombardier Foundation, we established Industrial Research Chairs at the École Polytechnique (Integrated Design towards Efficient Aircraft), McGill University (Multi-disciplinary computational fluid dynamics), Université de Sherbrooke (Aero-acoustics), Ryerson University and an endowed chair at the University of Toronto Institute for Aerospace Studies.

Other collaborations occur through the "Consortium for research and Innovation in Aerospace Québec" (CRIAQ). They also include various sponsorships of student events such as the Québec and Canadian engineering competition, solar car race and SAE (Society for Automotive Engineering) formula and cargo competition.

We are also contributing to both the Concordia and McGill University sustainability programs in Montréal. These partnerships help the universities understand the needs of business in terms of graduating engineers in the future. Both universities are partnering with local businesses to develop engineering modules that include sustainability to better understand its impact on engineering decisions.

We actively support education at all levels in the United Kingdom, including post-doctoral and doctoral funding at Queens and Ulster Universities in Belfast. We contribute to the MBA program at Strathclyde University in Glasgow, Scotland, and the Composite Training Program through the University of Bolton in London, England. Our engineers also deliver final year undergraduate lectures at Queens.

#### Transportation

In Canada, the Bombardier Chair in Sustainable Transportation at the University of British Columbia's College of Interdisciplinary Studies is sponsored by the J. Armand Bombardier Foundation. Dr. Larry Frank is investigating the links between public health and land uses, travel choices, the environment, land development and transportation investment. The Foundation recently renewed the five-year grant of \$100,000 per year.

In fiscal 2009, we endowed a new Chair of Rail Systems Technology in the Faculty of Mechanical Engineering at the Karlsruhe Institute of Technology, Germany. The chair focuses on rail operations and includes an annual grant until 2013. It places rail technology at one of the top five universities in Germany.

This new chair complements our Chair of Railway Technology at Dresden Technical University, Germany. We also work closely with various universities worldwide, including:

- University of Plymouth in the United Kingdom
- Technical University in Warsaw, Technical University in Radom and Silesian Technical University in Gliwice, Poland
- Royal Institute of Technology in Stockholm, Sweden

We also began a strategic partnership with the German Aerospace Center (DLR), which was fully implemented in 2009. This partnership entails:

- Collaborating in government-funded R&D projects
- Using DLR as an engineering consultant to cover peak workloads and provide special engineering know-how and facilities (e.g. wind tunnels)
- Offering mentorship programs for young engineering PhD candidates working at Bombardier

#### 7.4.5 INDUSTRY PARTNERSHIPS AND ASSOCIATIONS

In fiscal 2010, we actively collaborated and engaged with stakeholders, including policy-makers and industry groups, to reduce emissions and increase efficiency standards. See Our Approach to Developing Responsible Products for more information.

#### Aerospace

#### Canadian Aerospace Environmental Technology Roadmap

In May 2009, we became the chair of the newly formed Canadian Aerospace Environmental Technology Road Map (CAETRM). The CAETRM is Canada's first concerted effort to demonstrate and validate environmental technology breakthroughs for a greener aerospace industry. Initiated by Canada's National Research Council (NRC), this industry-led think tank includes government agencies.

Our goal is to provide public and private sector decision-makers with an industry consensus on technology needs. The CAETRM also offers guidance on investment, research, infrastructure, training and policy decisions.

Together, we are exploring breakthrough environmental technologies in:

- Aircraft systems and air traffic management (ATM)
- Airframe concepts
- Eco-design (cradle-grave-cradle design)
- Engine concepts
- Fuels and lubricants
- Ground operations
- Manufacturing and maintenance-repair-overhaul (MRO)
- Materials and coatings
- Rotary wing aircraft concepts

In May 2009, we presented the completed roadmap at the Canadian Aeronautics and Space Institute (CASI) conference in Ottawa. The action plan is now being implemented.

#### **European Research Frameworks**

In our Aerospace group, we also collaborated in European R&D projects through our Belfast facility. All projects are aligned with the environmental objectives of national or regional strategies such as ACARE (Advisory Council for Aeronautics Research in Europe) and the United Kingdom's NATS (National Aerospace Technology Strategy).

At our Belfast facilities, we are exploring the following three development areas related to structural concepts:

- Composites wing development
- Engine nacelles
- Advanced metallic structures

#### Green Aviation Research and Development Network

We are a founding member of Canada's Green Aviation Research and Development Network (GARDN), a new grouping of 18 government, academic and industry partners. This unique R&D partnership focuses on developing green engine and aircraft technologies to lower noise and emissions pollution. Our ultimate goal is to reduce the carbon footprint of the Canadian aviation sector.

GARDN's initial four-year budget of \$23 million Cdn will be used to focus on eight research themes: noise, emissions, materials and manufacturing processes, performance, icing, aircraft operations, alternative fuels and product lifecycle management.

The Aerospace Industries Association of Canada (AIAC) and the Consortium for Research and Innovation in Aerospace in Quebec (CRIAQ) will manage the network.

#### Taking the Lead on a Business Aviation Position Statement

In December 2009, the Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) took place in Copenhagen. To prepare, the civil aviation community worked together to develop a global solution to the industry's impact on climate change.

In our Aerospace group, we leveraged our commercial industry experience to spearhead an initiative to create the Business Aviation Commitment on Climate Change. One of our objectives was to effectively address business aviation's climate change impact in a global industry-wide solution. Our goal was to reach a consensus among all business aircraft manufacturers and operators on future environmental targets for this sector.

We are proud to say that our efforts were fruitful. On November 24, 2009, the General Aviation Manufacturers Association (GAMA) and the International Business Aviation Council (IBAC) agreed to set the following business aviation targets:

• A cap on aviation CO<sub>2</sub> emissions starting in 2020 (carbon-neutral growth)

- An average improvement in fuel efficiency of 2% per year from 2009 to 2020
- A reduction in CO<sub>2</sub> emissions of 50% relative to 2005 levels by 2050

#### Transportation

#### **Rail Emission Standards**

Emission standards for the rail industry are at various levels of development. They include both criteria air contaminants (CACs) and GHG emissions.

The United States has well-established emissions standards on CACs. Canada will likely adopt these standards after 2011. This is when the memorandum of understanding between rail companies and the Canadian government expires. In the European Union, we expect diesel emission guidelines by 2012. Additional costs may be incurred to ensure compliance with these stricter requirements.

To drive targeted innovations in sustainable and clean rail technologies, we established focused stakeholder engagement mechanisms to guide our R&D efforts.

One example is our collaboration with customers to advance our C.L.E.A.N. (Catalyst-based Low Emission ApplicatioN) diesel research project. In 2008, C.L.E.A.N. produced environmentally friendly diesel trains that reduce nitrogen oxide and particulate emissions to levels that will become European Union law in 2012.

We also actively engage with industry associations, including the Transport and Environment Group of the Association of the European Rail Industry (UNIFE) and the UITP Sustainability Commission. On a more global level, our Design for Environment (DfE) program helps us design rail vehicles with improved energy efficiency, while meeting emission and safety standards.

We continue to track emission standard developments through our partnerships with industry associations and an effective stakeholder engagement approach. For instance, we exchange ideas with our customers' environmental experts at workshops hosted by the International Union of Railways (UIC). We also offer guidance on European legislation and industry-wide standards.

#### Canadian Aerospace Industry Visibility

As part of our corporate social responsibility effort, we partnered with aerospace industry players to sponsor the television series "Canada Above and Beyond: 100 Years of Canadian Aviation." The series raised awareness of the Canadian aerospace industry's social and economic contribution at home and abroad.

Two 30-second television ads were also created under the theme "Our Aerospace Industry" to promote the industry in Canada and internationally. They aired over a four-week period on several channels in Canada. The advertising project, led by Bombardier, rallied the whole Canadian aerospace industry. Some 130 employees from different aviation organizations volunteered for the two-day shoot.

#### Aerospace Industry Partnerships

- UK's A|D|S (AeroSpace, Defence, and Security)
- International Business Aviation Council (IBAC)
- General Aviation Manufacturers Association (GAMA)
- National Business Aviation Association (NBAA)
- European Business Aviation Association (EBAA)
- Canadian Business Aviation Association (CBAA)
- National Aeronautics Association
- Middle East Aviation Association
- Asian Business Aviation Association
- Associacao Brasileira de Aviacao Peral
- Society of British Aerospace Companies (SBAC)
- International Civil Aviation Organization (ICAO), as part of the Council's Committee on Aviation Environment Protection (CAEP)
- Air Transport Action Group (ATAG)

- MOSAIC (Manufacturers of Sustainability-Aerospace Industry Catalyst) in Ontario, Canada
- Green Aviation Research and Development Network (GARDN)
- Aero Montréal
- Aerospace Industry Association of America (AIA)
- Aerospace Industry Association of Canada (AIAC)
- Royal Aeronautical Society (RAeS)
- Ontario Aerospace Council (OAC)
- The Wings Club
- Aero Club of Washington
- Wichita Aero Club
- International Air Transport Association (IATA)
- Air Transport Association (ATA)
- Regional Airline Association (RAA)
- Regional Airline Association Australia (RAAA)
- European Regions Airline Association (ERA)
- Arab Air Carriers Organization (AACO)
- Latin American and Caribbean Air Transport Association (ALTA)
- International Society of Transport Aircraft Trading (ISTAT)
- Air Transport Association of Canada (ATAC)
- World Economic Forum (WEF)
- International Coordinating Council of Aerospace Industries Associations (ICCAIA)
- Commercial Aviation Alternative Fuels Initiative (CAAFI)
- Canadian Aviation Environmental Working Group (CAEWG)
- Transportation Research Board (TRB)
- Airports Council International (ACI)
- Canadian Aerospace Environmental Technology Roadmap (CAETRM)
- Partnership for AiR Transportation Noise and Emissions Reduction (PARTNER)
- Consortium for Research and Innovation in Aerospace in Quebec (CRIAQ)
- SAE International Aerospace Environment Group

#### **Rail Transportation Industry Partnerships**

With its widespread engineering and manufacturing footprint, our Transportation group is a member of numerous standardization committees and industry associations, including:

- International Association of Public Transport (UITP)
- Association of the European Rail Industry (UNIFE)
- Association of German Railway Manufacturers (VDB)
- Association of Electrical and Electronics Industry in Germany (ZVEI)
- German Industry Association (BDI)
- European Standards Organisation (CEN)
- European Committee for Electrotechnical Standardization (CENELEC)

# 7.4.6 NON-GOVERNMENT ORGANIZATIONS

We seek an open dialogue with non-violent and credible non-government organizations (NGOs) on diverse subjects such as the environment and human rights. During these exchanges, we strive to create an atmosphere where all points of view are welcome and respected. This dialogue takes the form of face-to-face meetings and conference calls.

In fiscal 2010, our Aerospace group initiated discussions with environmental and aviation NGOs such as the International Coalition for Sustainable Aviation and Transport & Environment. Our Transportation group maintains relationships with several environmental NGOs, including the:

- International Network for Environmental Management (INEM) and B.A.U.M.
- Allianz pro Schiene (Alliance for Rail)
- Future e.V.

# 7.4.7 GOVERNMENTS AND REGULATORY AUTHORITIES

Governments are both customers and partners for Bombardier. We maintain an open dialogue with various levels of government through, among other activities, official meetings and briefings. Both our business groups are working with government entities to advance diverse green projects.

# **GREEN INITIATIVES**

#### Europe

#### European Union Clean Sky

The EU's Clean Sky is a joint technology initiative focused on accelerating the development of breakthrough technologies to reduce aviation's environmental impact. This public-private partnership includes some 86 organizations in 16 countries along with 54 manufacturers, including all leading European aviation companies, plus 15 research centres and 17 universities. Clean Sky is currently working on the following integrated technology demonstrators:

- SMART fixed wing aircraft
- Green regional aircraft
- Green rotorcraft
- Sustainable and green engines
- Systems for green operations
- Eco-design

#### Single European Sky Air Traffic Management Research (SESAR)

SESAR is the European Union's €30 billion air traffic management modernization program. The current patchwork of 35 air traffic control organizations is based largely on national borders. SESAR will replace this patchwork with "functional airspace blocks" based on operational requirements, in particular traffic flows. The European Commission estimates that implementing SESAR could save 16 million tonnes of CO<sub>2</sub> a year through:

- More efficient air traffic control
- Shorter routings
- Fewer delays

#### **United States**

#### NASA's National Plan for Aeronautics Research and Development

NASA's National Plan for Aeronautics Research and Development aims to reduce fuel consumption, explore alternative fuels, and research technologies and operational procedures for reducing energy consumption, noise and emissions.

#### Next Generation Air Traffic Control System (NextGen)

*NextGen* is a far-reaching transformation of the entire American air traffic control system, comparable to SESAR in Europe. It will replace ground-based technologies with new and more dynamic satellite-based technology. The Federal Aviation Administration's (FAA) *NextGen* portfolio consists of the following seven solution sets, each focusing on a series of related operational changes:

- Trajectory based operations (TBO)
- High density airports (HD)
- Flexible terminals and airports (FLEX)
- Collaborative air traffic management (CATM)
- Reduce weather impact (RWI)
- Safety, security and environment (SSE)
- Transform facilities (FAC)

The latest FAA estimates show that, by 2018, NextGen will:

- Reduce total flight delays by about 21%
- Generate \$22 billion in cumulative benefits to the traveling public, aircraft operators and the FAA
- Save more than 1.4 billion gallons of fuel
- Cut CO<sub>2</sub> emissions by nearly 14 million tonnes

#### Canada

#### Canadian Aerospace Environmental Technology Road Map (CAETRM)

In May 2009, Bombardier Aerospace became the chair of the newly formed Canadian Aerospace Environmental Technology Road Map (CAETRM). See Industry Partnerships and Associations (7.4.5) for more information.

#### Green Aviation Research and Development Network (GARDN)

Bombardier is a founding member of Canada's Green Aviation Research and Development Network (GARDN), a new grouping of 18 government, academic and industry partners. See Industry Partnerships and Associations (7.4.5) for more information.

#### AIAC Future Major Platform Technology Demonstrators and Aero Montréal "Avion Vert" Program

The Aerospace Industries Association of Canada is calling for a national technology demonstrator program. The program will bring together Canada's OEMs, SMEs and equipment manufacturers with major R&D programs in other key aerospace countries. A coordinated approach will ensure that technology demonstration, a crucial R&D phase bridging the research and "bring-to-market" phases, is well-funded. Demonstrators are currently needed in:

- Aircraft composite structures
- "More Electric" aircraft systems and engines
- Integrated avionics
- Advanced vision systems

Aero Montréal called for a similar industry-wide "Avion Vert" demonstrator program based on the "SAGE" requirement of future aircraft:

- Smart systems
- Affordable initial and operating cost
- Environmentally friendly technology
- Efficient performance and operations

Currently no funding has been provided by the Federal government, but the Québec government's latest budget included \$70 million Cdn in funding over the next four years. The industry has committed \$80 million Cdn.

The "Avion Vert" demonstrator program will focus on the following five "SAGE" projects:

- SAGE-1: Composite aircraft fuselage structure
- SAGE-2: More electrical engine
- SAGE-3: Integrated modular avionics for cockpit applications

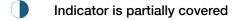
- SAGE-4: Integrated avionics for critical systems
- SAGE-5: Future Landing gear

In addition to spearheading the first SAGE project, our Aerospace group is expected to be an active participant in the four other projects.

# **GRI** Index

Mandaton           Sell Declared           Luid barth           Live cycle           Barternally Assured	
Third Party Checked	Assured
Optional port Exte	Externally
GRI Checked	Report

Indicator is fully covered



Indicator is currently not covered

Additional performance indicators are shown in grey shades

DMA Description of Management Approach

#### GRI **Description** Degree of Reference Indicator compliance Strategy and Analysis Statement from the most senior decision-1. Our Approach maker of the organization about the 1.1 relevance of sustainability to the organization 1.1. Executive Messages and its strategy Description of key impacts, risks and 1. Our Approach 1.2 opportunities 1.1. Executive Messages **Organizational Profile** 2.1 Name of Organization 1.3. Company Profile 2.2 Primary brands, products and/or services 1.3. Company Profile Operational structure of the organization, 2.3 including main divisions, operating 1.3. Company Profile companies, subsidiaries and joint ventures 2.4 Location of organization's headquarters 1.3. Company Profile Number of countries where the organization operates and names of countries with either 1.3. Company Profile 2.5 major operations or that are specifically 2009-2010 Annual Report, p.206 relevant to the sustainability issues covered in the report 2.6 Nature of ownership and legal form 2010 Management Proxy Circular Markets served (including geographic 1.3. Company Profile 2.7 breakdown, sectors served, and types of 2009-2010 Annual Report, p.28customers/beneficiaries) 29,63-65,106-110 Scale of reporting organization including: Number of employees, Net sales, Total 1.3. Company Profile 2.8 capitalization broken down in terms of debt 2009-2010 Annual Report and equity, Quantity of products or services provided

# **GRI G3 STANDARD DISCLOSURES**

2.9		nificant changes during the reporting od regarding size, structure or ownership	Not applicable. There were no significant changes during the reporting period regarding size, structure or ownership.
2.10	Awa	ards received in the reporting period	1.5. Recognitions
Report Parameters	;		
3.1	Rep	orting period for information provided	1. Our Approach
3.2	Date	e of most recent previous report	1. Our Approach
3.3	Rep	orting cycle	1. Our Approach
3.4		tact point for questions regarding the ort or its contents	1. Our Approach
3.5	Proc	cess for defining report content	1. Our Approach
3.6	Bou	indary of the report	1. Our Approach
3.7		ement of specific limitations on the scope oundary of the report	1. Our Approach
3.8	ope sign	is for reporting on joint ventures, sidiaries, leased facilities, outsourced rations, and other entities that can ificantly affect comparability from period eriod and/or between organizations	1. Our Approach
3.9	base	a measurement techniques and the es of calculations, including assumptions techniques	3.4. Health and Safety 5.2. Environmental Performance
3.10	of in	lanation of the effect of any re-statements formation provided in earlier reports and reasons for such restatements	5.2. Environmental Performance

3.11	Significant changes from previous reporting periods in the scope, boundary or measurement methods applied in the report	5.2. Environmental Performance
3.12	Table identifying the Standard Disclosures in the report	GRI Index
3.13	Policy and current practice with regard to seeking external assurance for the report.	1. Our Approach 5.2. Environmental Performance
Governance, commitme	ents and engagement	
4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	2. Governance 2.2 Corporate Governance 2010 Management Proxy Circular
4.2	Indicate whether the Chair of the highest governance body is also an executive officer.	Corporate website/Governance/ Board of Directors
4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	2. Governance 2.2 Corporate Governance
4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	2. Governance 2010 Management Proxy Circular
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives and the organization's performance (including social and environmental)	2. Governance 2.2 Corporate Governance 2010 Management Proxy Circular, p.25 Corporate website/Governance/ Remuneration
4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	Corporate website/Governance/ Code of Ethics and Business Conduct 2. Governance 2010 Management Proxy Circular, p.58

[		
4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental and social topics	Corporate website/Governance/ Board Committees 2010 Management Proxy Circular, p.56
4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic environmental and social performance and the status of their implementation	<ul><li>1.0 Our Approach</li><li>2.2 Corporate Governance</li><li>2.3 Ethics</li></ul>
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental and social performance, including relevant risks and opportunities and adherence or compliance with internationally agreed standards, codes of conduct and principles	2.2. Corporate Governance 2.4. CSR Governance
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental and social performance.	2009 Management Proxy Circular, p.56
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	2.2. Corporate Governance
4.12	Externally developed economic, environmental and social charters, principles or other initiatives to which the organization subscribes or endorses	<ul><li>2.5. UN Global Compact</li><li>4.0 Products</li><li>5.3. Energy and Carbon Strategy</li><li>7.4. Stakeholder Engagement</li></ul>
4.13	Memberships in associations and/or national/ international advocacy organizations in which the organization: Has positions in governance bodies; Participates in projects or committees; Provides substantive funding beyond routine membership dues; Views membership as strategic	7.4. Stakeholder Engagement

4.14		List of stakeholder groups engaged by the organization	7.4. Stakeholder Engagement
4.15	•	Basis for identification and selection of stakeholders with whom to engage	1. Our Approach 7.4. Stakeholder Engagement
4.16	•	Approaches to stakeholder engagement including frequency of engagement by type and by stakeholder group	7.4. Stakeholder Engagement
4.17		Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns including through its reporting.	<ul><li>1.0 Our Approach</li><li>2.2 Corporate Governance</li><li>3.5 Engagement</li><li>4.7 Engaging Customers</li><li>6.0 Supply Chain</li><li>7.4 Stakeholder Engagement</li></ul>
Economic			
DMA	•	Description on the management approach related to the economic aspects including economic performance, market presence and indirect economic impacts.	<ul><li>1.0 Our Approach</li><li>3.0 Employees</li><li>6.0 Supply Chain</li><li>7.3 Community Involvement</li></ul>
EC1		Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, etc.	<ol> <li>1.3. Company Profile</li> <li>Supply Chain</li> <li>7.3. Community Involvement</li> </ol>
EC2		Financial implications and other risks and opportunities for the organization's activities due to climate change.	5. Operations CDP 2009
EC3		Coverage of the organization's defined benefit plan obligations.	2010 Annual Report, p.193-197
EC4		Significant financial assistance received from government.	2010 Annual Report, p.136
EC5	0	Range of ratios of standard entry level compared to local minimum wage	Not covered

EC6		Policy, practices, and proportion of spending on locally based suppliers	6.4. Supplier Relationship
EC7	•	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	3.2. Talent Management 3.3. Diversity
EC8		Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in- kind, or pro bono engagement.	7. Responsible Citizen 7.3. Community Involvement
EC9		Understanding and describing significant indirect economic impacts, including the extent of impacts.	7.0 Responsible Citizen 7.3 Community Involvement
Environmental			
DMA	•	Description on the management approach related to the environmental aspects including goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up.	<ul><li>4.0 Products</li><li>5.0 Operations</li><li>6.10 Supply Chain</li></ul>
EN1		Materials used by weight or volume	<ul><li>5.2. Environmental Performance</li><li>4.4. Aerospace Products</li><li>4.5. Transportation Products</li></ul>
EN2		Percentage of used materials that are recycled materials	4.4.5. Recyclability 4.5.4. Recyclability
EN3		Direct energy consumption	5.2. Environmental Performance
EN4		Indirect energy consumption by primary source.	5.2. Environmental Performance
EN5		Energy saved due to conservation and efficiency improvements.	5.2. Environmental Performance 5.3. Energy and Carbon Strategy 5.4. Environmental Initiatives
L			

EN6		Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	4. Products
EN7		Initiatives to reduce indirect energy consumption and reductions achieved.	5.2. Environmental Performance 5.3. Energy and Carbon Strategy 5.4. Environmental Initiatives
EN8		Total water withdrawal by source	5.2. Environmental Performance
EN9	$\bigcirc$	Water sources significantly affected by withdrawal of water	Not covered
EN10	$\bigcirc$	Percentage and total volume of water recycled and reused.	Not covered
EN11	$\bigcirc$	Production plants in areas of high biodiversity value	Not covered
EN12	$\bigcirc$	Significant impacts upon biodiversity in protected areas	Not covered
EN13		Habitats protected and restored	7.3 Community Involvement.
EN14	$\bigcirc$	Strategies for managing impacts on biodiversity	Not covered
EN15	$\bigcirc$	Endangered species affected by operations of the organization	Not covered
EN16		Total direct and indirect greenhouse gas emissions by weight	5.2. Environmental Performance
EN17	$\bigcirc$	Other relevant indirect greenhouse gas emissions by weight	Not covered

EN18		Initiatives to reduce greenhouse gas emissions and reductions achieved.	5. Operations
EN19	$\bigcirc$	Emissions of ozone-depleting substances by weight.	Not covered
EN20		NO, SO, and other significant air emissions by type and weight.	5. Operations
EN21		Total water discharge	5.2. Environmental Performance
EN22		Total weight of waste by type and disposal method.	5.2. Environmental Performance
EN23	$\bigcirc$	Significant spills	Not covered
EN24	$\bigcirc$	Weight of transported, imported, exported or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III and VIII and percentage of transported waste shipped internationally	Not covered
EN25	$\bigcirc$	Areas impacted by the organization's discharges of water and runoff	Not covered
EN26	•	Initiatives to mitigate environmental impacts of products and services and extent of impact mitigation.	4. Products
EN27		Percentage of products sold and their packaging materials that are reclaimed by category	4.4.5. Recyclability 4.5.4. Recyclability
EN28		Significant fines and sanctions for non- compliance with environmental laws	No significant fines occurred
EN29	$\bigcirc$	Significant environmental impacts of transporting products, goods, materials, and members of the workforce	Not covered
EN30		Environmental protection expenditures and investments	5. Operations
Labour Practice	S		
DMA	•	Description on the management approach related to labour practices including goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up.	3. Employees

LA1		Total workforce by employment type, employment contract and region.	1.3 Company Profile 3.0 Employees
LA2		Total number and rate of employee turnover	3. Employees
LA3	$\bigcirc$	Benefits provided only to full-time employees	Not covered
LA4		Percentage of employees covered by collective bargaining agreements.	3. Employees
LA5		Minimum notice period(s) regarding significant operational changes	3. Employees
LA6		Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on OHS programs	3. Employees
LA7		Rates of injury, occupational diseases, lost days and absenteeism and number of work- related fatalities by region.	3.4. Health and Safety
LA8		Preventive Healthcare, counseling and training regarding serious diseases	3.4. Health and Safety
LA9	$\bigcirc$	Health and safety topics covered in agreements with trade unions	Not covered
LA10		Average hours of training	3.4. Health and Safety
LA11		Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	3.5.2. Developing
LA12	•	Percentage of employees receiving regular performance and career development reviews.	3.5.2. Developing
LA13		Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership and other indicators of diversity.	2.2. Corporate Governance 3.3. Diversity
LA14	$\bigcirc$	Ratio of basic salary of male and female employees	Not covered

uman Rights			
DMA	•	Description on the management approach related to human rights including goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up.	7.2 Human rights
HR1	0	Investment decisions that include human rights clauses or screening	Not covered
HR2		Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	6. Supply Chain
HR3		Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	2.3. Ethics
HR4	$\bigcirc$	Incidents of discrimination and actions taken	Not covered
HR5		Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	<ul><li>2.3. Ethics</li><li>2.5. UN Global Compact</li><li>6.2. Supplier Code of Conduct</li><li>7.2 Human Rights</li></ul>
HR6		Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	<ul><li>2.3. Ethics</li><li>2.5. UN Global Compact</li><li>6.2. Supplier Code of Conduct</li><li>7.2 Human Rights</li></ul>
HR7		Operations identified as having significant risk for incidents of forced or compulsory labor, and measures taken to contribute to the elimination of forced or compulsory labor.	<ul><li>2.3. Ethics</li><li>2.5. UN Global Compact</li><li>6.2. Supplier Code of Conduct</li><li>7.2 Human Rights</li></ul>
HR8	0	Percentage of security personnel trained on aspects of human rights that are relevant to operations	Not covered
HR9	$\bigcirc$	Incidents of violations involving rights of indigenous people	Not covered

Society			
DMA	•	Description on the management approach related to society including goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up.	1.2 Ethics 7.0 Responsible Citizen
SO1		Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating and exiting.	<ol> <li>1. Our Approach</li> <li>5. Operations</li> <li>7. Responsible Citizen</li> </ol>
SO2		Number of business units analyzed for corruption-related risks	2.3. Ethics 6.2. Supplier Code of Conduct
SO3	•	Percentage of employees trained in organization's anti-corruption policies and procedures.	2.3. Ethics
SO4	$\bigcirc$	Actions taken in response to incidents of corruption.	Not covered
SO5		Public policy positions and participation in public policy development and lobbying.	4.3. Greenhouse Gas Emissions 7.4. Stakeholder Engagement
SO6		Financial and in-kind contributions to political parties and politicians	Corporate website/Governance
SO7	0	Number of legal actions for anti-competitive behavior	Not covered
SO8	$\bigcirc$	Number of fines for non-compliance with laws	Not covered
Product Respo	onsibility		
DMA	•	Description on the management approach related to product responsibility including goals and performance, policy, organizational responsibility, training and awareness, monitoring and follow-up.	4. Products 4.1. Objectives 4.2. Our Approach
PR1		Life cycle stages in which health and safety impacts of products and services are assessed for improvement and percentage of significant products and services categories subject to such procedures.	4. Products 4.6. Safety

PR2	$\bigcirc$	Incidents of non-compliance with regulations concerning health and safety of products and services	Not covered
PR3		Principles and measures related to product and service information and labeling N/A	4.2.3. Environmental Product Declarations
PR4	•	Incidents of non-compliance with regulations and voluntary codes concerning product information and labeling N/A	No occurrence
PR5	•	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	4.7. Engaging Customers
PR6	0	Programs for compliance with laws, standards, and voluntary codes related to marketing communications and safety committees	Not covered
PR7	•	Incidents of non-compliance with regulations and voluntary codes related to marketing communications	No occurrence
PR8	•	Number of substantiated data protection complaints	No occurrence
PR9	$\bigcirc$	Significant fines for non-compliance with laws and regulations concerning the provision and use of products	Not covered