



# 2025 Climate Change Resilience Report



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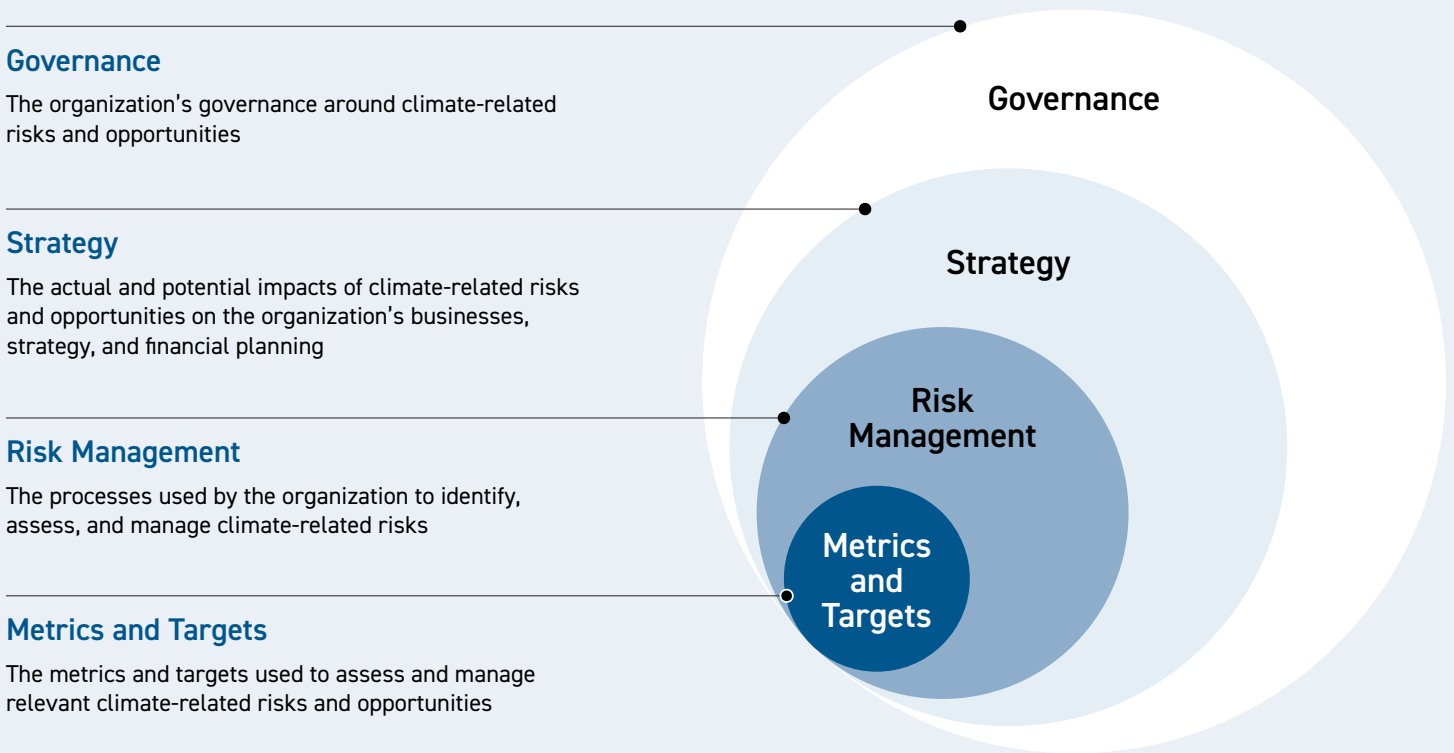
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# About This Report

The following report supplements our [2025 Annual & Sustainability Report](#) and has been prepared in alignment with the recommendations laid out by the [Task Force on Climate-related Financial Disclosures \(TCFD\)](#), now overseen by the International Financial Reporting Standards (IFRS) Foundation. It presents climate-related risk management information for Vancouver Airport Authority (the Airport Authority) and our operation of Vancouver International Airport (YVR).

The report also outlines our climate-related disclosure across the four core elements of the TCFD framework: Governance, Strategy, Risk Management, and Metrics and Targets, and will provide stakeholders with a clear understanding of how we identify, assess, and manage climate-related risks and opportunities, including those arising from the physical impacts of climate change and from the transition to a low carbon economy.

**Figure 1: Core Elements of Recommended Climate-Related Financial Disclosures**



# Our Context for Climate at YVR

YVR is Canada's second busiest airport and a critical Pacific gateway, welcoming a record-breaking 26.9 million travellers and moving 364,742 tonnes of cargo in 2025. These results matter because YVR is an economic engine that supports jobs, trade diversification, and connectivity for British Columbia and Canada, contributing more than \$15 billion annually to Canada's GDP.

While YVR serves as a vital link in Canada's travel and trade network, climate change continues to reshape the aviation sector, creating both risks and new opportunities.

In 2025, we remained committed to proactive and transparent action to manage climate-related impacts and drive meaningful progress on climate and energy resilience to ensure long-term success and sustainable growth.

We continued to advance our commitment to Net Zero 2030, reducing emissions where we can today and building the enabling infrastructure and partnerships required for deeper reductions over time. As a result of our actions over this past year, YVR proudly accepted re-accreditation for Level 4+ of the [Airport Carbon Accreditation](#) (ACA) Program, a certification we first achieved in 2022 and must reapply for annually. And, we remained the only airport in Canada and just one of three in North America to hold the Level 4+ status, reflecting our ongoing commitment to carbon management and emissions reduction.

Alongside our 2025–2027 Environmental Sustainability Plan, our Roadmap to Net Zero guided us in upgrading dikes and drainage on Sea Island, as well as upgrading hot water systems and heating, ventilation, and cooling equipment.

Additionally, we received recommendations on actions needed to build future energy solutions from our Energy Advisory Council and advanced work to enable Sustainable Aviation Fuel adoption at YVR.

Looking ahead, we will continue to advance initiatives that support emissions reductions and climate readiness while building the energy planning and infrastructure needed to manage long-term transition risks for YVR and the aviation system we support.

# Governance

Vancouver Airport Authority is a private, non-share capital corporation formed in 1990, operationalized in 1992 under Part II of the *Canada Corporations Act*, and continued in 2013 under the *Canada Not-for-profit Corporations Act*. The Airport Authority operates YVR pursuant to a lease with the Government of Canada. YVR is located on Sea Island, on the traditional and unceded territory of the Musqueam people.

## Board of Directors

The Airport Authority is governed by a Board of Directors, the majority of whom are appointed by nominating entities representing professional bodies and the community at large. Further details on Board nomination and selection are provided in our [Annual & Sustainability Report](#). The Board oversees the business conduct and activities of our Executive Team, with the objective of ensuring we meet our obligations and take all reasonable steps to ensure the safety, resilience, and sustainability of the Airport Authority.

The Board consists of four committees:

- The Finance and Audit Committee
- The Governance Committee
- The Human Resources Committee
- The Development Committee

The Board provides oversight on our climate-related initiatives across multiple areas, including the [2025–2027 Strategy](#); the [Roadmap to Net Zero 2030](#); the [2025–2027 Environmental Sustainability Plan](#); the Enterprise Risk Register; and the Investment Plan. Management provides quarterly Enterprise Risk Reports to the Board and its committees. Climate-related risks are identified within the Enterprise Risk Register and are assigned to the full Board for oversight, reflecting their strategic significance.

## Board Committees

At the Board committee level, the Finance and Audit Committee (FAC) oversees sustainability reporting, including the Climate Change Resilience Report, as well as the sustainability of our financial model. The FAC supports the Board in fulfilling its oversight responsibilities related to financial reporting, enterprise risk management, internal controls, and internal and external audit functions. Given climate change adaptation is identified as a key strategic risk, the FAC provides oversight of its identification and management.

The Governance Committee oversees compliance with applicable environmental laws and regulations, and provides input into environmental management plans, supporting effective climate-related governance practices.

The Human Resources Committee reviews and recommends executive compensation incentive plans and performance measures, including the incorporation of climate-related metrics.

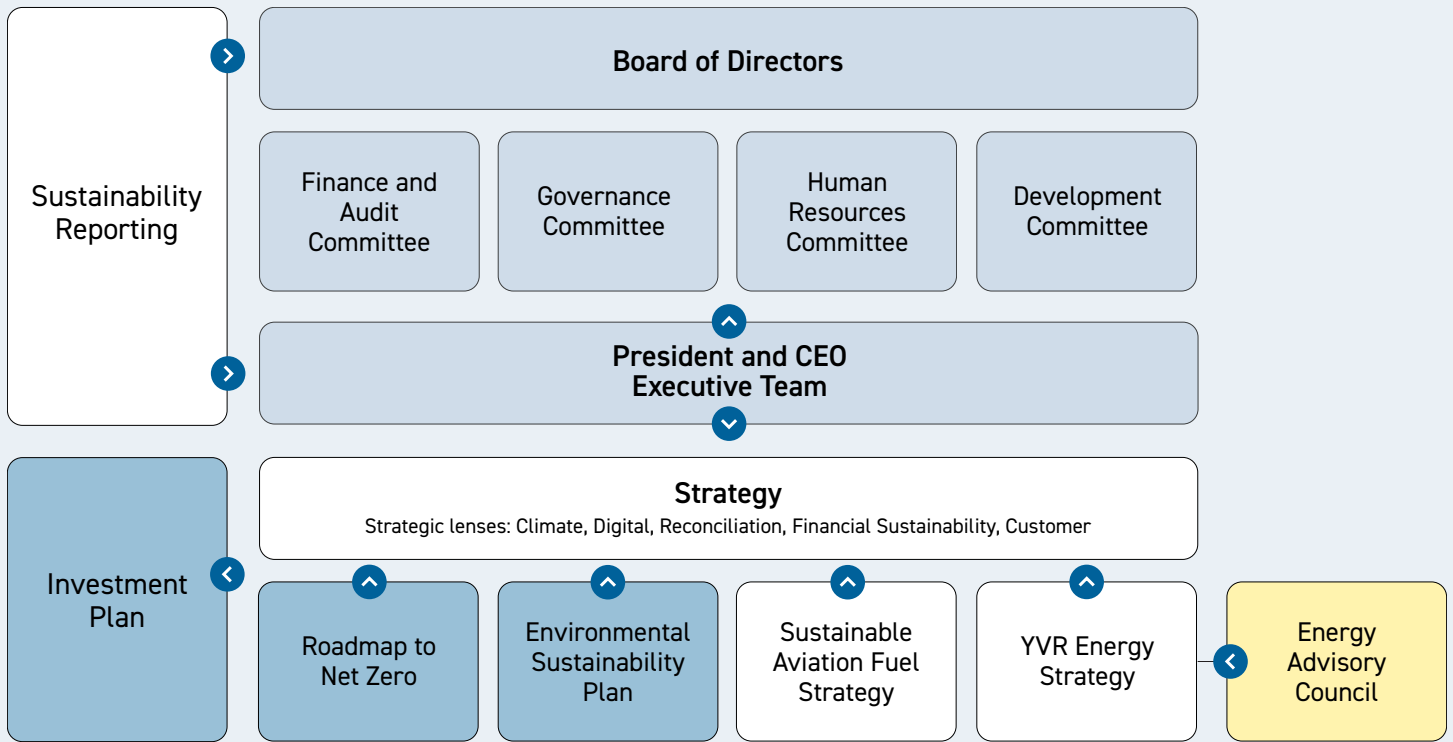
The Development Committee assists the Board with overseeing the long-term Investment Plan and ensuring its alignment with our Strategy, including climate-related objectives. They also review and recommend major capital investments for Board approval, ensuring that appropriate asset management processes and programs are in place to support safety, resilience, sustainability, value preservation, and risk mitigation.

## Management

The YVR Executive Team is responsible for overseeing the assessment and management of climate-related risks and opportunities, and for integrating these considerations into the organization's strategy, planning, and investment decisions. Executives are accountable for the climate-related plans and strategies outlined in Figure 2, with additional details provided in the [Strategy](#) section.

Our Investment Plan is driven by these strategic priorities, alongside the supporting strategies and plans. It is also guided by our Enterprise Risk Management (ERM) Risk Register, which identifies climate risk as an enterprise-level risk based on its strategic impact and risk rating. Through this integrated approach, Management ensures that climate-related risks and opportunities are actively managed and aligned with YVR's long-term resilience and sustainability objectives.

**Figure 2: Climate Governance**



### Climate Adaptation Working Group

Our Climate Adaptation Working Group includes representatives from across the organization and meets twice a year to assess and monitor our climate resilience and adaptation risks, along with the associated mitigations, as part of the Climate Change Adaptation Plan.

The Working Group's assessments inform the identification, evaluation, and mitigation of climate-related risks, which are reflected in the Enterprise Risk Management (ERM) Risk Register. Outputs from the group also support the integration of climate resilience considerations into the Asset Management Plan, ensuring that adaptation measures are embedded into long-term asset planning and decision-making.

### Executive Compensation

The Board of Directors establishes annual performance metrics, including minimum targets and maximum performance thresholds, against which Executive performance is assessed. These metrics are reviewed and approved annually as part of the organization's executive compensation framework. Climate performance is incorporated into executive remuneration through the inclusion of the corporate greenhouse gas (GHG) emissions target, which influences both short-term and long-term incentive plans. This linkage reinforces Management accountability for climate-related objectives and supports the integration of climate considerations into strategic decision-making and operational performance. Further details on executive compensation metrics and performance alignment are provided in the 2025 Statement of Executive Compensation, found in our [Annual & Sustainability Report](#).

# Strategy

## YVR's Strategic Approach to Climate

YVR integrates climate considerations across all strategic streams, treating climate not only as a strategic priority but also as a decision-making lens applied across the organization. We manage climate mitigation, adaptation, and the transition to a low carbon economy through multiple, aligned strategic plans, including the 2025–2027 Strategy, the Roadmap to Net Zero 2030, the 2025–2027 Environmental Sustainability Plan, and the SAF Strategy.

Through our Climate Change Adaptation Plan, Investment Plan, and Asset Management Plan, we continue to invest in measures that strengthen resilience to physical climate risks. These investments include upgrading dike and drainage systems to manage more frequent and intense rainfall; improving heating, ventilation, and air-conditioning (HVAC) systems to withstand more extreme temperatures; and enhancing low-visibility airside capabilities to maintain the resiliency of our operations during fog and increased wildfire activity. We also actively monitor climate-related events such as extreme snow and cold, increased precipitation, warmer-than-average temperatures, and wildfires to inform future planning and preparedness.

## 2025–2027 Strategy

In our 2025–2027 Strategy, we remain steadfast in our commitment to Net Zero 2030 for our operations, while strengthening climate resilience and adaptation. Climate continues to serve as a strategic lens through which we assess priorities and ensure alignment with our organizational purpose. Alongside our climate mitigation measures, we prioritize preparedness for the physical impacts of climate change. By embedding climate adaptation into strategic planning and investment decisions, we ensure YVR remains resilient now and into the future.

Energy represents a key strategic shift within the Strategy and sits at the core of YVR's operations. As our airline partners, tenants, and service providers electrify their activities, the collective energy demand across the aviation ecosystem continues to grow. YVR is well positioned to meet this demand through our land base, capital capacity, and trusted reputation within the industry. We will continue to pursue investments that transition YVR to a low carbon energy system, improve energy efficiency, and strengthen resilience, while supporting stable and reliable energy use over the long term. Additional details on our Strategy are available on our [website](#).

## Roadmap to Net Zero 2030

Air emissions, including greenhouse gases, are a key indicator of our impact on the atmosphere, and reducing these emissions remains a priority for YVR and the broader aviation sector. To transition from carbon neutral to net zero, we prioritize reducing operational energy use to the greatest extent possible using available technologies, replacing any remaining fossil fuel use with renewable fuels, and balancing any remaining emissions with an equivalent amount of carbon removals. While offsets avoid future emissions, carbon removals go a step further by taking existing carbon out of the atmosphere.

To achieve this ambitious goal, we are following four decarbonization pathways:



01

### Energy conservation and electrification in our buildings

Improving efficiency in heating/cooling, cooking, lighting, and other electrical loads, and switching from natural gas to renewable electricity wherever possible.



02

### Greening our fleets

Investing in electric and hydrogen vehicles, right-sizing our fleet to match operational needs, and transitioning heavier equipment to operate on renewable fuels.



03

### Replacing fossil fuels with renewable alternatives

Investing in 100 per cent green electricity and on-site solar, securing renewable natural gas for heating/cooking, and purchasing renewable diesel for the heavy-duty fleet and generators.



04

### Closing the gap

Investing in high quality carbon removals for the emissions that remain, including technologies like direct air capture or bio-sequestration projects.

Our Roadmap to Net Zero is supported by a comprehensive multi-year Investment Plan that establishes project timelines and estimates associated costs, energy savings, and emissions reductions. Governance and delivery are overseen by an organization-wide Energy Optimization Team and a formal Roadmap to Net Zero Steering Committee, with representation from key departments. Bi-annual progress updates on the Investment Plan and project status are provided to the Executive Team to ensure alignment and accountability.

Additional information on the Roadmap to Net Zero is available on our [website](#).

## Environmental Sustainability Plan

Our 2025–2027 Environmental Sustainability Plan outlines the environmental priorities that support our 2025–2027 Strategy. The Plan details the strategic priorities we will pursue over a three-year period to address climate change, protect archaeological and cultural resources, and reduce waste across our operations.

Additional information on the Environmental Sustainability Plan is available on our [website](#).

## YVR Energy Strategy

Clean, reliable, and affordable energy is essential to power YVR's operations and to support continued leadership in sustainable aviation. While we have committed to achieving net zero emissions by 2030 for our direct emissions (Scope 1 and Scope 2), the next step in our decarbonization journey focuses on addressing emissions generated by the broader airport community on Sea Island (Scope 3 emissions). YVR's Energy Strategy will establish a pathway to meet growing electrical demand through energy solutions that are low carbon, safe, secure, sufficient, and resilient, while supporting long-term operational reliability and industry transition.

To inform development of the strategy, YVR established an external Energy Advisory Council (EAC) comprising six subject-matter experts. The role of the EAC is to explore options for an energy roadmap that ensures a reliable, redundant, and clean energy supply, aligned with YVR's operational needs and affordability requirements. Their recommendations will be data-driven, forward-thinking, extending to 2070 and beyond, and inform where and how investments should be made to meet future energy needs. They will also set out next steps and potential advocacy efforts required.

## Sustainable Aviation Fuel (SAF) Strategy

SAF has the potential to reduce aircraft emissions by up to 80 per cent<sup>1</sup>—while providing additional benefits to our local air quality. In alignment with national and industry goals, we have developed a SAF Strategy to guide the advancement and deployment of SAF both at YVR and within the broader region.

Our strategy focuses on three core areas: advocating for the market, supporting SAF uptake, and enabling SAF production. To support SAF uptake at YVR and encourage production within B.C., we launched a [BC Low Carbon Jet Fuel Incentive Program](#), which has been extended to run through 2028. In addition, we collaborated with the provincial government's Ministry of Energy and Climate Solutions (MECS) on a technoeconomic [SAF Opportunities Study](#) to explore how to promote B.C.-based SAF production.

### Scope 3 Emissions

The bulk of emissions associated with airport operations arise from aircraft movements, airside activity, passenger and commercial traffic on Sea Island, and non-Airport Authority buildings. These sources are classified as Scope 3 emissions. While they fall outside our direct operational control and beyond the scope of our net zero commitment, we work to influence and enable emissions reductions across the broader airport ecosystem.

In 2025 we enhanced our Scope 3 reporting in alignment with the internationally accepted Greenhouse Gas Protocol. Additional information on Scope 3 emissions is available in our [Annual & Sustainability Report](#).

## Scenario Analysis

Climate-related scenario analysis is a tool used to assess the potential impacts of climate-related risks and opportunities on our Strategy and business model, and evaluates resilience under a range of plausible future conditions. The analysis considers how different climate outcomes could affect strategic priorities and financial performance.

Our scenario analysis focuses on the climate-related impacts most likely to inform strategic and financial planning and strengthen long-term resilience. The results of this analysis are presented in the 2024 Climate Change Resilience Report, available for download on this [web page](#).

1 [Developing Sustainable Aviation Fuel \(SAF\)](#)

# Risk Management

Climate risk is managed as an enterprise risk due to its strategic significance and the rating of the risk, with mitigations informing both our Investment and Asset Management Program. Our climate change risk and resilience initiatives are consistent with guidance developed by Airport Council International’s World Environment Standing Committee, recommending that airports identify and prioritize climate-related risks, threats, and vulnerabilities.

We assessed climate risks using climate projections for Metro Vancouver<sup>1</sup> and scenarios outlined in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report<sup>2</sup>. These scenarios, referred to as Representative Concentration Pathways (RCPs), reflect different trajectories of future GHG concentrations and associated global mean temperature increases. These scenarios are shown below.

High Global Emissions Scenario		Moderate Global Emissions Scenario		Low Global Emissions Scenario	
RCP 8.5	Projected warming: 3.2 to 5.4°C by 2090	RCP 4.5	Projected warming: 1.7 to 3.2°C by 2090	RCP 2.6	Projected warming: 0.9 to 2.3°C by 2090
Represents a scenario without additional efforts to constrain GHG emissions. Closest to a business-as-usual scenario.		Represents a scenario that requires a moderate level of mitigation of GHG concentrations.		Represents a scenario that requires strong mitigation of GHG concentrations. Aligned with the IPCC recommendation to remain below 1.5°C.	

## Physical Risk Assessment

Our physical climate risk assessment focuses on assets under our ownership and direct control and considers climate-related risks to both direct and indirect operations. The methodology was informed by the Airport Cooperative Research Program (ACRP) Report 147 and input from peer airports. Our Climate Adaptation Working Group drove this assessment through a series of structured workshops. The Group contributed to the identification of climate-related risks and associated impacts, assessment of likelihood and consequences, evaluation of existing control measures, and the identification of adaptation responses required to enhance resilience.

Our physical risk assessment (see [Table 1](#)) was conducted using the RCP 8.5 High Global Emissions Scenario, reflecting a conservative assumption that emissions trajectories remain similar to current levels. This approach was adopted given the current gap between global mitigation commitments and realized emissions reductions and is consistent with the approach used by Metro Vancouver. Differences between scenarios are relatively limited in projections to 2050, supporting the use of a business-as-usual scenario for short-term and medium-term physical risk planning.

## Transition Risk Assessment

Transition risks and opportunities associated with the shift to a lower-carbon economy were assessed under three scenarios: RCP 2.6, RCP 4.5, and RCP 8.5. While the RCP 8.5 scenario assumes limited global action to reduce emissions, our assessment assumes we would continue our efforts to support sector decarbonization regardless of the pace of the broader transition. See [Table 2](#), [Table 3](#), and [Table 4](#) for our transition risks and climate-related opportunities.

Transition risks and opportunities were evaluated in alignment with the TCFD framework, using the following categories:

### Transition Risk Categories

- Policy and Legal Risks
- Technology Risks
- Market Risks
- Reputation Risks

### Climate-Related Opportunity Categories

- Resource Efficiency
- Energy Source
- Products and Services
- Markets
- Resilience

1 [Climate Projections for Metro Vancouver](#)

2 [IPCC Fifth Assessment Report \(AR5\)](#)

## Physical Risk Matrix

Table 1: Physical risks as evaluated under the RCP 8.5 High Global Emissions Scenario (Business as Usual)

Climate Stressor	Impact to Airport	Existing Mitigations	Future Mitigations
<b>More frequent and intense precipitation events, including storm events.</b>	Airside disruptions and delay due to flooding and standing water.	<ul style="list-style-type: none"> <li>Irregular operations guidance/procedures.</li> <li>Regular inspections and maintenance of infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Continuous development of the Stormwater and Drainage Plan and Airside Drainage Maintenance Plan.</li> <li>Drainage infrastructure improvements.</li> </ul>
	Risk of bird strikes due to increased migratory bird activity.	<ul style="list-style-type: none"> <li>Wildlife Management Plan to ensure the safety of aircraft operations and wildlife. This includes habitat and vegetation management.</li> <li>Avian radar to track and understand patterns of bird behaviour.</li> </ul>	<ul style="list-style-type: none"> <li>Mitigation/eradication of standing water.</li> <li>Expanded avian radar.</li> <li>Cooperation with neighbouring municipalities to reduce standing water and land uses that attract migratory birds.</li> </ul>
	Dike and drainage systems overwhelmed due to sea level rise, storm surge, flooding, and wind and wave build-up.	<ul style="list-style-type: none"> <li>Implementation of Dike Plan—progressive raising of all reaches to 4.7 m (see SICA West Dike Upgrade below).</li> <li>Stormwater Management Plan to minimize future development impacts, protect existing infrastructure, and improve flood mitigation.</li> <li>Updated drainage and flood modelling (see storm drainage section below).</li> <li>Regular inspections and maintenance of stormwater infrastructure.</li> </ul>	<ul style="list-style-type: none"> <li>Continue inspections, maintenance and upgrades of dikes, pump stations, and stormwater drainage.</li> <li>Continuous development of the Stormwater and Drainage Plan.</li> <li>Investigate implementation of grooved runway pavement to improve traction and drainage during heavy precipitation.</li> </ul>
	Operational impacts on and damage to critical buildings due to flooding.	<ul style="list-style-type: none"> <li>Relocation of the data centre to a location above sea level and shifting common use systems to software as a service.</li> <li>Digital Plan and IT Disaster Recovery Plan to address resilience of the IT systems.</li> <li>Design standards for both buildings and pavement.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing IT infrastructure upgrades to raise critical infrastructure above sea level.</li> <li>Continuous maintenance of International Terminal Building roof.</li> <li>Monitoring and investigation of impacts of climate change on groundwater levels.</li> </ul>
	Disruption to road access and parking availability due to flooding.	<ul style="list-style-type: none"> <li>Operational procedures including warning signs on roadway to notify drivers of hazardous conditions.</li> <li>Rerouting public to other ground access alternatives.</li> </ul>	<ul style="list-style-type: none"> <li>Continuous development of the Stormwater and Drainage Plan.</li> <li>Installation of additional sump pumps in parkade.</li> </ul>
	Airside disruptions due to electrical storms.	<ul style="list-style-type: none"> <li>Lightning detection system (THOR).</li> <li>Procedures in place around operations and refueling.</li> </ul>	<ul style="list-style-type: none"> <li>Further assessment to determine impacts of climate change on occurrence of electrical storms.</li> </ul>
	Disruptions to power supply due to flooding.	<ul style="list-style-type: none"> <li>Emergency power/backup generators available.</li> </ul>	<ul style="list-style-type: none"> <li>Flood-hardening upgrades to our electrical substation (medium-long term).</li> <li>Review of improvements to emergency power and backup generators.</li> </ul>
	Disruption to the electrical distribution system on Sea Island due to flooding.	<ul style="list-style-type: none"> <li>Emergency power/backup generators available in event of loss of power supply.</li> <li>Stormwater Management Plan to minimize future development impacts, protect existing infrastructure, and improve flood mitigation.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing development of the Electrical Plan to address work supporting state of good repair for key electrical assets and future growth.</li> </ul>

Climate Stressor	Impact to Airport	Existing Mitigations	Future Mitigations
<b>More frequent and intense precipitation events, including storm events. (cont'd)</b>	Damage to Sea Island bridges due to flooding.	<ul style="list-style-type: none"> <li>Regular bridge inspections.</li> </ul>	<ul style="list-style-type: none"> <li>Evaluate need for scour mitigation measures to protect the integrity of bridge structures, where necessary.</li> <li>Ongoing coordination with external working groups for the Lower Mainland Flood Management Strategy.</li> </ul>
<b>Warmer-than-average temperatures.</b>	Impacts on the baggage system due to warmer-than-average temperatures.	<ul style="list-style-type: none"> <li>Mobile fans.</li> </ul>	<ul style="list-style-type: none"> <li>Further upgrades to our baggage system and/or the climate controls in bag halls.</li> </ul>
	Overheating of critically important operational buildings/systems (e.g., server rooms).	<ul style="list-style-type: none"> <li>Existing International Terminal Building and Domestic Terminal Building cooling systems are interconnected to meet existing peak cooling loads.</li> <li>Emergency power/backup generators in the event of loss of power supply.</li> <li>Technical standards developed for electrical and communications equipment room cooling.</li> </ul>	<ul style="list-style-type: none"> <li>Feeder replacements to improve the redundancy of power supply for the main feed to both the Domestic and International Terminal Buildings (medium-long term).</li> <li>Increase resilience of the HVAC cooling system to ensure peak cooling capacity is met.</li> </ul>
	Airside disruptions due to low visibility conditions from wildfire smoke.	<ul style="list-style-type: none"> <li>Low Visibility Operations Plan and CAT II/III runway capability to support operations during fog/low visibility events.</li> <li>Increased redundancy for backup power support for Low Visibility Operations.</li> </ul>	<ul style="list-style-type: none"> <li>Lighting upgrades to further support low/reduced visibility operations.</li> </ul>
	Increased energy demand for cooling of buildings.	<ul style="list-style-type: none"> <li>HVAC Asset Plan and System upgrades.</li> <li>Energy Management as part of the Net Zero 2030 commitment.</li> <li>Design standards for new buildings to address the impacts to building envelopes.</li> </ul>	<ul style="list-style-type: none"> <li>Implementation of Energy Management Information System.</li> <li>Ongoing development of the Electrical Master Plan.</li> <li>Completion of the geo-exchange facility to support terminal heating and cooling.</li> </ul>
	Increased energy demand for cooling of aircraft on stands.	<ul style="list-style-type: none"> <li>Installation of Ground Power Units (GPU).</li> <li>Preconditioned Air Units (PCA) to allow operators to plug into electric power at aircraft stands.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing investment in Ground Power Units (GPU) and Preconditioned Air Units (PCA).</li> </ul>
	Health and safety impacts to employees.	<ul style="list-style-type: none"> <li>Health and safety procedures.</li> <li>On-site medical/First Aid facilities.</li> </ul>	<ul style="list-style-type: none"> <li>Provision of cooling stations and water bottle filling stations.</li> <li>Assessment of procedures in other locations where &gt;30°C temperatures are the norm.</li> </ul>

Climate Stressor	Impact to Airport	Existing Mitigations	Future Mitigations
<b>Increased duration of dry spells.</b>	Reduced availability of water.	<ul style="list-style-type: none"> <li>Water consumption reduction targets and water reduction initiatives set out in our Environmental Management Plan.</li> </ul>	<ul style="list-style-type: none"> <li>Water monitoring, auditing, and leak detection programs.</li> <li>Water shortage contingency plan.</li> <li>Rainwater collection for non-potable uses.</li> </ul>
	Fire: vegetation fire, aviation fuel fire, and increased forest fires.	<ul style="list-style-type: none"> <li>Hazardous Materials Management Program to describe proper use, handling, and storage practices when working with hazardous materials.</li> <li>Hazardous Materials Spill Response Plan to manage fuel fires.</li> <li>Vegetation Management Plan to reduce the potential spread of fire ignitions and spread.</li> <li>Low Visibility procedures for forest fires (see mitigations for changes to the occurrence of fog below).</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing emergency and fire planning.</li> </ul>
<b>Unpredictable occurrence of extreme snow and extreme cold events.</b>	Inability to effectively respond to prolonged/extreme snow/ice and cold temperatures, including de-icing and snow clearing.	<ul style="list-style-type: none"> <li>Additional de-icing chemical storage to support additional on-site de-icing chemical supply.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing snow fleet renewal.</li> <li>Ongoing implementation of mitigations including enhancing winter and irregular operations, enhancing cross-team collaboration, accelerated investments in technology and data, enhancing in-terminal passenger support, and improving communications to passengers and public.</li> </ul>
	Interruptions to transit service.	<ul style="list-style-type: none"> <li>Bus bridges available in event of system closures.</li> <li>Other ground access alternatives available.</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing liaison with stakeholders for effective risk management.</li> </ul>
	Impacts to the baggage system due to extreme cold events.	<ul style="list-style-type: none"> <li>Mobile heaters.</li> </ul>	<ul style="list-style-type: none"> <li>Upgrades to our baggage system and/or the climate controls in baggage halls.</li> </ul>
<b>Changes to the occurrence of fog.</b>	Airside disruptions due to low visibility conditions from fog.	<ul style="list-style-type: none"> <li>Low Visibility Operations Plan and CAT II/III runway capability to support operations during fog/low visibility events.</li> <li>Increased redundancy for backup power support for Low Visibility Operations.</li> </ul>	<ul style="list-style-type: none"> <li>Lighting upgrades to further support low/reduced visibility operations.</li> <li>Further monitoring to understand the impacts of climate change on the occurrence of fog.</li> </ul>

## Transition Risk Matrix

Table 2: Transition risks as evaluated under the RCP 2.6 Low Global Emission Scenario and the RCP 4.5 Moderate Global Emissions Scenario

Risks	Current and Potential Future Mitigations
<b>Policy and Legal Risks</b>	
<p>Ineffective or inconsistent implementation of evolving decarbonization regulations in the aviation sector may constrain future growth.</p>	<ul style="list-style-type: none"> <li>• Decarbonization of Scope 3 emissions including:               <ul style="list-style-type: none"> <li>– An energy strategy which will assess forecast demand and identify energy supply options to support the decarbonization of Sea Island building emissions (Scope 1, Scope 2, and Scope 3).</li> </ul> </li> <li>• Implementation of the Sustainable Aviation Fuel (SAF) Strategy for the decarbonization of aircraft.               <ul style="list-style-type: none"> <li>– For SAF, we have implemented a SAF incentive for airlines uplifting SAF in B.C. to support the uptake of SAF at YVR. Undertaking technoeconomic study of SAF production market in B.C. and beyond in partnership with the Ministry of Energy and Carbon Solutions (MECS), to understand the need for policy intervention and advocacy for the creation of SAF in B.C.</li> <li>– For hydrogen, we completed a Hydrogen Infrastructure Study for the potential uptake of hydrogen to support hydrogen fueled aircrafts and ground transportation as part of an MOU with ZeroAvia and Airbus.</li> <li>– For our groundside emissions, switch to electrified equipment and the use of low carbon and hydrogen fuels.</li> <li>– Optimization gate scheduling and apron management for greater aircraft fuel efficiency.</li> </ul> </li> <li>• Development of an intermodal strategy for alternative modes of transportation.</li> <li>• Government relations collaboration and advocacy to support investment in low carbon technologies.</li> <li>• Engagement and partnership with key industry stakeholders and Musqueam, including piloting of renewable technologies on Sea Island.</li> <li>• Diversification of non-aeronautical revenues to mitigate dampened demand.</li> <li>• Participation in Transport Canada's Sustainable Aviation Task Force to inform implementation of Canada's Aviation Climate Action Plan.</li> </ul>
<b>Technology Risks</b>	
<p>Uncertainty with the adoption of new aircraft technology results in reduced return on capital invested from stranded assets (i.e. SAF, Hydrogen, Electric Aircraft, Propulsion Technologies).</p>	<ul style="list-style-type: none"> <li>• Phased approach to uptake of any future technologies including pilot programs providing a test bed for new technologies, partnering with external stakeholders and Musqueam, supporting research and development including:               <ul style="list-style-type: none"> <li>– For SAF, we have implemented a SAF incentive for airlines uplifting SAF in B.C. to support the uptake of SAF at YVR. We completed a technoeconomic study of SAF production market in B.C. and beyond in partnership with MECS to understand the need for policy intervention and advocacy for the creation of SAF in B.C.</li> <li>– For hydrogen, we completed a Hydrogen Infrastructure Study for the potential uptake of hydrogen to support hydrogen fueled aircraft and ground transportation, with outcomes to include potential pilot studies.</li> <li>– To support electric aircraft technology, the electrical demand study will assess future electrical demand and capacity and inform an energy strategy.</li> </ul> </li> </ul>
<p>Insufficient investment in technologies needed to keep up with transition (at the airport level, province level, country level, and/or globally).</p>	<ul style="list-style-type: none"> <li>• Public policy advocacy to support investment in low carbon technologies.</li> <li>• Engagement and partnership with industry stakeholders and Musqueam.</li> <li>• Development and implementation of a governance framework that will drive the efficient prioritization of capital.</li> </ul>
<p>Insufficient low- or zero-carbon energy needed to meet demand.</p>	<ul style="list-style-type: none"> <li>• An energy strategy which will assess forecasted demand and identify energy supply options to support the decarbonization of Sea Island building, ground access, and aviation emissions (Scope 1, Scope 2, and Scope 3).</li> <li>• Implementation of energy efficiency technologies and practices.</li> <li>• Prioritization of energy for critical uses, and phasing new demand.</li> <li>• Engagement and partnership with industry stakeholders and Musqueam.</li> <li>• Development and implementation of a governance framework that will drive the efficient prioritization of capital.</li> </ul>

Risks	Current and Potential Future Mitigations
<b>Market Risks</b>	
Increase in carbon pricing leading to higher ticket prices and potential dampened demand.	<ul style="list-style-type: none"> <li>• YVR SAF Strategy.</li> <li>• Proactive decarbonization of Scope 3 emissions (see above for detailed actions) to reduce carbon intensity.</li> <li>• Development of an Intermodal Hub Strategy which includes options for zero and low carbon transportation alternatives.</li> <li>• Diversification of non-aeronautical revenues to mitigate dampened demand.</li> </ul>
Increased prices associated with renewable energy and renewable fuels (e.g. SAF, Hydrogen) results in increased costs, dampened demand, and reduced capacity.	<ul style="list-style-type: none"> <li>• Continue to work with government and key industry stakeholders to collaborate on and advocate for access to funding. <ul style="list-style-type: none"> <li>– For SAF, we have implemented a SAF incentive to support the uptake of SAF at YVR and completed a technoeconomic study of SAF market in B.C. and beyond in partnership with MECS, to understand the need for policy intervention and advocacy.</li> </ul> </li> <li>• Implementation of energy efficiencies.</li> <li>• Potential renewable energy production investment as part of the YVR Energy Strategy development and implementation.</li> <li>• Diversification of non-aeronautical revenues to mitigate dampened demand.</li> </ul>
Low Carbon Alternative Transport Options (rail, e-ferris) results in increased competition and dampened demand for flights.	<ul style="list-style-type: none"> <li>• Development and implementation of an Intermodal Hub Strategy for Sea Island.</li> <li>• Engagement and partnering with industry stakeholders and Indigenous communities.</li> <li>• Diversification of non-aeronautical revenues to mitigate dampened demand.</li> </ul>
Impacts to global supply chain networks (e.g. goods and services, cargo), results in increased capital costs and reduced return on invested capital.	<ul style="list-style-type: none"> <li>• Implementation of project governance which captures additional costs and additional sourcing time.</li> <li>• Implementation of a Supply Chain Management Strategy which includes diversifying our suppliers, sourcing alternatives to products, building up appropriate stores and potential near-shoring.</li> </ul>
Passenger profiles favouring decarbonization impacts aviation market demand.	<ul style="list-style-type: none"> <li>• Development and implementation of our Roadmap to Net Zero 2030 for Scope 1 and Scope 2 emissions.</li> <li>• Proactive decarbonization of Scope 3 emissions by working with airlines and airport partners.</li> <li>• Development of an Internal Hub Strategy for Sea Island.</li> <li>• Optimization of airspace and apron management for greater aircraft fuel efficiency.</li> <li>• Diversification of non-aeronautical revenues to mitigate dampened demand.</li> <li>• Development of a YVR Energy Strategy.</li> </ul>
<b>Reputation Risks</b>	
Shift in consumer and public expectations results in customer dissatisfaction and reputational risk.	<ul style="list-style-type: none"> <li>• Proactive decarbonization of our Scope 1, Scope 2, and Scope 3 emissions.</li> <li>• Communication and education in support of decarbonization of the sector.</li> <li>• Development of an Intermodal Hub Strategy for Sea Island.</li> </ul>

Table 3: Transition risks as evaluated under the RCP 8.5 High Global Emissions Scenario (Business as Usual)

Risks	Current and Potential Future Mitigations
Policy and Legal Risks	
Slowing, reversed regulatory environment for the decarbonization of the aviation sector impacting speed of transition.	<ul style="list-style-type: none"> <li>• Public policy advocacy to support investments in low carbon technologies.</li> <li>• Engagement and partnering with industry stakeholders and Musqueam to advance the transition.</li> <li>• Proactive decarbonization of our Scope 1, Scope 2, and Scope 3 emissions, regardless of reduced pace of transition.</li> <li>• Communication and education in support of decarbonization of the sector.</li> </ul>
Technology Risks	
Premature investments and adoption of low carbon aircraft technology (at the airport level) results in reduced return on capital invested from stranded assets (i.e. SAF, Hydrogen, Electric Aircraft, Propulsion Technologies).	<ul style="list-style-type: none"> <li>• Phased and multifaceted approach and partnering for development and uptake in any future technologies, such as pilot programs—acting as a test bed for new technologies, partnering with external stakeholders and Musqueam, supporting research and development to reduce risk.</li> <li>• Public policy advocacy to support investments in low carbon technologies.</li> <li>• Development and implementation of a governance framework that will drive the efficient prioritization of capital.</li> <li>• Diversification of non-aeronautical revenues to mitigate potential losses from stranded assets.</li> </ul>
Insufficient investment in technologies needed to transition (at the provincial level, country level, and/or globally) results in high pricing for available technology and limited access to new technology and low carbon fuels.	<ul style="list-style-type: none"> <li>• Public policy advocacy to support investments in low carbon technologies.</li> <li>• Engagement and partnering with industry stakeholders and Musqueam to advance research and development for low carbon technology.</li> <li>• Diversification of non-aeronautical revenues to increase capital for adoption of available low carbon technology.</li> </ul>
Market Risks	
Increasing energy and renewable fuel pricing (SAF, Hydrogen, LCJF) from challenges in meeting economies of scale results in increased costs for adoption and uptake.	<ul style="list-style-type: none"> <li>• Continuation of work with government and key industry stakeholders to collaborate on and advocate for investments and support for the development and uptake of low carbon fuels.</li> <li>• Implementation of energy efficiencies.</li> <li>• Diversification of non-aeronautical revenues to increase capital for uptake of available low carbon fuels.</li> </ul>
Reputation Risks	
Consumer and public expectations results in customer dissatisfaction and reputational risk.	<ul style="list-style-type: none"> <li>• Proactive decarbonization of our Scope 1, Scope 2, and Scope 3 emissions, regardless of slowed transition.</li> <li>• Communication and education in support of decarbonization of the sector.</li> </ul>

# Climate-Related Opportunities

Table 4: Climate-Related Opportunities

Opportunity Categories	Opportunities
Energy Sources Markets	<ul style="list-style-type: none"> <li>• Development of new renewable fuel markets (e.g. SAF, Hydrogen, Power to Liquid, Low Emission Jet Fuel).</li> <li>• Potential revenue opportunity with renewable energy production on and off Sea Island.</li> <li>• Sea Island as a test bed/incubator for new technologies and energy generation.</li> </ul>
Tourism Markets	<ul style="list-style-type: none"> <li>• Sea Island as an intermodal hub for passengers and cargo (including high-speed rail, ferries, river cargo, enhanced regional transit connections).</li> </ul>
Alternative Markets Products and Services	<ul style="list-style-type: none"> <li>• Development of new multi-modal alternatives (e.g. high-speed rail, e-ferries).</li> </ul>
Cargo Markets Products and Services	<ul style="list-style-type: none"> <li>• A potential increase in air cargo due to supply chain disruptions from climate stressors.</li> </ul>
Energy Efficiency	<ul style="list-style-type: none"> <li>• Cost savings from the implementation of energy efficient technologies and practices and on-site renewable generation.</li> <li>• YVR as a low carbon route/air gateway between Asia and the Americas.</li> </ul>
Ecosystem Health	<ul style="list-style-type: none"> <li>• Ecosystem health benefits from a reduction in emissions.</li> </ul>

## 2025 Results

### Roadmap to Net Zero

We report annually on the progress of our carbon reduction projects and initiatives, as well as our collaborative efforts with business partners to drive broader emissions reductions. Detailed information on our 2025 progress under the Roadmap to Net Zero and Environmental Sustainability Plan is provided in the [Annual & Sustainability Report](#).

### Storm Drainage

YVR is located on Sea Island, where much of the land lies below the 200-year design flood elevation for both coastal and Fraser River flood levels. As a result, Sea Island faces flood and erosion risks from the Fraser River and from coastal processes in the Strait of Georgia. To manage these risks, Sea Island is protected by a 15-kilometre system of dikes and bank protection works, supported by an extensive storm drainage system designed to move rainfall runoff to flood boxes and pump stations that form part of the dike system. Together, the perimeter dikes and drainage infrastructure provide protection against a range of flood hazards.

In 2023, we completed a multi-year initiative to develop a comprehensive computer model of the drainage system. This model enables assessment of our drainage system performance under current and projected future climate conditions and supports informed decision-making for stormwater management. Through 2025 and into 2026, we refined the model to support YVR's Storm Water Plan. The model is now used to conduct capacity analyses that inform the prioritization of stormwater system upgrades, evaluate the effectiveness of maintenance activities, and guide operational decision-making.

We are also in the process of replacing four pump stations serving the storm drainage system on Sea Island. The new pump stations are designed to accommodate increased drainage demands associated with climate change and strengthen long-term system resilience.

We will continue to apply the drainage model and risk analysis results to guide future decisions related to operation, maintenance, rehabilitation, and enhancement of the stormwater drainage system that serves YVR.

### The Sea Island Conservation Area (SICA) West Dike Upgrade

The Sea Island Conservation Area West Dike is a 2.5-kilometre section located along the north side of Sea Island adjacent to the North Arm of the Fraser River. Completed in the first quarter of 2025, the upgrade project involved raising the existing dike by approximately one metre and realigning sections of the adjacent ditch to improve drainage performance. This work enhances flood protection and climate resilience for Sea Island.

# Metrics and Targets

We publicly disclose our climate change metrics and progress against our key performance indicators annually in our Annual & Sustainability Report. This disclosure includes information on climate performance, emissions metrics, and progress toward established targets, as well as the alignment of climate outcomes with executive performance through the Executive Compensation Statement.

Further details are provided in our [2025 Annual & Sustainability Report](#), which incorporates our 2025 Statement of Executive Compensation.

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# Thank you

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**At YVR, everything we do is guided by our purpose:  
to serve our community and the economy that  
supports it—today and for generations to come.**

Thank you for reading our Climate Change Resilience Report. If you have any questions or comments regarding this report, please send us a message at: [community\\_relations@yvr.ca](mailto:community_relations@yvr.ca).

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