Climate-Related Financial Disclosure Unaudited

Background and introduction

Climate change presents both risks and opportunities for The City and all Calgarians and businesses, with implications that may affect financial and economic conditions, the environment, community safety and overall wellbeing. Managing these risks and opportunities is a core element of prudent municipal governance and long-term financial sustainability. Guided by our approved corporate strategy, The City has established a framework to integrate climate considerations into decision-making, planning and investment. The Calgary Climate Strategy – Pathways to 2050[1] (Climate Strategy) and its supporting 2023-2026 Climate Implementation Plan[2] (Implementation Plan) provide a structured approach to identifying, accounting for and coordinating climate actions across departments and business units within our defined budgeting cycle. These actions are intended to reduce climate-related risks, enhance resilience and position The City to respond effectively to emerging opportunities. While the pace and scale of the global transition to a low-carbon economy remain uncertain, the range of possible outcomes introduces material risks and opportunities for municipal operations and finances. Proactively reducing exposure and vulnerability to physical climate risks — such as flooding, drought, wildfire smoke and extreme weather — helps mitigate potential financial, operational and service delivery impacts, supporting The City's long-term sustainability and resilience.

To enhance transparency regarding how climate-related risks could affect our service delivery, assets, infrastructure and operations, for the fifth consecutive year, The City has included this Climate-Related Financial Disclosure (CRFD) in the unaudited section of the Annual Financial Report. This year's disclosure is intended to align with the International Sustainability Standards Board (ISSB) International Financial Reporting Standards (IFRS) S2 Climate-related Disclosures, demonstrating The City's ongoing commitment to strong governance and long-term resilience.

Highlight 1:

Evolution of the climate-related disclosure landscape

The first IPSASB SRS Standard, the IPSASB SRS 1, Climate-related Disclosures, was approved by IPSASB in December 2025. This Standard will be effective Jan. 1, 2028, with earlier adoption permitted. While this year's CRFD report aims to align with current IFRS standards, as The City's financial accounting and statements align with the Canadian PSAB standards, future CRFD will align with the new IPSASB public sector Climate-related Disclosures standard and future PSAB accounting standards.

Materiality approach

The City considers climate-related information to be material if its omission or misstatement could reasonably influence decisions related to financial sustainability, service delivery or progress toward climate goals. To determine what is material, The City looks at what information matters most to interested parties and the potential impact the information has on finances and City services. As the financial risks around climate-related impacts become better understood, climate-related decision-making is expected to evolve. The City also recognizes that some data may change over time, as data quality and methodologies improve. In some cases, disclosed information relies on third-party data that may be updated or refined. To manage this, a ±5 per cent threshold is applied to all disclosed quantitative metrics. If changes exceed this threshold, The City will restate that information.

(1) The City of Calgary. 'Calgary Climate Strategy – Pathways to 2050'. *The City of Calgary* [website], Dec. 11, 2023. https://www.calgary.ca/environment/climate.html

(2) The City of Calgary. 'Climate Implementation Plan 2023-2026'. *The City of Calgary* [website], Feb. 5, 2024. https://www.calgary.ca/environment/climate/implementation-plan.html

Governance

The City strives for accountability, effectiveness and transparency in its climate action through governance processes that are subject to ongoing review and continuous enhancement. These processes align with ISSB expectations for robust and progressively evolving oversight and define the key roles, responsibilities, strategies and priorities that guide the identification and management of climate-related risks. Risks are assessed at multiple organizational levels, including Council, the ELT, business units and cross-corporate committees.

Governance roles and responsibilities

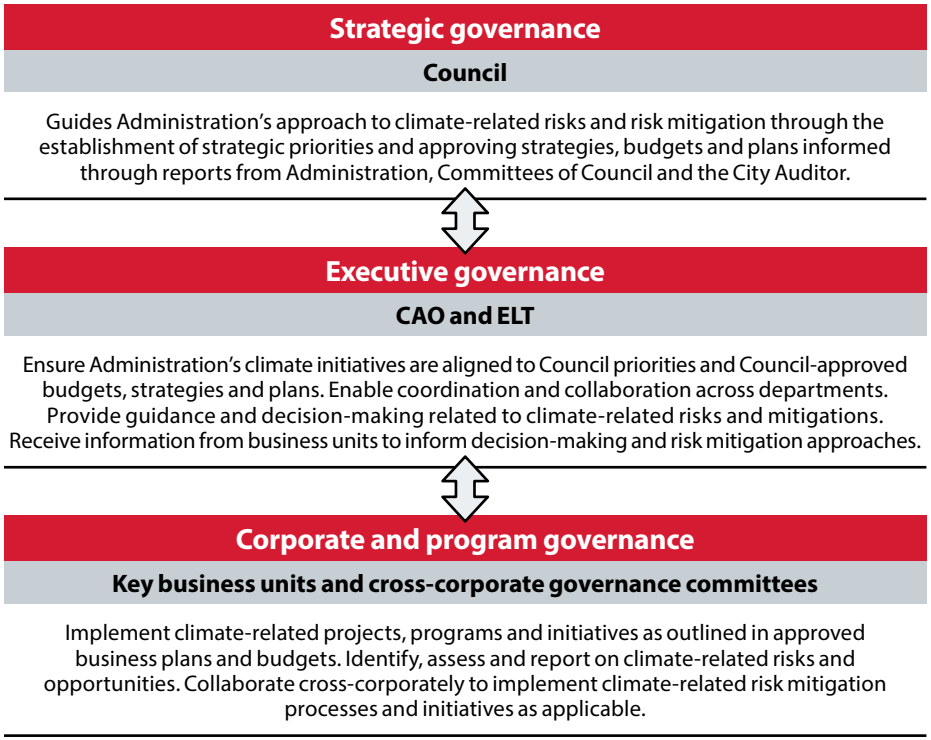
Climate-action governance aligns with The City's overall corporate governance systems. Council and its committees set the strategic direction, while the Chief Administrative Officer (CAO) and ELT provide executive leadership and oversight of climate-related risk management. All members of the ELT also support implementation across business units to ensure coordinated, organization-wide climate action (see *Figure 1*).

Key internal groups

In addition to Council and ELT's oversight, several key internal groups play essential roles in managing climate-related risk across the organization.

- The Climate & Environment (C&E) business unit provides oversight and technical expertise to integrate The City's cross-corporate climate and environmental risks into decision-making. C&E collaborates with departments across the corporation to enable targeted integration in land-use planning, development and implementation of capital projects, operational services and ERM.
- The Emergency Management & Community Safety business unit oversees the Calgary Emergency Management Agency, which assesses local disaster risks — including those related to climate events — and coordinates emergency planning, disaster mitigation, community preparedness, business continuity, response and recovery activities on behalf of the local authority.
- Other key contributors support the identification and management of environmental and climate risks across the organization. This includes Water Services, Business Planning, Performance Measurement & Reporting, Capital Planning & Business Services, Asset Management Planning, Risk Management & Claims and Operational Excellence.

Figure 1: Governance roles and responsibilities

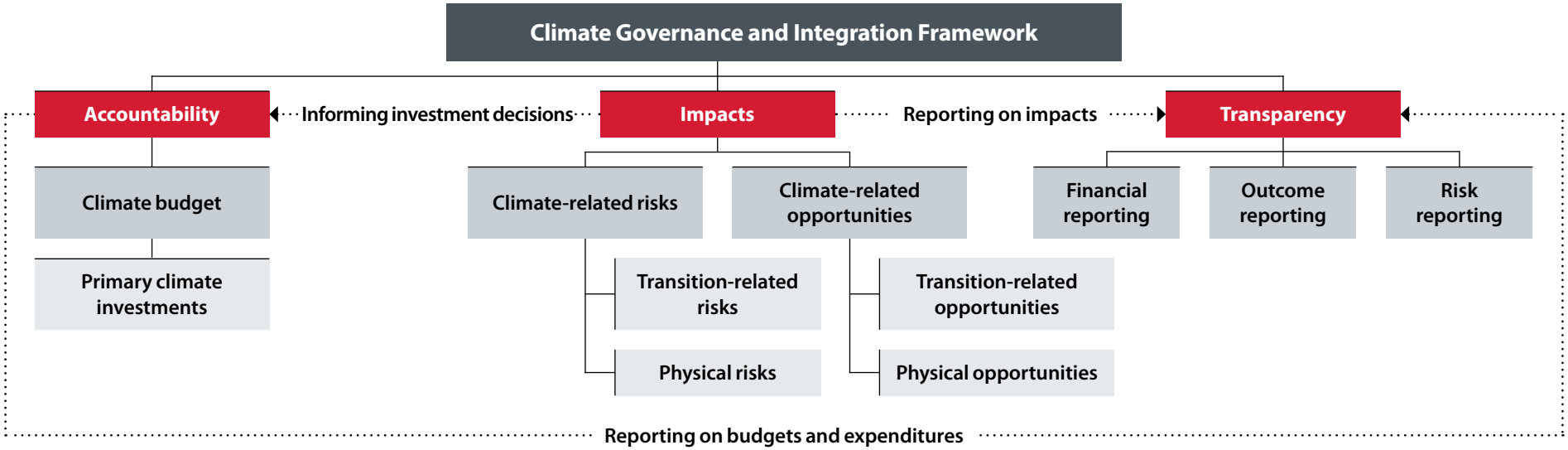


Operational controls and assurance

At the operational level, environmental and climate risks are identified, monitored and managed through The City's Corporate Environmental Management System (EnviroSystem). The EnviroSystem is aligned with International Organization for Standardization (ISO) 14001 and provides standards, guidance and tools for identifying, assessing and managing environmental risks and compliance obligations, including the evolving integration of climate-related risks. ISO 14001 is undergoing one of its most climate-focused shifts since its inception with the upcoming 2026 revision that will explicitly embed climate considerations into core EMS requirements. Currently, the EnviroSystem is being implemented in priority business units, with opportunities to further strengthen and expand its use. Mitigation measures, improvement actions and other risk controls are documented, tracked and reported within the EnviroSystem, ensuring consistent records that support accountability, transparency and internal and external assurance processes, including audits.

Climate Governance and Integration Framework

Figure 2: Corporate Climate Governance and Integration Framework



As part of continual improvement of The City's climate governance, The City began developing its Climate Governance and Integration Framework (The Framework) in 2023. This will help to embed climate considerations into investment, operational and delivery decisions across the organization (see *Figure 2*).

The Framework advanced through 2024 and 2025 and will continue to evolve as processes and cross-corporate integration strengthen. The Framework is built on three pillars, each supported by tools, processes and standard procedures:

- **Accountability:** Classifying and tracking climate-related investments and documenting responsible parties.
  - The cross-corporate Climate Budget supports this pillar by tracking investments that reduce emissions and physical climate risk, strengthening financial accountability (see *Table 6*).
- **Impacts:** Assessing proposed projects, programs and initiatives against climate-related risk and opportunity criteria and evaluating outcomes for reporting.
  - Risk assessment tools identify climate hazards and risk exposure of new and existing infrastructure.
  - Energy and emissions modelling tools compare the emissions impacts of investment options and report emissions.
- **Transparency:** Ensuring effective reporting and disclosure of climate-related investment outcomes.
  - The City uses its established reporting and disclosure mechanisms to support this pillar (see *Figure 3*).

Further enhancements to all three pillars are planned for 2026 and beyond, including deeper integration with business and financial planning processes and continued improvement of tool outputs.

Highlight 2:
Corporate Carbon Budget approach adjustment

Previous disclosures noted that The City was developing a target-based Corporate Carbon Budget as part of The Framework. The Corporate Carbon Budget was intended to identify a planned limit on the greenhouse gas (GHG) emissions The City could produce over a set period, based on The City's 2050 climate target. To better align with service planning and budgeting, The City is now exploring an adjusted approach that more effectively integrates GHG and carbon considerations into decision-making. Detailed tracking and monitoring of corporate GHG emissions and modelling of future GHG emissions remain key priorities.

Corporate climate reporting and disclosure mechanisms

The five primary channels for corporate climate reporting and disclosure are shown in *Figure 3* below. These reports and information platforms enhance transparency and strengthen corporate governance and accountability by consistently monitoring and communicating climate-related information to leadership, Council and the public. By integrating climate performance data into financial and operational reporting, these channels enable informed decision-making, align climate actions with strategic objectives and Council priorities and strengthen oversight of The City's progress toward its climate goals.

Figure 3: The City's corporate climate reporting and disclosure channels

Annual Financial Report

Audit Committee,
public

This Annual Financial Report provides a comprehensive view of The City's consolidated financial statements, supporting effective governance, accountability and transparency. The FSDA includes a detailed risk management section and the annual CRFD can be found in the unaudited section. Historical reports are available here:

calgary.ca/our-finances/annual-reports

Principal Corporate Risk Report

Executive Leadership Team,
Audit Committee

The Principal Corporate Risk Report is a semi-annual update on The City's risk profile across ten Principal Corporate Risks (PCRs), including the Climate and Environmental Risk. It provides a snapshot of the current risk landscape, highlighting the importance of proactive and coordinated risk management.

Climate Progress Report

Community Development Committee

Biennial report outlining The City's progress on the climate mitigation and adaptation actions presented in the Implementation Plan, and progress toward the long-term goals and targets of the Calgary Climate Strategy. Historical reports are available here:

calgary.ca/environment/progress/climate-action

Quarterly reports

Executive Committee,
public

Quarterly reports summarize progress on The City's four-year Service Plans and Budgets, aligned with Council priorities. They include updates on how key climate and environmental projects contribute to priorities and enhanced service experience. Historical reports are available here:

calgary.ca/our-finances/performance-report

Climate & Environment Dashboard

Public-facing dashboard

The Climate & Environment Dashboard enhances transparency by providing a comprehensive view of key climate and environmental performance metrics and community indicators. The Dashboard is backed by the Climate & Environmental Analytics System (CEAS), which is a governance and reporting platform that tracks and supports disclosure of The City's climate performance. In 2025, The City expanded its data warehouse, improved internal dashboards and refined reporting processes. Additionally, the Dashboard is updated as data becomes available and therefore is the source for the most current data. Access the Dashboard here:

climate-and-environment-dashboard-thecityofcalgary.hub.arcgis.com.

Governance assessment and improvement

The City continues to strengthen climate governance across the organization. In alignment with governance categories, key improvements in 2025 included:

Aspect of governance	Key improvements in 2025
Strategic direction and priorities	• Developed the Capital Prioritization Framework – Climate and Environment, a standard operating procedure that supports assessment and prioritization of capital and infrastructure investments based on climate and environmental criteria.
Organizational structure and accountabilities	• Water Accountability Committee continued to advance corporate alignment, oversight and accountability on risk management, financial oversight, regulatory assurance, service direction and strategic resource planning related to water. This included the integration of climate-related risks. • Completed a portfolio-level Climate Risk and Resilience Assessment for Calgary Transit (see *Highlight 4*). This assessment delivered a detailed and forward-looking evaluation of how climate change is impacting Calgary Transit's infrastructure, operations and service delivery. It underscores the need for strengthening existing and future physical infrastructure while enhancing operational resilience.
Collaborative action in operational leadership	• Began undertaking analysis to understand the financial impact climate-related risks may have on specific service areas and asset components at The City to provide better information for decision-makers. To be completed in 2026. • Conducted three systems-thinking and leadership workshops between leaders of core business units and corporate priorities to advance the integration of climate-related risk into City processes, decision-making and budgets. • Developed a Facilities Climate Adaptation Investment Guidance Dashboard (see *Highlight 5*).
Performance reporting	• Continued to enhance the CEAS and associated dashboard, including the development of a new Climate Resilient Goal landing page and new metrics, including Average Summer Temperature and Calgarians' Perspectives on Climate Change for public reporting to support performance evaluation and transparency. • Integration of climate information, including highlights of the Benchmark YYC[1], ClimateReadyYYC[2] program and investments in flood mitigation infrastructure into the 2025 Q1, Q2 and Q3 corporate quarterly reports.
Risk management	• Integrated climate-related risk assessments and energy efficiency measures into long-term capital planning and asset management to support climate-ready investments and address climate risks to City infrastructure. • Established a new Principal Corporate Risk focused on climate and environmental risk.

(1) https://www.calgary.ca/environment/programs/building-energy-benchmarking-program

(2) https://www.calgary.ca/environment/programs/equity

Risk management and strategy

The City's climate-related risk management and strategy is integrated into an organization-wide approach to identifying, assessing and managing risks. It connects corporate, business unit and project-level processes — such as the Corporate Risk Profile, Business Unit Risk Registers (BURRs), environmental aspect assessments and climate-specific tools — to create a consistent view of climate risks across all levels of decision-making. This coordinated structure strengthens alignment between ERM and climate strategies, supports evidence-based planning and investment and enables The City to proactively manage both current and emerging climate risks as conditions evolve. A comprehensive overview of The City's complete and updated PCRs can be found in the FSDA.

Enterprise Risk & Issues Management Framework

To ensure risk management is embedded in decision-making across The City, the ERM program was integrated into the Chief Administrative Office and combined with the Issues and Opportunities function, forming the Enterprise Risk & Issues Management (ERIM) division. Under the CAO's direction, ERIM provides a coordinated, proactive approach to identifying, assessing and managing risks and opportunities that impact The City's ability to achieve its strategic objectives. This governance structure (see *Figure 4*) underpins the corporate risk review process and strengthens alignment between ERM and cross-corporate climate-related risk strategies.

Figure 4:
Enterprise risk management (ERM) governance and reporting structure

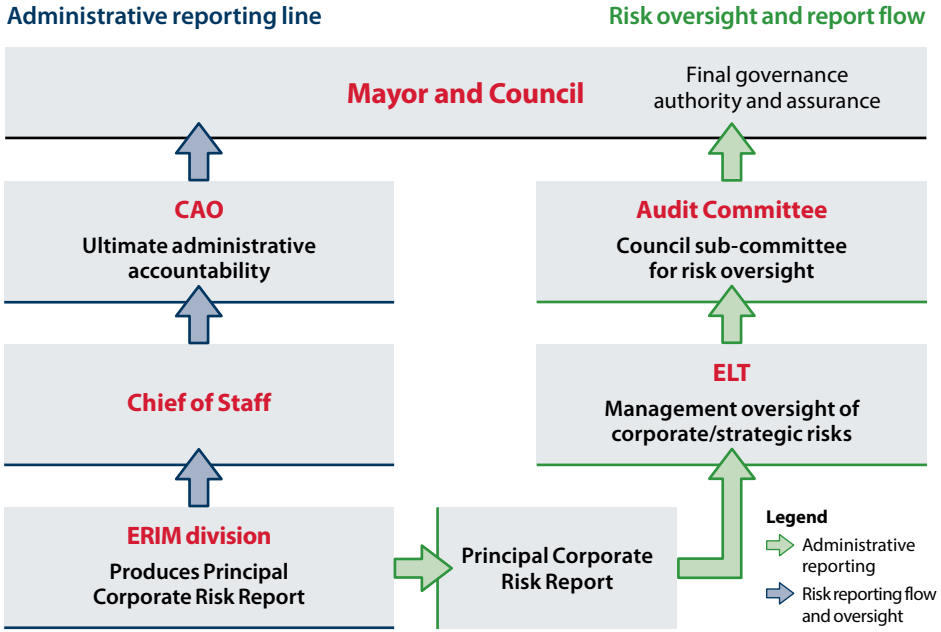
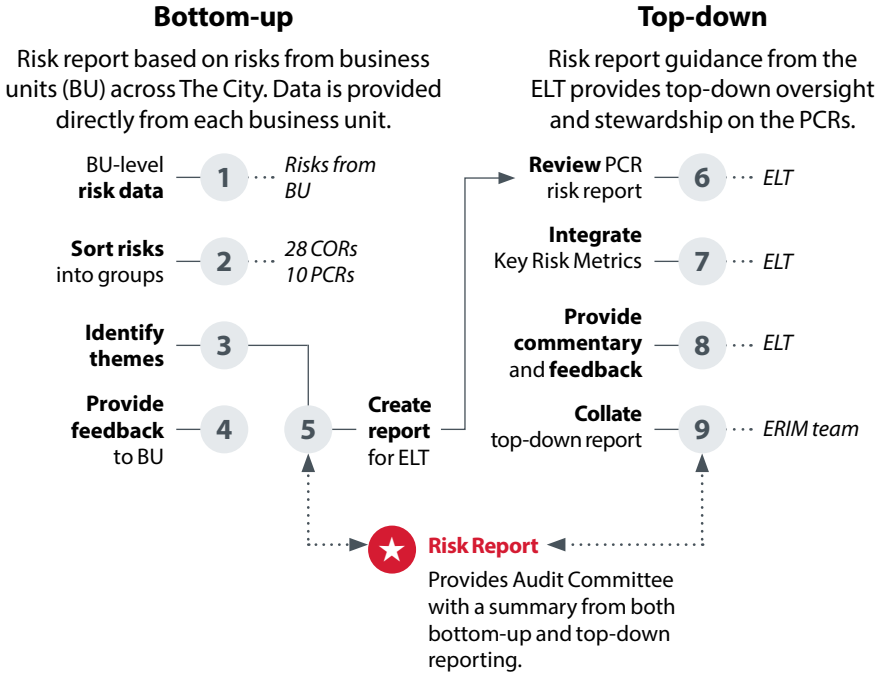


Figure 5:
The City's corporate risk review process

ERM reporting **enables the ELT and Audit Committee** to **effectively oversee risk management** and make **informed, evidence-based decisions.**



Corporate risk review process

The City's corporate risk review process provides a consistent and systematic approach to identifying, analyzing and reporting risks that may affect The City's ability to achieve its objectives. The primary output of this process is The City's corporate risk profile.

The ERIM team updates The City's corporate risk profile semi-annually (see *Highlight 3*) based on information from the 10 PCR. Each PCR is evaluated based on likelihood and impact and rated on a five-point scale: slight, low, medium, high or extensive. The risk profile also includes information on risk response progress, risk trends and assessment of risk appetite and tolerance.

PCRs are assessed using both bottom-up and top-down approaches (see *Figure 5*) and consider internal and external pressures that may influence risk ratings, trends or response strategies. Climate change is considered a key external pressure affecting multiple PCRs, particularly due to the impact of severe weather events on The City's assets, infrastructure, workforce and residents. ELT monitors and discusses these risks, with a focus on mitigating threats to strategic objectives while identifying opportunities. The Climate and Environmental PCR, which addresses physical climate, environmental and GHG-related Corporate Operating Risks (COR), is one of the ten PCRs that make up The City's corporate risk profile.

Highlight 3: 2025 Year-End Risk Profile

In the 2025 Year-End Risk Profile, the Climate and Environmental PCR was rated as "high" with a "stable" trend. The City's risk response is "in progress" and the risk response will continue to evolve while being closely monitored.

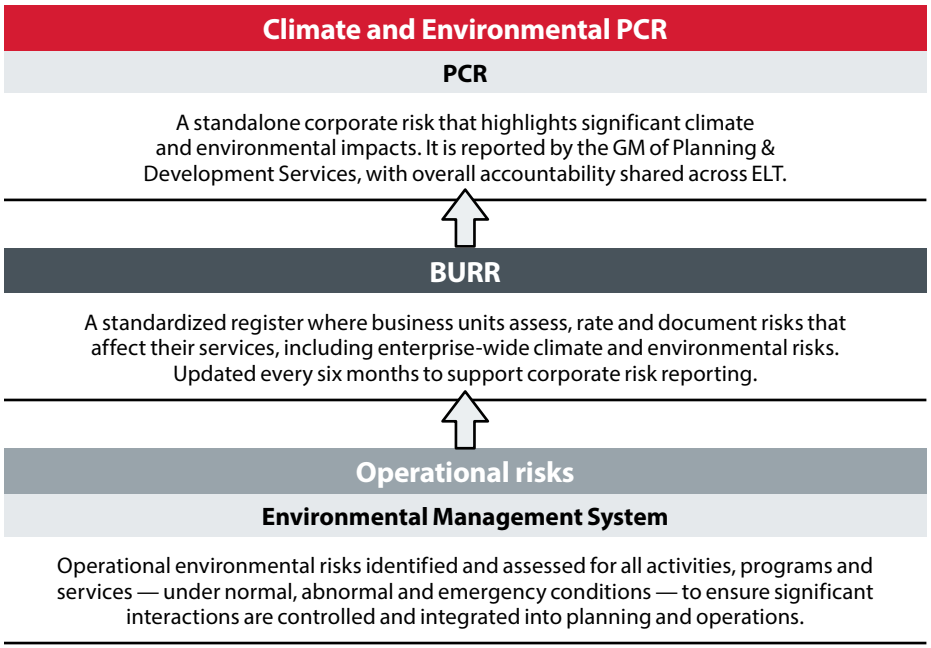
Coordinating The City's climate and environmental risk management

In 2025, The City established a standalone Climate and Environmental PCR and Accommodating Growth PCR to replace the previous Sustainable City PCR. The Sustainable City PCR was a complex risk that included population growth, development pressures, affordability and climate and environmental impacts. Separating the risks improved clarity in reporting, strengthened focus through better monitoring and prioritization and enhanced accountability for demonstrating risk pressures, response effectiveness and interdependencies. The General Manager of Planning & Development Services reports on the Climate and Environmental PCR and Accommodating Growth PCR and ELT remains accountable for managing all PCRs.

BURRs complement the corporate risk process by providing a system for business units to assess and document risks affecting their services or the wider corporation. BURRs capture key drivers, ratings, impacts and mitigation measures and are updated every six months to inform The City's corporate risk profile.

At the operational level, through The City's Environment Policy and Corporate EnviroSystem standards, business units are required to identify and evaluate environmental aspects, which are activities or conditions that interact with the environment during normal, abnormal or emergency operations. This process ensures significant environmental interactions are recognized, controlled and integrated into strategic decisions surrounding business plans and budgets, project design, service delivery, operations and emergency preparedness. While the requirement applies to all business units, The City is still progressing toward full participation and complete data coverage. Priority business units have submitted their environmental aspects, while some areas remain in progress or under resourced. Efforts are underway to address these gaps, improve consistency and strengthen the integration of climate-related risk into the EnviroSystem. *Figure 6* shows how climate-related operational risks flow into BURRs and ultimately into the Climate and Environmental PCR.

Figure 6:
Climate, environmental and operational risk integration



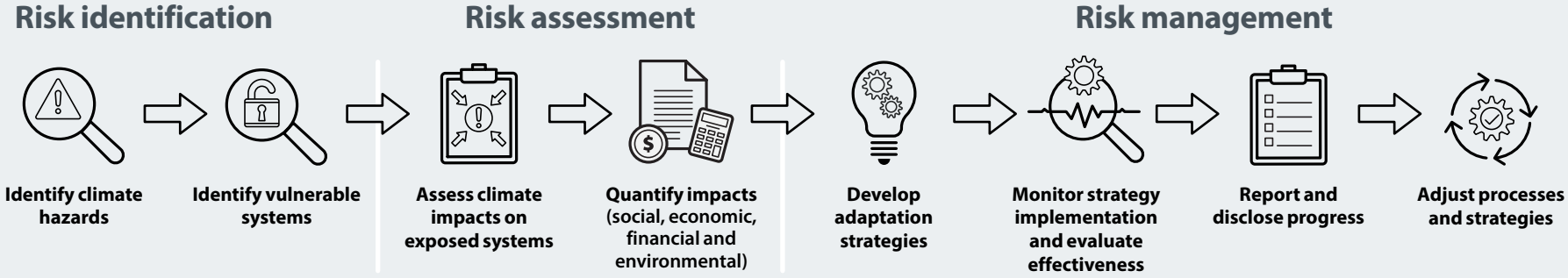
Climate-related risk and opportunities

The integrated approach described in the Risk management and strategy section enables The City to systematically identify, track and manage climate risks across all levels of decision-making. The following section outlines the key climate-related risks and opportunities identified, the tools used to assess their impacts and the strategies, plans, policies and initiatives in place to address them.

Climate-related physical risks and opportunities

Climate-related physical risks and opportunities refer to the direct impacts of climate change on the environment, human health and wellbeing, built infrastructure and assets, City operations and service provision and delivery to Calgarians. *Figure 7* below highlights The City's physical risks identification, assessment and management process.

Figure 7: The City's Climate-related physical risk assessment process



Physical risk identification

The City uses climate projections to describe how Calgary is likely to experience climate change based on current global emission trends and scenario analysis best practices. This information is detailed in The City's 2022 Climate Projections Report[1] and uses historical (1981-2010), medium-term, 2050s (2041-2070) and long-term, 2080s (2071-2100) time horizons. Using these projections, The City assesses Calgary's specific physical climate risks through various approaches and scenario analyses.

(1) The City of Calgary. 'Climate Projections for Calgary'. *The City of Calgary* [website], Jan. 10, 2025. https://www.calgary.ca/content/dam/www/uep/esm/documents/climate-projections-calgary-2024.pdf

Physical risk assessment

The City uses three tools to assess and manage physical climate risks: the Community Climate Risk Index (CCRI) for community-level risks, the Climate Risk and Resilience Assessment (CRRA) for corporate assets and services and the Climate Risk Screening Assessment (CRSA) for project-level analysis. Together, these tools use climate projections and standardized qualitative and quantitative methods to identify vulnerabilities, assess exposure and inform risk reduction measures. As of 2025, The City has completed 22 CRRAs and 15 CRSAs on a range of initiatives including multi-tenant master planned developments, public spaces, water utility projects and service-line portfolio assessments (see *Highlight 4*). Complementary tools that focus on individual hazards have also been developed, such as the Urban Heat Map that concentrates on the hazard of extreme heat. *Table 1* below summarizes these tools and their applications.

Highlight 4: Calgary Transit analysis

In 2025, a CRRA and associated financial analysis for the whole of Calgary Transit was completed, helping foster an improved understanding of climate risk to Transit service delivery, staff and assets. The analysis also identifies adaptation measures and investment strategies to reduce risk to Transit's assets in 2025 and beyond.

Table 1: Physical risk assessment tools

Assessment tool	Tool type	Tool description	Tool use
CCRI	Composite index	CCRI is an internal tool that evaluates climate hazard exposure and vulnerability for each Calgary community. It supports the development of climate risk profiles, providing evidence-based insights to guide place-based planning and climate adaptation.	Assessing exposure, likelihood and vulnerability help identify where climate adaptation measures are most needed to support Calgarians. The resulting community climate risk profiles are attached to local area plans and guide community-wide adaptation policies. The CCRI also provides climate risk context for infrastructure projects.
CRRA and CRSA processes	Risk assessment processes	The CRRA is a collaborative, detailed assessment of climate risk for City-owned infrastructure and facilities. It identifies specific risks and informs design measures to reduce physical climate impacts and protect service delivery. The CRSA is a streamlined version of the CRRA that uses a screening model on later-stage public infrastructure projects to quickly identify opportunities to reduce physical climate risk.	These processes identify climate hazards and risks, inform project teams and guide design decisions to create more resilient City assets and services. They are applied to both existing and new infrastructure, as well as to service portfolios such as Calgary Transit.
Urban heat mapping and research	Spatial analysis model	The Urban Heat Map is a public tool that identifies neighbourhoods with higher heat exposure and the factors contributing to it, such as vegetation levels and impermeable surfaces. It also shows key social exposure and vulnerability indicators. Urban heat research improves the accuracy of this mapping, identifies effective heat-reduction strategies and models the cooling benefits of increasing Calgary's tree canopy.	The Urban Heat Map informs heat-mitigation policies in planning documents, including local area plans. It supports community planning, urban forestry and infrastructure projects by providing heat-exposure context. Researchers and students also use it for urban design and climate studies. Heat research has guided Urban Forestry investments, including the 2 Billion Trees program and Facilities in selecting tree-planting sites and will be used to track the effectiveness of heat-mitigation strategies.

In addition to physical risk assessments, The City has conducted economic and financial analyses to quantify climate change impacts, supporting evidence-based risk reduction and highlighting the societal costs of inaction and the benefits of proactive adaptation. These insights guide strategic capital planning, budget allocation and long-term fiscal sustainability in climate risk management (see *Highlight 5*). *Table 2* below details the analyses and their applications.

Highlight 5:
Facilities Climate Adaptation Investment Guidance Dashboard

In 2025, a Facilities Climate Adaptation Investment Guidance Dashboard was developed to support evidence-based decision-making on adaptation investments. The Dashboard outlines the recommended scale and timing of investments and provides a clear business case to support budget approvals aimed at managing both current and long-term climate-related risks to facility assets. Applied at both the portfolio and individual-project levels, the tool helps identify where targeted adaptation measures can deliver long-term value by reducing operational disruptions and minimizing repair and asset renewal costs associated with climate-related hazards.

Table 2: Climate-related financial and economic analysis resources

Assessment tool	Resource type	Resource description	Resource use
Climate-related financial impact analysis *(ongoing)*	Report	The City is undergoing a limited scope climate-related financial impact analysis to quantify historical extreme-weather costs, project future financial risks and demonstrate the value of investing in climate adaptation. This is expected to be complete by Q3 2026.	This is foundational work for evaluating climate-related financial risks to better understand current and future costs to key services and assets, including mobility, water, wastewater, stormwater, buildings and natural assets. The results will help inform asset management planning, capital prioritization, budgeting and long-term resilience investments by translating climate risks into financial impacts. It will also establish the methodology for future work expanding the scope of climate-related financial impacts to other City services and assets.
Valuation of natural assets	Spatial analysis model	The natural asset valuation approach measures the ecosystem service value and replacement cost of natural assets, recognizing their intrinsic worth. An update to the natural asset valuation model is underway and expected to be available to City staff as a value calculation interface in late 2026.	This approach recognizes how natural assets help reduce climate risk and supports decisions to better protect, restore and manage them. Key uses include assessing how development affects natural asset services, integrating natural assets into corporate asset management and climate reporting and guiding operational and capital investment decisions across natural City parks. The initial 2021 assessment found Calgary's natural assets provide roughly $2.5 billion in annual service value[1].
Heat and wildfire smoke economic analysis *(ongoing)*	Report	Launched at the end of 2025, the Economic Impact Assessment for heat and wildfire smoke will evaluate current and future financial risks and economic impacts on Calgarians, businesses and the broader Calgary community. It will also identify populations that are disproportionately affected by these hazards.	This analysis will strengthen The City's understanding of the economic impacts of heat and wildfire smoke on Calgarians, businesses and institutions. It will help identify where targeted actions can reduce risks, impacts and costs for both the organization and the community. These insights will guide the prioritization of actions in the heat and wildfire smoke plan.
Financial analysis of climate risks and adaptation – City buildings[2]	Lifecycle cost model	This assessment evaluates the rising climate-related costs to The City's building portfolio and recommends cost-effective strategies to reduce risk to building components. Increasing climate hazards are projected to add $1.6 billion in lifecycle costs between 2025 and 2095 (2021 dollars).	This tool calculates the lifetime savings of proactive versus reactive climate-adaptation investments for City facilities. It identifies the optimal timing and scale of adaptation measures and pinpoints building components with the highest return on investment. The tool has directly informed the Facilities Energy & Environment Annual Investment Plan and related budget requests and has been used to support climate-adaptation funding for three building renovation projects.

(1) Valuation of Natural Assets. Analysis Summary. Nov. 12, 2021: https://hdp-ca-prod-app-cgy-engage-files.s3.ca-central-1.amazonaws.com/6616/5369/8199/Natural_Asset_Valuation_Summary.pdf

(2) Boyd, R.1, Kwan, C.1, Iffrig, A.2, Kowalczyk, T.2 and Zukiwsky, J.1, 2023: Financial Analysis of the Climate Resilience Funding Gap for City Facilities: Adapting City Buildings for Climate Change. Technical Report prepared by All One Sky Foundation and Associated Engineering for The City of Calgary.

Climate-related physical risks

Calgary's geographical location exposes the city to a range of climate-related physical risks, including acute events like floods and severe storms and chronic hazards such as temperature shifts, wildfire smoke and prolonged droughts. These risks place pressure on City infrastructure, operations and natural systems[1] (see *Highlight 6*), while also creating opportunities to modernize assets and strengthen emergency preparedness through investments in climate adaptation. Effectively managing these risks is essential to financial planning, reliable service delivery, affordable insurance and long-term resilience and affordability for Calgarians and businesses. Strengthening resilience to climate-related hazards is good business practice, strengthening Calgary's competitiveness and positioning us as a forward-looking city that attracts people, businesses and investors. *Table 3* below highlights Calgary's physical risks, impacts and The City's strategic responses.

Highlight 6: Hail resilience post 2024 storm

After the catastrophic 2024 hailstorm, The City created a Hail Resilience Program to strengthen both community and corporate resilience to future hail events. The Program includes hail-exposure mapping, a hail-equity impact analysis and a Hail Resilience Improvement Network with residential sectors. With hailstorms causing about $6 billion in insured losses in Alberta over the past five years, this resilience-focused approach aims to reduce future damage and claims, protect property and support long-term insurance affordability for Calgarians.

Table 3: Climate-related physical risks, impacts and responses for The City of Calgary

Climate-related physical risks	Description of risk	Corporate impacts	Strategic response
Hazard: shifting seasons **Risk type:** chronic **Time horizon:** mid- to long-term (2041–2100) **Likelihood:** very high	Changes in seasonal patterns affect multiple aspects of Calgary's built and environmental systems. • Earlier spring snowmelt changes the timing of annual water availability. • Longer summer and growing season shifts water demand patterns. • Changes in freeze-thaw cycles can damage infrastructure. • Vegetation impacts, invasive species spread and changing disease susceptibility in parks and private gardens.	**Assets and infrastructure** • Changes in freeze-thaw cycles can damage infrastructure. • Increasing need for road repairs. **Operations and service delivery** • Increasing annual cost to maintain parks and natural assets stressed by seasonal changes and acute climate hazards (e.g. pest management and urban forest maintenance). • Shifting road maintenance seasons. • Shifting municipal water demand and seasonal source water supply. **Natural environment** • Shifting seasonal patterns disrupt tree and vegetation biological timing causing damage and loss of critical ecosystem services provided by natural assets. • Invasive species (e.g. Emerald Ash Borer, Dutch Elm Disease) could cause complete destruction of whole species of trees, resulting in an estimated cost of $80 million over 10 years to remove and replace the impacted assets.	**Strategies, policies and plans** • Integrated Pest Management Policy (2020). • Drought Resilience Plan (2023). • Water Efficiency Plan (2026). • Water Security Roadmap (2026). **Projects, programs and funding** • Federal funding has been secured to increase tree planting in the city. • Hydrologic forecasting and coordinated water reservoir and dam operations. • Climate resilience considerations integrated into the Calgary Plan, which remains underway in 2026.

(1) Catastrophe Indices and Quantification Inc. CatIQ Discloses Updated Industry Loss for the Calgary Hailstorm of August 5, 2024. CatIQ [website], 12 February 2025. https://public.catiq.com/2025/02/10/cad-3-253-b-catiq-discloses-updated-industry-loss-for-the-calgary-hailstorm-of-august-5-2024/

Table 3: Climate-related physical risks, impacts and responses for The City of Calgary (continued)

Climate-related physical risks	Description of risk	Corporate impacts	Strategic response
Hazard: severe storms (heavy rain, hail, snow/ice) **Risk type:** acute **Time horizon:** short- to mid-term (present–2070) **Likelihood:** high	Intense storms can overwhelm city drainage infrastructure, leading to localized flooding. Severe hail, high winds and intense rainfall can damage built and natural assets and create dangerous conditions. • Hailstorms have damaged billions of dollars worth of private and public assets (built and natural) in Calgary over the past few years (e.g. the 2020 and 2024 hailstorms resulted in a combined $4.41 billion of insured losses)(1). • Significant damage and loss of urban tree canopy due to severe storms in 2014, 2020 and 2024. • Public and private infrastructure (built and natural) can be damaged and essential services and transportation networks may be temporarily unavailable.	**Assets and infrastructure** • Increased closures of public facilities, and impact on access to services and service delivery reliability. • Increased life cycle and replacement costs to municipal assets (e.g. stormwater infrastructure, facilities, fleet, etc.). **Operations and service delivery** • Increasing emergency response, clean-up costs and staff redeployment (e.g. the spring thaw and flood event in March 2023 led to nearly 35,000 service requests at a cost of approx. $500,000). **Natural environment** • Significant increase in damage to trees and other natural infrastructure, resulting in ecosystem service loss, costs for response/ clean-up and increased risk to public safety and property (e.g. tree failures).	**Strategies, policies and plans** • Stormwater Management Strategy (2023). • Climate resilience considerations integrated into the Calgary Plan, which remains underway in 2026. **Projects, programs and funding** • Emergency response and clean-up to repair public and private property and restore essential services. • The Community Drainage Improvement Program reduces local flood risk. • The Alberta Climate Ready Homes project is informing climate resilience to severe hail and basement flooding in the residential home sector. • The City has designed and is implementing a new hail resilience program (2025/2026). • Federal funding through the 2 Billion Trees program has been secured to increase tree planting and offset some of the urban tree canopy loss.

(1) L. Twidle, Managing Director, CatIQ, personal communication, February 14, 2025.

Table 3: Climate-related physical risks, impacts and responses for The City of Calgary (continued)

Climate-related physical risks	Description of risk	Corporate impacts	Strategic response
Hazard: drought **Risk type:** chronic and acute **Time horizon:** short- to long-term (present–2100) **Likelihood:** high	Natural and seasonal variabilities in the water system will be exacerbated by climate change, with increased risk of drought. • Municipal, agricultural and industrial water supply impacts. • Ecological, social and economic consequences from disruptions in water availability and change in quality.	**Assets and infrastructure** • Impacts to natural assets and infrastructure. • Irrigated sports fields, public pools, splash parks and landscaping assets may be impacted. **Operations and service delivery** • Increased operational cost, including staffing, infrastructure, communications, bylaw enforcement, water and wastewater treatment. • Increased costs to maintain regulatory compliance for wastewater discharge. • Water treatment challenges due to shifting water quality and decreased water supply. • Increased variability in water utility revenue projections and pressure on financial reserves. • Increasing annual cost to maintain parks and natural assets stressed by seasonal drought (e.g. pest management, habitat restoration and urban forest maintenance). • Loss of public recreation opportunities due to recreational asset disruption. **Natural environment** • Loss of ecosystem services provided by natural assets. • Increased stress to aquatic ecosystems and species. • Increased incidence and severity of wildfires. • Increased susceptibility to disease, pests and invasive species.	**Strategies, policies and plans** • Drought Resilience Plan (2023). • Water Utility Bylaw update (2025). • Water Efficiency Plan (2026). • Climate resilience considerations integrated into the Calgary Plan, which remains underway in 2026. • Updates planned to Calgary's Zoning Bylaw for drought resilient landscaping outcomes. **Projects, programs and funding** • Implementation of the Drought Resilience Plan (2023). • Implementation of annual Demand Management Program, including operational business units' Demand Management Response Plans; Voluntary Water Sharing Agreements with other water users in shared watershed. • Continued participation in Province-led studies for water supply infrastructure projects. • Model long-term climate impacts to water supply through the Water Security Roadmap. • Updated Water Utility Bylaw Outdoor Water Use Restrictions (2025). • Updated Water Efficiency Plan, including planned implementation of outdoor watering schedules to address peak demand and encourage efficient watering practices, underway for 2026 approval.

Table 3: Climate-related physical risks, impacts and responses for The City of Calgary (continued)

Climate-related physical risks	Description of risk	Corporate impacts	Strategic response
Hazard: extreme temperatures **Risk type:** chronic and acute **Time horizon:** short- to long-term (present–2100) **Likelihood:** high	Calgary is increasingly vulnerable to high temperatures and heat waves, as many buildings lack cooling due to historically moderate summers. The urban heat island effect amplifies temperatures in developed areas.	**Assets and infrastructure** • Increase in annual building energy and water demand and associated costs for space cooling. • Increased cost to provide public cooling amenities (e.g. indoor cooled spaces, shade structures, water fountains and features etc.). **Operations and service delivery** • Decreased worker productivity and adjustment to project schedules. • Increased staff exposure to health impacts from extreme temperatures. • Increased potential for infrastructure failure if materials cannot withstand extreme temperatures. • Increased adaptability in recreational program design required (e.g. redundancy in booking indoor and outdoor spaces). **Natural environment** • Increased susceptibility to disease, pests and invasive species. • Increased risk of drought and wildfires. • Water temperature increases and stress to aquatic ecosystems.	**Strategies, policies and plans** • Climate resilience considerations integrated into the Calgary Plan, which remains underway in 2026. **Projects, programs and funding** • Enhanced public communications leading up to and during heat waves. • Urban heat mapping tool that identifies "hot spots" for planning heat mitigation efforts, including in Local Area Plans. • Enhanced planting, care and protection of trees to reduce urban heat effects. • Additional public water stations during the summer months. • Assessment of economic impacts of rising temperatures and extreme heat to Calgarians, businesses and institutions to support a strategy.
Hazard: wildfire **Risk type:** chronic and acute **Time horizon:** short- to long-term (present–2100) **Likelihood:** medium	**Impacts on communities** • Fires in wildland-urban interface areas can burn homes, roads and utility infrastructure, causing risks to public safety and property damage. Communities considered to be in wildland-urban interface areas are limited within the city. **Impacts to source water quality** • Contaminants from fire retardants or burned areas can impact source waters through runoff and debris flows. Significant impacts to water treatment are only likely if widespread catastrophic wildfires occur in forested areas upstream of Calgary's water intakes.	**Assets and infrastructure** • Damage to infrastructure due to wildland-urban interface fires. • Sediment, ash and debris can impact water treatment infrastructure. **Operations and service delivery** • Short-term deterioration of water quality may increase operational water treatment costs. • Long-term and cumulative impacts may lead to algal blooms over multiple seasons. **Natural environment** • Increased erosion, runoff and peak flows to receiving water bodies. • Mobilized pollutants can alter stream chemistry.	**Strategies, policies and plans** • The City has initiated scoping for a risk-based Wildland-Urban Interface Strategy for communities in the interface area. • Source Water Protection Plan and Drinking Water Safety Plan. **Projects, programs and funding** • Glenmore Water Treatment Plant wildfire pilot (completed). • Fire foam PFAS (per- and poly-fluoroalkyl substances) study and advocacy (completed).

Table 3: Climate-related physical risks, impacts and responses for The City of Calgary (continued)

Climate-related physical risks	Description of risk	Corporate impacts	Strategic response
Hazard: wildfire smoke **Risk type:** chronic and acute **Time horizon:** short- to mid-term (present–2070) **Likelihood:** high	Wildfire smoke can impact Calgary's air quality with high particulate matter (PM2.5). Smoke can cause irritation to eyes, nose and throat as well as respiratory challenges or trouble breathing, especially for vulnerable populations.	**Assets and infrastructure** • Increasing costs to upgrade building HVAC systems for higher temperatures and poor air quality. **Operations and service delivery** • Decreased labour productivity and adjustment to outdoor work schedules. • Cancellations of outdoor events and programming and the need to provide suitable back-up indoor-use spaces. • Considerations for providing indoor clean-air spaces.	**Strategies, policies and plans** • Climate resilience considerations integrated into the Calgary Plan, which remains underway in 2026. **Projects, programs and funding** • HVAC system upgrades in municipal buildings to improve indoor air quality. • Operational adjustments to protect staff's health and wellbeing. • Assessment of economic impacts of wildfire smoke to Calgarians, businesses and institutions to support development of a strategy.
Hazard: river flooding **Risk type:** acute **Time horizon:** short- to long-term (present–2100) **Likelihood:** medium	The Bow and Elbow Rivers have the potential to result in severe flooding during spring mountain snowmelt combined with heavy rainfall events (e.g. the 2013 flood caused approx. $5 billion in damages[1]).	**Assets and infrastructure** • Damage and repair costs to municipal infrastructure and maintenance of infrastructure flood protection. • Increase in building life-cycle costs. **Operations and service delivery** • Emergency response, evacuation and clean-up costs. • Disruption to City services and associated revenue losses. **Natural environment** • Potential for bank erosion and loss of riparian area.	**Strategies, policies and plans** • Flood Resilience Plan (2018). • Stormwater Management Strategy (2023). • Land-Use Bylaw (2026 update). • Updates to the Calgary Plan and Zoning Bylaw planned for flood policy and regulation. **Projects, programs and funding** • Flood Resilience Program. • Over $1 billion invested in local and upstream flood mitigation infrastructure. • Springbank Off-stream Reservoir (SR1) completed in 2025 — protecting Elbow River communities to a 1:200 flood level. • Worked with Province to finalize updated flood hazard mapping (2025). • Updating regulatory (land-use) framework for flood-resilient development and property-level flood risk reduction. • Progressed City studies on related river hazards such as erosion/channel meander and river-driven groundwater.

(1) The City of Calgary. Flooding in Calgary – Flood of 2013. *City of Calgary* [website], Feb. 18, 2025. https://www.calgary.ca/water/flooding/history-calgary.html

The City's 2022 Climate Projections Report indicates that climate-related events are expected to become more frequent and severe. As Calgary grows — and property and infrastructure values rise — exposure to these risks will also increase, leading to higher long-term costs for both The City and Calgarians. Investing in climate adaptation is essential to maintaining a resilient, livable city (see *Highlight 7*).

Climate impacts are not experienced equally across Calgary. Seniors, low-income residents and racialized communities face higher physical climate risks. Using the CCRI (see *Table 1*), The City identifies these vulnerable communities and supports them in reducing and managing their risks (see *Highlight 8*). While these risks can be reduced, they cannot be fully eliminated, so The City continually updates its risk management and emergency response strategies.

Highlight 7: Impact of The City's Flood Resilience Program

Since the 2013 flood, Calgary has significantly strengthened its flood resilience through major community and upstream mitigation investments. Completion of the downtown Bow River flood barrier and the Springbank Off-Stream Reservoir on the Elbow River in 2025 have substantially increased protection. Together, these measures have reduced overall flood-risk exposure by approximately 70 per cent.

Highlight 8: Climate Resilient Communities

The City created the Climate Resilient Communities working group in 2023 to bring diverse perspectives into climate-adaptation planning. The group has provided guidance on addressing climate risks for vulnerable populations and co-developed ClimateReadyYYC, a grant program that funds projects supporting those most affected by climate impacts. As of 2025, ClimateReadyYYC has supported 29 community resilience initiatives.

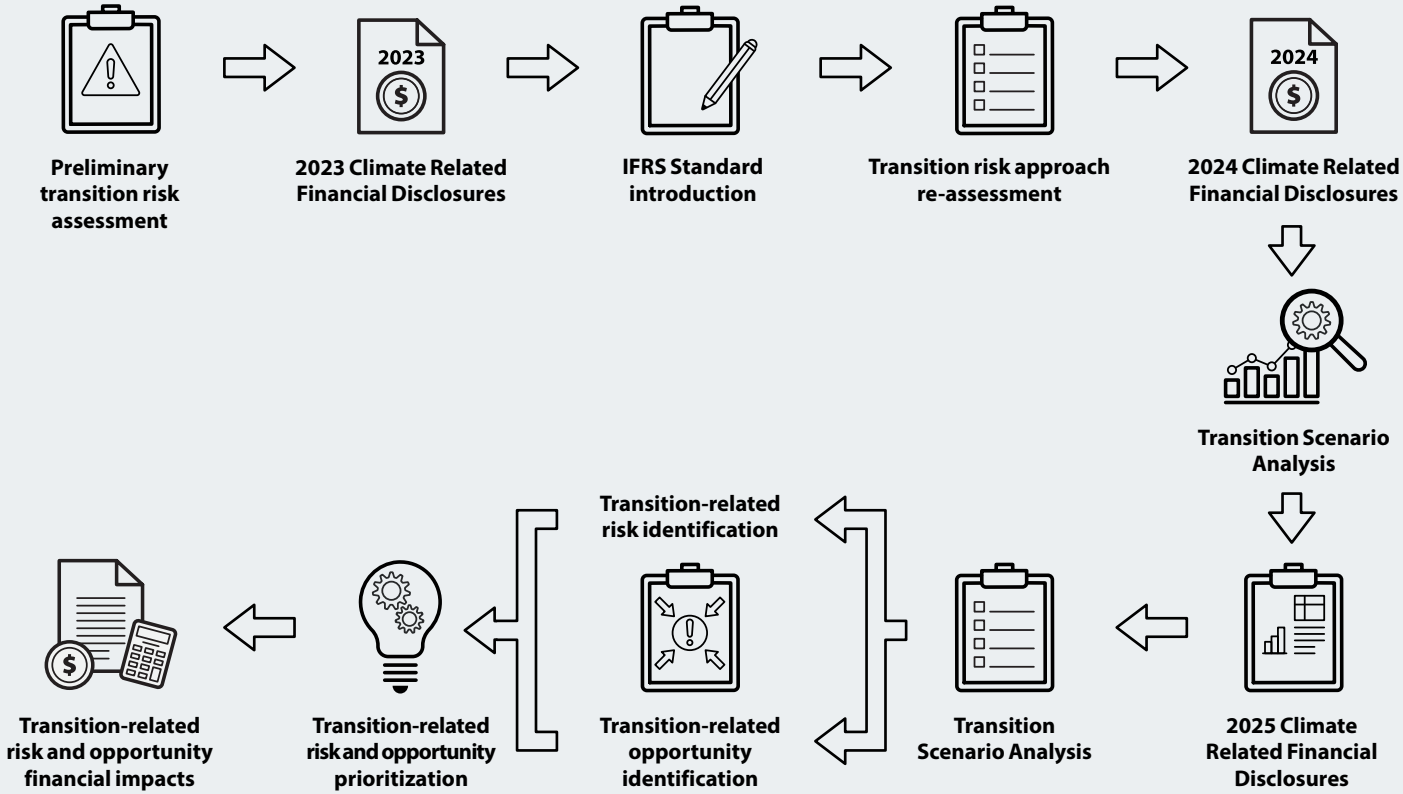
Climate-related transition risk and opportunities

Climate-related transition risks and opportunities arise from the global shift toward a low-carbon economy. As this transition accelerates, The City may face increased exposure to these risks. The drivers for transition risks and opportunities are:

- **Policy and legal risks:** New or changing regulations, emission limits or carbon pricing schemes.
- **Technology risks:** Replacement of existing systems by low-emission or energy-efficient technologies.
- **Market risks:** Changes in demand for low-carbon services.
- **Reputational risks:** Public perceptions of environmental performance and leadership.

These risks, if not proactively managed, may lead to asset obsolescence, higher compliance and operational costs, financial penalties, reduced revenue and shifts in operational priorities. The City is developing a methodology to identify and assess climate-related transition risks and opportunities. *Figure 8* outlines the key steps in advancing The City's transition risk management approach.

Figure 8: The City's climate-related transition risk assessment evolution map



Climate-related transition risks and opportunities

In 2025, The City advanced its understanding of climate-related transition risks through research and engagement with internal interested parties. Through these preliminary research efforts, three transition risk scenarios have been identified that align with the Canadian context. These scenarios offer an early look at a range of possible global futures—ranging from ambitious decarbonization to slow policy advancement. They are not predictions of The City's future, but rather global examples that help illustrate potential risks The City could face in the short, medium and long term. *Table 4* below provides an overview of the transition risk scenarios being considered in the preliminary analysis.

Next steps will include further investigation of potential transition-related scenarios, with the intention to formally adopt three to four scenarios to inform detailed assessment of transition-related risks and opportunities for The City. Future efforts will include assessing the likelihood and impact of these risks and opportunities across the different scenarios and time horizons to guide prioritization for evaluating financial impacts. The City will also identify the strategies, policies and initiatives needed to mitigate high-priority risks.

Table 4: Transition risk scenarios

Scenario	Description
Net Zero by 2050 **Source:** Canada's federal climate policy[1]; IEA Net Zero[2]	The Net Zero by 2050 scenario reflects a transition pathway in which Canada, alongside other major global economies, implements progressively more stringent climate policies aligned with achieving net-zero GHG emissions by 2050. This scenario assumes strong government intervention, rising carbon prices and rapid deployment of clean and low-carbon technologies, leading to a fundamental transformation of energy systems, markets and business models. This scenario is informed by the Government of Canada's Net-Zero Emissions Accountability Act (2021) and the IEA's Net Zero by 2050 Roadmap (2023), which together assume accelerated decarbonization of global energy systems, economy-wide emissions reductions and large-scale adoption of clean technologies across all sectors. Under this scenario, transition risks are systemic and increase as the pace of decarbonization accelerates. Organizations are expected to face heightened policy, market, technology and legal risks and will need to adapt their strategies, asset portfolios and operations to remain resilient and aligned with the speed and scale of the transition.
Delayed Transition ("Middle of the Road") **Source:** NGFS[3]/IPCC Delayed Action[4]	The Delayed Transition scenario reflects a pathway in which Canada and other major global economies undertake insufficient climate action in the near term, resulting in continued growth in GHG emissions through the 2020s. Climate policies remain fragmented, carbon pricing signals are weak or inconsistent and investment in low-carbon technologies progresses more slowly than required to align with long-term climate goals. This scenario is informed by the Network for Greening the Financial System (NGFS) Delayed Transition scenario and the Intergovernmental Panel on Climate Change's (IPCC) delayed mitigation pathways, which assume that stronger climate action is postponed until after 2030. As physical climate impacts intensify and international climate commitments become unavoidable, governments are forced to implement abrupt, stringent and uncoordinated policy measures later in the transition period. These late interventions drive rapid increases in carbon prices, accelerated regulatory tightening and sudden shifts in market and technology adoption.
Current Policies/ Business-as-Usual (BAU) **Source:** IPCC SSP2-4.5; NGFS Current Policies	The Current Policies or BAU scenario reflects a pathway in which Canada and other global economies continue to implement only existing climate policies, with limited additional ambition or new mitigation measures over time. Climate action progresses incrementally, carbon pricing remains relatively modest and policy implementation gaps persist, resulting in GHG emissions remaining high or declining too slowly to meet long-term climate targets. This scenario is informed by the IPCC's SSP2-4.5 pathway and the NGFS Current Policies scenario, which assume that governments largely maintain today's policy frameworks, with occasional rollbacks or delays in implementation. As a result, global warming is projected to reach approximately 3°C by the end of the century, reflecting insufficient mitigation and continued reliance on carbon-intensive energy systems and technologies. Under this scenario, transition risks are comparatively moderate in the near- to medium-term due to limited policy and market pressure to decarbonize. However, physical climate risks increase significantly over time as the frequency and severity of climate-related hazards intensify.

(1) Government of Canada. Net-zero emissions by 2050. Available at: https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050.html

(2) International Energy Agency. World Energy Outlook – Sustainable Development Scenario. Available at: https://www.iea.org/reports/world-energy-outlook-2020

(3) NGFS. NGFS Scenarios for central banks and supervisors – Phase IV. Available at: https://www.ngfs.net/system/files/import/ngfs/medias/documents/ngfs_climate_scenarios_for_central_banks_and_supervisors_phase_iv.pdf

(4) IPCC. Shared Socioeconomic Pathways (SSP2: Middle of the Road). Available at: https://en.wikipedia.org/wiki/Shared_Socioeconomic_Pathways

Integrating climate into financial planning and service delivery

The cross-corporate Climate Budget is a core element of the Climate Governance & Integration Framework. It tracks The City's financial commitments toward climate action, specifically Primary Climate Investments (PCI). During the 2023-2026 Service Plans and Budgets process, investments were reviewed and assigned the designation as a PCI, if the investment had a clear primary outcome aligned with The City's climate goals. Identification of PCIs within The City's entire four-year budget was The City's first step toward considering climate-related risks and opportunities during the financial planning process and the ongoing monitoring and reporting of the PCIs supports accountability and transparency. More information about The City's 2023-2026 Service Plans and Budgets, and impacts of recent adjustments made in 2026, can be found in the FSDA and *Table 5*.

PCIs for 2023-2026 were identified using high-level assessments of emissions and climate risk reduction. To improve future investment decisions and tracking, assessment tools will need to advance toward more detailed, quantitative analysis, and categorization of primary climate investments may need to evolve. Additionally, The City is developing an Environmental Commodities Management Policy that will enhance the oversight of environmental commodities at The City. It will also inform the management of The City's participation in the environmental commodities markets, including Technology Innovation and Emissions Reduction (TIER) credits, Renewable Energy Certificates (REC) and Clean Fuels Regulations (CFR) Credits. Integration and disclosure of environmental commodities in the cross-corporate Climate Budget and in corporate GHG emissions reporting may be explored in the future.

The City is currently tracking PCIs for the 2023-2026 business cycle and *Table 5* presents the 2023-2026 cross-corporate Climate Budget as of December 31, 2025.

Table 5: 2023-2026 cross-corporate Climate Budget

Primary Climate Investments	One-time Operating ($000s)	Capital ($000s)	Total ($000s)
2023-2026 Service Plans & Budgets	45,503	218,708	264,211
Budget adjustments in 2023	–	165,000[b]	165,000
Budget adjustments in 2024	(602)	(47,842)[c]	(48,444)
Budget adjustments in 2025	(10,677)[a]	(46,599)[c]	(57,276)
Adjusted 2023-2026 budget (as of December 31, 2025)	34,224	289,267	323,491
2023-2025 expenditures	15,269	88,347	103,616
2026 budget[d]	18,984	155,184	174,168

Budget adjustments each year could include relinquishments, reprioritization of budgets, additional budget allocations, recasts of budget into future years and Council-directed budget adjustments. Further context on these adjustments is referenced below:

(a) $9 million of one-time operating budget was eliminated from C&E business unit through the 2026 Budget Adjustments to the 2023-2026 Service Plans and Budgets, with an additional $1.6 million relinquished.

(b) $165 million in debt-financing from the Canada Infrastructure Bank was approved in 2023 for the electric bus program.

(c) Across 2024 and 2025, approximately $69 million in capital was recast into 2027+ across various projects to align with the spend forecasts and $26.8 million was relinquished.

(d) The 2026 budget represents the reported budget as of December 31, 2025. Carry-forward amounts from 2025 into 2026 may not be fully represented in the 2026 budget as these amounts were finalized in quarter 1 2026.

Resilient climate-related risk management

The City takes a cross-corporate approach to climate resilience, guided by the Climate Strategy and aligned with The City's Environment Policy. The Climate Strategy sets the long-term direction for building a net-zero, climate-resilient city, including building governance foundations, accelerating retrofits and protecting infrastructure — scaling clean energy and technology, enhancing nature-based solutions and strengthening community preparedness. The Strategy provides long-range vision, while the Climate Implementation Plan — updated every four years and adapted through annual budget adjustments — serves as an adaptive, corporation-wide tool that responds to evolving risks, new technologies and changing economic conditions. Administration collaborates across departments and with external partners to ensure actions are practical and evidence-based, while Council sets the scale and pace of investment in alignment with their priorities for the four-year business cycle. Together, this cross-corporate approach supports practical, coordinated action that reduces climate-related risks, protects public infrastructure and services and delivers long-term value by supporting a safe, affordable and economically competitive city for Calgarians and businesses.

Metrics and targets

The City has established metrics and targets to measure and track performance, community indicator trends and governance and disclosure progress. As this work advances, we are refining these metrics and strengthening monitoring and measurement so they more effectively inform decision-making. In 2025, The City Auditor audited climate-related metrics in the 2024 Climate-related Financial Disclosure report (see *Highlight 9*).

Highlight 9: Climate-related metrics audit

In 2025, the City Auditor audited the climate metrics reported in the 2024 Climate-related Financial Disclosure report to verify their reliability. The audit confirmed the metrics were accurate (±5 per cent) and not misleading. It recommended stronger oversight and communication practices to maintain this standard. The City has already applied initial improvements to the 2025 disclosure process, with further enhancements to be implemented by June 2026 for the 2026 disclosure process.

Climate goals and targets

The City has set key GHG emissions reduction targets, along with specific climate mitigation and adaptation goals and actions, to guide its progress. These initiatives align with international standards, Government of Canada targets and best practices of other major Canadian cities. *Figure 9* below highlights The City's climate related goals and targets.

Figure 9: The City's climate-related goals and target

Goals

- Improve energy use and reduce greenhouse gas emissions
- Reduce climate risk resulting from climate hazards

Targets

- Net-zero GHG emissions by 2050

Climate-related performance metrics

The following metrics track and highlight The City's performance in progressing toward its goals and targets.

Corporate GHG emissions

The corporate GHG emissions metric measures total emissions from City owned buildings, assets, projects and operations, and tracks progress toward net-zero by 2050. The City is implementing measures that lower emissions from electricity use, natural gas and transportation fuels, and is reducing electricity related emissions by purchasing Renewable Energy Certificates (REC). Both market-based emissions and location-based emissions are reported under the corporate GHG emissions metric to capture the impacts of these different emission reduction tactics (see *Highlight 10*).

The corporate GHG emissions metric is a lagging 2024 metric in this report, because full and accurate emissions data for a reporting year is not finalized until four to five months after year end, reflecting post year end energy data reconciliation and the timing of annual regulatory emissions reporting from key services.

In 2024, The City had higher energy and fuel consumption across most sources, including natural gas, diesel, gasoline, compressed natural gas (CNG) and propane as well as increased waste and wastewater related emissions. Despite this higher energy and fuel consumption, the decrease in Alberta's grid emissions factor (driven by a reduction in high-carbon electricity generation) more than offset this rise, resulting in The City's location-based emissions falling 14 per cent from the 2019 baseline and 1 per cent from 2023. The City's market-based emissions increased by 1 per cent from the 2019 baseline and 8 per cent from 2023, due to the increase in energy and fuel consumption described above.

As part of the 2024 inventory, The City updated its 2014-2023 emissions data (see *Highlight 11*). *Table 6* provides details of The City's Corporate GHG Emissions at year-end relative to the 2019 baseline and year-end metric included in the 2024 disclosure.

Highlight 10: Market-based vs. location-based emissions

Market-based emissions

GHG emissions calculated using emission factors that reflect procurement choices, such as The City's purchase of RECs to offset its annual electricity consumption.

Location-based emissions

GHG emissions calculated using the average emissions intensity of the local electricity or natural gas grid where the energy is consumed.

Highlight 11: 2024 GHG Review

The City restated its emissions from 2014-2023 due to improved accuracy of emissions factors for wastewater. These factors, based on recent site-level studies, replaced previous generic estimates and resulted in a material decrease in reported emissions (±5 per cent). As a result, emissions for all years from 2014 to 2023 have been restated lower than previously reported.

Table 6: Corporate GHG emissions relative to 2019 baseline year

GHG emissions	2019 (baseline year)	2023	2023 (restated)	2024
Corporate market-based GHG emissions				
Scope 1 and 2 market-based emissions ($ktCO_2e$)	391.3	404.6	367.7	395.5
Scope 1 emissions	388.9	402.4	365.5	392.9
Scope 2 emissions	2.4	2.2	2.2	2.6
Market-based emissions relative to 2019 baseline		▲ 3%	▼ 6%	▲ 1%
Market-based emissions relative to previous year			0%	▲ 8%
Corporate location-based GHG emissions				
Scope 1 and 2 Location-based emissions ($ktCO_2e$)	673.6	627.0	590.1	581.0
Scope 1 emissions	388.9	402.4	365.5	392.9
Scope 2 emissions	284.7	224.6	224.6	188.1
Location-based emissions relative to a 2019 baseline		▼ 7%	▼ 12%	▼ 14%
Location-based emissions relative to previous year			0%	▼ 2%

Note: Figures are rounded.

Flood risk assessment

The City's Flood Resilience Strategy, and annual flood preparedness and response activities manage climate-related flood risks. As extreme floods become more likely, reservoirs, flood barriers, drainage system improvements, forecasting/response enhancements and land-use or building regulations help limit potential damages. The City has invested $295 million and secured $1.02 billion from other levels of government for flood mitigation projects. These investments protect $68 billion in infrastructure and property, have reduced flood damage exposure by 70 per cent since 2013 and have achieved The City's 2025 resilience target. Major milestones achieved in 2025 included substantial completion of the Sunnyside Flood Barrier and Springbank Off-stream Reservoir. Public engagement and updated draft policies for refined flood-hazard areas were completed in 2025 for finalization in 2026. As river flood risk evolves due to changing climate, an adaptive risk-management approach is intended to lower exposure and potential impacts; however, residual flood risk cannot be fully eliminated, particularly under extreme events. Focus in 2026 will include supporting The Province's advancement of the Relocated Ghost Dam, which would offer incremental flood and water supply resilience for Calgary and other communities along the Bow River. *Table 7* below presents Calgary's flood-risk assessment, including property flood-exposure levels and estimated annual damages across flood events.

Table 7: Calgary flood risk assessment relative to baseline

Flood Risk	2013 (baseline year)	2024	**2025**
Calgary's river flood risk			
Number of properties within 1:100 river flood extent – flood exposure risk	7,241	3,360	**1,367**
Risk relative to 2013 Baseline		▼ 54%	▼ **81%**
Calgary's average annual damages river flood risk			
Potential flood damage ($)	168 M	75 M	**50 M**
Damages relative to 2013 baseline		▼ 55%	▼ **70%**

Water management

The City monitors water supply and demand to promote responsible use, protect downstream users and support basin-wide stewardship. As population growth and climate conditions change, pressure on water resources increases. While per capita water demand in 2025 increased to 334 liters per capita per day (LPCD), from 322 LPCD in 2024, 2024 demand is not considered representative as it was influenced by water restrictions due to the first Bearspaw South Feeder Main break and associated repairs. Varying levels of outdoor water restrictions were in effect for a total of 109 days in 2024. Overall, per capita water use declined from 356 LPCD in 2023 to 334 LPCD in 2025, with 2023 considered a more representative year for typical per capita water use, as it was not affected by major system disruptions or extended restrictions. In 2025, annual river withdrawal was 212,245 megaliters, The City also returned about 87 per cent of used water as treated effluent to the Bow River. In December 2025, Calgary experienced another significant water main break (see *Highlight 12*), further underscoring the importance of system resilience and adaptive water management. *Table 8* summarizes key metrics that guide current water supply, demand and effluent management decisions.

Highlight 12: Calgary's critical water infrastructure risks

Calgary's 2025 Bearspaw South Feeder Main break exposed an ongoing vulnerability in the city's water system, with the aging pipe still at risk of unexpected failure until system redundancy is in place. Although repairs have helped stabilized sections of the line, The City warns that further breaks remain possible. In response, The City has accelerated construction of a new parallel feeder main — advancing completion to December 2026 — to remove this single point of failure and strengthen long-term water system resilience.

Table 8: Calgary water use relative to 2003 baseline

Water use	2003 (baseline year)	2023	2024[4]	**2025**
Water average day demand				
Calgary daily water demand, averaged per person: liters per capita per day (LPCD[1])	518	356	322	**334**[2]
Demand relative to 2003 Baseline		▼ 31%	▼ 38%	▼ **36%**
Water usage and conservation				
Annual river withdrawals[3] (ML/Year)	212,471	201,904	196,003	**212,245**
Annual withdrawals relative to baseline		▼ 5%	▼ 8%	**0%**
Annual water (effluent) returns (ML/Year)		154,115	167,738	**181,333**
Number of days in water restrictions[5]	–	78	109	**1**

Note: Figures are rounded.

(1) LPCD shows water used by residential, business and institutional customers, as well as water lost through leaks or water that is unaccounted for or not billed. This total is then divided by the number of people living in Calgary.

(2) 2025 LPCD calculation is based on forecasted population from corporate economics. An updated version of 2025 LPCD will be calculated once the final population number is estimated for 2025.

(3) Annual River Withdrawal from the Bow and Elbow rivers represents water supply withdrawals for Calgary, Airdrie, Chestermere, Strathmore and Tsuut'ina Nation.

(4) In 2024, strict water conservation measures were implemented due to infrastructure issues, resulting in water savings.

(5) Number of days in water restrictions are informational only and have no targets; they are operational responses to weather, infrastructure and water availability conditions.

Natural environment

Conserving and restoring Calgary's natural environment is vital for thriving ecosystems. Conserved natural areas help reduce climate risk through the provision of ecosystem services, such as managing stormwater, providing cooling, storing carbon and supporting Calgarians' health and wellbeing. *Table 9* highlights key metrics that support the preservation, conservation and restoration of the natural environment in Calgary. The percentage of Environmentally Significant Area (ESA) retained or added was 50 per cent. Average performance from 2019-2025 was 57 per cent, slightly below target. Amount of ESA protected will vary year-over-year as it depends on the annual number of approvals and pre-development landscape habitat types within those areas. Designating land as Environmental Reserve is a key tool for protecting lands in greenfield development, however, it is limited to lands meeting the definition of Environmental Reserve under the Municipal Government Act and does not apply to all ESAs such as naturally occurring tree stands, native grasslands, the full extent of riparian areas and river valleys and certain wetland types.

The habitat restoration metric has been removed from the 2025 report as part of a planned transition to outcome based reporting. The prior metric was activity based and did not measure ecological condition or outcomes. It is being replaced with a condition based metric that more directly reflects habitat health and ecological function. Development of the replacement metric is underway, and it will be included in future reporting once available.

Table 9: Calgary natural areas conservation and restoration

Conserving and restoring natural areas	Target	2024	**2025**
ESA protected and conserved			
ESA protected or conserved calculated at land use amendment/outline plan approval (%)	60	63	**50**
Protection and conservation relative to 2026 target		▲ 5%	**▼ 17%**

Climate-related community indicators

Climate-related community indicators measure community scale progress on climate action and can highlight areas of success and challenges. Although The City cannot directly control these metrics, it can influence them by leading through corporate action, community awareness efforts and supportive programs and policies.

Calgary community-wide GHG emissions

Community-wide GHG emissions measure all GHG emissions produced in Calgary across major sectors: transportation, residential buildings, non-residential buildings and waste. This includes Scope 1, Scope 2 and selected Scope 3 emissions (inbound and outbound transportation). The metric tracks progress toward The City's interim goal of a 65 per cent reduction from 2019 levels by 2030 and achieving the target of net zero by 2050. In 2024, Calgary's community-wide GHG emissions were 17 per cent lower than in 2019 and 4 per cent lower than in 2023. The largest year-over-year reductions came from the building sector; although, buildings remain the largest source of emissions overall. Key drivers of the 2024 decrease include a lower electricity grid emissions factor and reduced natural gas consumption.

Calgary community-wide GHG emissions per capita

Calgary's population grew by 17 per cent from 2019 to 2024. Community-wide GHG emissions per capita help assess whether emissions are decreasing relative to this growth. A decline from the base year signals positive progress. In 2024, Calgary's per capita GHG emissions were 30 per cent lower than in 2019 and 12 per cent lower than in 2023. While the population has increased, emissions have not risen proportionally — an encouraging trend. However, much steeper reductions in total emissions are still required to reach net zero by 2050. *Table 10* below provides details of Calgary's community-wide GHG emissions relative to 2019 baseline.

Table 10: Community-wide GHG emissions relative to 2019 baseline year

GHG emissions	2019 (baseline year)	2022	2023	2024
Community-wide GHG emissions				
GHG emissions ($MtCO_2e$)	18.2	16.4	15.7	15.1
Emissions relative to 2019 baseline		▼ 10%	▼ 14%	▼ 17%
Emissions relative to previous year			▼ 4%	▼ 4%
Community-wide GHG emissions per capita				
GHG emissions per capita (tCO_2e/person)	14.2	12.2	11.3	10.0
Emissions per capita relative to 2019 baseline		▼ 14%	▼ 20%	▼ 30%
Emissions per capita relative to previous year			▼ 7%	▼ 12%

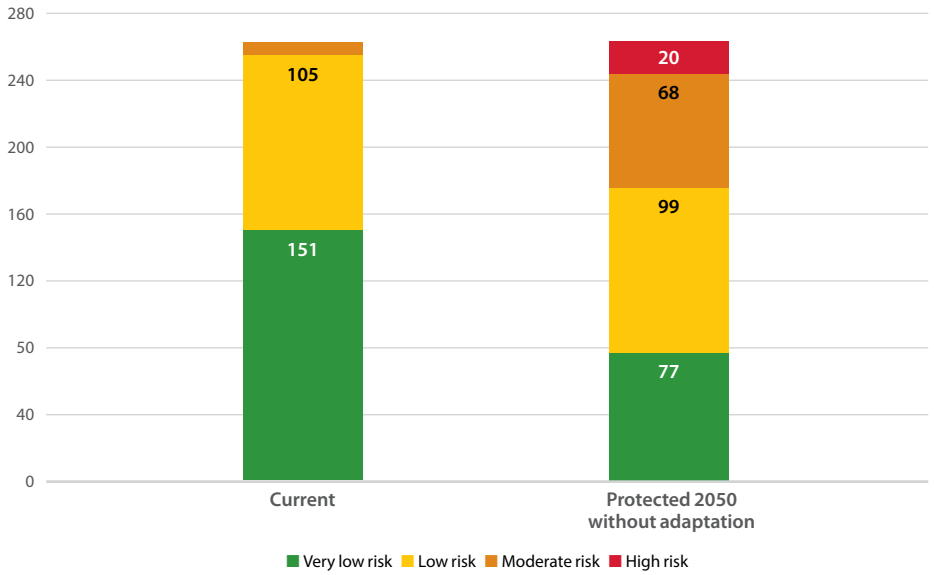
Note: Figures are rounded.

Community Climate Risk Index (CCRI)

The CCRI tool provides an average climate risk score for each community based on physical, social and economic factors (see *Figure 10*). It assesses the degree of climate risk and highlights the drivers of vulnerability within each Calgary community. The CCRI compares every community to the Calgary average and shows how they rank against one another. While all Calgary communities face climate risks, the CCRI highlights which ones are above or below the city average to help identify those at higher risk. There are currently eight communities at moderate projected climate risk. The CCRI projects that without implementing risk mitigation and adaptation strategies, this will increase to 88 communities at moderate or high risk by 2050.

This information helps The City develop strategies to support those vulnerable communities in mitigating and managing their physical climate risks. The CCRI is updated every five years, and the latest assessment was completed in 2025 with refreshed Statistics Canada census, infrastructure, land cover and tree canopy data.

Figure 10: Projected climate risk for Calgary communities
(number of communities)



Climate-related governance and disclosure metrics

Climate-related governance and disclosure metrics provide a snapshot of The City's performance in climate transparency, strategy and institutional readiness.

Carbon Disclosure Project (CDP)

The CDP is a leading global disclosure platform used by cities, companies, states and regions to report and manage climate and environmental impacts. The City has disclosed impacts annually through the CDP since 2016, reporting on climate mitigation and adaptation actions, and performance. In 2025, The City achieved an "A" score, reflecting best-practice climate disclosure and action.

Tracking Adaptation and Measuring Development (TAMD) score

The TAMD framework is a self-assessment tool used to evaluate institutional readiness for climate adaptation across eight indicators, including integration into planning, institutional coordination, budgeting and finance, organizational capacity, use of climate information, adaptation planning under uncertainty and partner participation and awareness. In 2025, The City achieved a TAMD score of 73 per cent (58/80), demonstrating continued improvement from 70 per cent in 2024 and indicating positive progress in adaptation readiness.

Summary and next steps

In 2025, The City strengthened climate governance, advanced risk-assessment practices and improved transparency across decision-making processes. Key achievements included the establishment of a standalone Climate and Environmental PCR, along with the following advancements:

- Expanded physical and transition climate risk assessments
- Enhanced the Climate Governance and Integration Framework
- Advanced flood and extreme heat resilience initiatives and natural asset restoration
- Improved the accuracy of corporate GHG emissions reporting and overall climate data quality through continued enhancements to the Climate and Environmental Analytics System

Together, these advances support more informed and disciplined decision-making that reduces climate-related risks, protects essential infrastructure and services and helps manage long-term costs for The City, Calgarians and businesses. In doing so, this work aligns with The City's vision of Calgary being a great place to make a living, a great place to make a life.

Looking ahead, The City will continue to evolve its climate governance, disclosures and risk-management processes — including aligning future reporting to the IPSASB climate-disclosure standard released in January 2026. This work will also include the advancement of transition-risk assessment (Phase 2), climate-financial impact analysis, refinement of the cross-corporate Climate Budget and deeper integration of climate considerations into asset management, capital planning, business unit risk registers and operational decision-making. Further enhancements to the Environmental Management System, hazard-consequence scoring, CEAS data quality and metrics will support stronger evidence-based planning, while the development of the 2027-2030 Climate Implementation Plan will guide the next phase of climate action.