

# 2024 Report

## Climate-related Risks and Opportunities

Follow-up to the recommendations of the Task Force  
on Climate-related Financial Disclosures

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# 1. Introduction



# 1. Introduction

## 1.1 About VIA Rail

VIA Rail operates Canada’s national passenger rail service on behalf of the Government of Canada, offering intercity rail services and ensuring rail transportation services to regional and remote communities. With an objective to provide a safe, accessible, efficient, reliable, sustainable, and environmentally friendly passenger rail service, VIA Rail is an independent Crown corporation that connects more than 400 communities, covering a 12,500-kilometre network. At VIA Rail, we are committed to sustainability and the communities we serve. Our 2021–2025 sustainability plan has been based on six priorities that drive us to embed environmental, social, and governance performance in all our operations. As we approach the conclusion of our current plan, we are excited to embark on VIAction and continue our sustainability work under this umbrella. Our new five-year strategic plan reinforces our commitment to decarbonisation and integrates these efforts into our 2030 goals.

We are committed to reducing the environmental impacts of our own operations and ensuring that our buildings and infrastructure are resilient in the face of climate change. Consequently, one key priority of our sustainability plan focuses on Climate Action, which is supported by three strategies:

- **Enhancing greenhouse gas (GHG) emissions reduction targets to support Canada’s 2050 net-zero emissions ambition.**
- **Improving fuel and energy efficiency in all operations.**
- **Reviewing climate change risks and implementing an action plan.**



 <p><b>Environmental</b></p> <p><b>Climate Action</b></p> <p>Mitigate impact on climate change and ensure readiness to adapt</p> <p><b>Environmental Management</b></p> <p>Minimize waste in our operations and drive circularity</p>	 <p><b>Social</b></p> <p><b>Employee Mobilization</b></p> <p>Support employees to become sustainability ambassadors</p> <p><b>Community Engagement</b></p> <p>Further engage with community partners to extend our reach</p>	 <p><b>Governance</b></p> <p><b>Responsible Sourcing</b></p> <p>Leverage sourcing as a key driver of sustainable practices</p> <p><b>Credibility and Recognition</b></p> <p>Demonstrate excellence in sustainability</p>
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This report intends to better inform our stakeholders on climate-related risks and opportunities affecting VIA Rail's operations and how we are responding. It reflects our commitment to provide meaningful and transparent information related to our sustainability performance to our stakeholders. This report also meets the Canadian government's requirement for Crown corporations to demonstrate climate leadership by reporting on their climate change-related risks and opportunities in line with the Task Force on Climate-related Financial Disclosures (TCFD). We anticipate seeing new guidance in the coming years on the application of the new sustainability and climate reporting standards published in 2024 by the Canadian Sustainability Standards Board and by the International Public Sector Accounting Standards Board (IPSASB).

We are actively enhancing our understanding of climate risks and opportunities while working to better integrate climate-related considerations into our governance and internal processes. In this report, we explore our progress for 2024.

In parallel, we developed our new strategic plan, VIAAction 2030, which is anchored in minimizing environmental impact and climate issues. Through this ambitious plan based on concrete objectives, VIA Rail aims to become a best-in-class operator in North America and a leader in integrated mobility at the heart of the passenger journey in Canada. Environment is one of the five pillars of our corporate strategy, reflecting our commitment to becoming an environmental champion in both the services we provide and in our operational practices by upholding high environmental standards and implementing initiatives to reduce VIA Rail's environmental footprint. This report also provides a look at some of the actions VIA Rail is currently taking in this regard.

## 2024 Main Highlights:

- **VIA Rail advanced the way physical risks are being assessed by enhancing the approach to understanding vulnerabilities of built assets (rail, stations, maintenance centres, etc.).**
- **Initiated efforts to evaluate the financial effects of selected areas of physical risks on VIA Rail.**
- **Developed a climate risk framework for physical risks to embed climate risk considerations into the management of VIA Rail built assets.**



## 2. From Risk to Resilience

# 2. From Risk to Resilience

Our climate is changing rapidly, and impacts caused by climate change are broad and systemic. VIA Rail is anticipating increasingly challenging climate conditions for which we need to prepare, as well as societal and business environment changes as Canada transitions to a low-carbon economy.

## 2.1 Overview of Climate Scenario Analysis Approach

In 2023, VIA Rail analyzed how climate-related risks and opportunities might evolve over time and impact our operations across two climate scenarios and time horizons (2030 and 2050). Through workshops with representatives from key departments, we mapped the potential financial impact categories from these risks and opportunities. This exercise also helped VIA Rail consolidate business responses that are currently in place or planned, as well as identify additional measures VIA Rail could consider, therefore enhancing its resilience to climate-related risks and opportunities.

### VIA Rail explored the following two climate scenarios:

- **Deep Decarbonisation:** A low-emissions scenario that sets out a pathway to transition to a low-carbon economy with the goal of net-zero GHG emissions by 2050. This scenario limits global mean temperature rise to no more than 1.5 °C by 2100 to avoid the worst effects of climate change. Under this scenario, there is exponential growth in renewable energy, aggressive electrification, deployment of low-carbon technologies and significant behavioural changes. It generally produces higher transition risks and opportunities and lower physical risks.
- **Climate Crisis:** A high-emissions scenario in which little additional progress is made in curbing global GHG emissions that continue to rise unabated and global average warming exceeds 4 °C by 2100. Such a rise in temperature will result in severe climate impacts. It generally produces lower transition risks and opportunities and higher physical risks.

Deep Decarbonisation Scenario

Climate Crisis Scenario

**Business more impacted by transition risks and opportunities**

**Business more impacted by physical risks and opportunities**

For a full description of the climate scenario analysis undertaken by VIA Rail, please consult our 2023 Report on Climate-related Risks and Opportunities. The results were used to inform the climate risk work undertaken in 2024 on both transition and physical risks, which are explained in the next pages.

Following guidance from the TCFD, VIA Rail is considering climate-related risks and opportunities from two angles:

1. **physical risks resulting from climate change that can be acute (event-driven) or chronic (long-term); and**
2. **transition risks and opportunities that arise from the necessary transition to a low-carbon economy.**

The 2023 scenario analysis explored the key climate-related risks and opportunities across two climate scenarios and time horizons, which led to the following short-list:

### **Physical risks:**

- **Acute (extreme weather events)**
- **Chronic (weather variability)**

### **Transition risks:**

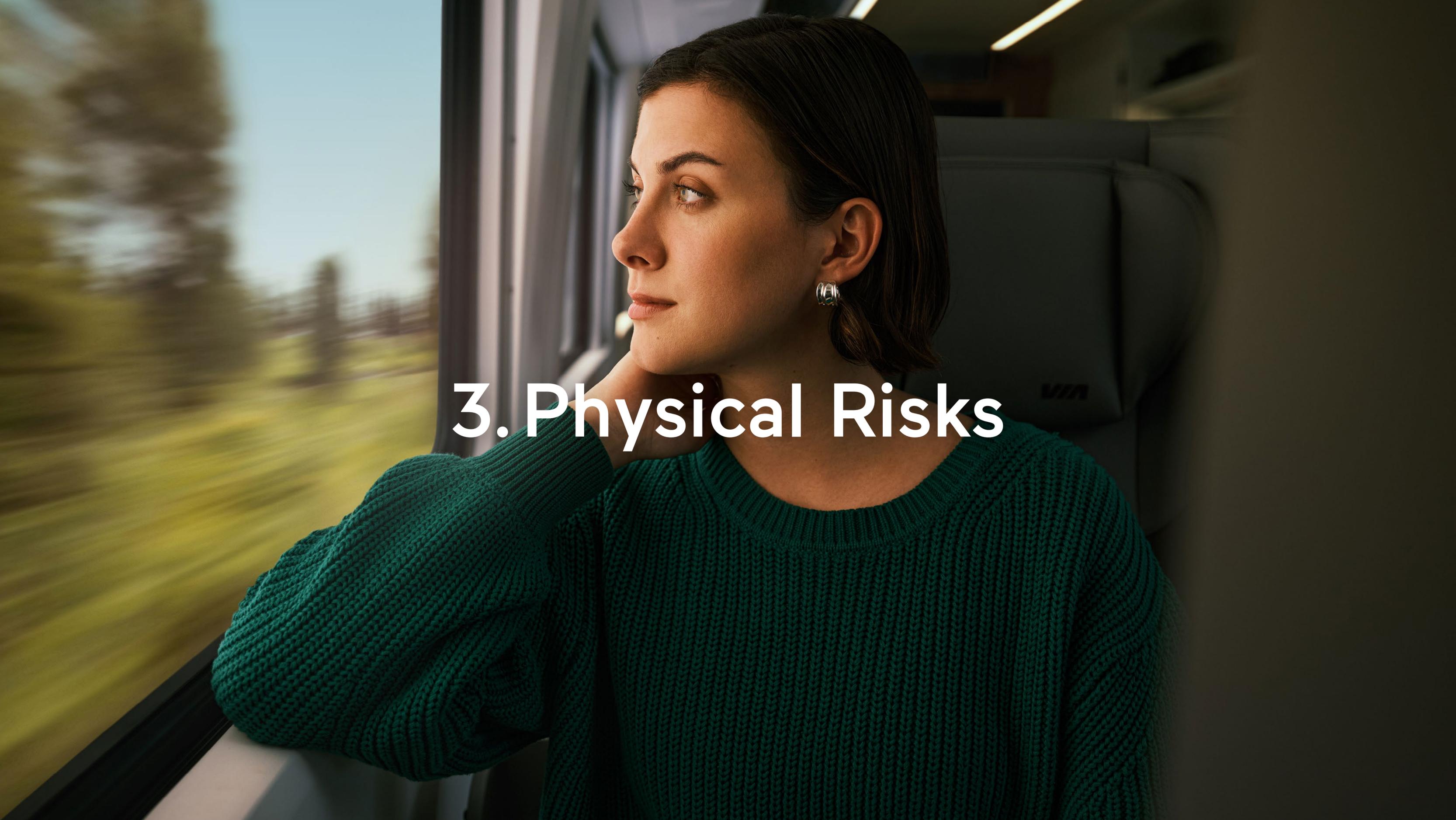
- **Fossil-fuel pricing**
- **Energy efficiency and availability**
- **Transitioning rolling stock**

### **Transition opportunities:**

- **Energy efficiency and availability**
- **Transitioning rolling stock**
- **Demand for low-carbon transportation**

A more comprehensive table with definitions is presented in the 2023 report.

In 2024, VIA Rail took a deep dive into several areas of risk to better understand their potential impact and financial implications, as further detailed in Sections 2.2 and 2.3 below.



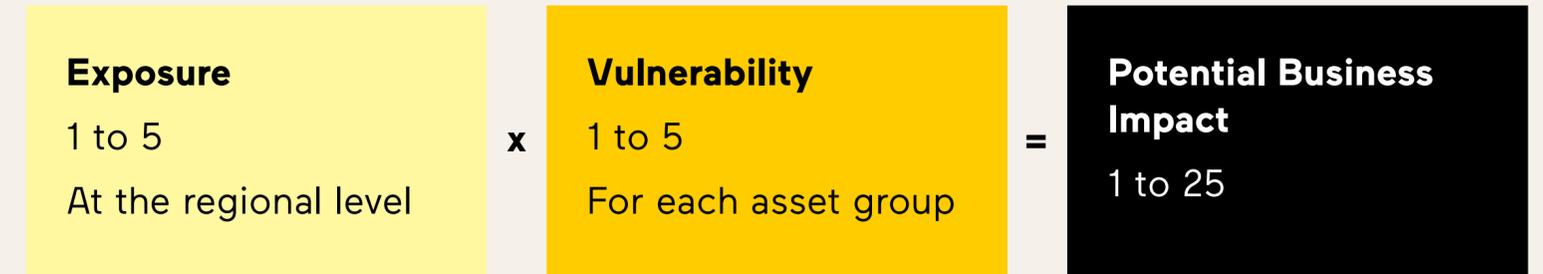
# 3. Physical Risks

# 3. Physical Risks

## 3.1 Moving From Scenario Analysis to a Preliminary Heatmap

In 2024, VIA Rail advanced the way physical risks were assessed with a more thorough approach to understanding the vulnerabilities of different asset groups. This allowed us to get a better understanding of the potential business impacts of various climate hazards across operating regions. The exposure score for each hazard was determined using regional climate data, while the vulnerability score was based on the characteristics of the asset group (rolling stock, real estate, and rail infrastructure). For this assessment, only the Climate Crisis scenario and the 2050 timeframe were considered.

To identify the key areas of risks, VIA Rail adopted the following methodology:



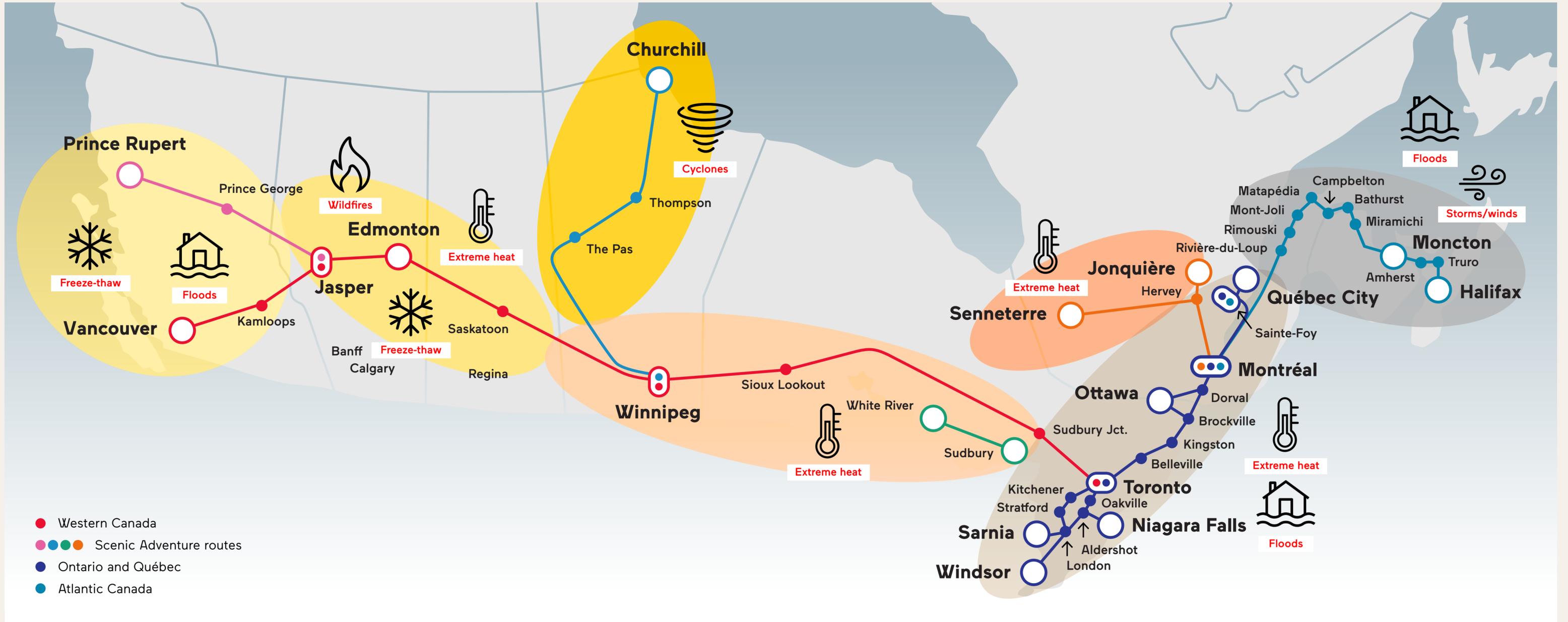
**Exposure refers to:** The nature and the degree to which an asset group is exposed to significant climate hazard.

**Vulnerability refers to:** The degree to which a system is susceptible to, or unable to cope with, adverse effects of a climate change, including climate variability and extremes.

This produced a high-level heatmap with impact scores ranging from 1 to 25, which helped to identify the areas for further study and served as the foundation for the development of the risk evaluation framework described in Section 4.3.

Extreme heat and flooding were among the hazards surfacing in many regions. The image below presents the physical risks having the greatest impact in each region.

# Physical Risks Having the Greatest Potential Impact for each Region Explored



- British Columbia region
- Alberta and Saskatchewan region
- Winnipeg-Churchill route
- Central Canada region
- Montréal-Senneterre route
- Québec-City-Windsor corridor
- The Maritimes region

Hazards	Potential physical impacts
<b>Extreme heat</b>	Increased delays or interruptions in operations and services, affecting the delivery of goods and materials necessary for rail operations and reduced labour productivity and availability.
<b>Floods</b>	Intense rainfall and rapid snowmelt can cause flooding, which can damage buildings, wash out tracks, weaken infrastructures, and lead to service disruptions.
<b>Strong winds/ Tropical cyclones</b>	High winds and storms can topple trees onto tracks, damage buildings and overhead lines, and pose risks to trains, increasing the frequency of maintenance and repairs as well as increase the risk of staff and passenger injuries.
<b>Wildfires</b>	Wildfires can damage tracks, signalling equipment, and other infrastructure, increasing the frequency of maintenance and repairs, as well as pose risks to passenger safety.
<b>Freeze-thaw cycles</b>	Freeze-thaw can potentially cause heaving or distortion of the track alignment, and damage buildings. In northern areas, thawing permafrost can destabilize the ground on which tracks and structures are built.

## 3.2 Estimating the Financial Effects in Quantified Terms

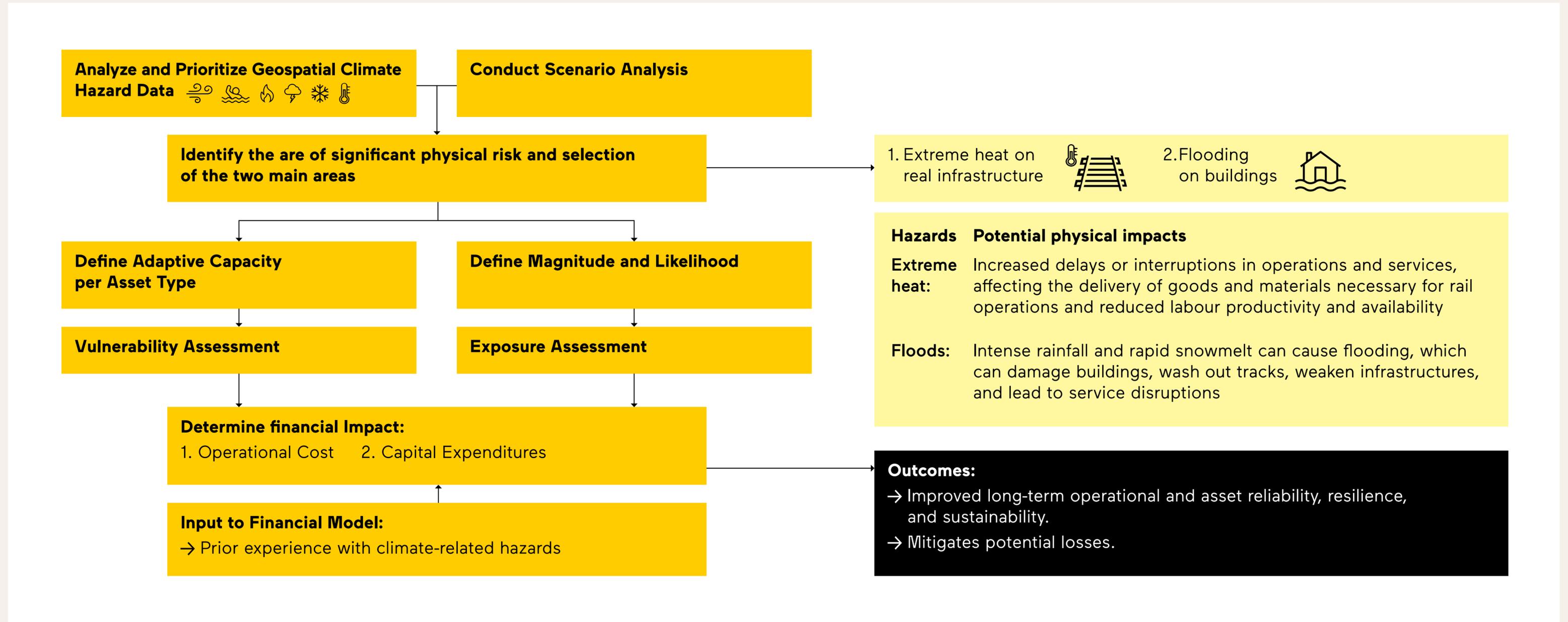
From the above list of physical risks with the highest potential financial impacts, VIA Rail selected two specific areas of risk and began the process of identifying how the potential financial impacts of these risks could be quantified. The areas are:

1. The impact of extreme heat on rail infrastructure in Alberta-Saskatchewan
2. The impact of flooding on buildings in the Québec City-Windsor corridor

For these two areas of risks, VIA Rail is looking to gain a deeper understanding of costs associated with operational disruptions (OPEX) due to repairs or delays, and the capital investment required for major upgrades or repairs (CAPEX).

The diagram below outlines VIA Rail's ongoing evaluation process, led by the finance team. This assessment is currently in progress and will continue over the coming years as the team refines its analysis.

## VIA Rail’s process to identifying and quantifying the financial impacts of physical risks



### 3.3 VIA Rail's Response to Physical Risks

As VIA Rail continues to assess the impact of physical risks, we are refining our ability to develop effective responses that enhance resilience. In line with the previous year's report, the organization evaluates business responses through strategic, operational, and emergency perspectives to address emerging risks.

VIA Rail responses fall under the responsibilities of railway operations, real estate, finance, and the risk management team. These responses are aimed at improving preparedness and mitigation and include both measures to be implemented in the short term, such as monitoring and enhancing communication protocols established with host track administrator, and long-term planning efforts, such as investing in and prioritizing adaptation measures for stations in areas exposed to greater climate hazards. As our understanding of these hazards evolves, response strategies will continue to be adapted.

### 3.4 Case Study

#### Wildfires in Jasper National Park

##### Background

In July 2024, Jasper National Park in Alberta faced exceptionally dry and hot conditions, with the fire danger index reaching extreme levels. These conditions, coupled with a severe thunderstorm, ignited three wildfires, all just a few kilometres from the Town of Jasper<sup>1</sup>. This location is critical for VIA Rail, as it houses one of our locomotive engineering terminals where we support operations and ensure the efficient management of our train services. The station is also a key point for the Canadian route (as well as a highlight for travellers) and for services to Prince Rupert.

The wildfires had a significant impact on rail operations:

- **Train lines affected:** Routes in both directions had to be cancelled for the duration of the fire and following days. Trains coming from Edmonton and Kamloops were rerouted or sent back. Disruptions persisted for three to four weeks.
- **Stranded equipment:** Due to the rapid spread of the fire, provincial authorities had to take swift action, including ordering the evacuation of staff and engineers from VIA Rail's locomotive terminal. As a result, some equipment was inaccessible for several days. Fortunately, neither the equipment nor VIA infrastructure in Jasper sustained any damage.

Several lessons were learnt from the tragic event:

- **Key partnerships: Collaboration and agreements with other rail transportation companies for alternative routes are essential to deal with prolonged disruptions such as those caused by wildfires. We need to explore alternative routes and strengthen agreements with other railway companies to ensure better handling of future disruptions. Additionally, working with agencies like Parks Canada to promptly restore access underscores the importance of collaboration in returning to normal operations quickly.**
- **Risk assessments and preparation: VIA Rail is enhancing risk management and governance practices to be better prepared for future wildfires or other climate-related events.**

The wildfire in Jasper National Park served as a critical reminder of the need to build resilience into operations and effectively manage the response to limit the impact of disruptions from future climate-related events, in the moment and in order to speed up the recovery period.

### 3.4.1 Transition Risks and Opportunities

After our 2023 climate scenario analysis (see last year's report) where we identified the most significant risks and opportunities related to the transition to a low-carbon economy, we convened representatives from different business units across the organization to discuss the integration of climate risks and opportunities into business processes.

From these discussions, VIA Rail implemented various immediate actions, such as energy efficiency measures in railway operations, and worked on future-looking plans, including evaluating the price and availability of alternative fuels.

### Visual summary: Transition risks

#### Deep Decarbonisation Scenario



Demand for low-carbon and efficient transport solution



Implementation of energy efficiency and fuel substitution measures



Replacement of rolling stock on long distance, regional and remote routes



New regulations prescribing electrification of fleet and use of low-carbon fuels



Increased carbon pricing



Complexity of transitioning rolling stock to lower-carbon technology

#### Climate Crisis Scenario



Complexity of transitioning rolling stock to lower-carbon technology



Lower demand for low-carbon and efficient transport solution



# 4. Decarbonizing our Operations

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## 4.1 GHG Profile

An accurate and exhaustive GHG emissions inventory is an essential foundation to executing a transition plan and achieving our decarbonisation targets. To this end, our GHG emissions reporting is based on the ISO 14064 standard and applies emission factors from the latest Environment Canada National Inventory Report: greenhouse gas sources and sinks. Our GHG emissions inventory initially included direct emissions (scope 1) and indirect emissions (scope 2).

In 2024, VIA Rail reduced its absolute greenhouse gas (GHG) emissions by 25% compared to the 2005 baseline year. Our goal remains to reduce emissions by 30% by 2030. A review of this target is currently underway to reflect the latest data on the energy performance of our new fleet and to assess reduction pathways aligned with the federal government's long-term climate targets, including the objective of achieving net zero by 2050. At the same time, the implementation of our decarbonisation plan continues.

VIA Rail assessed key factors affecting fuel consumption and energy efficiency, including:

- identifying potential fuel efficiency measures for rolling stock, incorporating low-carbon fuel considerations in new fuel contracts,
- evaluating the impact of the new fleet's fuel consumption on emissions targets; and
- reviewing energy efficiency measures to establish targets for key real estate assets.

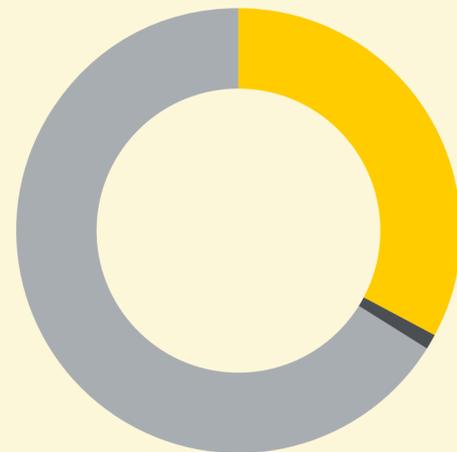
**Scope 1: direct emissions from combustion of fossil fuels and refrigerant releases at facilities owned or controlled by VIA Rail (maintenance centres, stations and offices) and mobile sources (rail locomotives and road vehicles).**

**Scope 2: indirect emissions from the generation of electricity and steam purchased and consumed at facilities owned or controlled by VIA Rail.**

**Scope 3: indirect emissions include all other indirect emissions not included in Scope 1 and Scope 2 and that occurs in VIA Rail's value chain, including both upstream and downstream emissions.**

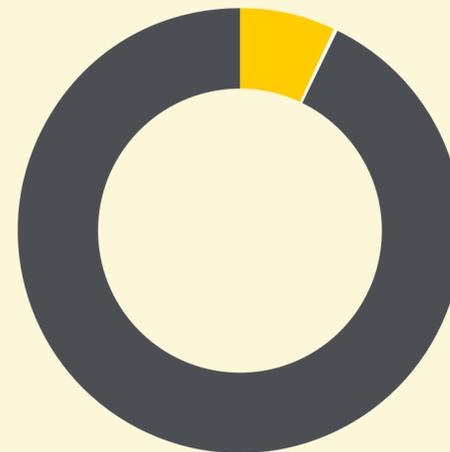
## VIA Rail's GHG emissions breakdown

**Total GHG emissions**



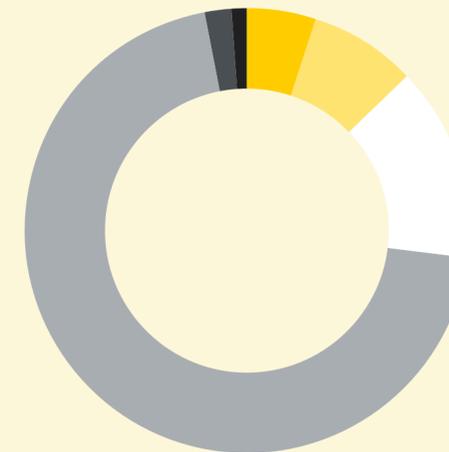
- **33%** Scope 1
- **0.5%** Scope 2
- **66%** Scope 3

**Scope 1 GHG emissions**  
(% breakdown)



- **7%** Buildings
- **0.3%** Road vehicles
- **93%** Locomotives and cars

**Scope 3 GHG emissions**  
(% breakdown)



- **5%** Employee commuting
- **8%** Passenger commuting
- **14%** Fuel and energy production and transportation
- **70%** Purchased products and services
- **2%** Waste generated
- **1%** other (includes all other non-material scene 3 emissions)

## 4.2 Transition Plan

Rail accounts for less than 4% of Canada's transportation GHG emissions. Yet the rail sector moves close to 80 million people annually, making it the least GHG-intensive mode of ground transportation. As such, passenger rail plays a vital role in reducing the transportation sector's impact on climate change. VIA Rail is committed to driving the transition towards a low-carbon economy and supporting Canada's climate goals.

VIA Rail remains committed to its 2030 goal of reducing absolute GHG emissions by 50% compared to 2005 levels. However, the introduction of the new fleet has brought unexpected challenges, resulting in a temporary increase in fuel consumption and GHG emissions compared to the legacy fleet.

Preliminary data indicates an increase in emissions in 2024 compared to 2023, primarily due to the higher fuel consumption of the new fleet, a factor that was not anticipated at this scale. This represents a short-term challenge, and efforts are underway to better understand fuel performance and explore potential efficiency measures.

Moving forward, we will continue to analyze the new fleet's fuel consumption, reassess key assumptions, and refine our emissions projections. Future updates will provide further clarity on potential mitigation measures and adjustments needed to align with our 2030 reduction target.

The path towards deep decarbonisation of rail in Canada remains complex, influenced by operational challenges and the pace of technological advancements. As part of our sustainability plan, VIA Rail has finalized a comprehensive decarbonisation plan, identifying key operational, financial, and technological challenges and establishing short-, medium-, and long-term measures to address them. We are now transitioning from planning to action, with initiatives underway that include testing alternative fuels on our new fleet, implementing operational improvements, reducing station energy consumption, and advancing the development and deployment of an eco-driving tool.

Additionally, we are enhancing recycling practices and making steady progress towards our zero-waste objective, which will help further reduce scope 3 emissions. This includes, amongst others, targeted zero-waste training for on-board employees and equipment maintenance employees, and the running of pilots and tests onboard trains as well.

VIA Rail's decarbonisation plan aligns with the trajectory outlined in the Rail decarbonisation roadmap for Canada,<sup>3</sup> which was developed through the Railway Association of Canada and Transport Canada. Based on the roadmap, the proposed net-zero trajectory for rail is set to unfold in three overlapping stages:

- 1. Efficiency improvements: Pursuing efficiency improvements remains a top priority, as efficiency gains will assist in reducing the burden of decarbonisation of fuels and propulsion technologies. VIA Rail will, among other things, continue to explore how to minimize traction energy consumption and maximize onboard energy efficiency. In 2024, VIA Rail continued to test an artificial intelligence-powered application that provides recommendations for fuel-efficient train handling. Initial results are promising and need to be further refined based on the new fleet. See case study in Section 3.3.**
- 2. Alternative fuels: The use of renewable content in diesel is currently regulated by the federal and provincial governments to a minimum of 5%; higher-blend rates are now technically possible and are anticipated to be increasingly authorized and used by 2030. Our new fleet recently introduced on the Québec City-Windsor corridor is designed to accept higher alternative fuel content, allowing for greater future flexibility in the use of fuel mix as we decarbonize our operations.**
- 3. Alternative propulsion: Alternative propulsion technologies, like electrification via battery or catenary systems, or hydrogen fuel cells, should eventually become commercially available and prevail in the longer term, as we reach the limits of what low-carbon fuels and efficiency measures can offer to reduce GHG emissions. In the long term, VIA Rail will prepare and adapt to deploy these technologies.**

The timeframe of these stages aligns with Canada's climate strategy and commitment to net-zero emissions by 2050.

VIA Rail has also identified grid decarbonisation, energy retrofits, operational efficiency and the transition to zero-emission vehicles as main decarbonisation levers to achieve its climate goals.

## 4.3 GHG Emissions Reduction Case Study

### 4.3.1 Leveraging AI to Reduce Fuel Consumption and GHG Emissions in Rail Transport

In 2021, VIA Rail initiated a pilot project in collaboration with RailVision Analytics to reduce fuel consumption and greenhouse gas (GHG) emissions in our rail operations. This project integrates our established mode of transportation with cutting-edge artificial intelligence (AI) technology to enhance fuel efficiency without impacting travel time.

The AI-enabled software, EcoRail, analyzes various factors such as speed, track slope, equipment used, season and schedule to provide actionable driving recommendations to our locomotive engineers. Initial tests conducted over six months in our simulators on the Ottawa-Toronto route demonstrated a potential reduction of up to 15% in fuel consumption and corresponding GHG emissions. Encouraged by these results, we have extended the AI pilot project to live train operations.

This pilot project is a significant step towards achieving VIA Rail's goal of reducing its environmental footprint. By leveraging AI technology, we are contributing to Canada's transition towards a low-carbon economy and supporting bold climate action initiatives.

The high-level outcomes that we want to achieve include:

- **enhancing the efficiency of our rail operations by determining the most fuel-efficient train handling patterns specific to each route and locomotive type operated by VIA Rail;**
- **promoting continuous improvement and engagement from locomotive engineers through timely feedback and comprehensive performance reporting;**
- **consistently decreasing VIA Rail's fuel consumption and associated GHG emissions while maintaining performance levels; and**
- **scaling simulators to live operations with the potential for widespread use across the network.**

Following the results of this pilot, VIA Rail will evaluate the feasibility of applying AI-driven techniques to other routes and operations in the future.

A man wearing blue headphones is seated in an airplane cabin, reading a newspaper on a tray table. The scene is illuminated by warm, golden light from a window behind him, suggesting a sunrise or sunset. The tray table holds a glass of water and a smartphone. The man is wearing a dark blue jacket. The background shows the interior of the airplane with other seats visible.

# 5. Governance and Risk Management

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## 5.1 Board and Management Oversight

### 5.1.1 Board of Directors

The Board of Directors (Board) oversees VIA Rail and holds management accountable for the Corporation's performance, the achievement of its objectives, and ensuring the long-term viability of Canada's passenger rail service. The Board is accountable to VIA Rail's shareholder, the Government of Canada, and reports to Parliament through the Minister of Transport. It is notably responsible for approving VIA Rail's strategic direction and priorities, as well as the Corporate Plan, and for ensuring that key business risks are identified and that adequate treatment plans and management systems are put in place.

Through its ESG-focused committee, the *Stakeholders Engagement and Communications Committee* (SECC), the Board monitors the development and implementation of VIA Rail's Environmental, Social and Governance (ESG) strategy and its integration into VIA Rail's management, operations, and decisions. It also monitors VIA Rail's compliance with ESG-related statutory and regulatory requirements and industry standards, including those associated with climate change, and for ensuring that treatment and programs are in place, where applicable. In addition, the Board annually approves how management reports on ESG performance, which includes VIA Rail's

sustainability and TCFD-related information. Progress on VIA Rail's sustainability plan and its Climate Action priority is also reviewed periodically by the SECC.

The Board is responsible for overseeing and approving the overall Enterprise Risk Management (ERM) Framework and ERM Policy at VIA Rail. Once a year, Board members review the enterprise risk universe and risk responses and identify top strategic risks to be monitored. An enterprise risk update is provided during quarterly Board meetings to keep the Board informed of the evolution and status of top strategic risks, which include those related to ESG.

The Board has established various committees, including the ones listed below. In addition to the activities described, each committee identifies, evaluates and assesses risks related to its responsibilities.

**The Audit and Pension Investment Committee** (Audit Committee) is responsible, amongst others, for overseeing VIA Rail's internal and external audit process as well as its financial reporting and disclosure. The Audit Committee also reviews financial components and risks associated with VIA Rail's five-year Corporate Plan and annual operating and capital budgets, which could be influenced by climate-related risks and opportunities as these continue to be integrated into the business strategy.

**The Stakeholder Engagement and Communications Committee** (SECC) oversees VIA Rail's stakeholder engagement initiatives, including communications and marketing strategies, key corporate reports such as the TCFD report, its ESG strategy, as well as VIA Rail's participation in the High Frequency Rail (HFR) Project.

**The Major Projects / Fleet Modernization Committee** (Major Projects Committee) is responsible for overseeing and monitoring major projects and programs, such as the purchase and commissioning of a new Québec City-Windsor corridor fleet. The Major Projects Committee is also responsible for overseeing policies, practices and procedures regarding management of major projects, as well as monitoring capital spending.

The **Human Resources Committee** (HR Committee) is responsible for identifying, evaluating, and treating risks related to performance evaluation and compensation, employee benefits, organizational structure, management development and succession planning, employee and labour relations, occupational health and safety and HR strategic plan.

The **Governance Committee** is responsible for overseeing the corporation's risk management policies and procedures, including its Enterprise Risk Management Framework, and following up on the implementation of such policies and procedures.

### 5.1.2 Executive Committee

The Executive Committee is composed of VIA Rail's core executive team. As a member of the Executive Committee, the Chief Strategy Officer (CSO) is responsible for VIA Rail's sustainability plan and enterprise risk management, which includes reporting on progress in meeting GHG emissions targets and the oversight of the integration of climate-related risks in governance mechanisms. The CSO reports directly to the President and Chief Executive Officer.

Within the Management Committee, the CSO supervises the implementation of the ERM program. As part of the ERM governance, each risk theme is assigned to an Executive Committee member or to a senior team member (Vice-President, Senior Director or Director level) who is considered as the accountable executive.

## 5.2 Risk Management

VIA Rail manages its risks based on the processes of ERM, project risk management and resiliency planning. In recent years, VIA Rail crystallized a new ERM reporting format. The improved governance structure allows for enhanced oversight from the Board on risk levels, perceived effectiveness of treatment plans, residual risks and executive accountability. It is also more agile to assess and monitor risks and support better decision-making to achieve the Corporation's objectives.

In accordance with the improved governance framework, a three-tier approach has been implemented to identify, assess, and address (1) risk themes, (2) risk drivers and (3) response plans. Risk themes represent key enterprise risks ranked from low to critical, according to their health and safety, financial, environmental, passenger, and human resources impacts. They are examined at the Board level. The Executive Committee maintains oversight on key risk drivers and is responsible for assigning relevant risk owners to ensure appropriate risk management as well as the effectiveness of associated response plans.

Along with the ERM team, accountable executives conduct an annual enterprise risk identification exercise to review existing risk themes and risk drivers, and identify new ones, if needed. They also evaluate and review risk levels on an annual basis. On a quarterly basis, the ERM team updates the Executive Committee on the status of response plans, controls and Key Risk Indicators (KRIs). ESG-related risks and broad climate-related risks encompassed in this enterprise-wide framework are subject to the same control and management procedures as other risk themes.

VIA Rail is working to update the ERM framework to recategorize and modernize our view of risks and will actively look to include climate risks, as risk factors or separate drivers, to ensure better visibility and management.

# Risk Management Framework



## 5.2.1 How We Identify and Evaluate Climate-related Risks

A thorough engineering risk assessment was conducted in 2019 to gain a better understanding of the physical climate-related risks that could affect our business, infrastructure and people. This risk assessment covered a large selection of important buildings and infrastructure that VIA Rail owns. However, it did not include equipment or infrastructure owned by our service delivery partners, including a majority of the tracks our trains operate on.

For transition risks, a preliminary exercise was conducted in 2022 to map out key risks and opportunities through a workshop involving representatives from across departments.

Building on this earlier work, in 2023, VIA Rail engaged in a more thorough exercise with extensive internal engagement to conduct a detailed qualitative climate scenario analysis to identify and explore climate-related risks and opportunities. VIA Rail first selected two scenarios, a Deep Decarbonisation or low-emissions scenario and a Climate Crisis or high-emissions scenario, for two time horizons (2030 and 2050). These scenarios cover a wide range of possible outcomes to study the potential impacts of climate risks and opportunities across the geographic regions in which we operate.

In 2024, VIA Rail moved to a quantitative approach to deep dive into the financial impacts of two areas of risk, as described in Section 2.2.2. This work was carried out in collaboration with members of various asset teams to capture all relevant information.

### Scenario analysis sources:

The Deep Decarbonisation (low emissions) scenario was informed by:

- The International Panel on Climate Change's (IPCC) Shared-Socio-economic Pathway (SSP) 1 Representative Concentration Pathway (RCP) 2.6, commonly referred to as SSP1-RCP2.6 scenario for the *physical risk assessment*, approximately compatible with
- The Canadian Energy Regulator's (CER) 2023 Canada's Energy Future: Global Net-zero Scenario, the International Energy Agency's (IEA) 2023 World Energy Outlook: (WEO) Net Zero Emissions by 2050 Scenario and Energy Super Modelers and International Analysts' (ESMIA) 2023 Net Zero by 2050 scenario for the *transition risk and opportunity assessment*.

The Climate Crisis (high emissions) scenario was informed by:

- The IPCC's SSP5-RCP8.5 for the *physical risk assessment*, approximately compatible with
- The CER's 2023 Canada's Energy Future: Current Measures Scenario and ESMIA's 2023 Reference scenario for the *transition risk and opportunity assessment*.

### 5.2.2 A Further Step to Evaluate the Potential Physical Risks and Impacts to our Assets: Our Climate Risk Evaluation Framework

In 2024, VIA Rail created a climate risk evaluation framework to help its real estate and rail infrastructure teams integrate climate risk considerations into their risk management practice, portfolio planning, capital investment, and improvement projects.

The framework leveraged the climate scenario analysis conducted in 2023 and the 2019 physical risk assessment and was further enhanced in 2024 by discussions with engineers and asset managers to better understand the vulnerability of VIA Rail’s asset types (e.g., stations) and asset components (e.g., building components) to key climate hazards. The vulnerability of each of these components was given a default vulnerability score, with the possibility, within the framework, to make an adjustment to the vulnerability for a specific asset (e.g., the roof at a particular station).

With the exposure and adjusted vulnerability, the framework provides a climate impact rating for a given asset for each of the 10 hazards in the evaluation. The impact score is calculated as follows:



The resulting business impact is then aggregated in a “climate risk” score created by averaging the impact scores across all hazards for one specific asset, with the following scoring options:

- **High (usually when 2-3 hazards could have a high impact on the asset)**
- **Moderate (usually when 1-2 hazards could have a moderate to high impact on the asset)**
- **Low (usually when the asset was relatively resilient to climate hazards)**

The climate risk scores provide a snapshot of the current and future climate risks that could potentially impact a specific asset, highlighting specific hazards that could have a high impact. This is a useful input that can be integrated into risk management practices, as well as for asset managers to use in prioritizing maintenance and capital investments as part of portfolio planning.



# 6. Moving Forward

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In 2024, we went deeper into identifying and understanding the climate-related physical risks and the associated business impact for VIA Rail. Progress was made on managing the climate risks and opportunities we may face in the future, and we recognize that this is an ongoing iterative process. We will continue to work on the quantification of the financial impact of potential high-risk areas or opportunity that may impact our operational budgets and capital planning. VIAAction, our five-year strategic plan, recognizes the importance of this work and our decarbonisation efforts, which are reflected in our 2030 goals.

As we continue to respond to our key risks and opportunities, we will ensure regular stakeholder engagement in order to identify additional ways that VIA Rail can best respond to climate risks and opportunities in the future and monitor the effectiveness of existing measures. Moreover, we will consider formally integrating our most material risks and opportunities into our ERM system and assigning a champion to oversee risk mitigation and opportunity management. To further structure these efforts of actively considering climate risks and opportunities across all our business units, we are developing a multi-year roadmap with clear short-, medium-, and long-term milestones along the way. This process will further contribute to enhancing the resilience of our business strategy.

We are now transitioning from planning to action in our decarbonisation journey, with initiatives underway that include:

- **testing alternative fuels on our fleet;**
- **implementing operational improvements to reduce fuel and station energy consumption; and**
- **advancing the development of an eco-driving tool.**

