

2023 Climate Action Progress Report

Taking Action on the Climate Emergency



Making a difference...together

TERRITORIAL ACKNOWLEDGMENT

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



Cover photos:

Front: Ogden Point Breakwater

Back: Juan de Fuca trail

Organizational Overview

The Capital Regional District (CRD) delivers regional, sub-regional and local services to 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands. Governed by a 24-member Board of Directors, the CRD works collaboratively with First Nations and all levels of government to enable sustainable growth, foster community well-being, and develop cost-effective infrastructure, while continuing to provide core services to residents throughout the region.

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Overview

In 2021, the CRD renewed its Climate Action Strategy and committed to annually report on all climate action-related activities undertaken by the organization. This report summarizes all 2023 activities and other annual indicators identified in the CRD's Climate Action Strategy.

Regulations and Commitments

The CRD is required to take action to reduce corporate and community-related greenhouse gas (GHG) emissions and prepare for the impacts of climate change under the following provincial regulations and commitments:

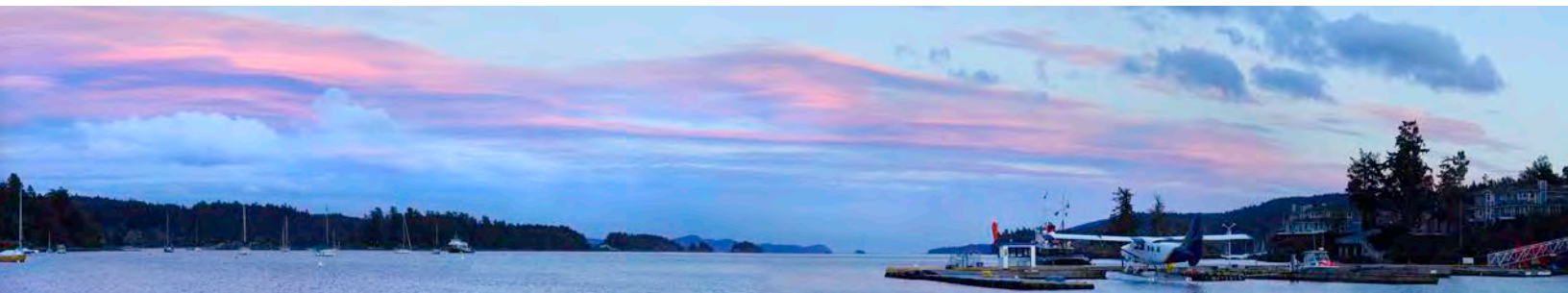
- **Local Government (Green Communities) Statutes Amendment Act** requires regional districts and local governments to include targets, policies and actions for the reduction of GHG emissions in Regional Growth Strategies and Official Community Plans. The Act also provides powers to local governments to support mitigation and adaptation through development permit areas, development cost charges and parking and building code requirements.
- **Landfill Gas Management Regulation** establishes province-wide criteria for landfill gas capture from municipal solid waste landfills. The regulation focuses on GHG emissions from landfills, with the objective of maximizing reductions of landfill gas emissions and identifying potential opportunities to increase landfill gas recovery. As a manager of the Hartland Landfill, the CRD is responsible for adhering to this regulation.
- **Emergency and Disaster Management Act** was established in 2023, replacing the Emergency Program Act, with accompanying regulations still forthcoming. This new legislation aligns with the Sendai Framework for Disaster Risk Reduction, which includes a priority to better understand disaster risk, and local governments will be required to prepare risk assessments for all potential hazards. These risk assessments will be required to consider the role of climate change.
- All local governments in the region, including the CRD, are signatories of the BC Climate Action Charter. This includes a commitment to:
 - become carbon neutral in corporate operations.
 - measure and report on the community's GHG emissions profile.
 - work to create compact, complete and more energy-efficient communities.
- United with more than 350 Canadian local governments, the CRD is a member of the Partners for Climate Protection Program, from the Federation of Canadian Municipalities and ICLEI - Local Governments for Sustainability, affirming its ambitious GHG reductions and participating in a five-milestone planning, implementation and reporting framework.

CRD Climate Action & Adaptation Service

Under Bylaw No. 3510, the CRD established a climate action service in 2009 to act as a resource and facilitator for the CRD, local governments, citizens and organizations in the capital region on energy and climate issues. The service hosts two inter-municipal networks and works closely with local government staff, senior governments, utilities and other stakeholders to identify and advance climate action initiatives in collaboration. The Climate Action Service has five main focus areas:

- provide support to local governments in developing and implementing climate action plans, programs and policies.
- 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 and support execution of climate-related Board priorities.

In 2023, the Climate Action service operated on a core budget of approximately \$1.9 million, which included five full-time employees and one four-year, full-time term position. In addition, the corporation provided an annual stipend of \$100,000 toward a fund to support key corporate-focused climate action planning activities. The program's core budget is provided through an annual requisition from all the region's municipalities and electoral areas and supplemental funding from corporate services. Additionally, the program leveraged approximately \$500,000 in external grants and advanced several partnerships to undertake corporate and community climate action programming.*



View of Ganges Harbour on Salt Spring Island

**The CRD receives \$126,082 annually for the 2022, 2023 and 2024 years from the Local Government Climate Action Program to support local climate initiatives. Funds can be held in reserve year over year to fund larger projects and are allocated to electoral areas and corporate projects in alignment with the Climate Action Strategy. See Appendix A for details on allocation of funds in 2023.*

Climate Action Strategy

Climate action is a long-standing CRD Board priority. Since 2009, the CRD has been committed to taking action to address climate change within its own operations, and at the regional level, to reduce emissions and prepare for climate impacts. This commitment was underlined by the Board's declaration of a climate emergency in early 2019. In answer to this declaration, the CRD developed an updated five-year Climate Action Strategy in 2021.

The Climate Action Strategy provides direction 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. The strategy coordinates with other CRD plans and strategies and supports the overarching Regional Growth Strategy (RGS).



Farm in Central Saanich

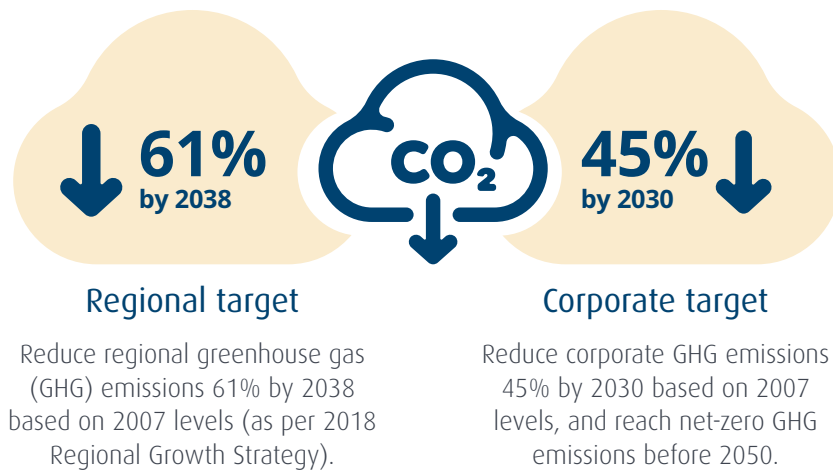
Climate Action Vision

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.

Targets and Goals

The CRD’s Climate Action Strategy outlines a pathway toward net-zero emissions by mid-century, in line with the Intergovernmental Panel on Climate Change modelled pathways to limit warming to a 1.5°C change this century. It also established six goal areas where the CRD will focus its efforts.



Climate Action Strategy Goals

- Climate focused decision making
- Sustainable land use, planning and preparedness
- Low-carbon mobility
- Low-carbon and resilient buildings and infrastructure
- Resilient and abundant nature, ecosystems and food systems
- Minimized waste

Tracking Our Emissions

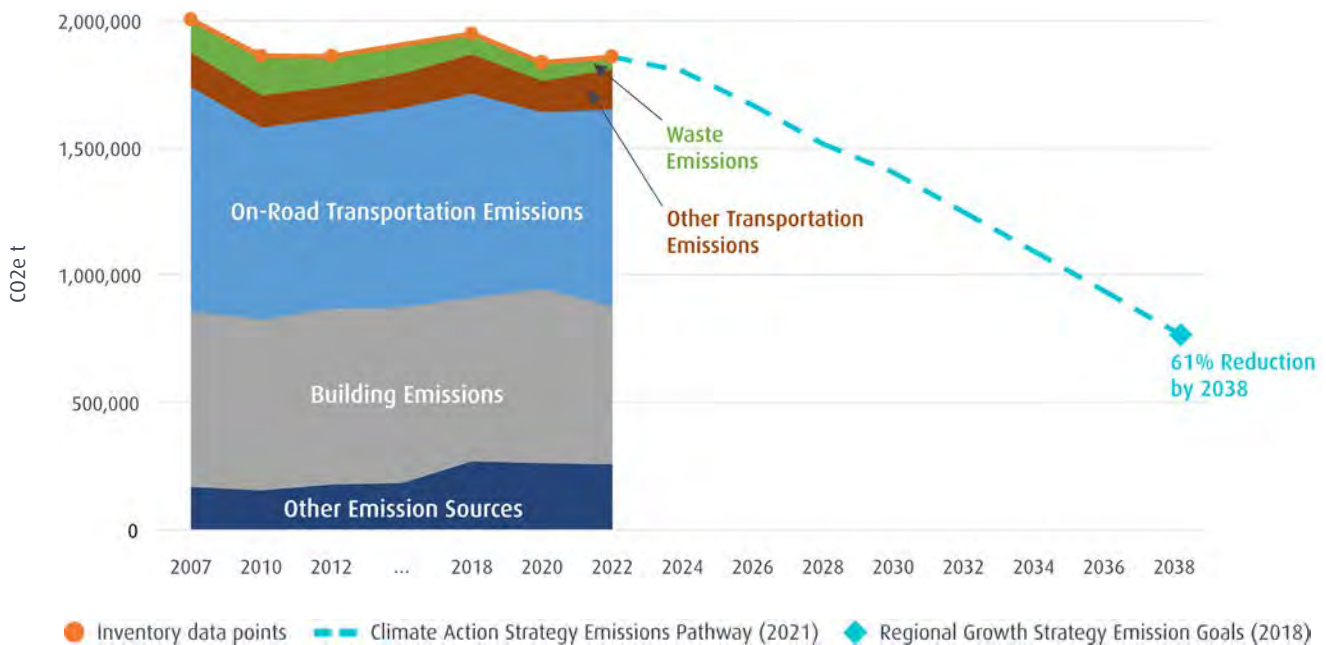
The CRD undertakes GHG accounting on a regular basis to understand our emissions portfolio.

Community Emissions

In 2023, the CRD completed an emissions inventory and report for the 2022 calendar year, building on the 2018 and 2020 inventories. This followed the internationally recognized Global Protocol Community-Scale GHG Inventories BASIC+ Framework and included GHG emissions from stationary energy (e.g., buildings), transportation (e.g., commuter vehicles), waste (e.g., landfills), industrial processes and product use (IPPU) (e.g., chemical industry), and agriculture, forestry and other land use (e.g., fertilizer application).

The territorial 2022 inventory indicated the capital region emits approximately 1.86 million tonnes of CO₂e annually. This represents a 7% reduction from 2007 levels and a decline in per capita GHG emissions (t CO₂e/capita) of 25%. Emissions increased by 1% compared to the 2020 inventory. This slight increase was expected and largely due to increased transportation-related emissions associated with COVID-19 pandemic recovery and the return to in-person activities. On-road transportation and the built environment remain the main sources of regional emissions, together accounting for approximately 75% of all emissions in 2022.

Capital Region Emissions (2007 to 2022) and 2038 RGS Emissions Goal



To achieve the CRD's regional GHG emission reduction target of 61% reduction by 2038, the region, and all key players, including senior levels of government, local governments, residents, businesses, industry and organizations, must continue to advance key initiatives, including:

- increase uptake of transit, walking, cycling and other modes of active transportation.
- accelerate adoption of zero-emissions vehicles.
- retrofit existing buildings, improving energy efficiency and converting fossil fuel heating systems to electric.
- transition to construction of net-zero energy ready new buildings.

Corporate Emissions

In 2023, CRD operations* generated 2,956 tonnes of CO₂e emissions, with 1,404 tonnes associated with vehicle and equipment use and 1,552 tonnes coming from facilities and infrastructure. This represents a 2.8% increase from 2022, and a 1.6% decrease from the baseline level of emissions from 2007.

Buildings and Infrastructure

The overall emissions from CRD buildings and infrastructure decreased by 8.7% compared to 2022, despite the CRD adding a new building, the Salt Spring Island Multi Space, to the reporting scope, which added an additional 62 t CO₂e, primarily from propane use.

The majority of emission reduction was in the 'other fuel' category and can be attributed to the reduction of biodiesel used at the SEAPARC facility after a boiler replacement. Emissions from natural gas also contributed to the reduction, dropping by 7.8%, which can be attributed in part to several energy-focused maintenance and operational measures, supported by the corporate energy specialist. It should be noted that the reductions in electrical emissions are primarily due to the reduction in the emission factor for the BC Hydro provincial grid, which dropped 1.7% in 2023, compared to 2022.



Electrician installing an EV charger

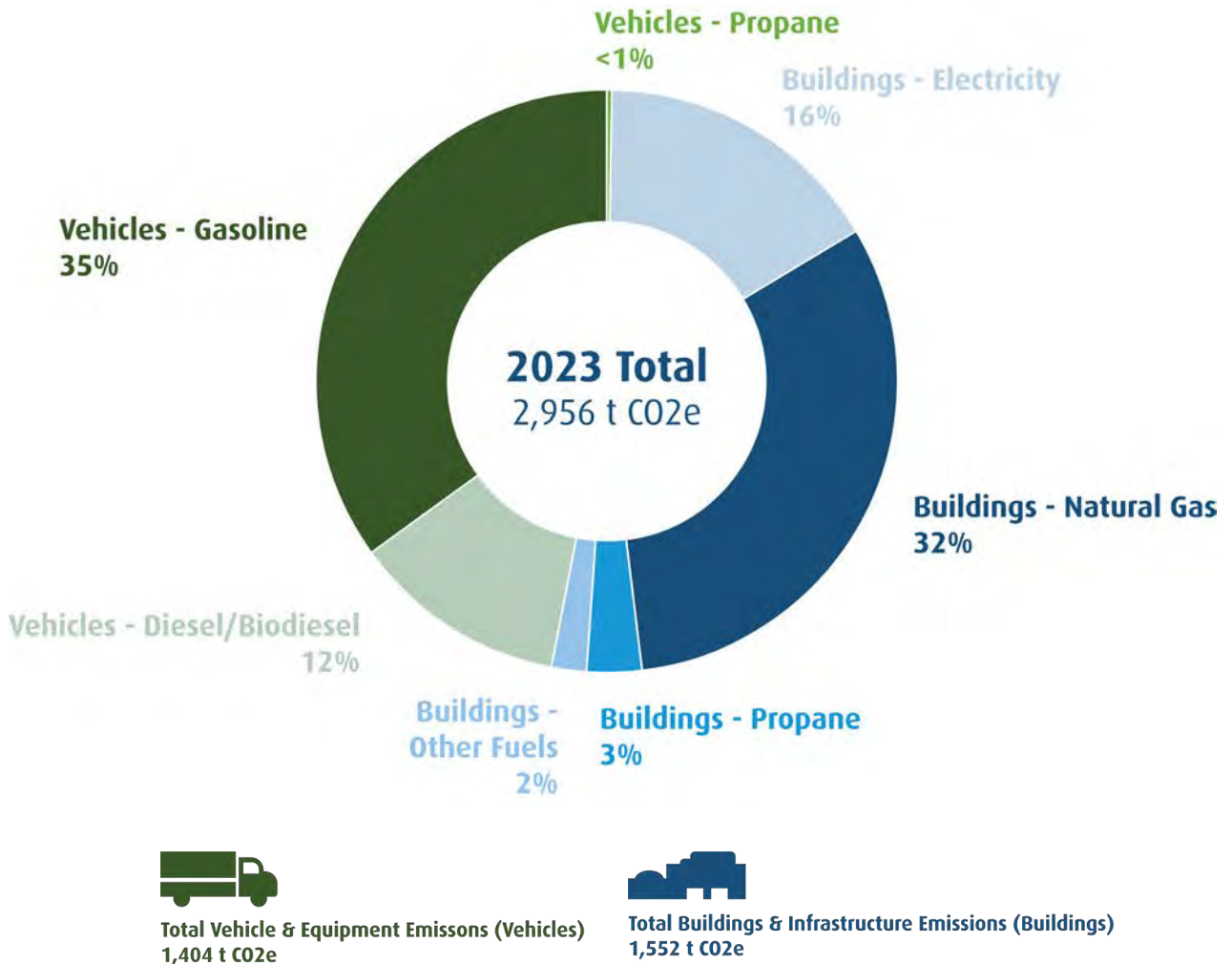
**Emissions associated with Hartland Landfill, Capital Region Housing Corporation, and Capital Region Hospital District are not included in this total, as they are excluded from the provincial reporting framework.*

Vehicle and Equipment Emissions

The overall emissions from vehicle and equipment use increased by a total of 19.4% and are strongly impacted by increased service levels provided by the CRD. Factors that contributed to the vehicle emissions were increased vehicle use for building inspections, bylaw enforcement, emergency programs, and the overall staffing increases in various services, notably Regional Parks.

Throughout 2023, the CRD procured an additional 36 electric vehicles, which included a backlog of orders from previous years; it is expected these zero-emission vehicles will assist in the reduction of GHG emissions from vehicles in the 2024 reporting year and beyond.

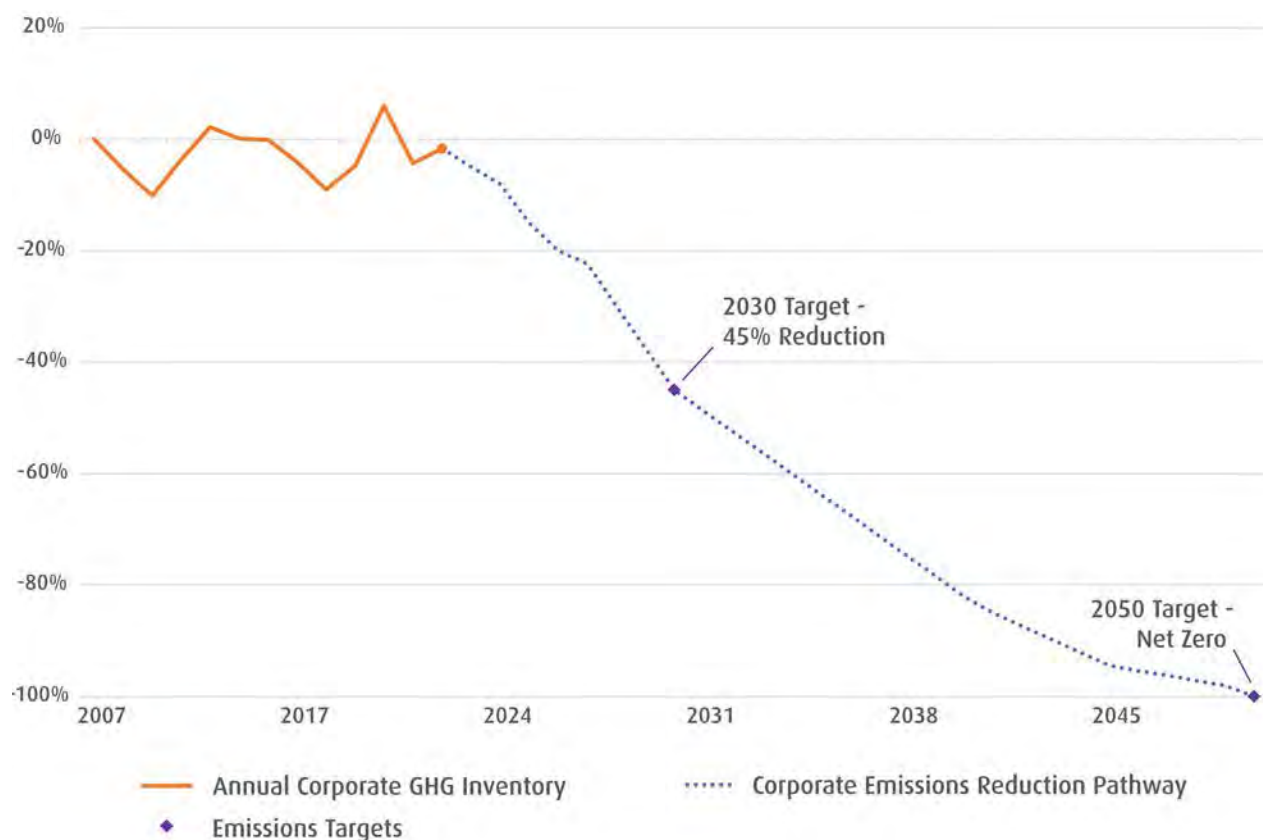
2023 CRD Corporate GHG Emissions



The graph below illustrates the reported 2023 emissions and the updated 2022 emissions on the corporate emission reduction pathway laid out in the Climate Action Strategy. To follow the pathway and begin to decrease emissions and meet corporate GHG targets, the CRD will continue to focus on accelerating the following critical actions in upcoming years:

- procurement of electric and plug-in hybrid vehicles for the CRD fleet,
- decarbonization at key CRD facilities, including Panorama Recreation Centre, SEAPARC Leisure Complex, CRD Headquarters, and Integrated Water Services; and
- pursuing an annual 5% improvement in electricity efficiency through energy audits and retrofits.

CRD Corporate Emission Trends (2007 to 2023) and Forecasted Climate Action Strategy Pathways and Targets



Adapting to Climate Impacts

The global average temperature has increased by over 1°C in the past 150 years and the impacts on weather patterns are already being felt. The past three years have brought an unprecedented heat dome, heavy rains and flooding, extended drought, the worst wildfire season in Canadian history, and the world's hottest year on record.

As a result of climate change, modelling indicates that the region will continue to experience:

- hotter summer temperatures, with more extreme heat days and heatwaves
- warmer winter temperatures and less frequent frost, with less snowfall in the colder months
- less rain and more dry days in the summer months
- more precipitation falling in fall, winter and spring, with longer-lasting and more frequent extreme rainfall events
- increased likelihood of variability of climate within and between years
- sea level rise

Resilience to climate change can take many forms and includes the ability to prepare for, recover from, and adapt to these impacts. It involves more immediate actions to prepare and react to extreme weather events the region is already experiencing, as well as longer-term planning to prepare for the consequences of future warming in the mid to late-century time scale.

The CRD has several services that support climate resilience, including: maintaining drinking water supply and wastewater services, regional planning functions, regional parks, harbours, watersheds and invasive species related programs, and supporting emergency management coordination and healthy community planning. The CRD is working to adapt to the changing climate in our service areas by identifying vulnerabilities and adaptive capacities, as well as strategies and actions to improve how the region anticipates, responds to and recovers from both extreme weather events and the gradual changes occurring over time.



Smoke pollution from summer forest fires



CRD Headquarters

Progress on the CRD's Five-year Action Plan

The CRD's Climate Action Strategy established six key goal areas, 56 actions and 127 sub-actions that will be undertaken by several different services across the organization between 2021 and 2025. The strategy also outlined several indicators to help measure success and to track important trends.

The following sections are intended to provide a high-level, easy-to-understand overview of the CRD's performance and progress related to climate action, and to summarize progress made in the 2023 year for each goal area.

More information, including details on the scoring methodology and actions within each goal area, is contained in Appendix A: Climate Action Report Card.





2023 Overall Action Plan Progress

On Track

The climate action strategy identifies 127 actions with specific timelines across the organization. Scores are based on the current status of each action within their goal areas.



Corporate Actions

Opportunity for Improvement



Community-Focused Actions

On Track

Goal Area



Goal 1: Climate-Focused Decision Making



Goal 2: Sustainable Land Use, Planning and Preparedness



Goal 3: Low-Carbon Mobility



Goal 4: Low-Carbon and Resilient Buildings and Infrastructure



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



Goal 6: Minimized Waste

Legend: Action Status



On Track: 75% or greater of yearly target progress



Opportunity for Improvement: 50% - 75% of yearly target progress



Attention Required: less than 50% of yearly target progress



Future Action

Legend: Indicators*



Direction of arrow indicates **current trend direction**



Indicator is trending in the **desired direction**



Indicator is trending in the **wrong direction**



Indicator is intended to provide **contextual information**

*While indicators are not considered in the calculation of the action status, they provide context and track long-term progress.



Climate-Focused Decision Making

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



Overall Action Status
On Track

To provide its wide range of services, the CRD maintains and operates vehicles, equipment, buildings, facilities, infrastructure, landfills, trails and parks. Decisions made in each service area can have implications for greenhouse gas (GHG) emissions generated or sequestered by CRD assets over time, as well as how prepared these assets are for the changing climate. The CRD has also identified the need to improve the organizational understanding of Indigenous knowledge, laws and perspectives in relation to climate solutions.



The majority of sub-actions in this goal area are well progressed, resulting in an overall action status of *on track*.

Goal Progress Summary

- Approved and implemented a new corporate green building policy, which sets standards for energy efficient and low-carbon new construction and retrofits of corporate buildings.
- Adopted an internal carbon price policy that sets an internal corporate carbon price of \$170 per tonne of carbon emissions to represent the social, environmental and economic benefits of carbon pollution reduction in select corporate projects.
- Maintained the internal Climate Action Reserve Fund, which provided support to additional GHG reduction studies at three recreation centres and partially funded an ongoing study at the Saanich Peninsula Wastewater Treatment Plant.
- Completed the annual corporate GHG emissions inventory.
- Provided a variety of staff training sessions, including: overviews of new climate policies; Climate 101, a general primer available to all staff and offered regularly; and Climate 201, to guide staff on embedding a climate lens in their work.

CRD Roles

Operational decision making

This goal contains

15
sub-actions



Front entrance at CRD Headquarters

- Attended the 2023 Cultural Heritage Climate Change Workshop where Indigenous perspectives on heritage conservation in light of climate change were shared and new approaches to help reduce shoreline impacts were discussed.

Indicators



Annual CRD Corporate GHG emissions

- 2,956 t CO₂e (2.8% increase compared to 2022)



CRD staff e-bike training session in Centennial Square



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.



Overall Action Status
On Track

How land use is managed has a strong influence on the regional emissions, by affecting how far we travel to daily amenities, school and work, 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 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 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.



The majority of sub-actions in this goal area are well progressed, resulting in an overall action status of *on track*.

Goal Progress Summary

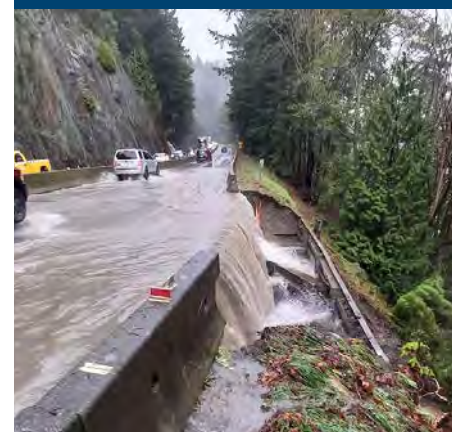
- Undertook an extensive effort to map vulnerability to extreme heat for the region and develop the Capital Region Extreme Heat Information Portal, with support from municipal partners and a grant from the Union of British Columbia Municipalities (UBCM).
- Partnered with the University of Victoria's School of Public Administration to conduct research into the health impacts of extreme heat using an equity lens.
- Hosted an inter-municipal workshop on carbon budgeting.
- Obtained a Pacific Institute for Climate Solutions grant to hire a summer intern to support climate adaptation related research.
- Commenced an update to the 2017 Climate Projections for the Capital Region report based on new global models, engaged with municipal staff on regional impacts and created a guide for the use of climate projections data.

CRD Roles

- Regional planning
- Juan de Fuca land use planning
- Emergency management in electoral areas
- Inter-municipal coordination
- Data management

This goal contains

24
sub-actions



Malahat washout during November 2021 extreme rain event (Credit: Emcon Services Inc.)

- Completed the 2022 Regional GHG Inventory Study and provided the report and data to local government staff in the region.
- Successfully applied for the UBCM Complete Communities grant to initiate a Growth and Mobility Study.
- Completed Electoral Area Community Wildfire Resiliency Plans and shared with residents.
- Continued work on the FireSmart program.
- Began the creation of a public-facing emergency dashboard to improve the public notification system for extreme weather events.
- Continued to facilitate and administer several inter-municipal networks that serve to coordinate regional climate action, set priorities and disseminate resources, including the Climate Action Task Force and Climate Action Working Group, Development Planning Advisory Commission, Transportation Working Group, Local Government Emergency Program Advisory Committee, the Regional Emergency Management Partnership and the Healthy and Safe Environments Community Health Network.

Indicators



Regional GHG emissions

- 1.86 million tonnes of CO₂e (1% increase compared to 2020)



Number of net new dwelling units in areas where more than 45% walk/bike/bus to work*

- Currently, the region is not meeting the desired trend

* Progress on this indicator is reported in the Regional Growth Strategy Indicator Report.



Tour of the Greater Victoria Water Supply Area



Low-Carbon Mobility

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



Overall Action Status
On Track

On-road transportation is the region’s largest source of GHG emissions. Not only do vehicles release significant emissions, they also lead 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. For trips that use a vehicle, rapidly switching to electric vehicles (EVs) will require building out charging infrastructure throughout the region, making sure chargers are accessible to those who live in all types of homes and at key locations across the region. The CRD owns and operates a fleet of approximately 300 vehicles to provide its many services across the region, and can reduce its GHG emissions by greening its fleet.



The majority of sub-actions in this goal area are well progressed, resulting in an overall action status of *on track*.

Goal Progress Summary

- Continued implementation of the corporate Green Fleet Policy, ordering and acquiring new EVs.
- Accessed grant funding from the federal Zero Emission Vehicle Infrastructure Program and installed 54 electric vehicle chargers at 13 CRD sites and facilitated grant funding for 60 additional chargers on behalf of the City of Victoria, encompassing both fleet and public vehicle charging.
- Developed and distributed public EV charging installation guidelines to support private and public sector landowners and businesses to install public charging stations.
- Initiated a Memorandum of Understanding with BC Hydro to advance key priorities related to EV charging infrastructure and policies across the region.
- Completed work with the Community Social Planning Council on gender equity and safety on CRD trails.

CRD Roles

- CRD fleet
- CRD infrastructure (Regional trail system and EV charging)
- Regional planning
- Electoral area transportation
- Data management
- Community programs

This goal contains

31
sub-actions



Fleet EV charging at McLoughlin Point Wastewater Treatment Plant

- Continued to participate in various technical and working groups to support the connection of the downtown to the Westshore through RapidBus delivery and supported the Ministry of Transportation and Infrastructure to improve transit service in suburban and rural areas by increasing the number of park and rides.
- Analyzed, published and distributed regional Origin Destination Household Travel Survey with an expanded scope, adding additional questions related to e-bike usage, micro-mobility, demographics and population change.
- Completed an update to the Regional Cycling Network and the All-Ages and Abilities facility framework and developed a planning tool to support a consistent cycling network across jurisdictions.
- Accelerated the Regional Trails Widening and Lighting Project after securing additional resources through the CRD's 2024-2028 Financial Plan.
- Continued to implement the Gulf Islands Trails Plan, with the development of the first regional trail in the Gulf Islands (Mayne Island Regional Trail) underway.
- Completed repairs to Regional Parks Selkirk Trestle and Phase 4 of the E&N Rail Trail.
- Completed Salt Spring Island Active Transportation Plan.

Indicators



Regional EV Infrastructure Roadmap implementation

- Level 2 ports: 54% (415 installed)
- DCFC ports: 33% (44 installed)



Regional GHG emissions from transportation

- 930,656 t CO₂e (14% increase compared to 2020)



Annual EV ICBC registrations (region fleet size)

- 10,424, 3.43% of total registrations (0.92% increase compared to 2022)



Annual CRD corporate fleet GHG emissions

- 1404 t CO₂e (19.4% increase compared to 2022)



Number of corporate EVs purchased*

- 36 EVs purchased (45 total in fleet)

*Due to industry delays, vehicles received in 2023 were a combination of vehicles ordered in 2021, 2022 and 2023.



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.



Overall Action Status

Opportunity for Improvement

A large portion of regional GHGs 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 is key to achieving GHG reduction targets and can support resiliency measures. As the climate changes, it is increasingly important to prepare buildings and infrastructure. The capacity of infrastructure to be resilient to climate impacts must be considered, such as increased stormwater flows, power interruptions, poor air quality and heat waves.



Although many actions are well-progressed in this goal area, staff indicate actions related to corporate carbon reduction projects and assessing CRD infrastructure for climate risk have been delayed, resulting in an overall status of *opportunity for improvement* for this goal area. Many foundational energy studies for key facilities have been completed and retrofit projects will be completed in future years.

Goal Progress Summary

- Finalized and began implementation of the Corporate Green Building Policy.
- Completed energy audits and a preliminary net-zero energy pathway feasibility study for Panorama Recreation Centre, SEAPARC Leisure Complex and Rainbow Recreation Centre, and began additional detailed studies.
- Implemented the Home Energy Navigator program, which saw nearly 700 registrants, providing approximately 500 home consultations, and supported an estimated 125-150 heat pump retrofits in the region.

CRD Roles

CRD buildings and infrastructure

Building inspection in electoral areas

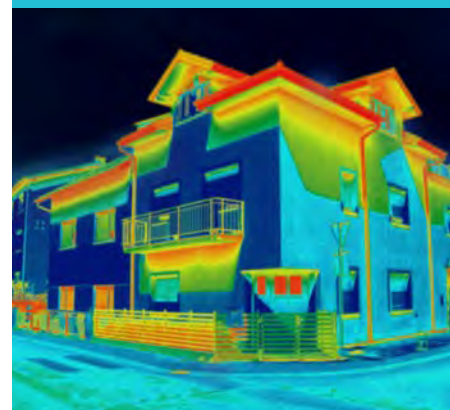
Data management

Community programs

This goal contains

30

sub-actions over the next five years



Thermal camera image of a building

- Continued supporting the BC Sustainable Energy Association to deliver Cool it! climate action workshops for students in the region, delivering 73 workshops (33 funded by the CRD and 40 additional workshops funded by municipalities).
- Coordinated and supported consultations with the District of Saanich and the City of Victoria towards creating mandatory energy and carbon emission reporting requirements for existing large Part 3 buildings; engaged municipalities about the opportunity.
- Supported municipalities in their considerations and adoptions of the Zero Carbon Step Code (ZCSC) and the transition to mandatory BC Energy Step Code requirements.
- Led the province in being the first regional district to adopt Step 3 of ZCSC, Strong Carbon Performance, in electoral areas.
- Advanced several initiatives, with the University of Victoria and the Canadian Forest Service, to better assess and understand climate change impacts relating to ecosystem health and water supply in the Greater Victoria Water Supply Area.
- Hosted a local government workshop on green stormwater infrastructure guidelines, undertook a series of Rural Stormwater Management workshops for the agricultural community, and workshops for residential rain garden installation for homeowners.

Indicators



Regional Energy Retrofit Program implementation

- 700 participants signed up as of December 2023



Regional GHG emissions from buildings

- 619,054 t CO₂e (10% decrease compared to 2020)



Annual CRD corporate facilities GHG emissions

- 1,552 t CO₂e (8.7% decrease compared to 2022)



CRD residents outside their home retrofitted with a heat pump



Home Energy Navigator display at the Victoria Home Show



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.



Overall Action Status

Opportunity for Improvement

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. 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 the region can collectively respond to support the health of our ecosystems.



Although many efforts are being made in this goal area, staff indicate *opportunities for improvement* or delays in identifying and implementing adaptation strategies and data collection on biodiversity.

Goal Progress Summary

- Finalized the Regional Parks and Trails Strategic Plan 2022-2032 after more fulsome engagement with First Nations.
- Progressed updates to the Regional Parks Land Acquisition Strategy, which provides direction on the selection of land for regional park purposes that reflect the values identified in the Strategic Plan, including climate considerations.
- Undertook several initiatives to better assess and understand climate change impacts relating to ecosystem health and water supply in the Greater Victoria Water Supply Area, including investigating impacts on: forest growth, mortality and resilience; vulnerability of the dominant tree species to outbreaks of a bark beetle; forest fuel hazard and wildfire probability, behaviour and spread, and burn severity.

CRD Roles

Stewardship of CRD lands

Land acquisition

Community and inter-municipal coordination

Education and outreach

Regional planning

Data management

This goal contains

19
sub-actions



Volunteers removing invasive species in Mill Hill Regional Park

- Provided various regional and local ecological data sets to support planning and policy efforts, including the launch of intertidal and subtidal inventories of the core area harbours, land cover information, and coastal storm and sea level data.
- Continued to support efforts to monitor stream flows in the region.
- Continued to chair and coordinate the Capital Region Invasive Species Partnership.
- Hosted and promoted regional participation in the Canada-wide Nature in the City challenge supporting biodiversity awareness.
- Advanced work on a proposed Regional Foodlands Trust, obtaining initial support from the Board, permission for use of Bear Hill from Regional Parks and continued engagement with the agricultural community.
- Continued to work cooperatively with the W̱SÁNEĆ Leadership Council and its designates on the development of the Mount Work Regional Park Management Plan.
- Partnered with the W̱SÁNEĆ Leadership Council and Raincoast Conservation Society on the Healthy Waters Initiative, which includes a role for W̱SÁNEĆ Guardians.
- Collaborated with Scia'new First Nation and T'Sou-ke First Nation on the protection of culturally significant sites.
- Collaborated with T'Sou-ke First Nation on ecological restoration planning for Ayum Creek Regional Park in partnership with the Land Conservancy.

Indicators



Hectares of regional park land*

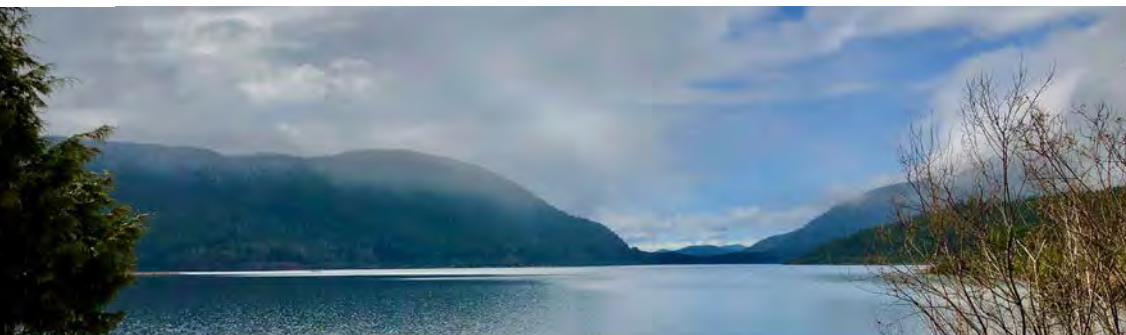
• 13,350 ha (an additional 21.28 ha was acquired in 2023)



Number of volunteer stewardship hours

• 6,209 hours by 703 volunteers

**Progress on this indicator is reported in the Regional Growth Strategy Indicator Report*



Sooke Lake Reservoir



Todd Creek Trestle



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.



Overall Action Status

Opportunity for Improvement

Product use and the disposal of waste contribute to GHG emissions in the region. About 2.7% 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, and then on decreasing the GHG emissions from the remaining waste.



Although significant progress has been made on actions in this goal area, staff indicated *opportunities for improvement* or delays in furthering education and engagement on waste management to be delivered by and for First Nations communities, maximizing and optimizing the capture of landfill gas, and considering climate change impacts in liquid waste management.

Goal Progress Summary

- Received approval from the Ministry of Environment & Climate Change Strategy on the Solid Waste Management Plan.
- Received Board approval for policy changes that will see more waste diverted from Hartland Landfill, including: new material bans, adjusted tipping fee structure, and increased bylaw fines.
- Initiated the procurement process for a Material Diversion Transfer Station at Hartland Landfill to collect and process five source-separated waste stream materials for reuse, recycling, or energy recovery and will facilitate the diversion of up to 40,500 tonnes of waste per year.
- Continued the curbside Blue Box Collection Program and awarded a new curbside recycling contract for the collection of recyclables from single-family homes, to take effect in early 2024, which includes low-emission and electric vehicles.

CRD Roles

- Solid waste management
- Liquid waste management
- Education and outreach

This goal contains

8

sub-actions over the next five years



Hartland Landfill

- Implemented the Multi-family Dwelling Waste Diversion Project, which promoted standardized education on proper recycling procedures for 50 participating buildings (2,499 units) across eight municipalities within the region.
- Supported 22 projects, with approximately \$60,000 in funds, through the Rethink Waste Community Grant.
- Advanced several education programs, including: the Rethink Waste Newsletter, workshops, landfill tours, funding for the Compost Education Centre, webpage updates, advertisement campaigns, and direct community outreach.
- Initiated work on a jurisdictional scan of municipal solid waste processing technologies; this included investigating incineration with energy recovery, gasification, and pyrolysis thermal processing systems.
- Produced approximately 7.9 megawatts of green power from landfill gas, an increase from 1.6 megawatts in 2022.**

Indicators



CRD's per capita disposal rate*

- 382 kg/capita (6.02% or 23 kg/capita decrease compared to 2022)



Landfill Gas Efficiency**

- Achieved a 74% gas collection efficiency based on UBCi model (78% in 2022)

**This number excludes blended biosolids. Please refer to the 2023 Solid Waste Management Plan Progress Report for additional information.*

***Please refer to the Solid Waste Management Plan Progress Reports for additional information.*



Hartland Landfill and the Landfill Gas Plant



Hartland Landfill public drop-off

Looking Ahead – 2024

The CRD will continue to show a leadership role, support inter-municipal collaborative efforts, pursue strategic partnerships and external funding sources, and respond to opportunities, as local and senior levels of governments advance their efforts. Some activities planned for 2024 include:

- **Extreme Heat Vulnerability Mapping:** In 2024, the Extreme Heat Vulnerability Information Portal Project, a collaborative effort between the CRD, municipal partners, Island Health and the Province to understand vulnerability to heat across the capital region, will be completed. The portal will support the integration of extreme heat disaster risk reduction and climate adaptation planning, providing tools and data to help community planners and emergency managers address extreme heat now, and in the future.
- **Updated Climate Projections:** An update to the 2017 Climate Projections for the Capital Region report based on new global models will be released in early 2024 and accompanied by capacity-building workshops for municipal staff.
- **Emergency Response Notification System:** The development of a public-facing emergency dashboard to improve the public notification system for extreme weather events is targeted for completion in 2024.
- **Panorama Heat Recovery System:** In 2024, a low-temperature electric dehumidifier, designed for future tie-ins with the heat recovery system, will be installed at Panorama Recreation Centre. Detailed design and incentive applications for the heat recovery system will be completed, with installation scheduled for 2025.
- **Transportation Governance:** Building on an initial survey of municipal councils, electoral areas and partner agencies, on transportation governance in the region, staff will prepare an engagement plan for the service design and feasibility study phase of this initiative and further engage interest holders.
- **EV Infrastructure Roadmap:** Staff will continue to work with local governments, BC Hydro and other partners to advance the installation of EV charging infrastructure across the region.
- **Monitoring Ecosystem Health in the Greater Victoria Water Supply Area:** An update of the Terrestrial Ecosystem Mapping in the GVWSA, an essential information source for assessing the effects of climate change on ecosystems, will be completed.
- **Hartland Landfill Policy Changes:** Bylaw changes that will see more waste diverted from Hartland Landfill, including new material bans, adjusted tipping fee structure, and increased bylaw fines, will come into effect.
- **Additional Climate Action Capacity:** In response to Board directives, the Climate Action Program will hire a one-year auxiliary term position to develop a community mobilization program, undertake regional education activities, and commence additional policy analysis, regulatory reviews, and/or GHG modelling efforts.



Dallas Road, Victoria, BC

Appendix A: Climate Action Report Card

This Climate Action Report Card is intended to provide a high-level, easy-to-understand overview of the CRD's climate performance and progress.

Methodology

The Climate Action Strategy defines specific actions to guide CRD efforts over the lifespan of the strategy. These include 56 “umbrella” actions broken down into 127 sub-actions, with specific timelines and responsible divisions.

The Climate Action Report Card compiles the self-reported quantitative progress metrics from services for each of the 127 sub-actions. By averaging the progress of respective sub-actions, the report card measures the current ‘action status’ for several informative categories, such as overall climate action status, corporate and community-focused actions, and the six goal areas of the strategy.

The report card uses a math-based system to produce a percent grade by comparing reported progress with expected progress based on the action timelines established in the strategy. For ongoing actions with no timeline, percentages are based on self-reported levels of progress satisfaction by the responsible service. Each action status score is accompanied by qualitative progress updates that summarize any actions taken or barriers encountered during the reporting year. For clarity, percentages are converted to three coloured status indicators: on track, opportunity for improvement, and attention required. In addition, several broader corporate and regional indicators are included. These are not considered in the evaluation of the action statuses.

For more information on timing, divisions involved, and sub-actions, please see Appendix C in the Climate Action Strategy.



2023 Overall Action Plan Progress On Track

The climate action strategy identifies 127 actions with specific timelines across the organization. Scores are based on the current status of each action within their goal areas.



Corporate Actions Opportunity for Improvement



Community-Focused Actions On Track

Goal Areas:



Goal 1: Climate-Focused Decision Making



Goal 2: Sustainable Land Use, Planning and Preparedness



Goal 3: Low-Carbon Mobility



Goal 4: Low-Carbon and Resilient Buildings and Infrastructure



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



Goal 6: Minimized Waste

Legend: Action Status



On Track: 75% or greater of yearly target progress



Opportunity for Improvement: 50% - 75% of yearly target progress



Attention Required: less than 50% of yearly target progress



Future Action

Legend: Indicators*



Direction of arrow indicates **current trend direction**



Indicator is trending in the **desired direction**



Indicator is trending in the **wrong direction**



Indicator is intended to provide **contextual information**

*While indicators are not considered in the calculation of the action status, they provide context and track long-term progress.

Status Action Update

Progress on Actions



1-1 Integrate and standardize the climate lens framework across processes

- Prepared the 2023-2026 Corporate Plan, with consideration of how initiatives impact the organization's climate action efforts.
- Approved and implemented a corporate green building policy.
- Applied a climate lens to actions completed under the Corporate Asset Management Strategy.
- Completed the annual corporate GHG emissions inventory.
- Developed an annual CRD Climate Action Report Card for accountability on climate progress.



1-2 Develop internal carbon pricing policies and procedures

- Approved and adopted an internal carbon price policy for use in select corporate projects. Piloted the policy into the scope of work for a new build project, as well as a major facility upgrade.



1-3 Identify internal funding sources for climate action

- Provided funding through the internal Climate Action Reserve Fund for additional carbon reduction studies at three recreation centres and partially funded an ongoing study at Saanich Peninsula Wastewater Treatment Plant.
- Engaged in a contract with BC Hydro to provide partial funding to the Corporate Energy Specialist role in 2023.



1-4 Support staff capacity building and coordination

- Provided a variety of staff training sessions, including: overviews of new climate policies; Climate 101, a general primer available to all staff and offered regularly; and Climate 201, to guide staff on embedding a climate lens in their work.
- Maintained an internal Climate Action SharePoint hub for staff capacity building.
- Continued quarterly Climate Action Fleet and Facilities Working Group meetings and established a Building Performance Working Group.



1-5 Investigate how Indigenous knowledge can inform climate action at CRD

- Continued engagement with First Nations with respect to climate impacts. Indigenous perspectives on climate change concerns continue to be raised by First Nations in engagement with CRD staff in relation to many areas of service delivery, often with a focus on reduced access to land for food security and cultural uses, including harvesting and hunting. More work is needed to learn how Indigenous knowledge can inform climate action.
- Continued conversations with First Nations leadership, Guardians, cultural workers and archaeologists on the importance of protecting cultural heritage sites and landscapes that are susceptible to climate impacts.
- Attended the 2023 Cultural Heritage Climate Change Workshop where Indigenous perspectives on heritage conservation in light of climate change were shared and new approaches to help reduce shoreline impacts were discussed.



Climate-Focused Decision Making

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



Overall Action Status
On Track

Additional Action Plan Indicators



Annual CRD Corporate GHG emissions • 2,956 t CO₂e (2.8% increase compared to 2022)












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.



Overall Action Status
On Track

Status	Action	Update
Progress on Actions		
	2-1 Incorporate climate hazards and vulnerabilities into corporate CRD emergency response plans	<ul style="list-style-type: none"> Continued to reevaluate emergency response planning based on climate hazards and vulnerabilities on an ongoing basis. Began the development of a public-facing emergency dashboard to improve the public notification system for extreme weather events. Targeted for completion in 2024.
	2-2 Monitor Regional Growth Strategy (RGS)	<ul style="list-style-type: none"> Completed the annual RGS Indicator Report. Reviewed Regional Context statements, as needed, through an established process in which municipal climate policies are reviewed in relation to RGS goals.
	2-3 Integrate climate impacts into Juan de Fuca land use plans and policies	<ul style="list-style-type: none"> Initiated a review and update for the Port Renfrew Official Community Plan (OCP). Staff are working with Pacheedaht First Nation to select a consultant to lead the project. Planned review of development permit flood management guidelines in conjunction with the Port Renfrew OCP update.
	2-4 Collect and share pertinent energy, emissions, climate projections and vulnerability data	<ul style="list-style-type: none"> Completed the 2022 Regional GHG Inventory Study and provided the report and data to local government staff in the region. Continued to collect heating systems information for all homes sold in the capital region and continued development of regional home archotyping map based on home heating fuel information. Undertook an extensive effort to map vulnerability to extreme heat for the region and develop the Capital Region Extreme Heat Information Portal, with grant funds received from the Union of British Columbia Municipalities (UBCM). Obtained a Pacific Institute for Climate Solutions grant to hire a summer intern to support climate adaptation related research. Advanced an update to the 2017 Climate Projections for the Capital Region Report based on new global models. Engaged with municipal staff on regional impacts and created a guide for the use of climate projections data. Obtained a Complete Communities grant (UBCM) to initiate a Growth and Mobility Study. A portion of the study will be used to advance the development of a methodology to assist in GHG analysis associated with the implementation of the RGS.
	2-5 Identify innovative actions to close the regional 2030 emissions reduction gap	<ul style="list-style-type: none"> Delivered a list of policies that have the potential to close the capital region emissions gap to the Board.
	2-6 Coordinate regional climate action, collaboration and capacity building among local governments and interested First Nations	<ul style="list-style-type: none"> Continued to facilitate and administer several inter-municipal networks that serve to coordinate regional climate action, set priorities and disseminate resources, including the Climate Action Task Force and Climate Action Working Group, Development Planning Advisory Commission, Transportation Working Group, Local Government Emergency Program Advisory Committee, the Regional Emergency Management Partnership and the Healthy and Safe Environments Community Health Network. Conducted research and hosted an inter-municipal workshop on carbon budgeting. Supported local governments and First Nations in accessing climate projections and sea level data and participated in policy discussions. Continued to reach out to First Nations to collaborate on relevant projects, such as extreme heat vulnerability mapping to build relationships and provide opportunities for sharing of information as it relates to climate change. Partnered with the University of Victoria's School of Public Administration to conduct research into the health impacts of extreme heat using an equity lens.

Status	Action	Update
	2-7 Incorporate regional climate projections into electoral area emergency planning and enhance FireSmart efforts	<ul style="list-style-type: none"> Continued to incorporate climate projections in the hazard, risk and vulnerability assessments for the Electoral Areas on an ongoing basis. Completed Electoral Area Community Wildfire Resiliency Plans and shared with residents. Continued work on the FireSmart program. Conducted Community Wildfire Resiliency webinar series for electoral areas. Adopted new open burning bylaw to prevent human-caused wildfires. Completed Community Evacuation Guides. Raised public awareness of community wildfire exposure, evacuation maps and other preparedness resources to enhance personal and community resiliency planning.
	2-8 Coordinate with emergency management stakeholders on planning and public outreach activities related to climate risks	<ul style="list-style-type: none"> Continued to work to coordinate extreme heat, flood and drought awareness among emergency management stakeholders and partners in the region. Undertook extreme heat vulnerability mapping for the region, which will inform emergency response and other planning activities (see action 2-4).
	2-9 Investigate Transition Salt Spring Island 2.0 Climate Plan implementation	<ul style="list-style-type: none"> Allocated Local Government Climate Action Program funds (\$22,000 for 2023) to award a contract to Transition Salt Spring Society to provide education programming and community engagement to reduce emissions.

Regional Climate Progress Indicators and Trends



Regional GHG emissions

• 1.86 million tonnes of CO2e (1% increase compared to 2020)



Number of net new dwelling units in areas where more than 45% walk/bike/bus to work*

• Currently, the region is not meeting the desired trend

*Progress on this indicator is reported in the Regional Growth Strategy Indicator Report.



Low-Carbon Mobility










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



Overall Action Status
On Track

Status	Action	Update
Progress on Actions		
	3-1 Administer and track the new Green Fleet Policy	<ul style="list-style-type: none"> Continued to implement the Green Fleet Policy and order and acquire new electric vehicles (EVs). Continued to experience some delays due to market availability and vehicle requirements exceeding the capabilities of current EVs. Where possible, vehicles have been slated for a shortened (5-year) lifecycle and will be reviewed at that time for potential EV replacement.
	3-2 Develop electric vehicle (EV) adoption and right-sizing plan for the corporate fleet	<ul style="list-style-type: none"> Reviewed market availability of EVs on an ongoing basis. Investigated opportunities for telematics and fuel purchase management software to assist in fleet rightsizing. Maintained corporate e-bike fleet at headquarters and Regional Parks and completed staff training.
	3-3 Develop EV infrastructure plan for the corporate fleet	<ul style="list-style-type: none"> Installed 54 chargers at 13 different sites for fleet use, meeting short- to mid-term fleet EV infrastructure needs. Accessed external grant funding to support installations.
	3-4 Investigate the feasibility of bio-based diesel supply and storage	<ul style="list-style-type: none"> Continued discussions with fuel providers regarding feasibility and to determine next steps.
	3-5 Develop a region-wide approach to transportation demand management and safety policy	<ul style="list-style-type: none"> Continued implementing a pilot for sustainable commute planning, working with large employers in the region (Seaspan and CFB Esquimalt). Continued Traffic Safety Commission work on safety education and initiatives, including the development and implementation of more standardized safety protocols and treatments. Completed work with the Community Social Planning Council on gender equity and safety on CRD trails. Grant funds were used to investigate the development of bike skills for equity-seeking groups that are underrepresented on CRD trails.
	3-6 Collect and distribute transportation planning data regionally	<ul style="list-style-type: none"> Continued collection, analysis and distribution of transportation data through traffic count program, volunteer bike program, permanent bike counter program, and the addition of short duration automated bike count pilot, using cameras to do volume counts in locations throughout the region. Data is routinely utilized to inform decision making at a local, regional, provincial and national level. Analyzed, published and distributed regional Origin Destination Household Travel Survey, with an expanded scope, adding additional questions related to e-bike usage, micro-mobility, demographics and population change.
	3-7 Accelerate infrastructure improvements that support active transportation	<ul style="list-style-type: none"> Supported Board advocacy for regional infrastructure delivery in relation to transportation, including increased funding for active travel, including improvements to the regional trail network. Continued implementation of the Regional Transportation Plan (RTP). Initiated the planning required to scope regional transportation governance options with a background report to the Transportation Committee. Initiated an engagement process with municipal councils, electoral areas and agency partners on regional transportation governance. Completed Salt Spring Island Active Transportation Plan. Continued meetings of the Regional Transportation Working Group with a core mandate of working toward consistent and connected cycling facilities, per the regional transportation priorities. Completed an update to the regional cycling network and the All-Ages and Abilities facility framework and developed a planning tool to support a consistent cycling network across jurisdictions. Accelerated the Regional Trails Widening and Lighting Project after securing additional resources through the CRD's 2024-2028 Financial Plan. Continued to implement the Gulf Islands Trails Plan. Development of the first regional trail in the Gulf Islands (Mayne Island Regional Trail) is underway, supported by grant funding to be completed in 2024. Completed repairs to Regional Parks Selkirk Trestle. Completed Phase 4 of the E&N Rail Trail.

Status	Action	Update
	3-8 Lead and support regional education programs focused on zero-emission mobility	<ul style="list-style-type: none"> • Maintained current portfolio of education programs, including Charge Your Ride, on the CRD website; provided outreach materials to community groups, as requested. • Co-hosted industry-focused workshops on EV charging infrastructure best practices for engineers, site hosts and property management professionals. • Continued with Ready, Step, Roll active school travel planning implementation, with five schools enrolled.
	3-9 Support acceleration of transit improvements and increased service	<ul style="list-style-type: none"> • Continued to participate in various technical and working groups to support the connection of the downtown to the Westshore through RapidBus delivery. • Supported the Ministry of Transportation and Infrastructure (MoTI) to improve transit service in suburban and rural areas by increasing the number of park and rides. • Explored the feasibility of mobility hub development in key locations across the region, in partnership with MoTI. • Continued discussion of long-term transportation alternatives in the context of transportation governance work (see action 3-7) • Established a provincial E&N technical working group to determine the future of the E&N Corridor. • Initiated concept planning for a transit bus storage location on Salt Spring Island.
	3-10 Support a public electric vehicle charging network and encourage uptake of zero-emission vehicles	<ul style="list-style-type: none"> • Established BC Hydro MOU to advance priority initiatives. Included liaising within municipal partners and other key stakeholders to identify potential Level 3 direct current fast charging (DCFC) stations sites across the region. • Developed and distributed public EV charging installation guidelines to support private landowners and businesses to install public charging stations. Provided support to BC Hydro in the review and redevelopment of provincial EV charger design guidelines for DCFCs. • Installed eight publicly-accessible chargers at SEAPARC Leisure Complex, Panorama Recreation Centre and Rainbow Recreation Centre and facilitated an external federal grant on behalf of the City of Victoria, installing 60 additional chargers, encompassing both fleet and public vehicle charging. • Completed feasibility studies and engineering evaluations at nine high-use parks, to support prioritization for future installations. • Pursued engagement opportunities with EV infrastructure builders, site hosts, electricians and other key sectors as opportunities arose. • Responded to provincial engagement processes for input on the Clean Transportation Action Plan and the Medium Heavy Duty Zero Emission Vehicle consultation paper.
	3-11 Implement Regional EV Charging Roadmap	<ul style="list-style-type: none"> • See action 3-10. • Continued to pursue grant funding to install additional Level 2 EV chargers in the region. • Attended provincial Electric Vehicle Local Government Peer network meetings and shared learnings with municipal staff via the CRD Climate Action Inter-Municipal Working Group.
	3-12 Improve internet access on Southern Gulf Islands	<ul style="list-style-type: none"> • Proposed partnership with CityWest, contracted by Connected Coast, to build last-mile fibre infrastructure to Galiano and Saturna Islands, which would deliver connectivity and economic benefits. This project would create revenue through a profit-sharing agreement, which will be invested in economic diversification and sustainability initiatives across the entire electoral area. • Completed two applications to the Rural Economic Development Infrastructure Program (REDIP) for funding to support the above project. One application was unsuccessful, and one is still under review. Without REDIP support, the CRD will need voter assent separately for each island to borrow the funding.

Additional Action Plan Indicators		Regional Climate Progress Indicators and Trends	
	Regional EV Infrastructure Roadmap implementation	<ul style="list-style-type: none"> Level 2 ports: 54% (415 installed) DCFC ports: 33% (44 installed) 	 Percentage of total trips made by walking, cycling and transit in the Growth Management Planning Area* <ul style="list-style-type: none"> Progress is being made toward the target. The overall active transportation mode share has increased due to a sizeable increase in cycling trips and a steady increase in walking.
	Percentage of the Regional Trail Network completed*	<ul style="list-style-type: none"> 96.2% 	 Annual EV ICBC registrations (region fleet size) <ul style="list-style-type: none"> 10,424, 3.43% of total registrations (0.92% increase compared to 2022)
	Annual CRD corporate fleet GHG emissions	<ul style="list-style-type: none"> 1,404 t CO2e (19.4% increase compared to 2022) 	 Victoria Transit Region fuel sales <ul style="list-style-type: none"> 2023 data for this indicator was unavailable at the time of reporting
	Number of corporate EVs purchased	<ul style="list-style-type: none"> 36 new EVs acquired (total 45 in fleet)** 	 Regional GHG emissions from transportation <ul style="list-style-type: none"> 930,656 t CO2e (14% increase compared to 2020)
	Number of CRD fleet EV chargers installed	<ul style="list-style-type: none"> 54 (79 to date) 	

*Progress on these indicators is reported in the Regional Growth Strategy Indicator Report. In 2023, the Percentage of the Regional Trail Network completed indicator was revised to better align with the Regional Parks and Trails Strategic Plan 2022-2032 and so cannot be compared to what has been reported in previous years.

**Due to industry delays, vehicles received in 2023 were a combination of vehicles ordered in 2021, 2022 and 2023.



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.










Overall Action Status

Opportunity for Improvement

Status	Action	Update
Progress on Actions		
	4-1 Develop and implement a corporate Green Building Policy	<ul style="list-style-type: none"> Finalized and implemented the Corporate Green Building Policy.
	4-2 Develop and implement a Strategic Energy Management Plan	<ul style="list-style-type: none"> Completed an energy management assessment in conjunction with 16 stakeholders from various services in the CRD and BC Hydro, which will inform the updated corporate Strategic Energy Management Plan.
	4-3 Conduct energy studies for CRD facilities to identify priority emission reduction and energy efficiency projects	<ul style="list-style-type: none"> Supported by a Federation of Canadian Municipalities (FCM) grant, completed ASHRAE Level 1 energy audits and a preliminary net-zero energy pathway feasibility study, which included a business case for renewable power, for SEAPARC Leisure Complex, Panorama Recreation Centre and Rainbow Road Recreation and began additional detailed studies. A portion of Local Government Climate Action Program (LGCAP) funds were allocated to support work for Panorama Recreation Centre (\$79,496). Accessed BC Hydro funding to initiate an energy study for the Saanich Peninsula Wastewater Treatment Plant, to be completed in 2024. As part of this study, the business case for on-site renewable power generation is being examined. Completed replacement of two heat pumps at Rainbow Recreation Centre, with commissioning of both units continuing into 2024. A portion of LGCAP funds were allocated to support this work (\$10,000).
	4-4 Complete identified high impact retrofits to CRD facilities	<ul style="list-style-type: none"> Completed options analysis for the electrification of the CRD Headquarters HVAC system. Costing results have delayed implementation and staff are currently investigating funding models. Assessed building optimization opportunities at CRD Headquarters and implemented changes to reduce energy use and emissions. Engaged an engineering consultant to begin a conceptual design for a heat recovery system and detailed design of a low-temperature electric dehumidifier for Panorama Recreation Centre.
	4-5 Pursue climate-friendly development and retrofits for CHRC and CRHD facilities	<ul style="list-style-type: none"> Embedded energy reductions into the design phase on new construction projects, wherever possible. All new development projects follow Building and Energy Performance targets set by the BC Housing Design Guidelines and Construction Standards. Continued efforts to secure grant funding to support energy and GHG savings in housing facilities. Pursued FCM Sustainable Affordable Housing Grants for three projects in the design stage. Projects pursuing FCM funding are targeting Step Code 4, with additional energy requirements, and will demonstrate Net Zero Ready performance through a renewable energy study (performance targets are contingent on funding). Continued to follow the Hospital District 10-year capital plan, which provides major and minor capital resources to Island Health and facilities following Island Health energy guidelines.
	4-6 Consider climate impacts in risk assessments and infrastructure upgrades	<ul style="list-style-type: none"> Continued to consider climate change impacts as part of the design criteria for water supply and wastewater systems. Developed a spatial risk-based drainage structure replacement matrix for the primary water supply catchment area to identify structures that are undersized in relation to projected climate impacts. Undertook initiatives to better assess and understand climate change impacts relating to ecosystem health and water supply in the GVWSA. See actions 5-2 and 5-3.
	4-7 Implement a Regional Energy Retrofit Program	<ul style="list-style-type: none"> Implemented the Home Energy Navigator program, which saw nearly 700 registrants, providing approximately 500 home consultations, and supported an estimated 125-150 heat pump retrofits in the region. Undertook two major marketing campaigns, organized multiple social media campaigns and attended eight community events (including two Victoria Home Shows) in support of recruitment. Continued to determine how to scale up the program and expand program uptake in the region. Supported expansion of the program to the Regional District of Nanaimo and the City of Vancouver in 2023. More than 3,000 heat pumps were installed in the region in 2023.

Status	Action	Update
	4-8 Develop, deliver and support building-related energy, emissions and water education	<ul style="list-style-type: none"> • See action 4-7. • Continued supporting the BC Sustainable Energy Association to deliver Cool it! climate action workshops for students in the region, delivering 73 workshops (33 funded by the CRD and 40 additional workshops funded by municipalities). • Continued to promote BC's home heating fuel-switching rebate program with municipal partners, including hosting a Group Purchase Rebate code for the region, and co-hosting community workshops and webinars. • Partnered with staff from CRD Parks, Environmental Protection, and Environmental Resource Management to deliver public outreach events, as well as a Professional Development Day for teachers. • Began updating the Climate Action To Go Kits, available through the region's libraries, and investigated developing thermal imaging kits. • Allocated Local Government Climate Action Program funds (\$10,000) to award a contract to Transition Salt Spring to administer and promote the Southern Gulf Island Rainwater Harvesting Rebate Program, approving 25 rain barrels, with an additional six in the pre-approval stage and enabling the storage of 45,782 US gallons of rainwater.
	4-9 Support acceleration of regional building energy benchmarking and local government regulation approaches	<ul style="list-style-type: none"> • Continued participation in the Building Benchmark BC program, including five corporate buildings. • Coordinated and supported consultations with the District of Saanich and the City of Victoria towards creating mandatory energy and carbon emission reporting requirements for existing large Part 3 buildings; engaged municipalities about the opportunity. • Participated in the Benchmarking Peer Leadership Group and shared information with partners clarifying local government authority related to building energy and carbon emissions reporting.
	4-10 Coordinate high-performance building policy support and capacity-building activities	<ul style="list-style-type: none"> • Continued to participate in the Step Code Local Government Peer network. • Supported municipalities in their considerations and adoptions of the Zero Carbon Step Code (ZCSC) and the transition to mandatory BC Energy Step Code requirements. • Led the province in being the first regional district to adopt Step 3 of ZCSC, Strong Carbon Performance, in electoral areas. • Participated in provincial engagement sessions related to forthcoming Highest Efficiency Equipment Standards.
	4-11 Collect and share data and research on building energy use and emissions	<ul style="list-style-type: none"> • See action 2-4. • Utilized the Inter-municipal Climate Action Working Group to share knowledge about regional best practices on embodied carbon.
	4-12 Promote green infrastructure and improved stormwater management approaches	<ul style="list-style-type: none"> • Hosted a local government workshop on green stormwater infrastructure (GSI) guidelines. • Hosted a series of Rural Stormwater Management workshops for the agricultural community. • Promoted GSI guidelines through the Inter-municipal Watershed Management Group. • Delivered workshops for residential raingarden installation for homeowners. • Continued to coordinate the Gorge Waterway Initiative.
	4-13 Understand climate impacts on groundwater resources in Juan de Fuca Electoral Area	<ul style="list-style-type: none"> • Initiated planning for potential groundwater study of Aquifer 606.
	4-14 Investigate regional renewable energy and storage potential	<ul style="list-style-type: none"> • Future action.

Additional Action Plan Indicators		Regional Climate Progress Indicators and Trends			
	Annual CRD corporate facilities GHG Emissions	· 1,552 t CO2e (8.7% decrease compared to 2022)		Regional Energy Retrofit Program implementation	· 700 participants registered as of December 2023
	Number of critical emissions reduction projects completed	· 0*		Annual FortisBC natural gas consumption numbers	· 7,409,355 (2022) (3% increase compared to 2021)
	Number of site energy audits completed	· 11 (increase of 3 since 2022)		Annual FortisBC natural gas connections	· 60,260 (2022) (2% increase compared to 2021)
				Regional GHG emissions from buildings	· 619,054 t CO2e (10% decrease compared to 2020)

*Studies have been undertaken that will direct capital projects in coming years.



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.



Overall Action Status
Opportunity for Improvement

Status	Action	Update
Progress on Actions		
	5-1 Integrate climate considerations into regional parks strategic and management planning	<ul style="list-style-type: none"> Finalized the Regional Parks and Trails Strategic Plan 2022-2032 after more fulsome engagement with First Nations. Climate action and resiliency was identified as one of the five strategic goals and five priorities and 24 actions were identified to support climate action in regional parks and trails. Initiated a park management planning process and policy review, which includes investigating how climate change considerations can be embedded in park management plans. Continued to develop the Stewardship Plan to guide management and acquisition decisions that build resiliency in regional parks and trails, under a changing climate. Progressed updates to the Regional Parks Land Acquisition Strategy, which provides direction on the selection of land for regional park purposes that reflect the values identified in the Strategic Plan, including climate considerations. Collaborated with Scia'new First Nation and T'Sou-ke First Nation on the protection of culturally significant sites. Collaborated with T'Sou-ke First Nation on ecological restoration planning for Ayum Creek Regional Park, in partnership with the Land Conservancy. Continued to work cooperatively with the WSÁNEĆ Leadership Council and its designates on the development of the Mount Work Regional Park Management Plan. Awarded the BC Recreation and Parks Association (BCRPA) Program Excellence Award for the Exploring Indigenous Perspectives Program.
	5-2 Monitor ecosystem health in the Greater Victoria Water Supply Area (GVWSA) and investigate expanding regionally	<ul style="list-style-type: none"> Undertook several initiatives to better assess and understand climate change impacts relating to ecosystem health and water supply in the GVWSA, including: investigating impacts on forest growth, mortality and resilience; vulnerability of the dominant tree species to outbreaks of a bark beetle; forest fuel hazard and wildfire probability, behaviour and spread, and burn severity. Continued work on a risk mitigation strategy to reduce the potential impacts on water quality from areas burned by a wildfire. Began update of the Terrestrial Ecosystem Mapping, which will be an essential information source for assessing the effects of climate change on ecosystems in the GVWSA. Utilized updated LiDAR data to develop an enhanced forest inventory that quantifies the height, density and structure of forest in the GVWSA to facilitate analyses and modelling relating to the risk of drought stress and wildfire in a changing climate. Expanded and upgraded the watershed hydrology monitoring system to improve understanding of how climate change could affect the amount and timing of rainfall, soil moisture, stream flows and water quality. These data will also be used to develop a water supply reservoir inflow model that can be used to assess climate change projections on water supply. Completed annual overview flights to monitor forest health, which have been ongoing since 2007.
	5-3 Undertake climate adaptation initiatives to increase the resilience of the GVWSA	<ul style="list-style-type: none"> Developed shaded fuel-break corridors at strategic locations near the boundaries of the GVWSA to use as staging areas for wildfire suppression. Several approaches for managing woody debris have been implemented and compared, including the use of an air curtain burner. Tried within-stand treatments with thinning of 40 to 60-year-old planted douglas fir stands to reduce the distribution of biomass and forest fuel that would otherwise occur through natural thinning processes and increasing drought conditions. Planned prescribed burn trial area in the Leech Water Supply Area, when conditions allow.
	5-4 Provide regional and local ecological data to support planning and policy efforts	<ul style="list-style-type: none"> Advanced efforts to implement a proposed Biodiversity Service Establishment Bylaw, which received 1st, 2nd and 3rd reading. Compiled existing datasets from the Province and initiated preliminary discussions with some municipal staff regarding collaboration. Provided various regional and local ecological data sets to support planning and policy efforts, including the launch of intertidal and subtidal inventories of the core area harbours, land cover information, and coastal storm and sea level data. Worked to enable easier download and improve public accessibility to land cover classification data. Continued to support efforts to monitor stream flows in the region. Engaged a contractor to obtain high flow data to improve flow discharge curves. Participated in the provincial Local Government Biodiversity Forum and provided input on the draft Provincial Biodiversity Framework.
	5-5 Coordinate regional invasive species program	<ul style="list-style-type: none"> Fostered ongoing regional collaboration and information sharing through the Capital Region Invasive Species Partnership, which is chaired and coordinated by the CRD. Organized several species-specific training workshops to share best management and removal practices for priority invasive species throughout the region and build local government and First Nation capacity to manage these species. Implemented public awareness and outreach campaigns regarding priority invasive species in the region. Contributed to the development of standard operating procedures for the mobile incineration unit. Managed the shared invasive species treatment and monitoring contractor and liaised with municipal partners to remove high-priority invasive plants in the region.

Status	Action	Update
	5-6 Support regional forest and urban tree programs	<ul style="list-style-type: none"> Updated regional watershed land cover maps showing tree canopy and impervious cover change over time. Hosted regional discussions and initiated planning in preparation for submitting a regional application to the Two Billion Trees (2BT) program with local governments, school districts and First Nation partners.
	5-7 Support Indigenous-led monitoring and restoration programs	<ul style="list-style-type: none"> Discussion about Guardian Programs with multiple First Nations are ongoing through engagement on Phase 1 of the Regional Parks Land Acquisition Strategy. Involved First Nations' cultural workers, Guardians and archaeologists in projects to monitor and help mitigate impacts on culturally significant areas during land altering works. Consulted with Songhees Nation on the proposed routing for daylighting Bowker Creek to ensure the protection of significant cultural sites. Requested input into Bowker Creek Blueprint. Engaged T'Sou-ke, Tsawout and Songhees Nations marine and Guardian staff in egg adding and moult surveys as part of the new Regional Goose Management Service. Continued to work with Pauquachin First Nation to assess water quality in and around Coles Bay, including participating in a collaborative project with the University of Victoria to develop on-reserve in-community water quality monitoring capacity. Assisted Tsawout First Nation after they experienced a sewage spill into Tetayut Creek. Partnered with WSÁNEĆ Leadership Council and Raincoast Conservation Society on the Healthy Waters Initiative, which includes a role for WSÁNEĆ Guardians. Engaged some First Nations to offer support regarding fats, oils, grease and obstructive waste in sewer systems. Worked with T'Sou-ke Nation on a potential knotweed management program for the Sooke and Charter Rivers, as this species is predicted to expand with changing climate conditions.
	5-8 Support local food and agriculture planning and programs	<ul style="list-style-type: none"> Progressed work to support a Regional Foodlands Trust. Obtained initial support from the CRD Board and drafted the service bylaw for future consideration. Obtained permission for the use of Bear Hill from Regional Parks and initiated a process to identify potential site operators. Continued engagement with the agricultural community.
	5-9 Integrate climate impacts and solutions into environmental education and outreach campaigns	<ul style="list-style-type: none"> Continued to embed climate adaptation messaging in environmental public outreach campaigns and residential educational materials, including the integrated residential outreach program Live Green, Waterwise Summer campaigns, watershed outreach programs and regional park interpretive programs. Offered Climate Resilient Gardening, Lawn to Meadows, Healthy Soils, Rainwater Harvesting, and Backyard Biodiversity workshops as part of the Live Green Healthy Landscapes workshop series. Hosted and promoted regional participation in the Canada-wide Nature in the City challenge supporting biodiversity awareness. Promoted stewardship stories from noted local stewards in the region during "Make a Difference" week. Supported the One Planet Student Challenge, a regional art contest focused on sustainability solutions, in partnership with the District of Saanich, City of Victoria and nonprofit, OneEarth Living. 124 students from nine schools participated in 2023. A celebration event was held for finalists, and their art was displayed at CRD Headquarters for one month.

Additional Action Plan Indicators		Regional Climate Progress Indicators and Trends	
	Hectares of regional park land	<ul style="list-style-type: none"> 13,350 ha (an additional 21.28 ha was acquired in 2023) 	<ul style="list-style-type: none"> Percentage of Sea-to-Sea Green/Blue Belt acquired* This indicator has been replaced in the Regional Growth Strategy Indicator Report by Total Regional Park land acquired
	Number of volunteer stewardship hours	<ul style="list-style-type: none"> 6,209 hours by 703 volunteers 	<ul style="list-style-type: none"> Hectares of farmland in the Growth Management Planning Area This indicator has been replaced in the Regional Growth Strategy Indicator Report with Farm operating revenues in the Growth Management Planning Area due to census data being unavailable



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.



**Overall Action Status
Opportunity for Improvement**

Status	Action	Update
Progress on Actions		
	6-1 Implement the Solid Waste Management Plan	<ul style="list-style-type: none"> Received approval from the Ministry of Environment & Climate Change Strategy on the Solid Waste Management Plan. Received Board approval for policy changes that will see more waste diverted from Hartland Landfill, including new material bans, adjusted tipping fee structure, and increased bylaw fines. Initiated the procurement process for a Material Diversion Transfer Station at Hartland Landfill to collect and process five source-separated waste stream materials for reuse, recycling, or energy recovery and will facilitate the diversion of up to 40,500 tonnes of waste per year. Developed the Waste Stream Collector Incentive program to encourage Hartland account customers to divert recyclables. Continued developing programming to increase waste diversion based on the results from CRD's 2022 Solid Waste Stream Composition Study. Implemented the Multi-family Dwelling Waste Diversion Project, which promoted standardized education on proper recycling procedures for 50 participating buildings (2,499 units) across eight municipalities within the region. Continued to enforce landfill bans on yard and garden material and food waste; collected 12,833 tonnes of source-separated organic material at the Hartland Depot for processing off-site. Continued with onsite beneficial use opportunities, with 5,100 tonnes of select waste material streams processed and utilized on site in place of virgin material, as per provincial guidelines.
	6-2 Develop and deliver education programs to promote a circular economy, zero waste and the 3 Rs	<ul style="list-style-type: none"> Continued to provide funding under the Rethink Waste Community Grant, supporting 22 projects with approximately \$60,000 in funds. Continued to distribute the Rethink Waste Newsletter. Produced and promoted four videos on Rethink Waste Community Grant recipients, to highlight how individuals and organizations are coming together to reduce waste. Responded to 19,597 Infoline inquiries via phone calls and emails. Continued participation in the Coast Waste Management Association's Educators & Communicators Working Group. Continued sponsorship of Ecostar awards. Refreshed and updated the solid waste web pages, including adding a dedicated education page. Broadened education resources for people living in multi-family buildings, as well as businesses. Continued to promote food waste reduction through the Love Food Hate Waste Campaign, which features bus ads, social media, local print and digital media ads. Continued to deliver education workshops and landfill tours. Continued to provide funding for the Compost Education Centre to deliver programming. Renewed a two-year contract with the Victoria Compost and Conservation Education Society (CEC) targeting organic diversion and compost education. Initiated the procurement process to conduct a Market Research and Engagement Study to evaluate the effectiveness of the CRD's waste reduction programming and behaviour change initiatives, which will be conducted once every three years to allow for comparison between years.
	6-3 Support education and engagement on waste management to be delivered by and for First Nations communities	<ul style="list-style-type: none"> Continued to have regular meetings with the W̱SÁNEĆ Leadership Council and the Capital Regional District Solid Waste Working Group. Continued discussions with Pacheedaht First Nation and Port Renfrew on future mutually beneficial long-term waste management for the broader Port Renfrew community.
	6-4 Continue to maximize and optimize the capture of landfill gas for beneficial use	<ul style="list-style-type: none"> Produced approximately 7,939 KW/h (7.9 megawatts) of green power from landfill gas, an increase from 1.6 megawatts in 2022.* Awarded construction contract for a Renewable Natural Gas (RNG) facility at Hartland Landfill, which is expected to result in GHG emission reductions of 450,000 tonnes of carbon dioxide over the next 25 years, a 73% improvement from initial projections of 260,000 tonnes in 2019. Implemented strategies to improve gas collection and mitigate fugitive emissions. Continued annual installation of landfill gas collection infrastructure. Initiated work on a jurisdictional scan of municipal solid waste processing technologies, including investigation of incineration with energy recovery, gasification, and pyrolysis thermal processing systems.
	6-5 Consider climate change impacts in liquid waste management	<ul style="list-style-type: none"> Continued development of the renewed Core Area Liquid Waste Management Plan and Saanich Peninsula Liquid Waste Management Plan. Staff are working to engage First Nations and integrate climate change considerations into the plan updates.

Regional Climate Progress Indicators and Trends



CRD's per capita disposal rate

· 406 kg/per capita (1% decrease compared to 2022)



Landfill Gas collection efficiency*

· Achieved a 74% gas collection efficiency based on UBCi model (78% in 2022)

**Please refer to the Solid Waste Management Plan Progress Reports for additional information.*



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