RAC Taxation Committee Meeting – 2024/01

February 22, 2024

People. Goods. Canada moves by rail.





Competition Law Compliance Policy

STATEMENT

The RAC is committed to compliance with all **competition laws** applicable in Canada, including Canada's *Competition Act.*

Under the leadership of its Board of Directors, the RAC carries out its activities in strict compliance with all **competition laws**, provides guidance to its committees and its employees on how to comply with these laws, and promotes with them the importance and value to the RAC of complying with them.

The RAC Corporate Secretary ensures that RAC, its committees and its staff are familiar and comply with this policy.

COMPETITION LAW

Competition laws are designed to maintain and encourage competition in the marketplace. Non-compliance with the **competition laws** relating to improper coordination among competitors could constitute a criminal offence to which significant fines and prison terms can be attached, and for which significant damages can be awarded in private lawsuits, including large class actions.

RAC is a forum for railway members to exchange information and views on the railway sector. Particularly because RAC is an association that represents most of the players in the rail sector in Canada, including many that compete with one another, any activity it conducts must be in strict accordance with the **competition laws**, and avoid even the perception of possible improper conduct.

PROHIBITED ACTIVITIES

Due to the presence of multiple competing entities in RAC, any activity, including discussions or agreements that relate, directly or indirectly, to the following "**Prohibited Topics**" are strictly prohibited:

- Prices (rates) charged to shippers for services provided by members of the RAC
- Prices (costs) paid to suppliers for services provided to members of the RAC
- Any other conditions associated with services provided to shippers or received from suppliers of RAC members, including discounts, rebates, etc. and level of service provisions
- Customer or territory allocation
- Limitation of supply of services provided by RAC members to their customers

GUIDANCE

Any activity, including discussions or agreements that could even remotely be construed as relating to the above Prohibited Topics, cannot take place at the RAC or any of its committees or any meeting organized or attended by RAC staff, or otherwise among RAC members.

To ensure compliance with these rules, when meeting, members of a RAC committee or of the Board of Directors must:

- □ Have a pre-set agenda and take minutes, recording resolutions adopted and summarizing the essentials of conversations that took place.
- Limit themselves to issues identified on the agenda, except if circumstances call for other issues to be addressed, in which case careful notes of the additional issues discussed must be recorded.
- If any participant believes that Prohibited Topics have been raised or discussed, they must advise all participants of their concern and any discussion relating to that issue be ceased immediately pending legal advice.
- Require legal advice if any issue to be discussed might cause the members to believe that competition laws could be infringed.
- Suspend or even postpone to a later date discussions on such issues if legal advice cannot be sought in a timely manner.

Staff of the RAC shall in their duties ensure the confidentiality of information brought to their attention by members, avoid conflict of interest or situations that would discredit the RAC, unless doing so could violate the **competition laws**.

Updated May 3, 2021



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RAC TAXATION COMMITTEE MEETING 2024-01

THURSDAY, FEBRUARY 22, 2024 | 14:00 - 16:00 (EST)

ZOOM MEETING - CLICK HERE

AGENDA

SCHEDULE	<u>LEADER</u>	<u>TIME</u>
 Welcome, Call to Order and Opening Comments Competition Law Compliance Policy – Forward Statement > Approval of December 13, 2022, Meeting Minutes > Discussion regarding Committee Chair 	Jonathan Victor Jonathan/Vict	14:00 or
2. RAC Updates		
2.1 Environment/climate-related tax items >	Ben	14:15
2.2 RAC Advocacy and shortline tax credits >	Kevin	14:25
3. Discussion Topics		14:35
3.1 Shortline tax credit planning and considerations (e.g., Class 1 subsidiary eligibility, provinces to target, etc.)	Jonathan	
3.2 Federal tax items (e.g, withholding tax, minimum taxes, share buybacks, et)	Victor	
3.3 Property Tax	Victor	
3.4 Provincial Dashboard	Jonathan	
4. Discus timing of next committee meeting	Jonathan	15:55
5. Adjournment	Victor	16:00

> Supporting material in briefing book

- Competition Law Compliance Policy
- Dec 2022 Meeting Minutes
- Advanced Biofuels Canada BC Carbon Tax on low carbon fuels letter
- 2023-2030 MOU between TC and RAC
- RAC Shortline Tax Credit Leave Behind (Ontario)





RAC Taxation Committee 2022-02

Tuesday, December 13, 2022 Virtual Meeting

Meeting Minutes

Attendees:

Brianna Bowman (RAC)	Jonathan Thibault (RAC)
Kevin Poulin (SRY)	Victor Wong (CP)
Devony Spenceley (ONR)	Paolo Zaccagnini (CN)

Absent:

Erin Hillis (ONR), Erin Mullens (ONR), Harold Perrault (GWRR)

1. Call to Order & Administrative Issues

Victor Wong called the meeting to order at 2:04 pm EDT.

1.1 Competition Law Compliance Policy – Forward Statement

The Competition Guidelines, as adopted by the RAC Board of Directors, were read to the committee participants. The Guidelines are enclosed in the latest version of the briefing book and explain that the policy emphasizes our organization's compliance with Canadian Competition Laws in all our meetings and activities.

1.2 <u>Approval of May 5, 2022, Meeting Minutes</u> The May 5, 2022, meeting minutes were reviewed and subsequently unanimously approved by the Committee.

2. Discussion Topics

- 2.1 Federal Fall Economic Statement and Consultations
 - Two Federal Tax Consultations were included in the briefing book for the committee to review.

2.2 2% Federal Excise Tax in Share Buybacks

- Committee members would like to see this tax eliminated or at the very least reduced to match the U.S. which is 1%.
- Class 1s may advocate against the tax, and put their support behind/endorse other associations like Canadian Tax Foundation, Canadian Bar Association, CPA, etc.
- Committee asked RAC to include this as part of a pre budget submission (not as a top priority since it only affects some railways, and other channels can be used to advocate against the tax).
- Clarification is needed to understand whether companies like CN & CP, that trade on exchanges in the U.S and Canada, are subject to both the U.S. and proposed Canadian taxes.



- Companies can file through Tax Executive Institute (TEI) to get a meeting with Department of Finance (don't need an open consultation).
- CN may share comments on the proposed tax with the RAC Taxation Committee in early 2023.

2.3 Provincial sales tax on rolling stock

- Railways that operate locomotives across an interprovincial network in Canada is subject to a non-recoverable provincial sales tax.
- The 3 jurisdictions that impose provincial sales tax on rolling stock are British Columbia, Manitoba, and Saskatchewan.
- Double taxation is an issue, when a locomotive or railcar is purchased in a
 province subject to PST and is subsequently taxed when leased and/or used
 in other jurisdictions, without a "netting" arrangement. PST should be selfassessed on a net basis, not gross.
- SRY successful at getting a reduced rate (net) of PST for the % of time that the railcar is in BC.
- There is no sales tax on railcars purchased in the U.S., but they are taxed when used in Canada. This is not reciprocal, as railways cannot net Canadian-purchased rolling stock for mileage used in U.S.
- The RAC could advocate for rolling stock to be exempt from provincial sales tax like in the U.S. through provincial budget submissions.
- Victor Wong (CP) and Paolo Zaccagnini (CN) will circle back to their teams and discuss how best to approach rolling stock and get back to the committee.

2.4 Digital information on property taxes

- CP has started to look into obtaining electronic information on property tax like BC does in terms of how assessments are received electronically.
- The committee would like to see all provinces follow suit.
- 2.5 Provincial Fuel Tax
 - Would be good to better understand fuel taxes, which fund roads and public infrastructure. Would be good if railways' contributions went into a fund for railways, as they don't use the province's infrastructure.
 - Saskatchewan has a much higher fuel tax rate than any other major province
 - The committee would like to leverage the provincial tax dashboard to create handbooks to targeted jurisdictions.

3. Provincial-focused RAC tax policy paper

- Focus efforts mostly on railway-specific taxes; and less on taxes that affect all industries.
- Each province is unique and has its own challenges.
- The RAC is working on a provincial-focused tax policy paper and will seek input from the committee.
- This paper could include provincial sales tax on rolling stock, digital information on property taxes, provincial fuel tax, etc.
- The RAC could create leave behinds with targeted provincial findings to be handed out to new elected officials in each province.



4. The meeting adjourned at 3:24 pm ET.

Action	n Items – Nov 25, 2021	Lead	Status
1.	Minutes: The meeting minutes are to be circulated within 21 calendar days	Brianna	Complete
2.	Find new VIA Rail member for committee	Jonathan	Complete
3.	Provincial-focused RAC tax policy paper	Jonathan/Committee	
4.	Seek improvements (funding; accelerated depreciation; faster approvals) to the National Trade Corridor Fund	Jonathan/PAC committee	
5.	RAC to support the Canadian Hydrogen and Fuel Cell Association submission on the proposed hydrogen investment tax credit.	Jonathan/Ben	Complete



Summary of RAC Tax Committee-related Activities in 2023

The members of the RAC tax committee met informally and communicated electronically several times throughout 2023. With the support and expertise of the RAC Taxation Committee, the RAC advocated on tax policies through multiple consultations and submissions.

RAC Response to Federal Consultation on Certain Budget 2023 Measures

- In September, RAC's response to the Department of Finance included several tax-related recommendations, including:
 - Incentivize rail investments through accelerated (or 100% immediate) depreciation, a tax credit (like the 45G credit in the U.S.) to support shortline railway infrastructure, and other tax measures.
 - Ensure the rail sector has access to clean technology investment tax credits.
 - \circ Confront the growing administrative burden of the tax system.
 - Modify share buyback proposal to match the lower U.S. tax rate, avoid double taxation, and broaden exemption provisions for repurchase of shares issued for corporate financing purposes (e.g., M&A).
 - Delay EIFEL measures and/or exempt the rail sector to reflect its unique circumstance (e.g., the requirement for significant investment in capital and maintenance programs to enhance safety of privately funded infrastructure).

RAC Response to Consultation on Building a Green Prairie Economy Act

- In June, RAC provided a submission regarding the federal consultation on Building a Green Prairie Economy Act. RAC's tax-related recommendations included:
 - Incentivize supply chain investments through accelerated depreciation and other tax measures.
 - \circ Ensure the rail sector has access to clean technology investment tax credits.

Federal Clean Hydrogen Investment Tax Credit

 In January, RAC provided a submission to the Department of Finance on its Consultation on the Clean Hydrogen Investment Tax Credit. RAC's main recommendation was that the eligibility of the Clean Hydrogen Investment Tax Credit and the Tax Credit for Clean Technologies be holistic and cover all investments related to the production, distribution, storage, and use of clean hydrogen.

RAC Pre-budget Submissions

- 2023 Quebec submission included recommendation: Establish a competitive and flexible tax framework that would allow railways and their customers to invest in their own infrastructure, including subsidies, low-interest loans and tax credits to stimulate investments.
- 2023 Federal submission included recommendations:
 - Extend, by three years, the phase out of the Accelerated Investment Incentive.
 - \circ Introduce higher tax depreciation rates to spur ongoing investments.
- 2024 B.C. Pre-budget submission included recommendation: Eliminate the carbon tax on low carbon fuels utilized in British Columbia



Saskatchewan Revenue Agency

• In January, and then again in a follow-up in September, the RAC provided input to the Saskatchewan Chamber of Commerce survey regarding the creation of the Saskatchewan Revenue Agency, communicating the industry's concerns.

Shortline Track Maintenance Tax Credit

- Leveraging work done by the committee over the past several years (e.g., 2021 White Paper on Tax Policy), RAC engaged the Ontario government regarding the creation of a shortline track maintenance tax credit.
- In December, RAC and four of its Ontario shortline members held several in-person meetings in Toronto, educating elected officials on the contributions of Ontario shortlines (as well as challenges), and promoting the creation of an Ontario shortline track maintenance tax credit.

Honourable Premier David Eby Honourable Josie Osborne, Minister of Energy, Mines, and Low Carbon Innovation Honourable George Heyman, Minister of Environment and Climate Change Strategy Honourable Katrine Conroy, Minister of Finance Honourable Bruce Ralston, Minister of Forests Honourable Brenda Bailey, Minister of Jobs, Economic Development, and Innovation Honourable Rob Fleming, Minister of Transportation and Infrastructure

Re: Budget 2024 – Urgent Action on the Clean Fuel Carbon Tax Exemption

We are writing to request immediate action to improve the affordability of clean fuels¹ in British Columbia by removing the carbon tax from clean fuels used in the province. British Columbians are facing affordability challenges across the board – fuel costs, housing, food, etc. In addition, there is clear urgency for effective – and affordable - climate action measures that ensure that BC does its part in the fight against global climate change.

Since 2010, the BC LCFS has been a cornerstone provincial climate action policy, avoiding more than 20 million tonnes in greenhouse gas (GHG) emissions by displacing gasoline and diesel use with clean fuels.² The recent adoption of the new BC *Low Carbon Fuel Act* and *Low Carbon Fuel (General & Technical) Regulations* in late 2023 will increase the scope and pace at which transportation fuels under the BC LCFS must reduce GHG emissions by 2030.³

In August 2023, BC's Select Standing Committee on Finance and Government Services released its Report on the Budget 2024 Consultation and recommended, "... *the carbon tax should be applied in a way that <u>ensures competitiveness</u> of BC products, is <u>equitable</u> across all regions of the province, and <u>supports decarbonization</u>" (emphasis added). The consultations documented significant cost concerns in BC's transportation sectors, such as aviation, marine, rail, trucking, and heavy equipment; equity issues were raised with respect to the carbon tax exemption on some alternative fuels in BC (e.g., electricity, hydrogen, and RNG), while other low emission biofuels are not exempt.*

As currently designed, BC applies the full carbon tax rate on all liquid clean fuel replacements for gasoline, diesel, and aviation fuel. The federal *Greenhouse Gas Pollution Pricing Act* (GGPPA) provides a mechanism to fully exempt biofuels used in gasoline, diesel, and jet fuel blends.⁴ Quebec's cap and trade system fully exempts biogenic CO₂ emissions from the carbon tax. As a result, BC's carbon tax uniquely impairs the competitiveness of BC-manufactured products and services by increasing the cost of clean fuel blends used by BC's freight and passenger transport companies and service providers. By not differentiating the carbon tax rates between high carbon fossil fuels and low carbon clean fuels, the BC carbon tax system fundamentally fails to support decarbonization.

¹ Clean fuels are defined as non-fossil low carbon liquid fuels registered and in compliance with the BC *Low Carbon Fuel Act*. Clean fuels include biofuels (biomass-based) and synthetic (carbon capture-based) fuels that replace refined petroleum products, such as gasoline, diesel, and jet fuel, for use in on-road, off-road, aviation, locomotive, and marine transportation, and/or heat and power generation.

² BC LCFS Information Bulletin RLCF-007-2022 (2010-2022), extrapolated to include 2023.

³ By 2030, the BC LCFS will reduce the carbon intensity of gasoline and diesel fuels by 30%, and by 10% for jet fuels.

⁴ GGPPA applies a 'fuel charge' (carbon tax) in all jurisdictions in Canada, except BC, QC, and the NWT.

Mitigating transportation GHG emissions requires a transition to non-fossil, low carbon fuels. Zeroemission vehicles (ZEV - electricity or hydrogen powered) and renewable natural gas-powered vehicles (i.e. used in CNG, LNG platforms) are low emission options that require major investments – and time for new energy production, engine and/or vehicle replacements. In the light-duty vehicle fleet (cars, SUVs, pickup trucks), ZEV sales in BC will replace internal combustion engine-powered vehicles by 2035.⁵ However, transportation systems modelling demonstrates long-term reliance on non-ZEV transportation to 2050 (i.e., internal combustion engine vehicles), especially in medium- and heavy-duty on-road trucking, off-road equipment, and the aviation/marine/rail transportation sectors.⁶ As a result, to meet 2030 or 2050 emission reduction targets, we must increase the pace and scale of replacement of fossil fuels with clean liquid fuels.

Liquid clean fuels are 'drop-in' replacements for gasoline, diesel, and jet fuel that can be used in conventional engines and fuel systems without requiring major conversions. As reported in the BC LCFS, the carbon intensity of clean liquid fuels used in BC over 2010-2022 is comparable, or even better (i.e., lower), than ZEV fuels.⁷ The drop-in nature of these fuels makes them more readily able to be adopted – and immediately reduce GHG emissions - across BC's industrial sectors and the 'hard-to-decarbonize' transport sectors identified above (e.g., aviation, marine, rail, and MHDV trucking/equipment).

Eliminating the carbon tax on clean liquid fuels reduces the cost of clean fuels in the market. Reducing clean fuel costs will increase demand, and support investments in clean fuel production capacity in the province. This will have immediate and long-lasting benefits for families, small businesses, and industrial fuel consumers by improving the affordability and availability of clean fuel alternatives. Further, BC's freight and passenger service providers will realize significant fuel cost savings which will mitigate high fuel costs and support the adoption of clean fuel blends to meet their corporate Environmental, Social, and Governance (ESG) commitments. Collectively, these benefits are passed through the value chains of the provincial economy, supporting jobs and economic growth, and mitigating the inflationary impact of high fuel costs.

We are seeking a permanent exemption from the BC carbon tax for clean fuels blended with or used to replace gasoline, diesel, and jet fuels pursuant to the *Carbon Tax Act* and *Carbon Tax Regulation*. Taking this action will realize the primary intention of the carbon tax (i.e., to reduce GHG emissions) by promoting the use of low carbon sustainable fuels and be a catalyst towards meeting CleanBC's goals and objectives to 2030.

The BC carbon tax is scheduled to increase to \$80 per tonne on April 1, 2024, increasing clean fuel costs in gasoline by 16.61 cents per litre, in diesel by 20.74 per litre, and in jet fuel by 19.59 cents per litre.⁸ These costs can be immediately mitigated by removing the BC carbon tax on clean fuels.

Respectfully yours,

[SIGNATORIES ON FOLLOWING PAGE]

⁵ BC Zero-Emission Vehicles Act

⁶ International Energy Agency (2023): Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach: link

⁷ BC LCFS Information Bulletin RLCF-007-2022 (2010-2022) – Table 4

⁸ BC Carbon tax rates by fuel type: link

Associations & Non-Profits

Advanced Biofuels Canada Association Ian Thomson, President

BC Council of Forest Industries Kurt Niquidet, Vice President & Chief Economist

BC Road Builders & Heavy Construction Association Lincoln Kyne, Senior Vice President, Lafarge

BC Trucking Association Dave Earle, President & CEO

Canadian Council for Sustainable Aviation Fuels Geoff Tauvette, Executive Director

Canadian Energy Marketers Association Jennifer Stewart, President & CEO

Canadian Oilseed Processors Association Chris Vervaet, Executive Director

Chamber of Marine Commerce Paul Topping, Director, Regulatory & Environmental Affairs

Clean Energy Canada Mark Zacharias – Executive Director

Council of Marine Carriers Paul Hilder, President

Mining Association of British Columbia Michael Goehring, President & CEO

National Airlines Council of Canada Jeff Morrison, President & CEO

Railway Association of Canada Jonathon Thibault, Manager, Economics, Data & Research

Vancouver Airport Authority Trevor Boudreau, Director, Government Relations

Companies

4Refuel Canada LP Joe Valeriote, Chief Commercial Officer

ADM Agri-Industries Ltd. Aaron Taft, General Manager, N.A. Biodiesel

Air Canada Serge Corbeil, Director - Government Relations, Local & Provincial

Arbios Biotech Canada Limited Partnership Rune Gjessing, President & CEO

BP Canada Energy Group ULC Pamela Keenan, President & Chairman

Canadian Forest Products Ltd. Don Kayne, President & CEO

Canfor Pulp Products Inc. Kevin Edgson, President & CEO

Chevron Canada Limited Deidre Reid, Vice President Corporate Affairs

Consolidated Biofuels Limited Dan Treleaven, CEO

Darling Ingredients Inc. Shelby Neal, VP Renewables & Energy Policy

Expander Energy Inc. Gord Crawford, President & COO

Greenergy Fuels Canada Inc. Johannes Dunn, Director of Growth

Gevo, Inc. Lindsay Fitzgerald, VP of Government Relations

Lafarge Canada Inc. Louis So, Procurement Manager

LanzaJet Inc. Alex Menotti, Vice President, Government Affairs, Policy & Sustainability

LanzaTech Inc. Tom Dower, Vice President, Public Policy

Ledcor Group Morgan McDonald, Director of Sustainability

Ledcor Marine Morgan McDonald, Director of Sustainability

Murex LLC Bob Wright, President

Parkland Corporation Robert Pinchuk, Director, Low Carbon Strategy

Seaspan Energy Ltd. lan Mclver, President

Southern Railway of British Columbia Limited Emily Mak, Director, Corporate Affairs & General Counsel

Steeper Energy Canada Limited Aleck Grenon, Corporate Development

Summit Air Morgan McDonald, Director of Sustainability

West Coast Reduction Ltd. Jared Girman, Director of Strategic Initiatives

Reply contact:Doug Hooper, Director Policy & Regulation
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2023-2030

MEMORANDUM OF UNDERSTANDING BETWEEN TRANSPORT CANADA AND THE RAILWAY ASSOCIATION OF CANADA FOR REDUCING LOCOMOTIVE EMISSIONS

1.0 Objectives

The purpose of this Memorandum of Understanding (MOU) is to establish a framework through which the Railway Association of Canada (RAC), its member companies, and Transport Canada (TC) will collaborate to decarbonize the rail sector.

The MOU supports the following objectives to align government and industry efforts to reduce emissions from the Canadian rail sector:

- Align government and industry actions to develop the necessary framework to achieve net-zero by 2050.
- Advance decarbonization research and development including governmentindustry cooperation on technology trials.
- Continue to advance efficiency measures in the Canadian rail sector to reduce greenhouse gas (GHG) emissions.
- Improve collaboration and information sharing to address emerging challenges, exchange best practices, support climate modelling, and inform the development of policies that support locomotive emission reductions.
- Explore modal shift to rail opportunities to reduce GHG emissions from the transportation sector.
- Continue to report locomotive emissions data and initiatives through the Locomotive Emissions Monitoring (LEM) Program.
- Increase the shared knowledge of emerging climate-related issues facing rail infrastructure through government-industry cooperation.

As the Government of Canada is taking a whole-of-government approach towards emission reduction efforts, the MOU recognizes Environment and Climate Change Canada (ECCC) and Natural Resources Canada (NRCan) as partners in several of the objectives described above.

2.0 Governance of the Memorandum

The following sections outline the governance structure for this MOU.

2.1 Management Committee

The MOU will be governed by a Management Committee comprised of senior officials (director or above) from the parties to the MOU, other federal government departments (including ECCC and NRCan), representatives from railway companies, and a representative of an environmental non-governmental organization. The Management Committee will be co-chaired by a representative from TC Environmental Policy and RAC. As the lead federal department for the MOU, TC commits to keeping other federal departments informed with respect to relevant activities and initiatives that result from the MOU.

The RAC and TC will select the environmental non-governmental organization representative. Other individuals (e.g., subject matter experts) may be invited to attend meetings from time to time, as required and agreed upon by the Management Committee. The Management Committee will meet at least once a year, beginning in January 2024, to exchange information, discuss progress and issues, complete a year-end review of activities, and set out priorities for the year. RAC and TC may schedule additional meetings as needed.

The functions of the Management Committee will include, but not be limited to, the following:

- Regularly meet to discuss policy issues, share priorities on research and development, oversee the work of the Technical Review Committee, and approve work plans for achieving the objectives of this MOU.
- Participate in the development of the Rail Climate Action Plan as appropriate, such as providing direction on content and reviewing stakeholder commitments.
- Make recommendations and review the MOU when necessary (e.g., following the publication of the Rail Climate Action Plan), in consideration of developments in the rail industry or the Canadian economy's impact on the MOU.
- Work together to identify and overcome barriers and implement action on opportunities to support rail sector decarbonization.
- Review and approve the annual LEM Reports and any other generated outputs.
- Review and approve communication strategies associated with the dissemination of MOU products.
- Provide direction on the scope, mandate, and publication of the audit, as described in Section 10.0.

2.2 Technical Review Committee

The Technical Review Committee membership will be determined and agreed upon by the Management Committee co-chairs. The Technical Review Committee will be cochaired by a representative from TC Environmental Policy and RAC, and is responsible for the following:

- Support the Management Committee through development and implementation of work plans to advance MOU objectives.
- Meet on a quarterly basis, at a minimum, to review progress, discuss policy issues, set research and development priorities, and initiatives supporting the MOU objectives.
- Share information, evaluate technology trials, and support modelling of sector emissions and target setting approach.
- Support the production of the annual LEM Reports and suggest improvements to the LEM Program, including emission estimation methodologies as needed, and oversee and evaluate other reporting activities for products resulting from the MOU.
- Support the development of communication strategies associated with the dissemination of MOU products.

TC and RAC will serve as a liaison between the TRC, the Railway Research Advisory Board (RRAB) Decarbonization Task Team, the Railway Ground Hazard Research Program, and other relevant committees to help inform climate-related research priorities.

3.0 Context

Dating back to 1995, the Government of Canada and the RAC have collaborated to reduce locomotive emissions from the rail sector. This successful partnership has been governed through four consecutive MOUs (1995-2005; 2006-2010; 2011-2017; 2018-2022).¹

3.1 Global Climate Change

The Intergovernmental Panel on Climate Change (IPCC) found that current GHG commitments still leave a substantial gap to net zero, and it's likely that warming will exceed $1.5 \,^{\circ}$ C during the 21st century – making it more difficult to limit warming below $2 \,^{\circ}$ C. Human-caused climate change has already contributed to the planet's warming of about $1.1 \,^{\circ}$ C above pre-industrial levels in $2011-2020.^2$

Modelled pathways that limit warming to 1.5 °C or 2 °C involve rapid and deep and, in most cases, immediate GHG emission reductions in all sectors this decade. While some

¹ Please contact Transport Canada or the Railway Association of Canada for previous iterations of the MOU. The latest can be found here: https://www.railcan.ca/wp-content/uploads/2019/12/TC-RAC_MOU_2018-22.pdf.

² On March 20, 2023, the IPCC released its latest report, "AR6 Synthesis Report: Climate Change 2023," summarizing the current state of climate change and its widespread impacts and risks.

future impacts of climate change are unavoidable and/or irreversible, they can be limited by deep, rapid and sustained global GHG emissions reduction.

The transportation sector must play a key role in achieving these reductions. In 2021, transportation accounted for approximately 22% of Canada's GHG emissions, with the rail sector accounting for approximately 1% of total GHG emissions in Canada. While the on-road transportation sector represents the bulk (79%) of transportation emissions³, it will be essential to drive down emissions from all modes, including rail.

3.2 Government of Canada's Climate Response

Canada has committed to reducing GHG emissions by 40-45% below 2005 levels by 2030. Canada also committed to achieving a net-zero emission economy by 2050, enshrined in the *Canadian Net-Zero Emissions Accountability Act*.

Most recently, in March 2022, the Government of Canada released its <u>2030 Emissions</u> <u>Reduction Plan (ERP)</u>, a roadmap outlining a sector-by-sector path for Canada to meet its 2030 and 2050 emission reduction goals, including a commitment to develop a Rail Climate Action Plan.

Canada recognizes that rail is an efficient mode of transport that supports climate ambitions, economic prosperity, and well-being, and that encouraging a modal shift to rail, where possible, creates immediate GHG reduction opportunities within the transportation sector.

3.3 Canadian Rail Sector Climate Actions

Rail accounts for less than 4% of Canada's transportation GHG emissions.⁴ Yet, the rail sector moves nearly 70% of intercity ground freight and more than 100 million people annually (pre-pandemic)⁵, making it the least GHG intensive mode of ground transportation.

Canada's rail sector is committed to doing its part to improve its fuel efficiency, enhance the resiliency of rail infrastructure, and reduce emissions. Since 2005, the freight rail industry has improved its fuel efficiency by more than 25%, and intercity passenger rail fuel efficiency improved by over 30% as of 2019.⁶ As the most fuel-efficient mode of ground transportation, the rail sector is working to attract new passengers and encourage freight traffic to rail.

³ National Inventory Report (2023), <u>https://publications.gc.ca/collections/collection_2023/eccc/En81-4-2021-1-eng.pdf</u>

⁴ National Inventory Report (2023), https://publications.gc.ca/collections/collection_2023/eccc/En81-4-2021-1-eng.pdf

⁵ Railway Association of Canada, *Rail Trends 2020*, p.13-14.

⁶ Railway Association of Canada, Locomotive Emissions Monitoring Report 2021.

Rail is one of the sectors in which emissions are difficult to abate, requiring major transformational and technological change (i.e., low-carbon fuels and alternative propulsion) to achieve substantive emission reductions. To date, Canadian railways have made significant investments in infrastructure, fleet modernization, innovative fuel saving technologies, operational improvements, and the piloting of various low-carbon fuels and alternative propulsion technologies. The rail sector acknowledges the importance in mitigating the impacts of climate change through the reduction of locomotive emissions over the next decade, and the need to ensure that Canada's rail system is resilient to climate related impacts, including wildfires, flooding, and extreme heat and cold.

4.0 Reducing Greenhouse Gas Emissions

The rail sector is committed to continuing to improve its emissions intensity. For the duration of the Memorandum, the RAC will encourage its members to improve their GHG emissions intensity from railway operations.

TC and the RAC agree to work together to identify opportunities and address barriers to reducing GHG emissions in the rail sector. Forms of collaboration can include but are not limited to:

- collaboration on research, information sharing and dissemination on decarbonization technologies;
- collaborative clean technology research, development, and demonstration projects;
- policy development; and
- engagement on design and implementation of support programs.

Specific topics of collaboration may include, but are not limited to, the following areas:

- advance research and knowledge of rail infrastructure climate resiliency approaches; options to support modal shift; low-carbon fuels, alternative propulsion, and other clean technology; identify gaps in current funding opportunities for rail to inform government strategies for advancing rail sustainability;
- develop government supports for rail emission reductions and improve GHG reporting accuracy through year specific GHG emissions factors;
- promote the environmental benefits and strong emission performance of Canada's railways through reports, education campaigns, and other methods of communications; and
- engage with the passenger and shortline railway sectors to identify support requirements to advance decarbonization.

4.1 Net-Zero Vision

This MOU represents a shared vision of working towards net-zero GHG emissions by 2050 for the Canadian rail sector. Both parties understand the significance of monitoring, reporting on, and reducing rail sector emissions, and are committed to collaborating on emission reduction opportunities.

Under this MOU, TC and RAC and its members intend to pursue short-term emission reduction opportunities (2023-2030); by taking action to improve low-carbon fuels use and advance trials of zero-emission technologies; improve fuel efficiency; and explore other decarbonization strategies. The Government of Canada invites individual railway signatories to join the Government of Canada's Net Zero Challenge, and other net-zero initiatives as appropriate.

4.2 Modelling Pathways to Net-Zero

The Government of Canada recognizes the efforts of RAC members to disclose emissions and encourages a continuation of these efforts as the industry plans for 2030 and beyond.

To develop well-informed GHG reduction targets that are ambitious and reasonably achievable, TC and the RAC will work together to provide data to:

- develop modelled pathway(s) to net-zero for the sector, including low-carbon fuels uptake by 2030;
- better understand the policy, investment and incentive requirements to enable the adoption of zero-emission technologies;
- and support the development of additional rail decarbonization initiatives, such as the Rail Climate Action Plan.

4.3 Key Milestones on the Path to Net-Zero

This MOU sets the following aspirational goals to help guide TC and the RAC in transforming Canada's rail sector into a sustainable, net-zero mode of travel and freight. These aspirational goals will evolve and be updated as the collaborative work of the MOU advances. With these aspirational goals, TC and the RAC are committed to a journey of innovation, environmental stewardship, and leadership in rail decarbonization.

4.3.1 Reducing Greenhouse Gas Emissions by 2030:

While recognizing that modal shift from on-road to rail could increase rail emissions while reducing overall transportation sector emissions in the years to come:

Class 1 freight railways commit to reducing emissions intensity in accordance with their Science Based Targets (SBTi) targets, and to achieve absolute emission reductions by 2030 aligned with SBTi-modelled pathways.

Passenger railways, shortline and regional railways, and Transport Canada will continue to work with other federal departments, provincial and municipal governments, academia, and other key stakeholders to reduce emissions by 2030.

4.3.2 Advancing Low-Carbon Fuels in the Canadian Rail Sector:

This MOU commits the parties to exploring the feasibility of achieving 10 to 20% of lowcarbon fuels use within the rail sector by 2030, to send a clear signal that the rail sector will require significant volumes of sustainable low-carbon fuels.

Achievement of this goal is dependent on policy that enables the competitive availability and price of low-carbon fuels in the Canadian marketplace, as well as trials to advance rail sector technical and operational knowledge. In support of this goal, TC and the rail industry will aim to increase investments in locomotive engine testing and trials for lowcarbon fuels, and broadly share the results within the sector, investigate the availability of low-carbon fuels for rail transport use, and potential policy drivers for rail sector decarbonization.

4.3.3 Advancing Zero-Emission Locomotives in Canada's Rail Sector:

This MOU recognizes the importance of accelerating the adoption of zero-emission locomotives over the coming decades to reach net-zero. To support this transition:

- TC and RAC members propose to work together to accelerate the retrofitting and upgrading of locomotives to advance net-zero technology.
- TC will explore options for new or existing federal policy drivers, measures, and support programs to assist in the transition to a net-zero rail sector.

4.3.4 Promoting Modal Shift Opportunities:

This MOU sets an aspirational goal of achieving rail's potential to reduce transportation sector emissions through modal shift, both for passengers and freight. In support of this goal:

- TC and RAC members will seek to increase investments to modernize and expand the services of the rail network, such as increasing intermodal hubs and freight rail access to industries.
- TC will work to increase passenger rail ridership on existing routes through new, more efficient options (e.g., High Frequency Rail), and in working with stakeholders including other levels of government to promote coordinated operations that complement Canada's passenger rail network.

5.0 Reducing Criteria Air Contaminant Emissions

The RAC will continue to encourage its members, including those not covered by the *Locomotive Emissions Regulations* (LER), to improve their criteria air contaminant emissions performance.

Through this Memorandum, the RAC will continue to report on annual CAC emissions, in a manner and format that is agreeable to all parties, with a view to leverage the data railways provide to enable collaboration on future initiatives, tools, or actions that address air quality knowledge gaps.

6.0 Research, Development & Demonstration Commitments

Research, development, and demonstration (RD&D) are vital for decarbonization. TC and the RAC commit to working together to prioritize research and share, where possible, generated evidence in line with this MOU's objectives.

Through this MOU, TC and the RAC commit to the following items:

- TC will provide an annual update on rail RD&D projects and programs related to rail decarbonization to the Management Committee.
- RAC and its members will provide an annual update on research priorities that support the MOU objectives to the Management Committee.
- TC will establish Rail Decarbonization Task Team under the Railway Research Advisory Board (RRAB) in which RAC members are invited to participate, as a mechanism for enhancing rail decarbonization-related research collaboration between research bodies, industry, and federal departments, including coordinating strategic research direction and results sharing between the RRAB and the Management Committee.
- TC and the RAC will work with other federal government departments and agencies to support alignment of research with priority areas identified by the Management Committee.
- TC and the RAC will collaborate to advance knowledge of climate risks to rail infrastructure and identify and promote collaborative mechanisms to enhance climate and supply chain resiliency of Canada's rail network.
- TC, ECCC, NRCan, and RAC will collaborate on a research project to develop an understanding of the GHG and air quality impacts of modal shift towards rail, including a quantification and a policy analysis where possible.
- TC, ECCC, NRCan, and RAC will collaborate on a research project to assess the gaps in current knowledge and reporting on CAC emissions profile of the rail sector.
- TC, NRCan and RAC will collaborate to advance knowledge regarding low carbon fuels relevant to the sector.

• TC, NRCan and RAC will collaborate to advance knowledge regarding low carbon fueling infrastructure.

7.0 Rail Climate Action Plan

This MOU recognizes the need for government-industry collaboration to advance decarbonization technologies for the rail sector. Collaboration under the previous MOU included technology assessments and a decarbonization roadmap, and an emphasis on fuel efficiency improvements.

As a next step, TC will lead the development of a Rail Climate Action Plan, which will set out additional actions and measures to support the decarbonization of the rail sector in line with Canada's net-zero by 2050 commitment, along with supporting GHG reductions by 2030.

The collaborative activities set out in this MOU will be important enablers for the development of the Rail Climate Action Plan, including through working together to inform the development of ambitious and achievable GHG reduction targets.

TC's role includes fostering partnerships among rail stakeholders, coordinating efforts across transportation modes, and leveraging infrastructure and energy synergies. In developing the Rail Climate Action Plan, TC will explore options to overcome barriers and accelerate the rail system's sustainability transition.

8.0 Annual Reports

The following sections outline the reporting and verification requirements for this MOU. The first report will be for calendar year 2023 and the last report will be for the year 2030.

8.1 Contents and Production of Annual Reports

The RAC and the Technical Review Committee will be responsible for developing a Locomotive Emissions Monitoring (LEM) report for each year of the agreement. Each report will include:

 General information about the rail sector (reporting railways, network map, etc.); the sector's contribution to transportation-related emission reductions; and RD&D and other actions taken by the RAC, its members, and the Government of Canada (including an overview of funded/supported rail projects) to reduce GHG and CAC emissions from locomotives, advance new zero-emission technologies, and climate change adaptation efforts.

- Detailed information about the composition of the domestic locomotive fleet (OEM, model, tier level, engine, horsepower, year of manufacture, type of operation); names of the reporting railways and their province(s) of operation; freight and passenger traffic levels (gross tonne-kilometres, revenue tonne-kilometres, intercity passenger-kilometres); fuel consumption; fuel efficiency; and GHG and CAC emissions.
- Progress towards the aspirational goals listed in section 4.3.

The RAC will be responsible for the production, design and coordination of materials to produce the annual reports, and TC will be responsible for the translation of the annual reports. As part of the review process, the data workbooks used to prepare the annual reports (excluding company-specific information) will be circulated to the Technical Review Committee.

The final report under the Memorandum (i.e., 2030 reporting year) will include a summary of the parties' accomplishments over the total reporting period including GHG and CAC emission reductions, and TC and other departments' contributions towards achieving the objectives of the MOU.

8.2 Review and Approval of Annual Reports

The Technical Review Committee will support the production of each annual report.

Each annual report will be approved by the Management Committee.

8.3 Dissemination of Annual Reports

Each annual report shall be made available by the parties to the Memorandum and released to the public as soon as possible, once approved. The parties will jointly develop a communications strategy to maximize outreach and disseminate annual reports. As part of this strategy, TC will share the annual reports with ECCC and other relevant federal departments and agencies.

The RAC will be the copyright holder of all rights in, and to, the annual reports. TC will hold a royalty free license in perpetuity of any copyrighted materials included in the annual report.

9.0 Duration

The MOU will come into force upon signing by the duly authorized representatives of TC and the RAC and will endure until December 31, 2030, unless it is terminated at an earlier date. The party that is terminating the MOU will give six months prior formal written notice to each signatory.

10.0 Third Party Verification

A qualified auditor will be given access at least once over the duration of the MOU to audit the processes and supporting documentation pertaining to the MOU. Parties to the MOU will select the appropriate auditor and will share audit costs equally. The scope, mandate, and publication of the audit will be decided by the Management Committee.

11.0 General Provisions and Signatures

This MOU is a voluntary initiative that expresses in good faith the intentions of the parties. It is not intended to create nor does it give rise to legal obligations of any kind whatsoever, nor establish a partnership or joint venture between signatories. As such, it is not enforceable by law. The government reserves the right to develop and implement regulatory or other measures it deems appropriate to achieve clean air and climate change goals. Conversely, signatory parties reserve the right to review and reassess performance targets in correspondence with evolving government policies, operating procedures or market conditions. This Memorandum will not constrain the parties from taking further actions relating to GHG and CAC emissions or fuel use that are authorized or required by law.

The parties recognize that the information provided pursuant to the Memorandum will be governed by the applicable legislation concerning protection and access to information.

Dated at Ottawa this 5 day of December 2023.

Minister of Transport

President and CEO, Railway Association of Canada

Appendix A

RAC MEMBER COMPANIES

(As of December 5, 2023)

Agawa Canyon Railroad, ULC

Alberta Prairie Railway

ArcelorMittal Infrastructure Canada s.e.n.c.

Barrie-Collingwood Railway

Battle River Railway, NGC Inc.

BCR Properties Ltd.

Big Sky Rail Corp

Boundary Trail Railway Co.

Cape Breton & Central Nova Scotia Railway

Capital Railway

Carlton Trail Railway

Central Manitoba Railway Inc.

Chemin de fer Arnaud Québec

CN

Compagnie du Chemin de Fer Lanaudière inc.

CPKC

Essex Terminal Railway Company

exo

GIO Rail Holdings Corporation

Goderich-Exeter Railway Company Limited

Great Canadian Railtour Company Ltd.

Great Western Railway Ltd.

Hudson Bay Railway

Huron Central Railway Inc.

Immeuble VDS Inc.

Keewatin Railway Company

Knob Lake and Timmins Railway

Last Mountain Railway Metrolinx New Brunswick Southern Railway Company Limited Nipissing Central Railway Company **Ontario Northland Transportation Commission** Ontario Southland Railway Inc. Orangeville Brampton Railway Ottawa Valley Railway Prairie Dog Central Railway - Vintage Locomotive Society Inc. Québec Gatineau Railway Inc. Québec Iron Ore Inc. Québec North Shore and Labrador Railway Company Inc. Roberval and Saguenay Railway Company, The Romaine River Railway Company Société du chemin de fer de la Gaspésie South Simcoe Railway Southern Ontario Railway Southern Railway of British Columbia Ltd. St. Lawrence & Atlantic Railroad (Québec) Inc. Toronto Terminals Railway Company Limited, The Train Touristique de Charlevoix Inc. Tshiuetin Rail Transportation Inc. VIA Rail Canada Inc. West Coast Express Ltd.



SHORT LINES, BIG IMPACT: BENEFITS OF AND NEED FOR TRACK MAINTENANCE TAX CREDIT.



RAC ONTARIO MEMBERS

SHORTLINE RAILWAYS

ACR	Agawa Canyon Railroad
BCRY	Barrie-Collingwood Railway
ETR	Essex Terminal Railway Company
GIO	GIO Rail Holdings Corporation
GEXR	Goderich-Exeter Railway Company Ltd.
HCRY	Huron Central Railway Inc.
NCR	Nipissing Central Railway Company
ONR	Ontario Northland Transportation Commission
OSR	Ontario Southland Railway Inc.
OVR	Ottawa Valley Railway
SOR	Southern Ontario Railway
STTY	St. Thomas, Aylmer, Tillsonburg Railway (GIO)
TRRY	Trillium Railway (GIO)

CLASS 1 FREIGHT RAILWAYS

- CN CN
- CPKC CPKC
- CSX CSX Transportation Inc.
- NS Norfolk Southern Railway

INTERCITY RAILWAYS

- AMTK Amtrak VIA Rail Canada Inc. VIA
- **COMMUTER RAILWAYS**
- GO Metrolinx O-Train Capital Railway
- Toronto Terminals Railway Company Ltd. TTR
- **TOURISM RAILWAYS**

SSHR

South Simcoe Railway ACTT Agawa Canyon Tour Train

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ONTARIO SHORTLINES HAVE BIG ENVIRONMENTAL AND ECONOMIC IMPACT.



Rail is **4X MORE FUEL EFFICIENT** than trucking.

ENVIRONMENTAL IMPACT



One unit-train of freight can **REMOVE 300 TRUCKS** from our congested roads.



Locomotives move one tonne of freight more than 200 km on a single litre of fuel.

ECONOMIC IMPACT

Ontario's shortline railways bring over \$5 B worth of goods on behalf of their customers to market each year. In Canada, 1/5 carloads originate on a shortline railway.



REDUCTION IN THE COST OF CAPITAL (ALLOWING MORE INVESTMENT) **3 BILLION US** IN SHORTLINE INVESTMENT (47% INCREASE)

MORE RAIL TIES PURCHASED PER YEAR (MEASURABLY ENHANCING SAFETY)

AN ONTARIO SHORTLINE TRACK MAINTENANCE TAX CREDIT WILL HELP BUILD A STRONGER ONTARIO.

