CANADIAN PACIFIC



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# 1. SUSTAINABILITY AT CANADIAN PACIFIC

CP's philosophy is that effective governance involves more than policies, procedures and protocols; it must be integrated in the everyday business practices of all those who work for CP.

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## **INTRODUCTION:**

## WELCOME FROM E. HUNTER HARRISON, CHIEF EXECUTIVE OFFICER, CANADIAN PACIFIC







At CP, we believe that corporate sustainability creates shareholder value. It is a part of everything we do. We report on our progress, challenges and future plans through our biennial sustainability report.

Since our last report in 2009, we have decided to apply the guidelines outlined in the Global Reporting Initiative, GRI 3.1, in our sustainability reporting. The scope of this report has increased to include more comprehensive environmental, social and economic disclosure. We've also expanded our measurement methods to include a materiality analysis and stakeholder engagement information. We have self-assessed our 2010-2011 corporate sustainability report to be Application Level B. GRI reporting means that we are following the approach of sustainability leaders globally. While the content of this report has not been externally verified, we are satisfied that the information and data contained herein is accurate, reliable and provides a fair and balanced representation of CP's sustainability activities. During the reporting process, we have worked closely with a team of external advisors to enhance the breadth and quality of our disclosure. Our customers, shareholders, employees and other important stakeholders have also informed this report.

As sustainability is integrated in our business, we think it is important to be transparent and share quantitative sustainability indicator data with our stakeholders. This is another change compared to our 2009 report. Over the next couple of years, you can expect our sustainability reporting to become further aligned with financial disclosure.







For the 2010-2011 reporting period, I am proud to report the following:

- Our carbon emissions have remained flat as we are increasing the freight that we move and improving our fuel efficiency. As a part of our Carbon Disclosure Project response, we are also starting to measure our indirect, scope 3 emissions.
- For two large areas of purchase and waste, rails and ties, we have almost created a closed materials loop where we buy from sustainable sources – used steel for rails and wood for ties – and enable reuse and recycling of steel and energy generation from ties.
- We maintained our status as the safest Class 1 railroad in North America based on frequency of train accidents, with an FRA accident rate of 1.9 per million train miles in 2011.
- In 2010 and 2011, we completed two consecutive calendar years with zero employee fatalities. This is the first time we have achieved this in our history, and the first time any Class 1 railway in North America has done this.
- In partnership with Parks Canada, we created a Joint Action Plan to investigate how to reduce bear mortality along the railway.
- We achieved recognition for diversity in the workforce and on our Board of Directors.

All of this and more is described in *Tracking Sustainability*.

Thank you for taking the time to learn about how CP is integrating sustainability into our business and enabling North Americans to lower their carbon footprint. On behalf of CP's Board, I would also like to thank our employees, customers, suppliers and other business partners for contributing to our sustainability initiatives and inspiring us to do more.

Sincerely,

E. Hunter Harrison

Chief Executive Officer

# 1.2 CANADIAN PACIFIC PROFILE





Headquartered in Calgary, Alberta, Canadian Pacific operates a transcontinental railway in Canada and the United States, and provides logistics and supply chain expertise. Canadian Pacific provides rail and intermodal transportation services over a network of approximately 14,680 miles, serving the principal business centres of Canada from Montreal to Vancouver, and the U.S. Northeast and Midwest regions. CP's railway feeds directly into the U.S. heartland from the East and West coasts. Agreements with other carriers extend CP's market reach east of Montreal in Canada, throughout the U.S. and into Mexico.

Our rail network transports bulk commodities, merchandise freight and intermodal traffic. Bulk commodities include grain, coal, sulphur, and fertilizers. Merchandise freight consists of finished vehicles and automotive parts, as well as forest, industrial and consumer products. Intermodal traffic largely consists of high-value, time-sensitive retail goods in overseas containers that can be transported by train, ship, and truck, and in domestic containers and trailers that can be moved by train and truck to final destination.

CP is a public company with shares listed on the Toronto Stock Exchange and New York Stock Exchange. Our revenues have grown at a compound annual growth rate of 2.5% since 2006 and our revenue ton miles (RTM) at a rate of 1% per year over the same period. Other results from our key economic indicators are included in the table on page 5.

CP's corporate strategy is aligned with, and complementary to, our sustainability strategy. For example, operating efficiencies reduce our environmental footprint; our operate safely and develop people foundations (detailed on page 9) contribute to our social license to operate; our ability to provide service enables more North American transportation users to select a cleaner mode. Together, the rewards of good environmental, social and governance stewardship reduce the risk profile of CP and increase long-term shareholder return.

The following graphs and table highlight important financial indicators. The sustainability report mainly focuses on ESG, non-financial, indicator performance.

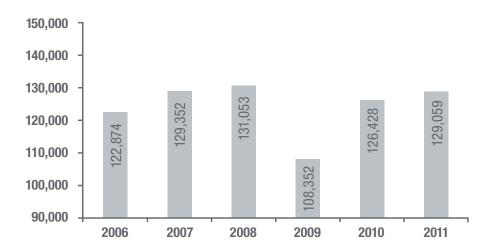
During the reporting period, there have been no significant changes to the organization's scope and scale of operations, organizational structure or ownership. There are no restatements of information from our 2009 report.

<sup>&</sup>lt;sup>1</sup> CP operates in more than 1,100 North American communities. A detailed listing of our Intermodal, Transload, Port and Yard facilities may be found at: http://www.cpr.ca/en/our-network-and-facilities/Pages/default.aspx.

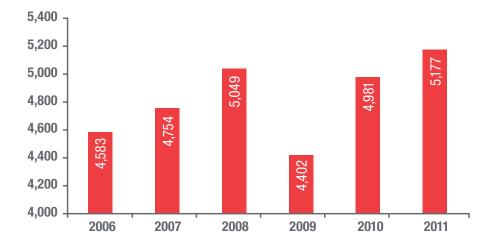
## **FOCUS AREA:**

## **ECONOMIC PERFORMANCE**

#### **REVENUE TON MILES (\$ MILLIONS)**



#### **TOTAL REVENUE (\$ MILLIONS)**







¹Income taxes paid were low in 2010 and 2011 due to income tax losses carried forward from prior years. At December 31, 2011, the Company has income tax operating losses carried forward of \$1,411 million.

ECONOMIC INDICATORS		
Year	2011	2010
Revenue (Millions)	\$5,177	\$4,981
Operating Expense (Millions)	\$4,210	\$3,865
Operating Ratio	81.3%	77.6%
Compensation and Benefits (Millions)	\$1,426	\$1,431
Income Taxes Paid (Millions) <sup>1</sup>	\$4	\$8
Net Income (Millions)	\$570	\$651
Retained Earnings (Millions)	\$5,445	\$5,073
GTM (Millions)	247,955	242,757
RTM (Millions)	129,059	126,428
FTE Employees	14,169	13,879

# DRIVING SUSTAINABILITY WITHIN OUR COMPANY & BEYOND:

# GLEN WILSON, VICE-PRESIDENT SAFETY, ENVIRONMENT & REGULATORY AFFAIRS





As a North American railway, Canadian Pacific's purpose is straightforward: we create value by providing safe, efficient and secure rail freight services that support our economy and society. But it is also important to consider how we manage our business. We believe that sustainability - a business model that fosters decisions grounded in financial, environmental and social interests – is the appropriate model. We understand these three elements are intimately connected to each other and must be balanced with a long-term perspective. We see it as a way of conducting business that strengthens both the business – by generating profits and building resilience – and society – by generating positive outcomes for the environment, communities, and employees.

We are committed to continuing down this path and believe that sustainable companies create financial value; understand how their actions affect the environment and actively address those impacts; care about their employees, customers and communities and work to make positive social change.

One globally significant area in which we are contributing is the reduction of greenhouse gases (GHG) associated with surface transportation. Since 1990, our greenhouse gas emissions per Revenue Ton Mile (RTM) have decreased by 25.6%. Our total GHG emissions in 2011 were 3,347 kilotonnes - which is only 7.9% above 1990 levels despite a 45.1% increase in RTM over the same period. We are partnering with other modes such as trucking and marine and investing in new intermodal facilities, colocating with major distribution hubs and building new infrastructure to deliver even more efficiencies in the supply chain.

What is remarkable is that we move that freight using a relatively small land footprint – a rail corridor that is approximately 100 feet wide and some 14,680 miles in length – a land footprint which has not grown significantly in over 125 years. We understand long term. With innovation, we have increased our ability to safely handle more and more freight and we will continue to leverage technology and operational improvements to create further capacity within that footprint.

Now, we also want to be open about defining and measuring our corporate progress. This Sustainability Report forms part of our commitment to transparency and reporting on our key sustainability performance. We have more to do and recognize that we need to develop new information management systems to progress our performance reporting and goal setting and further integrate it into our business. We are also committed to third-party assurance of some key performance data in our next report.

I invite you to read this report and follow our progress down this track.

Glen Wilson,

Vice-President Safety, Environment & Regulatory Affairs

# **AWARDS AND RECOGNITION**





Print

AWARD	WHAT WE'RE DOING
GLOBE AND MAIL BOARD GAMES 2011 CORPORATE GOVERNANCE RANKINGS	In 2011, CP was ranked 4th in Canada for its corporate governance practices. The ranking methodology considers board composition, shareholding & compensation, shareholder rights and disclosure.
CORPORATE KNIGHTS BEST 50 CORPORATE CITIZENS 2010	In 2010, CP was ranked 25th in Canada in Corporate Knights' annual ranking. This ranking provides insight into the state of responsible business in Canada. Companies are rated based on their environmental, social, governance and transparency practices. Company scores are determined based on their performance on eleven indicators including energy, carbon, water and waste productivity, leadership diversity and safety.
CHEMICAL INDUSTRY ASSOCIATION OF CANADA AWARD OF MERIT	The Chemical Industry Association of Canada presented Michael Wilken and William Fairfield of CP, along with representatives of the Railway Association of Canada, the 2011 Award of Merit for their work. CP contributes annually in the organization and participation of TransCAER (Transportation Community Awareness and Emergency Response) events, including the presentation and training with the CCPX 911 training car and the registration of qualified emergency response contractors. This is the first year the Association has provided formal recognition outside of their member companies.
INTERNATIONAL HEAVY HAUL ASSOCIATION BEST PAPER AWARD	"The Continued Evolution of Safer, More Productive and Less Destructive Trains on CP," authored by Stan Bell, CP Director, Operations Standards and Rules, was recognized by the International Heavy Haul Association Board of Directors with the "Best Paper" Award. The expert judges determined that Stan's work demonstrated significant potential for improvements in railroad safety, efficiency and productivity.
RAILWAY ASSOCIATION OF CANADA ENVIRONMENT EXCELLENCE AWARD	CP was presented with a Railway Association of Canada Environment Award in 2011. This award acknowledges CP's Genset Locomotive Testing Program that compared genset locomotives, which use several smaller diesel engines, with traditional diesel locomotives. Testing conducted through 2009 and 2010 confirmed fuel savings and resulting greenhouse gas emission reductions of approximately 35% and reduced noise levels.
CP 2011 ENVIRONMENTAL EXCELLENCE AWARD WINNER	Kevin Lopresti, Locomotive Systems Specialist from Calgary, was selected as CP's Employee Environmental Excellence Award winner in 2010. Kevin has undertaken various initiatives to reduce locomotive idling, including the introduction of the ZTR auto-stop system, which 98% of CP's current yard fleet is now equipped with.
2010 ALBERTA HUMAN RIGHTS COMMISSION DIVERSITY LEADERSHIP AWARD OF DISTINCTION	With more than 3,650 Alberta employees, CP was been recognized for its exceptional work in building workplaces that are welcoming and inclusive.
OEKOM RESEARCH AG REPORT	Oekom Research AG is a research and rating agency based in Germany. Researching the integration of ethical, social and environmental aspects in the investment management of their clients with assets totaling over 90 billion euros from 8 countries, 17 railways from 9 countries were evaluated.  CP achieved a B- (PRIME) rating and industry leader status in four areas:  * Health & Safety  * Product Responsibility  * Business Ethics  * Biodiversity

#### **FOCUS AREA:**

## **GOVERNANCE & SUSTAINABILITY MANAGEMENT**





#### STRATEGY

Our objective is to create long-term value for our customers, shareholders and employees by aligning all parts of the organization around our Foundations:

- Provide Service: Promise only what we can do. Always do what we have promised. Our standards and what we offer must always be getting better. This maxim belongs to every department, person and part of our railway.
- Control Costs: Always looking for the better way is in everyone's role. Can we not do something? Can we do it faster, better and less expensively? The answer is always Yes.
- Optimize Assets: Have only the assets we absolutely need to provide the services we have promised. Intelligently exhaust all other ways to improve productivity before spending one dollar of capital.
- Operate Safely: Don't get anyone hurt. Protect our people. Protect our customer's goods. Protect our communities. Protect the environment.
- **Develop People:** One employee focused on a plan is powerful. 15,000 are unstoppable. If you lead people your role is to coach them every day to be better than the day before. If you don't lead people then lead by example. It's the way of winners.

#### **BOARD OF DIRECTORS**

Becoming a truly sustainable business means integrating sustainability into our core processes and decision-making, starting with committed and visionary governance. The board has sole responsibility for Canadian Pacific's long-term strategic direction, succession plans for senior officers and risk management oversight. This includes taking reasonable steps to confirm that management has an effective risk management structure in place to identify, understand and appropriately manage business risks. The Board and its Governance Committee are responsible for developing CP's approach to corporate governance and annually reviews the Corporate Governance Guidelines, Board Terms of Reference, Board composition and skills and the performance of the Board, its directors and its committees. With the exception of President and Chief Executive Officer, Frederic J. Green and board member Edmond Harris, all board members are independent. For more details on our governance structure and Board composition, please visit our 2011 Annual Report online at: http://www.cpr.ca/en/invest-in-cp/ financial-reports/FinancialReports/Attachments/200/cp-ar-2011.pdf.





#### Print

#### CEO

The CEO is responsible for developing and managing a board approved long term strategy, business plan and budget. The CEO identifies and manages risks and opportunities in CP's daily operation, and implements board approved decisions and policies. The CEO establishes and maintains an ethical work environment which supports CP's core principles and ensures that CP's policies and operations are in accordance with government and regulatory requirements.

#### **ENVIRONMENTAL LEAD TEAM**

The strategic leadership and daily management of sustainability at CP are shared among numerous corporate groups: Health, Safety and Environment, Human Resources and Investor Relations. An Environmental Lead Team comprised of senior leaders from Operations, Strategy and Yield, Risk Management, Finance, Internal Audit, Strategic Sourcing, and Safety, Environment and Regulatory Affairs meets quarterly to review progress on environmental matters against targets. Our approach incorporates management systems, monetary compensation tied to achieving company targets including sustainability targets, workplace health and safety and diversity committees, regular audits and corrective action tracking.







#### **CODE OF BUSINESS ETHICS**

CP's Code of Business Ethics (the "code") addresses conflicts of interest, protection and proper use of corporate assets and opportunities, confidentiality of corporate information, fair dealing with third parties, compliance with laws, rules and regulations and reporting of illegal or unethical behaviour. The code applies to all directors, officers and employees, both unionized and non-unionized, of CP and its subsidiaries in Canada, the United States and elsewhere. All directors, officers and non-union employees are required to acknowledge that they have read, understood and agree to comply with the code. Contractors engaged by CP or its subsidiaries must also adhere to principles and standards of conduct consistent with those in the code.

#### **RISK MANAGEMENT**

As part of the preservation and delivery of value to our shareholders, we have developed an integrated Enterprise Risk Management framework to support consistent achievement of key business objectives through daily proactive management of risk. The objective is to identify events that result from risks, thereby requiring active management. Each event identified is assessed based on the potential impact and likelihood, taking account of financial, environmental and reputation impacts and existing management controls. Risk mitigation strategies are formulated to accept, treat, transfer, or eliminate the exposure to the identified events.







At CP, we believe that measuring our performance of key environmental and social indicators is a significant component of our overall management system and complements traditional economic measures of success. Below is an overview of the how we've chosen to address key sustainability focus areas.

#### **ENVIRONMENT**

North America is comprised of natural landscapes which provide valuable ecosystem services and habitat to an abundance of unique species. That is why at CP, we embrace our responsibility to protect the natural environment such that we meet the needs of today without hindering the ability of society to meet future needs. In 2011, Canadian Pacific was rated by the London-based FTSE Group as one of the top ten companies in North America for environmental, social and governance practices. Our environment management system is based on ISO14001 and complements our plans to reduce risk, minimize waste and introduce leading practices in fuel efficiency, water management and environmental protection. For example, CP's environmental assessment program ensures that projects and activities are designed and undertaken carefully and without causing adverse environmental impacts. Our proactive Environmental Accrual Program also remediates historically impacted sites with a target of achieving a 10% reduction in environmental liability per year. In 2010, we achieved a 12.4% reduction. Lastly, CP continues to pursue fuel conservation and locomotive fleet renewal to support our target for further greenhouse gas reductions.

#### **SOCIAL**

CP continues to be a leader in railway safety. We firmly believe that no job on our railway will ever be so important that we can't take the time to do it safely. That's why we actively integrate workplace, operational and public safety into everything we do. CP's Health, Safety, Security and Environment Committee<sup>2</sup> provides ongoing focus, leadership, commitment and support to improve the safety of our operations, the safety and health of all employees and the safety of communities through which we operate. A bottom-up safety action process, called the Safety Framework, actively involves over 1,000 employees, management and executives working together through local health and safety committees. CP produces a comprehensive corporate safety plan each year that is supported by individual safety plans produced by each operating department.





Additionally, senior union and operating employees meet regularly to discuss systemic safety enhancement opportunities. There are four functional policy committees in Canada, as well as three safety advisory boards in the U.S. This integrated approach to safety management covers all operating functions, ensures a consistent approach, promotes the sharing of best practices and has sustained our industry-leading safety performance.

In addition to being a safe place to work, CP strives to promote workplace diversity and employee well-being. Our focus is on supporting women in leadership and addressing high cholesterol and lack of exercise issues amongst our workforce through programs like our Wellness Subsidy Program.

CP's commitment to investing in its people extends to the more than 1,100 North American communities through which it operates. We strive to uphold our reputation as a valued and integral part of these communities, and that means knowing what matters to local residents and building meaningful relationships. We encourage our employees to support their local causes by volunteering time and donating to charities of their choice, with a portion of their funds matched by the company.

#### **GREEN ECONOMY**

As a transcontinental railway operator and logistics provider in Canada and the United States, CP plays an important role in advocating for an economy that is low carbon, resource efficient and socially inclusive. Railway transportation represents a sustainable choice for our customers, emitting approximately 91% less carbon dioxide than road transport. This positions CP as an integral part of sustainable supply chains throughout North America and a key player in the establishment of a green economy.

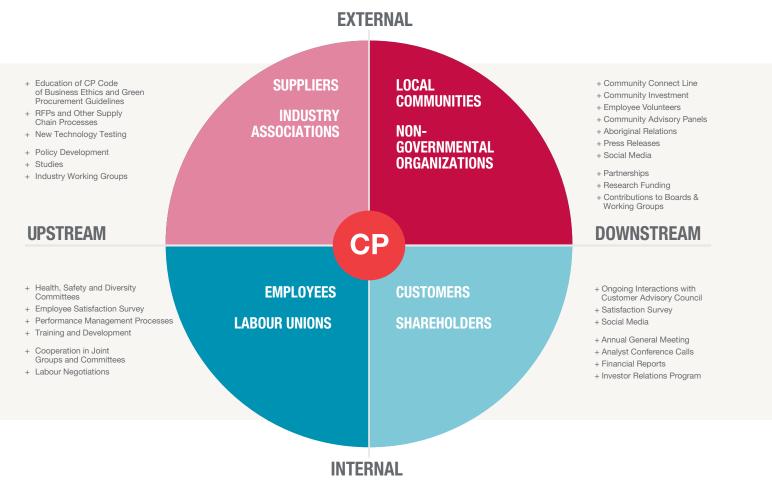
# 2. SUSTAINABILITY PERFORMANCE

Canadian Pacific is proud of our sustainability culture, driving resilience and innovation into much that we do. We are committed to improving sustainability in two parts – to enable our customers to achieve more sustainable business models and to integrate sustainability into our own operations.

Glen Wilson Vice-President Safety, Environment & Regulatory Affairs

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## STAKEHOLDER ENGAGEMENT







CP's operations impact a variety of stakeholder groups. As such, we seek to understand their views and involve them in working towards mutually beneficial outcomes. This involves being increasingly transparent and disclosing information to the appropriate groups regarding our operations and performance.

CP stakeholder engagement activities take place in ongoing, monthly and annual forums, and include initiatives such as:

- Ongoing working groups
- Customer Advisory Council conference calls
- Community advisory panels
- Public information sessions

#### STAKEHOLDER ENGAGEMENT: COMMUNITY CONNECT LINE

Our toll-free phone line and email service offer a single point of contact between residents, local governments and other stakeholders to ensure that CP has a constant presence in our communities and that we can promptly respond to inquiries. These range from proximity concerns to level crossings to questions about railway safety and train frequencies. In 2011, more than 7,000 people in Canada and the U.S. contacted us. This represents more than 130 community responses per week. CP's Community Connect toll-free number is: 1-800-766-7912. Our email address is: Community\_Connect@cpr.ca



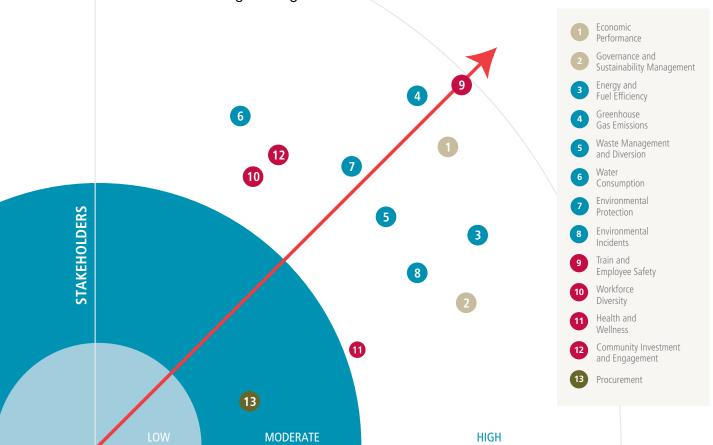
## **MATERIALITY**





Global Reporting Initiative (GRI) requires reporting organizations to identify the issues that are most important to the organization and its stakeholders. In developing this report, we followed the GRI process for identifying, prioritizing and validating report content. We have listened to the views of our customers, shareholders, employees and other stakeholders as described in the previous section. We have evaluated our own strategy and those of our industry peers to identify additional issues. We have consolidated this feedback and identified a number of focus areas that cover those parts of our business that are most significant to us and our stakeholders. Many of these focus areas represent both a potential risk to our operations and reputation if not managed appropriately, as well as an opportunity to create value for everyone involved with CP. Within each focus area, we have established indicators to measure our performance over time and demonstrate our commitment to sustainability.

The diagram below was compiled qualitatively through interviews with ESG analysts and reviewing their formal assessments of CP's sustainability performance, benchmarking customers, suppliers and industry peers, and conducting interviews with managers at CP with a sustainability mandate. Viewed within the overall aspect of moving freight, these material focus areas drive the strategic management of sustainability at CP and each one is described in detail in the pages that follow, including our targets and results.



# 2.3 INTRODUCTION TO SUSTAINABILITY INDICATORS

GOVERNANCE	ECONOMIC PERFORMANCE
GUVENNANGE	GOVERNANCE & SUSTAINABILITY MANAGEMENT
	ENERGY & FUEL EFFICIENCY
	GREENHOUSE GAS EMISSIONS
FAVIDONAFAT	WASTE MANAGEMENT AND DIVERSION
ENVIRONMENT	WATER CONSUMPTION
	ENVIRONMENTAL PROTECTION
	ENVIRONMENTAL INCIDENTS
	TRAIN & EMPLOYEE SAFETY
COCIAL	WORKFORCE DIVERSITY
SOCIAL	HEALTH & WELLNESS
	COMMUNITY INVESTMENT & ENGAGEMENT
ODEEN EGONOMY	PROCUREMENT
GREEN ECONOMY	MOVING FREIGHT





We have organized this sustainability report content into four main sections: Governance, Environment, Social and Green Economy. Each section has corresponding focus areas and indicators.

The following pages outline our sustainability performance from 2010-2011 for each focus area. They highlight the many initiatives we are undertaking to integrate sustainability and create value for CP and our many stakeholders.

#### **FOCUS AREA:**

# ENERGY AND FUEL EFFICIENCY

## 2.5%

Improvement in overall fuel efficiency since 2007

## \$1.5B

Spend since 1995 on 797 high-efficiency locomotives (47% of fleet) that produce 60% fewer smog pollutants and are 20% more fuel-efficient compared to locomotives manufactured 20 years ago

## 5,673 FT

2011 average train length

## 90 CARS

2011 average car count on intermodal freight trains

## **80-90**%

Less fuel expected to be used while idling compared to current technologies, due to "stop-start" antiidling technology being implemented

## FUEL TRIP OPTIMIZATION

System evaluates train length, weight, grade, track conditions, weather and locomotive performance to calculate the most efficient way to run the train

## DOUBLE-STACKING

Increased railroad clearance heights enable us to double-stack freight containers to increase our intermodal capacity

## REDUCED WEAR

Our rail lubrication program improves fuel efficiency and extends track life





Canadian Pacific's approach to operations considers all three elements of sustainability – environmental, social and governance performance – as part of our business. Our efficient trains drive service for our customers and create value for our shareholders as well as our many stakeholders. They are a primary driver of reduced operational cost and improved fleet efficiency, while enhancing safety, air quality and lowering greenhouse gas emissions.

#### PERFORMANCE HIGHLIGHTS LOCOMOTIVE FUEL CONSUMPTION AND FUEL EFFICIENCY 320 1.24 1.22 300 1.21 1.19 (Millions 280 260 **US Gallons** 1.16 240 US ( 220 282 200 2007 2008 2011 2009 2010 Efficiency



#### **FOCUS AREA:**

# GREENHOUSE GAS EMISSIONS





CP signal bungalows powered by solar energy

In common with other railways and transportation companies, Canadian Pacific emits greenhouse gases and air pollutants through fuel combustion in our train, vehicle and facilities operations, and indirectly through electricity use and business travel. As approximately 95% of our greenhouse gas emissions are due to locomotive diesel consumption, we focus the majority of our measurement and management efforts here to minimize this emission source.

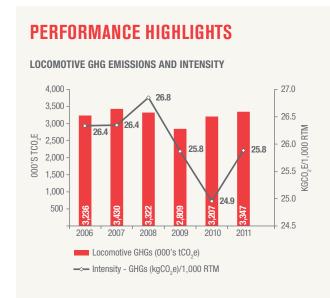
As a part of our operational planning, we set a greenhouse gas intensity reduction target each year. We track our performance against this target and link achievements to operations personnel performance rewards.

The reduction of our locomotive greenhouse gas emissions also benefits our customers, who increasingly are incorporating transportation-related emissions into their own footprints.

Our greenhouse gas strategy also includes a broader, long-term analysis of opportunities and risks associated with climate change. We believe that our ability to provide a low-carbon transportation mode is a future business growth driver, whereas changing weather patterns may contribute to both operational challenges and changes in volumes of commodities that we transport, such as grain.

#### **FACILITIES EMISSIONS**

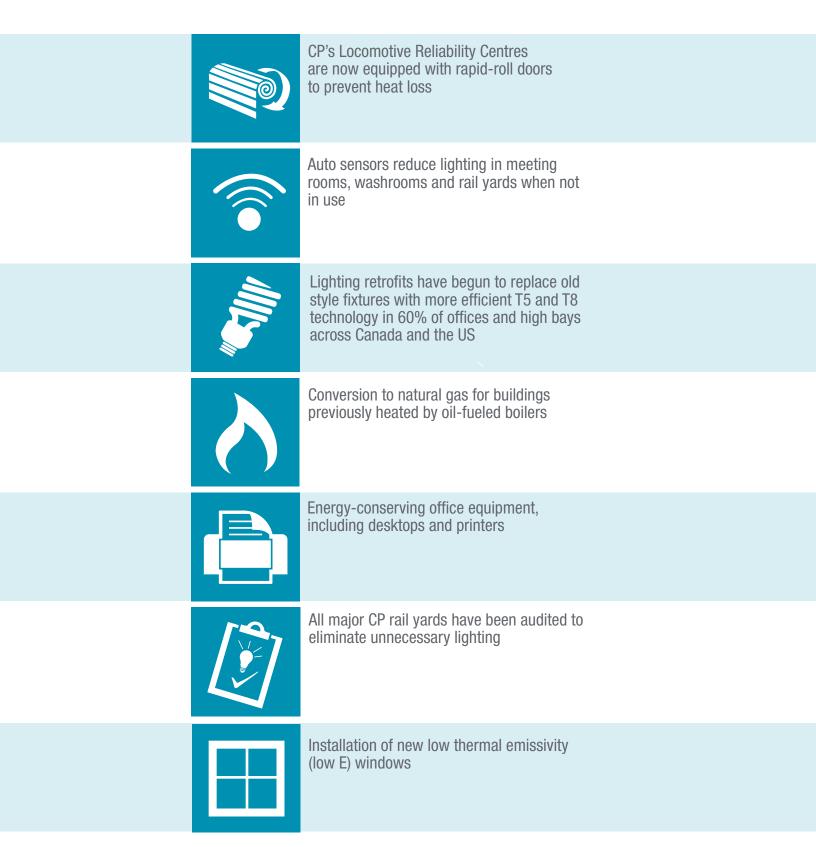
CP owns and occupies approximately 262,160 acres of real estate – equivalent to 406 square miles. With more than 3,800 buildings managed by CP's Facilities team, we have consistently reduced electricity and natural gas consumption on our property since 2007. In line with other major property owners and managers, we recognize that reducing facility energy consumption presents an opportunity for cost savings and emissions reduction.



Despite an increase of 5% revenue ton-miles from 2006 to 2011, our total greenhouse gas emissions remained flat at approximately 3.2 million tonnes of carbon dioxide. This is equivalent to a greenhouse gas intensity improvement of 2%.

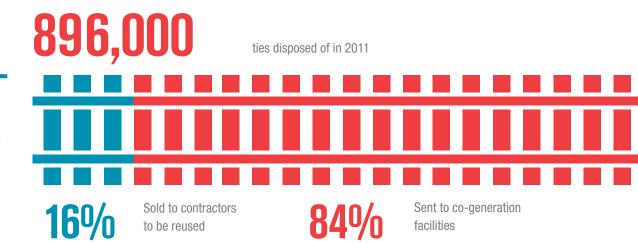
Of note, our overall train operations were significantly impacted in 2011 due to snow and flooding in Western Canada. This adversely affected our operational efficiency and fuel consumption. 2012 mid-year data show that the overall improvement trend is back on track, benefitting from our train efficiency strategies and investments in fuel efficient locomotives and automated train control.

# **CP ENERGY CONSERVATION MEASURES**



#### **FOCUS AREA:**

# WASTE MANAGEMENT & DIVERSION



#### RAILWAY TIE DIVERSION

Key goal under ties is to provide safe infrastructure while minimizing environmental impact.





CP relies on raw materials and resources throughout its operations to maintain the safety and performance of its assets. Recognizing the increasing scarcity of these resources, CP is committed to using these materials responsibly and efficiently. We strive to act as stewards of our material flows, which means reducing our inputs, managing materials closely and diverting our waste away from landfills whenever possible.

#### PERFORMANCE HIGHLIGHTS SOLID WASTE GENERATION AND DIVERSION LIQUID WASTE DIVERSION 1200 1000 8000 87% 100% 87% 82% 85% iquid Waste (1,000 Litres) 621 800 80% 6000 600 1,166 60% 740 843 369 4000 Waste 400 40% 2000 200 20% 4,960 4,655 5,069 6,300 211 241 211 0% Weight of Solid Wastes Diverted Landfill Waste Non-diverted Liquid Waste Volume of Liquid Wastes Diverted - Diversion % of Liquid Waste

Our waste management practices continue to be successful. In 2011, we generated 387 tonnes, or 40%, less solid waste than in 2008. Our liquid waste diversion rate has consistently reached over 80% since 2008, with 87% of our liquid waste diverted in 2011. For the past few years we have diverted nearly 100% of our railroad ties, generating energy at co-generation facilities, or selling them to contractors for reuse. 275,000 net tonnes of virgin steel purchases have been avoided since 2009 through our rail and wheelset diversion program. In 2011, revenue from selling scrap steel was approximately \$35 million.





For example, through our Wheelset Diversion Program, we provide our wheelset manufacturers with scrap steel, which they use for the making of new wheelsets. Since 2009, this program has resulted in avoided purchases of 275,000 net tonnes of virgin steel. In 2011, CP's revenue from selling scrap steel was approximately \$35 million.

Our waste diversion performance continues to excel. Our Rail Tie Diversion Program is one example of how waste can be used as a productive resource. Due to weather, ongoing wear and high performance demands, we regularly replace our rail ties, as required. Railroad ties that have not yet reached the end of their useful lives are sold to contractors for reuse. Remaining ties that needed to be disposed of and replaced are sent to co-generation facilities where they are burned to generate electricity instead of going to landfill. CP has also consistently diverted over 80% of our liquid waste since 2008, with an 87% diversion rate in 2011. Lastly, CP is putting in place waste diversion infrastructure at each office facility and will continue to expand on this program in other facilities going forward.

In addition to diverting waste from landfill, CP works hard to reduce the amount of waste it produces in the first place. In 2011, we generated 387 tonnes of solid waste, a 40% reduction since 2008.

## **FOCUS AREA:**

# WATER CONSUMPTION

## FACILITY RETROFITS & CONSTRUCTION

Since 2007, CP-owned facilities have undergone fixture upgrades to incorporate pre-set faucet temperature, low-flow and low-flush fixtures and automatic fixture sensors to conserve water.

Within CP yards, 10-inch waterlines have been replaced with smaller diameter pipes.

This program not only corrected any leaks that were present, the smaller piping is helping to reduce water waste.







Water stewardship is an integral part of our operations and reflects our commitment to global sustainability issues, the environment and communities where we operate.

We use water to service locomotives and in our yard facilities. In addition, all CP offices and rest houses are supplied with water for employee use. Our ambition is to become more progressive in incorporating water conservation and reuse options at our facilities, such as using water-efficient plumbing fixtures and using gray water and rainwater in lieu of potable water for cleaning purposes.

Most of the water we consume is sourced from and discharged to municipal sources.

Water treatment plants at CP maintenance yards are part of our wastewater monitoring program. Procedures are in place to manage properly any substances our water comes into contact with, such as oil and lubricants, which can be harmful if not treated appropriately.

Freshwater preservation is a key consideration in any environmental review CP conducts prior to building any new track and facility-related projects.

#### PERFORMANCE HIGHLIGHTS

CP's water consumption is estimated to be 1.4 million cubic meters per year. This is equivalent to 560 Olympic-size swimming pools. Although our relative water footprint is small, we recognize the need to be a good steward of this essential resource.



#### **FOCUS AREA:**

# ENVIRONMENTAL PROTECTION





\$40N

AVERAGE SPENT

ANNUALLY TO PROTECT
THE ENVIRONMENT
(2009 - 2011)

Canadian Pacific operates 14,680 miles of track in Canada and the United States. This is equivalent to a round-trip between our head office in Calgary and Mumbai, India. Our trains travel through national parks, First Nations lands, forests and near bodies of water. We make significant effort to protect the environment in these areas. We continue to invest in environmental protection through improving internal processes and working with community stakeholders.

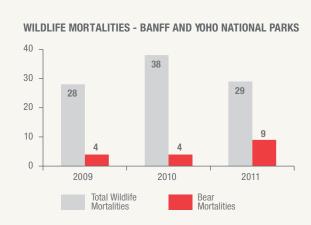
#### **BIODIVERSITY**

Managing biodiversity – to protect and restore the viability and health of our ecosystem – has an environmental significance at Canadian Pacific. Our railroad extends across vast parts of Canada and the United States. Different geographical regions also have unique plants and species. To minimize the impact of our operations on the wildlife which lives near our railroad, we consider biodiversity impacts in the environmental impact assessments we conduct. We also monitor incidents involving wildlife to understand how we can improve. This involves partnerships with Federal, State and Provincial Environmental Protection agencies as well as the The Nature Conservancy of Canada, Atlantic Salmon Federation and many regional environmental groups.

Our biodiversity strategy is based on prevention, research and remediation. In October 2010, CP launched a five-year joint action plan with Parks Canada aimed at supporting scientific research to understand bear behaviours and prevent train-bear conflicts within Banff and Yoho National Parks. We also invest in initiatives, like the Whonnock Creek salmon ladder and Alberta lynx rehabilitation, to engage actively in the protection and remediation of our natural environment.

#### PERFORMANCE HIGHLIGHTS

We continue to invest in biodiversity initiatives to reduce our impact on and remediate the diverse ecosystems near our railroad. While our wildlife incidents in the Banff and Yoho National Parks increased slightly from 28 incidents in 2009 to 29 incidents in 2011, the initiatives we are undertaking are intended to reduce future incidents, particularly those involving bears.





risk to the environment.

## **FOCUS AREA: ENVIRONMENTAL INCIDENTS INSTALLATION OF HALOCARBONS** HALOCARBON MANAGEMENT CP has developed a halocarbon management procedure to provide guidance on how to manage the risks associated with the use and disposal of halocarbons (i.e., refrigerants, fire-extinguishing **DECOMMISSIONING** agents and propellants) for CP operations in **AND DISPOSAL INVENTORY** Canada. Halocarbons represent a potential twofold The first is that some halocarbons contribute to the depletion of the stratospheric ozone layer that filters out harmful ultraviolet radiation, preventing it from reaching the earth's surface. The second is that all halocarbons (gases including CFC's, HCFC's

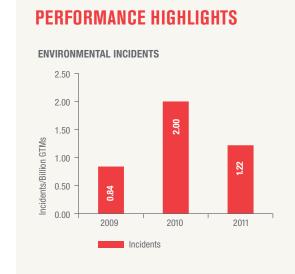


climate change.



and HFC's) are greenhouse gases that contribute to

CP considers pollutants inadvertently released into the air, water or soil in the course of normal railway operations as an environmental incident. CP is conscious of our impact on the environment and compliance with regulation, and we regularly monitor our environmental performance through compliance audits and incident tracking.



We strive to reduce environmental incidents. In 2011, we had an incident rate of 1.22 incidents/billion GTMs, slightly up from 2009.

**MAINTENANCE** 

#### **FOCUS AREA:**

# TRAIN & EMPLOYEE SAFETY

# 100 POLICE OFFICERS 25 FIELD OFFICES

#### **CP POLICE SERVICE**

The CP Police maintain public safety along our tracks and protects infrastructure and shipments. More than 100 police officers are assigned to more than 25 field offices across Canada and the U.S.

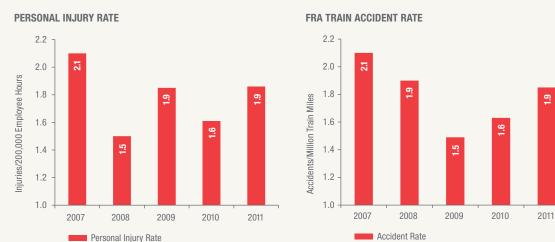
In 2010, we approved a five-year policing plan that will increase our presence with new officers placed in strategic areas across our network. Canadian Pacific is one of the safest railroads in North America. Safety is a fundamental component of CP's culture and is entrenched in all aspects of our operational strategy. We have a comprehensive approach to both individual and train safety through corporate policy, training, technology, community education and the Canadian Pacific Police Service.

Driving this approach is our commitment to continuously improve our health and safety performance across 100% of our operations. For example, our Corporate Health & Safety Plan educates our employees about safe rail practices on an ongoing basis. This reduces the likelihood of incidents involving our employees, shipments, passengers or the general public who live in proximity to CP tracks and rail yards. CP employees from Community Relations, Public Works and Environment also work with our customers and communities to support local emergency response training and rail safety education. Lastly, CP has approximately 75 local Health and Safety Committees across its network that convene monthly to identify safety issues and make recommendations on workplace safety.





#### PERFORMANCE HIGHLIGHTS



We consider our safety practices to be industry-leading. Our train accident rate is the lowest among Class 1 railroads in North America. CP also has a leading track record in preventing employee fatalities over the five-year period to 2011.

# FOCUS AREA:

WORKFORCE DIVERSITY

#### **WOMEN AT CP**

**20**%

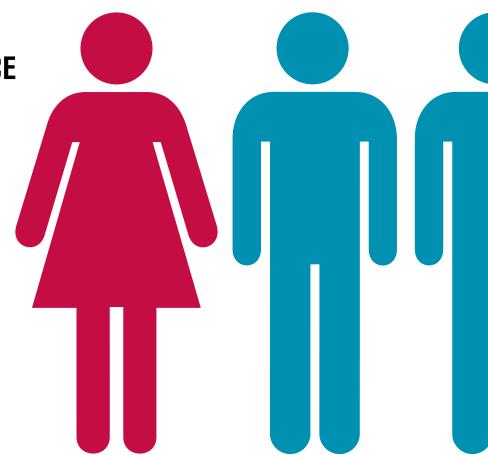
Board of directors

**25**%

Top Executives

300

women working as mechanics, engineers and train conductors







Our people and their well-being are key to our business success. We take a strategic approach to workforce diversity to promote an inclusive workplace. CP has been recognized as a leader for its practices in employment diversity and for supporting women in leadership positions, and is in line with other North American railroads in the hiring and retention of women. This is important because railroads have traditionally had significantly fewer female middle and senior managers compared to male, while women represent almost half of Canada's labour force.

This leadership is underscored by CP's commitment to employee training on human rights. In 2011, CP launched a series of highly successful e-learning modules entitled Discrimination & Harassment Awareness and Prevention, Preventing Violence, Workplace Accommodation, and Promoting Respect in the Workplace to which 24% of employees devoted a totally of 6,155 training hours. The Canadian Human Rights Commission praised the training modules as innovative and interactive.

**57** 

Immigration work experience candidates hosted since 2009

#### PERFORMANCE HIGHLIGHTS

As an employer touching more than 1,100 communities across Canada and the United States, we believe that our workforce should reflect those places.

Canadian Pacific has received diversity-related awards in 2010 for our employment initiatives, including an award from the Alberta Premier for diversity leadership. In 2011, we were recognized in the Globe and Mail Board Games report as one of 23 companies with leading board diversity. While approximately 10% of our workforce is female, we see this as an area for future improvement and believe that our support for women in leadership initiatives will help us get there.

#### **FOCUS AREA:**

# EMPLOYEE HEALTH & WELLNESS

#### **WELLNESS SUBSIDY PROGRAM**

1,687

employees claimed a subsidy in 2011

**85**%

of users surveyed have applied the subsidy towards physical activity

4.6/5

program employee satisfaction rating







Providing a motivating and healthy work environment is important to CP and our many employees. Owing to an aging workforce, we are increasingly investing in health-related initiatives to help our employees be more productive at work and lead healthier lives.

#### PERFORMANCE HIGHLIGHTS

The past two years have seen great success for our health and wellness programs, with an increasing number of employees participating. We have implemented several programs aimed at addressing the top risk factors of our workforce – high cholesterol and a lack of exercise. Our employee surveys consistently show employee satisfaction with our programs as well as a positive impact on work and family life.

## FOCUS AREA: COMMUNITY INVESTMENT





With an extensive railroad and property that spans across numerous states and provinces, CP is a neighbour to many communities. Our local engagement programs are accessible to 100% of the communities across our operations from coast to coast, through development programs, community consultations, and other outreach activities. Our community investment program engages with our communities in the key areas of safety, the environment, education and heritage.

In 2010 and 2011, we celebrated the 125th anniversary of the last spike by focusing on the historic ties we have with the communities along our tracks and donating artifacts from our archives to museums across Canada.

CP's goal is to make a relevant and lasting contribution to the quality of life in the towns where we operate. Our Holiday Train has touched thousands of community members since it began in 1999. We have also established long-term partnerships with a number of charitable organizations in Canada and the U.S. and strive to ensure that funded projects are meaningful to, and include the participation of, employees, customers and community stakeholders.



Since 2006, we have invested more than \$16 million in communities across North America. Additionally, our Holiday Train campaign has raised more than \$6.4 million and close to 2.6 million pounds of food for local food banks.



# FOCUS AREA: PROCUREMENT



## CP'S CODE OF BUSINESS ETHICS: ENVIRONMENTAL PROTECTION

CP will strive to be a good and responsible corporate citizen with proper regard for the public interest. Environmental and other legitimate social objectives will be taken into account and balanced against other CP objectives in establishing policies and in the conduct of daily affairs. Environmental decisions will be predicated on the best available scientific and technical information and will be considered an integral factor in all business decisions.





As a low-carbon alternative to road transportation, we strive to work with our sustainability-focused customers to find ways to reduce the overall lifecycle carbon footprint of their products.

#### **PERFORMANCE HIGHLIGHTS**



Our wheelset procurement arrangement has helped us increase our purchasing of goods made from recycled materials, while reducing the amount of waste we send to landfills and lowering our disposal costs.

## FOCUS AREA: MOVING FREIGHT





# SUPPLY CHAIN INTEGRATION

Transload facilities are part of our network to facilitate the manufacture and assembly of renewable energy equipment in plants across the U.S. and Canadian east coast.

3,400

Carloads of wind turbine components transported since 2005

## 3 TRUCKS

Are taken off the road for every CP intermodal car

## 17 MILLION

Commuters used CP's railroad as a low-carbon alternative to driving

## SAFE CHOICE

Rail transportation is considered 18 times safer than highway driving

# SMALLER FOOTPRINTS

CP's customer greenhouse gas emissions calculator helps customers understand their carbon savings by choosing rail for land shipments

Canadian Pacific is an active partner in the global supply chain, and is dedicated to providing our customers with rapid and reliable rail service. Policy-makers and corporations across the world are working to conserve natural resources, reduce carbon emissions and minimize the release of emissions and effluents into the natural environment. With increasing populations and growing needs for products and services, it is essential to achieve structural change in how we use and reuse resources and generate and consume energy.

Low-carbon transportation is a key component of the path to a greener economy. As an owner and operator of a large section of North America's railroad infrastructure, Canadian Pacific can significantly influence the carbon footprint of the transportation of both goods and people. The transport of goods by rail emits approximately 91% less carbon dioxide than road transport. We work with our customers to provide the logistics, coordination and transportation of goods. This includes transportation of bulk goods like coal and grain, and industrial and consumer products.

Many of our growing and more profitable customer segments are key contributors to the green economy. This can be major retailers that desire to switch transportation from trucks to train or suppliers of green power components and renewable energy feedstock.

In partnership with commuter railroads in major metropolitan areas such as Vancouver, Toronto and Montreal, we enable millions of commuters to travel to work in a more carbon-efficient mode.





#### TRAINS FOR WIND POWER TRANSPORTATION

CP provides its customers with a low emissions road transportation alternative. We facilitate transportation of wind power components for the world's leading manufacturers, such as General Electric, Vestas and Siemens. Since 2005, CP has handled more than 3,400 carloads of wind-energy components.

#### FACILITATOR OF CLEAN ENERGY SUPPLY CHAIN

CP Logistics Solutions (CPLS) facilitates a wind energy supply chain connecting manufacturers in Quebec and Florida. Using our network of transload facilities, CPLS coordinates the entire logistics process.

#### PROVIDER OF LOW-CARBON COMMUTING ALTERNATIVE

By maintaining some of the most on-time track sections in Canada and the U.S., we enable rail transit operators in Montreal, Toronto and Vancouver to operate commuter trains. Trains have a 91% lower footprint than vehicles, as measured by carbon equivalents per kilometres travelled. Additionally, as passenger trains are up to 18 times safer than car travel, we are also contributing to safe commutes.

#### **CUSTOMER GREENHOUSE GAS EMISSIONS CALCULATOR**

CP helps customers understand their carbon savings by choosing rail for their land shipments. We have developed a greenhouse gas calculator that compares emissions for customer shipments by rail and by road. This calculator can be found on our website at:

https://www8.cpr.ca/enetp22/GHGCalculatorUser/UserDetails.aspx.

#### PERFORMANCE HIGHLIGHTS

We are increasingly working with our suppliers and customers to reduce the overall environmental footprint of their industries. While previous efforts have evolved organically in the organization, we are now putting best practice into policy and opportunities for growth.



# +3,400 CARLOADS SINCE 2005

### TRAINS FOR WIND POWER TRANSPORTATION

CP provides its customers with a low-emissions road transportation alternative. We facilitate transportation of wind power components for the world's leading manufacturers such as General Electric, Vestas and Siemens.

### **PERFORMANCE SUMMARY TABLE**







	2010	2011	2012
ECONOMIC			
TOTAL REVENUE (MILLIONS)	4,981	5,177	5,695
FREIGHT REVENUE (MILLIONS)	4,853	5,052	5,550
GROSS TON-MILES (GTM) (MILLIONS)	242,757	247,955	254,354
TRAIN MILES (THOUSANDS)	39,576	40,145	40,270
REVENUE TON-MILES (RTM) (MILLIONS)	126,428	129,059	135,032
FREIGHT REVENUE PER RTM (CENTS)	3.8	3.9	4.11
ENVIRONMENT			
ENERGY AND FUEL EFFICIENCY			
TOTAL ENERGY CONSUMPTION, THOUSAND EMWH	13,007	13,972	12,992
FUEL, THOUSAND EMWH	12,844	13,789	12,684
DIESEL/GAS/OIL, THOUSAND EMWH	12,625	13,404	12,437
MOTOR GASOLINE, THOUSAND EMWH	N/A	141	132
PROPANE, THOUSAND EMWH	3	5	21
NATURAL GAS, THOUSAND EMWH	216	238	90
PURCHASED ELECTRICITY, THOUSAND EMWH	163	183	308
PURCHASED ELECTRICITY, GJ	586,800	658,800	1,108,800
LOCOMOTIVE FUEL CONSUMPTION, M US GALLONS	282	294	293
LOCOMOTIVE FUEL CONSUMPTION, GJ	38,916,000	40,572,000	40,434,000
LOCOMOTIVE FUEL EFFICIENCY, US GALLONS /1,000 GTM	1.16	1.19	1.15
LOCOMOTIVES EQUIPPED WITH FUEL TRIP OPTIMIZER,#	200	261	291
"HIGH EFFICIENCY" LOCOMOTIVES, %	43%	47%	49%









	2010	2011	2012
GREENHOUSE GAS EMISSIONS			'
TOTAL EMISSIONS (SCOPE 1,2,3), THOUSAND TCO <sub>2</sub> E	3,308	3,563	3,509
TOTAL SCOPE 1 GHG EMISSIONS <sup>1</sup> , THOUSAND TCO <sub>2</sub> E	3,251	3,496	3,377
LOCOMOTIVE, THOUSAND TCO <sub>2</sub> E	3,207	3,347	3,257
OTHER SCOPE 1, THOUSAND TCO <sub>2</sub> E	44	149	120
TOTAL SCOPE 2 GHG EMISSIONS <sup>2</sup> , THOUSAND TCO <sub>2</sub> E	57	63	109
TOTAL SCOPE 3 GHG EMISSIONS <sup>3</sup> , THOUSAND TCO <sub>2</sub> E	N/A	3.9	23.1
BUSINESS AIR TRAVEL, TCO <sub>2</sub> E	N/A	2.8	3
BUSINESS CAR TRAVEL, TCO <sub>2</sub> E	N/A	0.5	0.4
BUSINESS HOTEL TRAVEL, TCO <sub>2</sub> E	N/A	0.6	19.7
COMPANY GHG INTENSITY, $KGCO_2E/1,000$ RTM	26.2	27.6	25.8
LOCOMOTIVE GHG INTENSITY <sup>4</sup> , KGCO <sub>2</sub> E/1,000 GTM	13.2	13.5	13.1
REVENUE GHG INTENSITY SCOPE 1 AND 2, $TCO_2E/\$MILLION$ TOTAL REVENUE	664	687	612
EMPLOYEE GHG INTENSITY SCOPE 1 AND 2, ${\rm TCO_2E}$ /FTE EMPLOYEE	238	251	239
AVERAGE WEIGHT OF FREIGHT PER TRAIN, TONNES/TRAIN	6,519	6,593	6,709
AVERAGE TRAIN LENGTH (FEET)	5,660	5,665	5,838
WASTE MANAGEMENT AND DIVERSION			
LIQUID WASTES, THOUSAND LITRES	6,235	7,283	6,267
LIQUID WASTES RECYCLED, %	82%	87%	85%
LUBRICANT RECYCLED, %	100%	100%	100%
SCRAP STEEL, NET TONNES	94,100	97,700	129,285
SCRAP STEEL RECYCLED, %	100%	100%	100%
SOLID WASTES, TONNES	610	583	901

<sup>&</sup>lt;sup>1</sup> Scope 1 emissions include locomotive diesel, propane, natural gas and others. <sup>2</sup> Scope 2 emissions include purchased electricity. <sup>3</sup> Scope 3 emissions include business car, air and hotel travel. <sup>4</sup> GHG intensity values are calculated using scope 1 and 2 emissions.





	2010	2011	2012
SOLID WASTES RECYCLED, %	40%	36%	32.5%
SOLID INDUSTRIAL WASTES DIVERTED, TONNES	241	211	293
RAIL TIES DISPOSED, #	1,112,589	895,870	947,798
TOTAL RAILWAY TIES DIVERTED, %	100%	100%	100%
RAILWAY TIES TO CO-GENERATION FACILITIES, %	84%	82%	100%
RAILWAY TIES SOLD TO CONTRACTORS FOR REUSE, %	16%	18%	0%
WATER CONSUMPTION			
WATER CONSUMPTION FROM MUNICIPAL SOURCES, 1,000 M3	1,232	1,635	5,872
ENVIRONMENTAL PROTECTION			
REMEDIATION OF CONTAMINATED SITES, ENVIRONMENTAL LIABILITY REDUCTION, $\%$	12%	9%	15.2%
PROVISION FOR ENVIRONMENTAL REMEDIATION PROGRAM, \$ MILLION	107	97	87.3
SPENT ON REMEDIATION, \$ MILLION	12.9	14.3	11
ENVIRONMENTAL INCIDENTS			
ENVIRONMENTAL AUDITS PERFORMED, #	7	10	7
ENVIRONMENTAL INCIDENTS, INCIDENT/BILLION GTMS	2.00	1.22	1.22
TOTAL WILDLIFE MORTALITY, #	38	29	32
BEAR MORTALITIES (BANFF AND YOHO NATIONAL PARKS), #	4	9	4
SOCIAL			
TRAIN AND EMPLOYEE SAFETY			
PERSONAL INJURY RATE, CASES/200,000 EMPLOYEE HOURS	1.6	1.9	1.55
FATALITIES, #	0	0	2
FRA TRAIN ACCIDENT RATE ACCIDENTS/MILLION TRAIN-MILES	1.6	1.9	1.67
GRADE CROSSING ACCIDENT RATE PER MILLION TRAIN-MILES	2.7	2.5	2.7







	2010	2011	2012			
CP POLICE COMPLAINTS, #	14	9	6			
CHARGES FOR CROSSING VIOLATIONS, #	952	824	800			
SPEEDING TICKETS ISSUED, #	1,646	2,731	2,414			
WORKFORCE DIVERSITY						
<b>EMPLOYEES, #</b> 13,879 14,169 14,594						
EMPLOYEES IN UNIONS OR ASSOCIATIONS, %	75%	75%	81%			
WOMEN, %	10.1%	10.1%	10.7%			
PERSONS WITH A DISABILITY, %	3.9%	3.4%	3.2%			
ABORIGINAL, %	3.6%	3.6%	3.8%			
VISIBLE MINORITIES, %	6.9%	6.8%	6.8%			
NUMBER OF CP BOARD DIRECTORS BY MINORITY GROUP						
FEMALE BOARD DIRECTORS, %	20%	20%	28.6%			
FULL TIME BOARD DIRECTORS, %	99%	99%	42.9%			
BOARD OF DIRECTORS BY REGION, %: CANADA	76.1%	75.8%	57.1%			
BOARD OF DIRECTORS BY REGION, %: UNITED STATES	23.9%	24.2%	42.9%			
RATE OF TURNOVER BY AGE GROUP						
25 OR LESS, % OF TOTAL ATTRITION	5.9	8.3	9.2			
25 TO 35, % OF TOTAL ATTRITION	16.9	20.1	18.9			
35 TO 45, % OF TOTAL ATTRITION	12.4	14.2	14.0			
45 TO 55, % OF TOTAL ATTRITION	12.1	14.1	11.8			
55+, % OF TOTAL ATTRITION	52.7	43.3	46.0			
RATE OF TURNOVER BY GENDER						
MALE, %	9.6	8.9	11.8			
FEMALE, %	9.8	11.2	12.4			
RATE OF TURNOVER BY REGION						
ALBERTA/SASKATCHEWAN, %	8.4%	8.6%	15.1			









	2010	2011	2012
BRITISH COLUMBIA, %	8.5%	6.9%	11.4
MANITOBA/ONTARIO, %	8.7%	7.4%	10.3
QUEBEC/SOUTHERN ONTARIO, %	10.9%	8.4%	9.9
US EAST, %	13.3%	11.3%	10.7
US WEST, %	7.7%	10.2%	10.7
AVERAGE HOURS OF TRAINING PER EMPLOYEE PER EMPLOYEE CATEGORY, HRS./FTE			
UNION HRS/FTE	21	21	21
NON-UNION HRS/FTE	33	33	13
EMPLOYEE HEALTH AND WELLNESS			
TOTAL WORKFORCE REPRESENTED BY HEALTH & SAFETY COMMITTEES, %	100%	100%	100%
COMMUNITY INVESTMENT			
NUMBER OF ACADEMIC SUPPORT AND RESEARCH PROGRAMS, #	22	35	32
VALUE OF ACADEMIC SUPPORT AND RESEARCH PROGRAMS, \$ THOUSANDS	320	2,325	800
DONATIONS TO REGISTERED CHARITIES, \$ THOUSANDS	1,958	3,492	3,714
COMMUNITY INVESTMENTS, \$ THOUSANDS	731	696	419
COMMUNITY ENGAGEMENT			
COMMUNITY CONNECT PUBLIC INTERACTIONS, #	6, 426	7,185	6,866
CALLS TO COMMUNITY CONNECT RE: NOISE COMPLAINTS, #	864	1,171	947
GREEN ECONOMY			
PROCUREMENT			
NEW RAIL PURCHASED, NET TONNES	65,800	89,700	98,566
RECYCLED INPUT MATERIALS, %	20%	57%	42%
TIE PLATES, SPIKES, RAIL ANCHORS PURCHASED, NET TONNES	23,000	23,000	31,354
RECYCLED INPUT MATERIALS, %	100%	100%	100%
WHEELSETS PURCHASED, NET TONNES	33,800	27,700	22,959
RECYCLED INPUT MATERIALS, %	90%	90%	90%



# 3. MORE INFORMATION

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# 3.1 COMMITMENTS TO EXTERNAL INITIATIVES





CP supports the below organizations which have important mandates in areas of safety, environmental protection, human rights, education and community support.

### **CANADIAN PACIFIC IS PROUD TO SUPPORT:**

- Parks Canada
- Smartway
- TransCAER
- Network for Business Sustainability
- Carbon Disclosure Project
- Vancouver Olympics
- Fisheries and Oceans Canada
- Cochrane Ecological Institute
- Women's Executive Network
- Railway Association of Canada
- American Association of Railroads
- Assembly of First Nations
- Canadian Human Rights Commission
- Nature Conservancy of Canada

- United Way
- University of British Columbia
- Simon Fraser University
- Vancouver General Hospital
- Trinity Western University
- University of Saskatchewan
- Food Banks Canada
- Conference Board of Canada Council on Corporate Aboriginal Relations
- Ducks Unlimited
- Responsible Care (Chemical Industry Association of Canada and American Chemistry Council)
- CTA Technical Advisory Committee on Noise and Vibration BC, AB, SK
- Integrated Vegetation Management Associations (IVMA)



### REPORT BOUNDARIES





This report is prepared in accordance with the Global Reporting Initiative (GRI) Third Generation (G3.1) guidelines. The report primarily contains sustainability data from January 1, 2010, to December 31, 2011. We include information relating to prior or subsequent periods if it is determined to be material. Our performance data present numerical data using the metric system and Canadian dollars, unless otherwise noted. Comparative historical data from four previous years (2006, 2007, 2008 and 2009) is included where available to demonstrate trends in certain indicators. Historical data omissions are primarily due to new indicators for which historical data were not available. Emissions data pertaining to the Dakota, Minnesota & Eastern Railroad Corporation subsidiary is excluded prior to 2010, as information relating to prior periods was not tracked.

GRI guidelines require an organization to determine which entities' (e.g., subsidiaries and joint ventures) performance will be represented by the report. For the purpose of this report, we have included performance data on all of our managed operations, which include Canadian Pacific Railway Limited, Canadian Pacific Railway Company and all of their subsidiaries in Canada and the United States.

# 3.3 APPLIED PROTOCOLS & STANDARDS





### **GREENHOUSE GAS PROTOCOL (GHG PROTOCOL)**

The Greenhouse Gas Protocol is the most widely used international accounting tool for government and business leaders to understand, quantify and manage greenhouse gas emissions. CP uses the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition), to calculate our GHG emissions. The GHG Protocol Corporate Standard provides standards and guidance for companies and other organizations preparing a GHG emissions inventory. It covers the accounting and reporting of the six greenhouse gases covered by the Kyoto Protocol: carbon dioxide ( $CO_2$ ), methane ( $CH_4$ ), nitrous oxide ( $CO_2$ ), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride ( $CO_2$ ).

### FEDERAL RAILROAD ADMINISTRATION (FRA), TRANSPORT CANADA (TC) AND TRANSPORTATION SAFETY BOARD (TSB)

We are required to report train accidents and incidents by type to the FRA for our U.S. operations, and to the TSB for our Canadian operations. Transport Canada sets policies and standards regarding rail transport in Canada, and the FRA has policy responsibilities for rail in the U.S.

### UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE (UNFCCC)

The emission factors used to calculate the three GHG emitted from diesel locomotive engines ( $CO_2$ ,  $CH_4$  and  $N_2O$ ) are those used in Environment Canada's National Inventory Report 1990-2008: Greenhouse Gas Sources and Sinks in Canada submitted annually to the UNFCCC.

### INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE (IPCC)

The global warming potentials used in determining CP's climate change impact were determined by the IPCC. The IPCC is a scientific body established by the United Nations to review and assess the most recent scientific, technical and socioeconomic information produced worldwide relevant to the understanding of climate change.

### **GLOBAL REPORTING INITIATIVE (GRI)**

Please refer to section 3.4 of this report for information regarding our commitment to GRI.

### **GLOBAL REPORTING INITIATIVE REFERENCE TABLE**





### LEGEND:





ompiete	Not reported	٠,
artially complete 🔴	N/A	Ν

GRI INDICATOR	DESCRIPTION	REFERENCE	COVERAGE
STRATEGY AN	D ANALYSIS		
1.1	President and CEO statement <sup>1</sup>	2	<b>-</b>
1.2	Description of key impacts, risks, and opportunities <sup>2</sup>	6	<b>—</b>
ORGANIZATIO	N PROFILE		
2.1	Name of the organization	4	
2.2	Primary brands, products, and/or services	4	•
2.3	Operational structure	43	•
2.4	Location of headquarters	4	
2.5	Operation locations	4	•
2.6	Ownership and legal form	4	•
2.7	Markets served	4	•
2.8	Scale of organization	4-5	•
2.9	Significant changes during the reporting period	4	•
2.10	Awards and recognition	7	•
REPORT PARA	METERS		
Report Profile	9		
3.1	Reporting period	43	
3.2	Date of previous report	2	•
3.3	Reporting cycle	2	•
3.4	Contact information	52	•
Report Scope	and Boundary		
3.5	Process for defining report content	14-15	•
3.6	Boundary of the report	43	•
3.7	Limitations on the boundary of the report	43	•
3.8	Basis for reporting on other entities that can impact reporting	43	•

<sup>&</sup>lt;sup>1</sup> CP currently does not report its sustainability challenges as data is not available.



<sup>&</sup>lt;sup>2</sup> CP currently does not report its key risks and opportunities as data is not available.









GRI Indicator	DESCRIPTION	REFERENCE	COVERAGE
3.9	Data measurement techniques	43	•
3.10	Explanation any re-statements of information provided in earlier reports	4	•
3.11	Significant changes from previous reports	4	•
GRI Context I	ndex		
3.12	Table of disclosures	45-49	•
Assurance			
3.13	Policy and current practice regarding external assurance	2, 6	
GOVERNANCE	COMMITMENTS, AND ENGAGEMENT		
Governance			
4.1	Governance structure of the organization <sup>1</sup>	8, 9, 39	$\overline{igo}$
4.2	Chair and relationship to Executive Officer	8	
4.3	Number and gender of members of the board	8	•
4.4	Mechanisms for shareholders and employees to provide recommendations to the board	14	•
4.5	Linkage between compensation and sustainability performance	9	•
4.6	Processes to prevent conflicts of interest	10	•
4.7	Process for determining the qualifications and diversity of board	8	•
4.8	Mission or values, codes of conduct, and sustainability principles	9, 11	•
4.9	Procedures for overseeing sustainability performance and compliance	8, 10, 44	
4.10	Processes for evaluating performance	9	
Commitments	s to External Initiatives		
4.11	How the precautionary principle is addressed <sup>2</sup>		0
4.12	Endorsed external economic, environmental, and social charters, principles, or other initiatives	42	•
4.13	Memberships in associations	42	•
Stakeholder I	Engagement		
4.14	List of stakeholder groups engaged	14	
4.15	Basis for identifying and engaging stakeholders <sup>3</sup>	14	<b></b>
4.16	Approaches to stakeholder engagement	14-15	•
4.17	Key stakeholder topics and how they have been addressed	15-16	•

<sup>&</sup>lt;sup>1</sup>CP currently does not track data on the diversity of our Board of Directors. The individual ages of our Board of Directors is published in our Management Proxy Circular as part of the descriptive information tables.

<sup>2</sup>CP does not report on the precautionary principle defined by the United Nations Environment Programme since stakeholders do not consider it material.

<sup>3</sup>CP does not currently report on this indicator because data is not available.







GRI Indicator	DESCRIPTION	REFERENCE	COVERAGE
MANAGEMEN	T APPROACH AND PERFORMANCE INDICATORS		
ENVIRONMEN	T PERFORMANCE INDICATORS		
DMA	Disclosure on Management Approach	11	
Energy			
EN3	Direct energy consumption by primary energy source	19, 36	
EN4	Indirect energy consumption by primary source	36	<b>—</b>
EN5	Energy saved due to conservation and efficiency improvements	17, 20	•
EN6	Energy efficiency or renewable energy products and services	17, 36	•
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	20, 36, 44	•
Water			
EN8	Total water withdrawal by source	38	<b>-</b>
Biodiversity			
EN12	Significant impacts on biodiversity	24-25	•
EN13	Habitats protected or restored	24, 25, 42	•
EN14	Strategies for managing impacts on biodiversity	24	•
Emissions, E	iffluents, And Waste		
EN16	Total direct and indirect greenhouse gas emissions	37, 44	•
EN17	Other relevant indirect greenhouse gas emissions	37	•
EN18	Initiatives to reduce greenhouse gas emissions	19, 20, 37	
EN22	Total weight of waste	21, 37, 38	<b>-</b>
Products And	I Services		
EN26	Initiatives to mitigate environmental impacts	7, 19-21, 23, 36-40	•
HUMAN RIGHT	rs Performance Indicators		
DMA	Disclosure on Management Approach	11	
Investment a	nd Procurement Practices		
HR3	Total hours of employee training on policies and procedures concerning aspects of human rights	28	•









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GRI Indicator	DESCRIPTION	REFERENCE	COVERAG
Freedom Of A	Association And Collective Bargaining		
LABOUR PRAC	CTICES AND PERFORMANCE INDICATORS		
DMA	Disclosure on Management Approach	11	
Employment			
LA1	Total workforce	39	
LA2	Number of new hires and rate of employee turnover	39, 40	
Labour/Mana	agement Relations		
LA4	Percentage of employees covered by collective bargaining agreements	39	
Occupational	Health and Safety		
LA6	Percentage of total workforce represented in joint occupational health and safety programs	27, 40	•
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	38	<b>-</b>
LA8	Education, training, counseling, prevention, and risk-control programs in place to address serious diseases	27, 29 ,40, 41, 43	•
Training and	Education		
LA10	Average hours of training per year per employee	40	
Diversity And	Equal Opportunity		
LA13	Composition of governance bodies and breakdown of employees by diversity group	39	$\bigcirc$
SOCIETY PERF	FORMANCE INDICATORS		
DMA	Disclosure on Management Approach	12	
Local Commi	unity		
S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	14, 30, 31, 38, 40	•
PRODUCT RES	SPONSIBILITY PERFORMANCE INDICATORS		
DMA	Disclosure on Management Approach	12	
Customer He	alth And Safety		
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement	27	•









GRI Indicator	DESCRIPTION	REFERENCE	COVERAGE	
ECONOMIC PERFORMANCE INDICATORS				
DMA	Disclosure on Management Approach	12	•	
Economic Performance				
EC1	Direct economic value generated and distributed	5, 40		
EC2	Risks and opportunities related to climate change	19	<b>-</b>	
LOGISTICS AN	ID TRANSPORTATION PERFORMANCE INDICATORS (SECTOR SUPPLEMENT)			
Policy				
LT3	Policies and programmes relating to sustainable transportation, modal shift and route planning	6, 33-34		
Energy				
LT4	Initiatives to use renewable energy sources and to increase energy efficiency	33-34		
Urban Air Po	llution			
LT5	Initiatives to control urban air emissions in relation to road transport	17-18	•	
Noise/Vibrati	ion			
LT7	Policies and programs for noise management/abatement	7, 42	•	

## **ABBREVIATIONS** & GLOSSARY







TERM	DEFINITION
CANADIAN PACIFIC LOGISTIC SOLUTIONS	Canadian Pacific Logistics Solutions, CPLS, is a CP business unit which delivers logistics and transportation management services.
CANADIAN PACIFIC POLICE SERVICE	The Canadian Pacific Police Service, CPPS, is a part of CP and works closely with communities, other law enforcement and government agencies to promote railway safety and infrastructure security.
CARBON DISCLOSURE PROJECT	An independent, non-for-profit organization with a mission to improve climate change and water disclosure to reduce organizations' greenhouse gas emissions and water use. It provides a global system for companies and cities to measure, disclose, manage and share environmental information. It is supported by over 655 institutional investors holding more than US\$ 78 trillion in assets under management.
CLASS 1 RAILROAD	A Class 1 railroad in the United States, or a Class 1 railway/rail carrier in Canada, is one of the largest freight railroads based on operating revenue of approximately \$350 million (2006).
ENERGY INTENSITY	A ratio of energy consumption to an activity measure, such as floor space, passenger-miles, employees or revenue.
EQUIVALENT MEGAWATT- Hours	A unit of energy equivalent to one megawatt of power expended for one hour of time. A megawatt is equal to one thousand kilowatt-hours or one million watt-hours. For ease of comparison, it is customary to convert energy consumption of different fuel types, such as diesel, gasoline, electricity and propane, into one common unit of energy. All energy consumption in this report is expressed as equivalent megawatt-hours, or eMWh.
FEDERAL RAILROAD Administration	An administration created by the US Department of Transportation; it has five purposes: promulgate and enforce rail safety regulations, administer railroad assistance programs, conduct research and development in support of improved railroad safety and national rail transportation policy, provide for the rehabilitation of Northeast Corridor rail passenger service, and consolidate government support of rail transportation activities. It is commonly abbreviated FRA.
FUEL EFFICIENCY	The output from one unit of fuel input, such as miles per gallon for an automobile or ton-miles of freight for rail.
FULL-TIME EQUIVALENT	A standard measure for employee numbers that considers the different workloads of full-time and part-time employees. For example, two part-time employees working half-time would be considered one full-time equivalent (abbreviation: FTE).
GIGAJOULES	Standard measure of energy (abbreviation: GJ).
GREEN ECONOMY	According to the United Nations Environment Programme, a green economy is one that results in improved human well-being and social equity, while significantly reducing environmental impacts and ecological scarcities. In its simplest expression, a green economy is an economy which is low carbon, resource efficient and socially inclusive.
GREENHOUSE GAS	A gas in the atmosphere that contributes to the greenhouse effect by absorbing infrared radiation.  Greenhouse gases (abbreviation: GHG) include halocarbons, carbon dioxide, methane, nitrous oxide, ozone and water vapour.
GROSS-TON-MILE	A measure of total workload for one ton, moved one mile (abbreviation: GTM). It includes commodities carried, the weight of the railcars and locomotives, and can include non-revenue movements of ties, rail, diesel fuel and other company materials.







TERM	DEFINITION
INTERMODAL TRANSPORTATION	The movement of goods (in the same loading unit or vehicle) by successive modes of transport, such as rail, ship and truck, without handling of the goods themselves when changing modes.
KILOGRAMS OF CARBON DIOXIDE EQUIVALENTS & TONNES OF CARBON DIOXIDE EQUIVALENTS	Standard measures of greenhouse gas emissions. Abbreviations: $\mathrm{KCO_2e}$ and $\mathrm{TCO_2e}$ .
NET TONNES	This is a standard measure of steel weight.
PRECAUTIONARY PRINCIPLE	The precautionary principle stipulates that where there are threats of serious or irreversible damage, a lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.
REVENUE TON-MILE	A measure of one ton of revenue-earning commodity moved one mile (abbreviation: RTM). It excludes the weight of the railcar and locomotives.
SCOPE 1 EMISSIONS	All direct greenhouse gas emissions, including those from locomotive fuel and natural gas.
SCOPE 2 EMISSIONS	Indirect greenhouse gas emissions from the consumption of purchased electricity, heat or steam.
SCOPE 3 EMISSIONS	Other indirect emissions, including emissions from CP employee business travel.
TRANSLOAD FACILITY	The facility in which product is transferred from one mode of transportation to another. In CP's case, product is moved from truck to rail car, or vice versa.



# 3.6 GETTING INVOLVED/ CONTACT INFORMATION





### **ENVIRONMENTAL, SAFETY AND COMMUNITY INFORMATION**

Environmental, safety and community information is available under the "In Your Community" section on CP's website at <a href="https://www.cpr.ca">www.cpr.ca</a>.

### **COMMUNITY CONNECT**

An online question and feedback form monitored by our Community Connect team is available under the "In Your Community" section on CP's website at www.cpr.ca. You can also call our 24/7 toll-free bilingual community connect line at: 1 (800) 766-7912.

### **COMMUNICATIONS AND PUBLIC AFFAIRS**

Contact Communications and Public Affairs, Canadian Pacific, Suite 500, Gulf Canada Square, 401 9th Avenue S.W., Calgary, Alberta, Canada, T2P 4Z4.



### GENERAL DISCLAIMER ABOUT FORWARD LOOKING STATEMENTS





The information in this report may contain forward-looking statements relating but not limited to CP's operations, priorities and plans, anticipated financial performance, business prospects, planned capital expenditures and programs and strategies. This forward looking information also includes, but is not limited to, statements concerning expectations, beliefs, plans, goals, objectives, assumptions information and statements about possible future events, conditions and results of operations or performance.

Forward-looking information typically contains statements with words such as "anticipate," "believe," "expect," "plan" or similar words suggesting future outcomes.

By its nature, CP's forward-looking information involves numerous assumptions, inherent risks and uncertainties, including but not limited to the following factors: changes in business strategies; general North American and global economic and business conditions; credit and business conditions; risks in agricultural production such as weather conditions and insect populations; fluctuations in the value of the Canadian dollar relative to the U.S. dollar; the availability and price of energy commodities; the effects of competition and pricing pressures; industry capacity; shifts in market demands; changes in laws and regulations including regulation of rates; changes in taxes and tax rates; potential increases in maintenance and operating costs; uncertainties of litigation; labour disputes; risks and liabilities arising from derailments; transportation of dangerous goods; health, safety and environmental risks; timing of completion of capital and maintenance projects; currency and interest rate fluctuations; effects of changes in market conditions and discount rates on the financial position of pension plans and investments; and various events that could disrupt operations, including severe weather conditions, security threats and governmental response to them; and technological changes.