2020 Task Force on Climate-related Financial Disclosures Report

DELIVERING RESPONSIBLY

We recognize the importance of mitigating and adapting our business to changing climate conditions. As an enabler of the economy, CN is committed to playing a key role in the transition to a lower-carbon economy. We believe our position in the supply chain will enable us to lead a step-change towards decarbonizing North America's freight sector.

PICTURED:
Intermodal Train, Grant Brook, BC
Photo by CN Employee Tim Stevens

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About this Report

Delivering Responsibly is at the heart of how CN is building for a sustainable future. Our 2020 Task Force on Climate-related Financial Disclosures Report outlines our commitment to support the transition to a low-carbon economy.

CHANTALE DESPRÉS
Assistant Vice-President, Sustainability

Transparency regarding climate-related risks and opportunities is critical to maintaining the trust of our stakeholders and allows our investors to better understand the implications of climate change on our business.

Our approach to sustainability disclosure aligns with international standards, including the United Nations Global Compact (UNGC), the Global Reporting Initiative (GRI), the Sustainability Accounting Standards Board (SASB), the United Nations Sustainable Development Goals (SDGs), the World Bank Mobility Goals and the Task Force on Climate-related Financial Disclosures (TCFD).

In 2020, CN, became an official supporter of the TCFD, and released its first stand-alone TCFD report, a first in the North American rail sector.

This year's Task Force on Climate-related Financial Disclosures Report provides a comprehensive view into how we understand and manage the risks and opportunities associated with climate change in four sections: **Governance, Risk Management, Strategy, and Metrics & Targets.** This disclosure reflects CN's ongoing journey in climate change disclosures since 2009 through the CDP and is aligned with our 2021 CDP Response.

GOVERNANCE | RISK MANAGEMENT | STRATEGY | METRICS & TARGETS

OUR BUSINESS AT A GLANCE

CN is a leading North American transportation and logistics company, and our 19,500-mile network spans Canada and Mid-America, connecting ports on three coasts. We offer fully integrated rail and other transportation services, including intermodal, trucking, freight forwarding, warehousing and distribution. Our freight revenues are derived from seven commodity groups representing a diversified and balanced portfolio of goods transported between a wide range of origins and destinations.

2020 KEY STATISTICS

>300M TONS OF CARGO MOVED	$13.8B REVENUES
$2.9B CAPITAL INVESTMENTS	24,381 EMPLOYEES (end of period)
19,500 ROUTE MILES	9 PORTS SERVED

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2020 Sustainability Report
2020 Data Supplement GRI and SASB Index
2021 CDP Response
2021 Management Information Circular

Message from the President and CEO

At CN, we believe our position in the supply chain will enable us to lead a step-change towards decarbonizing North America's freight sector by leveraging and stimulating progress in the development of low-carbon fuels and technologies.

For more than 100 years, CN has been at the forefront of innovation. We pioneered the now industry-standard Precision Scheduled Railroading (PSR) more than 20 years ago. Today, we are taking PSR to the next level by layering advanced technology and automation onto every aspect of our operations to continuously improve the safety and efficiency of our operations. We are calling this next generation "Digital Scheduled Railroading" (DSR).

Our focus is on creating the railroad of the future by pulling together as ONE TEAM. A sustainable future also means always considering how our activities affect the environment. We believe rail is part of the climate change solution, and CN continues to be an active leader through our actions and transparency. We have been making robust annual climate change disclosures for more than a decade, and in 2020, we also became a supporter of the Task Force on Climate-related Financial Disclosures (TCFD), issuing our first stand-alone TCFD report, a first in the North American rail sector. Also in 2020 and 2021, our actions to reduce emissions, mitigate climate risks and develop the low-carbon economy resulted in CN being one of only three Canadian companies listed on CDP's global Climate A List. As a company, we are enormously proud of these world-wide recognitions of our sustainability efforts and our strong track record of fuel and carbon efficiency. Since 1993, we have improved locomotive emissions intensity by 43% avoiding over 48 million tonnes of carbon.

Today, CN remains the North American rail industry leader, consuming approximately 15% less locomotive fuel per gross ton mile than the average of our Class I peers. In fact, we delivered our best fuel efficiency ever in 2020 — 4% better than the previous record set in 2019 — which avoided approximately 275,000 tonnes of CO_2 emissions.

At CN, our vision is to be the safest and most carbon-efficient, operationally effective, and customer-centric railroad in North America. That is our business — an essential business. As we look to 2030 and beyond, we believe decarbonizing transportation will continue to require innovative fuel-efficient technologies, the greater use of cleaner sustainable fuels, and designing innovative low-emission supply chain solutions through investments and collaboration.

JJ RUEST
President and CEO

SELECTED AWARDS AND RECOGNITION

CDP A LIST 2021 CLIMATE

Listed on the CDP's 2021 prestigious 'A List' for our actions to cut emissions, mitigate climate risks and develop the low-carbon economy.

Member of Dow Jones Sustainability Indices Powered by the S&P Global CSA

Listed on the Dow Jones Sustainability World Index for the 10th consecutive year and on the DJSI North American Index for the 13th consecutive year.

2021 GLOBAL100

Ranked 10th on the Corporate Knights 2021 Global 100 Index of the most sustainable corporations in the world.

BEST 50 CORPORATE CITIZENS

Ranked among the Best 50 Corporate Citizens in Canada by Corporate Knights for the 13th consecutive year in a row. Evaluated on up to 21 ESG indicators.

Governance

Board-level Oversight

The role of the Board is to supervise the management of CN's business and affairs, with the objective of increasing shareholder value. This includes the monitoring of internal controls, ensuring that an appropriate risk assessment process is in place to identify, assess and manage the principal risks of CN's business and financial strategy. CN has identified climate change as an enterprise risk and as such, the Board supervises the management of climate-related risks and opportunities.

Risk oversight is achieved through strategic overview of significant risks and issues, including climate change, and business updates with the President and Chief Executive Officer, and executives. Company officers provide regular updates on the execution of business strategies, business opportunities, risk and safety management, ethical conduct, and detailed reports on specific risk issues. Specifically, all Board directors receive regular updates on the Company's climate change and performance towards targets as part of the briefing materials. In addition, Board members receive CN's sustainability report, which includes specific information on the Company's climate change strategy and performance. In 2021, the Board oversaw CN's Climate Action Plan for inclusion in CN's Information Circular.

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2021 CDP Response, Pages 56–61

2021 Management Information Circular, Pages 78–79

Audit Committee

The Audit Committee of the Board of Directors has responsibility to assist the Board in fulfilling its oversight responsibilities with respect to the Company's financial reporting, monitoring risk management, internal controls and internal and external auditors. In 2020, the Audit Committee reviewed the Company's risk assessment, including risk oversight and risk management policies under the Enterprise Risk Management process, ensuring that an appropriate risk assessment process is in place to identify, assess and manage the principal risks of CN's business and financial strategy, including climate change risks. The committee made the decision to approve our climate risk mitigation controls, MD&A disclosure, as well as other climate-related disclosure commitments. In 2021, as part of the its continuous improvement efforts to ensure best-in-class governance, the Audit Committee was integrated to form the Audit, Finance, Risk Committee.

Governance, Sustainability and Safety Committee

In 2021, CN announced improvements to the effectiveness, transparency and accountability of the Board in line with emerging best practices, including the creation of a new Governance, Sustainability and Safety Committee (GSS). The GSS Committee of the Board of Directors will assist the Board in fulfilling its oversight responsibilities with respect to governance, safety and sustainability of the Company's operations, which include overseeing policies and practices relating to ESG matters. Oversight responsibilities also include assessing and monitoring CN's environmental, safety and security policies and practices, including CN's Climate Action Plan.

"Following the inaugural vote in April 2021, CN will seek an annual advisory vote on our Climate Action Plan during CN's Annual General Meeting of Shareholders. This vote complements CN's long-standing and robust climate change plans and disclosures, its public reporting of its greenhouse gas emissions, its strategy to reduce emissions, as well its year-over-year progress."

SHAUNEEN BRUDER
Chair of the Governance, Sustainability and Safety Committee

PICTURED:

JJ Ruest
President and
Chief Executive Officer

Rob Reilly
Executive Vice–President and
Chief Operating Officer

Ghislain Houle
Executive Vice–President and
Chief Financial Officer

Janet Drysdale
Vice–President, Sustainability

Executive Leadership

The Executive Vice-President and Chief Operating Officer (COO) is the highest-level management position with direct responsibility for climate-related issues. As part of the Executive Leadership Team, the COO reports directly to the President and Chief Executive Officer (CEO) and the Board on climate-related risks and opportunities, including fuel efficiency, winter readiness plans, and rail network resiliency and safety.

The COO's mandate is to drive operational and service excellence and enable the Company to run a safe, fluid, reliable, and efficient railroad. With approximately 85% of our direct greenhouse gas emissions generated from fuel consumption during rail operations, this mandate includes providing executive management oversight on the fuel efficiency strategy to meet related targets and oversight on our investments in innovative rail technologies. For example, in 2020, CN spent $0.4 billion on equipment capital expenditures including the acquisition of 41 efficient high-horsepower locomotives. In addition, fuel conservation practices such as locomotive shutdowns in yards, streamlined railcar handing, train pacing, coasting and breaking strategies were implemented.

In parallel, the Chief Financial Officer (CFO), working with the Vice-President, Sustainability, a newly appointed role in 2021, provides executive management oversight on our carbon strategies. With climate-related risks and opportunities impacting the business, the Sustainability function needs to have direct responsibility for ensuring CN proactively identifies climate-related risks and opportunities, and for ensuring the Company establishes the right policies and programs to meet regulatory compliance obligations, corporate targets, and effectively mitigate potential risks.

For example, in 2020, the CFO and the Vice-President, Sustainability continued to play an important role in ensuring the Company took a strategic approach to understand the impact of carbon pricing and emerging clean fuel regulations in Canada on our business. They also ensured the development of strategies to mitigate these risks and to capitalize on longer-term opportunities by supporting the use of renewable fuels.

Executive Leadership Pay Linked to Climate Target

The performance goals of the COO, CFO, and Vice-President, Sustainability include improvements in CN's fuel efficiency, in line with the Canadian rail industry medium-term emission intensity reduction target of 6% by 2022 from a 2017 baseline and the Company's long-term science-based target to reduce GHG emission intensity (tCO_2e/million gross ton miles) by 43% by 2030, based on 2019 levels.

Oversight for managing potential climate-related risks and opportunities to the business, such as climate change policy impacts, renewable fuel use and stakeholder engagement is also included in the Vice-President, Sustainability's performance goals.

Decarbonization Steering Committee

The mandate of CN's Executive Decarbonization Steering Committee is to provide strategic support and decisions regarding the Company's decarbonization investments and projects, developed at the cross-functional working group level, comprising of subject matter experts who work to realize the projects. The committee includes the Chief Operating Officer, the Chief Information and Technology Officer, the Vice-President of Sustainability and the Vice-President of Procurement. CN's Vice-President, Sustainability chairs the bi-weekly meetings and reports directly to the COO. Critical matters are reported to the GSS Committee of the Board.

Sustainability Committee

The mandate of CN's Sustainability Committee is to monitor, assess, propose, and initiate mitigation measures for sustainability risks and opportunities, including climate-related matters. The committee comprises director- and senior management-level representatives from relevant business units and corporate functions that have oversight over or can influence critical levers in managing CN's environmental or social impact. These include, but are not limited to, Operations, Facilities Management, Fuel Management, Procurement, and Sales and Marketing. CN's Assistant Vice-President, Sustainability chairs the quarterly meetings and reports directly to the Vice-President, Sustainability. Critical matters are reported to the GSS Committee of the Board.

Management

Management is responsible for upstream and operations cost control, including energy efficiency, and are educated on energy management best practices through our EcoConnexions employee engagement program. Management at CN works collaboratively across the value chain to support sustainable production and consumption. Our employees are highly engaged in working together to optimize materials and minimize waste in our operations, which is also reflected by the inclusion of emissions and energy efficiency strategy performance indicators in the relevant employees' annual performance objectives.

For example:

- The Fuel Management team's performance score is tied to the Company's Canadian rail industry emission intensity reduction target of 6% by 2022 from a 2017 baseline.
- The Facility Management team's performance score is tied to the year-over-year target of reducing our overall energy spend by 2%.
- The Sustainability team's performance score is tied to the implementation of the emissions and energy efficiency strategy and the execution of the Company's climate change communications.

The achievement of the above performance indicators is linked to employee recognition as well as the individual's annual compensation and bonus reward.

Employees

Through our EcoConnexions engagement program, launched in 2011, our employees are provided with practical knowledge and tools to reduce energy consumption, minimize waste and improve good housekeeping practices. Launched in 2012, our EcoConnexions *From the Ground Up* reforestation program promotes the greening of communities and First Nations situated adjacent to our rail network. With our partners, Tree Canada and America in Bloom, we have assisted community groups to establish green spaces, tree plantings and mass reforestation projects in a sustainable, environmentally responsible manner. In total, since 2012, our EcoConnexions programs have planted more than two million trees – offsetting carbon emissions and improving air quality.

GOVERNING CLIMATE RISKS AND OPPORTUNITIES

CN manages climate-related risks and opportunities at all levels of the organization: the Board provides supervisory oversight, while Executive Leadership is responsible for climate-related issues and promotes the engagement of Management and Employees to mitigate risks and realize opportunities.

Risk Management

Management Process

CN uses enterprise and operational risk management processes to identify, prioritize, assess, respond to, and disclose risks, including climate-related risks that have the potential to affect business strategy. For each risk (inherent or residual), a ranking is provided ranging from high to low, based on financial, operational, environmental, and reputational impacts (worst-case) and the associated likelihood of occurring. Current and planned mitigation activities are captured and assigned ownership at the appropriate level. For example, ownership for enterprise-level risks resides at the executive level.

We regularly report on our risks internally, highlighting substantive risks and opportunities that have the potential for significant financial impact or are otherwise perceived as significant and/or could result in damage to CN's reputation or assets.

In response to increasing public and investor concerns over climate change, we have been strengthening the transparency of the information we publish publicly on climate-related issues, including concerning governance, risks, opportunities and performance. In addition to this report, in 2020, climate-related disclosures were included as part of our 2020 Annual Report, CDP Report and on our website.

The process to assess climate-related risks and opportunities, which typically refer to the impacts on our supply chain, existing and emerging regulations, technology, market, reputation, legal, and both chronic and acute physical events, takes place on an ongoing basis at the operational level, and more formally on an annual basis during our climate risk assessment leading up to the business planning cycle and voluntary ESG disclosure events.

READ MORE
2021 CDP Response, Pages 08–19

CLIMATE-RELATED RISKS AND OPPORTUNITIES

An important part of the TCFD's recommendations is the consistent categorization of climate-related risks and opportunities and the resulting financial impacts. Following these recommendations, CN identified the transitional risks and opportunities as well as the physical risks that are most pertinent to our business.

Strategy

Climate-related Risks and Opportunities

We recognize that both climate-related risks and opportunities impact our business. As such, climate change is integrated into our risk assessment processes. A clear understanding of the risks and opportunities related to climate change is fundamental to our strategy.

Tables 3 and 4 in this document outline key climate-related risks and opportunities with potential impact to our business over short- (0–1 years), medium- (2–5 years) and long-term (5–10 years) time horizons and our approach to addressing each. Risks are categorized as transition risks or physical risks. Transition risks result from a global transition to a low-carbon and climate-resilient economy that also present opportunities for our business. Physical risks result from extreme weather events and increasing global average temperatures.

Internal Price on Carbon

CN has established an internal price on carbon as a strategic planning tool, considering that addressing climate change is a business cost and opportunity. The development of an internal price of carbon helps to identify revenue opportunities, risks, and creates an incentive to drive energy efficiencies to reduce costs. The use of a shadow price across the jurisdictions where we operate simplifies planning. The use of the carbon price is furthermore critical for the development of a sound low-carbon transition plan in support of our carbon emissions reduction target. We review our internal price on carbon annually, considering changes to the pricing schemes as well as our operations. CN established an internal shadow price of carbon of $27 per tonne CO_2e for 2020.

Climate-related Scenario Analysis

In alignment with our climate risk process, CN has undertaken qualitative and quantitative climate change scenario analysis to explore climate vulnerabilities to enhance our resilience to climate-related risks. We plan to consolidate learnings from these to expand the analysis to other risk types in order to identify potential material financial risks and to inform our business strategy related to climate change. The results of the scenario analysis are discussed with the Executive Leadership Team on an on-going basis.

In 2020, we continued to expand our scenario analysis work, evaluating key physical and transition risks in detail. Going forward, we will continue to improve our capabilities to conduct climate change scenario analysis.

OUR CLIMATE CHANGE STRATEGY

Decarbonize Our Business

We are committed to continuing to lead the North American rail sector in setting clear and ambitious science-based targets and achieving net-zero operational emissions by 2050.

Enable the Transition to a Low-Carbon Future

Rail has a tremendous potential to reduce the environmental impact of transportation. We are committed to playing a key role in the transition to a low-carbon economy.

Build Resiliency and Biodiversity

As an enabler of trade, we recognize the importance of ensuring the resiliency of our rail network. We also recognize the importance of biodiversity and protecting natural capital.

Collaborate with Stakeholders

We recognize the importance of collaborating with governments, supply chain partners, customers, suppliers, academics and cleantech to accelerate the fight against climate change.

READ MORE
2020 Sustainability Report
Pages 16–27


Sioux Lookout, ON

Scenario Analysis Pilots

The transition and physical risks were selected based on their likelihood and potential financial impact on direct costs. We determined that a time horizon until 2030 for the analysis was relevant for our business as it aligns with our science-based target and the Government of Canada's 2030 GHG reduction target.

Transition Risk Scenario Analysis

In 2020, we assessed the financial impact of carbon prices in North America up to 2030 related to our locomotive fuel emissions, which represents approximately 85% of our Scope 1 emissions, with respect to transition risk.

We applied the Government of Canada's carbon price projections until 2030, which line up with the Bank of Canada's scenario that aligns with the well-below 2°C Paris Agreement goals. We also modelled the Bank of Canada's Nationally Determined Contributions (NDCs), which is aligned to a 3.5°C warming scenario by the end of the century. For the U.S., we analyzed the IEA's Sustainable Development Scenario leading to below 2°C and a prorated Bank of Canada's NDC scenario for our U.S. operations leading to 3.5°C.

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TABLE 2: Scenario Analysis Pilot Details and Outcomes

RISK

Carbon Prices

Financial impact of carbon prices in North America

Scenario	IEA'S SUSTAINABLE DEVELOPMENT SCENARIO (SDS)	NATIONALLY DETERMINED CONTRIBUTIONS (NDCs)
Description	The scenario outlines a major transformation of the global energy system to achieve universal access to energy (SDG 7), to reduce the severe health impacts of air pollution (part of SDG 3) and to tackle climate change (SDG 13).	Beginning in 2020, countries act according to their pledges under the Paris Agreement. They reduce global warming, but their actions are not enough to limit warming to an additional 2°C above pre-industrial levels by 2100.
Temperature Impact	End of century warming below 1.8°C	End of century warming around 3.5°C
Rationale for Selection	Explore a best-case/low emissions scenario.	Explore a scenario that is likely considering announced climate mitigation strategies.
Analytical Method	To conduct the carbon price analysis, we multiplied the carbon price by the forecasted locomotive emission volumes to determine the financial exposure to carbon price. Scenario inputs included CN GHG locomotive fuel emissions for the 2019 baseline year, as well as emission projections up to 2030, taking into consideration forecasted business volumes as well as fuel efficiency gains in line with our climate science target.	
Results and Outcome	In a 1.8°C scenario, CN could be exposed to a carbon price financial impact of approximately $750 million by 2030, where no target exists versus $450 million where CN meets its science-based target.	Conversely, in a 3.5°C scenario, CN could be exposed to a carbon price financial impact of approximately $350 million by 2030, where no target exists, versus $200 million where CN meets its science-based target.
Implications on Strategy	The results of the carbon price scenario analysis have informed and reinforced our commitment to achieving our climate science target and climate strategy.	

TABLE 2: Scenario Analysis Pilot Details and Outcomes (cont.)

RISK

Extreme Cold Temperatures

Impact of extreme cold temperatures on our rail network in Canada

Scenario	REPRESENTATIVE CONCENTRATION PATHWAY 2.6 (RCP)	REPRESENTATIVE CONCENTRATION PATHWAY 4.5 (RCP)
Description	A very stringent scenario with carbon dioxide emissions declining to zero by 2100, starting in 2020. It also requires that methane emissions go to approximately half the levels of 2020, and that sulphur dioxide emissions decline to approximately 10% of those of 1980–1990.	An intermediate scenario with emissions peaking around 2040, then declining. RCP 4.5 requires that carbon dioxide emissions start declining by approximately 2045 to reach roughly half of the levels of 2050 by 2100. Associated warming results in physical climate impacts.
Temperature Impact	End of century warming below 2°C	End of century warming between 2°C and 3°C
Rationale for Selection	Explore a best-case/low emissions scenario.	Explore a scenario that is likely considering announced climate mitigation strategies.
Analytical Method	To conduct the extreme cold analysis, we calculated the total number of cold days (below -25°C) impacting CN's Canadian rail network between 2020 and 2030. For the extreme cold scenario analysis, the inputs included the number of extreme cold days below -25°C, and the four-tier restriction system, which calls for specific train length reductions, and the GIS latitude and longitude coordinates across our Canadian rail network at 498 sub-stations. Extreme cold days, on average, are most pronounced on our operations in Alberta, Manitoba, Saskatchewan and British Columbia.	
Results and Outcome	The physical scenario analysis indicated that in a 1.8°C scenario, the number of extreme cold days (-25°C and lower) that could impact CN's network by 2030 would decrease by 26% from 2020.	In a 3.5°C scenario, the number of extreme cold days that could impact CN's network by 2030 would decrease by 44% from 2020.
Implications on Strategy	The extreme cold weather scenario analysis continues to be discussed in the context of influencing our winter readiness plans, particularly in areas of extreme cold exposures. These strategies can include reducing train lengths, modifying train schedules as well as adapting and right-sizing the fleet.	

* The Representative Concentration Pathways (RCPs) describe four different 21st century pathways of greenhouse gas (GHG) emissions and atmospheric concentrations, air pollutant emissions and land use, adopted by the IPCC.

Physical Risk Scenario Analysis

The physical risk analysis focused on the impact of extreme cold temperatures on our rail network in Canada, taking into consideration a time horizon of 2026 to 2030. The analysis was conducted for Representative Concentration Pathways (RCPs) 2.6 and 4.5 scenarios, using data from the World Climate Research Programme.

Hillsport, ON,
Photo by CN Employee,
Chris Wilson

Advancing Our Carbon Reduction Initiatives

With approximately 85% of our GHG emissions generated from rail operations, we believe the best way to reduce our carbon footprint is by continuously improving our rail efficiency. As such, our target informs our Climate Action Plan and business strategy. To achieve our target we are focused on five key strategic areas:

- Investing in and Upgrading Our Fleets
- Increasing Fuel-efficient Technologies
- Leveraging the Use of Big Data
- Enhancing Operating Practices
- Expanding the Use of Cleaner Fuels

FLEET RENEWAL: Cleaner, more fuel-efficient equipment enables us to decouple our business growth from GHG emissions. We continue to purchase more fuel-efficient locomotives and in 2020, we acquired 41 new high-horsepower locomotives.

INNOVATIVE TECHNOLOGY: We continue to explore and invest in innovative technologies. We equip our locomotives with energy management and data telemetry systems as well as distributed power functionality to help us maximize locomotive operating effectiveness and efficiency. These innovative technologies will allow us to continuously improve train handling, braking performance, and overall fuel efficiency, therefore improving our carbon efficiency in the years to come.

BIG DATA: Through our locomotive telemetry systems, we collect large amounts of data to improve performance and fuel conservation. In addition, Horsepower Tonnage Analyzer uses the data from the systems to optimize a locomotive's horsepower-to-tonnage ratio, further minimizing fuel consumption. Investments in information technology enable deeper analysis to continue to identify, through big data analytics, additional opportunities for fuel conservation that will present opportunities for us to further reduce our emissions in the coming years.

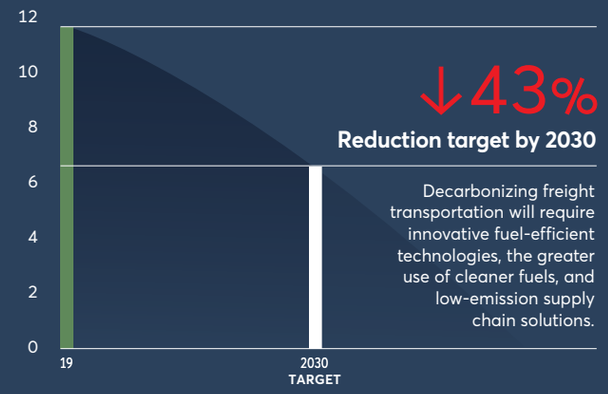
OPERATING PRACTICES: CN is moving from Precision Scheduled Railroading (PSR) to Digital Scheduled Railroading (DSR) with advanced information technologies and automation to further improve operations, safety and ease of doing business. Real-time information enables on-the-job training on practices that promote fuel conservation. Capitalizing on our locomotive telemetry systems and advanced data analytics will help us identify additional opportunities for fuel conservation operating practices in the coming years.

CLEANER FUELS: Driven by regulatory requirements, the growth of the renewable fuel market presents an immediate opportunity to further reduce our emissions by using sustainable renewable fuel blends in our fleets. In the medium term, the proposed Canadian Federal Clean Fuel Standard and other existing renewable and clean fuel standards in jurisdictions where CN operates, will continue to present an important opportunity for us to further reduce our emissions.

PICTURED:
Jasper, AB
Photo by CN Employee
RiasGafoor Tharaganar

OUR SCIENCE-BASED TARGET

EMISSIONS TRAJECTORY IN A WELL-BELOW 2°C SCENARIO
(Tonnes CO_2e/Million GTMs)



Decarbonizing freight transportation will require innovative fuel-efficient technologies, the greater use of cleaner fuels, and low-emission supply chain solutions.

TABLE 3: Climate-related Risks

	Description	Type	Potential Impact to Business	Strategic Planning, Risk Mitigation and Opportunities	Metrics[1]
RISK					
Extreme Weather The risk that an increased severity and frequency of extreme weather events yields increased direct costs.	Extreme temperatures present a risk to our network and infrastructure. For example, extreme heat can lead to rail misalignments and track buckling due to thermal rail expansion; extreme cold can result in broken rails, frozen switches, and high rates of wheel replacements due to track freezing. Further, flash floods can result in land- and mudslides and cause overflows, damaging the support structures and tracks. Temperature extremes can also impact our operations in the U.S. Tornado Belt, making us vulnerable to delays and outages due to increases in tornado occurrences and intensity.	**Physical:** Acute & Chronic **Risk level:** High	May result in loss of revenue due to extreme weather events affecting customer activities. May result in higher cost associated with ensuring asset availability, or to address damage to assets. **Time horizon:** Short, medium and long term **Potential financial impact figure:** $90-150 million **Estimated cost of management:** $100 million	We have several programs in place to respond to the physical impacts of climate change, including extreme weather readiness plans, an emergency response planning program, inspection programs and strategies to deploy non-rail modes of transport. We have established rapid-deployment teams to quickly take action when a service disruption occurs. These teams include staff to rework train schedules, as well as develop work and contingency recovery plans to deploy and manage needed equipment and repair crews. Year over year, we expend considerable costs towards the maintenance of our infrastructure to protect Company assets from wear and tear that could be attributable to changes in climate.	• Number of past, current, and projected weather events • Number of cold days (below -25°C) • Capital expenditure for climate-related events • Operational expenditure for climate-related events
Declining Markets The risk that the decline in demand for products currently representing a significant percentage of CN's commodity portfolio due to changes to consumer behaviours and climate change regulations will yield decreased revenues.	Increasing consumer preference for cleaner energy sources to limit the impacts of climate change, further accelerated by government commitments to clean energy, could affect commodities moved by CN. For example, policies and use of renewable energies are expected to spark the decline of coal in North America. In Canada, thermal coal is expected to contract by 10% over the next 10 years, a trend that is driven primarily by regulations to phase out traditional coal-fired power plants by 2030.	**Transition:** Market, Policy & Legal, and Technology **Risk level:** Medium—High	May result in the loss of rail freight revenues by 5% if consumer preference was to impact our thermal coal customers to the extent that all coal shipments ceased. **Time horizon:** Medium term **Potential financial impact figure:** $400-700 million **Estimated cost of management:** $0.5 million	CN revenues are derived from the movement of a diversified and balanced portfolio of goods, including petroleum and chemicals, grain and fertilizers, coal, metals and minerals, forest products, intermodal, and automotive. This commodity and geographic diversity better positions us to face implications from changing regulations. For example, in 2020, no individual commodity group accounted for more than 27% of total revenues. Furthermore, we engage with customers to promote the environmental benefits of rail to increase our market share in other commodity groups.	• Market demand and supply projections • Emissions regulations with potential impact on customer revenues

(1) Tables 3 and 4, on pages 11–14 outline key metrics used by CN to assess climate-related risks and opportunities in line with the Company's strategy and risk management process.

READ MORE
2021 CDP Response, Pages 14–16

TABLE 3: Climate-related Risks (cont.)

	Description	Type	Potential Impact to Business	Strategic Planning, Risk Mitigation and Opportunities	Metrics[1]
RISK					
Mandates and Regulation The risk that mandates on and regulations of services yield increased direct costs to transition to lower emissions technology.	With approximately 85% of our GHG emissions generated from rail operations, new mandates and regulations, such as the Canadian Fuel Standard that is proposed to come into effect in 2022, require us to continuously review our fleet and invest in new technology.	**Transition:** Market, Policy & Legal, and Technology **Risk level:** Medium—High	Requires increased investment in cleaner, more fuel-efficient rail and non-rail equipment to decouple growth from GHG emissions. **Time horizon:** Medium term **Potential financial impact figure:** $500-1,000 million **Estimated cost of management:** Over $4 million	We continuously improve our rail efficiency to decouple growth from carbon emissions, making us the most fuel-efficient railroad in North America. In addition to the capital intensive renewal of our fleet, investing in Tier 4 locomotives, new-generation railcars, hybrid and electric vehicles, the installation of fuel-efficient technologies and big data management analytics capabilities are helping us further reduce our carbon footprint and are part of our low-carbon transition plan in alignment with our science-based target reduction of 43% GHG emission intensity by 2030. Investments in information technology enable deeper analysis to continue to identify, through big data analytics, additional opportunities for fuel conservation that will present opportunities for us to further reduce our emissions in the coming years.	• Fleet emissions intensity • Fleet fuel efficiency • Fleet air emissions intensity • Emissions regulations • Low-carbon research investment spent • % of MWh from renewable • Renewable fuel energy consumption • # of vehicles with electric drive-train • % of fleet equipped with smart system
Carbon Pricing The risk that the increasing price of carbon and enhanced emissions reporting regulations will yield increased direct costs.	CN is subject to a larger number of provincial and federal GHG reporting, verification, and carbon market regulations in Canada and the U.S. than most rail companies. Our Heavy-Duty Vehicle (HDV) and Marine business units further differentiate our regulatory and reporting commitments from most of our competitors. These carbon pricing mechanisms have a direct impact on the operational costs of CN, as well as the flow-through cost for CN to customers.	**Transition:** Market, Policy & Legal, and Technology **Risk level:** Medium—High	Climate scenario analysis, considering a time horizon from 2019 (CN's base year) to 2030 and using projections and assumptions established for the development of CN's science-based target, indicated a potential impact of up to $450 million in carbon price. **Time horizon:** Long term **Potential financial impact figure:** $200-450 million **Estimated cost of management:** $0.15 million	Carbon pricing mechanisms have a direct impact on operational and flow-through cost to customers. We manage this risk through carbon surcharges for customers and by allocating resources to meet our compliance objectives. The growth of the renewable fuel market presents an opportunity to further reduce our emissions and carbon costs. We are aligned with Canada's Clean Fuel Standard and are furthermore actively working with our fuel suppliers and locomotive manufacturer, focusing on testing and exploring the greater use of biomass-based fuel blends, beyond regulated amounts, in our locomotives, to achieve our target. In 2020, the use of sustainable renewable fuels in our fleet saved approximately 77,000 tCO_2e.	• Market demand and supply projections • Emissions regulations with potential impact on customer revenues • Price of carbon

TABLE 4: Climate-related Opportunities

	Description	Type	Potential Impact to Business	Strategic Planning, Risk Mitigation and Opportunities	Metrics[1]
OPPORTUNITY					
Demand for Low-Carbon Goods and Services The opportunity to increase revenues resulting from increased demand for low-emission goods and services.	The movement towards carbon pricing in North America coupled with the growing pressures on CN customers to reduce their supply chain carbon emissions present important opportunities for us to position the environmental benefits of rail. Shipping freight by rail instead of trucks can reduce GHG emissions by up to 75%. Specifically, positioning rail as the most environmentally sound way to move freight over land could present opportunities to grow revenue within our intermodal and carload segments.	**Transition:** Market **Opportunity level:** Medium—High	May promote growth within our intermodal and carload business segments. **Time horizon:** Medium term **Potential financial impact figure:** Up to $8 billion, based on our truck-competitive business revenue. **Estimated cost to realize opportunity:** $2.9 billion	We actively engage with customers to position the environmental benefits of rail. CN furthermore invests in the expansion and strengthening of the Company's rail network. Investments include key track expansion projects that will boost capacity allowing CN to better service our customers. Other program elements will focus on the replacement, upgrade and maintenance of key track infrastructure to improve overall safety, fluidity and efficiency. In 2020, CN's 2.9 billion capital program included expansion projects such as the construction of about 3.5 miles of double track between Vancouver and Edmonton. CN furthermore continued to provide customers with transparent information on their GHG emissions from transportation of goods.	• Market demand and supply projections • Intermodal commodities growth projections • Emissions regulations with potential impact on customer revenues • Fleet (rail and truck) emissions intensity • Fleet (rail and truck) fuel efficiency
Emerging Markets The opportunity to increase revenues through access to new and emerging markets.	Concerns over price volatility, potential scarcity of non-renewable fuels, and environmental concerns have led to the rapidly growing adoption of renewable and alternative sources of energy. Assuming government policies evolve at a similar speed as in the past, renewables share is expected to triple to ~13% of global energy generation by 2036. For example, although the base is smaller, CN's clean energy revenues have been growing faster than fossil fuel revenues in the period from 2009 to 2019.	**Transition:** Market **Opportunity level:** Medium—High	May promote growth of our clean energy commodity segment. **Time horizon:** Long term **Potential financial impact figure:** $750-1,000 million **Estimated cost to realize opportunity:** $0.5 million	We are working closely with our customers to further develop these business opportunities. This includes proactively marketing the environmental benefits of shipping by rail. For example, CN is working closely with our customers to provide supply chain solutions to transport wood pellets from North American plants to customers across the world looking to move to a more sustainable renewable fuel solution.	• Market demand and supply projections • Emissions regulations with potential impact on customer revenues • Market Growth CAGR • Revenue Growth

READ MORE
2021 CDP Response, Pages 17–19

TABLE 4: Climate-related Opportunities (cont.)

	Description	Type	Potential Impact to Business	Strategic Planning, Risk Mitigation and Opportunities	Metrics[1]
OPPORTUNITY					
Energy Efficient Buildings The opportunity to reduce direct cost by moving to more efficient buildings.	Opportunities exist from the increasing availability of government and utility company subsidies for energy efficiency projects such as building and technology retrofits. The projects increase operational efficiency, reduce energy consumption, contribute to lowering emissions and reducing capital and operating costs. Specific types of projects include heating ventilation and cooling (HVAC) system upgrades, installation of more efficient air compressors and yard air lines to charge our train braking systems, and lighting upgrades.	**Transition:** Policy & Legal, and Technology **Opportunity level:** Low	Enables the reduction of Scope 2 emissions, while observing energy cost savings. **Time horizon:** Short term **Potential financial impact figure:** $0.3 million **Estimated cost to realize opportunity:** $0.05 million	Our approximately $5 million annual CN EcoFund, combined with government and utility incentives and subsidies, has enabled us to secure the necessary funding to drive energy-efficient upgrades in our buildings and yards. To maximize the opportunity, we continue to monitor funding opportunities from government and utility company subsidy programs that align with our procurement strategy. We actively submit project proposals and continue to collaborate with key utilities on identifying energy efficiency project opportunities. Specifically, in 2020, CN received subsidies from BC Hydro, Manitoba Hydro, Minnesota Power, and Commonwealth Edison for energy efficiency projects implemented across our network.	• Emerging regulations • Scope 2 emissions • % of MWh from renewable vs. non-renewable sources • Renewable fuel energy consumption in MWh • % of buildings with low-carbon energy products • Energy and GHG emissions savings from retrofit projects • Capital spent
Efficiency of Resources The opportunity to reduce operating costs by increasing the efficiency of resources.	Opportunities exist to realize long-term carbon efficiencies and fuel savings through our locomotive fleet renewal strategy and fuel conservation practices. CN has a strong track record of fuel and carbon efficiency, and we have improved locomotive emissions intensity by 43% since 1993. In 2020, CN delivered the Company's best fuel efficiency ever – 4% better than the previous record set in 2019 – which avoided approximately 275,000 tonnes of CO_2e emissions.	**Transition:** Policy & Legal, and Technology **Opportunity level:** Medium	Enables the reduction of operating costs, while observing emission savings. **Time horizon:** Short term **Potential financial impact figure:** $60 million **Estimated cost to realize opportunity:** $400 million	With approximately 85% of our GHG emissions generated from rail operations, we believe the best way to reduce our carbon footprint is by continuously improving our rail efficiency. In addition to the capital-intensive renewal of our fleet, the installation of fuel-efficient technologies and big data management analytics capabilities are helping us further reduce our carbon footprint and are part of our low-carbon transition plan in alignment with our science-based target reduction of 43% GHG emission intensity by 2030.	• Emissions intensity • Fleet fuel efficiency • # of vehicles with electric drive-train • % of fleet equipped with efficiency technologies

Rail has a tremendous potential to reduce the environmental impact of transportation. As an enabler of the economy, CN is committed to playing a key role in the transition to a lower-carbon economy.

PICTURED: Jasper, AB.
Photo by CN Employee, Tim Stevens

LEVERAGING THE ENVIRONMENTAL BENEFITS OF SHIPPING BY RAIL

Providing Low-Carbon Transportation Solutions

We are working with many of our customers to help them reduce their transportation supply chain GHG emissions, by leveraging rail for the long haul and trucking over shorter distances. The greater use of combined modes helps lower transportation costs by allowing each mode to be used for the portion of the trip to which it is best suited. It also helps reduce emissions, traffic congestion, accidents and the burden on transportation infrastructure.

Collaborating for More Efficient Supply Chains

Through Precision Scheduled Railroading, today, we are using fewer railcars and locomotives to ship more freight in a tight, reliable and efficient operation for our customers. By fostering better end-to-end service performance, working closely with customers and supply chain partners, including ports, we are driving further emission reductions across the entire supply chain.

Supporting Growth in Sustainable Products and Markets

Every year, we handle over 300 million tons of cargo from the food we eat, the wood to build our homes, the cars we drive, the appliances that make our lives easier, and the energy to power our activities. Many of these goods are being transformed into more sustainable products, and we are moving them in a sustainable way. We also continue to strengthen our position within cleaner energy markets such as wood pellets, wood chips, wind turbine components, solar panels, and biofuels.

Reduces Carbon

75%

MOVING FREIGHT BY RAIL INSTEAD OF TRUCK REDUCES GHG EMISSIONS BY UP TO 75%[1]

More Fuel Efficient

3-4x

TRAINS, ON AVERAGE ARE THREE TO FOUR TIMES MORE FUEL EFFICIENT THAN TRUCKS[1]

Longer Hauls

480 miles

THE DISTANCE ONE TRAIN CAN MOVE A TON OF FREIGHT ON ONE GALLON OF FUEL[1]

Avoids Congestion

300 trucks

ONE FREIGHT TRAIN CAN REPLACE OVER 300 BIG TRUCKS[2]

Lower Air Emissions

90%

TIER 4 LOCOMOTIVES REDUCE PARTICULATE EMISSIONS BY AS MUCH AS 90%[3]

(1) The Association of American Railroads (2) The Railway Association of Canada (3) U.S. Environmental Protection Agency

Supporting the Transition to a Sustainable Economy

Rail shipping as an environmental, efficient, and cost-effective mode of transport is especially compelling as we move towards a clean economy to bring cleaner and more environmentally sustainable products to the marketplace.

CONNECTING THE WORLD TO BIOMASS-BASED FUELS: Shipments of biomass-based fuels and energy sources from North American plants are in growing demand for customers looking for a more sustainable renewable fuel solution for personal and commercial use.

BRINGING ELECTRIC VEHICLES TO MARKET: As the global electric vehicle market grows, we are extending our reach through additional automotive distribution centres in major markets. The EV market has the potential to create high-end, knowledge-based jobs, reduce emissions and improve urban air quality.

LEVERAGING OUR REACH TO POWER THE FUTURE: Our network reaches into the lithium-rich regions to offer supply chain solutions for concentrate producers. Lithium-ion batteries are broadly applied, from home electronics to EVs, and even energy storage systems for solar and wind energy.

DELIVERING CLEANER ENERGY ALTERNATIVES: Thanks to the innovation of our customers, we are moving cleaner energy alternatives, including methanol, solar panels and wind turbines – strengthening North America's position in cleaner energy markets across Canada and the U.S. and export to Asia.

ENABLING OUR CUSTOMERS TO FEED THE WORLD: Thanks to our expansive network, we are playing a key role in supporting our customers to bring food to tables in North America and all over the world. Our Grain Plan is focused on supporting end-to-end supply chain reliability.

MOVING SCRAP FOR REUSE AND RECYCLING: Items within this industry are recycled repetitively without degradation or loss of their properties. For years, CN has been moving scrap metal for customers as well as recycling scrap metal, largely from our shops and yards including rail, railcars, and locomotive parts.

PICTURED: Transporting wind turbine components to producers and users of renewable electricity around the world. Georgetown, ON.

Metrics & Targets

Setting Targets

As we prepare for the future, we are committed to improving our carbon intensity consistent with stabilizing global temperatures.

In 2017, CN became the first railroad in North America, and amongst the first hundred companies globally, to set an approved science-based target. To ensure consistency with the most recent climate science and best practices that apply a well-below 2°C scenario, and in the context of the Company's acquisition of TransX, we revised our target in 2020. The new target, which was approved by the Science Based Targets initiative (SBTi) in April 2021, commits CN to reduce Scope 1 and 2 GHG emissions by 43% per million gross ton miles by 2030 from a 2019 base year.

In alignment with the Science Based Target initiative's framework for the transportation sector, CN furthermore commits to reduce Scope 3 GHG emissions from fuel- and energy-related activities by 40% per million gross ton miles by 2030 from a 2019 base year. As we look to 2030 and beyond, decarbonizing rail transportation will continue to require innovative fuel-efficient technologies, the greater use of cleaner sustainable fuels, and designing innovative low-emission supply chain solutions through investments and collaboration. In 2021, CN announced its commitment to setting a target in line with a 1.5°C scenario and to achieving net-zero carbon emissions by 2050.

READ MORE

2020 Data Supplement / GRI and SASB Index, Page 04

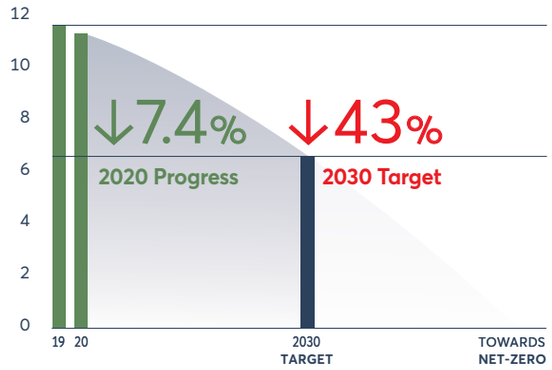
2021 CDP Response, Pages 27–28

CARBON REDUCTION TARGETS

Target	Date	Description	Progress
↓43% **Long-term** (Scope 1 & 2)	**2030**	Reduce Scope 1 and 2 GHG emission intensity (tCO_2e/million GTM) by 43% by 2030 based on 2019 levels.	In 2020, total Scope 1 and 2 emissions combined were 5,397,665 tonnes of CO_2e. On a GTM basis, it was approximately 3% less emission intensity than our base year of 2019, achieving 7.4% of the target.
↓40% **Long-term** (Scope 3)	**2030**	Reduce Scope 3 GHG emissions from fuel- and energy-related activities by 40% per million gross ton miles by 2030 from a 2019 base year.	In 2020, Scope 3 GHG emissions from fuel- and energy-related activities were 1,573,268 tonnes of CO_2e. On a GTM basis, it was approximately 9% less emission intensity than our base year of 2019, achieving 23% of the target.
↓6% **Mid-term** (Scope 1 & 2)	**2022**	Reduce Scope 1 and 2 GHG emission intensity (tCO_2e/million tonne kilometres) by 6% by 2022 based on 2017 levels.	In 2020, total Scope 1 locomotive emissions were 4,475,588 tonnes of CO_2e. On a kg-RTK basis, it was approximately 4% less emission intensity than our base year of 2017, achieving 89% of the target.

2030 Science-based Target

EMISSIONS TRAJECTORY IN A WELL-BELOW 2°C SCENARIO
(Tonnes CO_2e/Million GTMs)



* Tables 3 and 4 on pages 11-14 outline key metrics used by CN to assess climate-related risks and opportunities in line with the Company's strategy and risk management process.

Measuring Our Performance

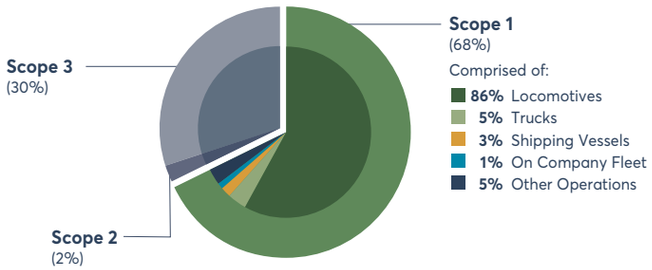
PICTURED:
Edmunston, NB
Photo by CN Employee, Maxime Larouche

TRACKING PROGRESS ON CARBON REDUCTIONS

Since 1993, we have reduced our rail locomotive GHG intensity by 43%, avoiding nearly 48 million tonnes of CO_2e, and we remain the leader in the North American rail industry, consuming approximately 15% less locomotive fuel per gross ton mile than the industry average. With approximately 85% of our Scope 1 emissions generated from rail operations, we believe the best way to reduce our carbon footprint is by continuously improving our rail efficiency.

Our Carbon Footprint

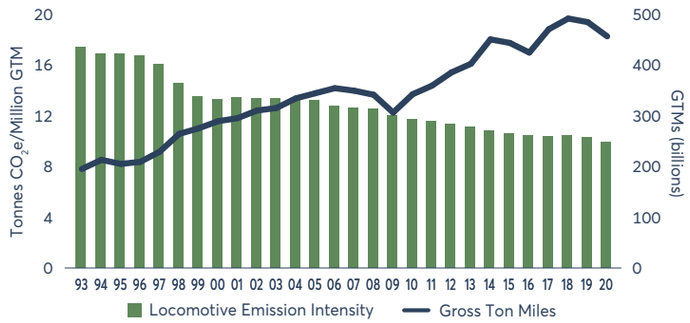
2020 SCOPE 1, 2 AND 3 GHG EMISSIONS
(% of Total Tonnes CO_2e)



Our Scope 3 emissions are comprised of: Fuel– and Energy–related Activities (68%), Capital Goods (18%), Purchased Goods and Services (10%), Upstream Transportation and Distribution (2%), and Waste Generated in Operations (2%).

Decoupling Growth from Carbon Emissions

LOCOMOTIVE GHG INTENSITY vs. GROSS TON MILES (GTMs)
(Tonnes CO_2e/Million GTM vs. Traffic Billion GTM)



SINCE 1993:

↓43%
REDUCTION IN LOCOMOTIVE GHG INTENSITY

↓48 million
TONNES OF CARBON AVOIDED WHILE CONTINUING TO GROW IN THE VOLUME OF FREIGHT WE MOVE

TABLE 5: Emissions Data Table

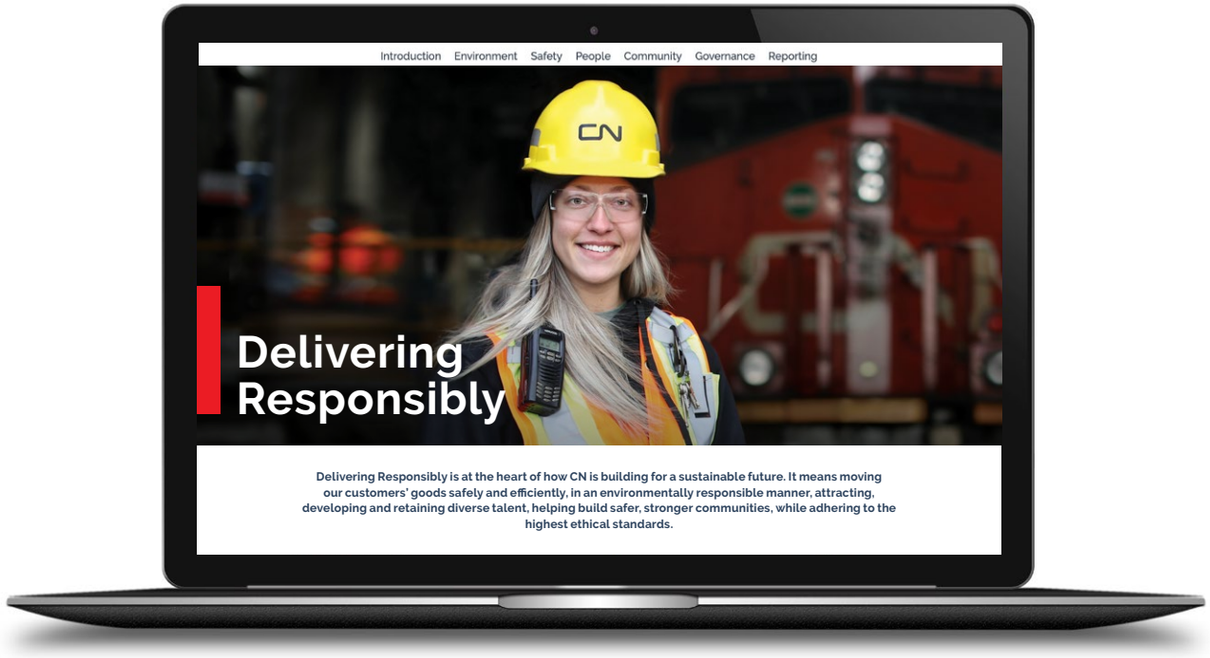
For a comprehensive summary of the environmental metrics related to CN's operations please see our Delivering Responsibly 2020 Data Supplement. For emissions methodology, please see our CDP Climate Change Response.

Data	Measurement	2020	2019	2018	2017	GRI	SASB
EMISSIONS							
Total GHG emissions (Scopes 1 and 2)[a] [b] [c]	Metric tonnes of CO_2e	**5,397,665**	5,936,535	5,965,175	5,671,982	–	–
Direct GHG emissions (Scope 1)[b]	Metric tonnes of CO_2e	**5,234,302**	5,771,894	5,776,183	5,499,641	305–1	110a.1
Rail locomotives[d]	Metric tonnes of CO_2e	**4,475,588**	4,962,923	5,095,382	4,865,352	305–1	110a.1
Intermodal CNTL trucks	Metric tonnes of CO_2e	**126,361**	140,760	149,620	149,669	305–1	110a.1
Intermodal TransX trucks	Metric tonnes of CO_2e	**155,152**	132,518	N/A	N/A	305–1	110a.1
Marine vessel fleet	Metric tonnes of CO_2e	**155,596**	191,557	192,860	187,093	305–1	110a.1
On Company Service fleet	Metric tonnes of CO_2e	**73,211**	95,552	95,664	90,211	305–1	110a.1
Intermodal equipment	Metric tonnes of CO_2e	**69,344**	60,834	62,323	57,185	305–1	110a.1
Miscellaneous fuel emissions	Metric tonnes of CO_2e	**179,052**	187,749	180,334	150,130	305–1	110a.1
Indirect GHG emissions (Scope 2)[c] [e]	Metric tonnes of CO_2e	**163,363**	164,641	188,992	172,341	305–2	–
Other indirect GHG emissions (Scope 3)[f]	Metric tonnes of CO_2e	**2,304,935**	2,778,723	2,488,659	2,768,395	305–3	–
GHG emission intensity[g]							
Total GHG emissions (by rail freight revenue)	Metric tonnes of CO_2e per thousand dollars of rail freight revenue	**0.41**	0.42	0.44	0.46	305–4	–
Total GHG emissions (by employee)	Metric tonnes of CO_2e per full-time employee	**227**	222	235	246	305–4	–
Impact of service							
Rail emission intensity[h]	Metric tonnes of CO_2e per million GTMs	**9.83**	10.28	10.39	10.37	–	110a.1
CNTL truck emission intensity	Metric tonnes of CO_2e per thousand kilometres travelled	**1.14**	1.21	1.21	1.23	–	110a.1
TransX truck emission intensity[i]	Metric tonnes of CO_2e per thousand kilometres travelled	**0.82**	1.31	N/A	N/A	–	110a.1
Marine vessel emission intensity	Metric tonnes of CO_2e per million net ton miles	**16.43**	16.63	16.20	16.37	–	110a.1
Target							
Measure (GHG emission intensity)[j]	Metric tonnes of CO_2e per million GTMs	**11.24**	11.61	N/A	N/A	–	110a.2
GHG science-based target progress[k]	% of progress towards target	**7.4%**	N/A	N/A	N/A	–	110a.2

(a) Our Scope 1 and 2 GHG emissions are consolidated based on an operational control approach.
(b) Our GHG Scope 1 emissions include rail and non–rail emissions. The GHG Protocol was applied. We measured carbon dioxide, methane and nitrous oxide using emission factors and global warming potentials from the Environment Canada National Inventory report and the International Panel on Climate Change Fifth Assessment reports, respectively.
(c) The 2019 data for indirect GHG emissions and energy consumption has been restated to account for previously omitted electricity consumed at TransX facilities.
(d) Rail locomotives emissions decreased 9.8% from 2019 due to a decrease in locomotive diesel consumption. Less locomotive diesel was consumed as a result of higher rail fuel efficiency and less GTMs travelled in 2020.
(e) Our GHG Scope 2 emissions comprise electricity emissions only. The GHG Protocol was used to calculate the Scope 2 GHG emissions, covering carbon dioxide, methane and nitrous oxide. Scope 2 emissions were calculated using a location–based method. We applied North American utility cost per MWh conversion factors and used emission factors from Environment Canada's National Inventory Report and the U.S. EPA eGRID database to convert MWh into tonnes of CO_2e.
(f) Our GHG Scope 3 emissions include emissions from fuel production, purchased goods and services, capital goods, waste generated in operations and upstream transportation and distribution. Emissions were calculated using standard emission factors multiplied by activity levels or dollars of spend. The 2019 data has been restated to account for emissions from the production of fuel for our trucking, marine, and On Company Service fleets, and of Other Track Material (OTM).
(g) Calculations for GHG emission intensity covers Scope 1 and 2 emissions only.
(h) Rail emission intensity is a measure of the tonnes of CO_2e generated by locomotives per million gross ton miles (GTM).
(i) The emissions intensity of the recently acquired TransX trucking fleet is reported separately to provide year–over–year comparability. The TransX truck emissions intensity reported for 2019 has been restated to account for the previously overstated kilometres travelled.
(j) GHG emissions are total Scope 1 and 2. Gross ton miles (GTM) include rail, marine vessels and trucks.
(k) CN has set a science–based target to reduce corporate Scope 1 and 2 emissions per million GTMs by 43% by 2030, compared to a 2019 base year. In 2020, CN completed Year 1 of the 10–year target.

Our Reporting

Transparent reporting is part of our commitment to be open about our business and to communicate our progress with focus, clarity and comparability. Our Delivering Responsibly website provides online access to our complete reporting suite including our most current Sustainablity Report and Data Supplement, TCFD Report and CDP Response – as well as an archive of past reports.



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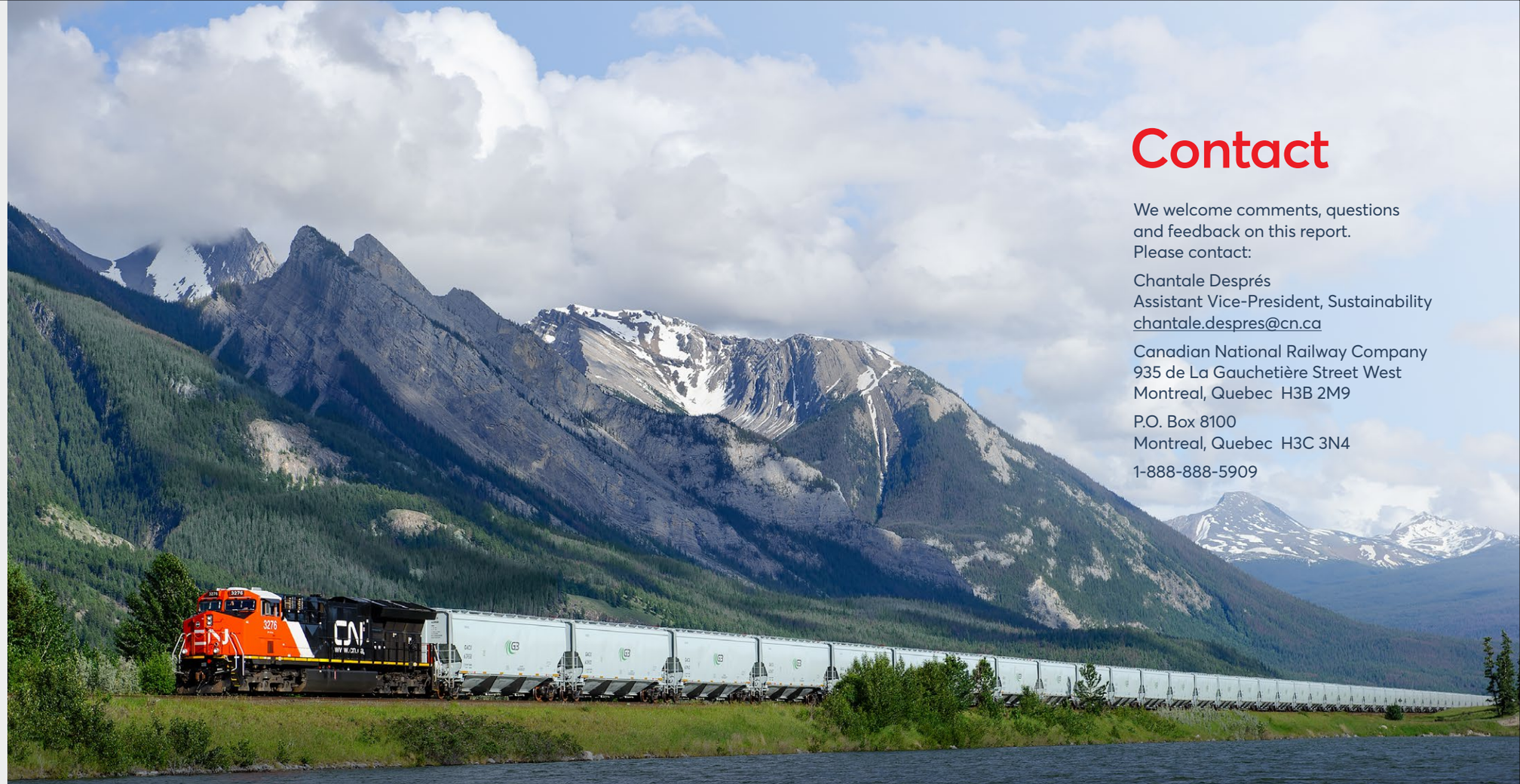
Current Reports

Sustainability Report

Data Supplement / GRI and SASB Index

CDP Response

TCFD Report



Contact

We welcome comments, questions and feedback on this report. Please contact:

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FORWARD-LOOKING STATEMENTS: Certain statements included in this report constitute "forward-looking statements" within the meaning of the *United States Private Securities Litigation Reform Act of 1995* and under Canadian securities laws, including statements based on management's assessment and assumptions and publicly available information with respect to CN. By their nature, forward-looking statements involve risks, uncertainties and assumptions. CN cautions that its assumptions may not materialize and that current economic conditions render such assumptions, although reasonable at the time they were made, subject to greater uncertainty. Forward-looking statements may be identified by the use of terminology such as "believes," "expects," "anticipates," "assumes," "outlook," "plans," "targets", or other similar words.

Forward-looking statements are not guarantees of future performance and involve risks, uncertainties and other factors which may cause actual results, performance or achievements of CN to be materially different from the outlook or any future results, performance or achievements implied by such statements. Accordingly, readers are advised not to place undue reliance on forward-looking statements. Important risk factors that could affect the forward-looking statements in this report include, but are not limited to: the duration and effects of the COVID-19 pandemic, general economic and business conditions, particularly in the context of the COVID-19 pandemic; industry competition; inflation, currency and interest rate fluctuations; changes in fuel prices; legislative and/or regulatory developments; compliance with environmental laws and regulations; actions by regulators; increases in maintenance and operating costs; security threats; reliance on technology and related cybersecurity risk; trade restrictions or other changes to international trade arrangements; transportation of hazardous materials; various events which could disrupt operations, including illegal blockades of rail networks, and natural events such as severe weather, droughts, fires, floods and earthquakes; climate change; labor negotiations and disruptions; environmental claims; uncertainties of investigations, proceedings or other types of claims and litigation; risks and liabilities arising from derailments; timing and completion of capital programs; and other risks detailed from time to time in reports filed by CN with securities regulators in Canada and the United States. Reference should also be made to Management's Discussion and Analysis (MD&A) in CN's annual and interim reports, Annual Information Form and Form 40-F, filed with Canadian and U.S. securities regulators and available on CN's website, for a description of major risk factors relating to CN.

Forward-looking statements reflect information as of the date on which they are made. CN assumes no obligation to update or revise forward-looking statements to reflect future events, changes in circumstances, or changes in beliefs, unless required by applicable securities laws. In the event CN does update any forward-looking statement, no inference should be made that CN will make additional updates with respect to that statement, related matters, or any other forward-looking statement.

PICTURED: Henry House, AB. Photo by CN Employee, Tim Stevens

Our Sustainability Commitment

Delivering Responsibly is at the heart of how CN is building for a sustainable future. It means moving our customers' goods safely and efficiently, in an environmentally responsible manner, attracting, developing and retaining diverse talent, helping build safer, stronger communities, while adhering to the highest ethical standards. Five principles anchor our commitment:

ENVIRONMENT

Conduct our operations with minimal environmental impact, while providing cleaner, more sustainable transportation services to our customers.

SAFETY

Be the safest railroad in North America by establishing an uncompromising safety culture and implementing a management system designed to minimize risk and drive continuous improvement.

PEOPLE

Provide a safe, supportive and diverse work environment where our employees can grow to their full potential and be recognized for their contributions to our success.

COMMUNITY

Build safer, stronger communities by investing in community development, creating positive socio–economic benefits and ensuring open lines of communication.

GOVERNANCE

Continuously improve our culture of integrity and ethical business, building trust and confidence with all our stakeholders.

PICTURED (COVER):
Ashcroft, BC
Photo by CN Employee,
Eric Demski

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