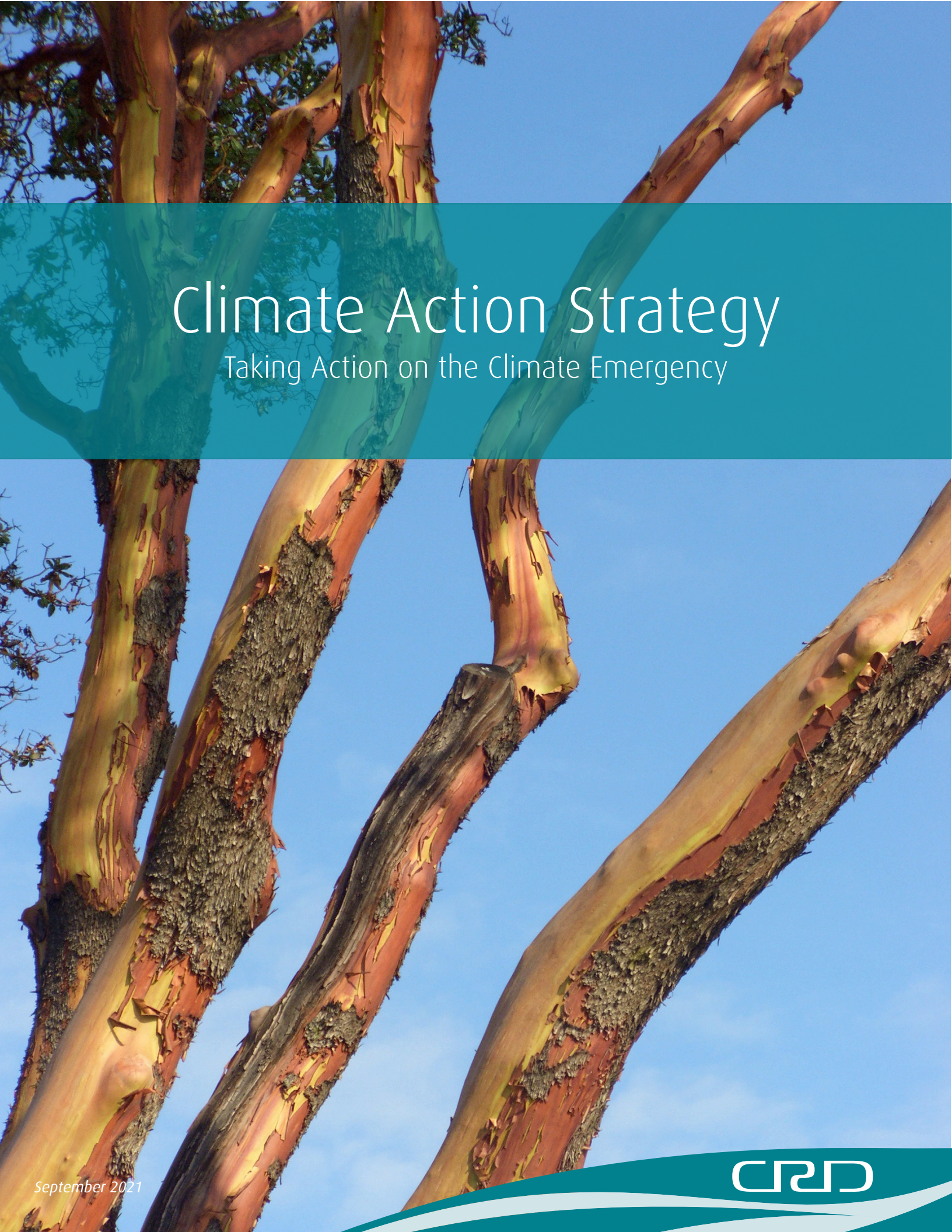




Climate Action Strategy

Taking Action on the Climate Emergency

September 2021

CRD

Territorial Acknowledgement

The CRD acknowledges that it conducts its business in the territory of the Lək'wəḡən (Songhees) and Xwsepsum (Esquimalt) Nations here in the core area, the W̱SÁNEĆ Nations, including W̱JOḺELP (Tsartlip), BOKÉĆEN (Pauquachin), S̱ÁUTW̱, (Tsawout) and W̱SIKEM (Tseycum) on the Saanich Peninsula and Gulf Islands, Sc'ianew (Beecher Bay), T'Sou-ke, and Pacheedaht to the west as well as MÁLEXEL (Malahat) and Pune'laxutth' (Penelekut) Nations. All of whom have lived on these lands since time immemorial.



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Introduction

The Climate Emergency

Addressing climate change is one of the most critical issues of our time – both locally and across the planet. The Capital Regional District (CRD) has clearly acknowledged and committed to taking action to address climate change within our operations as well as at the regional level, to reduce emissions and to prepare for the uncertainty a changing climate brings. This was highlighted in the Board’s declaration of a climate emergency in early 2019 and commitment to taking a leadership role to pursue regional carbon neutrality.

In response to the climate emergency, the CRD developed this updated five-year Climate Action Strategy in 2021, replacing two former strategies and integrating with existing local, provincial and federal climate action initiatives. The success of this strategy relies on our collective commitment to bold climate action at all levels of government to respond to this emergency.

Climate Action Vision

Through collective action, we eliminate emissions and foster healthy and resilient communities and natural areas now and in the future.

This vision recognizes that the CRD must act in concert with many partners to address the climate emergency, ensuring the region is minimizing its contribution to climate change while also preparing for the changes that have already begun. In this context, “we” is inclusive of all governments, First Nations, residents, businesses, institutions, organizations and residents

in the region. The CRD has many important roles to play in achieving this vision. This plan lays out those roles, as well as specific actions the CRD can take over the next five years to reduce emissions and prepare for changes to our climate.

Guiding Principles

Six principles were identified during the development of this strategy that guided the selection of the actions, and will continue to be used to guide the implementation of actions under each goal area:

- **Leadership:** The CRD takes bold action to rapidly eliminate greenhouse gas (GHG) emissions from corporate operations, prepares CRD assets for the changing climate, and integrates climate action across the CRD's local and regional services.
- **Urgency:** Actions to mitigate the impacts of climate change are swift and substantial to respond to the climate emergency.
- **Collaboration:** Collaborative and collective action among municipal, provincial, federal and First Nations governments, businesses, organizations and residents is critical to advance climate action.
- **First Nations relations:** Actions support Indigenous-led climate solutions that are grounded in Indigenous self-determination, shared prosperity and respect Indigenous relationships with the land, water and all beings.
- **Equity:** Actions are inclusive and accessible to residents across the region, and particularly support those most vulnerable to the impacts of climate change.
- **Co-benefits:** Actions maximize co-benefits, including reducing GHG emissions, increasing resilience, improving affordability, expanding economic opportunities, improving health and well-being, advancing reconciliation, and more.

Climate Commitments by Other Governments

The CRD's 2019 climate emergency declaration was prefaced by the Intergovernmental Panel on Climate Change (IPCC) report released in 2018, which found that limiting warming to a 1.5°C change this century could avoid more catastrophic impacts of climate change that would be experienced at 2°C or more of warming. Further to this, the report identified that to limit global temperatures to an increase of 1.5°C this century, the global community will need to achieve a greenhouse gas (GHG) emissions reduction of about 45% from 2010 levels by 2030 and become carbon neutral by approximately 2050.¹

In 2021, Canada's federal government passed the *Canadian Net-Zero Emissions Accountability Act*, which sets out targets to achieve net-zero GHG emissions by 2050 and aligns Canada with the IPCC report findings.² The government also released a strengthened climate action plan, including a proposal to increase the carbon tax annually from \$50 per tonne of CO₂ emissions in 2022 to \$170 per tonne in 2030.

Provincially, BC has set targets to reduce GHG emissions 40% by 2030, 60% by 2040 and 80% by 2050, relative to 2007.³ In 2018, the Province released the CleanBC plan with actions that are estimated to reduce BC's emissions by 18.9 megatonnes of CO₂e, 75% of the amount needed to reach the 2030 target. In 2019, the Province amended the *Climate Change Accountability Act* to include requirements related to climate risk and adaptation. This legislation requires an annual ministerial report on climate change risks, and an overview of government's actions to manage them. Currently, the Province is developing a Climate Preparedness and Adaptation Strategy that outlines actions for 2022-2025 needed to address the greatest risks to BC, building from the 2019 Preliminary Strategic Climate Risk Assessment. This, along with modernizing the *BC Emergency Program Act* and developing the forthcoming BC Flood Strategy, will guide provincial investments, policies and programs on climate adaptation in coming years.

Locally, municipal governments across the capital region have declared climate emergencies, promising to accelerate climate action efforts to achieve net-zero carbon emissions. Many have set very ambitious GHG reduction targets, enacted local policies and undertaken planning exercises aimed at reducing emissions and preparing for a changing climate.

Policies and programs implemented at each level of government are critical to achieving a carbon neutral capital region and improving our regional resiliency to climate change.

1. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf

2. [Canadian Net-Zero Emissions Accountability Act](#)

3. [BC Climate Change Accountability Act, 2007](#)

Targets and Commitments

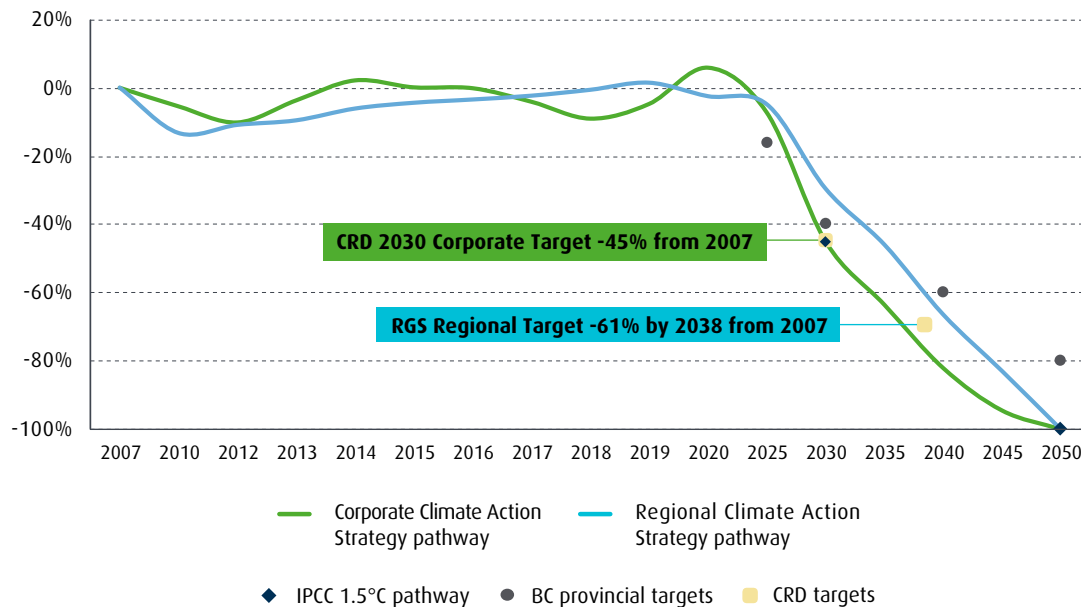
The following targets and commitments provide a set of markers that will help the CRD track and communicate progress on reducing GHG emissions, both at the regional and corporate scales. Figure 1 shows the pathways to reach these targets relative to international and provincial emission reduction goals.

Regional target: Reduce regional GHG emissions 61% by 2038 based on 2007 levels (as per 2018 Regional Growth Strategy).

Corporate target: Reduce corporate GHG emissions 45% by 2030 based on 2007 levels, and reach net-zero GHG emissions before 2050.

Climate emergency declaration: The CRD Board identified Climate Action & Environmental Stewardship as a priority for the region and approved a motion to declare a climate emergency. Through this declaration, the CRD signalled it would demonstrate leadership toward reaching regional carbon neutrality.⁴ This strategy outlines a pathway toward net-zero emissions by mid-century, in line with the IPCC modelled pathways to maintain temperatures below 1.5°C this century.

Figure 1. CRD GHG emission reduction pathways and targets



4. The Board declaration stated an aspirational goal to work toward being a carbon-neutral region by 2030. Upon examination of the existing state of the community and corporate greenhouse gas inventories, and the senior government policy positions, no feasible pathway of achieving regional carbon neutrality by 2030 was identified.



The CRD's Role in Climate Action

Building on a Strong Foundation

This 2021 strategy replaces and builds upon two existing CRD climate action strategies: the 2016 Corporate Climate Action Strategy and the 2017 Regional Climate Action Strategy. This 2021 strategy reflects current Board priorities (including the climate emergency declaration) to provide a clear path forward for how the CRD, under its service mandates, will show leadership on climate action, both for the CRD's corporate operations and for its community-focused services.

Corporate operations refer to operations and management of CRD-owned facilities, assets and lands, and corporate greenhouse gas (GHG) emissions refer to those produced by CRD corporate activity. Preparing corporate assets for climate change and reducing corporate GHG emissions are important because the CRD has direct control over these decisions, which provides an opportunity for the CRD to show leadership on climate action.

Community-focused climate action refers to action the CRD can take through its various regional, sub-regional and local services to support the climate mitigation and adaptation across the region. Depending on the service, the CRD has varying levels of control. In many cases, the CRD may influence but does not directly control decisions or outcomes, such as urban land use, transportation choices, energy-efficient building construction and retrofits and community waste reduction. Regional GHG emissions refer to all emissions from activities within the CRD region, a much larger amount of emissions than the CRD's corporate emissions. Enhancing regional resilience to a changing climate and reducing regional GHG emissions both involve significant partnerships with and between municipal, senior and First Nations governments, businesses, organizations and members of the public.

The **corporate** portion of the 2021 strategy builds from the 2016 strategy by involving stronger integration into the decision-making process, identifying key corporate projects, allocating resources and actively seeking grants to support additional investments. The **community** portion of the strategy focuses on areas where the CRD has the greatest influence and areas requiring or benefitting from strong regional coordination.

Throughout the development of this plan, there has been extensive engagement across CRD departments and with municipal representatives. The following groups were consulted, either through workshops or interviews:

- Elected officials from the CRD's Climate Action Inter-Municipal Task Force.
- Municipal staff from the CRD's Climate Action Inter-Municipal Working Group.
- Numerous staff from the CRD's various services that have a role in implementing this strategy, including: facilities, recreation, fleet, purchasing, finance, legislative, risk and insurance, regional and strategic planning, electoral area planning, parks, protective services, building inspections, environmental protection, utilities (water and wastewater), First Nations relations, health and capital planning, housing and environmental resource management.

Collectively, the input from this engagement led to the development of the new vision, guiding principles, goals and a set of actions and metrics to implement and monitor over the next five years.





Overview of the CRD

The CRD has over 200 services, infrastructure and financing agreements with municipalities and electoral areas to deliver services in the following categories:

- Regional, where all municipalities and electoral areas are served.
- Sub-regional, where two or more jurisdictions are served.
- Local, in the electoral areas where the CRD is the local government.

Services encompass the regional water supply, solid waste management, wastewater treatment, regional parks, recreation facilities and more.

In addition, the CRD owns and operates the Capital Region Housing Corporation, a non-profit operator of 2,007 affordable rental units within seven municipalities, and administers the Capital Regional Hospital District (CRHD). The CRHD invests in traditional health care services and provides capital funding for health care infrastructure, such as health facilities and hospital equipment.

Under Bylaw 3510, the CRD established a climate action service in 2009 to act as a resource and facilitator for local governments, citizens and organizations in the capital region on energy and climate issues. The service has five major focus areas:

- Provide support to local governments in developing and implementing climate action plans and programs (GHG emissions reductions and climate adaptation), as part of legislative requirements under Bill 27 and voluntary commitments under the BC Climate Action Charter.
- Catalyze action through partnerships with public and private sectors, non-governmental organizations and community organizations and increase public awareness of climate change issues.
- Liaise with senior levels of government on climate change-related programs, policies and legislation that impact the capital region.
- Provide scientific information, data and indicators related to local and regional GHG emissions and projected climate impacts.
- Support the CRD in fulfilling its corporate climate objectives by developing and facilitating the implementation of corporate climate action plans, policies and programs and support execution of climate-related Board strategic priorities.

Climate Action Strategy's Relationship to Other CRD Plans

Climate action at the CRD is embedded through numerous services and, as a result, has strong linkages with several strategic plans across the organization. Figure 2 highlights those with the strongest dependencies for this strategy, though there are several more that also influence the outcomes of climate action (see Appendix B). Successful implementation of these plans is integral to fulfilling the CRD's role in climate action.

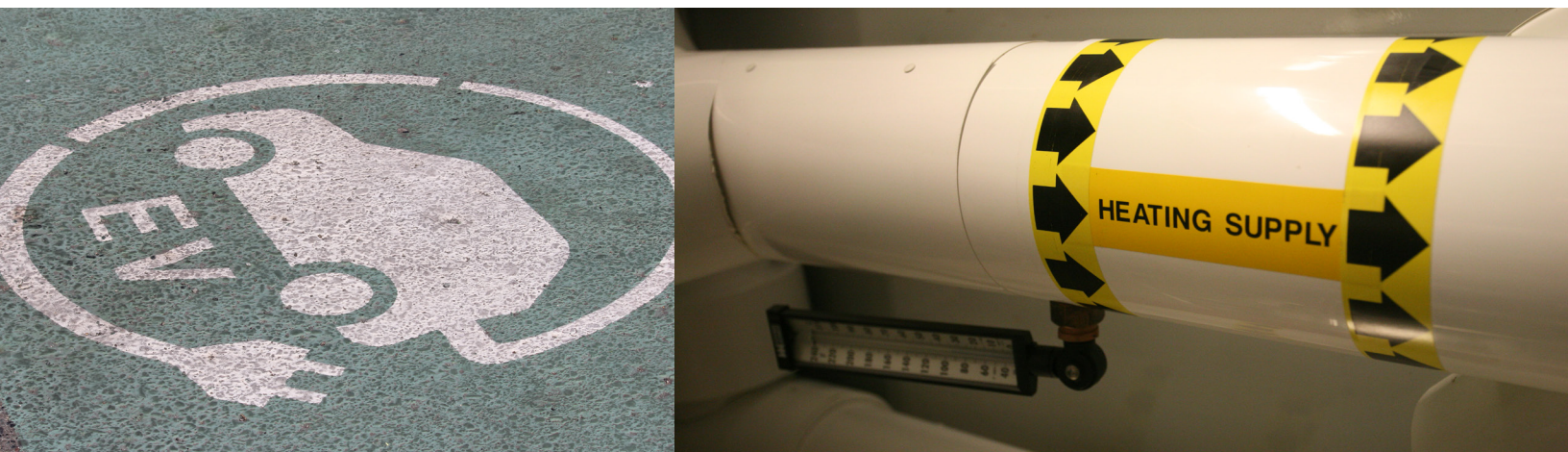
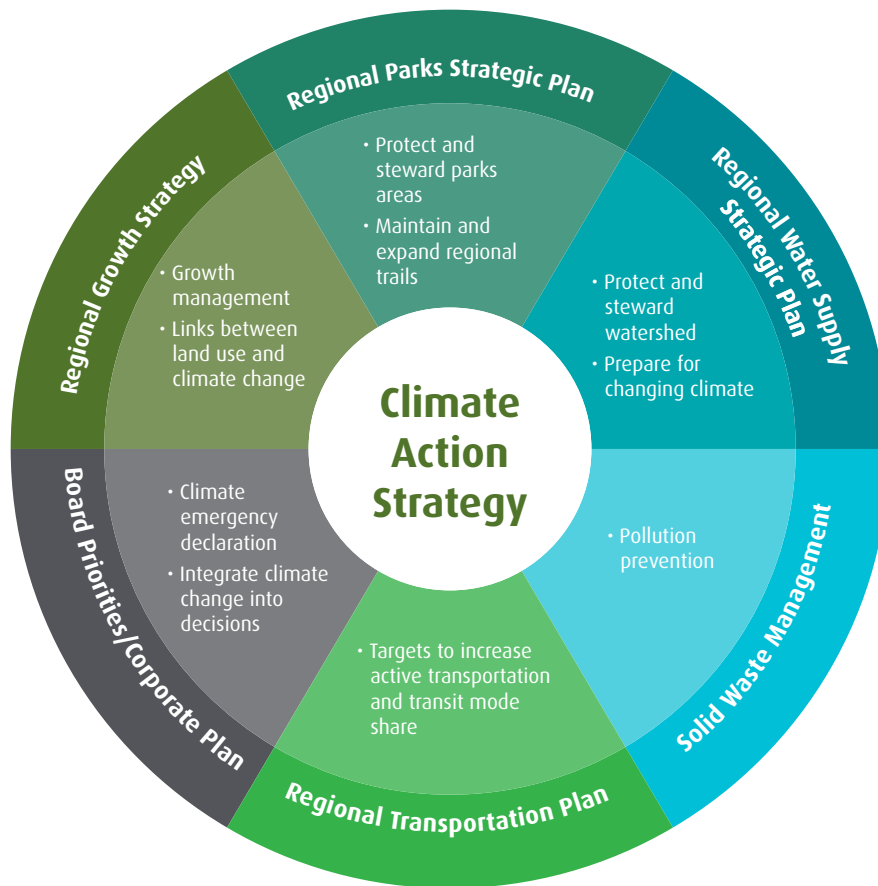
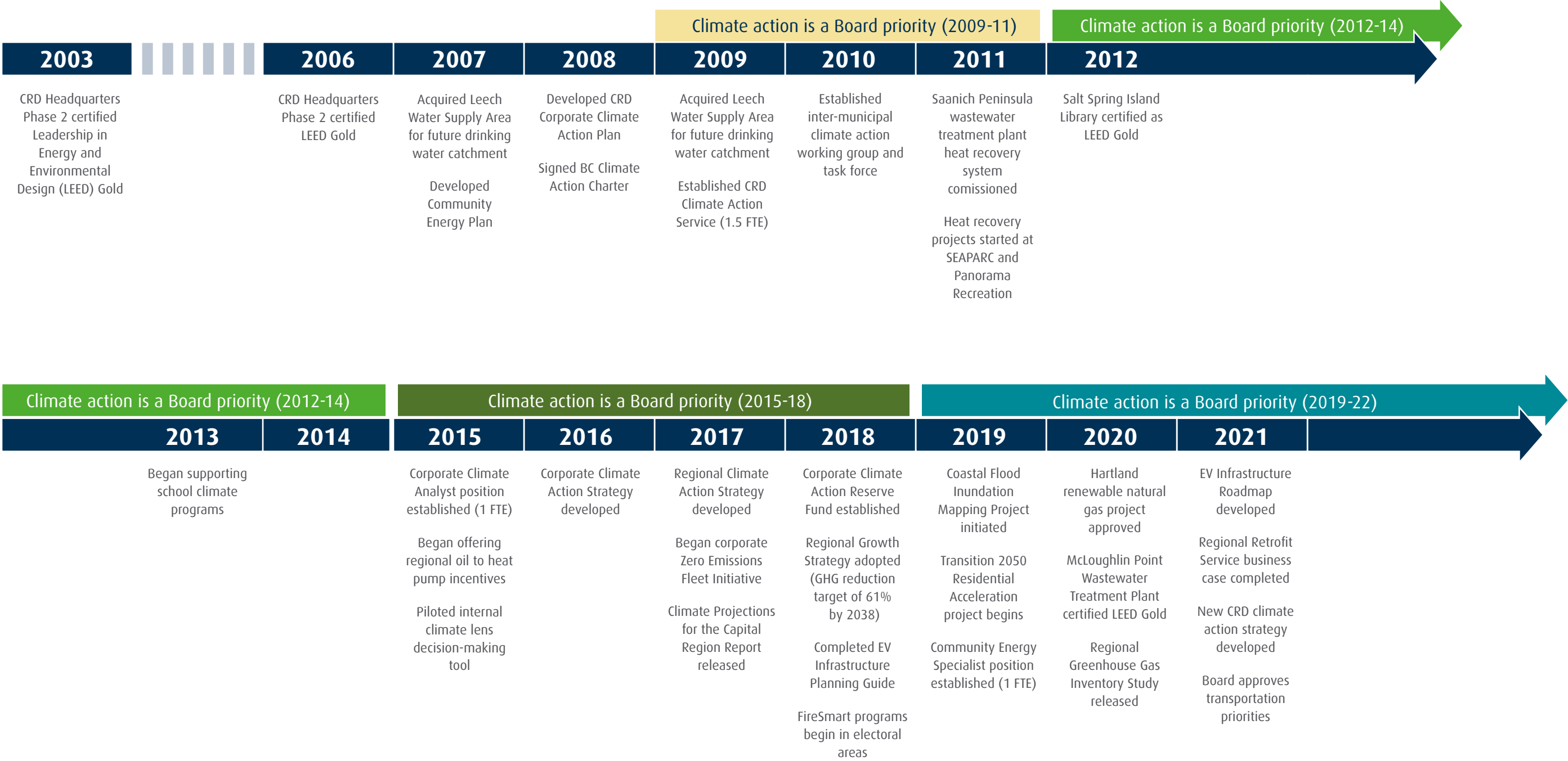


Figure 2. CRD strategies with strong links to the Climate Action Strategy



Climate Action through the Years





Adapting to a Changing Climate

Climate Projections and Impacts

Changes to our climate are already noticeable—extreme weather events like droughts, floods, heat waves and fires are happening more often—and these changes are projected to increase in frequency and severity over the coming decades. According to *Climate Projections for the Capital Region*,⁵ as a result of global warming, global climate models project the capital region will experience:

- more extreme climate events (such as intense storms or long heat waves).
- an increase in rainfall in fall, winter and spring; and a decrease in rainfall in summer.
- more intense, longer-lasting and more frequent rainfall events.
- frequent heavy snowfalls and rain on snow events in the short-term, less snow in the future.
- hotter summers and less days with freezing in winter.
- increased likelihood of variability of climate within and between years.

Global climate change is also increasing the region's susceptibility to increasing sea level rise. The most vulnerable areas to sea level rise are low-lying and have gently sloping beaches. Recent mapping activities by the CRD identified multiple sites like this in the region.⁶

5. [Climate Projections for the Capital Region](#), CRD, 2017

6. [Capital Region Coastal Flood Inundation Mapping Project](#), CRD, 2020

A changing climate will likely have many implications in this region—negatively affecting health, infrastructure, water supply, agriculture, ecosystems and species. These changes will result in more seasonal variations in water availability, causing droughts; high intensity precipitation events, causing flooding; heavy snow and ice, impacting transportation networks; extreme wind events that may cause power outages; prolonged heat events, increasing wildfire risk; and future coastal storms, flooding homes and infrastructure.

The scientific community agrees that the more we reduce total greenhouse gas emissions in the short term, the less intense these changes will be over time, and that acting earlier is in many cases less costly than delaying action.⁷ Public Safety Canada estimates that every dollar invested in mitigation saves \$3 to \$5 in recovery costs.⁸

CRD Climate Adaptation Planning

Adaptation is defined by the Intergovernmental Panel on Climate Change as the process of adjusting to actual or expected climate and its effects. This includes working to reduce or avoid harm, exploiting beneficial opportunities or facilitating adjustments in natural systems. To be effective in reducing our vulnerability and adapting to a changing climate, we need to improve how we anticipate, respond to and recover from both extreme weather events and more gradual changes occurring over time.

Over the past few years, the CRD has undertaken a number of planning exercises to better understand climate risk and identify actions that would reduce climate risk and support regional efforts on climate adaptation, as listed below. Results and recommendations from these exercises were considered in the development of this plan.

- **Corporate Climate Change Risk Assessment:**⁹ This report undertook a screening-level climate change risk assessment at the major asset class level to better understand vulnerabilities to climate change within corporate operations. Results included a list of recommendations to improve climate resiliency. Without undertaking action, a number of CRD assets—including ecological assets and parks; trails, boardwalks and piers; wastewater treatment, storage and conveyance systems; roads; bridge and tunnel assets; and dams and weirs—are most likely to be impacted by climate change.

7. [Special Report: Global Warming of 1.5°C, Summary for Policy Makers](#), IPCC, 2018. C.2.7 states that marginal abatement costs in modelled 1.5°C pathways are quite variable, but roughly 3-4 times higher than pathways limiting to 2.0°C (high confidence).

8. The Cost of Climate Adaptation, Federation of Canadian Municipalities and Insurance Bureau of Canada, 2019

9. Corporate Climate Change Risk Assessment, Stantec Consulting, 2021

- **Adaptation planning for the Greater Victoria Drinking Water Supply Area (GVWSA):** This involves mapping ecosystems, forest characteristics and invasive species to identify potential vulnerabilities to the projected impacts of climate change on the GVWSA. Analysis has pointed to the need to continue emphasizing wildfire prevention and post-fire rehabilitation to protect the water supply and source water quality.
- **Community Climate Change Adaptation Priorities for the Capital Regional District:**¹⁰ Led by ICLEI Canada, the CRD, in partnership with four municipalities, conducted a two-year climate risk assessment for the region, known as the Together for Climate project. This work identified risks and recommended actions the CRD can undertake to further support community preparedness for climate change. Regional risks identified included sea level rise, watershed health, air quality and extreme heat, invasive species, wind, tree health and interface fires. While the CRD is already engaged in advancing preparedness on many of these fronts, it is also well-poised to build capacity across the region in response to local climate impacts. This project recommended the CRD take a leadership role in supporting community-focused actions.



10. https://icleicanada.org/wp-content/uploads/2020/10/CRD-Climate-Adaptation-Resource_FINAL.pdf



Greenhouse Gas Emissions: Now and Looking Forward

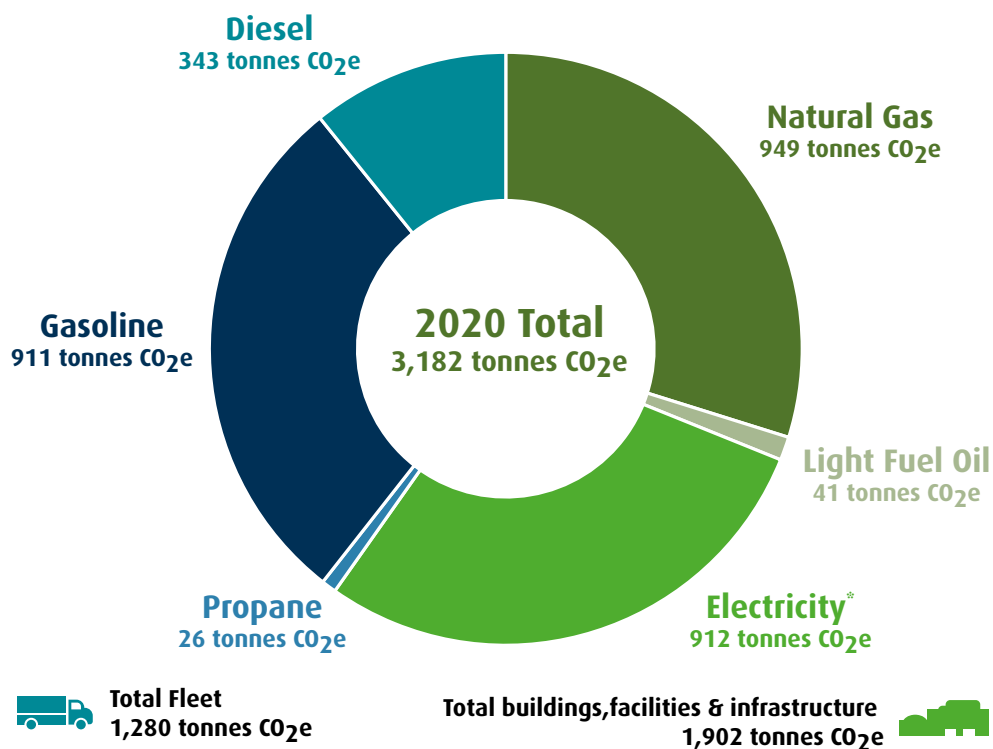
The CRD's Corporate GHG Emissions

In order to deliver services, the CRD operates buildings, infrastructure and a fleet of vehicles and equipment, which result in greenhouse (GHG) emissions – primarily from the use of fossil fuels. Since 2012, the corporation has annually tracked and reported its GHG emissions. Although the CRD's corporate emissions account for less than 1% of regional GHG emissions, reducing the organization's carbon footprint is an important area of action because the CRD can directly address these emissions through decisions made in the purchase, construction and operation of its assets and delivery of its services. In this realm, the CRD can take a leadership role in demonstrating how to rapidly eliminate GHG emissions.

2020 Corporate Emissions Profile and Business-as-usual Forecast

In 2020, the CRD's corporate operations resulted in roughly 3,182 tonnes of CO₂e, where operating fleet vehicles and equipment roughly account for 40%, and operating buildings, facilities and infrastructure account for 60% (see Figure 3). This represents an overall increase of 6% since 2007, while at the same time increasing service levels (including 24% increase in fleet size and 19% in staffing). This fell short of the 30% reduction target set for 2020.

Figure 3. Sources of greenhouse gas emissions from CRD Corporate operations in 2020



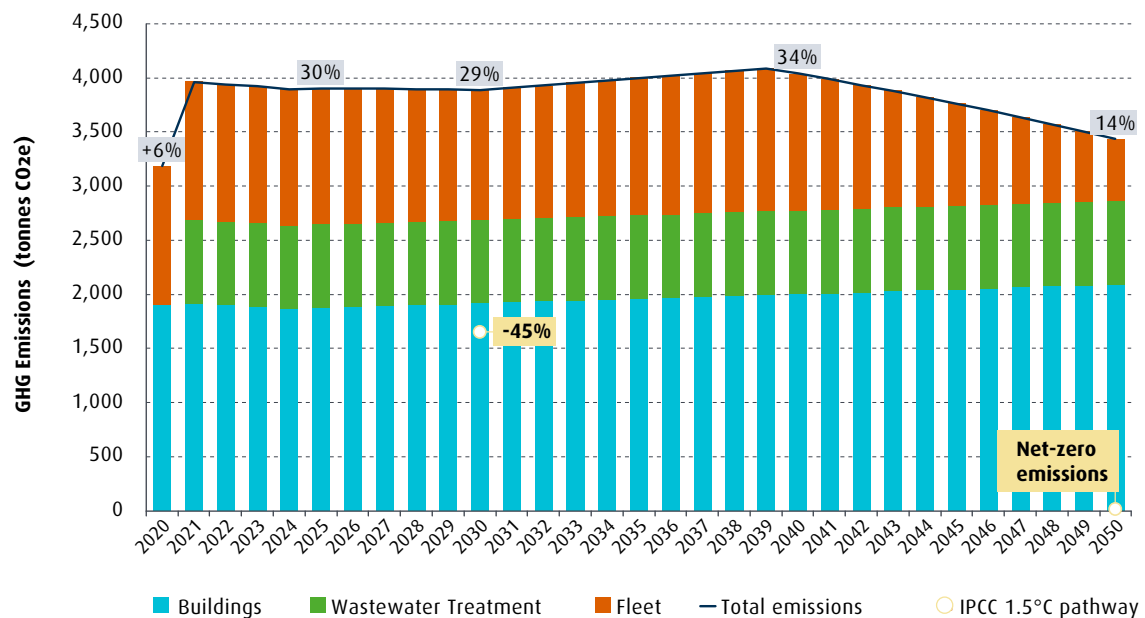
*Currently, electric vehicle charging is included in building electricity use

Sufficient emission reductions cannot be achieved without an increased corporate effort. A **business-as-usual scenario** (see Figure 4) estimates the change in corporate GHG emissions going forward, based on anticipated changes in service levels to serve a growing population, together with the implementation of senior government policies and regulations currently in place and CRD projects with allocated budget (see Table 1 for a list of assumptions). Following this trajectory, the CRD's corporate GHG emissions are estimated to increase by 33% by 2040, then decrease to +13% relative to the 2007 baseline by 2050—demonstrating that substantial effort is needed to align with the climate emergency commitment.

Table 1. CRD Corporate business-as-usual greenhouse gas emissions scenario assumptions

Sector	Item	Description	Year
Fleet	BC Low Carbon Fuel Regulation	-10% emissions intensity gasoline, diesel	2021-2030
Fleet	Federal Heavy-Duty Vehicle GHG Regulation	-16% fuel use in replacement vehicles from 2027 relative to 2017	2027-2039
Fleet	BC Zero Emission Vehicle (ZEV) Regulation	100% of replacement vehicles are ZEV starting in 2040	2040-2050
Buildings	New McLoughlin Point Wastewater Treatment Plant	18.6 GWh electricity; 145 MWh natural gas estimated	2021
Buildings	Japan Gulch Ultraviolet Plant Upgrade	-60% electricity consumption	2022-2024

Figure 4. CRD Corporate greenhouse gas emissions: business-as-usual scenario, 2020-2050, with percent change relative to 2007 (tonnes CO₂e)



CRD Corporate Emissions Reduction Target: 2021-2030

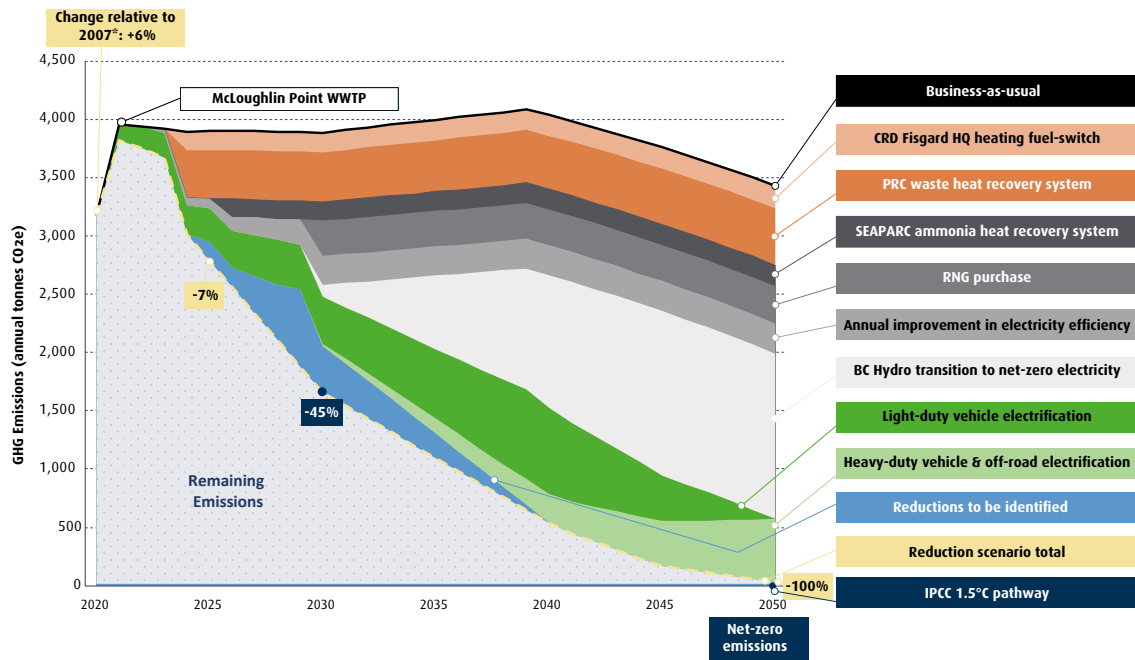
Though ambitious and requiring substantial resources and effort, the CRD can accomplish its reduction targets by ensuring the completion of several critical actions. This pathway includes the critical actions outlined in Table 2, with the resulting estimated impact of each shown in Figure 5. For reference, the IPCC 1.5°C scenario targets are shown in dark blue. Even with these critical actions, further effort is required to identify and implement additional means of reducing emissions.

Guided by the principles of leadership and urgency, the CRD will target to reduce GHG emissions from corporate operations 45% by 2030, relative to 2007, and be net-zero before 2050.

Table 2. Critical Actions of the CRD Corporate Climate Action Strategy Pathway

Sector	Critical Action	Year
Buildings	CRD Fisgard Headquarters heating fuel-switch from natural gas to electricity	2024
Buildings	Install Panorama Recreation Centre heat recovery system	2024
Buildings	Install SEAPARC Recreation Centre heat recovery system	2026
Buildings	Offset remaining gas use with renewable natural gas	2030
Buildings	Annual 5% improvement in electricity efficiency	2023-2030
Buildings	Transition to net-zero emissions electricity (BC Hydro)	2030-2045
Buildings	Maintain (or expand) operation of Saanich Peninsula Wastewater Treatment Plant district energy system	2025
Fleet	100% Light-duty vehicle and truck electrification	2021-2040
Fleet	Heavy-duty and off-road vehicle electrification and renewable fuel use	2030-2050
All	Identify and implement additional reductions of 400 tonnes CO ₂ e by 2030	2021-2030

Figure 5. CRD Corporate GHG emissions: Climate Action Strategy scenario, 2020-2050 (tonnes CO₂e)



* Percentage change in GHG emissions in 2020 relative to 2007 is different from the CRD's 2020 Climate Action Annual Report. Corporate GHG emissions inventories and projections in this document have been adjusted to reflect the province-wide reporting change in the BC Hydro's electricity emissions factor, which increases from 10.67 tCO₂e per GWh of BC Hydro electricity to 40.1 tCO₂e per GWh, starting in 2021. This increase reflects the reality that BC Hydro periodically imports high-GHG electricity from other regions

Regional GHG Emissions

2018 Capital Region Emissions Profile

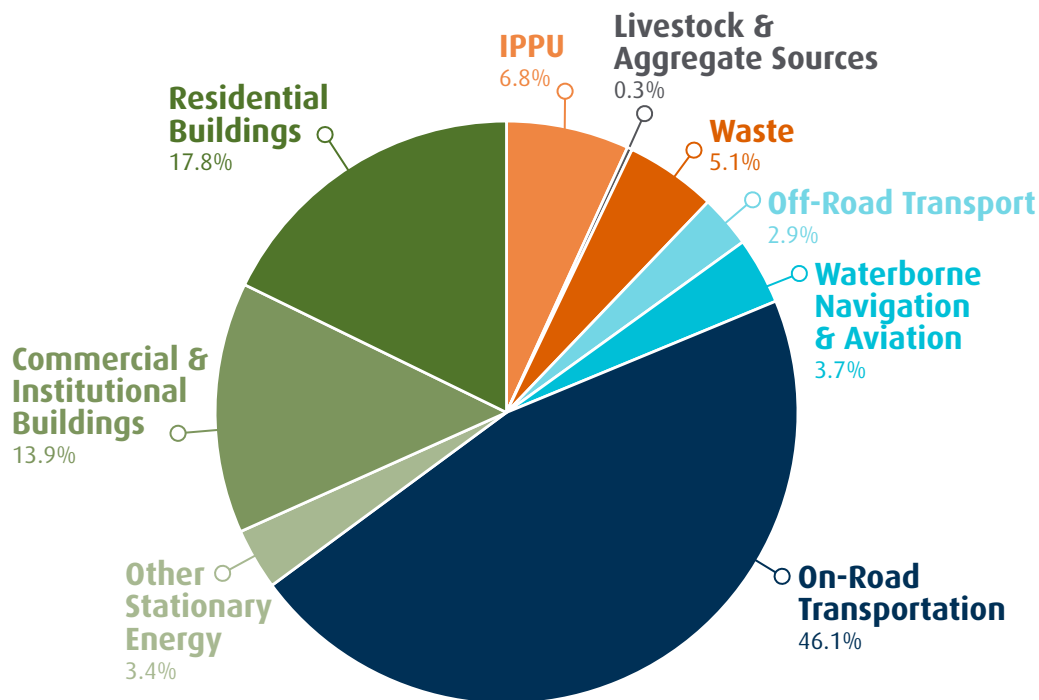
In 2020, the CRD completed a regional energy and emissions inventory to provide a more complete picture of the region's energy consumption and GHG emissions. This followed the Global Protocol Community-Scale Greenhouse Gas Emission Inventories BASIC+ Framework, and included territorial GHG emissions from: stationary energy (e.g., buildings), transportation (e.g., commuter vehicles), waste (e.g., landfills), industrial processes and product use (IPPU), and agriculture, forestry and other land use (e.g., fertilizer application).

The study conducted for the 2018 year shows that approximately 1.7 million tonnes of CO₂e emissions are emitted annually in the capital region, which is relatively unchanged from 2007 levels.¹¹ Although this does not represent a significant reduction from the 2007

11. [Capital Regional District 2018 GPC BASIC+ Community Greenhouse Gas \(GHG\) Emissions Inventory Report](#), Stantec, 2020

baseline, the total GHG emissions per capita has decreased by 14%. The two largest sources of GHG emissions in this inventory are transportation – accounting for almost half of regional GHG emissions, and buildings – accounting for another third of regional GHG emissions.

Figure 6. Sources of regional GHG emissions, 2018

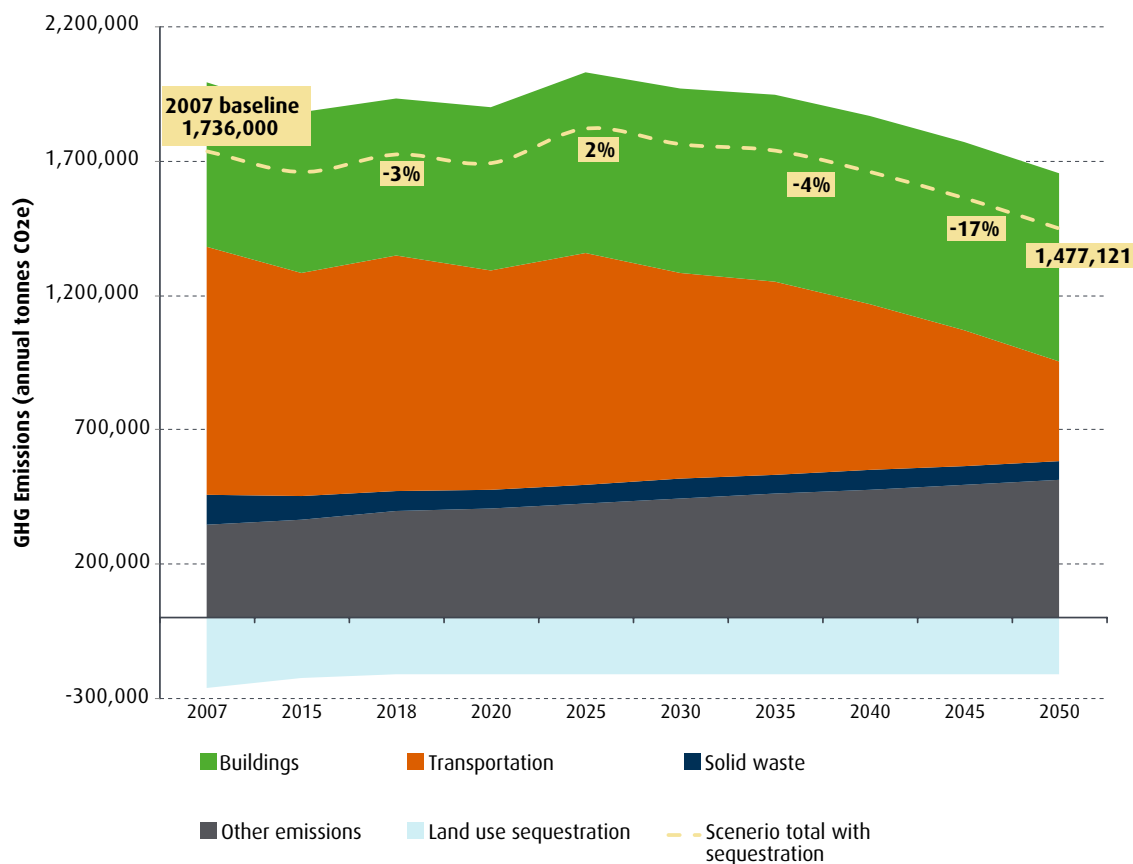


Capital Region Business-as-Usual Emissions Forecast

Continued strong population growth is anticipated for the capital region over the coming decades. Historically, energy consumption and levels of GHG emissions have shown a strong correlation with population growth, though this is weakening over time due to changes in land use and transportation mode shift in urban areas, and more efficient buildings, infrastructure and technology. Although current trends indicate that energy consumption and GHG emissions may reduce over time, much more significant shifts are needed to address the climate emergency. Based on the Capital Regional District 2019-2038 Population, Dwelling Units and Employment Projection Report, the population is anticipated to exceed 450,000 by 2028 and almost 500,000 by 2040, an increase of 20% by 2038, relative to 2019. If the population continued to grow at this rate, the CRD's population would reach over 540,000 by 2050.

Under the assumption that senior governments continue to implement the climate policies and regulations they have committed to, the forecast shown in Figure 7 can be considered a business-as-usual scenario for region-wide GHG emissions. This forecast estimates GHG emissions over time if only senior government policies are implemented and no additional action is taken by the CRD, local governments, residents, businesses, industry and organizations in the region. Under this scenario, GHG emissions are forecast to decrease over time, reaching -23% by 2050; clearly insufficient to align with the climate emergency.

Figure 7. Capital region-wide GHG emissions: Business-as-usual scenario, 2007-2050 (tonnes CO₂e)



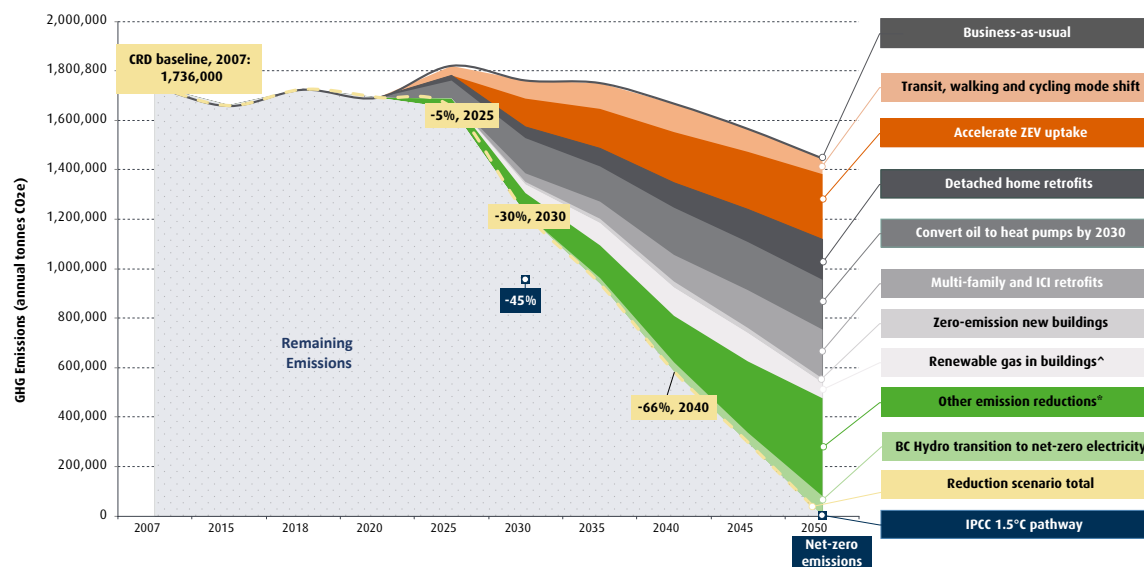
Rapidly Reducing Emissions While Increasing Resilience

A second region-wide scenario, called the **Climate Action Strategy** scenario, demonstrates one potential future trajectory for regional GHG emissions, though there are many more possible outcomes that depend on numerous factors beyond the CRD's control. This GHG emission reduction scenario cannot be achieved by the actions of the CRD alone; it shows the

potential outcome if all players do their part, including the CRD, by investing in the transition off fossil fuels. The scenario shows a pathway to achieve the CRD’s regional GHG emission reduction target for 2038 and approach net-zero emissions by mid-century. However, it falls short of meeting the Intergovernmental Panel on Climate Change 1.5°C scenario of reducing global emissions by 45% by 2030, from 2010 levels. **Additional measures need to be identified over the tenure of this plan to address the climate emergency.**

The actions identified in this strategy articulate how the CRD intends to play a leadership role in advancing the initiatives in its areas of influence in the near term. Figure 8 shows the potential reductions in regional emissions from different climate initiatives and Figure 9 shows the emissions that would remain after these reductions. This scenario assumes that the remaining emissions will be reduced by carbon sequestration from land use protection. This is shown as negative emissions in Figure 9 and subtracts from the total remaining emissions, resulting in the dotted-yellow reduction scenario pathway line. Land use protection ensures that natural areas continue to act as a carbon storage through mid-century.

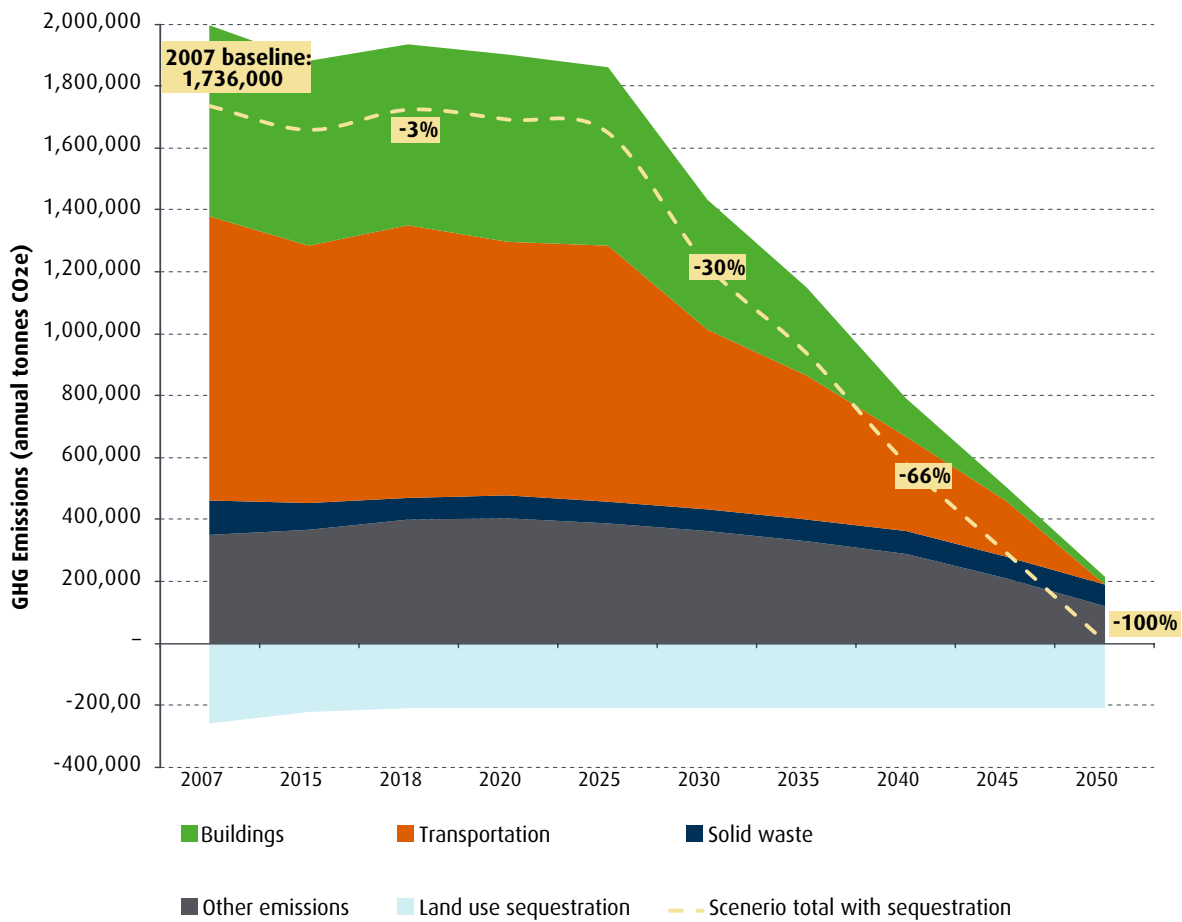
Figure 8. Capital region-wide GHG emissions: Climate Action Strategy scenario, 2007-2050 (tonnes CO₂e)



^ Renewable gas may include several sources, e.g., captured landfill gas, gas from anaerobic digesters, future supply of hydrogen gas.

* Other emissions sources include agriculture, forestry, other land use, fugitive, marine and aviation, product use

Figure 9. Capital region-wide GHG emissions: Climate Action Strategy remaining emissions, 2007-2050 (tonnes CO₂e)

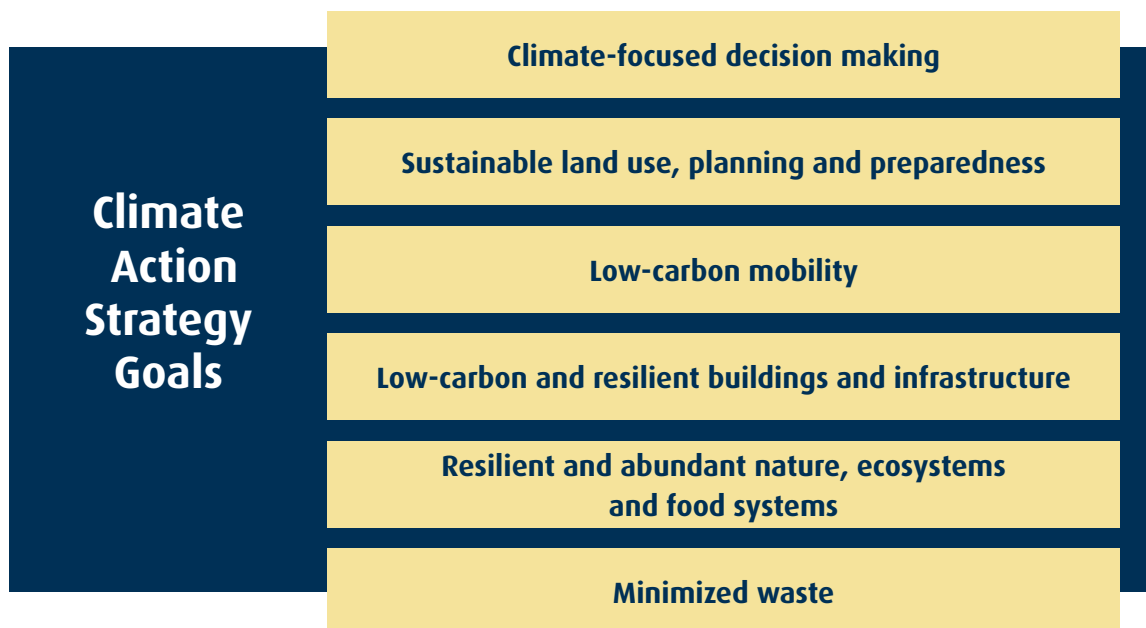




The CRD's Five-year Action Plan

As highlighted above, substantial action is needed from many parties to set the corporation and the region on paths that align with maintaining global temperature increase below 1.5°C, and that helps us prepare for the climate changes already evident. This section highlights six goal areas where the CRD will focus its efforts, together with numerous actions that will be undertaken by several different services across the organization. As highlighted in the vision and guiding principles, the CRD will also need to work collaboratively with several other organizations, and some of these key partner roles are highlighted below.

Appendix C provides a consolidated list of actions and related sub-actions, including which division(s) are responsible for leading and supporting the actions, estimated timing of action implementation and whether additional resources are needed.





Climate-Focused Decision Making

Goal 1: Climate action priorities are integrated at all levels of decision making across the organization.

In order to provide its wide range of services, the CRD maintains and operates vehicles, equipment, buildings, facilities, infrastructure, landfills, paths and parks. Decisions made in each service area can have implications for the amount of GHG emissions generated or sequestered by CRD assets over time, as well as how prepared these assets are for the changing climate.

There are a number of options to further integrate climate action into the decision-making process, including using a standard climate lens framework that demonstrates the climate impact of operational decisions and identifying an internal carbon price to help with business cases for energy efficiency and emission reduction measures. Effective implementation will require allocating appropriate internal funding and rolling out organizational change efforts to accompany new policies. Through this process, the CRD can also improve the organizational understanding of Indigenous knowledge, laws and perspectives in relation to climate solutions to inform how the CRD approaches climate action.

The CRD's Role

Operational decision making: Decisions at the CRD are guided by various corporate processes and procedures, including budget and capital planning, procurement, asset management and service planning. The CRD can update these to ensure they reflect the climate emergency priority.



Partners' Roles

Utilities: To support the CRD's efforts to improve energy efficiency and reduce GHG emissions through co-funding of staff resources and providing grants and funding to undertake projects.

Federal and Provincial governments: To ensure BC's electricity grid transitions to zero emissions, and to strengthen policies and programs that support rapid market transformation toward zero-emission buildings, infrastructure, vehicles and equipment.

Service providers: To supply CRD with options for reducing emissions during the procurement process.

Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Corporate actions	Lead CRD divisions
Integrate and standardize the climate lens framework across processes	Environmental Protection Financial Services Legal Services Regional & Strategic Planning
Develop internal carbon pricing policies and procedures	Environmental Protection Financial Services
Identify internal funding sources for climate action	Environmental Protection
Support staff capacity building and coordination	Environmental Protection
Investigate how Indigenous knowledge can inform climate action at CRD	First Nations Relations



Sustainable Land Use, Planning and Preparedness

Goal 2: Support the region on its pathway to livable, affordable and low-carbon communities that are prepared for climate change.

How land use is managed has a strong influence on the regional GHG emissions, by affecting how far we travel to daily amenities, school, work, etc., how we choose to get to those places, as well as affecting how much land can be protected as carbon sinks. The 2018 Regional Growth Strategy (RGS) sets a regional vision and high-level policies for growth management. The key provision is to contain 95% of growth in designated areas, and to concentrate growth in a way that is connected. In turn, this helps protect the region's parks and resource lands. The RGS, which encompasses the entire capital region except for the Islands Trust Areas, sets forth objectives, policies and targets to address climate change and highlights the connection between land use and climate change.

In addition to land use, planning and preparedness efforts across the region are important to increase the resilience of the region by increasing our ability to cope with hazardous or emergency events and other impacts that result from a changing climate. For example, emergency response plans need to be reviewed and refined over time, particularly as the context of our climate changes and shifts to include more extreme weather events that may require responses not anticipated or experienced in the past.



The CRD's Role

Regional planning: The CRD leads the development, monitoring and progress reporting of the RGS.

Juan de Fuca land use planning: The CRD is directly responsible for [land use planning in the Juan de Fuca Electoral Area](#).



Emergency management in electoral areas: The CRD is responsible for [emergency management](#), [emergency response](#), [fire protection](#), and [search and rescue](#) in the electoral areas.

Inter-municipal coordination: In relation to climate action, regional planning and emergency management, the CRD facilitates numerous committees that support this goal area: CRD Climate Action Inter-Municipal Working Group, CRD Climate Action Inter-Municipal Task Force, the Development Planning Advisory Committee, the Regional Emergency Management Partnership, Local Government Emergency Program Advisory Commission and the Regional Emergency Planning Advisory Commission.

Data management: The CRD supports an improved understanding of regional climate change issues and opportunities by collecting, analyzing and sharing information with regional partners.

Partners' Roles

Municipalities: Support regional growth planning and make local land use planning decisions.

Islands Trust: Make land use planning and policy decisions for Salt Spring Island and the Southern Gulf Islands electoral areas.

Provincial government: Owns various regulations (including BC Local Government Act and the Emergency Program Act), which provide the legislative framework for the CRD and its local governments. The Ministry of Transportation and Infrastructure is responsible for subdivision approvals in the electoral areas.

First Nations: The CRD will look to First Nations for leadership in understanding how to create new regional planning and decision-making systems together on their Traditional Territories.

Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Corporate actions	Lead CRD divisions
Incorporate climate hazards and vulnerabilities into corporate CRD emergency response plans	Protective Services
Community-focused actions	Lead CRD divisions
Monitor Regional Growth Strategy	Regional & Strategic Planning
Integrate climate impacts into Juan de Fuca land use plans and policies	Juan de Fuca Planning
Collect and share pertinent energy, emissions, climate projections and vulnerability data	Environmental Protection
Identify innovative actions to close the regional 2030 emissions reduction gap	Environmental Protection
Coordinate regional climate action, collaboration and capacity building among local governments and interested First Nations	Environmental Protection First Nations Relations Health & Capital Planning Protective Services Regional & Strategic Planning
Incorporate regional climate projections into electoral area emergency planning and enhance FireSmart efforts	Protective Services
Coordinate with emergency management stakeholders on planning and public outreach activities related to climate risks	Environmental Protection
Investigate Transition Salt Spring Island 2.0 Climate Plan implementation	Salt Spring Island Administration



Low-Carbon Mobility

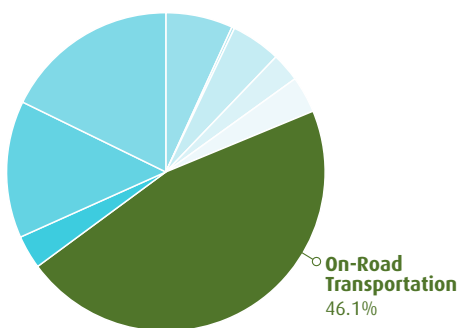
Goal 3: Rapidly reduce corporate fleet emissions. Support, endorse and encourage active, public and zero-emission transportation options across the region.



Almost half of the region's greenhouse gas (GHG) emissions come from transportation (cars, buses and trucks moving people and goods around). Not only do these vehicles release significant GHG emissions, they're also leading to increased traffic congestion in peak periods. Shifting from a vehicle-focus to a low-carbon mobility focus means improving the options to get more people walking, biking and taking transit. Currently, these make up about 27% of trips in the region, but the goal is to reach 45% by 2038.

For trips that use a vehicle, rapidly switching to electric vehicles (EVs) will require building out charging infrastructure throughout the region – making sure they are accessible to those who live in all types of homes and at key locations across the region.

For heavy-duty vehicles and equipment that have no suitable electric option in the near term, alternatives to fossil fuels, such as biodiesel and renewable diesel, can provide an interim option to rapidly reduce emissions where supply is available.



The CRD's Role

CRD fleet: The CRD owns and operates a fleet of approximately 300 vehicles to provide its many services across the region.

Regional trail system: The CRD is responsible for the planning, design, operation, maintenance, regulation and funding of a regional trail system that acts as an active transportation spine.

Regional planning: Together with member municipalities, the CRD developed and implements a [Regional Transportation Plan](#) and Regional Pedestrian and Cycling Master Plan.

Electoral area transportation: The CRD provides project management for transportation plans and projects and is a local partner for transit initiatives. The CRD plays an advisory role to the Ministry of Transportation & Infrastructure, which manages the road networks in the Juan de Fuca, Salt Spring Island and Southern Gulf Islands Electoral Areas.

Data management: The CRD collects, analyzes and shares data and information on regional transportation patterns, trips and modes, as well as undertaking modelling activities and providing policy support.

Community programs: The CRD supports local governments and partner agencies to plan for and implement a regional multi-modal transportation system, advance active transportation and electric vehicle programming and support transport projects that benefit the region as a whole.

Partners' Roles

Federal and provincial governments: Implement policy to achieve federal and provincial climate targets, including vehicle emission standards, zero emission vehicle sales, carbon tax, and low carbon fuel standard. Senior governments also provide funding for large infrastructure projects, and are responsible for road infrastructure in electoral areas, highways and through First Nations reserves.

Municipalities: Provide local roads, sidewalks, cycling infrastructure and trails, create land use and development plans, and develop bylaws to support low-carbon travel.

BC Transit: Manage Victoria Regional Transit system operation, advise Victoria Regional Transit Commission, fund provincial portion of the system, partner with Salt Spring Island Transit.

Victoria Regional Transit Commission: Determine transit route configurations, service levels and fares, review and recommend annual operating budgets and capital spending.

Salt Spring Island Transportation Commission: Serve as an advisor to the CRD and to BC Transit on matters related to the transit service and to transportation-related community needs and projects.

First Nations: The CRD will look to First Nations to identify priorities for working together on transportation initiatives.



Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Corporate actions	Lead CRD divisions
Administer and track the new Green Fleet Policy	Customer & Technical Services
Develop electric vehicle (EV) adoption and right-sizing plan for the corporate fleet	Customer & Technical Services Environmental Protection
Develop EV infrastructure plan for the corporate fleet	Environmental Protection Facilities Management & Engineering Services
Investigate the feasibility of bio-based diesel supply and storage for shared regional use	Customer & Technical Services

Community-focused Actions	Lead CRD divisions
Develop a region-wide approach to transportation demand management and safety policy	Regional & Strategic Planning
Collect, analyze and distribute transportation planning data regionally	Regional & Strategic Planning
Accelerate infrastructure improvements that support active transportation	Regional & Strategic Planning Regional Parks Salt Spring Island Administration Southern Gulf Islands Administration
Lead and support regional education programs focused on zero-emission mobility	Environmental Protection Regional & Strategic Planning
Support acceleration of transit improvements and increased service	First Nations Relations Regional & Strategic Planning Salt Spring Island Administration Southern Gulf Islands Administration
Support a public electric vehicle charging network and encourage uptake of zero-emission vehicles	Environmental Protection
Implement Regional EV Charging Roadmap	Environmental Protection
Improve internet access on Southern Gulf Islands	Southern Gulf Islands Administration

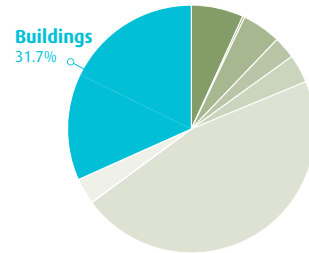


Low-Carbon and Resilient Buildings and Infrastructure

Goal 4: Accelerate energy efficiency, emission reductions and enhanced resilience in CRD buildings and infrastructure. Support and encourage the same for all buildings and infrastructure across the region.



Approximately one-third of regional greenhouse gas emissions come from energy used in buildings across the capital region, almost all of which is from fossil fuels for space heating and hot water. Shifting from relying on fossil fuels for space heating and hot water and improving the energy efficiency of our buildings are key to achieving GHG reduction targets. Further, this can support resiliency measures, which may be increasingly important with anticipated increases in high temperatures during the summer. Renewable fuels (such as renewable natural gas or a future supply of green hydrogen) may also provide an alternative for some applications.



While newly-constructed buildings are often more energy efficient, it is important to consider the embodied carbon in the materials selected for those buildings and the emissions associated with construction. Some materials require very high emissions to produce and therefore contribute to increased emissions globally.

As our climate changes, it is increasingly important to prepare our buildings and infrastructure for anticipated changes, which could affect the types of materials and systems selected, the capacity of infrastructure (like stormwater pipes), what climate information to use in design, how the building performs during power interruptions, and how buildings can provide community shelter or emergency support.

The CRD's Role

CRD buildings and infrastructure: The CRD owns and operates a large amount of buildings and infrastructure across its various services, including:

- Administration and operation centres.
- Residential care, social and affordable housing.
- Recreation and community centres.
- Roads, bridges, tunnel, dams and weirs.
- Trails, boardwalks and piers.
- Water storage, treatment and conveyance systems.

Building inspection: The CRD enforces the BC Building Code in the Juan de Fuca Electoral Area, the Southern Gulf Island Electoral Area, Salt Spring Island Electoral Area and, upon request, in First Nations communities.

Data management: The CRD collects, analyzes and shares data and information relevant to new and existing buildings and infrastructure.

Community programs: The CRD offers community programs to educate the public and encourage and incent efficient and low-carbon buildings across the region, including coordinating regional initiatives.

Partners' Roles

Federal and provincial governments: Set building code and equipment standards, and provide funding for incentive programs to support building retrofits to higher energy efficiency and alternative energy systems.

Municipalities: Issue building permits and enforce the BC Building Code, set development permit area requirements, and deliver education and incentive programs.

Islands Trust: Set development permit area requirements.

Utilities: Provide reliable energy, deliver demand-side management programs including incentives, increase capacity for energy efficiency retrofits, and provide educational outreach on building technologies and alternative energy systems.

First Nations: The CRD will look to First Nations to identify priorities for working together on First Nations' building and infrastructure-related initiatives.

Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Corporate actions	Lead CRD divisions
Develop and implement a corporate Green Building Policy	Environmental Protection Facilities Management & Engineering Services
Develop and implement a Strategic Energy Management Plan	Environmental Protection Facilities Management & Engineering Services
Conduct energy studies for CRD facilities to identify priority emission reduction and energy efficiency projects	Environmental Protection Panorama Recreation Salt Spring Island Administration SEAPARC Water and Wastewater Infrastructure Operations/Engineering
Complete identified high-impact retrofits to CRD facilities	Facilities Management & Engineering Services Panorama Recreation SEAPARC
Pursue climate-friendly development and retrofits for Capital Region Housing Corporation and Capital Region Hospital District facilities	Environmental Protection Health & Capital Planning Regional Housing
Consider climate impacts in risk assessments and infrastructure upgrades	Water and Wastewater Infrastructure Operations / Engineering Watershed Protection

Community-focused actions	Lead CRD divisions
Implement a Regional Energy Retrofit Program	Environmental Protection
Develop, deliver and support building-related energy, emissions and water education	Environmental Protection
Support acceleration of regional building energy benchmarking and local government regulation approaches	Environmental Protection
Coordinate high-performance building policy support and capacity building activities	Environmental Protection
Collect and share data and research on building energy use and emissions	Environmental Protection
Promote green infrastructure and improved stormwater management approaches	Environmental Protection
Understand climate impacts on groundwater resources in Juan de Fuca Electoral Area	Juan de Fuca Planning
Investigate regional renewable energy and storage potential	Environmental Protection





Resilient and Abundant Nature, Ecosystems and Food Systems

Goal 5: Protect, conserve and manage ecosystem health and nature's capacity to store carbon and adapt to climate change. Support the ongoing ability of natural systems to sustain life.



Green spaces, blue spaces and parks provide important services to store carbon in vegetation and soils, while at the same time providing ecological services that support the region's resilience to climate change, and providing buffers to extreme weather events. For example, the forests in the Greater Victoria Water Supply Area contribute to the high quality of water in the supply reservoirs, and green spaces in urban and suburban areas provide natural cooling capacity. In contrast, the built environment largely absorbs heat from the sun, which results in the urban heat island effect. As temperatures in the region rise, natural areas can also serve to reduce the need for energy-intensive air conditioning and provide accessible areas of respite for all residents.

Monitoring ecological changes over time and sharing this across all levels of government, including First Nations, as well as community organizations and citizens can increase our collective understanding of the impacts of these changes and inform how we can collectively respond to support the health of our ecosystems.



The CRD's Role

Land stewardship: Several services within the CRD play an important role in stewarding the CRD's lands, including:

- Managing over 13,000 hectares of natural areas in 34 regional parks and three regional trails.
- Managing over 20,000 hectares of forested land in three watersheds that supply potable water to residents.
- Managing a system of community parks across Salt Spring and the Southern Gulf Islands.

Land acquisition: The CRD plans for future acquisitions, restores and conserves natural resources, and offers interpretive programs for the continued stewardship of regional parks and trails.

Community and inter-municipal coordination: The CRD supports or coordinates a number of stewardship groups related to parks, watershed and harbour protection and invasive species management.

Education and outreach: The CRD develops and delivers education and outreach to help build regional resiliency, promote stewardship, and protect and conserve ecosystems.

Regional planning: The CRD does not have a specific mandate over food and agriculture. However, the CRD administers a Food and Agriculture Task Force to support the goals in the 2016 Regional Food & Agriculture Strategy for a resilient food and agriculture system.

Partners' Roles

Federal and provincial governments: Manage parks and waterbodies in their jurisdictions (e.g., Gulf Islands National Park Reserve, Goldstream Provincial Park, Race Rocks Marine Protected Area), manage forested areas, provide funding and information resources.

Municipalities: Collaborate with the CRD in defining a direction for regional parks, implement integrated watershed management, manage municipal parks and trails, create urban forest strategies, and make land use planning decisions and manage environmental development permit areas.

Islands Trust: Local trust committees make land use planning decisions and manage environment development permit areas. They collaborate with the CRD for new parks when subdividing or rezoning. The Islands Trust Fund secures land in nature reserves and through conservation covenants and collaborates with CRD Parks on projects, as appropriate.

First Nations: The CRD will look to First Nations to identify priorities for working together on nature-based, ecosystem and food initiatives within and around their Traditional Territories.

Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Corporate actions	Lead CRD divisions
Integrate climate considerations into regional parks strategic planning and management	Regional Parks
Monitor ecosystem health in the Greater Victoria Water Supply Area (GVWSA) and investigate expanding regionally	Regional Parks Watershed Protection
Undertake climate adaptation initiatives to increase the resilience of the GVWSA	Watershed Protection
Community-focused actions	Lead CRD divisions
Provide regional and local ecological data to support planning and policy efforts	Environmental Protection
Coordinate regional invasive species program	Environmental Protection
Support regional forest and urban tree programs	Environmental Protection
Support Indigenous-led monitoring and restoration programs	Environmental Protection First Nation Relations
Support local food and agriculture planning and programs	Environmental Protection Regional & Strategic Planning
Integrate climate impacts and solutions into education and outreach campaigns	Environmental Protection Integrated Water Services Regional Parks Salt Spring Island Administration Southern Gulf Islands Administration



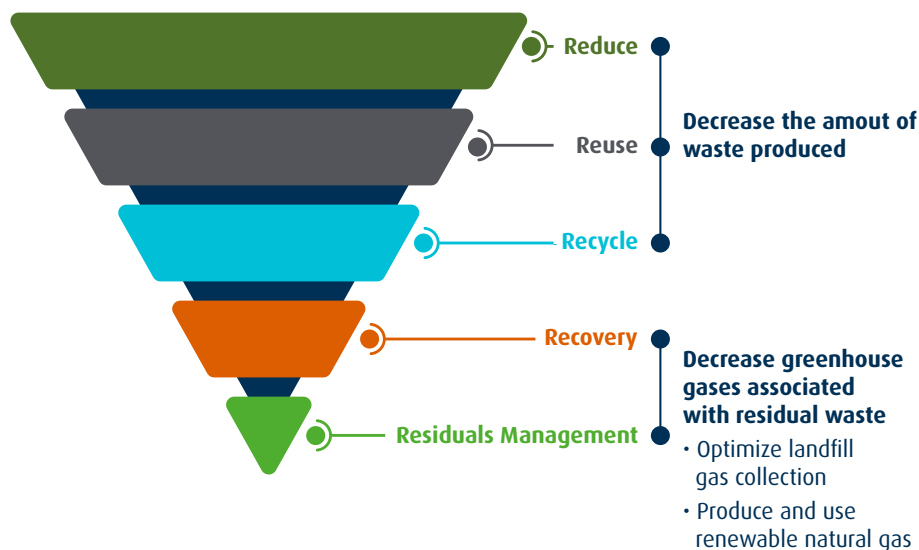
Minimized Waste

Goal 6: Waste generation and the resulting emissions are minimized and remaining waste is transformed into a resource. Follow the 5R pollution prevention hierarchy.

When we buy products and dispose of the waste, we also contribute to greenhouse gas (GHG) emissions in the region. About 6% of regional GHG emissions are associated with waste—and the majority of this comes from decomposing organic waste that was added to Hartland Landfill over the last several decades (e.g., food scraps and construction wood waste).

The most effective way to reduce future emissions from the landfill is to follow the 5R hierarchy – focusing first on decreasing the amount of waste produced, then on decreasing the GHG emissions from remaining waste (see Figure 10). The CRD continues to actively manage residual GHG emissions by maximizing the efficiency of the landfill gas capture system and converting the captured gas into an energy resource. A small portion of the region’s waste emissions result from management of liquid waste. Liquid waste management can also provide an opportunity for resource recovery, energy efficiency and energy generation.

Figure 10. 5R pollution prevention hierarchy



The CRD's Role

Solid Waste Management Plan: The CRD is responsible for solid waste management in the region and provides three major services: diversion (recycling and waste diversion programs), recovery (landfill gas capture and energy generation) and landfilling (disposal services and environmental protection).

Waste is seen as a resource and the CRD seeks the highest and best use for these resources, as demonstrated by initiatives such as methane gas capture and the ban on kitchen scraps from the landfill.

The CRD's efforts on solid waste are guided by the Solid Waste Management Plan, which provides a high-level, long-term vision of how to manage solid waste in accordance with the pollution prevention hierarchy, in accordance with the requirements under the provincial Environmental Management Act.

Liquid Waste Management Plan: The CRD, in cooperation with local municipalities, electoral areas, Island Health and industry, works together to develop local services to manage and monitor sewage infrastructure and treatment, stormwater infrastructure and septic systems. These programs and services are aimed at protecting human health, local streams, creeks, the ocean and our environment.

Education and outreach: The CRD delivers education and outreach programs that support the solid waste and liquid waste management services.



Partners' Roles

Federal and provincial governments: Set policies that guide local government and industry waste diversion performance and landfill management and reporting.

Municipalities: Collect solid waste and organics, where applicable.

Industry: Provide waste and recyclable services for residents and businesses without municipal services. Provide funding for products covered under the provincial Recycling Regulation (e.g., printed paper and packaging, paint, electronics, etc.).

Non-profits: Operate recycling facilities on the Southern Gulf Islands. Greater Victoria Compost Education Centre provides composting education to residents across the capital region.

First Nations: The CRD will look to First Nations to identify priorities for working together on waste reduction and management initiatives.

Actions at a Glance

See Appendix C for related sub-actions, the CRD divisions supporting them, estimated timing of action implementation and whether additional resources are needed.

Community-focused actions	Lead CRD divisions
Implement the Solid Waste Management Plan	Environmental Resource Management
Develop and deliver education programs to promote a circular economy, zero waste and the first 3Rs (reduce, reuse and recycle)	Environmental Resource Management
Support education and engagement on waste management to be delivered by and for First Nations communities	Environmental Resource Management
Continue to maximize and optimize the capture of landfill gas for beneficial use	Environmental Resource Management
Consider climate change impacts in liquid waste management	Environmental Protection



Implementation and Reporting

Climate action is integrated into work plans across the CRD departments, divisions and services. Over the next five years, the actions contained within this strategy will be implemented by almost two dozen service areas across the organization (see Appendix B and C). The CRD's Climate Action Program will be responsible for coordinating, monitoring and reporting on this Five-year Climate Action Strategy. Collaboration and involvement of staff across the organization and throughout the community will be integral to its success.

As progress is made in the implementation of this action plan, knowledge and understanding of the growing impacts of climate change will continue to develop, as will new opportunities for accessing external funding. To remain flexible and adaptable, and support implementation over time, program staff will:

- continue to identify opportunities for external funding to support strategy goals and actions.
- participate in regional and provincial forums to share best practices with others and learn from Indigenous knowledge and approaches to climate action.
- remain up-to-date with climate science and potential risks and impacts for the capital region.
- continue to provide data, information and policy support to local government climate action efforts.
- provide updated information about climate change projections and risks to senior management and the Board to inform decisions.
- continue to monitor data to track progress over time.

- identify opportunities for increasing public awareness on climate change risks and opportunities.
- evaluate progress annually and adjust actions, as needed.
- continue to provide annual progress reports to the CRD Board on the Climate Action Strategy.

Other services in the CRD are responsible for leading or supporting actions identified in this strategy, as listed in the detailed action plan (see Appendix C). These services are also responsible for reporting progress annually and supporting with the review and adjustment of actions, as needed.

Performance Indicators and Reporting

Staff will continue to publicly report annually on the progress being made in the implementation of the Five-year Climate Action Strategy. Table 3 summarizes the success measures identified for each goal area proposed for annual reporting. For each goal area, a corporate action status and/or a community-focused action status will reflect general progress made toward all actions in that goal. This helps to summarize at-a-glance progress made on actions that may not be easily measurable or reflected in another indicator, such as actions that are ongoing or taking place over a long period. For other measures, an icon is provided to indicate the desired direction of the measure over time (increasing or decreasing), if applicable, or if the measure is intended to provide contextual information.

In addition to these measures, annual reports to the Board and public will identify key achievements and successes, partnerships and any major barriers.



Table 3. Annual reporting measures

Goal area	Corporate	Community-focused
 Goal 1: Climate-focused decision making	 Corporate action status	N/A
	 Annual CRD Corporate GHG emissions	
 Goal 2: Sustainable land use, planning and preparedness	 Corporate action status	 Community-focused action status
		 Regional GHG emissions
		 Number of net new dwelling units in areas where more than 42% walk/bike/bus to work*
 Goal 3: Low-carbon mobility	 Corporate action status	 Community-focused action status
	 Annual CRD corporate fleet GHG emissions	 Regional GHG emissions from transportation
	 Number of corporate electric vehicles (EVs) purchased/combustion vehicles replaced	 Percentage of total trips made by walking, cycling and transit in the Growth Management Planning Area*
	 Number of EV chargers installed	 Percentage of the Regional Trail Network completed*
		 Number of public EV chargers installed
		 Annual EV ICBC registrations (region fleet size)
		 Victoria Transit Region fuel sales

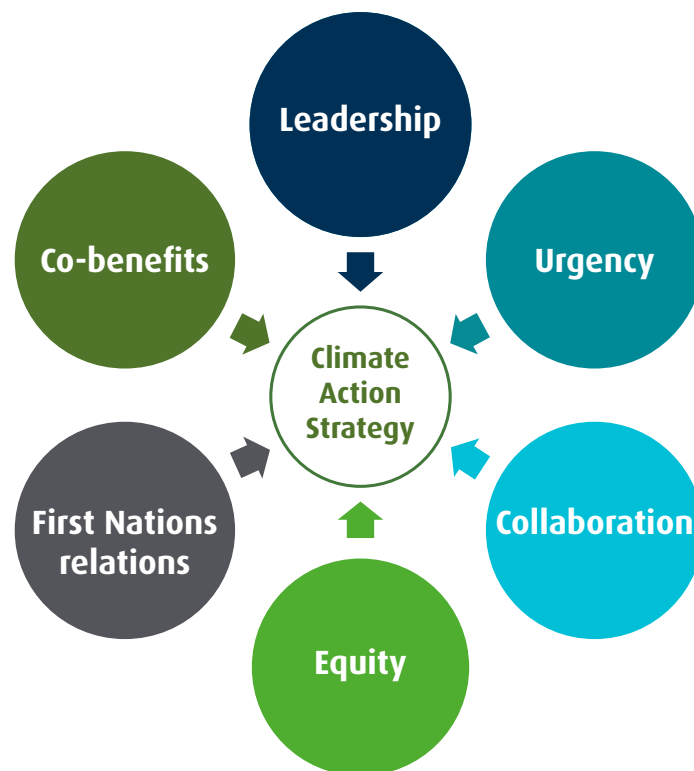
Goal area	Corporate	Community-focused
 Goal 4: Low-carbon and resilient buildings and infrastructure	 Corporate action status	 Community-focused action status
	 Annual CRD corporate facilities GHG emissions	 Regional GHG emissions from buildings
	 Number of critical emissions reduction projects completed	 Natural gas use: • Annual FortisBC consumption numbers • Annual FortisBC connections
	 Number of site energy audits completed	 Number of fossil-fuel-heated homes sold each year in the capital region
 Goal 5: Resilient and abundant nature, ecosystems and food systems	 Corporate action status	 Community-focused action status
	 Number of volunteer stewardship hours	 Percentage of Sea-to-Sea Green/Blue Belt acquired (RGS)
		 Hectares of regional parkland
 Goal 6: Minimized waste	N/A	 CRD's per capita disposal rate (reported via <i>Solid Waste Management Plan</i> target to reduce to 250kg or less by 2030)

* Metrics will be drawn from Regional Growth Strategy indicator reporting.

Adaptive Management

As implementation of this strategy progresses, it will be vital to track progress and assess whether identified actions need to be adapted, shifted to different times or focus, updated to reflect changing context and/or opportunities. Through this process, the CRD will be guided by the underlying guiding principles.

After five years of implementation, the CRD will undertake a thorough review and update to determine what actions are needed to continue advancing the corporation and the region to drastically reduce GHG emissions and foster healthy and resilient communities and natural areas.





Appendix A: Glossary

Adaptation: The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effect.¹

Biodiversity: The variability among living organisms from terrestrial, marine and other ecosystems. Biodiversity includes variability at the genetic, species and ecosystem levels.¹

Capacity building: The practice of enhancing the strengths and attributes of, and resources available to, an individual, community, society or organization to respond to change.²

Carbon neutrality: See net-zero emissions.³

Climate: The average weather over a long period of time. Aspects of climate include temperature, precipitation, wind speed and direction, sunshine, fog and frequency of extreme events.⁴

Climate change: The process by which the average weather becomes different over time. Climate has changed due to natural forces over the course of history (e.g., volcanoes, ocean currents) but human activity (e.g., industry, transportation) is now considered the cause of rapid and severe climate change. These changes include sea level rise, more intense and more frequent extreme weather events (e.g., storms, hurricanes, storm surge) and in Atlantic Canada, warmer, wetter summers and winters.⁴

Co-benefits: The positive effects that a policy or measure aimed at one objective might have on other objectives, irrespective of the net effect on overall social welfare. Co-benefits are often subject to uncertainty and depend on local circumstances and implementation practices, among other factors.¹

Drought: A period of abnormally dry weather, long enough to cause a serious hydrological imbalance. Drought is a relative term; therefore, any discussion in terms of precipitation deficit must refer to the particular precipitation-related activity that is under discussion.¹

Ecosystem: A functional unit consisting of living organisms, their non-living environment, and the interactions within and between them. The components included in a given ecosystem and its spatial boundaries depend on the purpose for which the ecosystem is defined: in some cases, they are relatively sharp, while in others they are diffuse. Ecosystem boundaries can change over time. Ecosystems are nested within other ecosystems, and their scale can range from very small to the entire biosphere. In the current era, most ecosystems either contain people as key organisms or are influenced by the effects of human activities in their environment.¹

Embodied carbon: The GHG associated with the non-operation phase of the building. This includes emissions caused by extraction, manufacture, transportation, assembly, maintenance, replacement, deconstruction, disposal and end-of-life aspects of the materials and systems that make up a building.⁵

Extreme weather event: An event that is rare at a particular place and time of year. Definitions of “rare” vary, but an extreme weather event would normally be as rare as or rarer than the 10th or 90th percentile of a probability-density function estimated from observations. By definition, the characteristics of what is called extreme weather may vary from place to place in an absolute sense. When a pattern of extreme weather persists for some time, such as a season, it may be classed as an extreme climate event, especially if it yields an average or total that is itself extreme (e.g., drought or heavy rainfall over a season).¹

Fossil fuels: Carbon-based fuels from fossil hydrocarbon deposits, including coal, peat, oil and natural gas.²

Greenhouse gas (GHG): Greenhouse gases are those gaseous constituents of the atmosphere, both natural and anthropogenic, that absorb and emit radiation at specific wavelengths within the spectrum of terrestrial radiation emitted by the Earth’s surface, the atmosphere itself and by clouds. This property causes the greenhouse effect. Water vapour (H₂O), carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄) and ozone (O₃) are the primary greenhouse gases in the Earth’s atmosphere. Moreover, there are a number of entirely human-made greenhouse gases in the atmosphere, such as the halocarbons and other chlorine- and bromine-containing substances, dealt with under the Montreal Protocol. Besides CO₂, N₂O and CH₄, the Kyoto Protocol deals with the greenhouse gases sulphur hexafluoride (SF₆), hydrofluorocarbons (HFC) and perfluorocarbons (PFC).²

Groundwater: Water below the level of the water table in the ground; water occupying the subsurface-saturated zone.⁶

Infrastructure: The physical capital and associated services are considered basic and necessary to the functioning of the built environment. These include such things as: sanitary sewers, treatment plants, and water pipelines and distribution/collection systems; roads, signals, sidewalks and other components of the transportation system, including transit vehicles, ferries and airports; solid waste management facilities including transfer stations and landfills; and energy supply and distribution systems, including hydroelectric and natural gas transmission and distribution systems. More generally, infrastructure can refer to other tangible public and private assets necessary to support the development of a modern urban settlement, such as hospitals, schools and recreation facilities. In some cases, preserved green space and natural areas, including forest, wetlands and stream corridors have been described as “green infrastructure” essential to the vitality of healthy human communities.

Interface fire: A fire that involves human development and wildland simultaneously.⁶

Invasive species: Any species not native to a particular ecosystem whose introduction causes, or is likely to cause, economic or environmental harm or harm to human health.⁶

Mitigation (of climate change): A human intervention to reduce the sources or enhance the sinks of greenhouse gases.¹

Net-zero emissions: Net-zero emissions are achieved when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period.³

Resilience: The capacity of social, economic and environmental systems to cope with a hazardous event, trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning and transformation.⁶

Sequestration: The uptake (i.e., the addition of a substance of concern to a reservoir) of carbon-containing substances, in particular carbon dioxide (CO₂), in terrestrial or marine reservoirs. Biological sequestration includes direct removal of CO₂ from the atmosphere through land use change, afforestation, reforestation, revegetation, carbon storage in landfills and practices that enhance soil carbon in agriculture (cropland management, grazing land management).²

Storm surge: The temporary increase, at a particular locality, in the height of the sea due to extreme meteorological conditions (low atmospheric pressure and/or strong winds). The storm surge is defined as being the excess above the level expected from the tidal variation alone at that time and place.¹

Urban heat island: The relative warmth of a city compared with surrounding rural areas, associated with changes in runoff, effects on heat retention and changes in surface reflectivity.¹

Vulnerability: The degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change. It is a function of the character, magnitude and rate of climate change and variation to which a system is exposed, its sensitivity and its adaptive capacity.¹

Zero-emission vehicle (ZEV): A vehicle that has the potential to produce no tailpipe emissions. It can still have a conventional internal combustion engine, but must also be able to operate without using it. We consider the following vehicles to be ZEVs: battery-electric, plug-in hybrid electric and hydrogen fuel cell.⁷

1. IPCC, 2014, Climate Change 2014: Impacts, Adaptation, and Vulnerability

2. IPCC, 2014, Climate Change 2014: Mitigation of Climate Change

3. IPCC, 2018, Special Report: Global Warming of 1.5°C – Glossary

4. BC MOE, 2013, Sea Level Rise Adaptation Primer – Appendix A

5. UK Building Council, 2015, Tackling Embodied Carbon in Buildings

6. BC Ministry of Forests, 2008, Glossary of forestry terms in British Columbia

7. Transport Canada, accessed 2021, [Zero-emission vehicles](#) (website)

Appendix B: Related CRD Strategies and Plans

CRD Plans intersecting with climate action	Climate Action Strategy Goal					
	1	2	3	4	5	6
2019-2022 Board Priorities	•	•	•	•	•	•
Advocacy Strategy (2019)	•	•	•	•	•	•
Community Health and Well-Being Plan (2017)		•	•	•	•	
Core Area Inflow and Infiltration Management Plan (2017)					•	
Corporate Asset Management Strategy (2019)	•			•	•	
Corporate Plan (2019-2022)	•	•	•	•	•	•
Liquid Waste Management Plans (various)					•	•
Regional Food and Agriculture Strategy (2016)					•	•
Regional Green/Blue Spaces Strategy (1997)					•	
Regional Growth Strategy (2018)		•	•	•	•	
Regional Housing Affordability Strategy (2018)	•		•			
Regional Parks Land Acquisition Strategy (2012-2021) and Fund					•	
Regional Parks Strategic Plan (2012-2021)			•		•	
Regional Pedestrian & Cycling Master plan (2011) and Salt Spring Island Edition (2013)			•			
Regional Trails Management Plan (2015)			•		•	
Regional Transportation Plan (2014)	•		•			
Regional Water Supply Strategic Plan (2017)				•	•	
Solid Waste Management Plan (2021)						•

Appendix C: Detailed Action Plan

CRD Divisions	Abbreviation
Environmental Protection	EPro
Juan de Fuca Electoral Area Planning	JdF Planning
Building Inspections	BI
Corporate Communications	CC
Customer & Technical Services	CTS
Environmental Resource Management	ERM
Facilities Management & Engineering Services	Facilities
Financial Services	Finance
First Nations Relations	FNR
Health & Capital Planning Strategies	HCP
Human Resources & Corporate Safety	HR
Information Technology & GIS	IT
Legal Services	Legal
Panorama Recreation	Pan Rec
Protective Services	PS
Regional & Strategic Planning	RSP
Regional Housing	Housing
Regional Parks	Parks
Risk & Insurance Management	Risk
Salt Spring Island Administration	SSI Admin
SEAPARC	SEAPARC
Southern Gulf Islands Administration	SGI Admin
Water and Wastewater Infrastructure Operation/Engineering	IWS
Watershed Protection	WP

Action name		Specific sub-actions	Lead	Support	Resources	Timing
 Goal 1: Climate-Focused Decision Making	Corporate					
	1-1 Integrate and standardize the climate lens framework across processes	Prepare a framework to standardize corporate climate action planning and evaluation of the climate impact of operational decisions. Utilize in corporate strategic planning, service planning and annual reporting.	EPro RSP	CC	Core service	2022-2023
		Integrate greenhouse gas emissions and climate risks into capital project planning; work with select services to develop Sustainable Service Delivery Plans.	Finance	EPro Other relevant divisions	Core service + new	2024+
		Incorporate a climate lens when implementing the corporate Asset Management Strategy.	Finance	EPro	Core service	2021+
		Align procurement and vendor selection with the CRD's corporate climate goals, as part of the planned procurement policy update.	Legal	EPro	Core service	2021-2022
		Complete annual corporate GHG reporting and provide to the Board and departments.	EPro	Finance	Core service	Annually
	1-2 Develop internal carbon pricing policies and procedures	Develop an internal carbon pricing policy to support internal decision making. Embed in specified corporate processes and procedures (e.g., net present value and lifecycle cost analyses).	EPro Finance	All relevant divisions	Core service	2021-2023
		Pilot the new internal carbon pricing policy with select department(s).	EPro Finance		Core service	2023-2024
	1-3 Identify internal funding sources for climate action	Continue Climate Action Reserve Fund (CARF) to support corporate climate action goals.	EPro	Finance	Core service	Ongoing
		Identify innovative sources of funding to support climate action programs, including expanded CARF, internal carbon fee and the opportunity for an internally invested project.	EPro	Finance	Core service	2023-2024
	1-4 Support staff capacity building and coordination	Develop an internal climate action SharePoint site to profile key policies, procedures and resources for staff.	EPro	IT	Core service	2021
		Develop a staff climate action outreach program to encourage sustainable behaviour.	EPro	CC	Core service	2022
		Prepare and deliver training in conjunction with the roll-out of the new policies and procedures.	EPro	CTS Facilities Finance RSP	Core service	Ongoing
		Promote CRD climate goals and policies to volunteer committees and commissions. Pilot with Salt Spring Island and Southern Gulf Islands Electoral Areas.	EPro	SGI Admin SSI Admin Other relevant divisions	Core service	2022
		Maintain an ongoing staff climate action working group to share knowledge and continually evaluate best opportunities for climate action initiatives.	EPro	CTS Facilities Finance IWS Pan Rec SEAPARC	Core service	Ongoing

	Action name	Specific sub-actions	Lead	Support	Resources	Timing
	1-5 Investigate how Indigenous knowledge can inform climate action at the CRD	Investigate and understand perspectives on how Indigenous knowledge and Indigenous laws informs and relates to climate action; share this information with CRD departments and with municipalities.	FNR	EPro	Core service	Ongoing

 Goal 2: Sustainable Land Use, Planning and Preparedness	Corporate					
	2-1 Incorporate climate hazards and vulnerabilities into corporate CRD emergency response plans	Incorporate climate hazards and vulnerabilities into corporate CRD emergency response plans.	PS	All relevant divisions	Core service + grants	Ongoing
		Review and refine existing communication processes as they relate to climate change and extreme weather.	PS	CC	Core service	Ongoing
	Community-focused					
	2-2 Monitor Regional Growth Strategy (RGS)	Review Regional Context Statements for alignment with climate policies in the RGS and publish annual RGS indicators report.	RSP		Core service	Ongoing
	2-3 Integrate climate impacts into Juan de Fuca land use plans and policies	Continue to update and adopt official community plans that are consistent with the climate policies in the RGS.	JdF Planning		Core service + grants	Ongoing
		Review and update development permit flood management guidelines and requirements to ensure appropriate building setbacks from shoreline.	JdF Planning		Core service + grants	2021, 2022
	2-4 Collect and share pertinent energy, emissions, climate projections and vulnerability data	Collect and share pertinent regional energy and emissions and climate projections data with local governments, stakeholders and First Nations.	EPro		Core service	Ongoing
		Conduct regional and local government Global Protocol Community-Scale Basic+ GHG inventories every two years.	EPro		Core service	2021, 2023
		Renew regional downscaled climate projections when updated global climate projections available.	EPro	WP Other relevant divisions	Core service	2022-2023
		Expand data collection and mapping efforts to identify vulnerabilities to the impacts of climate change.	EPro		Core service + grants	Ongoing
	2-5 Identify innovative actions to close the regional 2030 emissions reduction gap	Identify the emission gap between the 2030 target and the 2022 inventory. Initiate a process to identify new actions that will close the gap in emissions by 2030.	EPro		Core service + grants	2023-2024

Action name	Specific sub-actions	Lead	Support	Resources	Timing
2-6 Coordinate regional climate action, collaboration and capacity building among local governments and interested First Nations	Facilitate coordinated local government approaches to municipal land use policy, public outreach, data related to sea level rise planning.	EPro		Core service + grants	2021-2024
	Collaborate and coordinate with stakeholders and interested First Nations government to include climate projections and risks into strategies, plan and policies.	EPro		Core service + grants	Ongoing
	Support Indigenous-led climate solutions.	EPro	FNR Other relevant divisions	Core service + grants	Ongoing
	Coordinate Inter-municipal Climate Change Task Force and Inter-municipal Climate Change Working Group.	EPro		Core service	Ongoing
	Incorporate climate action updates, within the CRD Development Planning Advisory Commission meetings.	RSP	EPro	Core service	Ongoing
	Coordinate Local Government Emergency Program Advisory Commission and Regional Emergency Management Partnership.	PS		Core service	Ongoing
	Develop resources identifying connection between climate and health and develop resources for decision makers and public engagement.	HCP	Epro	Core service	2021
	Research and share with local governments best practices for incorporating an equity lens into mitigation, adaptation plans and programs.	EPro HCP		Core service	2022
	To support integration of land use and transportation, seek opportunities for funding, incentives and pilot projects to implement the Regional Growth Strategy land use concept.	RSP		Core service + grants	2022-2024
	2-7 Incorporate regional climate projections into electoral area emergency planning and enhance FireSmart efforts				
	Include regional climate projections in hazard, risk and vulnerability assessments for the three Electoral Areas' Emergency Operations Work Plans.	PS	EPro	Core service	Ongoing
	Enhance FireSmart efforts in electoral areas.	PS		New + grants	Ongoing
	Complete advance planning for drought and wildfire response in the Electoral Areas.	PS	IWS	Core service	2021-2022
	2-8 Coordinate with emergency management stakeholders on planning and public outreach activities related to climate risks				
	Work with the Province, Local Government Emergency Program Advisory Commission and the Regional Emergency Management Partnership to share data, support planning, and coordinate public outreach activities related to regional climate risks.	PS	CC EPro	Core service	Ongoing
	2-9 Investigate Transition Salt Spring Island 2.0 Climate Plan implementation				
	Investigate resource requirements and funding for a new staff to support the implementation of the Transition Salt Spring Island 2.0 plan.	SSI Admin	EPro PS	Core service	2022



Goal 3:
Low-Carbon
Mobility

Action name	Specific sub-actions	Lead	Support	Resources	Timing
Corporate					
3-1 Administer and track the new Green Fleet Policy	Continuous support and review of Green Fleet Policy to ensure zero-emissions vehicles are selected as replacement options whenever possible.	CTS	EPro	Core service	Ongoing
3-2 Develop electric vehicle (EV) adoption and right-sizing plan for the corporate fleet	Monitor and adjust for market availability for new low-emission medium and heavy-duty vehicles.	CTS	Facilities	Core service	2021-2022/ Ongoing
	Investigate opportunities for integrating car share into fleet operations.	CTS		Core service	2022
	Explore opportunities for telematics and improved fuel use tracking to determine fleet right sizing.	EPro			
3-3 Develop EV infrastructure plan for the corporate fleet	Develop EV infrastructure plan for the corporate fleet.	CTS	EPro	Core service + grants	2021-2022
	Install chargers to support light-duty EV purchases.	Facilities	Other relevant divisions	Core service + grants	2022-2024
3-4 Investigate the feasibility of bio-based diesel supply and storage	Investigate the feasibility of bio-based diesel storage and supply for shared regional use.	Facilities	All relevant divisions	Core service + grants	2022-2024
Community-focused					
3-5 Develop a region-wide approach to transportation demand management and safety policy	In collaboration with partners, develop options for transportation demand management (TDM) and safety policy.	CTS	EPro	Core service	2023-2024
	Work with partners to implement TDM and safety policy approaches across the region.	RSP	EPro	New	2022+
3-6 Collect, analyze and distribute transportation planning data regionally	Collect, analyze and distribute transportation planning data, including traffic counts, bike counts, and origin-destination survey results.	RSP	EPro	Core service	Ongoing
	Expand the Origin-Destination survey.	RSP		Core service	2022-2024

	Action name	Specific sub-actions	Lead	Support	Resources	Timing
	3-7 Accelerate infrastructure improvements that support active transportation	Support Board advocacy to senior governments for secure funding for local and regional transportation infrastructure improvements.	RSP		Core service	2022+
		Develop a policy framework and partnership agreements for the long-term build out of consistent, connected cycling facilities.	RSP	Parks	Core service	2022
		Implement the Regional Transportation Plan and the Pedestrian and Cycling Master Plan.	Parks RSP		Core service + grants	Ongoing
		Implement priority projects identified in the Regional Trails Management Plan to support active transportation: • Complete the E&N trail and upgrade heavily used urban sections. • Widen and install lighting at priority sections of the Galloping Goose and Lochside regional trails. • Continue to implement the Gulf Islands Regional Trails Management Plan.	Parks	RSP SGI Admin SSI Admin	New + grants	Ongoing
		Implement Pedestrian and Cycling Master Plan: Salt Spring Island Edition.	SSI Admin	RSP	Core service	Ongoing
		Complete Southern Gulf Islands Transportation Integration Plan for the SGI EA Area.	SGI Admin	RSP	Core service	2021
		Implement SGI Transportation Integration Plan through service establishment.	SGI Admin		New	2022-2023
	3-8 Lead and support regional education programs focused on zero-emission mobility	Develop, deliver and support new regional education programs focused on active, public and zero-emission transportation, including electric vehicles and e-bikes.	EPro	Parks RSP	Core service	Ongoing
		Continue to implement active school travel planning (Ready, Step, Roll program at five schools per year).	RSP		Core service	Ongoing
	3-9 Support acceleration of transit improvements and increased service	Support Board advocacy to accelerate implementation of Bus Mass Transit (RapidBus) linking directly to growth centres; secure funding; locate density near nodes.	RSP		Core service	2022+
		Support Board advocacy to improve local transit service in suburban and rural areas, including Park and Rides.	RSP	JdF Planning	Core service	2022+
		Plan for long-term transportation alternatives, including passenger ferry and rail-based transit options in appropriate locations.	RSP		Core service	2022-2024
		Facilitate delivery of the Salt Spring Island (SSI) Community Transit Service. • Work with BC Transit to electrify fleet and increase service.	SSI Admin	RSP	Core service	Ongoing
		Identify low-carbon mobility options as part of planning for an inter-island transportation system. Investigate expanding to Salt Spring Island.	SGI Admin	FNR RSP SSI Admin	TBD	TBD

Action name	Specific sub-actions	Lead	Support	Resources	Timing
3-10 Support a public electric vehicle charging network and encourage uptake of zero-emission vehicles	Develop and deliver education programs to encourage the adoption of EVs, and build capacity among EV infrastructure builders, site hosts, electricians and other key sectors.	EPro		Core service	Ongoing
	Support electric vehicle and e-bike adoption and infrastructure by providing guidance and coordinated policy support.	EPro		Core service	Ongoing
	Pursue opportunities to fund and coordinate installation of publicly accessible electric vehicle charging stations.	EPro Other relevant divisions		Core service + grants	Ongoing
	3-11 Implement Regional EV Charging Roadmap	EPro		New + grants	2022-2026
	Implement the Capital Region EV Infrastructure Roadmap.				
	• Coordinate funding applications and deployment. • Support planning and coordination on charger site selection. • Engage with BC Hydro on infrastructure planning. • Educate and build capacity of potential EV adopters, infrastructure builders, site hosts, engineers, electricians, and other trades. • Track and share usage at existing sites to monitor performance and inform planning.				
3-12 Improve internet access on Southern Gulf Islands	Support and coordinate broadband internet improvements to enable work from home opportunities and support local economic development.	SGI Admin		Core service	2021
	Establish connectivity service to facilitate senior government funding and internet service provider investment.	SGI Admin		New	2022



Goal 4:
Low-Carbon and Resilient Buildings and Infrastructure

Action name	Specific sub-actions	Lead	Support	Resources	Timing
Corporate					
4-1 Develop and implement a corporate Green Building Policy	Develop and implement a corporate Green Building Policy that prioritizes energy efficiency, electrification and resiliency.	EPro Facilities	All relevant divisions	Core service	2022
4-2 Develop and implement a Strategic Energy Management Plan	Complete energy audits of corporate facilities to support development of a Strategic Energy Management Plan.	EPro Facilities	All relevant divisions	Core service + grants	2021
4-3 Conduct energy studies for CRD facilities to identify priority emission reduction and energy efficiency projects	Conduct Net-Zero Energy Pathway Feasibility Study for recreation centres.	Pan Rec SEAPARC SSI Admin	EPro	Core service + grants	2022
	Conduct Saanich Peninsula District Energy System Expansion Study.	IWS	EPro Pan Rec	Core service	2022
	Complete energy audits of all CRD sites with significant GHG impact (e.g., >5 tonnes annually).	All relevant divisions	EPro Facilities	Core service + grants	2022-2024
	Conduct emissions reduction feasibility study for the Integrated Water Services (IWS) building at 479 Island Highway.	IWS	EPro Facilities	Core service	2022
	Identify future energy efficiency upgrades and opportunities in IWS infrastructure. Implement where possible.	EPro	IWS	New energy manager	2023-2025
	Evaluate the business case for installing renewable power at corporate sites, including water and wastewater locations.	EPro IWS	EPro	New energy manager	2024
4-4 Complete identified high impact retrofits to CRD facilities	Retrofit the HVAC system at Fisgard HQ to switch from fossil fuels to electricity.	Facilities	CTS EPro	Core service	TBD
	Install an Energy Recovery System at SEAPARC.	SEAPARC	EPro	New + grants	TBD
	Replace Fuel Oil Burners and remove underground fuel tanks at SEAPARC.	SEAPARC	EPro	New	TBD
	Install an Energy Recovery System at Panorama Recreation.	Pan Rec	EPro	Core service + grants	TBD
4-5 Pursue climate-friendly development and retrofits for CRHC and CRHD facilities	Identify and pursue funding opportunities to address energy and GHG saving opportunities during new development and retrofits of housing and healthcare facilities.	HCP Housing		TBD	TBD
	Embed energy reduction and other climate requirements in new developments, as per Island Health or BC Housing policies and other funding requirements.	HCP Housing		TBD	Ongoing
	Seek opportunities to promote housing tenant engagement programs to reduce energy use and energy costs through partnerships.	EPro	Housing	Core service	2022-2023

	Action name	Specific sub-actions	Lead	Support	Resources	Timing
	4-6 Consider climate impacts in risk assessments and infrastructure upgrades	Consider climate change impacts when undertaking risk assessments associated with the water supply and wastewater systems and infrastructure management decision making and plans.	IWS WP		Core service	Ongoing
		Consider future climate projections and review and revise infrastructure design standards, as appropriate. Upsize/right size drainage structures within the Greater Victoria Water Supply Area, based on priority.	WP		Core service	Ongoing
	Community-focused					
	4-7 Implement a Regional Energy Retrofit Program	Implement a Regional Energy Retrofit Program: • Targeted concierge service. • Optional financing component made available. • Coordinate and promote incentives for the provincial and federal retrofit programs.	EPro		New	2022-2026
	4-8 Develop, deliver and support building-related energy, emissions and water education	Develop, deliver and support regional educational programs and community initiatives that achieve reductions in building-related GHG, water and energy use.	EPro		Core service + grants	Core service
	4-9 Support acceleration of regional building energy benchmarking and local government regulation approaches	Coordinate with senior and local government to understand and pursue opportunities related to regional energy benchmarking. Participate in the Building Benchmark BC program.	EPro		Core service	2022-2024
		Advocate to the Province for greater local government authority to decrease community emissions from buildings (including energy benchmarking and labelling and regulating climate pollution for buildings).	EPro		Core service	2022-2024
	4-10 Coordinate high-performance building policy support and capacity building activities	Participate on the provincial local government step code peer network.	EPro		Core service	Ongoing
		Research and share information on best practices and support coordination of local government policy regarding high-performance buildings.	EPro	BI	Core service	Ongoing
		Provide expanded public and industry education on high-performance buildings through workshops, front counter and website resources.	EPro	BI	Core service	2022
	4-11 Collect and share data and research on building energy use and emissions	Collect and share data on pertinent regional building energy use and GHG emissions with local governments.	EPro		Core service	Ongoing
		Research and share information and best practices on embodied carbon in green building standards, land use and infrastructure.	EPro		Core service	2023
	4-12 Promote green infrastructure and improved stormwater management approaches	Work with local governments and community groups to promote, encourage and inform green infrastructure and improved stormwater management approaches.	EPro		Core service	Ongoing
	4-13 Understand climate impacts on groundwater resources in Juan de Fuca Electoral Area	Understand potential impact of climate change on groundwater resources to inform future planning in electoral areas.	JdF Planning		Core service	Ongoing
	4-14 Investigate regional renewable energy and storage potential	Undertake regional mapping of renewable energy potential to inform education and future programming.	EPro		TBD – grants	2024
		Investigate local power storage generation and storage potential.	EPro		TBD – grants	2025



Goal 5:
Resilient and
Abundant Nature,
Ecosystems and
Food Systems

Action name	Specific sub-actions	Lead	Support	Resources	Timing
Corporate					
5-1 Integrate climate considerations into regional parks strategic and management planning	Integrate climate change considerations in forthcoming Regional Parks Strategic Plan and parks management plans.	Parks	EPro	Core service	2022
	Update the CRD land acquisition criteria to include climate change considerations (subject to Regional Parks Strategic plan direction).	Parks	EPro	Core service	2022
	Invite and support First Nations participation in park planning, acquisition and protection of places.	Parks	FNR	Core service	Ongoing
5-2 Monitor ecosystem health in the Greater Victoria Water Supply Area (GVWSA) and investigate expanding regionally	Continue forest composition, hydrology monitoring and forest health reviews to assess and monitor ecosystem changes within the GVWSA.	WP		Core service	Ongoing
	Prepare business case to undertake planning in order to identify and prepare responses to climate change impacts on regional parks.	Parks		New	TBD
5-3 Undertake climate adaptation initiatives to increase the resilience of the GVWSA	Complete and implement the Climate Change Adaptation Strategy for the GVWSA.	WP		Core service	Ongoing
	Advance forest fuel management within the GVWSA to mitigate the intensity and extent of potential wildfires.	WP		Core service	2021+
	Investigate options to initiate more active forest management program in the GVWSA to create more resilient forested ecosystems.	WP		New	2022+
Community-focused					
5-4 Provide regional and local ecological data to support planning and policy efforts	Compile existing ecological data/mapping from other agencies to create a regional biodiversity inventory.	EPro		Core service	2021
	Undertake regional forest and urban tree monitoring efforts.	EPro		Core service	2021
	Support efforts to monitor stream flows in the region.	EPro		Core service	Ongoing
5-5 Coordinate regional invasive species program	Deliver regional invasive species programs, coordinate Capital Region Invasive Species Partnership intergovernmental working group. Support capacity building and local government policy development.	EPro		Core service	Ongoing
5-6 Support regional forest and urban tree programs	Support regional forest and urban tree programming, and coordinated planning efforts to increase canopy and sequestration potential.	EPro		Core service + grants	2023
5-7 Support Indigenous-led monitoring and restoration programs	Work with First Nations to identify interest in and support First Nations' Guardian programs for monitoring ecosystems.	FNR	EPro Parks	Core service + new	Ongoing
	Where requested, work with First Nations in watershed protection, ecosystem restoration and invasive species management.	EPro	FNR	Core service	TBD

	Action name	Specific sub-actions	Lead	Support	Resources	Timing
	5-8 Support local food and agriculture planning and programs	Administer Food and Agriculture Task Force and facilitate coordination of the Food and Agriculture Strategy implementation.	RSP		Core Service	Ongoing
		• Support agriculture extension services coordination. • Investigate feasibility for a Regional Foodlands Trust.				
		Develop public engagement materials on local food systems and low carbon food choices. Support and promote Indigenous food systems.	EPro	FNR	Core service	2024
	5-9 Integrate climate impacts and solutions into environmental education and outreach campaigns	Integrate education about climate impacts, threats and solutions into public education and outreach campaigns associated with drinking water, regional and community parks, and community watershed and biodiversity programs.	EPro IWS Parks SGI Admin SSI Admin	CC	Core service	Ongoing
		Promote UN Decade on Restoration and encourage groups/residents to get involved.	EPro		Core service	Ongoing

 Goal 6: Minimized Waste	Community-focused					
	6-1 Implement the Solid Waste Management Plan	Implement the Solid Waste Management Plan, consider influence on GHG emissions and climate resilience.	ERM		Core service + new	2021-2031
	6-2 Develop and deliver education programs to promote a circular economy, zero waste and the 3Rs	Develop and deliver education programs to promote the 3Rs (reduce, reuse, recycle), reduce consumption, and promote zero waste and circular economy approaches.	ERM	EPro	Core service	Ongoing
	6-3 Support education and engagement on waste management to be delivered by and for First Nations communities	Collaborate with First Nations to develop and share educational outreach information, and engagement opportunities on waste management with their community members.	ERM	FNR	Core service	Ongoing
	6-4 Continue to maximize and optimize the capture of landfill gas for beneficial use	Continue to maximize and optimize the capture of landfill gas for beneficial use (as per SWMP Strategy 14).	ERM		Core service	Ongoing
		Initiate Hartland Renewable Landfill Gas Initiative.	ERM		Core service	2023
		Continue to actively monitor the landfill's fugitive emissions and undertake operational adjustments to reduce them.	ERM		Core service	Ongoing
		Continue to conduct research, investigate and report out on emerging waste management technologies (including alternatives to landfilling such as integrated resource management and gasification).	ERM		Core service	Ongoing
	6-5 Consider climate change impacts in liquid waste management	Consider climate change impacts in the development of renewed Core Area Liquid Waste Management Plan and Saanich Peninsula Liquid Waste Management Plan.	EPro	IWS	Core service	2022



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