

Making the Business Case for Sustainability

Maryanne Roberts

Bombardier Transportation

Sr. Advisor, Comms. &

Public Affairs, U.S.

Horsham, Pennsylvania



2011 Rail Conference

Making the Business Case for Sustainability

- Bombardier
- Corporate Social Responsibility and Sustainability
- Sustainability in Products and Operations
- Keys to Success

Bombardier Inc. Overview

- Corporate headquarters: Montreal
- Two product segments



Bombardier Transportation Facts and Figures

- Headquarters: Berlin
- Employees: 34,900 in over 60 countries
- Facilities: 58 production and engineering sites; 40 services centers at customer premises
- Over 100,000 vehicles in service worldwide

Bombardier Transportation Products and Solutions

- Rolling stock and related equipment
- Transportation systems
- Services
- Signaling



One Definition of Corporate Social Responsibility

- "Corporate Social Responsibility is a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis." - European Commission

Another Definition of Corporate Social Responsibility

- CSR is the deliberate inclusion of public interest into corporate decision-making and the honoring of a triple bottom line:
Planet – People - Profit
(ecological, social and economic performance)

Corporate Social Responsibility and Stakeholders

- More than “just” enhancing brand reputation
- Investors and Customers include CSR aspects as decision criteria
- Employees prefer to work for companies with a distinct CSR commitment

CSR a Business Priority at Bombardier

- One of our 5 business priorities:
Enhance our commitment to CSR 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.

Sustainability as a Component of Corporate Social Responsibility

Mega trends:

- Climate change (global warming caused by CO2 emissions)
- Rapid urbanization and population growth (a challenge to strained infrastructures)
- Congestion (wastes time, energy, money; creates pollution, stress)
- Oil scarcity and volatile energy prices

The Climate is Right for Trains!

- Rail is the answer to mega trends
- Rail is the most sustainable solution for future mobility
- Major advantages in space, efficiency, energy consumption, reduced emissions

Sustainability Objectives

- **Product Responsibility**
Apply a life cycle approach to product development to enhance energy efficiency and improve the overall environmental profile of our products
- **Operational Environmental Mgt.**
Use inputs efficiently and eliminate or minimize unwanted outputs

Sustainable Products - Our Responsibility

To the planet in general, and
specifically to our customers

Improvements to our products'
overall environmental performance
will help them to:

- Reduce their carbon footprint
- Reduce their operating costs
- Improve their performance
- Attract more passengers to rail

Sustainable Products – Our Strategy

Design for Environment

- Apply a lifecycle perspective
- Maximize recyclability and recoverability
- Eliminate hazardous substances
- Ensure transparent communication
- Invest in technologies
- Involve suppliers

Sustainable Products – Our Strategy

Blend innovation and sustainable design to create lighter, quieter, more energy efficient, cleaner and greener, high-performing trains

Invest in R&D towards product innovation (\$147 million last year)

Sustainable Products - A Success Story

Delhi Metro

- First railway project in the world to receive carbon credits for regenerative braking
- *BOMBARDIER MOVIA* metro trains with *BOMBARDIER MITRAC* propulsion improve energy efficiency by creating up to 30% energy reduction through regenerative braking

Sustainable Operations - Our Responsibility

While use and maintenance of our products generates the greatest impact, reducing the environmental footprint of our service and manufacturing facilities remains an ongoing focus.

Sustainable Operations - Our Strategy

- Reduce energy consumption
- Reduce water consumption
- Reduce hazardous waste
- Reduce general waste
- Increase use of recycled materials
- Reduce greenhouse gas emissions

Sustainable Operations - Success Stories

Environmental footprint reduced
approx. one third between 2004
and 2010:

- 31% reduction in energy consumption
- 32% reduction in GHG emissions
- 37% reduction in water consumption

Sustainable Operations - North American Example

La Pocatiere, Quebec

- Began using heat generated by compressors and laser-cutting machine to heat parts of the workshop
- Contributed to annual heat savings of 112,000 KWh (equiv. to powering 100 60-watt light bulbs for > 2 years)

Sustainable Operations – Energy and Carbon Management

Objectives:

- Launch an annual Green Fund across the company to finance energy-saving initiatives
- Establish site-specific CO2 reduction targets
- Implement program to achieve carbon neutrality

Sustainable Operations – Environmental Performance

Objectives:

- Start implementing HSE Information Management System to improve environmental data accuracy and consistency
- Begin monitoring new environmental indicators
- Adopt company-wide green building guidelines for new facilities based on third-party certification requirements

Key Long-Term Environmental Goals

- Achieve carbon-neutral operations by 2020
- Switch to renewable materials where possible
- Continuously decrease the amount of water, energy and raw material used in our production processes
- Eliminate the use of restricted substances
- Deliver a “zero waste” performance

Achieving Key Long-Term Environmental Goals

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

Keys to Success - Communication

- Communicate to stakeholders
 - Bombardier Annual Report
 - Bombardier Inc. Corporate Social Responsibility Report
 - Bombardier Transportation Sustainability Report (2010 = 4th bi-annual report)
 - CSR website: csr.bombardier.com



Keys to Success – Stakeholder Engagement

- Engage your employees
 - Innovation Express
 - Tool to jointly create and work on innovative projects across divisions and worldwide

Keys to Success – Stakeholder Engagement

- Engage your customers
 - Understand their strategies, business priorities, requirements
 - Jointly design rail solutions

Keys to Success – Stakeholder Engagement

- Engage your customers' customers – the passengers
 - Solicit input to create more attractive and effective products
 - YouRail design competition

Keys to Success – Stakeholder Engagement

- Engage your suppliers
 - Utilize their expertise
 - Involve in design decisions
 - Joint R&D projects
 - Suppliers' Day

Making the Business Case for Sustainability

Your sustainability program can:

- Enhance your company's reputation / Position your company as a leader
- Drive innovation
- Create a competitive advantage

The end result = Succe\$\$

Making the Business Case for Sustainability

Maryanne Roberts

Bombardier Transportation

Sr. Advisor, Comms. &

Public Affairs, U.S.

Horsham, Pennsylvania



2011 Rail Conference