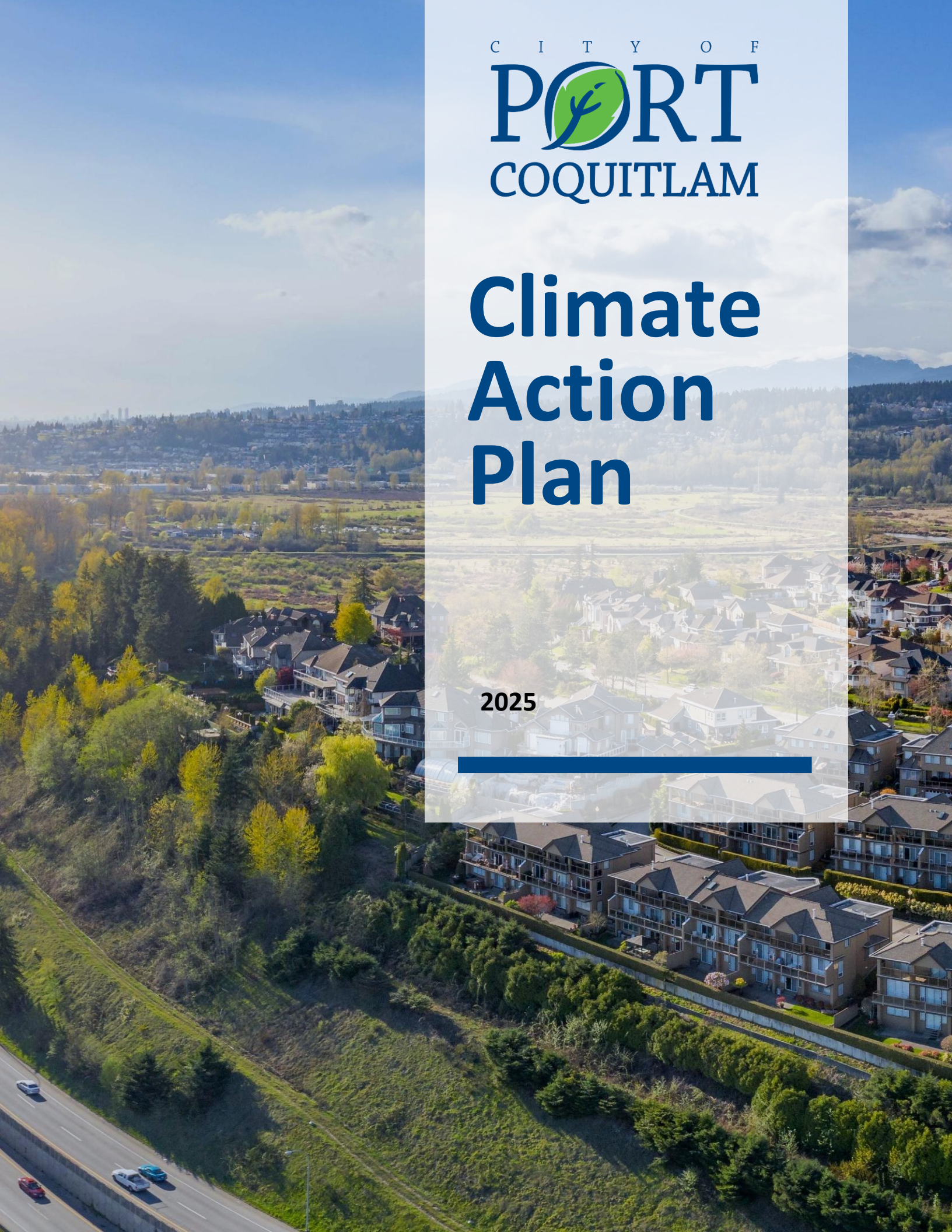

CITY OF PORT COQUITLAM

Climate Action Plan

2025

Prepared for:

CITY OF PORT COQUITLAM

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Executive Summary

Climate change is having wide-reaching impacts in the City of Port Coquitlam – from more severe heat waves and drought in summer months, and more severe rainstorms in spring, fall and winter. The actions we take to curb greenhouse gas emissions in our community and the broader region all contribute to provincial, federal, and international targets to keep warming temperatures below 2.0°C to avoid the most severe impacts of climate change.

Recognizing the global imperative to take serious action on climate change, the City of Port Coquitlam has set a new emissions reduction target that meets and exceeds the targets set at the global, national, and regional levels:

The City of Port Coquitlam commits to reducing emissions by 50% below 2007 levels by 2035 and achieving net zero emissions for corporate emissions by 2040 and community emissions by 2050.

Achieving this goal will require substantial effort by all involved – the City itself, its partners, its community members, and many others – and represents a truly ambitious but necessary reduction in our emissions.

This Climate Action Plan is a roadmap for the actions that the City of Port Coquitlam will take to act against climate change. The Plan builds on the foundation set by our City's *Corporate and Community Climate Action Plan (2010)* and reflects a **low-carbon resilience** approach to both reduce greenhouse gas emissions **(mitigation)** and manage climate risks **(adaptation).** The Plan takes an equity-centred lens to put the needs and priorities of key vulnerable groups in focus, including lower income, under-housed, and people with pre-existing health conditions that make them more vulnerable to climate change impacts.

The actions in our Plan have been carefully defined to build on the climate action initiatives the City already has underway and reflect regional best practices to make climate action as affordable and cost-effective as possible, by:

- Building on initiatives being led by Metro Vancouver, the Province and Federal government
- Focusing on opportunities to embed climate change considerations into existing City plans, policies and programs to build on and beyond the work City departments are already leading; and
- Prioritizing new projects and initiatives to leverage shared and external funding sources to amplify City funding (e.g. provincial and federal grant and subsidy programs, collaborating with neighbouring communities on cross-boundary projects, and implementing actions gradually through new planning and development).

We all play a role in climate action. While actions in this Plan are centred around actions the City will take, it also outlines measures Port Coquitlam residents and businesses can take to support our City's climate action goals.

The Plan is structured around a set of **31 objectives** and includes enabling actions that City departments will lead and partner on in the short term to address the greatest opportunities for impactful climate action. Many of these objectives will also require future actions but these are inherently subject to a rapidly changing landscape, as such further enabling actions continue to be refined by the City. Objectives and actions have been defined under **8 focus areas** that represent the greatest opportunities for impactful climate action in our community.

Our City's key objectives are summarized below:

BUILDINGS & ENERGY	TRANSPORTATION & LAND USE	SOLID WASTE & MATERIALS	CRITICAL INFRASTRUCTURE
1. Plan for more climate-ready new homes and buildings 2. Support lower-carbon and resilient retrofits 3. Design for low-carbon resilience in all new and retrofit municipal facilities 4. Support adoption of renewable power	1. Support widespread adoption of electric/zero emissions vehicles 2. Encourage active modes as the primary forms of transportation 3. Integrate a climate lens into land use planning 4. Transition municipal fleet to zero-carbon vehicles 5. Support decarbonization of medium/heavy-duty vehicles 6. Plan for more low-carbon resilient roads	1. Increase composting and recycling for residents and businesses 2. Support the shift to a circular economy 3. Move towards zero waste municipal operations 4. Promote waste reduction efforts by residents and businesses	1. Integrate a climate lens into infrastructure planning 2. Ensure flood planning meets current and future climate conditions 3. Build water system resilience to drought and heat waves 4. Explore opportunities to reduce emissions during municipal infrastructure construction

NATURAL SYSTEMS & GREEN INFRASTRUCTURE	CITY OPERATIONS, PLANNING & GOVERNANCE	COMMUNITY HEALTH & WELLBEING	LOCAL ECONOMY
1. Recognize and enhance the value of natural assets 2. Increase local carbon sequestration 3. Make local greenspace more climate-resilient 4. Enhance ecological diversity and resilience	1. Improve City's preparedness and response to climate-related hazards 2. Incorporate a climate lens into City program & decision-making	1. Prepare City emergency facilities for climate hazards 2. Preserve and protect cultural, heritage, and recreation sites 3. Establish targeted strategies to build resilience among key vulnerable groups 4. Establish community partnerships for community awareness and capacity-building	1. Support more low-carbon resilient agriculture 2. Support more low-carbon resilient local businesses 3. Encourage lower-carbon resilient transport hubs

Further information on each of these focus areas, the objectives and the near-term enabling actions is provided in **Section 4** of this Plan, including information on existing initiatives, key considerations, and opportunities for citizen action.

Acknowledgements

The City of Port Coquitlam's Climate Action Plan was developed through an 18 month-long collaborative effort led by City staff and senior leadership, City Council, and with input from community representatives and external groups. We send our sincerest gratitude to everyone involved for their time and invaluable insights and contributions.

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- BCIT
- Burke Mountain Naturalists
- City of Coquitlam
- City of Pitt Meadows
- City of Port Moody
- Coquitlam River Watershed Roundtable
- CPKC Rail
- Downtown Port Coquitlam BIA
- Fortis BC
- Fraser Basin Council
- Fraser Health
- Fraser Valley Watersheds Coalition
- HSR Zero Waste
- Input from over 400 members of the public
- kʷikʷəƛ̓əm First Nation
- Maple Creek Watershed Streamkeepers Society
- Mayor's Citizen Advisory Roundtable
- New View Society
- Province of BC - Climate Action Secretariat
- Riverside Secondary School - Environmental Club
- School District 43
- Scottish Line Painting Ltd.
- SHARC Energy
- Tri-Cities Homelessness and Housing Task Group (PoCo Foundation and Trinity United Church)

- Urban Development Institute
- Urban Land Institute
- Vancouver Fraser Port Authority
- Watershed Watch Salmon Society
- Wesgar Inc.
- Wondrous Tree Fellowship

1 Call to Action

Climate change presents a significant threat to our local community. Canada has already experienced 1.7°C of warming since pre-industrial times – a rate of warming approximately twice the global average due to our northern latitude – and this trend is expected to continue.

This level of global warming is expected to result in a number of climate related changes in Canada, including warmer year-round temperatures, changing precipitation patterns and rising sea levels. These could in turn translate into several regional changes, including more severe and frequent heat waves, droughts, wildfire and wildfire smoke events, storms and flood events, with broad reaching impacts on community health, infrastructure and property, local economies and the natural environment.

While everyone in Port Coquitlam will likely experience climate change impacts, the vulnerable, marginalized or those facing pre-existing challenges (e.g. pre-existing illness, lower income) will find it especially hard to cope as cascading climate hazards add to the challenges they already face.

Over the next decade we need to work together as a global community to prevent warming from reaching the 2.0°C threshold that the Intergovernmental Panel on Climate Change (IPCC) warns will have the most severe impacts across the globe[ii]. **Every community, organization and person has a role to play, and the time to act is now.**

Climate Change Impacts Today.

In Port Coquitlam, we are already seeing more extreme weather events due in part to climate change:

- The 2021 summer heat dome, which caused almost 600 deaths due to heat stress across British Columbia.
- The 2021 November atmospheric river, which caused stormwater and river flooding with an estimated $450 million in insurable damages to property owners and government infrastructure across the province.
- Record-breaking wildfire seasons in 2023 across BC with more than 2.84 million acres of land and forest burned, with wildfire smoke causing far-reaching impacts to health and recreation in our community every year since.

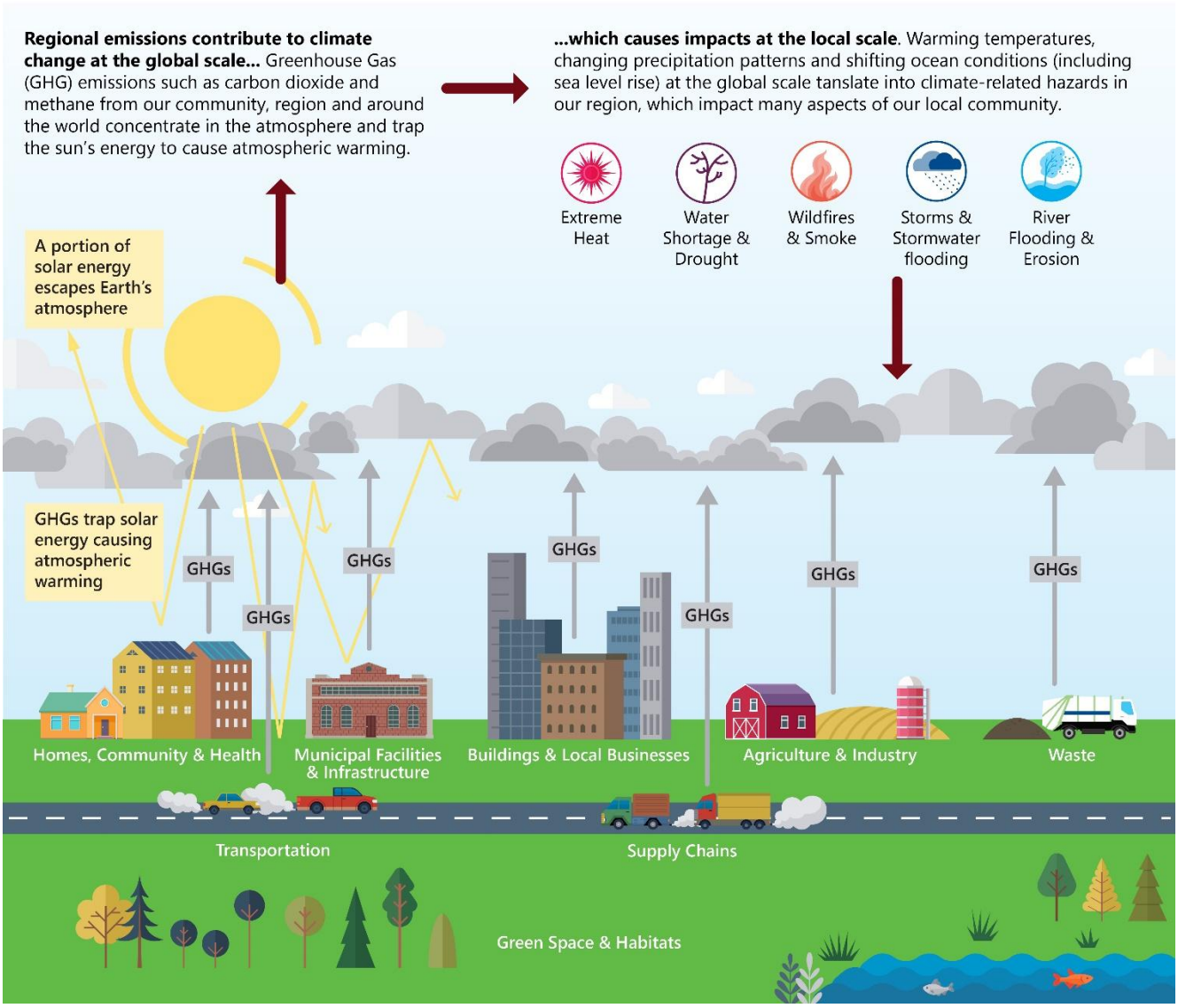
These recent events present a snapshot of how climate change is already affecting our community, despite efforts to curb our greenhouse gas emissions. Scientific evidence suggests that we can expect to see events like these become more frequent and severe as global temperatures continue to rise.

This is Port Coquitlam's plan to address climate change – both its causes and consequences.

It lays out the objectives and actions needed to ensure we are climate-ready and that we do as much as we can to reduce our impact on the climate and help those who will be most impacted by it.

2 Climate Change in Our Region

Charting a path towards meaningful climate action first requires an understanding of how local and regional emissions are causing global climate change, and how this in turn creates impacts at the local level.



Climate Change at the Global Scale

Since industrialization in the 19th century, human activities have caused greenhouse gas emissions (GHGs) to accumulate in Earth's atmosphere faster than ever before, creating global warming beyond the natural rate. GHGs such as carbon dioxide, methane and nitrous oxide are naturally-occurring gases that trap solar radiation in our atmosphere and maintain liveable temperatures on Earth. Burning fossil fuels, such as gasoline, diesel and natural gas, produce additional GHGs that trap more of the sun's energy and cause gradual warming of air and ocean temperatures across the globe.

The IPCC's most recent report projects global temperatures to reach 1.5°C of warming by between 2030 and 2052 due to the extra emissions already in the atmosphere, and that we could see warming up to 4.4°C by the end of the century if we don't make significant cuts to our emissions over the next 10 years[iii].

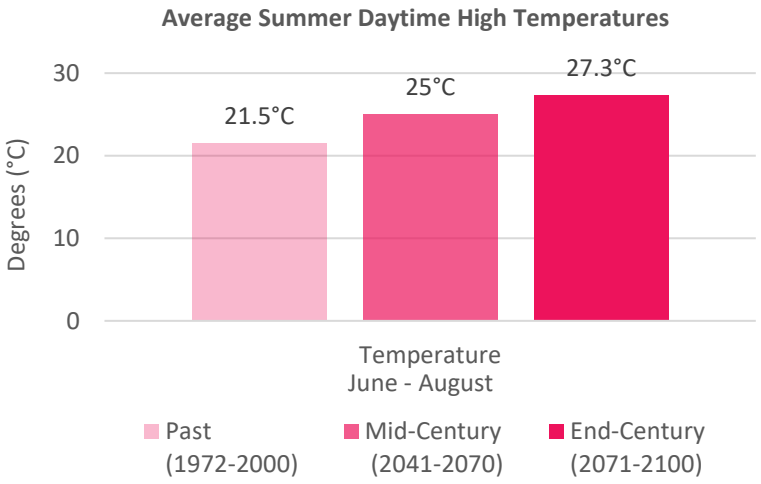
While 1.5°C of warming may not seem significant, climate scientists agree that this degree of warming will continue to cause significant and sometimes harmful impacts on communities and natural systems across the world[iv]. Impacts at 2°C and above will be even more severe and make adaptation actions much more challenging.

Climate Impacts at the Regional & Local Scale

Global warming at the global scale is already causing a broad range of changes to conditions in Metro Vancouver and across Canada. As global temperatures rise, we can expect to see increasingly hotter and drier summers, more severe wildfire and smoke seasons, wetter spring, fall and winters, sea level rise, greater river flood risk, higher wind speeds, and more severe winter storms. Projected trends for future climate conditions across Metro Vancouver are based on data taken from Climatedata.ca[v] and other various sources.

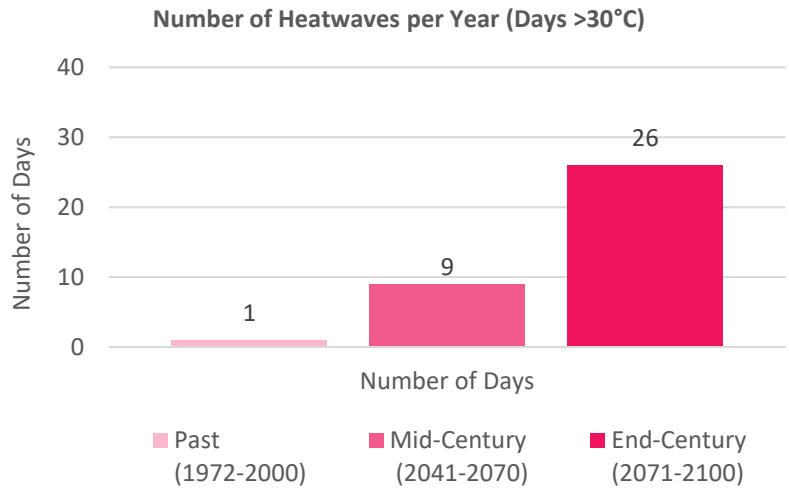
Warmer Average Temperatures

Air temperatures are projected to increase by 5.8°C on average over the century.



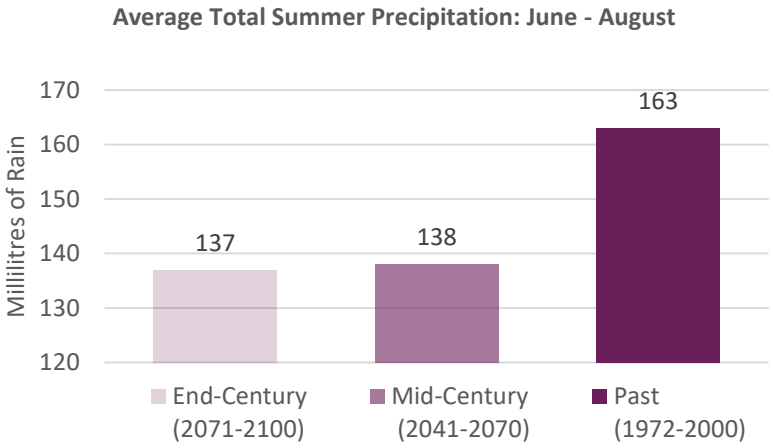
More Extreme Heatwaves

Heat waves are expected to become more frequent, last longer, and reach higher temperatures. By the end of the century, the number of days per year that reach temperatures above 30°C is projected to increase sevenfold.



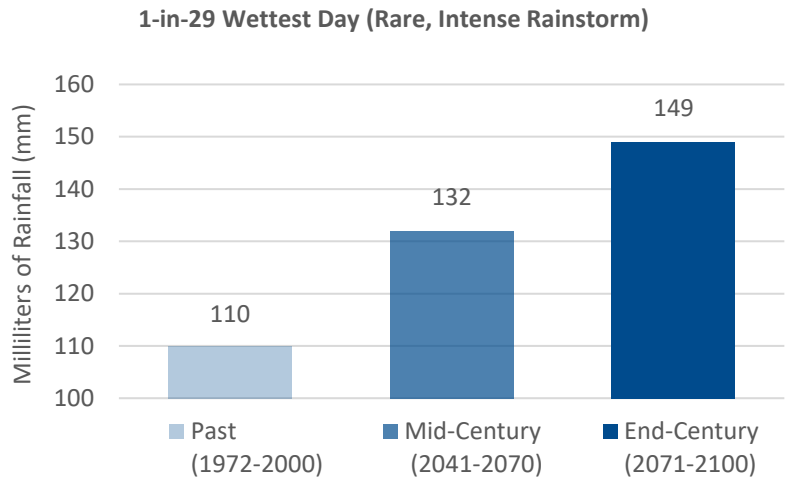
Declining Summer Rainfall

Total summer rain volumes are projected to decrease by 16% by the end of this century, paired with longer dry spells and lower overall snowpack in winter.



More Precipitation in Spring, Fall and Winter

Rainfall volumes on the wettest days each year are projected to increase by 20% by mid-century and 35% by the end of the century. As winter temperatures warm, more precipitation will fall as rain instead of snow. The region also expects to see shorter-duration, high-intensity rainfall events.



Wildfires[vi] and smoke[vii] events

across North America are expected to happen more often, last for longer, and affect larger areas.

Number of Annual Forest Fire Occurrences

Potential increase across British Columbia of 21% to 190% by the end of the century.

Number of "Smoke Waves"

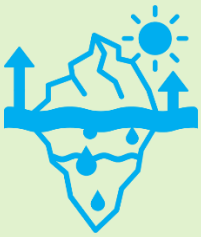
Number of smoke waves in the western US over a 6-year period increasing from **3 to 4** (2004 – 2009) to **5 to 6** by mid-century.

High Wind Events Occurring More Often

Storms with windspeeds of 70 km/hr or more are projected to increase by up to 25% by mid-century and up to 105% by end-century[viii].

Annual Hours with Windspeeds > 70 km/hr

The number of hours each year with windspeeds of 70 km/hr or more is projected to increase from 6 hours (1994 – 2009) to 8 hours by mid-century and to 11 hours by the end of the century.



Sea level rise[ix]

With the melting of glaciers and polar icecaps, and water expansion due to warming oceans, sea levels are expected to rise leading to beach erosion, damage to low-lying coastal areas and permanent inundation in some areas.

Sea level Rise

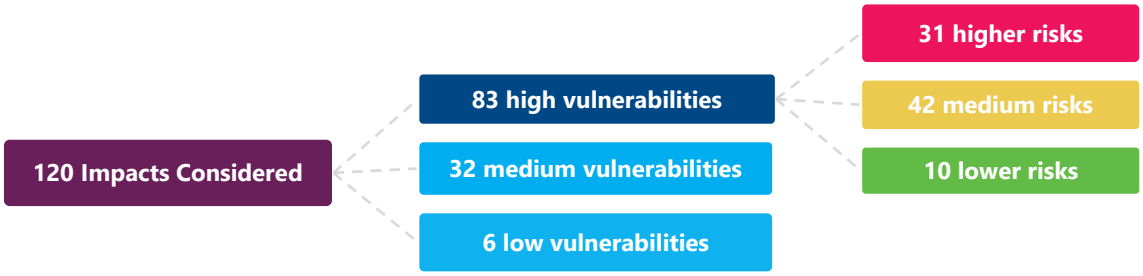
The province of British Columbia advises municipalities to plan for 1.0 -1.4 metre increase by 2100 and a 2.0 metre rise by 2200.

These changing conditions are expected to cause a range of impacts to life in Port Coquitlam, including damage to private property and City infrastructure, disruptions to businesses, transportation and municipal services, changes to natural habitats, and harm to human health and safety – particularly among vulnerable people who already face other burdens in their lives.

The City completed a climate vulnerability and risk assessment to better understand how future climate conditions could affect life in Port Coquitlam. The results were used to help the City focus climate action to address the highest risks over the shorter and medium term, while still identifying risks that may be low today but could become more significant as local contexts and global climate changes into the future. More information on the approach and outcomes from the assessment is available in supporting documents.

By the numbers.

The City of Port Coquitlam is already relatively resilient to climate change impacts, due in part to the many existing strategies the City has in place for managing hazards such as flooding, drought and extreme heat. The vulnerability and risk assessment considered more than 100 potential climate change impacts on City services and spaces, identifying 31 higher risks, which became the focus for adaptation planning and action.



The highest risks identified in the climate vulnerability and risk assessment for this Plan include:

Extreme heat	• Overheating in municipal buildings and housing, affecting occupant health and safety. • More instances of heat stress, particularly among vulnerable groups, causing higher demand for emergency services and healthcare. • Potential heat stress among municipal staff, especially outdoor workers, affecting staff safety and service delivery.
Water shortage & drought	• Longer-lasting regional water restrictions affecting outdoor water use, or indoor water use in extreme cases. • Drought impacting agricultural productivity and die-back of vegetation in parks and natural spaces.
Wildfires & Smoke	• Poor air quality from smoke events affecting respiratory health and increased demand for healthcare, particularly among vulnerable groups. • Potential supply disruption and increasing need for evacuation and emergency if a wildfire event were to occur.
Storms & stormwater flooding	• Increased stormwater volumes exceeding drainage or sanitary system capacity, causing flooding and potential damage to buildings, homes and roadways. • Potential injury and health impacts from storms and flooding, increasing need for emergency services and support for vulnerable populations. • Potential for major transportation and supply chain disruption.
River flooding & erosion	• Potential for a major river flood event to overtop existing dikes and damage municipal infrastructure, parks, buildings, agricultural lands, and homes within the floodplain. • Potential widespread power outage due to flooding of substations in the floodplain. • Potential for major transportation and supply chain disruption.

Climate-related impacts in your backyard.

During the engagement for this Plan, Port Coquitlam community members shared stories of how climate change is already impacting their lives and properties. This input was used to "ground-truth" climate impacts considered in the City's climate vulnerability and risk assessment and inform adaptation action.

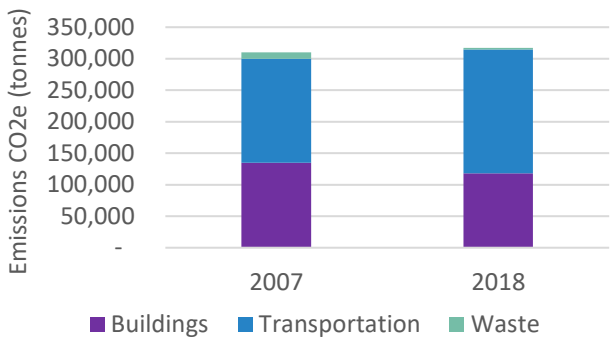
Climate impacts observed by the greatest number of respondents to the Phase 1 survey include:

- Higher summer temperatures causing homes to become uncomfortably hot (38% of survey respondents shared this observation)
- Heavy rainfall causing flooding in parks, on trails, streets and private lawns, and in basements (34% of respondents)
- Hotter, drier summers causing more trees and plants to die in parks, forests and on private property (25% of respondents)
- More intense smoke events happening more often, causing health-related impacts (e.g. among people with asthma) (16% of respondents)
- Fewer salmon seen in creeks, assumed to be due in part to lower creek levels during summer droughts (6% of respondents)

Port Coquitlam's Contribution to Climate Change

Alongside the many impacts from a changing climate that Port Coquitlam could face, the City is also a contributor to climate change. In 2018, Port Coquitlam's community GHG emissions totalled 317,300 metric tons of carbon dioxide equivalent (tCO_2e), including both **corporate** emissions derived from City facilities and operations (0.7% of total 2018 emissions) and **community-wide** emissions derived from the activities of community members and, households and businesses (99.3% of total 2018 GHG emissions).

This represents a 2% increase from the 2007 baseline year described in the City's 2010 *Corporate & Community Climate Action Plan (CCCAP)*, despite the plan's target of achieving an 8% reduction in emissions by 2017. However, when considering Port Coquitlam's population growth of 12% over the period 2007 to 2018, emissions have actually declined by 9% on a *per capita* basis. For comparison, Port Coquitlam's per capita emissions of 5.3 tCO_2e per person in 2018 was slightly better than the Metro Vancouver regional estimate of 5.59 tCO_2e per capita.

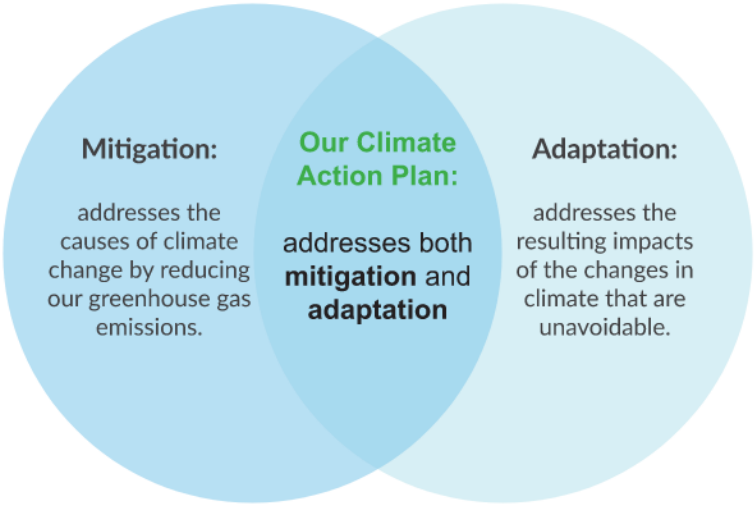


While this does show the results of local, provincial and federal efforts to reduce energy consumption and GHG emissions over the last decade, it is nevertheless important to note that these efforts have been insufficient in achieving the level of reductions necessary to meet the targets outlined in the Paris Agreement. In fact, without any additional action, Port Coquitlam's emissions would further increase as its population grows, increasing its impact on the climate.

Fortunately, the Government of Canada, the Province of BC and Metro Vancouver have already introduced and continue to develop regulations that will drive future GHG emissions reduction. Municipal governments, such as Port Coquitlam, play a critical role in the successful implementation and delivery of these regulations. More information on these regulations and the role Port Coquitlam plays in supporting GHG emissions reduction is provided in Section 4.

3 Developing the Plan

The City of Port Coquitlam's Climate Action Plan is our City's commitment to show regional leadership and collaboration in climate action. It outlines how we will do our part to both **mitigate** (reduce) local greenhouse gas emissions, as well as put proactive measures in place to better **adapt** (prepare) our community, natural spaces, buildings, and infrastructure to climate change impacts and take advantage of opportunities. By taking this integrated, **low-carbon resilience approach,** the Plan prioritizes actions that achieve both mitigation and adaptation benefits. Includes both mitigation actions that reduce greenhouse gas emissions and adaptation actions that aim to reduce the negative impacts of climate change. This plan is aligned with the broader efforts and goals of the Metro Vancouver region and our neighboring cities. Just as climate change globally requires coordinated efforts of all nations and peoples, this plan will require close collaboration with the metro region and Province.



Integration with City Planning Initiatives

The Plan builds on the foundations set in the City's 2010 CCCAP by continuing to implement the actions it outlined while adding new actions that draw on the latest advancements in science, technology, and policy to achieve more ambitious emissions reduction and climate resilience goals. It has been developed to build on outcomes from past and ongoing City planning processes and will, in turn, inform updates to ongoing and future plans and policies in years to come. Key areas for alignment and integration between ongoing City planning processes include:

- Building on priorities and initiatives identified through the City's ongoing **capital**, **asset management**, and **integrated watershed management** planning;
- Ensuring objectives and actions in the Climate Action Plan complement goals set in the City's ***Master Transportation Plan*** and ***Urban Forest Management Plan*****,** both of which were developed in parallel with the climate planning process;
- Using outcomes from the Climate Action Plan to inform financial planning for the **2026/2027 annual budget** and beyond; and
- Informing future updates to the City's ***Official Community Plan*** currently underway.

Developing our Climate Action Plan also involved careful consideration of broader regional planning efforts, including Metro Vancouver's *Metro 2050* plan, which was still underway during the writing of this Plan. This plan does not address Provincial housing legislation passed in 2024.

The Planning Process

The City of Port Coquitlam Climate Action Plan builds on the foundation set in the 2010 CCCAP and ongoing initiatives at the regional, provincial and national scale. The Plan was developed between Spring 2021 and Fall 2022, through the following three phase process:

PHASE 1 – VISIONING

Phase 1 involved developing an understanding of Port Coquitlam's climate action to date and the current climate change context. This involved a background review of City policies and plans, as well as a set of workshops with staff and Council to understand climate actions and impacts to date. This phase also included a technical analysis of current sources of GHG emissions in Port Coquitlam, a summary of regional climate projections, and a climate change vulnerability and risk assessment to understand how a future climate could affect Port Coquitlam's infrastructure, services, health and natural habitats. Public engagement during Phase 1 included a community-wide survey to understand community member concerns and priorities for climate action.

PHASE 2 – PLAN DEVELOPMENT

Phase 2 involved the prioritization of climate action objectives and enabling actions to build on existing initiatives and programs planned at the municipal, regional, provincial and federal levels. It also involved significant engagement with key contributors, rightsholders and the public through targeted meetings, a multi-stakeholder workshop, a public open house, and a second community-wide survey to get feedback on proposed climate action objectives and opportunities.

PHASE 3 – FINAL PLAN

Phase 3 drew on all the feedback provided by City staff, Council and community engagement to refine the final Climate Action Plan into a public document the City can be proud of. This phase also involved focused meetings with City departments and Council to develop an implementation plan to ensure the Plan's successful implementation across City departments.

Principles for Climate Action

Port Coquitlam's climate action planning process was guided by a set of overarching principles that reflect community, staff and Council priorities for success. These principles will also serve as a guiding light for implementation, providing key considerations for designing programs, criteria for evaluating options, and indicators for reporting on progress and success.

EVIDENCE-BASED

Draw on the best available climate science and proven approaches to drive effective action that reduces GHG emissions as much as possible and builds resilience to climate impacts.

PRACTICAL

Design actions to be implementable within the City's context, reflecting a clear understanding of the costs of action and inaction in the short and long term and leveraging efficiencies and external funding and other programs to make action as affordable as possible.

INTEGRATED

Design actions to build on and go beyond actions the City is already leading to ensure the City stays on track to achieve its climate targets in an efficient way. This principle aims to leverage existing systems and capacity, to mainstream a climate lens across the organization, and to encourage collaboration between departments on climate action.

COLLABORATIVE

Partner with neighbouring communities, kʷikʷəƛ̓əm First Nation, community groups, businesses and other partners to amplify the City's impact and influence through regional and cross-boundary initiatives.

EQUITABLE

Ensure that all climate actions are designed using meaningful engagement that captures diverse voices and reflects the needs of key vulnerable and marginalized groups and aligns with the City's reconciliation goals as they are developed over time.

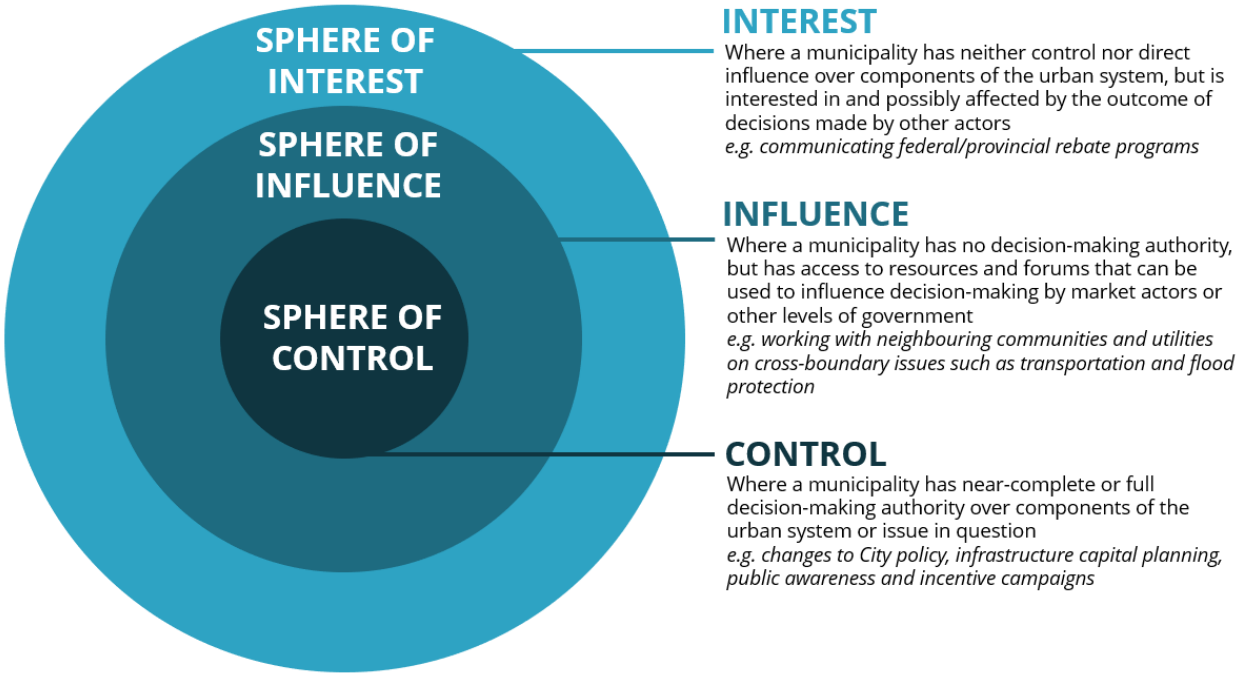
MULTI-SOLVING

Prioritize actions that address multiple climate action and community goals, including reducing GHG emissions, adapting to climate risks, strengthening the local economy, improving community health and wellbeing and protecting local ecosystems. Where reasonable, the City will prioritize nature-based approaches and leverage co-benefits and opportunities that climate change may present.

Opportunities for Amplified Action

The actions in this Plan build on and support many of the plans and programs that are already underway at the national and regional scales. It also builds on other regional planning initiatives, such as Metro Vancouver's *2050 Regional Growth Strategy,* and highlights opportunities for climate action partnerships with neighbouring municipalities and local community groups.

This collaborative and integrated approach is critical to amplify the City's influence to affect change. As such, the City's Climate Action Plan focuses on actions directly within the City's **sphere of control,** while also identifying actions to support initiatives within the City's **spheres of influence** and **interest** that are being led by other organizations and levels of government.



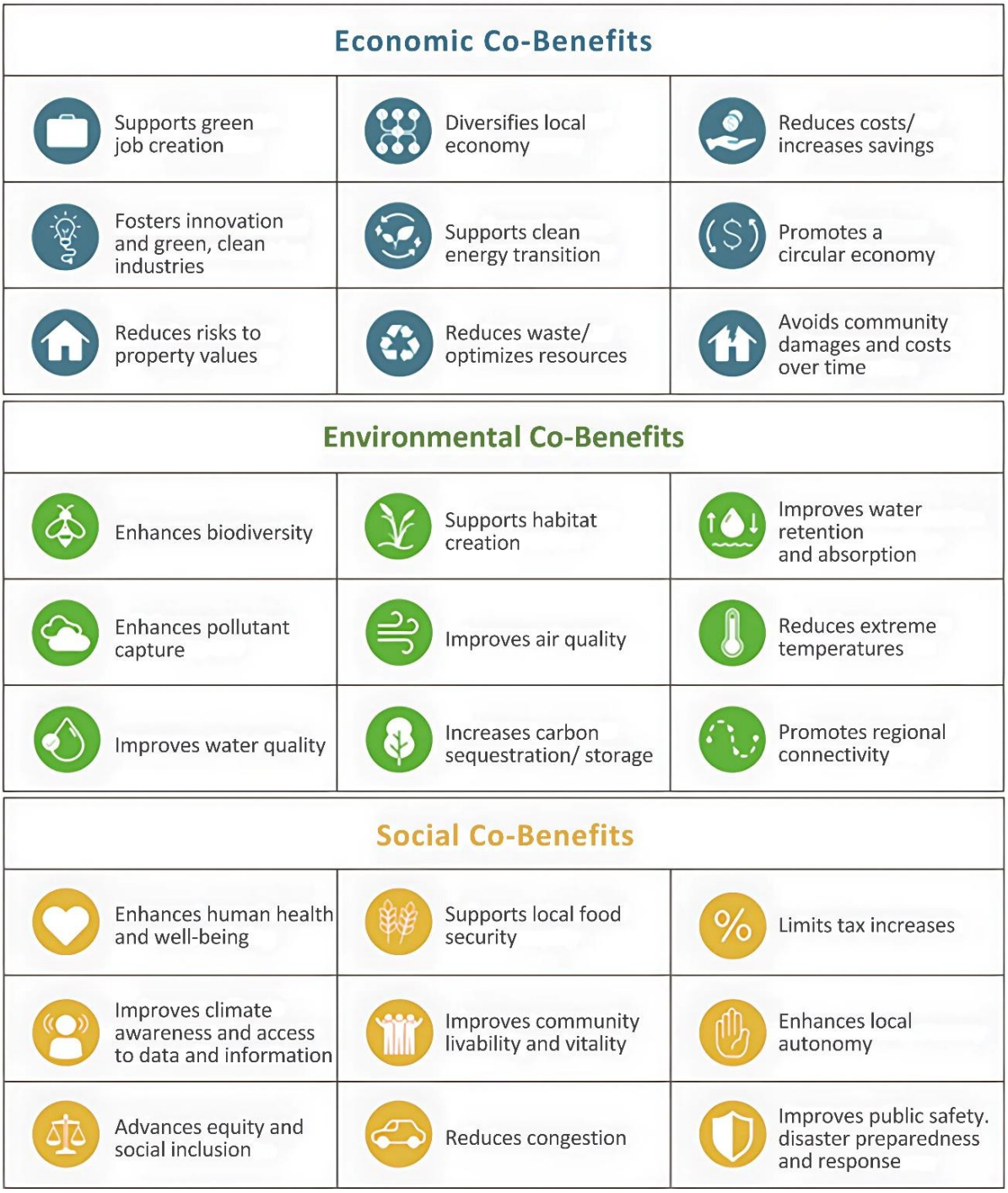
The City of Port Coquitlam's role in building community-wide climate change resilience is therefore one of both a leader and a partner.

As a leader, the City will demonstrate climate action within its sphere of control by integrating mitigation and adaptation measures through in its own internal policies, programs and facilities.	**As a partner**, the City will continue to build relationships with local businesses, community organizations, neighbouring communities and other levels of government. These partnerships will help to ensure information and resources are shared and goals and objectives are aligned, in turn amplifying the impact and effectiveness of resilience-building actions and strategies across the region.

The City will also act as a partner to its community members, who bring valuable insights and experiences to share and have a critical involvement and role to play in the success of this Plan. That is why the Plan includes actions for the City to directly support climate action by households and local businesses and identify actions residents can take to increase their own resilience, both at home and across the community.

Leveraging Co-benefits from Climate Action

There are a broad range of other benefits that climate action can have in our community. Reducing our emissions can mean more green space in our cities, less traffic congestion and associated air pollutants, healthier and more comfortable buildings, and less pollution in our environment. Prioritizing nature-based approaches to manage climate impacts – such as rain gardens to manage stormwater flooding – can also provide ecological habitats and create more enjoyable spaces to spend time in. Other co-benefits from climate action include:



Overview of Climate Action Co-benefits (Source: Simon Fraser University Adapting to Climate Team)

What We Heard

Creating opportunities for diverse voices across our community was critical for creating an effective plan that reflects community needs and priorities.

Guided by a communications and engagement strategy, we engaged over 400 people in 10 different engagement opportunities over the three-phase planning process. Engagement events included a mix of community-wide initiatives and targeted meetings to get input from our diverse community, with a particular focus on connecting with groups often underrepresented in planning processes and disproportionately impacted by climate change, such as youth, lower income and under-housed community members. We received feedback through the following channels and events:

Key feedback we received through engagement include:

A **high level of concern for the impacts of climate change** overall and shared stories of being impacted by recent climate events.

People raised concerns about **the cost implications of climate action for residents** (for example cost for retrofits, tax increases, cost of purchasing an electric vehicle), and the higher burden of these costs for lower income residents.

Top criteria for successful action include **reducing emissions as much as possible** and **improving resilience to climate change.**

The **protection of trees, watersheds and natural areas, climate change adaptation and mitigation are key priorities** for residents.

Participants also raise **barriers to implementing some of the actions** for renters, residents living in stratas or small businesses

Equity was a key consideration raised by many, especially by those with lower income levels.

Participants described many **positive impacts of climate action** (for example, building **complete communities**, infrastructure that encourages **active modes of transportation** that improves **air quality**, **supports active lifestyles**, **reduces noise** and **improves access to green space)**.

Top areas of action suggested by participants included **carbon sequestration**, **land use planning** and **increasing renewable energy**, protecting **natural systems,** using **green infrastructure** and lower-emission **transportation and vehicles**.

There was also emphasis on the positive impacts of actions that support natural systems such as enhancing **ecological diversity**, **improving resident health and well-being** and **building community connections** through involvement in stewardship groups. Further details on what we heard through engagement is included in supporting documents.

4 Our Plan for Climate Action

The IPCC C*limate Change 2023 Synthesis Report (2023)* found that the world is on track to exceed a 1.5 ºC increase in global temperatures above pre-industrial levels in the next three decades if drastic reductions in emissions are not achieved. Despite a dip in global emissions in 2020 due to the global pandemic, emissions have continued to rise every year—though global emissions are growing more slowly. The IPCC finds that global emissions must be reduced by half by 2030 and reach **net zero** by 2050 to keep warming to below a 2.0ºC increase from pre-industrial levels.[x] Achieving this level of greenhouse gas reductions will require an unprecedented transition away from fossil fuel use for energy, transportation, buildings, and industrial systems, combined with a parallel preservation and restoration of carbon-sequestering natural landscapes. However, the IPCC assessments also clearly shows we have the tools needed to achieve this change, especially in countries like Canada.

Recognizing the global imperative to take serious action on climate change, and the importance of advanced economies to lead this transition, the City of Port Coquitlam has set a new emissions reduction target that meets and exceeds the foundation set at the global, national and regional level:

City of Port Coquitlam commits to reducing emissions by 50% below 2007 levels by 2035 and achieve net zero emissions for corporate emissions by 2040 and community emissions by 2050.

Ensuring alignment: Port Coquitlam's targets are in line with those at other scales of government, helping to create alignment and momentum towards the same shared goals:

The Government of Canada has committed to reducing emissions by 40-45% below 2005 levels by 2030 and achieve net-zero emissions by 2050[xi].	**The Province of BC** has committed to reducing emissions by 40% below 2007 levels by 2030 and by 80% by 2050[xii].	**Metro Vancouver** has committed to reducing emissions by 45% below 2010 levels by 2030 and to reach carbon neutrality by 2050[xiii].

Ensuring Alignment

Port Coquitlam's targets are in line with those at other scales of government, helping to create alignment and momentum towards the same shared goals:

Alongside these broad targets, the Climate Action Plan also outlines specific objectives and enabling actions that the City will lead and partner on to address the greatest opportunities for impactful climate action. The Plan is structured around a set of **31 objectives** and includes enabling actions that City departments will lead and partner on in the short term. Many of these objectives will also require future actions but these are inherently subject to a rapidly changing landscape, as such further enabling actions continue to be refined by the City. Objectives and actions are set out under **8 focus areas** over the following pages.

'City Role' describes the City's overall role and sphere of control:

- **Leader**: the City will implement the action within its own internal policies, programs and facilities
- **Partner**: the City will support broader action through collaboration with other governments or organizations

Objectives are either noted as 'short-term' or 'future' objectives.

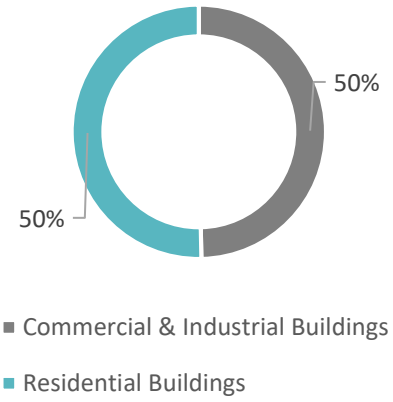
Short-Term	Objectives with short-term enabling actions to be carried out over the next 1 – 10 years.

Future	Objectives with longer-term enabling actions to be refined and carried out over the next 10 years+.

Note that future enabling actions continue to be developed for all objectives.

FOCUS AREA 1: BUILDINGS & ENERGY

Buildings are among the most important places in our communities. They are where many of us work, where we live and interact with others – and also where many of our emissions come from.



Current Context

Technical analysis of Port Coquitlam's city-wide emissions shows that in 2018, **the building sector accounted for 37% of the total community emissions**. About half of these come from residential buildings (including homes, townhouses, apartments, and condos), while the remaining 50% come from other building types (including office, retail, industrial, and publicly owned buildings).

Buildings in Port Coquitlam will also be impacted by more severe future climate conditions:

- Heatwaves causing overheating in homes, municipal buildings, and businesses without good ventilation, cross-breeze or A/C.
- Power outages due to more severe flooding, windstorms, or extreme heatwaves.
- Intense rainfall causing leaks, water damage and mould.
- More intense rainstorms causing flooding and sanitary backups into basements, underground storage and parkades of low-lying properties.
- Increased flood risk to community buildings in the floodplain including City Hall, No. 1 Fire Hall, and the PoCo Community Centre.

Climate Action To-Date

The City of Port Coquitlam already has several strategies underway to support more low-carbon resilient homes and buildings, including:

- ✓ Adopted advanced requirements under the Province of BC's Energy BC Energy Step Code to ensure improved energy efficiency in new homes and buildings.
- ✓ City development permit guidelines encourage energy-efficient design and renewable energy use.
- ✓ Distributing information about options and rebate programs to encourage energy efficiency retrofits and Energy Star upgrades for appliances and windows.
- ✓ Conducting an environmental audit of existing municipal facilities and operations.

Our Plan for Action

The City has identified four overarching **Buildings and Energy ("BE") objectives** to achieve its climate action targets and build resilience in municipal and private buildings. These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
BE 1	**Ensure new homes and buildings are energy efficient, low-carbon, and support healthy, comfortable, durable and resilient spaces**	
BE 1.1	Adopt Provincial timelines for the BC Energy Step Code and BC Zero Carbon Step Code.	Leader
BE 1.2	Review and update policies, regulations and guidelines to address provincial legislation, remove barriers and encourage energy-efficient, low-carbon, resilient design (e.g. designing based on future-shifted weather files, prioritizing passive design and cooler building materials, reducing embodied carbon, promoting energy efficiency, enhanced on-site stormwater management criteria, encouraging low impact development or green infrastructure, providing floor area ratio bonuses or height and overhang exemptions).	Leader
BE 1.3	Advocate to the Province to include resilience measures into the B.C. Building Code.	Partner
BE 1.4	Advocate for expanded financial incentives for low-carbon resilient measures, in partnership with utility companies and Province.	Partner
BE 2	**Support the widespread retrofit of existing homes, multi-family residential and other buildings to be energy efficient, low-carbon and resilient**	
BE 2.1	Continue to implement the Kingsway Green Energy Corridor project which includes proposals to recover wastewater heat from the McLean Avenue pump station for use at Port Coquitlam Community Centre and to establish a new bio-energy centre serving a district energy network providing clean energy to the Kingsway Industrial Corridor.	Leader
BE 3	**Demonstrate leadership by ensuring new municipal facilities and retrofits of existing facilities are low carbon and climate resilient**	
BE 4	**Support the widespread adoption of on-site renewable energy systems that are resilient to future climate conditions**	
BE 4.1	Advocate with the Province and BC Hydro for continued decarbonization of the electric grid.	Partner
BE 4.2	Advocate and work with utility partners to identify capacity-constrained neighbourhoods, streamline electrical service upgrades, enhance service resiliency, and keep rates affordable.	Partner
BE 4.3	Provide and share out on guidance for how to make renewable energy systems more resilient to key climate hazards, including more intense rain and wind storms.	Partner

Key Opportunities & Benefits from Action

- Reducing or eliminating natural gas from our homes and buildings would result in a 95% reduction in building sector emissions, contributing 40% to total emissions reductions by 2050.
- Lower emissions and higher energy efficiency homes and buildings translate into lower energy bills, fewer indoor air pollutants, quieter and more comfortable spaces, and more durable structures.
- Switching from gas to electricity creates the opportunity to install heat pumps, which can provide both heating and cooling in homes.
- The City can leverage the many ongoing climate action programs at the regional, provincial and federal scales, including the Federal Greener Homes program, the Province's CleanBC Roadmap to 2030 and Metro Vancouver's work to develop building performance standards to reduce emissions in existing commercial buildings.

Citizen Action! Ways you can support climate action in your homes include:

- Replace your natural gas-fired boiler with a heat pump that can provide both heating and cooling.
- Upgrade your appliances to high energy efficiency models.
- Find and seal air leaks in your building (e.g. around windows, chimneys, panels, etc.).
- Ask your landlord or realtor for information on energy and emissions performance and flood risk when looking for a new home.

FOCUS AREA 2: TRANSPORTATION AND LAND USE

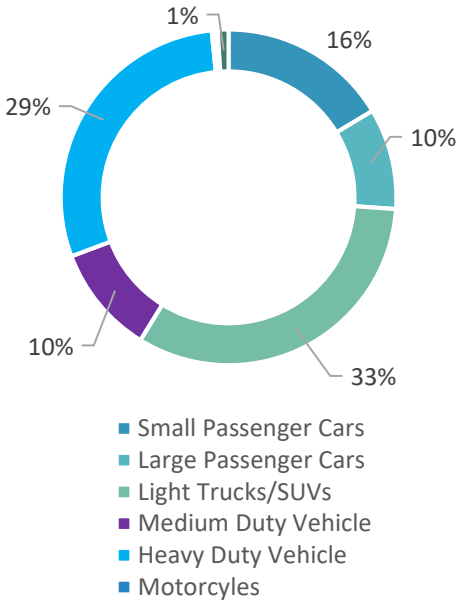
The way we design our communities and how we get around have major implications for a city's overall emissions, as well as many other dimensions of everyday life, like how easy it is to get from one point to another, and how we feel along the way.

Current Context

In 2018, **transportation emissions accounted for 62% of Port Coquitlam's total community emissions**. Nearly 60% of these came from cars, small trucks and SUVs, while the remainder mostly came from medium- and heavy-duty vehicles.

Unfortunately, **total transportation emissions have increased by 19% since 2007.** This increase is primarily due to a rise in emissions from the medium-duty and heavy-duty vehicles (e.g. trucks, vans, etc.) that serve the community and travel through it. An increase in the number of overall trips taken by these vehicles, coupled with few improvements in fuel economy for this vehicle class, are the primary reasons for this increase.

Fortunately, emissions from cars and lighter-duty vehicles have declined by 5% since 2007, mainly driven by improvements in fuel economy and a slight reduction in the number of overall trips taken. Buses accounted for only 1% of total emissions, while motorcycles and motorhomes together represented less than 1%.



Climate change can impact transportation systems and land use in Port Coquitlam by:

- More severe flooding and storms blocking trails, sidewalks, roadways & supply chains.
- Higher flood and wildfire risk affecting how much land that is safe to build on.
- Hotter summer temperatures making active & public transportation less comfortable.

Climate Action To-Date

The City of Port Coquitlam already has strategies underway to support lower-carbon and resilient transportation and land uses, through the Master Transportation Plan, including:

- ✓ Updating the City's Master Transportation Plan, with a focus on urban street design, sustainability, and diverse modes--including walking/wheeling, cycling/rolling, trails, transit, and cars and trucks (completed in 2024).
- ✓ Currently operating eight hybrid vehicles and two electric Zambonis as part of the City fleet.
- ✓ Completing an E3 assessment of City vehicle GHG emissions and performance in 2018.
- ✓ Advocating for improved transit connections to Port Coquitlam.
- ✓ Encouraging transit-oriented, higher density and mixed-use development with more multi-functional local streets in the Official Community Plan and a transit shelter expansion program.
- ✓ Encouraging improved pedestrian and transit facilities through rezoning applications.
- ✓ Actively partnering with schools to encourage walking and biking to school.

Our Plan for Action

The City has identified six overarching **Transportation and Land Use ("TL") objectives** to achieve its climate action targets and enable more low-carbon resilient transportation and land use planning. These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
TL 1	**Support the widespread adoption of electric/zero emissions vehicles**	
TL 1.1	Work with local businesses (e.g. gas stations) and stratas to expand the public charging network and provide charging stations on City and private property. Explore appropriate user fees (e.g. paid parking model) and the possibility of selling or using advertising space at chargers.	Partner
TL 1.2	Advocate for Zero Emission Vehicle (ZEV) incentives as part of any future regional mobility pricing.	Partner
TL 1.3	Investigate merits and options for EV bulk purchase programs for municipal and community fleets.	Leader
TL 1.4	Provide public education on EV opportunities and benefits, including promotional events that allow residents to test drive EVs.	Partner
TL 2	**Design or revitalize communities to support walking, cycling, rolling, trails, and public transportation as primary modes of transportation, with safer streets and more regional transit connections.**	
TL 2.1	Provide dedicated funding to implement actions identified in the City's Master Transportation Plan (underway), particularly those related to increasing transit and active modes of transportation and implementing traffic calming measures.	Leader
TL 2.2	Continue to advocate to Metro Vancouver and transit providers for improved transit service to Port Coquitlam commercial centres, neighbourhoods and schools, including more frequent service and affordable rates for students and seniors.	Partner
TL 2.3	Continue to participate in the Tri-Cities ride share planning process and conduct outreach to Ride Share operators to explore opportunities to expand car and bike share range and options in Port Coquitlam and support electrification of carshare fleets.	Partner
TL 2.4	Continue to enhance and expand the existing multi-use trail network and wayfinding to connect neighbourhood centres, transportation corridors, and recreational amenities for people of all abilities.	Leader
TL 2.5	Encourage staff to take alternative modes of transportation by supporting carpooling and other strategies	Leader
TL 2.6	Carry out an assessment of emergency route redundancy across the City for a range of climate-related and compound hazards, with consideration for emergency access to kʷikʷəƛ̓əm First Nation lands.	Leader
TL 3	**Integrate a strong climate lens into future land use planning and policy development including emissions reduction, climate-related risk reduction, and low-carbon resilience**	
TL 3.1	Develop a floodplain policy and bylaw along with flood and geohazard DPAs with guidelines for new development and infrastructure placement in high risk areas.	Leader

TL 3.2	Review and as necessary update the City's Flood Construction Levels (FCL) and floodplain mapping/guidance in the City's OCP once floodplain mapping and technical flood risk studies have been completed.	Leader
TL 3.3	Work with the real estate sector to build agent and homeowner awareness about flood risk and encourage risk disclosure to prospective buyers.	Partner
TL 4	**Transition the municipal vehicle fleet to zero-carbon vehicles**	
TL 4.1	Assess municipal fleet and develop implementation plan for phasing out fossil-fuel combustion municipal vehicles where possible over the next 15 years.	Leader
TL 4.2	Increase EV charging infrastructure in existing municipally owned and operated parking garages and public works yards, and increase EV charging in new municipal garages and yards.	Leader
TL 5	**Support the decarbonization of medium and heavy-duty vehicle fleets**	
TL 5.1	Advocate to school districts to champion electric school bus pilots and policies.	Partner
TL 5.2	Advocate to BC Trucking Association (BCTA) to continue working with the Ministry of Transportation on strategies for reducing emissions from trucking.	Partner
TL 6	**Reduce emissions from road construction and maintenance while increasing the resilience of roadways to climate hazards**	

Key Opportunities & Benefits from Action

- Walking, cycling, and rolling, taking public transit, and making the switch to electric vehicles could together result in a 90% reduction in transportation sector emissions by 2050, contributing 57% to total emissions savings by 2050.
- Shifting away from gas- and diesel-powered vehicles towards low-emissions alternatives will reduce emissions, while also reducing air pollution levels, creating quieter and safer streets, and creating more opportunities to run into our neighbours and friends.
- The City can leverage and support the Province of BC's goal of ensuring that Zero Emissions Vehicles (ZEVs) will account for 26% of new vehicle sales of light duty vehicles by 2026, 90% by 2030, and 100% by 2035, implemented through the Province's ZEV Act[xiv], and the Federal Government's updated fuel economy standards, set through the National Passenger Automobile and Light Truck Greenhouse Gas Emission Regulations[xv].

Citizen Action! Ways you can help reduce emissions from travel include:

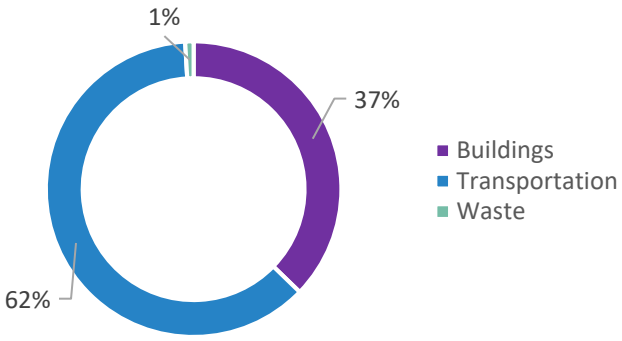
- Walk or cycle for all or a portion of your daily commute to school or work.
- Explore purchasing an electric vehicle when your current vehicle is up for replacement.
- Consider an e-bike as a main mode of transportation.

FOCUS AREA 3: SOLID WASTE AND MATERIALS

The things we buy, use, and throw away not only have an impact on our environment and in our landfills, but also for the emissions we create as a community.

Current Context

Solid waste, or the garbage or refuse we dispose of, releases emissions when it decomposes in the landfill, creating methane – a powerful greenhouse gas with 25 times the global warming potential than carbon dioxide. **Port Coquitlam's emissions associated with waste are small compared to the building and transportation sectors, accounting for just 1% of the community's total emissions in 2018.**



The overall trend in emissions from waste is also a good one: total solid waste emissions have reduced by 71% since 2007. This reduction is mainly the result of Metro Vancouver's *Integrated Solid Waste and Resource Management Plan*[xvi], approved in 2010, which sets goals, targets and actions to reduce waste generation, maximize reuse, recycling and material recovery, and recover from the waste stream.

Climate change can impact solid waste collection systems in Port Coquitlam by:

- Delays in waste collection in extreme heat due to concerns for worker safety and/or blocked roadways from flooding or windfall.
- Warmer summer temperatures and more heatwaves creating odour issues.
- High wind events causing waste bins and materials to scatter to neighbouring properties and ecological habitats.

Climate Action To-Date

The City of Port Coquitlam already has strategies underway to support lower-carbon transportation and land uses, including:

- ✓ Leading a robust waste collection system with garbage, organics and recycling pick-up.
- ✓ Increased focus on material re-use for capital projects (e.g. reusing pea gravel).
- ✓ Leading educational programs and initiatives to improve City staff and citizen understanding of the importance and opportunities for materials resource recovery.
- ✓ Hosting City-wide Repair Cafés and Garage Sales to encourage use of second-hand items.

Our Plan for Action

The City has identified four overarching **Solid Waste and Materials ("SW") objectives** to achieve its climate action targets and support solid waste reduction and diversion These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
SW 1	**Increase composting and recycling opportunities for residents and businesses**	
SW 1.1	Work with waste haulers to ensure occupants of commercial, institutional, industrial properties have disposal options for organics and recycling, through mandates on owners or other avenues.	Partner
SW 1.2	Work with waste haulers and stratas to ensure all residential multi-family properties have disposal options for organics and recycling on-site, through mandates on multi-family building owners and strata councils, or other avenues.	Partner
SW 1.3	Provide educational materials about where to dispose of harder-to-recycle items and to encourage landfill diversion and materials resource recovery.	Leader
SW 1.4	Work with community organizations, schools, and kʷikʷəƛ̓əm First Nation to deliver educational materials and lead waste reduction and recycling initiatives (e.g. Eco-schools program, park/shoreline cleanups, zero-waste school cafeteria programs, car free days etc.).	Partner
SW 1.5	Continue to work with Metro Vancouver to advocate for reducing emissions from waste collection vehicles (e.g. incentives for fleet replacement).	Partner
SW 2	**Support a shift to a circular economy to reduce community-wide embodied emissions**	
SW 2.1	Encourage embodied carbon tracking and reporting requirements to permit applications for Part 3 buildings and/or advocate to Province for province-wide requirements.	Leader / Partner
SW 2.2	Continue to host the City-wide Garage Sale annually and Repair Café throughout the year and establish metrics for tracking and reporting on success and impact from these events.	Leader
SW 3	**Move towards zero-waste municipal operations**	
SW 3.1	Improve annual tracking of corporate operations waste streams, e.g. weight-based metering.	Leader
SW 3.2	Ensure all municipal facilities have equal availability of recycling, organics, and waste disposal with support resources to encourage use.	Leader
SW 3.3	Establish programs to encourage sharing economy and reuse culture among staff, such as an online notice board for internal sales postings.	Leader
SW 4	**Promote waste reduction efforts by residents and businesses**	
SW 4.1	Establish strategies to reduce emissions intensity of corporate waste collection services/vehicles.	Leader
SW 4.2	Partner with local groups and kʷikʷəƛ̓əm First Nation to deliver a workshop series & educational materials targeted at helping local businesses reduce packaging and waste and use lower-carbon materials where reasonable.	Partner
SW 4.3	Work with Metro Vancouver to investigate the potential for a biosolids beneficial reuse facility in Port Coquitlam.	Leader

Key Opportunities & Benefits from Action

- Further reducing waste and shifting to a circular economy could result in an 70% reduction in community emissions from solid waste disposal, contributing 1% to total emissions savings.
- Reducing solid waste and diverting recycling and organics from landfills can reduce emissions, save on household costs, and improve the City's natural environment.
- Creating a circular economy in which materials are not disposed of but shared, repaired or repurposed for new uses and reduces the need for natural resources to be excavated, transported, refined and manufactured into new products. It can also provide opportunities to bring community members together in central hubs at the building or neighbourhood scale designed to share or trade household items.
- The City can work with local businesses, neighbouring municipalities and the region to streamline and improve waste collection, as well as find new opportunities to divert additional products from the landfill.

Citizen Action! Ways you can reduce solid waste from your home or business include:

- Host "stuff swaps" with friends and neighbours.
- Consider borrowing or sharing tools instead of purchasing your own, or host a tool share.
- Replace single-use items such as coffee cups and disposable bags with reusable items.

FOCUS AREA 4: CRITICAL INFRASTRUCTURE

Infrastructure comprises the network of often unnoticed facilities, pipes, and other structures that support the critical services such as drinking water, sanitary services, roads, flood protection, and electricity that can both contribute to and be impacted by a changing climate.

Current Context

The City of Port Coquitlam owns and operates over $1.3 billion in infrastructure assets, including facilities, roads and pathways, drainage and flood infrastructure. The City collaborates with Metro Vancouver to deliver drinking water and sanitary services and receives electricity, natural gas, telecommunications and other important services from third-party providers such as BC Hydro.

Critical infrastructure represents a relatively small proportion of Port Coquitlam's emissions when looking at its operations – less than 1% of the community's overall emissions. However, it can be vulnerable to climate change hazards, which can damage infrastructure assets and disrupt the essential community services they deliver. Due to the fact that Canadian building codes and standards have historically been based on past climate conditions, much of the infrastructure in Port Coquitlam is not yet designed to accommodate future climate change, including higher rainfall and river flows, hotter temperatures, and more frequent poor air quality events.

Climate change can impact critical infrastructure in Port Coquitlam by:

- Overheating in municipal buildings without air conditioning or good cross-ventilation.
- More poor air quality events causing smoke build up on municipal buildings without advanced air filtration.
- More severe droughts causing longer and more extreme levels of region-wide watering restrictions.
- More intense rainfall overloading the drainage and sanitary system due to cross-connected storm, roof and foundation drains.
- Higher risk of river flooding overtopping the City's existing dikes and damaging critical infrastructure in the floodplain:
  - Major roadways,
  - City sanitary pump stations and trunk sewers,
  - Both BC Hydro electrical sub-stations, and
  - Key municipal facilities including City Hall, No. 1 Fire Hall, and the PoCo Community Centre.

Climate Action To-Date

The City of Port Coquitlam already has strategies underway to build low carbon resilience of critical infrastructure and services, including:

- ✓ Enforcing summer watering restrictions under Metro Vancouver's Drinking Water Conservation Plan through local bylaws and initiatives.
- ✓ Managing the existing network of dikes to protect the City from river flooding.
- ✓ Investigating floodplain risk and resilience, including potential updates to the City's flood construction level and development regulations in the floodplain.
- ✓ Managing stormwater hazards through the City's Integrated Watershed Management Plans and upgrades to drainage design criteria and pump stations for future climate.
- ✓ Developing asset management plans that guide the management and upgrades of City infrastructure, while taking future climate conditions into account.

Our Plan for Action

The City has identified four overarching **Critical Infrastructure ("CI") objectives** to achieve its climate action targets and build resilience into municipal and third-party infrastructure and critical services. These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
CI 1	**Integrate a climate lens into infrastructure planning and capital projects to improve the resilience of critical municipal systems and services (e.g. water, wastewater, drainage) to current and future climate conditions and hazards**	
CI 1.1	Conduct more detailed condition and risk assessments of city-owned critical infrastructure within floodplain areas to identify specific upgrades, floodproofing, and/or resilience measures.	Leader
CI 1.2	Incorporate climate risks and resilience into the City's Asset Management Strategy to help prioritize renewal of city-owned assets.	Leader
CI 1.3	Work with Metro Vancouver and kʷikʷəƛ̓əm First Nation to understand the flood risk and vulnerability of the regional sanitary pump station and trunk sewer and implement strategies to reduce wet weather flows and build resilience.	Partner
CI 1.4	Require consideration of future climate conditions and resilience strategies in the design and construction of City-owned infrastructure.	Leader
CI 1.5	Complete the development of Integrated Watershed Management Plans for all developed watersheds, and implement IWMP recommendations.	Leader
CI 2	**Use a combination of flood resilience approaches and upgrades to river flood protection infrastructure to meet current and future climate conditions and hazards**	
CI 2.1	Update the City's floodplain mapping and technical flood risk studies and develop a comprehensive and integrated city-wide flood management strategy to prioritize flood and erosion risk reduction strategies.	Leader
CI 2.2	Continue to collaborate with the City of Coquitlam and the kʷikʷəƛ̓əm First Nation on management of flood risk, erosion, sedimentation and drainage, recognizing the interdependence of the City's flood and erosion protection and drainage systems with these other jurisdictions.	Leader / Partner
CI 2.3	Maintain City-managed dikes through appropriate operations and maintenance practices including annual inspections, required maintenance and repairs.	Leader
CI 2.4	Continue to participate in the Fraser Basin Council-led Lower Mainland Flood Management Strategy process to ensure the latest regional data, approaches and funding sources can support Port Coquitlam's flood management.	Partner
CI 2.5	Update City's existing Flood Evacuation Plan (prepared in 2007, updated in 2013) regularly, based on updated flood risk information and changes to City departments, contacts, infrastructure, and land use, and consider expanding it to consider more aspects of corporate and community emergency preparedness	Leader

CI 3	**Promote water conservation measures and other strategies to build water system resilience to drought and heat waves**	
CI 3.1	Incorporate consideration of future climate conditions and hazards as part of future updates to the City's Water Utility Emergency Response Recovery Plan (2014).	Leader
CI 3.2	Partner with local groups to deliver education programs promoting behaviour change and sustainable use of water, and provide incentives for rainwater re-use (e.g. rain barrel program).	Partner
CI 3.3	Investigate opportunities to use non-potable water (e.g. rainwater or grey water harvesting) for City operations, either temporarily or permanently.	Leader
CI 3.4	Collaborate with Metro Vancouver REAC Water Sub-committee on best practices for implementing the region's Drinking Water Conservation Plan and Drinking Water Management Plan commitments relating to climate change and water conservation.	Partner
CI 3.5	Collaborate with Metro Vancouver REAC Liquid Waste Sub-committee on best practices for implementing the region's Liquid Waste Management Plan commitments relating to climate change and sustainable use of resources.	Partner
CI 4	**Explore opportunities to reduce emissions for the construction of new municipal infrastructure and operation of existing infrastructure**	
CI 4.1	Adopt a bylaw to set waste diversion targets and increase recycling from demolition, construction, and land clearing for municipal projects.	Leader

Key Opportunities & Benefits from Action

- Ensuring that infrastructure upgrades and construction are designed with future climate conditions in mind.
- Exploring opportunities to upgrade City dikes to account for higher flood risk under future climate conditions and support regional initiatives underway to develop a province-wide Flood Strategy to help communities in high flood risk areas better prepare.
- Reducing the "embodied emissions" that go into producing materials used for its construction, including concrete, steel and others.
- Working with neighbouring local governments to leverage available grant funding programs from UBCM and other groups that encourage cross-jurisdictional collaboration to enhance the regional impact of flood protection on public and private lands.

Citizen Action! Ways you can help reduce the impact of climate change on critical community services include:

- Follow summer water restrictions and conserve water further by installing lower-flow appliances, using less water-intensive landscaping, and rainwater reuse for watering.
- Install backflow preventers at connection points to the municipal sanitary system to avoid backups and basement flooding during intense rainstorms and river flood events.
- Help reduce flood risk on your property by reducing impermeable surfaces (e.g. paved driveways), ensuring gutters are in good condition, and moving important items higher.

- Report any damage you see to City infrastructure, including from climate-related hazards (e.g. flooding, wind storms) using the City's Sort and Report app, service request webpage, or by calling the Public Works support line (604-927-5496).

FOCUS AREA 5: NATURAL SYSTEMS & GREEN INFRASTRUCTURE

Port Coquitlam's streams, wetlands, forests, and parks provide vibrant habitats for local plant and animal species and beautiful natural spaces for recreation in our community. These natural systems also provide important ecosystem services that support municipal infrastructure, with creeks and greenspace capturing rainwater and trees keeping the City cool during summer heatwaves. Natural spaces will become more important as the community continues to grow.

Current Context

Port Coquitlam has ample natural resources that make our City a beautiful place to live, work and play. Major creeks, including Maple Creek and Hyde Creek carry water from the coastal mountains down to the Fraser, Coquitlam and Pitt Rivers. Wetlands including DeBoville Slough, Reeve Slough, and Wilson/Colony Farm provide important natural habitats and also help to improve water quality and reduce pollution from road runoff. The City's many parks and forested lands also provide critical natural habitats and abundant recreational spaces for residents and visitors to enjoy. Unfortunately, the health and biodiversity of our local ecosystem is already under threat from a wide variety of sources ranging from pollution from runoff into local waterways, to poor development practices, to competition with introduced and invasive species such as knotweed.[xvii]

Climate change can impact local ecosystems in Port Coquitlam by:

- More severe heatwaves and drought causing tree die-back and negatively affecting plant, fish and wildlife health.
- Increased risk of river flooding affecting shoreline habitats and erosion.
- More intense rain and wind storms and river flooding damaging City parks.
- Extreme weather events will continue to impact the availability and maintenance of park infrastructure.

Climate Action To-Date

The City of Port Coquitlam already has strategies underway to enhance natural areas and promote green infrastructure, including:

- ✓ Leading the City's Greener City program to engage and involve the community in meeting City environmental commitments.
- ✓ Drafting an Urban Forest Management Plan to protect tree health, expand the canopy, and enhance current management practices.
- ✓ Requiring new tree planting for new developments through our Tree Bylaw (2019).
- ✓ Completing outstanding Integrated Watershed Management Plans and implementing the recommendations into capital and operational plans
- ✓ Working with Metro Vancouver and local stewardship groups on habitat restoration, species at risk protection, and biodiversity initiatives.
- ✓ Actively working to plant more climate-resilient species and control the spread of invasive plants (e.g. knotweed) in City parks and property.
- ✓ Working to conserve large natural areas including Coquitlam River corridor and Hyde Creek Nature Reserve.

Our Plan for Action

The City has identified four overarching **Natural Systems & Green Infrastructure ("NS") objectives** to achieve its climate action targets and build resilience into natural spaces and assets. These objectives are summarized below along with the City's short-term enabling actions.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
NS 1	**Recognize and enhance the environmental services provided by the City's natural assets and green infrastructure to low carbon resilience and carbon sequestration.**	
NS 2	**Seek opportunities to increase local sequestration while increasing community co-benefits.**	
NS 2.1	Establish dedicated municipal funding to implement recommendations from the City's Urban Forest Management Plan (underway), including increased canopy targets, tree protection measures, climate resilient/diverse species selection, and invasive species management.	Leader
NS 3	**Make urban forest, landscaping, and parks more tolerant of flooding, extreme heat, drought, and wildfire.**	
NS 3.1	Update the City's Park Plan to incorporate climate change and resilience strategies.	Leader
NS 4	**Enhance ecological diversity and build the resilience of natural ecosystems within the City to future climate conditions.**	
NS 4.1	Maintain and expand the City's Invasive Plant Management Program to protect ecological diversity and the ecological health of natural ecosystems, working with kʷikʷəƛ̓əm First Nation and local stewardship groups where possible.	Leader
NS 4.2	Introduce requirements for green stormwater infrastructure and structural water quality capture treatment in industrial areas (e.g. treatment wetlands, Stormceptors) to reduce untreated runoff from pollutant-generating surfaces (e.g. roads, parking lots, etc.) from entering the City's streams and drainage systems.	Leader

Key Opportunities & Benefits From Action

- Prioritizing nature-based solutions to respond to climate change can provide a broad range of benefits, including reducing risk to people and infrastructure while enhancing habitats and creating more greenspace. Wetlands, creeks and vegetation can enhance City drainage, support cooling in summer months, sequester carbon, and reduce erosion along creek and river banks.
- Partnering with local stewardship groups and large landowners to support restoration of local ecosystems can have broad-reaching impacts across the community, including reducing invasive species, providing space for more native plant species and enhancing habitat for pollinators and fish.

Citizen Action! Ways you can support ecological restoration and climate resilience include:

- Plant trees or native plants on your property and help water local street trees during times of drought.
- Avoid or remove any invasive plants in your garden and ask your local nursery to help you replace them with native species that provide local habitat and that are drought tolerant.
- Join or support local community groups dedicated to rehabilitating the local environment, such as removing invasive species or cleaning up waterways.

FOCUS AREA 6: CITY OPERATIONS, PLANNING & GOVERNANCE

Successful climate action at the City level will require commitment from across City departments, working together to achieve shared goals for climate mitigation and adaptation in City operations and programs.

Current Context

The City already integrates climate action into many of its programs and policies, which helps bring a climate lens to corporate operations and municipal services. The Port Coquitlam ***Official Community Plan*** (OCP, 2013) already directly incorporates climate considerations into its goals and policies, including Goal #1 (to build more compact communities that support lower transportation emissions) and Goal #3 (to protect the environment and respond to climate change impacts). Including climate conditions into the OCP helps ensure climate considerations filter down into many aspects of City planning and operations.

While many other City programs and policies touch on climate considerations, there is still a need to embed climate objectives and considerations more deeply throughout key plans, including the City's 2019 – 2022 priorities document, financial plans, ***Environmental Strategic Plan*** (2011), ***Long-range Financial Plan*** (2020), Emergency Response Plan (2022), heritage and parks planning.

Climate change can impact operations and programs in Port Coquitlam by:

- Overheating, poor air quality, flooding and storms can all threaten staff safety and ability to perform necessary work.
- More severe climate conditions can increase the maintenance needs for City infrastructure and properties.
- Responding to climate hazards can burden municipal finances and staff time, reducing resources available for other City programs.

Climate Action To-Date

The City of Port Coquitlam already has strategies underway to support low-carbon resilience throughout City operations and programs:

- ✓ Including criteria requiring environmental sustainability as part of procurement documents
- ✓ Completing a Hazard, Vulnerability and Risk Assessment of City operations
- ✓ Carries out peer education among staff on new and emerging programs e.g. Clean BC
- ✓ Has robust work-from-home capabilities to support staff productivity without needing to travel into the office everyday
- ✓ Working in collaboration with the Tri-Cities to share out on resources and incentive programs for climate resilience (e.g. heat pumps)

Our Plan for Action

The City has identified two overarching **City Operations, Planning & Governance ("CO") objectives** to achieve its climate action targets and build resilience into City operations and governance. These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
CO 1	**Improve the City's preparedness and agility to respond and recover from climate-related hazards**	
CO 1.1	Upgrade City staff health and safety policies to account for climate-related hazards, including protocols for indoor and outdoor staff during extreme heat or air quality events.	Leader
CO 1.2	Establish a staffing redundancy and/or cross-training program to support business continuity during catastrophic events that may cause major transportation barriers and make it difficult for critical staff to reach key facilities.	Leader
CO 1.3	Enhance data collection and monitoring for climate impacts in Port Coquitlam to inform City maintenance, capital planning, and response, including leveraging the Emergency Program's event tracker and work order structure to track emergency response costs.	Leader
CO 1.4	Work with power and telecommunication providers to understand and support mitigation of risk from service disruption from storms and flooding.	Partner
CO 1.5	Consider partnership opportunities with the school district, community organizations, kʷikʷəƛ̓əm First Nation or other groups who have facilities that could support extreme weather response shelters.	Partner
CO 1.6	Engage residents and businesses on ways they can adapt, support neighbours, or otherwise prepare for single and combined climate change impacts (e.g. promote sustainable drainage techniques, plant appropriate tree species, emergency preparedness).	Leader
CO 2	**Incorporate a climate lens into City programs and decision-making**	
CO 2.1	Build climate awareness and best practices across City departments through presentations on how departments can support emissions reduction and resilience in their work, and disproportionate impacts climate change can have on minority groups, including Indigenous communities	Leader
CO 2.2	Establish a Climate Action Policy to support consistent implementation and clear responsibilities across the organization.	Leader
CO 2.3	Provide more detailed requirements in the City's Purchasing Policy environmental clause that draws on best practices to reduce operational and embodied carbon emissions across City departments, programs and projects.	Leader
CO 2.4	Establish a funding strategy to support the implementation of the Climate Action Plan.	Leader

Key Opportunities & Benefits from Action

- Mainstreaming a "climate lens" into the City's decision-making and program development process will ensure climate change and co-benefits are considered before major investment decisions are made.
- Corporate champions who actively integrate climate considerations into their department's programs will play a key role in climate action success.
- Creating opportunities for collaboration across departments will help develop programs and projects that balance different perspectives, such as balancing costs for climate action and impacts on diverse groups.

Citizen Action! Ways you can support more low-carbon resilient City operations include:

- Reach out to the City to get involved in climate action initiatives planned and underway, such as opportunities to join citizen committees.
- Provide feedback on City policies and initiatives by responding to community-wide surveys, attending open houses and other events.

FOCUS AREA 7: COMMUNITY HEALTH & WELLBEING

Climate change can have wide-reaching impacts on human health and wellbeing, from increased demand for healthcare and support services during flooding, heatwaves and poor air quality events, mental health impacts from barriers to recreation and cultural activities, and eco-anxiety from climate change more broadly. These impacts are expected to disproportionately affect those people who are already vulnerable due to pre-existing conditions such as asthma or lower access to support resources (e.g. new Canadians, lower income).

Current Context

Port Coquitlam's *Emergency Response Plan* (2022) outlines actions and responsibilities that are put in place when hazards befall the community, many of which are expected to become more severe under future climate conditions. In the event of emergencies, the City's response is led out of the Emergency Operations Centre at No. 1 Fire Hall, in coordination with broader emergency response partners at the Provincial and regional scale.

The City is also home to a wide range of third-party health and support services, including the pharmacies, health clinics, and long-term care facilities that provide critical support for the community's health and wellbeing every day. In addition, the Eagle Ridge Hospital in neighbouring Port Moody provides a full suite of medical programming and is easily accessible from the Lougheed Highway. Other key support services are delivered to diverse needs groups through the ACCESS Youth Outreach Centre, New View Society, and other shelter and community support services.

Climate change can impact community health and wellness in Port Coquitlam by:

- Increasing risk of injury and/or evacuation during extreme events, such as flooding, wind storms and wildfires.
- More severe heatwaves increasing the risk of heat stress and medical service demand, particularly among key vulnerable groups.
- Health impacts from poor air quality events, particularly among people with respiratory issues or outdoor workers.
- Increasing climate change-related anxiety and mental health impacts (e.g. due to barriers to outdoor cultural or recreational activities).
- Power outages from extreme heat, flooding or storms affecting community members who are medically dependent on power.
- Disproportionate impacts on key vulnerable groups with pre-existing conditions or fewer support resources.

Climate Action To-Date

The City of Port Coquitlam already has strategies in place to support community health, preparedness, and resilience in the face of future climate change, including:

- ✓ A robust emergency management program, including community-based Emergency Preparedness training events, a citizen emergency response volunteer corps, a public notification system, emergency misting stations and tents for extreme heat events, and annual Emergency Operations Centre staff training.
- ✓ A City Emergency Response Plan (2022), Emergency Support Services Plan (2020), Extreme Heat Plan (2018), and Flood and Evacuation Plan (2013).
- ✓ City staff are currently identifying emergency response routes in collaboration with kʷikʷəƛ̓əm First Nation.
- ✓ The City is a member of the Tri-Cities Homelessness and Housing Task Force and works closely with other non-profits and service providers to support key vulnerable groups.

Our Plan for Action

The City has identified four overarching **Community Health & Wellbeing ("HW") objectives** to achieve its climate action targets and support community health, wellbeing and resilience. These objectives are summarized below along with the City's short-term enabling actions.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
HW 1	**Prepare city emergency response facilities to be more resilient to future climate hazards and conditions**	
HW 1.1	Investigate options to retrofit community centres to clean air shelters that meet the needs of diverse groups during poor air quality events (e.g. Hyde Creek/Wilson Community Centres).	Leader
HW 1.2	Incorporate a future-looking climate lens into the City's Emergency Management Program (e.g. response operations checklists, planned HRVA), Extreme Heat Plan (2021), and Flood Evacuation Plan (2013) to ensure emergency response capacity keeps pace with service needs given increasing climate hazards.	Leader
HW 2	**Preserve and protect cultural sites, heritage buildings, and recreation sites from climate change hazards**	
HW 2.1	Work closely with kʷikʷəƛ̓əm First Nation on climate action initiatives in areas of archaeological and cultural significance.	Partner
HW 2.2	Collaborate with kʷikʷəƛ̓əm First Nation on artwork, signage, and other opportunities for Indigenous cultural recognition as part of climate action initiatives.	Partner
HW 2.3	Support safer community recreation during hot summer conditions by planting more drought-tolerant shade trees along sidewalks/trails/playgrounds/cemeteries/fields/courts.	Leader
HW 2.4	Install shading, water fountains and bottle filling stations in areas with high traffic of key vulnerable populations to promote cooling and safe recreation. Consider whether there is a priority site for a splash pad or water park for summer recreation during non-drought conditions.	Leader
HW 3	**Establish targeted strategies to build climate resilience among key vulnerable groups, including under-housed populations**	
HW 3.1	Partner with local social service providers to understand opportunities for the City to better support resilience during extreme events (e.g. access to shade and drinking water during heatwaves, supporting outreach on available services, etc.).	Partner
HW 4	**Establish community partnerships to support educational and capacity-building programs that build community preparedness, connectedness and resilience**	
HW 4.1	Establish a Volunteer Community Emergency Response Corps to provide outreach during emergency events such as extreme heat, poor air quality, and flooding (e.g. Vancouver's Hey Neighbour program, Disaster Support Hub Initiative, Volunteer Corps, and Neighbourhood Emergency Preparedness Program). Provide training and support resources and guidance to prioritize the needs of vulnerable groups.	Leader
HW 4.2	Work with community organizations, health agencies, and social service providers to build their awareness, preparedness and response to extreme climate hazards, with a particular focus on supporting resilience among vulnerable populations.	Partner

Key Opportunities & Benefits from Action

- There are important opportunities to build partnerships with local organizations to ensure emergency services, health and wellness programs reach diverse groups across the City.
- Providing resources to help local residents and businesses better prepare for emergencies will help empower community members to weather the storm and support their neighbours and broader communities when municipal services are stretched.

Citizen Action! Ways you can better prepare for climate impacts include:

- Create an emergency plan and emergency kits for your home, business and primary vehicle.
- Reach out to neighbours or family members who may have special medical needs to discuss how you could offer support during an emergency.
- Download the City's Alertable app for public notification of emergencies.
- Apply to join the Emergency Preparedness Volunteer program through the City of Port Coquitlam's Volunteer Hub.

FOCUS AREA 8: LOCAL ECONOMY

Local businesses, industry, and agricultural producers can all play an important role in reducing emissions in business practices and taking steps to improve resilience to climate hazards to avoid disruption during extreme events. In the future, climate change is expected to create new local businesses and jobs as local behaviours shift toward the green economy.

Current Context

While many Port Coquitlam residents work in neighbouring municipalities or downtown Vancouver, the City has a vibrant downtown core along Shaughnessy Street with a wide range of local businesses including offices, retail and restaurants. The City also hosts a number of large industrial properties south of the Lougheed Highway and reaching southeast towards the Pitt River. These industrial lands include the Canadian Pacific Rail (CPR) yard and other industrial properties. Agricultural lands are located in the northeast corner of the municipality on the low-lying lands next to the Pitt River. These agricultural and industrial lands are within the floodplain and protected by the City's dike system but may be vulnerable to flooding during an extreme river flood event under future climate conditions.

Climate change can impact local businesses, industry and agriculture in Port Coquitlam by:

- Increased risk of flooding of industrial and agricultural lands in low-lying areas.
- Extreme heat waves and poor air quality events can cause unsafe indoor or outdoor conditions and disrupt business.
- Major flood or wildfire event could block transportation routes and supply chains.
- Warmer summer temperatures, heatwaves and drought can cause die-back of agricultural products & gardens.

Climate Action To-Date

The City of Port Coquitlam already has strategies in place or ongoing to support low-carbon resilience for local businesses and industry, including:

- ✓ Land use planning to conserve agricultural lands within City boundaries.
- ✓ Managing the existing network of dikes to protect the City from river flooding.
- ✓ Establishing new community gardens and other initiatives to celebrate local and sustainable food production.
- ✓ Working with local businesses through the Tri-Cities Chamber of Commerce to support emergency preparedness and share information about incentives for heat pumps and other low carbon resilience technologies.

Our Plan for Action

The City has identified three overarching **Local Economy ("LE") objectives** to achieve its climate action targets and support more resilient local businesses, agriculture, and industry in Port Coquitlam. These objectives are summarized below along with the short-term enabling actions to be taken by the City.

Our Objectives and Enabling Actions		
ID	**Description**	**City Role**
LE 1	**Support a lower-carbon and more resilient agricultural community**	
LE 1.1	Investigate options to build awareness and establish carbon sequestration partnerships with agricultural property owners in Port Coquitlam.	Partner
LE 1.2	Investigate the feasibility of a farm incubator program to support new farmers and active use of available agricultural lands.	Leader
LE 1.3	Improve access to local foods by sharing resources to encourage at-home food gardening, and supporting local farmers markets, local farm-gate sales.	Leader / Partner
LE 1.4	Investigate opportunities to create new community garden spaces.	Partner
LE 2	**Support local businesses in emissions reduction and preparing for climate impacts**	
LE 2.1	Work with the Tri-Cities Chamber of Commerce to build awareness about climate change, showcase local businesses to encourage buy-local, encourage living wage employment and remote work, support business emissions reduction and tracking, and increase resilience to climate hazards.	Partner
LE 3	**Partner with transport hubs to reduce emissions, minimize impacts to local ecosystems, and prepare for climate impacts**	

Key Opportunities & Benefits from Action

- Building relationships with local businesses will create important pathways for sharing information, both to build business awareness of climate impacts and preparedness but also to help the City anticipate how businesses and services may respond to hazards and climate action initiatives.
- Large industrial actors, such as CP Rail, BC Hydro and MainRoad (on behalf of BC's Ministry of Transportation and Infrastructure), can stand as critical partners for climate adaptation action (e.g. flood management) and can have a significant impact on community emissions reduction through careful purchasing decisions and energy efficiency measures.

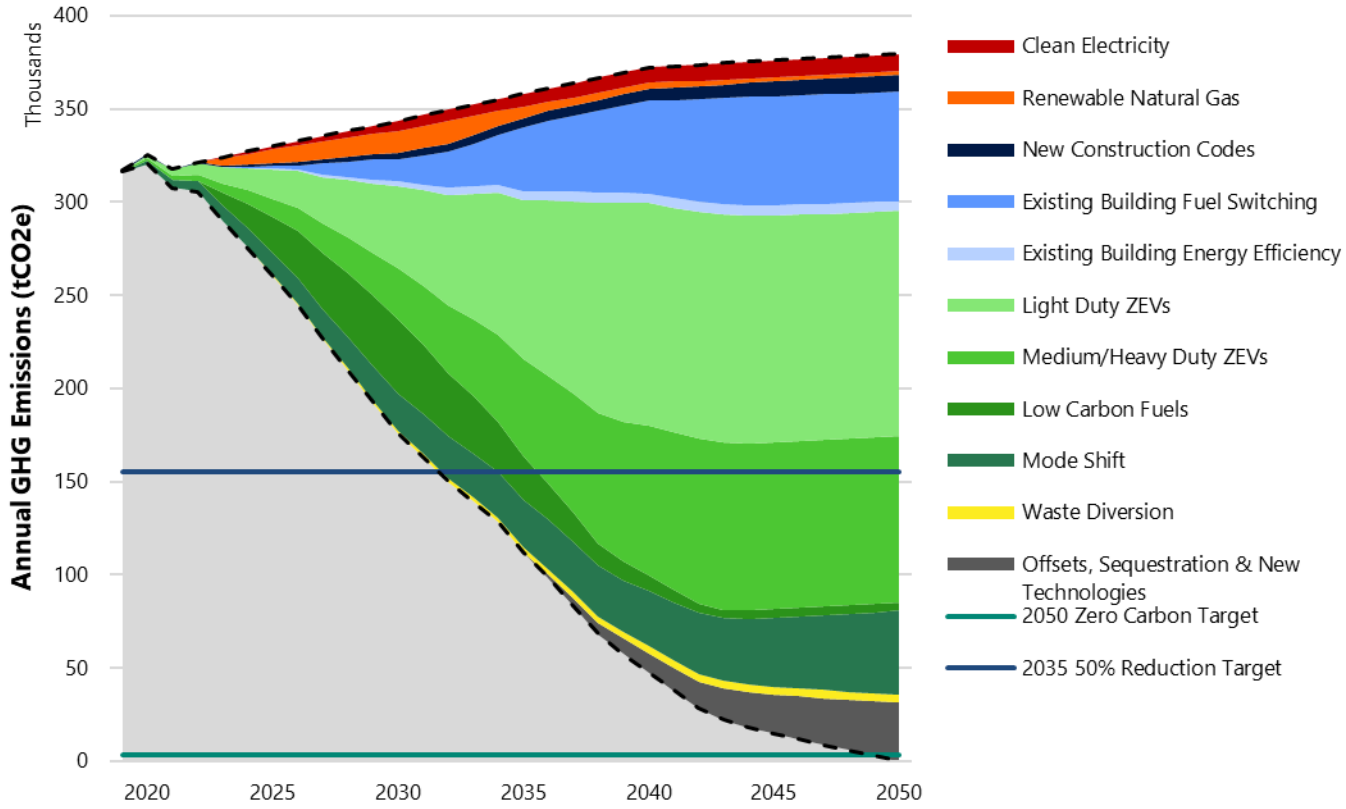
Citizen Action! Ways you can support more low-carbon resilient local business include:

- Support local food producers by visiting your local farm, farmers market and/or joining a community garden.
- Support local businesses by purchasing local as much as possible.

Emissions Reduction Plan

Projections of our community's GHG emissions show that the combined action taken by the City, Metro Vancouver, the Province of BC, and the Government of Canada, could reduce emissions by 64% by 2035 and 90% by 2050.

The projections show that there will be some residual GHG emissions come 2050, which is to be expected. Despite all efforts to reduce fossil fuel use, there will continue to be small amounts of fossil fuels used in buildings (for backup and top-up heating) and transportation (legacy gasoline and diesel vehicles). To achieve net zero, this gap will need to be balanced with carbon offsets, carbon sequestration and new innovative technologies. Future enabling actions to balance this gap continue to be explored by the City.



We recognize that achieving this level of reduction is not entirely within our control. Achieving these bold reductions will require coordinated action by all levels of government, along with action from community members and businesses throughout Port Coquitlam. Many of the key drivers of emissions reduction are regulations introduced by higher levels of government and municipal governments play a critical role in the implementation and delivery of these regulations. Thus, our enabling actions aim to foster strong coordination with other governments and consistent advocacy by Port Coquitlam.

The key policies that drive emissions reduction and the City's role in each of these policies are noted on the following pages.

Policy (Wedge)	Description of Policy (Existing or Planned)	Leading Actor(s)	Level of Control
Clean Electricity Delivery Standard	A requirement that 100% of electricity delivered in the province be generated by clean, renewable sources by 2030. (Existing)	Province of BC, BC Hydro	Influence
GHG Emissions Cap / Renewable Natural Gas	A GHG emissions cap for natural gas utilities intended to encourage utilities to invest in low-carbon fuels and energy efficiency. (Existing)	Province of BC, FortisBC	Interest
Kingsway Green Energy Corridor Project	Proposals to recover wastewater heat from the McLean Avenue pump station for use at Port Coquitlam Community Centre and to establish a new bio-energy centre serving a district energy network providing clean energy to the Kingsway Industrial Corridor.	Port Coquitlam	Control
Energy Benchmarking	A requirement for building owners to report energy use. (Planned)	Metro Vancouver	Influence
Highest Efficiency Equipment Standard	A requirement for all space heating and hot water heating systems sold or installed in BC after 2030 to be at least 100% efficient in all buildings. (Planned)	Province of BC	Influence
Building Performance Standard (BPS).	GHGI targets for existing buildings that get increasingly stringent over time. (Planned)	Metro Vancouver	Influence
Alterations Code	An expansion of the BC Building Code is under development that would require buildings undergoing certain alterations to meet select high-efficiency requirements.	Province of BC	Influence
Standards for Municipal Buildings	Standards that require new and existing municipal buildings to be built or retrofitted to low or net zero carbon. (Potential)	Port Coquitlam	Control
BC Energy Step Code	Tiered energy targets for different building types. The province has a mandatory timeline for when each step should be adopted for each building type, however, local governments can choose to adopt steps early. (Existing)	Province of BC, Port Coquitlam	Influence/Control
BC Zero Carbon Step Code	Tiered carbon targets, referred to as Emission Levels (EL), for different building types. Local governments can choose to make these targets a requirement in their jurisdiction. (Existing)	Province of BC, Port Coquitlam	Influence/Control

Low Carbon Fuel Standard	A requirement for fuel suppliers to reduce the average carbon intensity of their fuels annually to achieve a 30% reduction by 2030. (Existing)	Province of BC	Interest
Light-Duty Zero-Emission Vehicles Sales Targets	A requirement for automakers to meet an escalating annual percentage of new light-duty ZEV sales and leases. (Existing)	Government of Canada, Province of BC	Influence
Medium/Heavy-Duty Zero-Emission Vehicles	ZEV targets for medium- and heavy-duty vehicles signalled in the CleanBC Roadmap. (Planned)	Province of BC	Influence
Mode Shift	An intention to shift from vehicular transport towards active transportation and transit and reduce vehicle kilometres travelled (VKT) guided by various strategies and plans. (Ongoing)	Province of BC, Metro Vancouver, Port Coquitlam	Influence/Control
Waste Reduction and Diversion	An intention to reduce waste and divert waste from landfills guided by Metro Vancouver's Waste Solid Management Plan. (Ongoing)	Metro Vancouver	Influence

5 Implementing Our Plan

This Climate Action Plan lays out the objectives and enabling actions to reduce Port Coquitlam's carbon footprint and better prepare for climate impacts. Successful implementation of our Plan will require committed action and coordination among all City departments, in collaboration with external partners and support from external funding and citizen action on-the-ground.

The implementation of this Plan will be led by the Public Works Department, with Directors from each City department leading the implementation of actions within their programs. While many actions in this Plan have been accompanied by some early implementation details and timelines, more complex policies or programs may require the development of more detailed project plans as a first step.

This section provides a roadmap for successful implementation, including how we will report on progress and success and keep our Plan up-to-date as conditions change and we continue to move closer to our climate action goals.

Getting to Zero

Our projections of community GHG emissions show a 90% reduction in emissions from the 2007 baseline. Achieving this level of reduction will require substantial effort by all involved – the City itself, its partners, its community members, and many others – and represents a truly ambitious but necessary reduction in our emissions. To get all the way to our goal of achieving a net zero emissions community by 2050, the City will continue to monitor emerging technologies and tools to reduce or offset its remaining emissions. These may include carbon offsets, biological or other forms of carbon sequestration, and others that are still emerging as possible strategies to help communities reduce their emissions. The City will also continue to prioritize local climate actions that provide multiple local benefits ahead of potentially costly investments in offsets elsewhere as a way to ensure best use of its resources.

Keeping Our Plan Current

Responding to climate change will require sustained and long-term action that shifts as new information becomes available, local priorities evolve, and as new technologies and programs become available at regional and national scales. The Plan includes enabling actions that the City can take in the short-term but future enabling actions continue to be considered and refined by the City.

In addition to annual reporting, our Climate Action Plan will be reviewed every 5 years to check in on overall progress and incorporate new climate science, best practices, and technologies. This review period will be in alignment with the IPCC reporting cycle, which shares out on new climate projections and science every 5 years. The next IPCC reporting cycle (AR7) is due in summer 2027. The City of Port Coquitlam will, therefore, plan our next review in 2028 to allow time for downscaled local climate projections to be created.

A full refresh of the Climate Action Plan is recommended on a 10-year review or in conjunction with updates to the City's OCP. Outcomes from this full review and update process will, in turn, influence updates to other key City plans and policies to ensure climate objectives and actions continue to be deeply embedded throughout City operations.

Monitoring Plan Success

Establishing a clear plan for tracking and reporting on progress and achievements will be key for measuring Plan success and to inform ongoing climate action planning and action. The City has therefore established a set of indicators for tracking and reporting on the degree to which the City is implementing the plan in alignment with the Climate Action Principles in Section 3 of this Plan.

The City will report on progress annually by:

- Publishing an annual "report card" on implementation progress and outcomes to-date for mitigation and adaptation actions.
- Completing and publishing results from the City's GHG emissions inventory, accompanied by recommendations for adjusting actions to meet new conditions.
- Continuing to report out on the City's annual Carbon Disclosure Project (CDP) score through the **CDP Cities Program.**
- Reporting greenhouse gas emissions through Benchmarking BC.

The Plan's success will be monitored through two broad sets of performance metrics:

- **Process Indicators** used to evaluate the degree to which each climate action project is being delivered in accordance with the City's Climate Action Principles.
- **Outcome Indicators** that track the degree to which the City is meeting its overarching objectives and targets for each defined focus area.

Category	Indicators
Process Indicator	
Evidence-Based	• Percentage (%) of capital projects that incorporate climate projection data and future climate hazards.
Practical	• Value ($) of grant funding acquired to support climate action.
Integrated	• Percentage (%) of enabling climate actions completed within the recommended timeline.
Collaborative	• Percentage (%) of climate action projects completed in collaboration with external partners and/or programs.
Equitable	• Percentage (%) of initiated or completed climate action projects that include public and/or stakeholder engagement through an equity lens.
Multi-Solving	• Percentage (%) of climate actions completed or underway that document and report on other co-benefits.
Outcome Indicator	
Buildings & Energy	• Percentage (%) reduction in building energy use and emissions, per GHG inventory • Number (#) of homes that have undergone an energy retrofit under a City incentive program. • Dollars ($) of incentives delivered for retrofit actions. • Percentage (%) of City-owned floor area that have received energy efficiency and climate resilience retrofits.
Transportation & Land Use	• Kilometers (km) of new sidewalks, multi-use pathways, and cycling paths constructed by the City. • Dollars ($) invested in pedestrian safety improvements by the City. • Transit ridership and number of new benches and shelters installed. • Total vehicle kilometers travelled (VKT) by passenger cars and trucks. • Percentage (%) of City-owned vehicles that are electric or zero emissions. • Percentage (%) of new vehicles registered in the City that are zero emission vehicles. • Percentage (%) of City staff who use alternative modes of transport regularly to get to and from work.
Solid Waste & Materials	• Total volume (kg) of waste going to the landfill overall, and from City operations. • Percentage (%) of waste diverted from landfills via composting and recycling. • Number of participants/attendees at targeted circularity events such as Repair Café, City-Wide Garage Sale(s).
Critical Infrastructure	• Percentage (%) of priority actions completed within IWMPs. • Summer per capita water use and reduced per capita leakage. • Length (m) of City dikes upgraded to account for future climate • Number (#) of online service requests received from residents about flooding on private or city property.

Natural Systems & Green Infrastructure	• Degree to which natural assets are being integrated into the City's asset management program and capital planning. • Canopy cover (%) and number (#) of new trees planted annually compared with number (3) of trees removed annually. • Total area (m2) of riparian restoration projects led or in partnership with stewardship groups.
City Operations, Planning & Governance	• Percentage (%) of City projects, policies and programs updated to include climate considerations. • Number (#) of City staff who engaged in climate-related professional development and/or training. • Cost ($) for emergency response during climate-related emergency events.
Community Health & Wellbeing	• Number (#) of people supported following an emergency via the City's emergency program. • Number (#) of times the City's emergency operations centre is opened due to a climate-related hazard. • Number (#) of volunteers who participate in climate-related programs (e.g. tree planting, ecological restoration, etc.) • Number (#) of referrals to partner agencies to assist marginalized or vulnerable populations during climate-related hazards.
Local Economy	• Number (#) of community garden plots. • Number (#) of local businesses that report implementing climate mitigation and adaptation measures.

Acronyms and Glossary

Acronyms

AR6: Intergovernmental Panel on Climate Change Sixth Assessment Report

BAU: Business-as-usual climate emissions scenario

CCCAP: Corporate and Community Climate Action Plan

DPA: Development Permit Areas

FCL: Flood construction level

IPCC: Intergovernmental Panel on Climate Change

GHG: Greenhouse gas

LCR: Low-carbon resilience

OCP: Official Community Plan

RCP: Representative Concentration Pathways

ZEV: Zero emissions vehicle

Glossary

Adaptation: Adjusting decisions, activities, and actions based on observed or expected climate conditions, with the goal of moderating the negative impacts of climate change and capitalizing on beneficial opportunities.

Adaptive capacity: The ability to prepare for these impacts or respond to the consequences.

Business as usual (BAU): A hypothetical scenario where no major additional actions are taken to address climate change by Port Coquitlam or senior levels of government. The BAU projection for GHG emissions is the reference case against which savings from planned or recommended actions are calculated. The "BAU Policy" projection represents the effect of provincial and federal action with no additional local or regional action.

Carbon neutral: achieving a state in which the emissions produced by a community are balanced by an equal number of removals, primarily by reducing emissions as much as possible and then offsetting any remainder.

Carbon offsets: A reduction or removal of emissions made in order to compensate for emissions elsewhere. Carbon offsets are tradable credits an individual, organization, or government can buy, thereby investing measures to reduce carbon elsewhere.

Carbon sequestration: the process of capturing and storing atmospheric carbon dioxide, either naturally (e.g. biosequestration in trees and plants) or artificially (e.g. carbon capture and storage, or CCS).

Climate: Longer-term trends in atmospheric conditions over years or decades.

Climate change: Variations in climate over long time periods that have been observed and are projected to occur in the future (30-year periods typically).

Co-benefits: Improvements to the community that occur alongside climate mitigation and adaptation actions, such as improved public greenspace or enhanced public transportation.

Consequence: The potential damage, disruption, or strain experienced should a climate-related event occur. Consequence can range from minor (inconvenience) to severe (e.g. loss of life).

Embodied emissions: Embodied emissions refers to the greenhouse gas emissions associated with materials and construction processes throughout the whole lifecycle of a building or infrastructure. The embodied emissions (or

"embodied carbon") for a building includes the GHGs emitted during the acquisition of raw materials (e.g., mining, forestry), the manufacture of building materials (e.g., steel, concrete), the transportation of those materials to the construction location, the construction of the building—as well as the GHGs expected to be emitted through major equipment replacements, renovations, and eventual demolition. In British Columbia and other locations with relatively low-carbon electricity grids, the embodied emissions for a building often exceed the operational emissions over the lifecycle.

Extreme weather: Unpredictable, unexpected, and severe weather for a given location, including occurrences such as heat waves, rain storms, and windstorms.

Flood construction level (FCL): The minimum height that new development is required to build to in order to protect it from risk of flooding.

Greenhouse gas (GHG): Gases that trap heat in the atmosphere and contribute to climate change by absorbing infrared radiation (e.g. carbon dioxide, chlorofluorocarbons, methane). All GHGs can be measured in metric tons of Carbon Dioxide equivalent (tCO_2e), based on the relative amount of global warming created by a gas compared to Carbon Dioxide over a given timeframe (usually 100 years).

Greenhouse Gas Intensity (GHGI): The emissions intensity of a building or energy source. For a building, GHGI is measured in $kgCO_2e/m^2$ and measures the amount of GHGs attributable to the building's energy use over one year, per square meter of floor area. For energy sources such as electricity or natural gas, the GHGI is the amount of GHG emissions produced by combusting or generating a given amount of energy.

Impact statement: A brief summary of potential climate-related impacts to a given climate projection, which should be specific and actionable.

Likelihood: The expected return period or probability of the hazard event or trend occurring.

Mitigation: Measures taken to limit GHG emissions and associated global warming. Natural assets: Environmental features and ecosystems that provide people with vital services, such as aquifers, forests, streams, and riparian areas.

Net Zero Emissions: Reducing emissions to the greatest extent possible, and then offsetting any remaining emissions with verifiable, value-aligned investments in carbon sequestration.

Net Zero Energy: A net-zero energy building is a highly energy-efficient building that generates as much or more energy onsite through renewable power installations as it consumes, in net over the course of a calendar year.

Resilience: The capacity of a social, environmental, or economic system to cope with a hazardous event, trend, or disturbance, by resisting or changing in a way that maintains an acceptable level of functioning and structure.

Retrofit: improvements to a building or home that improves energy efficiency and/or reduces emissions.

Risk: A function of likelihood that a climate-related event will take place, and the consequence of that event should it occur.

Sensitivity: The degree to which people or systems are impacted by changing climate conditions, either positively or negatively.

Storm surge: A local rising of the ocean driven by pressure changes in the atmosphere and strong wind gusts.

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

Weather: The atmospheric conditions at a specific location at a specific time, which generally occur over a short time period and change frequently.

Zero emissions vehicle: a vehicle that does not emit any exhaust gas or tailpipe emissions.

References

[i] United Nations Framework Convention on Climate Change (2021) *Nationally determined contributions under the Paris Agreement.* **https://unfccc.int/sites/default/files/resource/cma2021_08_adv_1.pdf**

[ii] IPCC (2018) *Special Report on Global Warming of 1.5°C approved by governments*. **https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/**

[iii] IPCC (2023), Climate Change 2023 Synthesis Report **IPCC_AR6_SYR_SPM.pdf**

[iv] IPCC (2022) *AR6 Impacts, Adaptation and Vulnerability* **https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf**

[v] Climate projections shown in this section are taken from Climatedata.ca on the RCP8.5 GWL "business as usual" scenario for Metro Vancouver (2024) **Location — ClimateData.ca**

[vi] Wotton, M., Nock, C., and Flannigan, M. (2010) *Forest fire occurrence and climate change in Canada.* **https://www.researchgate.net/publication/224021735_Forest_fire_occurrence_and_climate_change_in_Canada**

[vii] Liu, J. et al. (2016) *Particulate air pollution from wildfires in the Western US under climate change.* **https://link.springer.com/article/10.1007/s10584-016-1762-6**

[viii] Cheng, C., et al. (2014) *Possible impacts of climate change on wind gusts under downscaled future climate conditions: Updated for Canada.* **https://journals.ametsoc.org/view/journals/clim/27/3/jcli-d-13-00020.1.xml**

[ix] City of Vancouver, Climate Change and Sea Level Rise (2024) **Climate change and sea level rise | City of Vancouver**

[x] IPCC (2022) *AR6 WGIII, Summary for Policymakers.* **https://report.ipcc.ch/ar6wg3/pdf/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf**

[xi] Government of Canada. *Canadian Net-Zero Emissions Accountability Act* **https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/climate-plan-overview/actions-healthy-environment-economy.html**

[xii] Government of Canada (2007) *Climate Change Accountability Act* https://www2.gov.bc.ca/gov/content/environment/climate-change/planning-and-action/legislation#:~:text=B.C.%20has%20legislated%20targets%20for,%2C%20and%2080%25%20by%202050

[xiii] Metro Vancouver (2019) *Climate 2050 Strategic Framework* **http://www.metrovancouver.org/climate2050**

[xiv] Province of BC (2019) Zero-Emission Vehicles Act **https://www.bclaws.gov.bc.ca/civix/document/id/complete/statreg/19029**

[xv] Government of Canada (2010) Passenger Automobile and Light Truck Greenhouse Gas Emissions Regulations **https://laws-lois.justice.gc.ca/eng/regulations/sor-2010-201/index.html**

[xvi] Metro Vancouver (2010) **Integrated Solid Waste and Resource Management.**

[xvii] City of Port Coquitlam and Metro Vancouver (2017). Help Stop the Spread of Invasive Plants **https://www.portcoquitlam.ca/wp-content/uploads/2017/01/Stop-the-Spread.pdf**