



## Notice of Meeting and Meeting Agenda Environmental Services Committee

---

Wednesday, April 17, 2024

1:30 PM

6th Floor Boardroom  
625 Fisgard St.  
Victoria, BC V8W 1R7

---

B. Desjardins (Chair), S. Tobias (Vice Chair), J. Brownoff, J. Caradonna, G. Holman,  
D. Kobayashi, D. Murdock, M. Tait, D. Thompson, A. Wickheim, C. Plant (Board Chair, ex-officio)

The Capital Regional District strives to be a place where inclusion is paramount and all people are treated with dignity. We pledge to make our meetings a place where all feel welcome and respected.

### 1. Territorial Acknowledgement

### 2. Approval of Agenda

### 3. Adoption of Minutes

3.1. [24-227](#) Minutes of the March 20, 2024 Environmental Services Committee Meeting

**Recommendation:** That the minutes of the Environmental Services Committee meeting of March 20, 2024 be adopted as circulated.

**Attachments:** [Minutes - March 20, 2024](#)

### 4. Chair's Remarks

### 5. Presentations/Delegations

*The public are welcome to attend CRD Board meetings in-person.*

*Delegations will have the option to participate electronically. Please complete the online application at [www.crd.bc.ca/address](http://www.crd.bc.ca/address) no later than 4:30 pm two days before the meeting and staff will respond with details.*

*Alternatively, you may email your comments on an agenda item to the CRD Board at [crdboard@crd.bc.ca](mailto:crdboard@crd.bc.ca).*

5.1. [24-421](#) Delegation - Philippe Lucas; Representing Biosolids Free BC: Re: Agenda Item 6.3. Biosolids Literature Review - Update

5.2. [24-422](#) Delegation - Jonathan O'Riordan; Representing Creatively United for the Planet Society: Re: Agenda Item 6.3. Biosolids Literature Review - Update

### 6. Committee Business

**6.1.      [24-398](#)      Solid Waste Management Plan - 2023 Progress Report**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:**      [Staff Report: SWMP - 2023 Progress Report](#)  
                          [Appendix A: SWMP - 2023 Progress Report](#)  
                          [Presentation: 2023 SWMP Progress Report](#)

**6.2.      [24-382](#)      Climate Action Strategy - 2023 Progress Report**

**Recommendation:** There is no recommendation. This report is for information only.

**Attachments:**      [Staff Report: Climate Action Strategy - 2023 Progress Report](#)  
                          [Appendix A: 2023 Climate Action Progress Report](#)  
                          [Presentation: 2023 Climate Action Progress Report](#)

**6.3.      [24-406](#)      Biosolids Literature Review - Update**

**Recommendation:** The Environmental Services Committee recommends to the Capital Regional District Board:  
That staff be directed to proceed with an academic review of the risks and benefits of biosolids land application with the team from Toronto Metropolitan University, with a budget not to exceed \$40,000.

**Attachments:**      [Staff Report: Biosolids Literature Review - Update](#)  
                          [Appendix A: Biosolids Literature Review - Terms of Reference](#)

**6.4.      [24-396](#)      Amendment to Environmental Resource Management Capital Plan**

**Recommendation:** The Environmental Services Committee recommends to the Capital Regional District Board:  
1. That an advancement of \$500K from the 2025 Aggregate capital budget to the 2024 capital budget be approved; and  
2. That the budget for the 2024 capital project Kitchen Scraps Transfer Station Relocation be increased by \$800K to ensure a contract can be awarded at the completion of the procurement process.

**Attachments:**      [Staff Report: Amendment to Environmental Resource Management Capital Plan](#)

**6.5.      [24-400](#)      Previous Minutes of Other CRD Committees and Commissions for Information**

**Recommendation:** There is no recommendation. The following minutes are for information only.  
a) Climate Action Inter-municipal Task Force - March 15, 2024  
b) TCAC Meeting - Core Area Wastewater Treatment - March 14, 2024

**Attachments:**      [Minutes: Climate Action Inter-municipal Task Force - March 15, 2024](#)  
                          [Minutes: TCAC - Core Area Wastewater Treatment - March 14, 2024](#)

**7. Notice(s) of Motion****8. New Business**

## 9. Adjournment

The next meeting is May 15, 2024.

To ensure quorum, please advise Jessica Dorman ([jdorman@crd.bc.ca](mailto:jdorman@crd.bc.ca)) if you or your alternate cannot attend.

## Meeting Minutes

### Environmental Services Committee

---

Wednesday, March 20, 2024

1:30 PM

6th Floor Boardroom  
625 Fisgard St.  
Victoria, BC V8W 1R7

---

#### PRESENT

Directors: B. Desjardins (Chair), S. Tobias (Vice Chair), J. Brownoff (EP), G. Holman (EP), S. Kim (1:46 pm), D. Kobayashi (EP), D. Murdock (1:36pm), M. Tait (EP), D. Thompson, A. Wickheim, C. Plant (Board Chair, ex-officio)

Staff: T. Robbins, Chief Administrative Officer; L. Hutcheson, Acting General Manager, Parks and Environmental Services; S. Carby, Senior Manager, Protective Services; G. Harris, Senior Manager, Environmental Protection; N. Elliott, Manager, Climate Action Programs, Environmental Protection; L. Ferris, Manager, Environmental Resource Management Policy and Planning; T. Watkins, Solid Waste Operations, Environmental Resource Management; M. Lagoa, Deputy Corporate Officer; J. Dorman, Committee Clerk (Recorder)

EP - Electronic Participation

Regrets: Director J. Caradonna

The meeting was called to order at 1:30 pm.

#### 1. Territorial Acknowledgement

Vice Chair Tobias provided a Territorial Acknowledgement.

#### 2. Approval of Agenda

**MOVED** by Director Wickheim, **SECONDED** by Director Thompson,  
That the agenda for the March 20, 2024 Environmental Services Committee meeting be approved.  
**CARRIED**

#### 3. Adoption of Minutes

3.1. [24-125](#) Minutes of the January 17, 2024 Environmental Services Committee Meeting

**MOVED** by Director Tobias, **SECONDED** by Director Wickheim,  
That the minutes of the Environmental Services Committee meeting of January 17, 2024 be adopted as circulated.  
**CARRIED**

#### 4. Chair's Remarks

Chair Desjardins spoke about the importance of the material on today's agenda.

#### 5. Presentations/Delegations

5.1. [24-321](#) Delegation - Francois Brassard; Representing Esquimalt Climate Organizers: Re: Agenda Item 6.5.: Third-party Academic Review of the Scientific Literature on the Uses and Impacts of Biosolids - Verbal Update  
F. Brassard spoke to Item 6.5.

5.2. [24-323](#) Delegation - Philippe Lucas; Representing Biosolids Free BC Re: Agenda Item 6.5.: Third-party Academic Review of the Scientific Literature on the Uses and Impacts of Biosolids - Verbal Update  
P. Lucas spoke to Item 6.5.

#### 6. Committee Business

6.1. [24-243](#) Curbside Collection of Packaging and Printed Products - 2024 Update

T. Watkins presented Item 6.1. for information.

Discussion ensued on the following:

- service delivery standards, missed collection and recovery pick-ups
- Recycle BC services and stewardship plan
- provincial legislation regarding recyclable materials
- contractor collection metrics
- multifamily solid waste program

**6.2.** [24-294](#) Material Stream Diversion - Award of Contract ERM2022-010

L. Ferris spoke to Item 6.2.

Discussion ensued on the following:

- recycling versus disposal
- out of region or country incentives, rates and policies
- contracted versus in-house operations
- 2030 waste reduction target
- cost, expenditure and financial modeling
- operational and environmental impacts or changes
- future policy and bylaw amendments for solid waste and organics

**MOVED by Director Thompson, SECONDED by Director Wickheim,  
The Environmental Services Committee recommends to the Capital Regional  
District Board:**

- 1. That staff be directed to finalize negotiations, and the Chief Administrative Officer be authorized to enter into a two-year operating and construction contract, for a combined value not to exceed \$12,500,000 (excluding GST) with DL's Bins, for the construction and operation of a material diversion transfer station to begin processing of clean wood, treated wood and asphalt shingles on July 1, 2024;**
- 2. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the ban on carpet and underlay and salvageable wood to Phase 3;**
- 3. That staff be directed to return to the Environmental Services Committee with proposed bylaw amendments to shift the implementation of the \$300/tonne unsorted load rate to Phase 3; and**
- 4. That staff immediately begin consultation on policies to restrict the flow of general refuse waste outside of the capital region.**

**CARRIED**

**6.3.** [24-244](#) Extreme Heat Vulnerability Mapping and Information Portal Project

N. Elliott spoke to Item 6.3.

Discussion ensued on the following:

- continuous improvements
- cooling centers

**Director Brownoff left the meeting at 2:49 pm.**

**MOVED by Director Plant, SECONDED by Director Tobias,  
The Environmental Services Committee recommends to the Capital Regional  
District Board:**

**That the results of the Extreme Heat Vulnerability Mapping and Information Portal project for the capital region be referred to municipal councils, the Electoral Areas Committee and First Nations for information.**

**CARRIED**

**6.4.**     [24-245](#)     Climate Projections for the Capital Region

N. Elliott spoke to Item 6.4.

Discussion ensued on the following:

- impacts and implications on infrastructure
- BC Building Code and building design efficiency
- mitigation, adaptation and advocacy for future infrastructure upgrades
- information session interest and outcomes
- presentation to councils possible by request

**MOVED by Alternate Director Kim, SECONDED by Director Thompson,  
The Environmental Services Committee recommends to the Capital Regional  
District Board:**

**That the Climate Projections for the Capital Region (2024) report be referred to  
municipal councils, the Electoral Areas Committee and First Nations for  
information.**

**CARRIED**

**6.5.**     [24-318](#)     Third-party Academic Review of the Scientific Literature on the Uses and  
Impacts of Biosolids - Verbal Update

L. Hutcheson presented Item 6.5. for information.

Discussion ensued on the following:

- timeline on analysis, scope and delivery
- UVic environmental interest group

**6.6.**     [24-255](#)     Previous Minutes of Other Committees and Commissions for Information

**The following minutes were received for information:**

- a) **Solid Waste Advisory Committee Meeting - March 1, 2024**
- b) **Technical and Community Advisory Committee Meeting - October 27, 2023**
- c) **Technical and Community Advisory Committee Meeting - November 24, 2023**
- d) **Technical and Community Advisory Committee Meeting - January 19, 2024**
- e) **Technical and Community Advisory Committee Meeting - February 13, 2024**

**7. Notice(s) of Motion**

There were no notice(s) of motion.

**8. New Business**

L. Hutcheson provided a verbal update regarding a recent news item and  
potential link to the operator of the residual treatment plant at Hartland Landfill.

**9. Adjournment**

**MOVED by Director Thompson, SECONDED by Director Wickheim,  
That the March 20, 2024 Environmental Services Committee meeting be  
adjourned at 3:21 pm.**

**CARRIED**

\_\_\_\_\_  
CHAIR

\_\_\_\_\_  
RECORDER

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, APRIL 17, 2024**

**SUBJECT     Solid Waste Management Plan – 2023 Progress Report**

**ISSUE SUMMARY**

To present the Capital Regional District’s (CRD) 2023 Solid Waste Management Plan (SWMP) Progress Report (Appendix A), which identifies progress towards implementing the CRD’s SWMP.

**BACKGROUND**

In BC, it is a requirement under the *Environmental Management Act* for all regional districts to develop their own solid waste management plans, which are high-level, long-term visions of how a regional district would like solid waste managed within its community, in accordance with the 5R hierarchy of reduce, reuse, recycle, resource recovery and residuals management.

The CRD’s first SWMP was approved by the Province in 1989, was updated in 1991 and again in 1995, and subsequently received eight amendments. A new SWMP for the region began development in 2012. This plan was endorsed by the CRD Board in May 2021, and was approved by the Ministry of Environment & Climate Change Strategy in July 2023.

The 2021 SWMP includes four goals and outlines three focus areas (Reduce/Reuse, Recycling and Recovery/Residuals Management) consisting of 15 strategies, as shown below. An update on the progress towards implementation of the strategies can be found in Appendix A of the attached progress report.

<b>GOALS</b>			
Have informed citizens who participate effectively in proper waste management practices.	Surpass the provincial per capita waste disposal target.	Extend the life of Hartland Landfill to 2100 and beyond.	Ensure that the CRD’s solid waste services are financially sustainable.

<b>FOCUS AREAS</b>		
<b>Reduce and Reuse Strategies</b>	<b>Recycling Strategies</b>	<b>Recovery and Residuals Management Strategies</b>
1. Continue and Enhance Education Programs 2. Encourage Waste Prevention 3. Support Reduction of Avoidable Food Waste 4. Support Reuse Activities in the Region 5. Support Local Governments in Working Towards Zero Waste and a Circular Economy 6. Continue and Enhance Policy Development	7. Increase Residential Diversion 8. Increase Multi-Family Diversion 9. Increase Industrial, Commercial and Institutional Diversion 10. Support Existing and New Extended Producer Responsibility Programs 11. Increase Organics Diversion and Processing Capacity 12. Increase Construction, Renovation and Demolition Material Diversion 13. Encourage Proper Public Space Waste Management Activities	14. Optimize Landfill Gas Management 15. Enhance Hartland Disposal Capacity

Performance indicators in the attached 2023 report have been analyzed and assessed by CRD staff. In the SWMP, the per capita waste disposal rate is used to help the CRD and residents of the region understand progress towards the plan’s waste reduction goals and targets. In 2023, the CRD calculated a disposal rate of 382 kg/capita, a decrease of 23 kg/capita from 2022. The 2023 per capita disposal rate excludes landfilling of Class A Biosolids.

In the spring of 2023, CRD staff worked with the Solid Waste Advisory Committee to develop additional indicators to enable tracking of progress towards meeting the SWMP goals. Through this process, additional data collection was initiated to allow for comparisons over time, and the following studies were added to the Environmental Resource Management workplan and 2024-2028 budget: the Market Research and Engagement Study (2024), the Waste Generator Study (2025) and the Solid Waste Composition Study (2026). The 2023 Progress report will be reviewed by the Solid Waste Advisory Committee to monitor and evaluate the effectiveness of the SWMP implementation.

In relation to policy changes, the CRD Board has approved bylaw changes at Hartland Landfill, including new material bans, adjusted the tipping fee structure and increased bylaw fines. The changes to the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 and Ticket Information Authorization Bylaw No. 1857 will come into effect in two phases in 2024. These new policies are expected to support the CRD’s goal to reduce the per capita disposal rate and make progress towards the SWMP disposal rate target of 250 kg/capita.

Furthermore, the Province requires that the implementation of the SWMP be monitored by a plan monitoring committee, which is one of the main roles of the CRD’s Solid Waste Advisory Committee.

**CONCLUSION**

The CRD’s Solid Waste Management Plan (SWMP) includes four goals and 15 strategies, and staff began implementation of the SWMP in 2021. An update on the progress towards implementation of the SWMP can be found in the CRD’s 2023 SWMP Progress Report. It is expected that with the implementation of the new policies, the per capita disposal rate will further decrease, which will make progress towards the SWMP disposal rate target. The CRD’s 2023 SWMP Progress Report will be reviewed by the Solid Waste Advisory Committee for monitoring and evaluating purposes.

**RECOMMENDATION**

There is no recommendation. This report is for information only.

Submitted by:	Russ Smith, Senior Manager, Environmental Resource Management
Concurrence	Larisa Hutcheson, P.Eng., Acting General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

**ATTACHMENT**

Appendix A: Solid Waste Management Plan – 2023 Progress Report



# 2023 Solid Waste Management Plan Progress Report



Making a difference...together

## TERRITORIAL ACKNOWLEDGEMENT

The CRD conducts its business within the traditional territories of many First Nations, including but not limited to BOKEĆEN (Pauquachin), MÁLEXEŁ (Malahat), P'a:chi:da?aht (Pacheedaht), Pune'laxutth' (Penelekut), Sc'ianew (Beecher Bay), Songhees, STÁUTW (Tsawout), T'Sou-ke, WJOŁEŁP (Tsartlip), WSIKEM (Tseycum), and x\*sepsəm (Esquimalt), all of whom have a long-standing relationship with the land and waters from time immemorial that continues to this day.



## Terms and Abbreviations

- 3Rs** - Reduce, Reuse, Recycle
- 5Rs** - Reduce, Reuse, Recycle, Recovery and Residual Management
- C&D** - Construction and Demolition
- CEC** - Compost Education Centre
- CRD** - Capital Regional District
- EPR** - Extended Producer Responsibility
- ENV** - Ministry of Environment & Climate Change Strategy
- GHG** - Greenhouse Gas
- ICI** - Industrial, Commercial and Institutional Sector
- MFD** - Multi-family Dwelling
- MSW** - Municipal Solid Waste
- PPP** - Packaging and Paper Products
- RNG** - Renewable Natural Gas
- SWAC** - Solid Waste Advisory Committee
- SWMP** - Solid Waste Management Plan

## 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.

## Table of Contents

<b>Overview .....</b>	<b>2</b>
Regulations and Commitments .....	2
<b>Solid Waste Management Plan .....</b>	<b>3</b>
Goals .....	4
Focus Areas.....	4
<b>Targets and Tracking .....</b>	<b>5</b>
Per Capita Disposal .....	6
Solid Waste Stream Composition Study.....	8
Solid Waste Market Research and Engagement Study .....	9
Waste Generator Study.....	9
<b>Challenges and Opportunities.....</b>	<b>10</b>
Blended Biosolids at Hartland Landfill.....	11
<b>Progress Summary .....</b>	<b>12</b>
Goals .....	14
Reduce and Reuse .....	16
Recycling.....	18
Recovery and Residuals Management .....	20
<b>Looking Ahead - 2024.....</b>	<b>22</b>
<b>Appendix A: Solid Waste Management Plan Report Card .....</b>	<b>23</b>

*Cover image: Rebound Victoria used funding from the Rethink Waste Community Grant to set-up used tennis ball collection totes at different recreation centres in the capital region. People can take the tennis balls for reuse and the leftover balls are used for energy recovery, instead of being landfilled.*



Aerial view of the active face at Hartland Landfill.

## Overview

The 2023 SWMP Progress Report highlights activities undertaken by the CRD in 2023 and satisfies the regular reporting requirements associated with the CRD's SWMP. The SWMP has a target of reducing waste in the region by more than one-third by 2031. Through zero waste and circular economy principles, the plan includes strategies for reducing all streams of solid waste to extend the life of Hartland Landfill to 2100 and beyond.

All costs associated with the CRD's solid waste service are funded through tipping and user fee revenues at Hartland Landfill, collection agreements with product producers, sale of landfill gas and sale of recyclables.

### Regulations and Commitments

The CRD became responsible for solid waste disposal for the region in 1973 when, at the request of the CRD Board, the Province of BC established solid waste disposal as a regional function of the CRD. In 1975, the CRD acquired Hartland Landfill and subsequently assumed direct operation of the site in 1985.

The site currently operates under a Design, Operations and Closure Plan, in accordance with an Operational Certificate issued by the ENV, as well as the BC Landfill Criteria for Municipal Solid Waste. There is also a provincial authorization in place for asbestos management.

Any solid waste originating from outside of Canada is managed at Hartland Landfill, in accordance with the International Waste Directive under the authority of the Canada Border Service Agency and the Canadian Food Inspection Agency.

### Solid Waste Management Planning

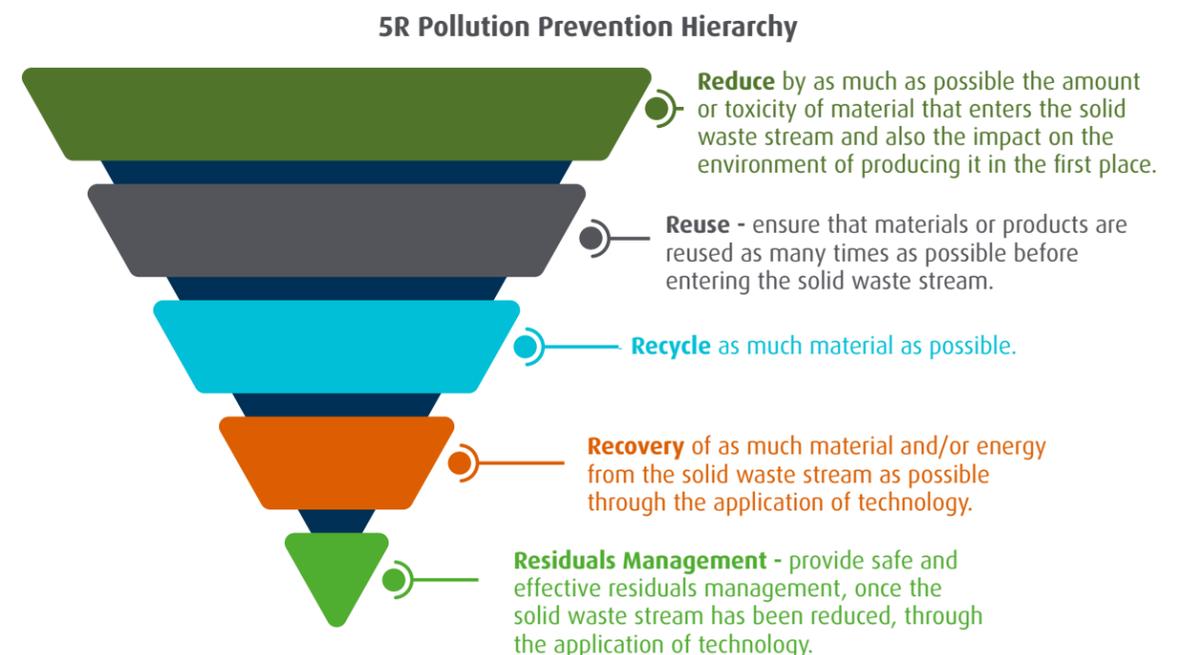
The *Environmental Management Act* requires all regional districts in BC to develop plans for the management of MSW and recyclable materials. Solid waste management planning is a proven way to reduce the amount of solid waste requiring disposal in a region, contributing to the protection of the environment.

### Landfill Operating and Monitoring Requirements

Hartland Landfill is authorized through an Operational Certificate under the *Environmental Management Act*. The Operational Certificate specifies the relevant environmental legislation applicable to the site and sets out requirements for environmental monitoring and annual reporting. Under this regulatory framework, the CRD has established a comprehensive environmental monitoring program to ensure Hartland is not impacting the surrounding environment. More details can be found in the *Hartland Landfill Operating & Environmental Monitoring 2022-2023 Report*.

## Solid Waste Management Plan

In BC, regional districts develop SWMPs under the provincial *Environmental Management Act* that are high-level, long-term visions of how the regional district would like to manage its solid waste, in accordance with the 5R Pollution Prevention Hierarchy.



The SWMP for the region was endorsed by the CRD Board in May 2021, and was approved by the ENV in July 2023. The final Plan includes strategies and actions for reducing and managing all streams of solid waste—including recyclables, compostable material and garbage—with an eye to extend the life of Hartland Landfill to 2100 and beyond.

Waste reduction, reuse and recycling can reduce GHG emissions both by lowering the demand for new materials and products (reducing upstream environmental impacts), and by minimizing downstream environmental impacts, such as transporting waste over long distances and disposing of it in landfills.

The SWMP's progress is monitored by the SWAC, an advisory committee established by the CRD's Environmental Services Committee to provide input on solid waste management matters and meet the requirements of the ENV's *Guide to Solid Waste Management Planning*. Members of the SWAC represent a diversity of background, interests and geographical location, with a balance between technical and non-technical members and industry and public members.

### Goals

The Province's guidelines for solid waste management planning require SWMPs to have goals—the long-term aims to be achieved as an outcome of the plan. A goal may be achieved within the timeframe of this plan, but a goal may also be aspirational, something for the CRD to strive for beyond that timeframe. The CRD's SWMP goals are:

- To surpass the provincial per capita waste disposal target (350 kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year;
- To extend the life of Hartland Landfill to the year 2100 and beyond;
- To have informed citizens that participate effectively in proper waste management practices; and
- To ensure that the CRD's solid waste services are financially sustainable.

### Focus Areas

The SWMP identifies three focus areas consisting of 15 strategies with 72 actions. Over the lifetime of the SWMP, the strategies and actions contained within form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations Governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process.

The 15 strategies with 72 actions and associated timelines are divided into the following focus areas:

- Reduce and Reuse
- Recycling
- Recovery and Residuals Management

For more details on the SWMP's 15 strategies, consult *Appendix A: SWMP Report Card*.

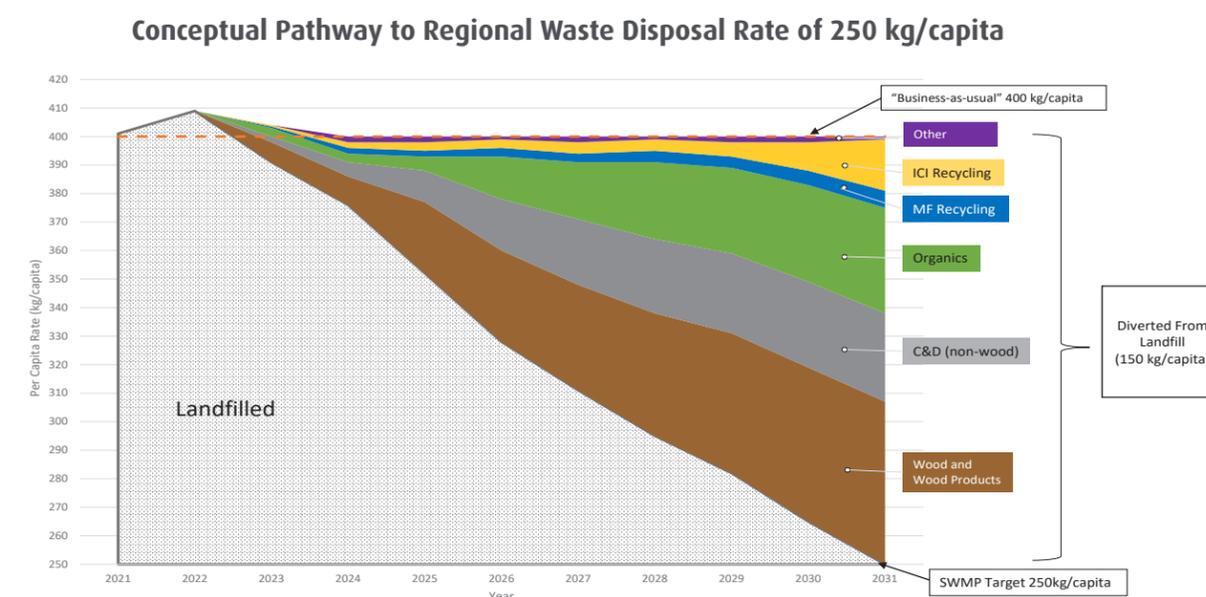


The Pender Island Recycling Depot used funding from the Rethink Waste Community Grant to implement zero waste initiatives at the Pender Island Fall Fair.

## Targets and Tracking

The targets established for this plan are focused on reducing the amount of waste landfilled on a per capita basis. By the end of the 10<sup>th</sup> year of this plan, the capital region's per capita disposal rate target is 250 kg or less, surpassing the Province's long-term target of 350 kg per capita.

Below is a chart plotting one conceptual pathway to reducing the regional per capita disposal rate from 2021 levels to 250 kg per capita. The actual path taken to achieve waste reduction targets will depend on the actions the community takes to reduce waste, and the work the CRD does to support diversion activity and redirect waste material back into the economy. The chart represents an aggressive timeline to divert materials from the landfill, in accordance with the strategies and actions in *Appendix A: SWMP Report Card*.



The metrics used to track the SWMP targets in 2023 are the regional per capita disposal rates, and the Solid Waste Stream Composition Study, which provides a breakdown of categories and sectors to focus on. In the spring of 2023, CRD staff worked with the SWAC to develop Progress Report Performance Indicators to enable tracking of progress towards meeting the SWMP goals and targets. Additional data collection was proposed to allow for comparisons over time, and the following studies were added to the Environmental Resource Management workplan and 2024-2028 budget: the Market Research and Engagement Study (2024), the Waste Generator Study (2025) and the Waste Composition Study (2026).

## Per Capita Disposal

In 2012, the Province of BC began using per capita disposal rates as the standard solid waste metric. The provincial per capita disposal rate in 2021, the latest provincial numbers reported, was 506 kg per capita, while the capital region’s rate in 2021 was 400 kg per capita, the second lowest in the province. Regional disposal rates reported to the ENV include general refuse from the residential sector and ICI sources, including blended biosolids, as well as waste from construction, demolition and renovation activities. Disposal rates do not include controlled waste like asbestos, biomedical, or agricultural waste, heavy industry or contaminated soil.

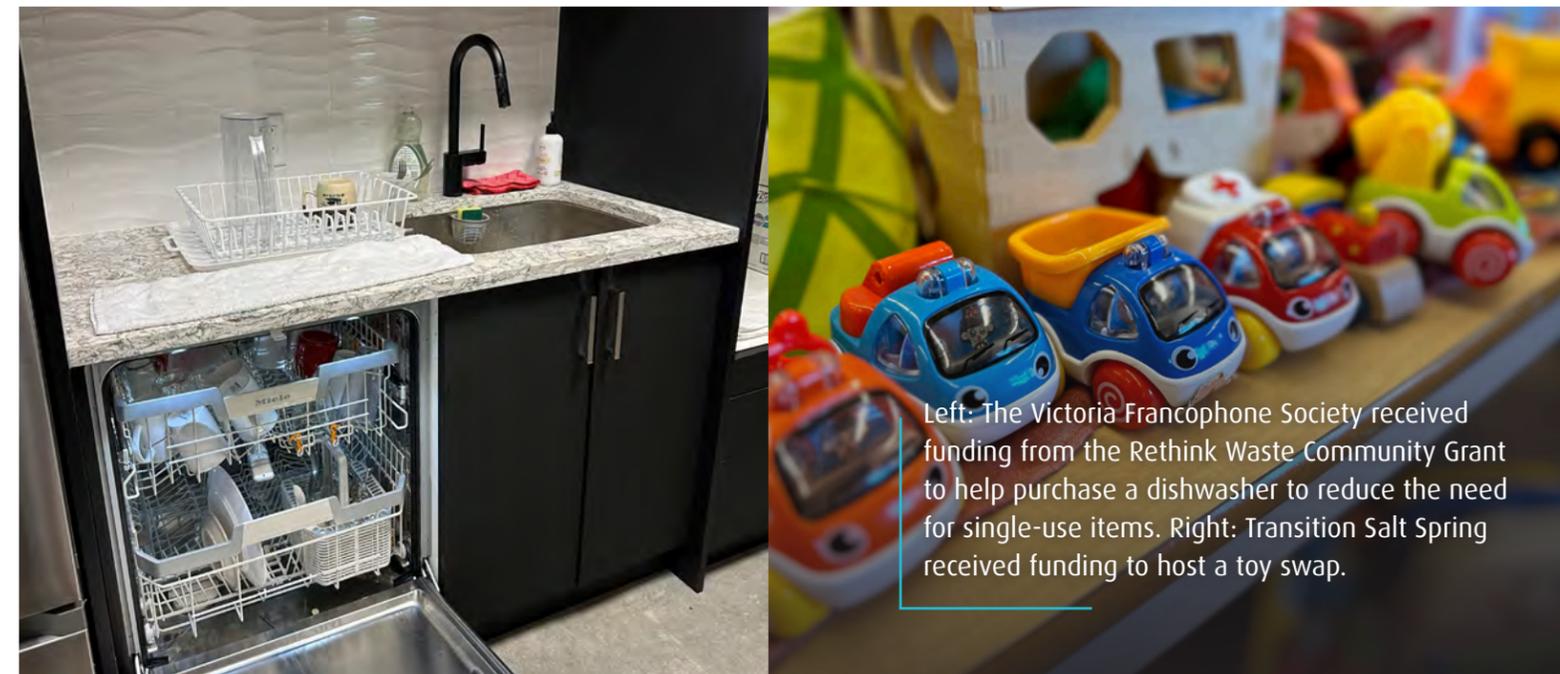
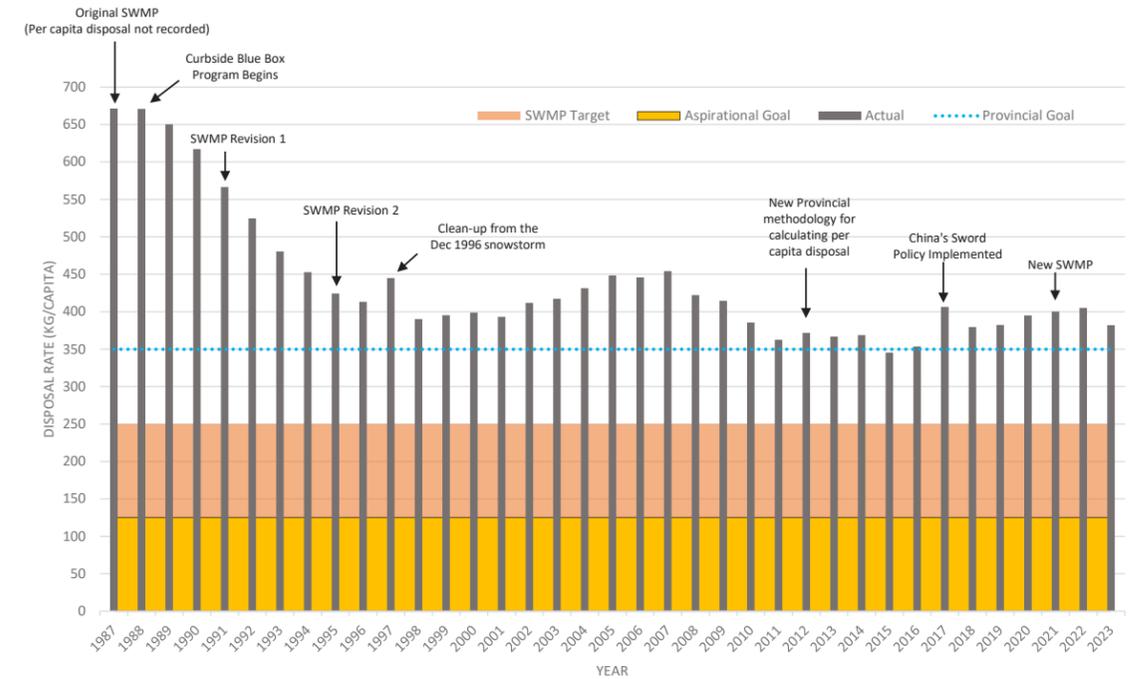
In the SWMP, the per capita waste disposal rate is used to help the CRD and residents of the region understand progress towards the plan’s waste reduction goals and targets. The per capita disposal rate reported below excludes blended biosolids, as this material stream is not included within the SWMP. See pg. 11 for more information.

### General Refuse Disposal - Per Capita Disposal Rate for the Capital Region

Year	Population <sup>2</sup>	Hartland Landfill <sup>1</sup>			Disposal Rate kg/person	Percentage Change from 2021
		Received	Beneficial Use <sup>3</sup>	Landfilled <sup>4</sup>		
2021	432,062	173,899	-1,013	172,886	400	N/A
2022	439,950	183,397	-5,107	178,290	405	+1.31%
2023	455,092	179,075	-5,100	173,975	382	-4.43%

<sup>1</sup> Excludes blended biosolids; see pg. 11 for more information  
<sup>2</sup> BC Stats  
<sup>3</sup> Onsite beneficial use of material based on ENV guidelines  
<sup>4</sup> The figure for 2021 includes 6,730 tonnes landfilled at Tervita Highwest Landfill

### CRD Historic Per Capita Disposal Rate



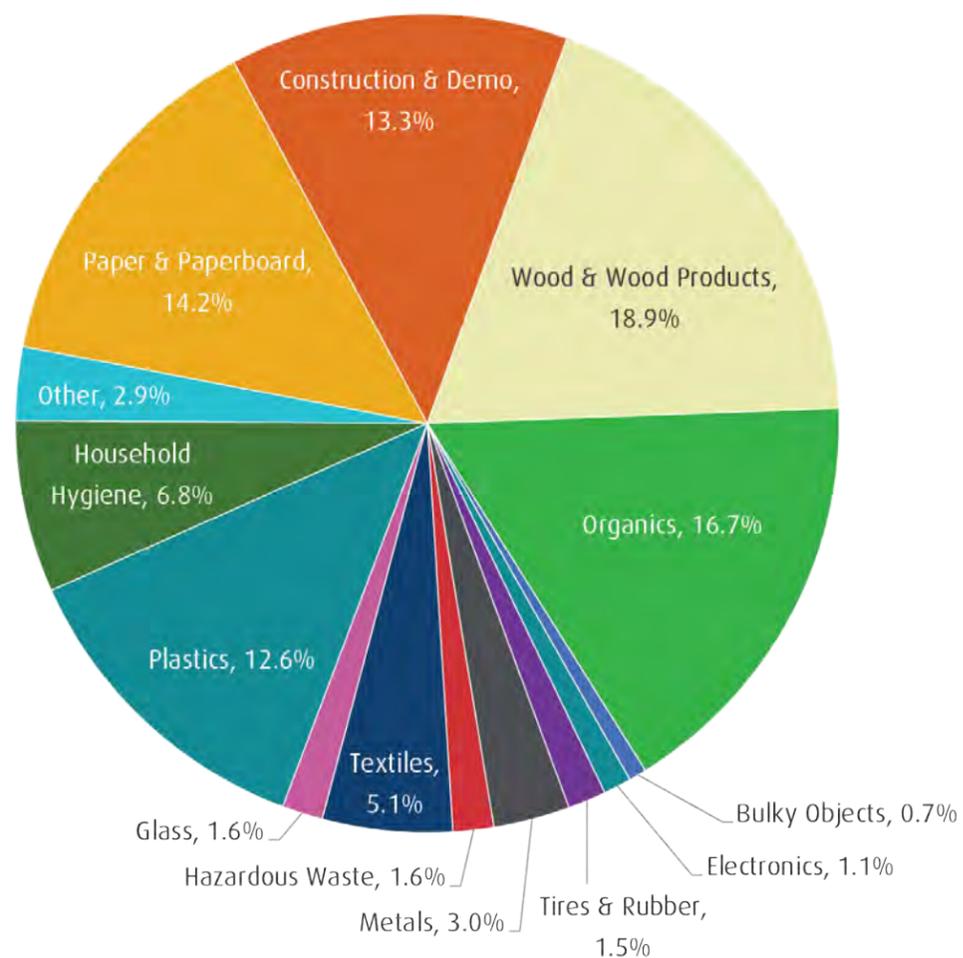
Left: The Victoria Francophone Society received funding from the Rethink Waste Community Grant to help purchase a dishwasher to reduce the need for single-use items. Right: Transition Salt Spring received funding to host a toy swap.

## Solid Waste Stream Composition Study

Solid waste stream composition studies provide valuable benchmark data and analysis for evaluating the success of existing solid waste programs and SWMP initiatives.

Since 1990, the CRD has commissioned seven studies to assess the composition of waste being landfilled at Hartland. The most recent analysis took place in 2022; the next study will take place in 2026. In the past, studies have taken place approximately every five years; however, in consultation with the SWAC, the CRD has committed to more frequent studies.

**2022 Solid Waste Stream Composition Study Results**



## Solid Waste Market Research and Engagement Study

The solid waste market research and engagement study will help determine if the CRD's waste reduction programs are effective, and identify and address any challenges, limitations, or gaps within each program area. This study will help the CRD to better understand the public's attitudes, knowledge of and behaviours towards the CRD's waste reduction programming and behaviour change initiatives within the capital region.

The first study will take place in 2024, and results will be included in the 2024 SWMP Progress Report. The study will be conducted once every three years during the life of the SWMP.

## Waste Generator Study

The waste generator study will help the CRD gather data on where waste is generated, such as a household, business, industry or community. The purpose of such a study is to gain insights into the patterns of waste generation, understand the composition of the waste stream and identify opportunities for waste reduction, recycling or proper disposal.

Currently, the CRD's diversion data is limited to the recyclable and reusable items accepted at the Hartland Landfill and through administering PPP contracts on behalf of Recycle BC for the curbside blue box program and the Electoral Area depots. Along with identifying where garbage is generated and where it ends up, the waste generator study will help identify a complete picture of diversion activities happening across a variety of sectors.

The first study will take place in 2025, and results will be included in the 2025 SWMP Progress Report. The study will be conducted once every three years during the life of the SWMP.

**Diversion Programs Funded or Administered by the CRD**

CRD Program Diversion (tonnes)	2021	2022	2023
Hartland Diversion	17,525	16,642	18,924
Curbside Blue Box	18,613	17,293	17,438
Electoral Area Depot Funding	915	929	907
<b>Total tonnes diverted</b>	<b>37,053</b>	<b>34,864</b>	<b>37,269</b>



# Challenges and Opportunities

As the management of unwanted materials is a shared responsibility, successful implementation of the SWMP will require involvement from the entire community, including residents, businesses, institutions, First Nations, municipalities and non-profit associations, as well as the local waste management industry. Each of the stakeholders involved in solid waste management has a unique role to play, but there are many competing priorities.

## Solid Waste Roles and Responsibilities

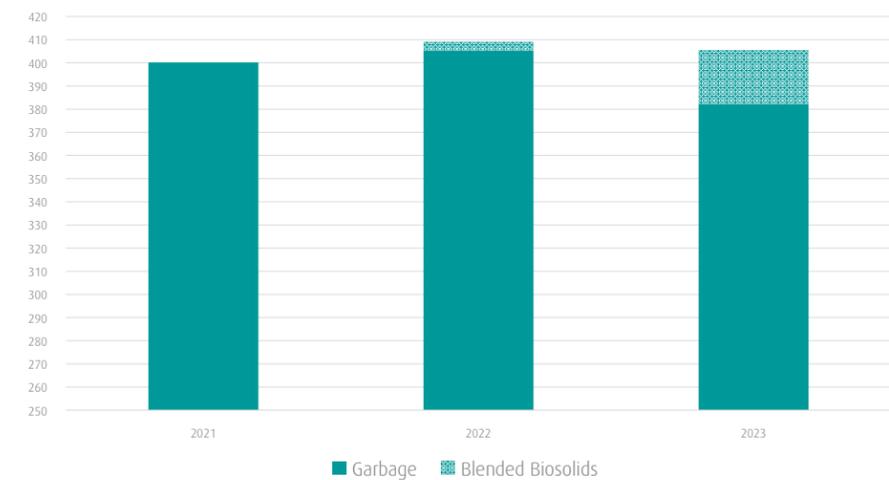


The main policy levers the CRD has control of, outside of solid waste, are limited to what is accepted at Hartland Landfill. In 2023, the CRD Board approved bylaw changes at Hartland Landfill, including new material bans, adjusted tipping fee structure and increased bylaw fines. The changes are intended to support diversion activity in the community; however, if the policies do not achieve the desired diversion, or if waste appears to be migrating out of the region, staff will return to the Board for consideration of flow control policies.

## Blended Biosolids at Hartland Landfill

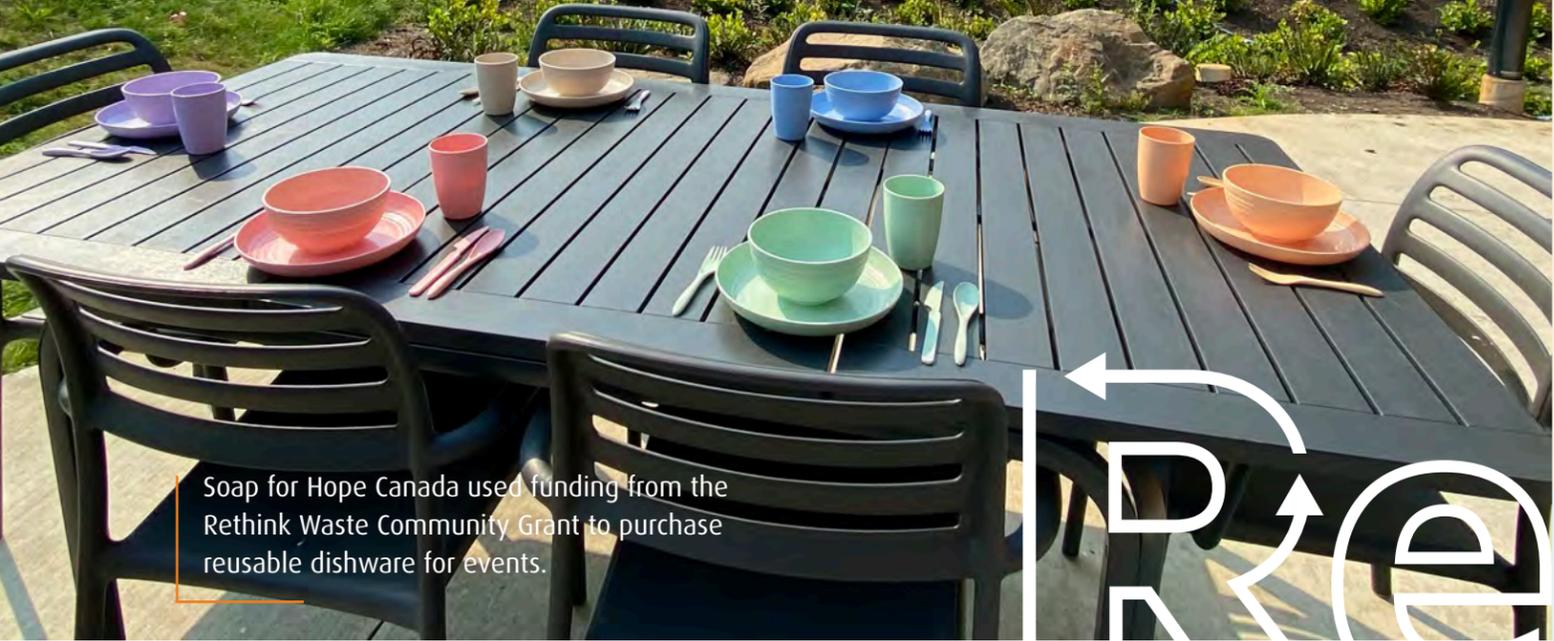
The CRD's short-term plan for Class A Biosolids beneficial use relies primarily on incineration at a cement production facility, and when the cement kiln is unable to receive biosolids, the contingency is to create biosolids growing medium (BGM) for use on engineered cover systems at Hartland Landfill. Due to operational challenges and use of BGM at the landfill being exceeded, Class A Biosolids, blended with sand to render them inert (blended biosolids), began to be landfilled as general refuse at Hartland Landfill in 2022.

General Refuse Landfilled (kg per capita)



In 2023, the CRD landfilled 10,591 tonnes of blended Class A Biosolids as general refuse at Hartland Landfill. Factoring this material into the 382 kg per capita disposal rate for 2023, it increases 6.28% to 406 kgs per capita. The ENV requires the CRD to report the 406 kg per capita disposal rate for the region, even though beneficial use strategies for biosolids are not included within the SWMP.

The CRD will submit a long-term plan outlining the beneficial uses for Class A Biosolids by June 2024, as required by the provincial government. Landfilling blended biosolids has been used as an emergency measure and is not being considered as a long-term management option.



Soap for Hope Canada used funding from the Rethink Waste Community Grant to purchase reusable dishware for events.

## Progress Summary

The following sections are intended to provide a high-level, easy-to-understand overview of the CRD's progress related to implementing the SWMP and to summarize progress made in 2023 as it relates to the plan's goals and focus areas.

### Goals

The four goals of the SWMP may be achieved within the timeframe of this plan, but a goal may also be aspirational, something for the CRD to strive for beyond the timeframe of this plan. Measures of success and progress status definitions for the goals were developed with the SWAC in 2023.

### Focus Areas

The focus areas form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process. The 15 strategies and 72 actions contained within the SWMP are divided into three focus areas:

- Reduce and Reuse
- Recycling
- Recovery and Residuals Management

For more details on the SWMP's 15 strategies, consult *Appendix A: SWMP Report Card*.



## 2023 Overall SWMP Progress

On track

### Goal Areas

- Goal 1:** To surpass the provincial per capita waste disposal target (350kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year.
- Goal 3:** To have informed citizens that participate effectively in proper waste management practices.
- Goal 2:** To extend the life of Hartland Landfill to the year 2100 and beyond.
- Goal 4:** To ensure that the CRD's solid waste services are financially sustainable.

### Focus Areas

- Reduce and Reuse**
- Recycling**
- Recovery and Residuals Management**

#### Focus Area Icon Legend

- 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**

#### Goal Area Icon Legend

- On Track**
- Opportunity for Improvement**
- Attention Required**

Developed in collaboration with the SWAC, each goal has a unique definition for "On Track", "Opportunity for Improvement" and "Attention Required." Review the following section for definitions.

 Goal Area Progress Summary

 <b>Opportunity for Improvement</b>	<p><b>Indicators and Inputs Summary:</b></p> <ul style="list-style-type: none"> <li>Calculated a disposal rate of 382 kg/capita, an decrease of 4.43% or 18 kg/capita from when the plan began in 2021.</li> <li>2022 Solid Waste Stream Composition study indicated 47% of the garbage sent to Hartland Landfill could have been diverted through reuse, recycling or energy recovery.</li> <li>In 2025, the CRD will complete a waste generator study to further analyze where and how waste is generated.</li> </ul>			
<p><b>Goal 1</b></p> <p>To surpass the provincial per capita waste disposal target (350kg/capita/year) and aspire to achieve a disposal rate of 125 kg/capita/year.</p>				
<p>Icon Definitions</p> <table border="0"> <tr> <td style="text-align: center;">  Community is trending towards a per capita disposal rate to be <b>less than 350 kg/capita</b> over the life of the plan.         </td> <td style="text-align: center;">  Community is trending towards a per capita disposal rate of <b>350 kg/capita</b> over the life of the plan         </td> <td style="text-align: center;">  Community is trending towards a per capita disposal rate <b>above 350 kg/capita</b> over the life of the plan.         </td> </tr> </table>		 Community is trending towards a per capita disposal rate to be <b>less than 350 kg/capita</b> over the life of the plan.	 Community is trending towards a per capita disposal rate of <b>350 kg/capita</b> over the life of the plan	 Community is trending towards a per capita disposal rate <b>above 350 kg/capita</b> over the life of the plan.
 Community is trending towards a per capita disposal rate to be <b>less than 350 kg/capita</b> over the life of the plan.	 Community is trending towards a per capita disposal rate of <b>350 kg/capita</b> over the life of the plan	 Community is trending towards a per capita disposal rate <b>above 350 kg/capita</b> over the life of the plan.		

 <b>Opportunity for Improvement</b>	<p><b>Indicators and Inputs Summary:</b></p> <ul style="list-style-type: none"> <li>Achieved a compaction density rate of 0.98 tonnes of general refuse per cubic metre*, surpassing the landfill guideline target of 0.85 tonnes per cubic metre by 17.18%, indicating an efficient waste compaction process that utilized the available landfill space more effectively than initially planned.</li> <li>Landfilled 173,975 tonnes of general refuse at Hartland Landfill, an increase of 1,089 tonnes (0.63%) from when the plan began in 2021.</li> <li>Additionally, 10,591 tonnes of blended Class A Biosolids were landfilled at Hartland as general refuse as a Long-Term Biosolids Plan is developed in 2024.</li> </ul> <p><small>* Compaction density data is from 2022</small></p>			
<p><b>Goal 2</b></p> <p>To extend the life of Hartland Landfill to the year 2100 and beyond.</p>				
<p>Icon Definitions</p> <table border="0"> <tr> <td style="text-align: center;">  Air space utilization is on track to extend the life of Hartland Landfill to the year <b>2100 and beyond</b>.         </td> <td style="text-align: center;">  Air space utilization is only trending to extend the life of Hartland Landfill to the year <b>2100</b>.         </td> <td style="text-align: center;">  Air space utilization will not extend the life of Hartland Landfill to the year <b>2100</b>.         </td> </tr> </table>		 Air space utilization is on track to extend the life of Hartland Landfill to the year <b>2100 and beyond</b> .	 Air space utilization is only trending to extend the life of Hartland Landfill to the year <b>2100</b> .	 Air space utilization will not extend the life of Hartland Landfill to the year <b>2100</b> .
 Air space utilization is on track to extend the life of Hartland Landfill to the year <b>2100 and beyond</b> .	 Air space utilization is only trending to extend the life of Hartland Landfill to the year <b>2100</b> .	 Air space utilization will not extend the life of Hartland Landfill to the year <b>2100</b> .		

 <b>On Track</b>	<p><b>Indicators and Inputs Summary:</b></p> <ul style="list-style-type: none"> <li>Provided \$244,265.44 in funding for non-profit waste reduction organizations, organics diversion education and the Rethink Waste Grant, a 20.64% increase from when the plan began in 2021.</li> <li>Delivered 8,574 waste reduction workshops and tours (landfill tours, 3Rs, composting) to children and adults in the capital region, a 70.63% increase from when the plan began in 2021.</li> <li>In 2024, the CRD will complete a Solid Waste Awareness and Engagement Market Research Study to further evaluate the CRD's programming and behaviour change initiatives.</li> </ul>			
<p><b>Goal 3</b></p> <p>To have informed citizens that participate effectively in proper waste management practices.</p>				
<p>Icon Definitions</p> <table border="0"> <tr> <td style="text-align: center;">  Engagement and participation in proper waste management practices is <b>higher</b> than previous years.         </td> <td style="text-align: center;">  Engagement and participation in proper waste management practices is <b>equivalent</b> to previous years.         </td> <td style="text-align: center;">  Engagement and participation in proper waste management practices is <b>less</b> than previous years.         </td> </tr> </table>		 Engagement and participation in proper waste management practices is <b>higher</b> than previous years.	 Engagement and participation in proper waste management practices is <b>equivalent</b> to previous years.	 Engagement and participation in proper waste management practices is <b>less</b> than previous years.
 Engagement and participation in proper waste management practices is <b>higher</b> than previous years.	 Engagement and participation in proper waste management practices is <b>equivalent</b> to previous years.	 Engagement and participation in proper waste management practices is <b>less</b> than previous years.		

 <b>On Track</b>	<p><b>Indicators and Inputs Summary:</b></p> <ul style="list-style-type: none"> <li>Solid waste service continues to be a self-funded and achieves a surplus.</li> </ul>			
<p><b>Goal 4</b></p> <p>To ensure that the CRD's solid waste services are financially sustainable.</p>				
<p>Icon Definitions</p> <table border="0"> <tr> <td style="text-align: center;">  Solid waste service self-funding model is <b>financially sustainable</b> for the remainder of the plan.         </td> <td style="text-align: center;">  Solid waste service self-funding model is <b>trending in the wrong direction</b>, adjustments may be necessary.         </td> <td style="text-align: center;">  Solid waste service self-funding model is trending in the wrong direction and is currently <b>not sustainable</b> for the remainder of the plan.         </td> </tr> </table>		 Solid waste service self-funding model is <b>financially sustainable</b> for the remainder of the plan.	 Solid waste service self-funding model is <b>trending in the wrong direction</b> , adjustments may be necessary.	 Solid waste service self-funding model is trending in the wrong direction and is currently <b>not sustainable</b> for the remainder of the plan.
 Solid waste service self-funding model is <b>financially sustainable</b> for the remainder of the plan.	 Solid waste service self-funding model is <b>trending in the wrong direction</b> , adjustments may be necessary.	 Solid waste service self-funding model is trending in the wrong direction and is currently <b>not sustainable</b> for the remainder of the plan.		



### Reduce and Reuse

Governments, residents, non-profits and business all have an important role to play in reducing and diverting waste from the landfill. Reducing the amount of waste created, and finding ways to repurpose and reuse waste, eliminates the need to dispose of items later.



**Overall Status**  
On Track

#### CRD Roles

- Municipal collaboration
- Provincial and Federal Government advocacy
- Funding and supporting non-profits
- Education and outreach

This focus area includes

6

SWMP strategies

#### Progress Summary

- The SWMP received approval from the ENV in July 2023.
- The CRD Board approved bylaw changes at Hartland Landfill, including new material bans, adjusted tipping fee structure and increased bylaw fines. These have the potential to divert up to 40,500 tonnes of waste a year, contributing to reducing the region’s waste by more than one-third.
- Developed the Waste Stream Collector Incentive program, which offers Hartland Landfill account customers a \$25/tonne rebate on general refuse if they provide their customers multi-stream collection services and voluntarily report on waste collection data.
- Between the Hartland Landfill Public Tours, Hartland Landfill Technical Tours, 3Rs K-12 program and outreach events, the CRD connected with 5,971 residents.
- The CRD provided funding to 20 community-based projects totalling \$57,175 under the Rethink Waste Community Grant. To highlight how individuals and organizations are using the grant to reduce waste, the CRD produced and promoted four videos on Rethink Waste Community Grant recipients.
- Continued to provide support (\$68,000) for 10 local non-profit reuse organizations to assist them in managing unusable donations and partnered with five non-profit reuse organizations for the redistribution of 37 tonnes of usable textiles, bicycles and large appliances collected at the Hartland Depot.



Salt Spring Island Printmaker Society



ReWood used funding from the Rethink Waste Community Grant to salvage wood from construction sites to build garden beds, compost bins and greenhouses for community gardens.



## Recycling

By participating in recycling programs, residents and businesses take responsibility for the products they've purchased, and support a system where these materials can be used repeatedly.



**Overall Status**  
On Track

### CRD Roles

Hartland Depot

Landfill bans

Provincial and Federal  
Government advocacy

Curbside recycling contract

Recycling in Electoral Areas

Education and outreach

This focus  
area includes

# 7

SWMP strategies

### Progress Summary

- Received Board approval to ban wood (clean, treated and salvageable), asphalt shingles and carpet and underlay from general refuse at Hartland Landfill in 2024. These materials will be accepted at Hartland for a reduced tipping fee and transferred offsite for reuse, recycling or energy recovery.
- Received Board approval to accept mixed C&D waste (garbage mixed with wood, asphalt shingles and/or carpet and underlay) for \$300/tonne to encourage source separation at the waste generator level.
- Piloted the MFD Waste Diversion Project by hiring two outreach assistants to conduct site visits and offer advice, signage and resources on best practices and setup for the waste collection area. In the end, 50 buildings totalling 2,499 units across eight municipalities participated and the project will continue and expand in 2024.
- Added single-use and packaging-like products to the CRD's Blue Box Program and depot programs. This initiative aligns with Recycling Regulation changes and subsequent expansion of Recycle BC's list of accepted items.
- Participated in Recycle BC's Five-Year Program Plan consultation and provided feedback to both Recycle BC and ENV in seven key areas, including the need to invest and work with industry to enhanced service levels in all areas, particularly for MFD residents.

An apartment building participating in the Multi-family Dwelling Waste Diversion Project.



Hartland Depot





## Recovery and Residuals Management

Once material has been reduced and technology has been applied to recover as much energy as possible, residuals management provides a safe and effective way to manage materials that don't have a next and best use.



**Overall Status**  
Opportunity for Improvement

### CRD Roles

Landfill bans and enforcement

Hartland Landfill

Technology research

Landfill Gas Management

This focus area includes

# 2

SWMP strategies

### Progress Summary

- Calculated a disposal rate of 382 kg/capita, a decrease of 6.02% or 23 kg/capita from 2022.
- Received Board approval to increase Hartland Landfill's general refuse tipping fee from \$110 to \$150/tonne.
- Initiated the procurement process to design, build, operate and maintain a Material Diversion Transfer Station at Hartland Landfill to process wood (clean, treated and salvageable), asphalt shingles and carpet and underlay before it's transferred offsite for reuse, recycling or energy recovery.
- Issued 715 tickets and 37 warnings primarily related to banned materials in garbage.
- Completed design of Cell 4 Liner and procured and awarded Cell 4 Liner Construction Contract and began construction activities.
- Conducted additional shredding trials, with specific material streams, to manage incoming volumes and further densify material.
- Removed 30,000 m<sup>3</sup> of overburden and 197,000 m<sup>3</sup> of in-situ rock to prepare the new landfilling cell to receive future garbage.
- Provided the Township of Esquimalt with \$50,000 to further explore an Integrated Resource Management approach for managing municipal solid waste, kitchen scraps and yard and garden waste using thermal technologies.
- Achieved a gas collection efficiency of 64% based on the ENV model, and a 74% gas collection efficiency based on the UBCi model in 2023.



Active Face



The Clean Wood Bin at Hartland Landfill's Public Drop-off Depot.

## Looking Ahead

The CRD will continue to show a leadership role by supporting local, municipal, and federal waste diversion efforts, and continue to move waste up the 5R Pollution Prevention Hierarchy to its next and best use.

Some activities planned for 2024 include:

- **Implement and Monitor New Policies to Divert Waste from Hartland Landfill:** The CRD Board has approved bylaw changes at Hartland Landfill, including new material bans, adjusted tipping fee structure and increased bylaw fines. The changes to the Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 and Ticket Information Authorization Bylaw No. 1857 will come into effect in two phases in 2024.
- **Expanded Hours at Hartland Landfill:** Pilot and evaluate increasing Hartland public access hours, to better support waste reduction and diversion activity relating to the new SWMP and the significant solid waste policy changes that come into effect in 2024.
- **New Curbside Collection Contractor:** New collection contractor begins January 1, 2024 for the 2024-2029 Curbside Blue Box Program. The new contractor will be using 23 compressed natural gas vehicles and two electric vehicles.
- **Waste Stream Collector Incentive Program and Waste Flow Management:** Using research to explore how the capital region can feasibly implement waste flow management to increase the diversion of recyclable materials, as well as prevent disposal of out-of-region MSW at Hartland Landfill.
- **MFD/ICI Sector Strategy:** Expand the MFD Waste Diversion Project and begin developing Space and Access Guidelines, in collaboration with municipalities.
- **Solid Waste Market Research and Engagement Study:** The study will determine the effectiveness of the CRD's current waste reduction programming and behaviour change initiatives and will help inform existing programs and guide the development of future programming moving forward.
- **Hartland Landfill Operations:** Research and pilot new technologies to maximize the densification and compaction rate at the active face. Decrease use of raw materials (such as aggregate) for cover by increasing beneficial use of select waste material as per the ENV guidelines.



Compost Education Centre workshop

## Appendix A: Solid Waste Management Plan Report Card

The SWMP Report Card is intended to provide a high-level, easy-to-understand overview of the CRD's progress related to implementing the SWMP and to summarize progress made in 2023.

### Methodology

The SWMP identifies specific strategies and actions to guide the CRD's efforts over the lifespan of the Plan. Over the lifetime of the SWMP, the strategies and actions contained within will form the basis of service plans and work plans that are approved by the Board annually as part of the financial planning process. Collaboration with First Nations governments, municipalities, other solid waste services, CRD divisions and stakeholders will be integral to this process.

These include 15 strategies with 72 actions and associated timelines divided into the following three focus areas.



Hartland Public Drop-off Depot



## 2023 Overall SWMP Progress

On track

The 15 strategies with 72 actions contained within the SWMP are divided into three focus areas. Scores are based on the current status of each strategy with their focus area.

### Focus Areas



Reduce and Reuse



Recycling



Recovery and Residuals Management

### Focus Area Icon Legend



**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**

Status	Strategy	Update
<b>Progress on Strategies</b>		
	<b>1 Continue and enhance education programs</b>	<ul style="list-style-type: none"> <li>Developed and circulated 6 issues of the CRD's Rethink Waste Newsletter to 379 residents and businesses</li> <li>Responded to 19,597 Infoline inquiries via phone and email and received 215,276 visits to myrecyclopedica.ca</li> <li>Delivered 103 3R programs to 3,567 students, and sent 3 Educator Newsletters to 556 teachers</li> <li>Delivered 8 public landfill tours to 231 residents, 11 community group tours to 263 residents and 15 technical landfill tours to 400 industry partners</li> <li>CEC delivered 136 composting workshops to 2,690 K-12 students and 26 composting workshops to 467 adults on behalf of the CRD</li> <li>Conducted 5 solid waste public education campaigns, including advertorials, movie theatre pre-roll, digital advertising, print advertising and bus advertising</li> <li>Hired a social media assistant, which led to increased social engagement for solid waste public education campaigns across all CRD social platforms (LinkedIn, Facebook, Instagram)</li> <li>CRD staff attended 16 community events with solid waste messaging, including Love Food Hate Waste, household hazardous waste and Rethink Waste/3Rs display; CEC staff attended 31 community events on behalf of the CRD to promote at home composting and organics diversion</li> <li>Received 8,588 new RecycleCRD app installs and received 6,620 Ready, Set, Sort! game plays by residents</li> <li>Added 12,725 residents to receive reminders and alerts via RecycleCRD app, email, voicemail and mobile calendar for the curbside recycling program</li> <li>Continued participation in Coast Waste Management Association communications/educators working group</li> <li>Continued sponsorship of Ecostar awards</li> <li>Refreshed and updated the solid waste webpages, including adding a dedicated education page <a href="http://crd.bc.ca/rethinkwaste">crd.bc.ca/rethinkwaste</a> to communicate to a broader audience (e.g., MFD, ICI)</li> <li>Updated PowerPoint template, educational campaigns, video, website and infosheet to include the Rethink Waste brand; further updates to solid waste collateral will take place in 2024</li> <li>Received funding approval to conduct a Solid Waste Market Research and Engagement Study every 3 years beginning in 2024 to evaluate the effectiveness of the CRD's waste reduction programming and behaviour change initiatives</li> </ul>
	<b>2 Encourage waste prevention</b>	<ul style="list-style-type: none"> <li>Continued to provide funding under the Rethink Waste Community Grant and supported 20 projects (\$57,175)</li> <li>Produced and promoted 4 videos on Rethink Waste Community Grant recipients, to highlight how individuals and organizations are coming together to reduce waste</li> <li>Town of Sidney - Single Use Plastics Bylaw 2231 came onto effect January 1, 2023</li> <li>City of Victoria - Single-Use Items Reduction Bylaw council readings completed in April, and it has since been awaiting approval by the Province before final adoption</li> </ul>



### Reduce and Reuse

Reducing the amount of waste created, and finding ways to repurpose and reuse waste, eliminates the need to dispose of items later.



**Overall Focus Area Status**  
On track



## Reduce and Reuse

Status	Strategy	Update
<b>Progress on Strategies</b>		
	<b>3 Support reduction of avoidable food waste</b>	<ul style="list-style-type: none"> <li>Conducted a fall Love Food Hate Waste education campaign, which featured movie theatre ads, social media, local print and digital media ads</li> <li>Provided \$94,738 in funding to the CEC to deliver waste diversion and composting programs to adults and children in the region</li> <li>Updated and renewed the Organics Diversion and Compost Education Partnership for 2024-2025 with the CEC</li> <li>Participated in the City of Victoria's Circular Economy Speaker Series: Reducing Food Waste event</li> </ul>
	<b>4 Support reuse activities in the region</b>	<ul style="list-style-type: none"> <li>Continued to provide support (\$68,000) for 10 local non-profit reuse organizations to assist them in managing unusable donations</li> <li>Collected 37 tonnes of reusable goods at Hartland Depot for redistribution by local non-profit reuse organizations</li> <li>Supported 8 reuse projects through the CRD's Rethink Waste Community Grant</li> </ul>
	<b>5 Support local governments in working towards zero waste and a circular economy</b>	<ul style="list-style-type: none"> <li>Continued leading the Local Government Waste Reduction Working Group; 12 municipalities participated, 7 meetings held in 2023</li> <li>Continued work with WSANEC Leadership Council/CRD Solid Waste Working Group</li> <li>Continued discussions with Pacheedaht First Nation on future, mutually beneficial long-term waste management for the broader Port Renfrew community</li> <li>CRD Board endorsed the Vancouver Island and Coastal Communities Committee's Terms of Reference and appointed the Environmental Services Committee Chair as the CRD's elected representative</li> <li>Conducted jurisdictional scan to review BC/other landfills 'pay as you throw' systems to learn more about disposal fee structures in surrounding areas, informing staff on best practices for increasing fees for waste disposal</li> </ul>
	<b>6 Continue and enhance policy development</b>	<ul style="list-style-type: none"> <li>Received approval from the ENV for the SWMP in July 2023</li> <li>Received Board approval to amend Hartland Landfill Tipping Fee and Regulation Bylaw No. 3881 and Ticket Information Authorization Bylaw No. 1857 in 2024 to include new material bans, adjustments to the tipping fee structure and increased bylaw fines</li> <li>Effective January 2024, clean wood will be banned from general refuse; the general refuse tipping fee will increase from \$110 to \$150/tonne; segregated clean wood will be accepted at a tipping fee of \$80/tonne and will be transferred offsite for recycling or energy recovery; rates for various offences will increase (some up to \$500)</li> <li>Effective July 2024, treated wood, salvageable wood, carpet and underlay and asphalt shingles will be banned from being accepted at the landfill as general refuse but will be accepted as segregated materials at a reduced tipping fee</li> <li>Developed the Waste Stream Collector Incentive program to offer Hartland account customers a \$25/tonne rebate beginning in 2024 on general refuse for those who provide multi-stream collection services (source-separated food scraps, general refuse, and recyclables including glass) and voluntarily report waste collection data</li> <li>Created a communications plan to educate and inform the public about the 2022 Solid Waste Stream Composition Study and the 2024 policy and bylaw changes at Hartland Landfill</li> <li>Continued administration of the solid waste local service for the Port Renfrew community, including securing grant funding for site upgrades and efficiencies, as well as a business case study for the future operation of the service</li> <li>Participated in a Disaster Debris Management Planning workshop with the City of Victoria to understand best practices for disaster debris management planning and provided information on collaboration opportunities with the City of Victoria and other agencies</li> <li>Initiated the development of a Request for Expressions of Interest for Disaster Debris Management Planning in collaboration with the City of Victoria</li> </ul>



## Recycling

By participating in recycling programs, residents and businesses take responsibility for the products they've purchased and support a system where these materials can be used repeatedly.



**Overall Action Status**  
On Track

Status	Strategy	Update
<b>Progress on Strategies</b>		
	<b>7 Increase residential diversion</b>	<ul style="list-style-type: none"> <li>Partnered with Recycle BC for local collection of 19,162 tonnes of residential PPP through the Hartland Depot, the curbside single-family home recycling program and depot services for rural/island residents</li> <li>Received 4,637 tonnes of recyclable material and 69 tonnes of orphan household hazardous waste as the Hartland Depot</li> <li>Continued to support the Southern Gulf Islands Recycling Coalition as they deliver waste reduction and diversion services for their communities</li> <li>Participated in Recycle BC's Five-Year Program Plan consultation and provided feedback to both Recycle BC and ENV in 7 key areas, including the need to provide adequate per household funding that meets the actual costs of collection of PPP from single family homes, as well as concerns around maintaining support for existing depots, the need to establish new depots and potential to broaden PPP collectors' access to processing and marketing services</li> <li>The SWAC directed CRD staff to set aside funding to conduct a Waste Generator Study every 3 years, beginning in 2025, to understand how much waste is recycled, composted or put in the garbage at the waste generator level (single-family home, MFD, ICI)</li> </ul>
	<b>8 Increase multi-family diversion</b>	<ul style="list-style-type: none"> <li>Piloted the MFD Waste Diversion Project by hiring 2 term outreach assistants to conduct site visits to offer advice, signage and resources on best practices and setup for the waste collection area; 50 buildings totalling 2,499 units across 8 municipalities participated</li> <li>Developed signage and education materials for MFDs, including sorting guides, move-in and move-out guides and signage to promote proper waste disposal; resources available to download from website</li> <li>Presented on MFD Waste Diversion: Challenges &amp; Solutions at the Coast Waste Management Associate Virtual Panel &amp; Roundtable Discussion event</li> <li>Participated in Recycle BC's Five-Year Program Plan consultation and provided feedback to both Recycle BC and ENV in 7 key areas, including the need to invest and work with industry to enhanced service levels in all areas, particularly for MFD residents</li> <li>City of Victoria - In June 2023, Council directed staff to develop and report back on options for a MSW collection service model for MFD and explore design regulations or guidelines for solid waste storage facilities in MFD and commercial developments</li> </ul>
	<b>9 Increase diversion from industrial, commercial and institutional facilities</b>	<ul style="list-style-type: none"> <li>Performed a jurisdictional scan on Space, Access and Source Separation for MFD and ICI to help inform staff with policy options</li> <li>Initiated internal business case to hire a new staff position in 2024 that will focus on shifting disposal ban enforcement to generator, rather than hauler.</li> </ul>
	<b>10 Support existing and new extended producer responsibility programs</b>	<ul style="list-style-type: none"> <li>Continued to partner with 12 EPR stewards for local collection of 20,681 tonnes of provincially-regulated recyclables through the Hartland Depot, Gulf Islands and Port Renfrew Depot and the Curbside Blue Box Program</li> <li>Added single-use and packaging-like products to the CRD's Blue Box Program and depot programs to align with Recycling Regulation changes and subsequent expansion of Recycle BC's list of accepted items January 1, 2023</li> <li>Conducted a pilot project with Major Appliance Recycling Roundtable (MARR) at the Hartland Depot that tested hard plastics from refrigerators for use in waste to energy</li> <li>Continued to engage in opportunities to refine the EPR system in BC by participating on the BC Product Stewardship Council, working with program stewards to support and enhance their services offered in the capital region and providing feedback on the five-year EPR program plan reviews</li> </ul>



## Recycling

Status	Strategy	Update
<b>Progress on Strategies</b>		
	<b>11 Increase organics diversion and processing capacity</b>	<ul style="list-style-type: none"><li>• Provided consolidation, transfer and processing services for 11,249 tonnes of kitchen scraps collected by municipalities and private service providers</li><li>• Provided transfer and processing services for 2,088 tonnes of yard and garden material received at Hartland Depot</li><li>• Continued to plan and design for a new kitchen scraps transfer station</li><li>• Continued to support restoration activities by offering reduced tipping fees for safe disposal of source-separated invasive species material</li><li>• Evaluated and reported to Board on pathways to support mandatory separation of curbside collection and diversion of organics</li></ul>
	<b>12 Increase construction, renovation and demolition material diversion</b>	<ul style="list-style-type: none"><li>• Hired a full-time permanent Waste Diversion Coordinator</li><li>• Retained a technical advisor and issued a Request for Expressions of Interest to understand the processing and marketing capacity to determine landfill material bans</li><li>• Conducted a jurisdictional scan to learn about other landfills' waste acceptance criteria and associated bylaw fines</li><li>• Investigated other jurisdictions C&amp;D strategies; started with District of North Vancouver C&amp;D checklist and other resources provided</li><li>• Received Board approval to ban wood (clean, treated and salvageable), asphalt shingles, and carpet and underlay from general refuse in 2024</li><li>• Received Board approval to accept mixed C&amp;D waste (garbage mixed with wood, asphalt shingles and/or carpet and underlay) for \$300/tonne beginning in 2024 to encourage source separation at the waste generator level</li><li>• Hosted a webinar for private and public solid waste industry partners on the 2024 changes at Hartland Landfill and the Waste Stream Collector Incentive program</li><li>• Hosted a Diversion and Deconstruction Workshop with the City of Victoria at Hartland Landfill to learn about best practices in deconstruction and waste diversion from local experts</li><li>• Conducted characterization of shredded construction and demolition waste to determine potential alternative end uses</li><li>• Diverted 1,402 tonnes of clean wood for off-site use to produce energy for pulp operations</li><li>• WorkSafe BC announced new regulations around training and certification for workers involved in asbestos abatement beginning in 2024. Hartland staff affected will take the Foundational Awareness Course and the Surveying Safety Course in 2024.</li><li>• The ENV has new regulations around the need for contingency plans in relation hazardous waste and stewardship programs. Hartland is working towards improving their plans for Stewards in 2024.</li><li>• City of Victoria - Following the enactment of the Demolition and Deconstruction Bylaw, the city worked with the homebuilding and construction industry on an approach to salvage valuable wood from house demolitions that aligns with regional market capacity for material reuse</li></ul>
	<b>13 Encourage proper public space waste management activities</b>	<ul style="list-style-type: none"><li>• Conducted an education campaign on illegal dumping/abandoned waste, highlighting how residents can dispose of unwanted items according to the 5R Pollution Prevention Hierarchy</li><li>• Provided \$1,252 in funding for the Community Clean-up Program</li><li>• Participated in Recycle BC's Five-Year Program Plan consultation and provided feedback to both Recycle BC and the ENV in 7-key areas, including the need to enhance streetscape programming in urban areas</li><li>• Supported Pacheedaht First Nation as they completed removal of debris associated with illegal dumping activity in their community</li><li>• Responded to 8 inquiries regarding illegal dumping activity in Electoral Areas</li></ul>



## Recovery and Residuals Management

Once material has been reduced, and technology has been applied to recover as much energy as possible, residuals management provides safe and effective ways to manage materials that don't have a next and best use.



### Overall Action Status

Opportunity for improvement

Status	Strategy	Update
<b>Progress on Actions</b>		
	<b>14 Optimize landfill gas management</b>	<ul style="list-style-type: none"> <li>Achieved a gas collection efficiency of 64% (ENV model) 74% (UBCi model)</li> <li>Produced 7.9 megawatts of green power</li> <li>Broke ground on construction of new methane to RNG facility</li> <li>Continued to implement strategies to improve gas collection and mitigate fugitive emissions.</li> <li>Continued annual installation of landfill gas collection infrastructure</li> <li>Continued to partner with the University of Victoria on the fugitive emissions study</li> </ul>
	<b>15 Enhance Hartland disposal capacity</b>	<ul style="list-style-type: none"> <li>Calculated a disposal rate of 382 kg/capita, a decrease of 6.02% or 23 kg/capita from 2022</li> <li>Received Board approval to increase Hartland Landfill's general refuse tipping fee from \$110 to \$150/tonne, ban clean wood from general refuse and increase bylaw fines beginning January 1, 2024</li> <li>Received Board approval to ban treated wood, asphalt shingles, and carpet and underlay from general refuse beginning July 1, 2024</li> <li>Used the results of the 2022 Solid Waste Stream Composition Study to help inform the 2024 policy changes at Hartland Landfill</li> <li>Initiated the procurement process to design, build, operate and maintain a Material Diversion Transfer Station at Hartland Landfill to process wood (clean, treated and salvageable), asphalt shingles and carpet and underlay before it's transferred offsite for reuse, recycling, or energy recovery</li> <li>Continued with onsite beneficial use opportunities, with 5,100 tonnes of select waste material streams processed and utilized onsite in place of virgin material, as per the ENV guidelines.</li> <li>Conducted additional shredding trials, with specific material streams in an effort to manage incoming volumes and further densify material</li> <li>Achieved a landfill utilization factor of 0.66 t of refuse/m<sup>3</sup> of airspace</li> <li>Removed 30,000 m<sup>3</sup> of overburden and 197,000 m<sup>3</sup> of in-situ rock to prepare the new landfilling cell to receive future garbage</li> <li>Completed design of Cell 4 Liner, awarded Cell 4 Liner Construction Contract and began construction</li> <li>Produced and applied biosolids growing medium as a topsoil alternative, as outlined in the approved Biosolids Beneficial Use Contingency Plan</li> <li>Landfilled 10,591 tonnes of blended biosolids at Hartland as general refuse as Long Term Biosolids Planning solutions are developed in 2024</li> <li>Received 21,124 tonnes of controlled waste and 2,957 tonnes of asbestos-containing material</li> <li>Issued 715 tickets and 37 warnings, primarily related to recyclable material being found commingled in the garbage</li> <li>Conducted feasibility work on the thermal pilot to study disposal alternatives for managing C&amp;D material</li> <li>Initiated work on a jurisdictional scan of municipal solid waste processing technologies, including investigating incineration with energy recovery, gasification, and pyrolysis thermal processing systems</li> <li>Provided the Township of Esquimalt with \$50,000 to conduct biochar testing to explore an Integrated Resource Management approach to manage municipal solid waste, kitchen scraps and yard and garden waste using thermal technologies</li> </ul>



**Capital Regional District**

625 Fisgard Street  
Victoria, BC V8W 2S6  
250.360.3000

[www.crd.bc.ca](http://www.crd.bc.ca)  
X: @crd\_bc  
Facebook: Capital Regional District

An aerial photograph of a community cleanup activity. Several people are gathered around a blue tarp on the ground, sorting collected waste into white buckets. The buckets are labeled with categories of waste: 'CIGARETTE BUTTS', 'STYROFOAM', 'PLASTIC', 'SOFT PLASTIC', and 'PAPER/CARD'. The scene is outdoors on a grassy area, and the overall image has a blue tint.

# 2023 Solid Waste Management Plan Progress Report

Environmental Services Committee  
April 17, 2024

# Agenda

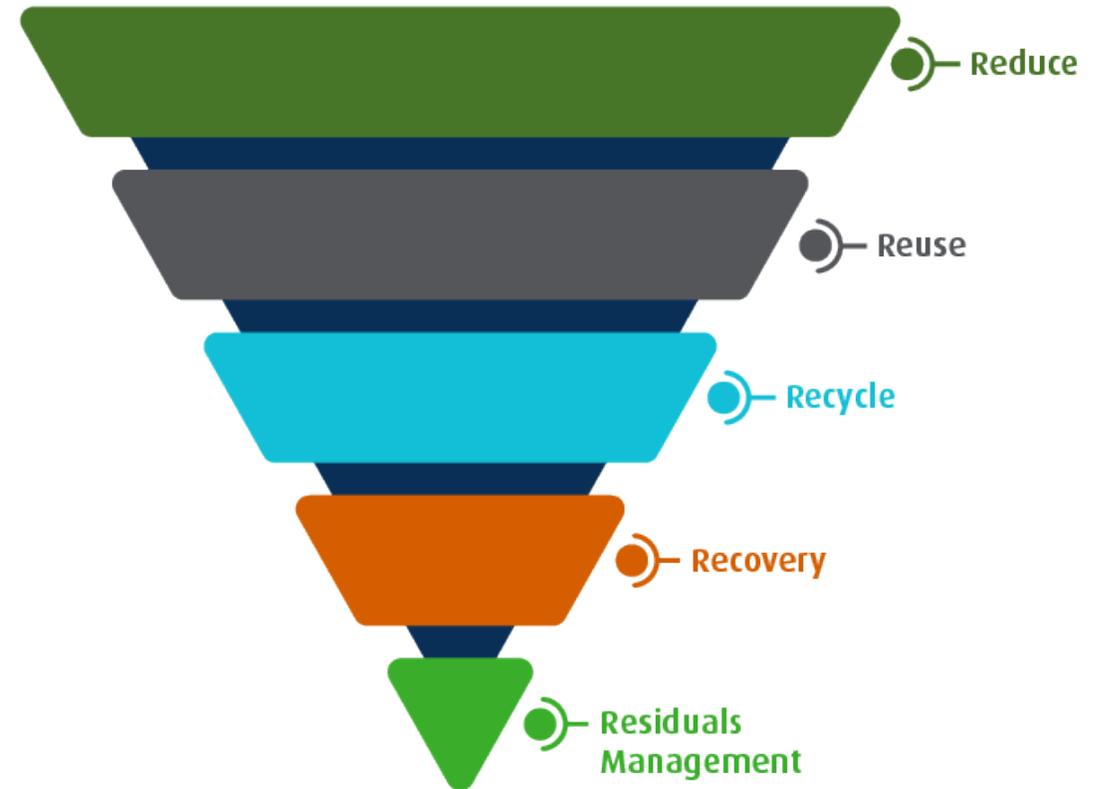
1. Solid Waste Management Plan
2. Progress Summary
3. Looking Ahead
4. Report Card



# Solid Waste Management Plan



In BC, regional districts develop SWMPs under the provincial *Environmental Management Act* that are high-level, long-term visions of how the regional district would like to manage its solid waste, in accordance with the 5R Pollution Prevention Hierarchy.

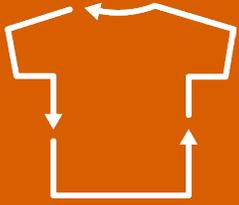


# Solid Waste Management Plan



Goals			
To surpass the provincial per capita waste disposal target	To extend the life of Hartland Landfill to the year 2100 and beyond	To have informed citizens that participate effectively in proper waste management practices	To ensure that the CRD's solid waste services are financially sustainable

Focus Areas		
Reduce and Reuse <i>Strategies 1-6</i>	Recycling <i>Strategies 7-13</i>	Recovery and Residuals Management <i>Strategies 14-15</i>



## Reduce and Reuse

Governments, residents, non-profits, and businesses all have an important role to play in reducing and diverting waste from the landfill. Reducing the amount of waste created, and finding ways to repurpose and reuse waste, eliminates the need to dispose of items later.



**Overall Action Status**  
On Track



## Progress Summary

- the SWMP received approval from ENV in July 2023
- the Rethink Waste Community Grant funded 20 projects (\$57,175)
- the CRD Board approved changes at Hartland Landfill that could divert up to 40,500 tonnes of waste a year



# Recycling

By participating in recycling programs, residents and businesses take responsibility for the products they have purchased and support a system where these materials can be used repeatedly.



**Overall Action Status**  
On Track



## Progress Summary

- received Board approval for new general refuse material bans; these materials will be accepted at Hartland for a reduced tipping fee and transferred offsite for recycling or energy recovery
- piloted the MFD Waste Diversion Project
- added single-use and packaging like products to the CRD's Curbside Blue Box Program and depot programs



# Recovery and Residuals Management

Once material has been reduced, and technology has been applied to recover as much energy as possible, residuals management provides a safe and effective way to manage materials that don't have a next and best use.



**Overall Action Status**  
Opportunity for Improvement



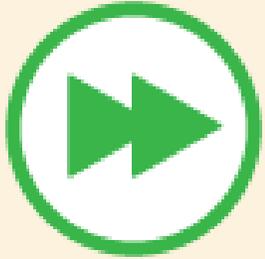
## Progress Summary

- calculated a 2023 disposal rate of 382 kg/capita\*, a decrease of 6.02% or 23 kg/capita from 2022
- initiated the procurement for a Material Diversion Transfer Station at Hartland
- received Board approval to increase Hartland Landfill's general refuse tipping fee from \$110 to \$150/tonne

\*This number excludes blended biosolids



# Report Card



## 2023 Overall SWMP Progress On track

The SWMP identifies specific actions to guide the CRD's efforts over the lifespan of the plan. These include 15 strategies with 72 sub-actions and associated timelines divided into three focus areas.

### Focus Areas:



**Reduce and Reuse**



**Recycling**



**Recovery and Residuals  
Management**

# Looking Ahead - 2024



- implement and monitor new policies to divert waste from Hartland Landfill
- pilot expanded hours at Hartland Landfill's public drop-off depot
- monitor Waste Stream Collector Incentive Program and investigate waste flow management
- monitor the new curbside collection contractor
- expand the MFD/ICI Sector Strategy and begin developing Space and Access Guidelines in collaboration with municipalities
- conduct the Solid Waste Market Research and Engagement Study
- research and pilot new technologies to maximize the densification and compaction rate at the active face



# Thank you

rsmith@crd.bc.ca | 250.360.3080



@crdvictoria



Capital Regional District



CRDVictoria



crd.bc.ca

## REPORT TO ENVIRONMENTAL SERVICES COMMITTEE MEETING OF WEDNESDAY, APRIL 17, 2024

---

**SUBJECT**     **Climate Action Strategy – 2023 Progress Report**

### **ISSUE SUMMARY**

To present the Capital Regional District's (CRD) 2023 Climate Action Progress Report, which identifies progress towards the CRD's Climate Action Strategy.

### **BACKGROUND**

The CRD has a strong history of climate action and remains committed to addressing climate change within its own operations and at the regional level. The CRD signed the BC Climate Action Charter in 2007, established a regional climate action service in 2009, embedded climate action targets and goals into the Regional Growth Strategy in 2018, and declared a climate emergency in 2019. In 2021, the Board approved a renewed CRD Climate Action Strategy and five-year action plan. The 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. Actions are categorized within six goal areas. The CRD has committed to annually reporting on the progress towards achieving its climate action goals.

### **2023 Progress Report Results**

The 2023 Climate Action Progress Report (Appendix A) provides a summary of the 2023 activities undertaken by multiple CRD services to track the progress of the CRD Climate Action Strategy's corporate and community-focused actions. The Progress Report also includes a report card that compiles self-reported progress metrics from divisions responsible for advancing each of the Strategy's 54 actions (comprised of 127 sub-actions). These metrics were used to produce a 'status' (on track, opportunity for improvement or attention required) for overall action plan progress, corporate and community-focused actions, the six goal areas of the strategy and each action. This systematic evaluation provides an indication of where focused efforts need to be made or increased to achieve targeted actions and outcomes within the Strategy and meet our targets.

The overall status for the 2023 year was calculated as 'on track', meaning 75-100% of the yearly target for actions were progressed as envisioned within the Strategy's five-year action plan. The averaged status for all corporate actions was calculated as 'opportunity for improvement' and the averaged status for all community-focused actions was calculated as 'on track'. The Progress Report also includes a list of both corporate-focused and regional indicators. These indicators are not included in the status calculations but provide context and track long-term trends relevant to the organization and broader regional climate action trends.

### **Greenhouse Gas Emissions and Climate Impacts**

To track progress, the CRD completes an annual corporate emissions inventory. Emissions associated with Hartland Landfill and the Capital Region Housing Corporation are not included,

as they are excluded from the provincial reporting framework. The results of the 2023 corporate inventory indicate:

- CRD operations generated 2,956 tonnes of CO<sub>2</sub>e emissions, a 2.8% increase from 2022 and a 1.6% decrease from the baseline level of emissions from 2007.
- Emissions from buildings, facilities and infrastructure decreased by 8.7% to 1,552 tonnes, attributed in part to several energy-focused maintenance and operational measures.
- Emissions from vehicle travel increased by 19.4% to 1,404 tonnes due to a growth in service levels provided by the CRD. Factors that contributed were increased vehicle use for building inspections, bylaw enforcement, emergency programs, and the overall staffing increases in various services, notably Regional Parks.

As the region continues to grow, there is also an increased demand for government services to adequately serve and support communities, which is reflected in our corporate emissions. This context does not preclude the need to reduce emissions further or meet our targets; the CRD is committed to advancing greenhouse gas (GHG) mitigation efforts to align with the emission reduction pathways outlined in the Climate Action Strategy. For example, 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 2024 and beyond.

The CRD completes regional and local government GHG inventories every two years, following the internationally recognized Global Protocol Community-Scale GHG Inventories BASIC+ Framework. The latest inventory, completed for the 2022 year and presented to the Board in October 2023, indicated:

- The capital region emits approximately 1.86 million tonnes of CO<sub>2</sub>e annually.
- This represents a 7% reduction from 2007 levels and a decline in per capita GHG emissions (t CO<sub>2</sub>e/capita) of 25%.
- Emissions increased by 1% compared to the 2020 inventory.

Regardless of GHG emission reductions today, the capital region will continue to experience the impacts of climate change now and into the future. The CRD and regional partners must work to reduce vulnerability in our communities and adapt to a changing climate by improving how we anticipate, respond to and recover from both extreme weather events and more gradual changes occurring over time. Climate adaptation planning and implementation will be a key aspect of future service delivery.

### **CRD Climate Action Service**

Under Bylaw No. 3510, the CRD established a Climate Action service in 2009 with a regional collaboration mandate to directly support the organization and local governments in reaching mitigation and adaptation targets, policies and actions. The service hosts two inter-municipal networks, and closely works with local government staff, senior governments, utilities and other stakeholders to identify other climate action opportunities and advance initiatives in collaboration.

In 2023, the Climate Action service operated on an annual budget of approximately \$1.9M, 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 towards 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. The program also relies on external grants and partnerships to undertake corporate and community climate action programming. External sources accounted for approximately \$500,000 in additional funding to support completion of key projects in 2023.

**CONCLUSION**

The CRD’s 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 CRD’s 2023 Climate Action Progress Report outlines actions the CRD has undertaken to advance the Climate Action Strategy, Board priorities, and commitments as a signatory to the BC Climate Action Charter over the past year. Overall, in 2023, the CRD progressed on several climate action initiatives and has identified where focused efforts need to be made or increased to achieve targeted actions and outcomes. The overall status for the 2023 year was calculated as ‘on track’, meaning 75-100% of the yearly targets for actions were progressed as envisioned within the Strategy’s five-year action plan. The CRD remains dedicated to expediting crucial actions and planning aimed at achieving corporate greenhouse gas reduction targets and preparing for climate impacts. Furthermore, the organization continues to collaborate with partners to meet regional goals.

**RECOMMENDATION**

There is no recommendation. This report is for information only.

Submitted by:	Nikki Elliott, BES, MPA, Manager, Climate Action Programs
Concurrence:	Larisa Hutcheson, P. Eng., Acting General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

**ATTACHMENT**

Appendix A: 2023 Climate Action Progress Report

# 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.

## Table of Contents

<b>Overview .....</b>	<b>2</b>
Regulations and Commitments.....	2
<b>Climate Action Strategy.....</b>	<b>4</b>
Climate Action Vision.....	5
Targets and Goals.....	5
<b>Tracking Our Emissions.....</b>	<b>6</b>
Community Emissions .....	6
Corporate Emissions.....	7
<b>Adapting to Climate Impacts .....</b>	<b>10</b>
<b>Progress on the CRD’s Five-year Action Plan.....</b>	<b>11</b>
Goal 1: Climate-Focused Decision Making.....	13
Goal 2: Sustainable Land Use, Planning and Preparedness.....	15
Goal 3: Low-Carbon Mobility .....	17
Goal 4: Low-Carbon and Resilient Buildings and Infrastructure.....	19
Goal 5: Resilient and Abundant Nature, Ecosystems and Food Systems.....	21
Goal 6: Minimized Waste .....	23
<b>Looking Ahead - 2024.....</b>	<b>25</b>
<b>Appendix A: Climate Action Report Card .....</b>	<b>26</b>



# 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:

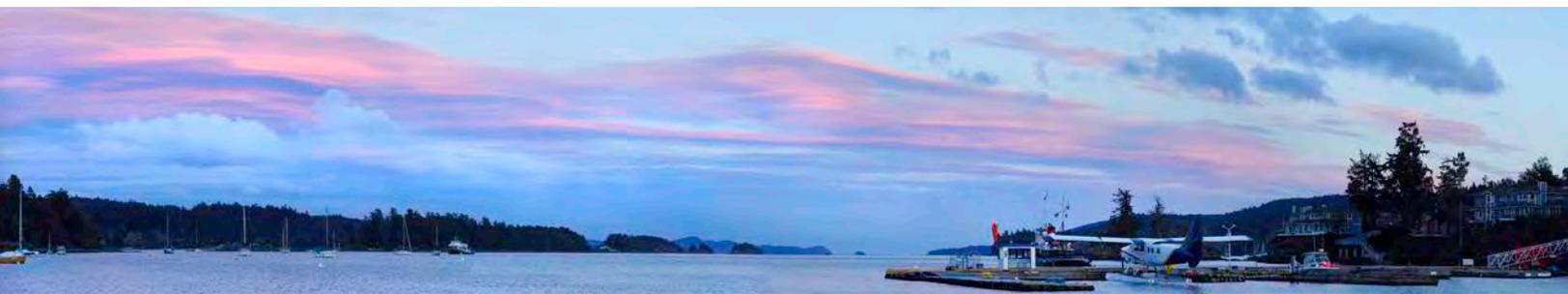
- **Local Government (Green Communities) Statutes Amendment Act** requires regional districts and local governments to include targets, policies and actions for the reduction of GHG emissions in Regional Growth Strategies and Official Community Plans. The Act also provides powers to local governments 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*

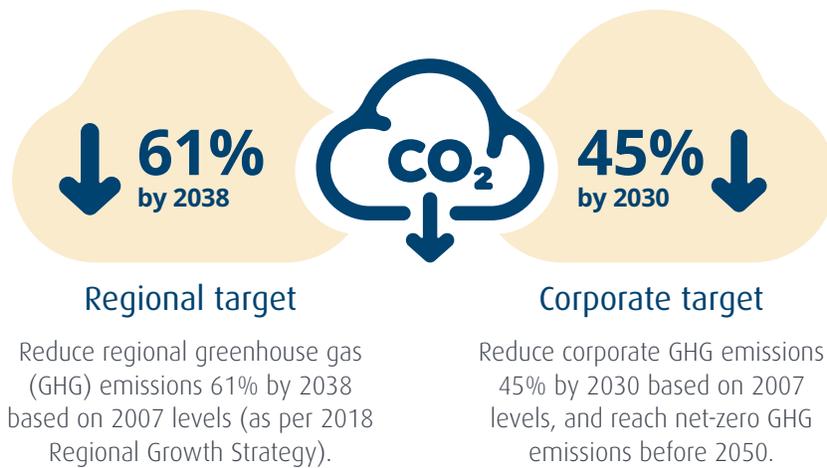
## Climate Action Vision

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

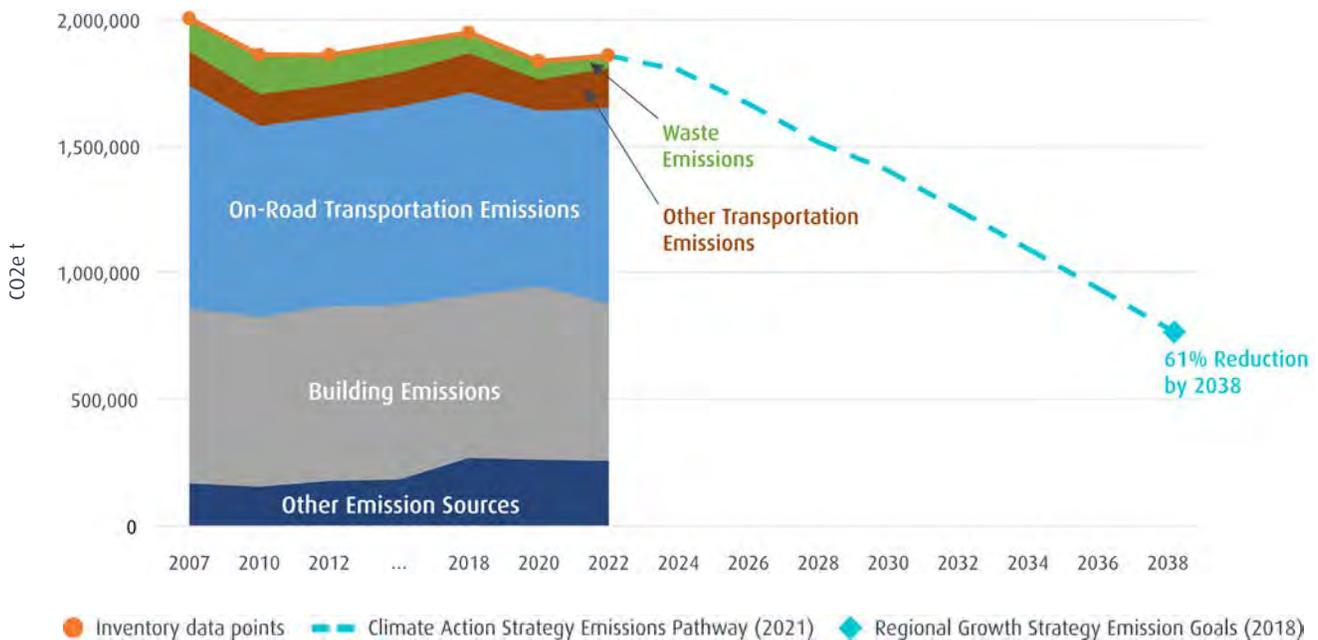
The CRD undertakes GHG accounting on a regular basis to understand our emissions portfolio.

## 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 CO<sub>2</sub>e annually. This represents a 7% reduction from 2007 levels and a decline in per capita GHG emissions (t CO<sub>2</sub>e/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 CO<sub>2</sub>e 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 CO<sub>2</sub>e, 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*

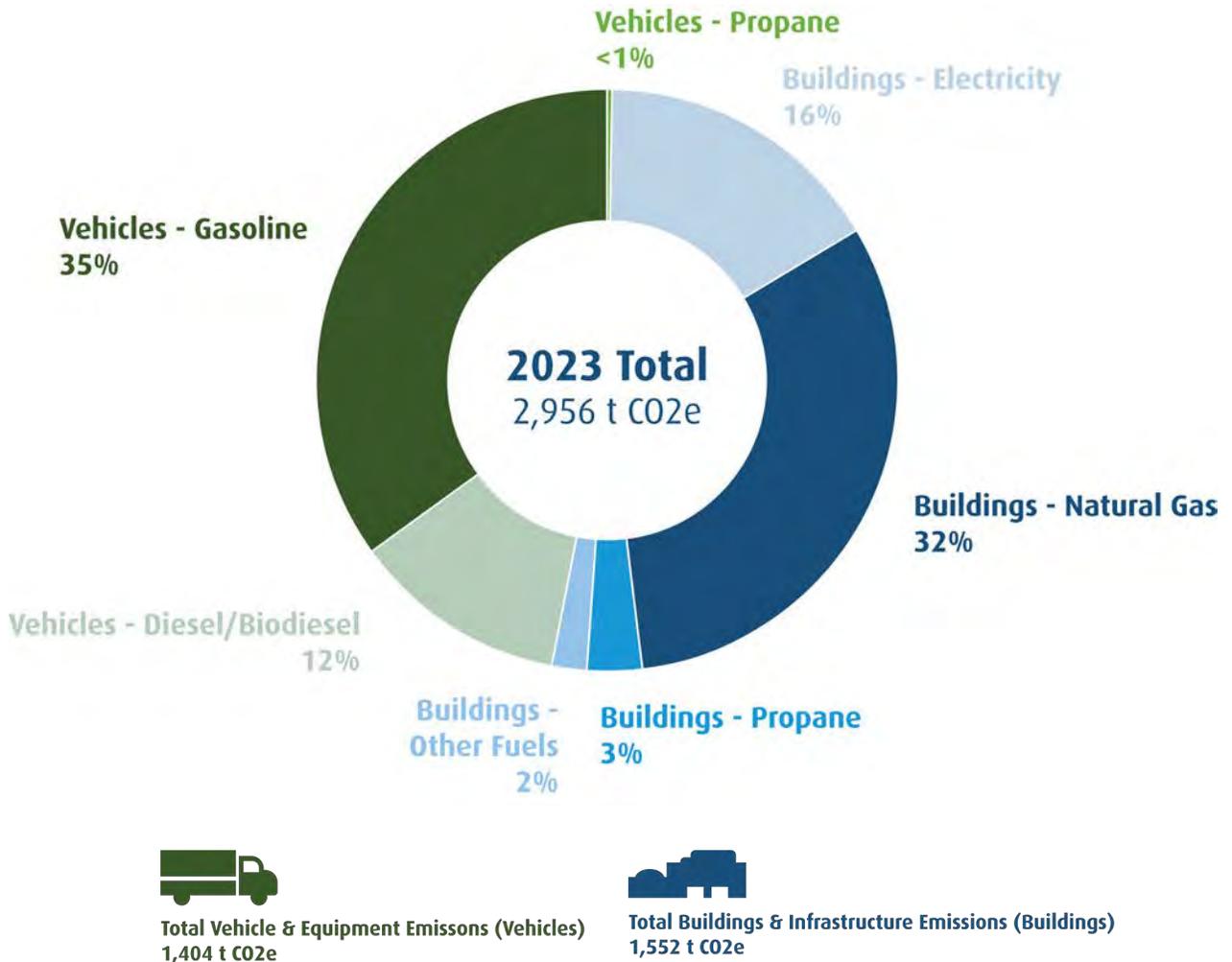
*\*Emissions associated with Hartland Landfill, Capital Region Housing Corporation, and Capital Region Hospital District are not included in this total, as they are excluded from the provincial reporting framework.*

## 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.

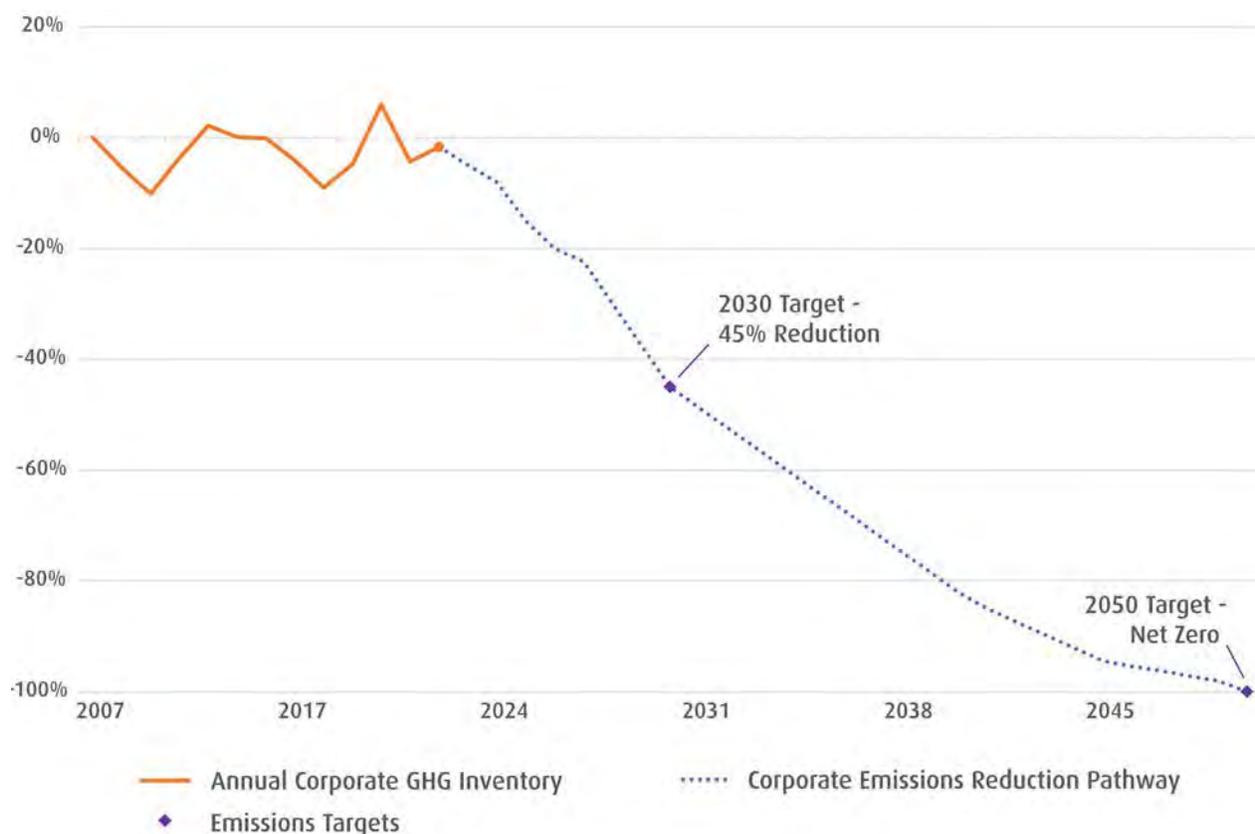
## 2023 CRD Corporate GHG Emissions



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 CO<sub>2</sub>e (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

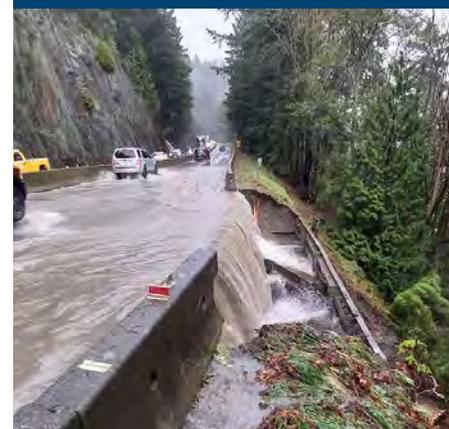
- Undertook an extensive effort to map vulnerability to extreme heat for the region and develop the Capital Region Extreme Heat Information Portal, with support from municipal partners and a grant from the Union of British Columbia Municipalities (UBCM).
- Partnered with the University of Victoria's 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 CO<sub>2</sub>e (1% increase compared to 2020)



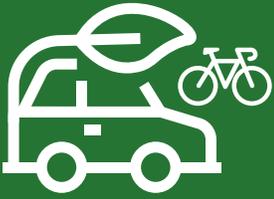
### Number of net new dwelling units in areas where more than 45% walk/bike/bus to work\*

- 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*.

### CRD Roles

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

### 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.

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 CO<sub>2</sub>e (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 CO<sub>2</sub>e (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

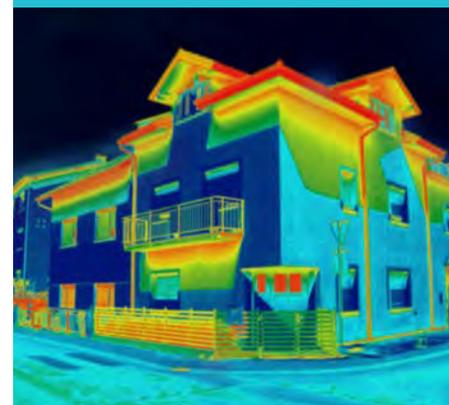
Data management

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 CO<sub>2</sub>e (10% decrease compared to 2020)



**Annual CRD corporate facilities GHG emissions**

- 1,552 t CO<sub>2</sub>e (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\***

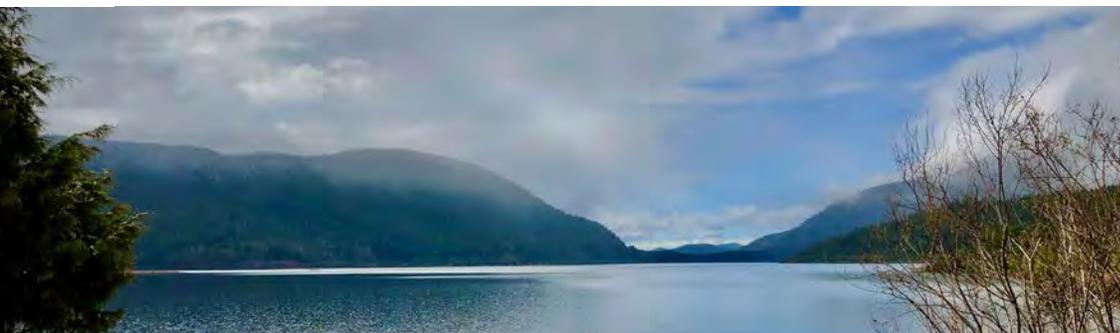
• 13,350 ha (an additional 21.28 ha was acquired in 2023)



**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
<b>Progress on Actions</b>		
	<b>1-1 Integrate and standardize the climate lens framework across processes</b>	<ul style="list-style-type: none"> <li>Prepared the 2023-2026 Corporate Plan, with consideration of how initiatives impact the organization's climate action efforts.</li> <li>Approved and implemented a corporate green building policy.</li> <li>Applied a climate lens to actions completed under the Corporate Asset Management Strategy.</li> <li>Completed the annual corporate GHG emissions inventory.</li> <li>Developed an annual CRD Climate Action Report Card for accountability on climate progress.</li> </ul>
	<b>1-2 Develop internal carbon pricing policies and procedures</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<b>1-3 Identify internal funding sources for climate action</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Engaged in a contract with BC Hydro to provide partial funding to the Corporate Energy Specialist role in 2023.</li> </ul>
	<b>1-4 Support staff capacity building and coordination</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Maintained an internal Climate Action SharePoint hub for staff capacity building.</li> <li>Continued quarterly Climate Action Fleet and Facilities Working Group meetings and established a Building Performance Working Group.</li> </ul>
	<b>1-5 Investigate how Indigenous knowledge can inform climate action at CRD</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul>



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 CO<sub>2</sub>e (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
<b>Progress on Actions</b>		
	<b>2-1 Incorporate climate hazards and vulnerabilities into corporate CRD emergency response plans</b>	<ul style="list-style-type: none"> <li>Continued to reevaluate emergency response planning based on climate hazards and vulnerabilities on an ongoing basis.</li> <li>Began the development of a public-facing emergency dashboard to improve the public notification system for extreme weather events. Targeted for completion in 2024.</li> </ul>
	<b>2-2 Monitor Regional Growth Strategy (RGS)</b>	<ul style="list-style-type: none"> <li>Completed the annual RGS Indicator Report.</li> <li>Reviewed Regional Context statements, as needed, through an established process in which municipal climate policies are reviewed in relation to RGS goals.</li> </ul>
	<b>2-3 Integrate climate impacts into Juan de Fuca land use plans and policies</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Planned review of development permit flood management guidelines in conjunction with the Port Renfrew OCP update.</li> </ul>
	<b>2-4 Collect and share pertinent energy, emissions, climate projections and vulnerability data</b>	<ul style="list-style-type: none"> <li>Completed the 2022 Regional GHG Inventory Study and provided the report and data to local government staff in the region.</li> <li>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.</li> <li>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).</li> <li>Obtained a Pacific Institute for Climate Solutions grant to hire a summer intern to support climate adaptation related research.</li> <li>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.</li> <li>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.</li> </ul>
	<b>2-5 Identify innovative actions to close the regional 2030 emissions reduction gap</b>	<ul style="list-style-type: none"> <li>Delivered a list of policies that have the potential to close the capital region emissions gap to the Board.</li> </ul>
	<b>2-6 Coordinate regional climate action, collaboration and capacity building among local governments and interested First Nations</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Conducted research and hosted an inter-municipal workshop on carbon budgeting.</li> <li>Supported local governments and First Nations in accessing climate projections and sea level data and participated in policy discussions.</li> <li>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.</li> <li>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.</li> </ul>

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

### Regional Climate Progress Indicators and Trends

	<b>Regional GHG emissions</b>	<ul style="list-style-type: none"> <li>1.86 million tonnes of CO2e (1% increase compared to 2020)</li> </ul>
	<b>Number of net new dwelling units in areas where more than 45% walk/bike/bus to work*</b>	<ul style="list-style-type: none"> <li>Currently, the region is not meeting the desired trend</li> </ul>

\*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
<b>Progress on Actions</b>		
	<b>3-1 Administer and track the new Green Fleet Policy</b>	<ul style="list-style-type: none"> <li>Continued to implement the Green Fleet Policy and order and acquire new electric vehicles (EVs).</li> <li>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.</li> </ul>
	<b>3-2 Develop electric vehicle (EV) adoption and right-sizing plan for the corporate fleet</b>	<ul style="list-style-type: none"> <li>Reviewed market availability of EVs on an ongoing basis.</li> <li>Investigated opportunities for telematics and fuel purchase management software to assist in fleet rightsizing.</li> <li>Maintained corporate e-bike fleet at headquarters and Regional Parks and completed staff training.</li> </ul>
	<b>3-3 Develop EV infrastructure plan for the corporate fleet</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<b>3-4 Investigate the feasibility of bio-based diesel supply and storage</b>	<ul style="list-style-type: none"> <li>Continued discussions with fuel providers regarding feasibility and to determine next steps.</li> </ul>
	<b>3-5 Develop a region-wide approach to transportation demand management and safety policy</b>	<ul style="list-style-type: none"> <li>Continued implementing a pilot for sustainable commute planning, working with large employers in the region (Seaspan and CFB Esquimalt).</li> <li>Continued Traffic Safety Commission work on safety education and initiatives, including the development and implementation of more standardized safety protocols and treatments.</li> <li>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.</li> </ul>
	<b>3-6 Collect and distribute transportation planning data regionally</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>
	<b>3-7 Accelerate infrastructure improvements that support active transportation</b>	<ul style="list-style-type: none"> <li>Supported Board advocacy for regional infrastructure delivery in relation to transportation, including increased funding for active travel, including improvements to the regional trail network.</li> <li>Continued implementation of the Regional Transportation Plan (RTP).</li> <li>Initiated the planning required to scope regional transportation governance options with a background report to the Transportation Committee.</li> <li>Initiated an engagement process with municipal councils, electoral areas and agency partners on regional transportation governance.</li> <li>Completed Salt Spring Island Active Transportation Plan.</li> <li>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.</li> <li>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.</li> <li>Accelerated the Regional Trails Widening and Lighting Project after securing additional resources through the CRD's 2024-2028 Financial Plan.</li> <li>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.</li> <li>Completed repairs to Regional Parks Selkirk Trestle.</li> <li>Completed Phase 4 of the E&amp;N Rail Trail.</li> </ul>

Status	Action	Update
	<b>3-8 Lead and support regional education programs focused on zero-emission mobility</b>	<ul style="list-style-type: none"> <li>• Maintained current portfolio of education programs, including Charge Your Ride, on the CRD website; provided outreach materials to community groups, as requested.</li> <li>• Co-hosted industry-focused workshops on EV charging infrastructure best practices for engineers, site hosts and property management professionals.</li> <li>• Continued with Ready, Step, Roll active school travel planning implementation, with five schools enrolled.</li> </ul>
	<b>3-9 Support acceleration of transit improvements and increased service</b>	<ul style="list-style-type: none"> <li>• Continued to participate in various technical and working groups to support the connection of the downtown to the Westshore through RapidBus delivery.</li> <li>• 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.</li> <li>• Explored the feasibility of mobility hub development in key locations across the region, in partnership with MoTI.</li> <li>• Continued discussion of long-term transportation alternatives in the context of transportation governance work (see action 3-7)</li> <li>• Established a provincial E&amp;N technical working group to determine the future of the E&amp;N Corridor.</li> <li>• Initiated concept planning for a transit bus storage location on Salt Spring Island.</li> </ul>
	<b>3-10 Support a public electric vehicle charging network and encourage uptake of zero-emission vehicles</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• Completed feasibility studies and engineering evaluations at nine high-use parks, to support prioritization for future installations.</li> <li>• Pursued engagement opportunities with EV infrastructure builders, site hosts, electricians and other key sectors as opportunities arose.</li> <li>• Responded to provincial engagement processes for input on the Clean Transportation Action Plan and the Medium Heavy Duty Zero Emission Vehicle consultation paper.</li> </ul>
	<b>3-11 Implement Regional EV Charging Roadmap</b>	<ul style="list-style-type: none"> <li>• See action 3-10.</li> <li>• Continued to pursue grant funding to install additional Level 2 EV chargers in the region.</li> <li>• Attended provincial Electric Vehicle Local Government Peer network meetings and shared learnings with municipal staff via the CRD Climate Action Inter-Municipal Working Group.</li> </ul>
	<b>3-12 Improve internet access on Southern Gulf Islands</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>

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

\*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
<b>Progress on Actions</b>		
	<b>4-1 Develop and implement a corporate Green Building Policy</b>	<ul style="list-style-type: none"> <li>Finalized and implemented the Corporate Green Building Policy.</li> </ul>
	<b>4-2 Develop and implement a Strategic Energy Management Plan</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>
	<b>4-3 Conduct energy studies for CRD facilities to identify priority emission reduction and energy efficiency projects</b>	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>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).</li> </ul>
	<b>4-4 Complete identified high impact retrofits to CRD facilities</b>	<ul style="list-style-type: none"> <li>Completed options analysis for the electrification of the CRD Headquarters HVAC system. Costing results have delayed implementation and staff are currently investigating funding models.</li> <li>Assessed building optimization opportunities at CRD Headquarters and implemented changes to reduce energy use and emissions.</li> <li>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.</li> </ul>
	<b>4-5 Pursue climate-friendly development and retrofits for CHRC and CRHD facilities</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Continued efforts to secure grant funding to support energy and GHG savings in housing facilities.</li> <li>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).</li> <li>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.</li> </ul>
	<b>4-6 Consider climate impacts in risk assessments and infrastructure upgrades</b>	<ul style="list-style-type: none"> <li>Continued to consider climate change impacts as part of the design criteria for water supply and wastewater systems.</li> <li>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.</li> <li>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.</li> </ul>
	<b>4-7 Implement a Regional Energy Retrofit Program</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Undertook two major marketing campaigns, organized multiple social media campaigns and attended eight community events (including two Victoria Home Shows) in support of recruitment.</li> <li>Continued to determine how to scale up the program and expand program uptake in the region.</li> <li>Supported expansion of the program to the Regional District of Nanaimo and the City of Vancouver in 2023.</li> <li>More than 3,000 heat pumps were installed in the region in 2023.</li> </ul>

Status	Action	Update
	<b>4-8 Develop, deliver and support building-related energy, emissions and water education</b>	<ul style="list-style-type: none"> <li>• See action 4-7.</li> <li>• 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).</li> <li>• 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.</li> <li>• 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.</li> <li>• Began updating the Climate Action To Go Kits, available through the region's libraries, and investigated developing thermal imaging kits.</li> <li>• 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.</li> </ul>
	<b>4-9 Support acceleration of regional building energy benchmarking and local government regulation approaches</b>	<ul style="list-style-type: none"> <li>• Continued participation in the Building Benchmark BC program, including five corporate buildings.</li> <li>• 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.</li> <li>• Participated in the Benchmarking Peer Leadership Group and shared information with partners clarifying local government authority related to building energy and carbon emissions reporting.</li> </ul>
	<b>4-10 Coordinate high-performance building policy support and capacity-building activities</b>	<ul style="list-style-type: none"> <li>• Continued to participate in the Step Code Local Government Peer network.</li> <li>• Supported municipalities in their considerations and adoptions of the Zero Carbon Step Code (ZCSC) and the transition to mandatory BC Energy Step Code requirements.</li> <li>• Led the province in being the first regional district to adopt Step 3 of ZCSC, Strong Carbon Performance, in electoral areas.</li> <li>• Participated in provincial engagement sessions related to forthcoming Highest Efficiency Equipment Standards.</li> </ul>
	<b>4-11 Collect and share data and research on building energy use and emissions</b>	<ul style="list-style-type: none"> <li>• See action 2-4.</li> <li>• Utilized the Inter-municipal Climate Action Working Group to share knowledge about regional best practices on embodied carbon.</li> </ul>
	<b>4-12 Promote green infrastructure and improved stormwater management approaches</b>	<ul style="list-style-type: none"> <li>• Hosted a local government workshop on green stormwater infrastructure (GSI) guidelines.</li> <li>• Hosted a series of Rural Stormwater Management workshops for the agricultural community.</li> <li>• Promoted GSI guidelines through the Inter-municipal Watershed Management Group.</li> <li>• Delivered workshops for residential raingarden installation for homeowners.</li> <li>• Continued to coordinate the Gorge Waterway Initiative.</li> </ul>
	<b>4-13 Understand climate impacts on groundwater resources in Juan de Fuca Electoral Area</b>	<ul style="list-style-type: none"> <li>• Initiated planning for potential groundwater study of Aquifer 606.</li> </ul>
	<b>4-14 Investigate regional renewable energy and storage potential</b>	<ul style="list-style-type: none"> <li>• Future action.</li> </ul>

Additional Action Plan Indicators		Regional Climate Progress Indicators and Trends			
	<b>Annual CRD corporate facilities GHG Emissions</b>	· 1,552 t CO2e (8.7% decrease compared to 2022)		<b>Regional Energy Retrofit Program implementation</b>	· 700 participants registered as of December 2023
	<b>Number of critical emissions reduction projects completed</b>	· 0*		<b>Annual FortisBC natural gas consumption numbers</b>	· 7,409,355 (2022) (3% increase compared to 2021)
	<b>Number of site energy audits completed</b>	· 11 (increase of 3 since 2022)		<b>Annual FortisBC natural gas connections</b>	· 60,260 (2022) (2% increase compared to 2021)
				<b>Regional GHG emissions from buildings</b>	· 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
<b>Progress on Actions</b>		
	<b>5-1 Integrate climate considerations into regional parks strategic and management planning</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Initiated a park management planning process and policy review, which includes investigating how climate change considerations can be embedded in park management plans.</li> <li>Continued to develop the Stewardship Plan to guide management and acquisition decisions that build resiliency in regional parks and trails, under a changing climate.</li> <li>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.</li> <li>Collaborated with Scia'new First Nation and T'Sou-ke First Nation on the protection of culturally significant sites.</li> <li>Collaborated with T'Sou-ke First Nation on ecological restoration planning for Ayum Creek Regional Park, in partnership with the Land Conservancy.</li> <li>Continued to work cooperatively with the WSÁNEĆ Leadership Council and its designates on the development of the Mount Work Regional Park Management Plan.</li> <li>Awarded the BC Recreation and Parks Association (BCRPA) Program Excellence Award for the Exploring Indigenous Perspectives Program.</li> </ul>
	<b>5-2 Monitor ecosystem health in the Greater Victoria Water Supply Area (GVWSA) and investigate expanding regionally</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Continued work on a risk mitigation strategy to reduce the potential impacts on water quality from areas burned by a wildfire.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>Completed annual overview flights to monitor forest health, which have been ongoing since 2007.</li> </ul>
	<b>5-3 Undertake climate adaptation initiatives to increase the resilience of the GVWSA</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Planned prescribed burn trial area in the Leech Water Supply Area, when conditions allow.</li> </ul>
	<b>5-4 Provide regional and local ecological data to support planning and policy efforts</b>	<ul style="list-style-type: none"> <li>Advanced efforts to implement a proposed Biodiversity Service Establishment Bylaw, which received 1st, 2nd and 3rd reading.</li> <li>Compiled existing datasets from the Province and initiated preliminary discussions with some municipal staff regarding collaboration.</li> <li>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.</li> <li>Worked to enable easier download and improve public accessibility to land cover classification data.</li> <li>Continued to support efforts to monitor stream flows in the region. Engaged a contractor to obtain high flow data to improve flow discharge curves.</li> <li>Participated in the provincial Local Government Biodiversity Forum and provided input on the draft Provincial Biodiversity Framework.</li> </ul>
	<b>5-5 Coordinate regional invasive species program</b>	<ul style="list-style-type: none"> <li>Fostered ongoing regional collaboration and information sharing through the Capital Region Invasive Species Partnership, which is chaired and coordinated by the CRD.</li> <li>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.</li> <li>Implemented public awareness and outreach campaigns regarding priority invasive species in the region.</li> <li>Contributed to the development of standard operating procedures for the mobile incineration unit.</li> <li>Managed the shared invasive species treatment and monitoring contractor and liaised with municipal partners to remove high-priority invasive plants in the region.</li> </ul>

Status	Action	Update
	<b>5-6 Support regional forest and urban tree programs</b>	<ul style="list-style-type: none"> <li>Updated regional watershed land cover maps showing tree canopy and impervious cover change over time.</li> <li>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.</li> </ul>
	<b>5-7 Support Indigenous-led monitoring and restoration programs</b>	<ul style="list-style-type: none"> <li>Discussion about Guardian Programs with multiple First Nations are ongoing through engagement on Phase 1 of the Regional Parks Land Acquisition Strategy.</li> <li>Involved First Nations' cultural workers, Guardians and archaeologists in projects to monitor and help mitigate impacts on culturally significant areas during land altering works.</li> <li>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.</li> <li>Engaged T'Sou-ke, Tsawout and Songhees Nations marine and Guardian staff in egg addling and moult surveys as part of the new Regional Goose Management Service.</li> <li>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.</li> <li>Assisted Tsawout First Nation after they experienced a sewage spill into Tetayut Creek.</li> <li>Partnered with WSÁNEĆ Leadership Council and Raincoast Conservation Society on the Healthy Waters Initiative, which includes a role for WSÁNEĆ Guardians.</li> <li>Engaged some First Nations to offer support regarding fats, oils, grease and obstructive waste in sewer systems.</li> <li>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.</li> </ul>
	<b>5-8 Support local food and agriculture planning and programs</b>	<ul style="list-style-type: none"> <li>Progressed work to support a Regional Foodlands Trust. Obtained initial support from the CRD Board and drafted the service bylaw for future consideration.</li> <li>Obtained permission for the use of Bear Hill from Regional Parks and initiated a process to identify potential site operators.</li> <li>Continued engagement with the agricultural community.</li> </ul>
	<b>5-9 Integrate climate impacts and solutions into environmental education and outreach campaigns</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Hosted and promoted regional participation in the Canada-wide Nature in the City challenge supporting biodiversity awareness.</li> <li>Promoted stewardship stories from noted local stewards in the region during "Make a Difference" week.</li> <li>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.</li> </ul>

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



## 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
<b>Progress on Actions</b>		
	<b>6-1 Implement the Solid Waste Management Plan</b>	<ul style="list-style-type: none"> <li>Received approval from the Ministry of Environment &amp; Climate Change Strategy on the Solid Waste Management Plan.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ul>
	<b>6-2 Develop and deliver education programs to promote a circular economy, zero waste and the 3 Rs</b>	<ul style="list-style-type: none"> <li>Continued to provide funding under the Rethink Waste Community Grant, supporting 22 projects with approximately \$60,000 in funds.</li> <li>Continued to distribute the Rethink Waste Newsletter.</li> <li>Produced and promoted four videos on Rethink Waste Community Grant recipients, to highlight how individuals and organizations are coming together to reduce waste.</li> <li>Responded to 19,597 Infoline inquiries via phone calls and emails.</li> <li>Continued participation in the Coast Waste Management Association's Educators &amp; Communicators Working Group.</li> <li>Continued sponsorship of Ecostar awards.</li> <li>Refreshed and updated the solid waste web pages, including adding a dedicated education page.</li> <li>Broadened education resources for people living in multi-family buildings, as well as businesses.</li> <li>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.</li> <li>Continued to deliver education workshops and landfill tours.</li> <li>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.</li> <li>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.</li> </ul>
	<b>6-3 Support education and engagement on waste management to be delivered by and for First Nations communities</b>	<ul style="list-style-type: none"> <li>Continued to have regular meetings with the W̱SÁNEĆ Leadership Council and the Capital Regional District Solid Waste Working Group.</li> <li>Continued discussions with Pacheedaht First Nation and Port Renfrew on future mutually beneficial long-term waste management for the broader Port Renfrew community.</li> </ul>
	<b>6-4 Continue to maximize and optimize the capture of landfill gas for beneficial use</b>	<ul style="list-style-type: none"> <li>Produced approximately 7,939 KW/h (7.9 megawatts) of green power from landfill gas, an increase from 1.6 megawatts in 2022.*</li> <li>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.</li> <li>Implemented strategies to improve gas collection and mitigate fugitive emissions.</li> <li>Continued annual installation of landfill gas collection infrastructure.</li> <li>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.</li> </ul>
	<b>6-5 Consider climate change impacts in liquid waste management</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>

**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.*





**Capital Regional District**

625 Fisgard Street  
Victoria, BC V8W 2S6  
250.360.3000

[www.crd.bc.ca](http://www.crd.bc.ca)  
Twitter: @crd\_bc  
Facebook: Capital Regional District



# 2023 Climate Action Progress Report

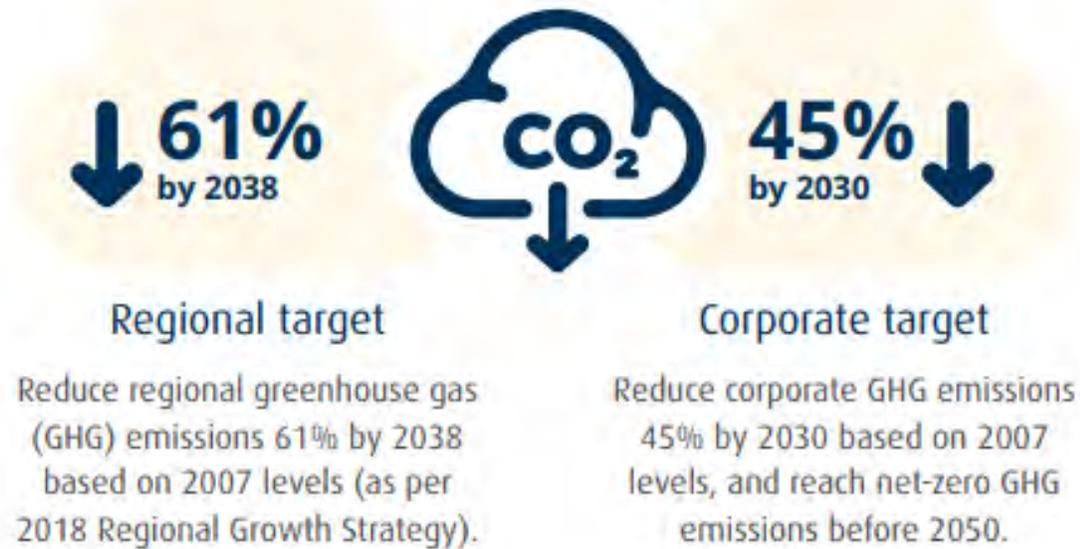
Presented to CRD Environmental Services Committee  
April 17, 2024

# Agenda

1. Climate Action Strategy
2. Current Status
3. Progress Summary
4. Report Card
5. Looking ahead



# Climate Action Strategy



Climate-focused decision making

Sustainable land use, planning and preparedness

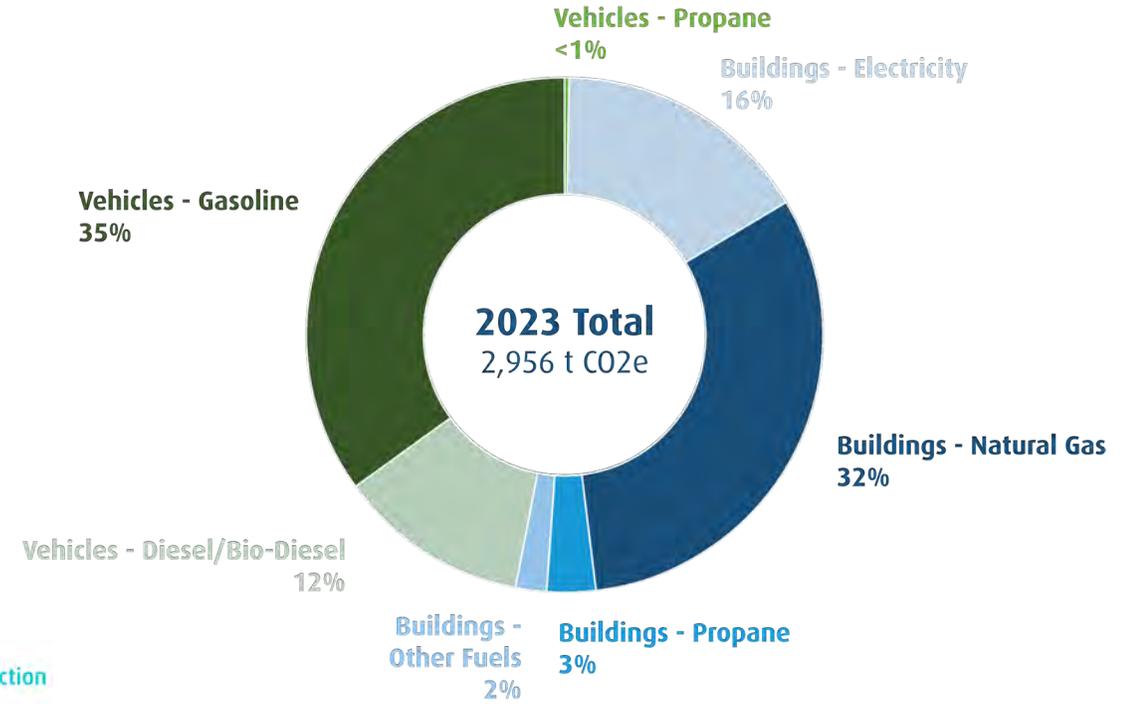
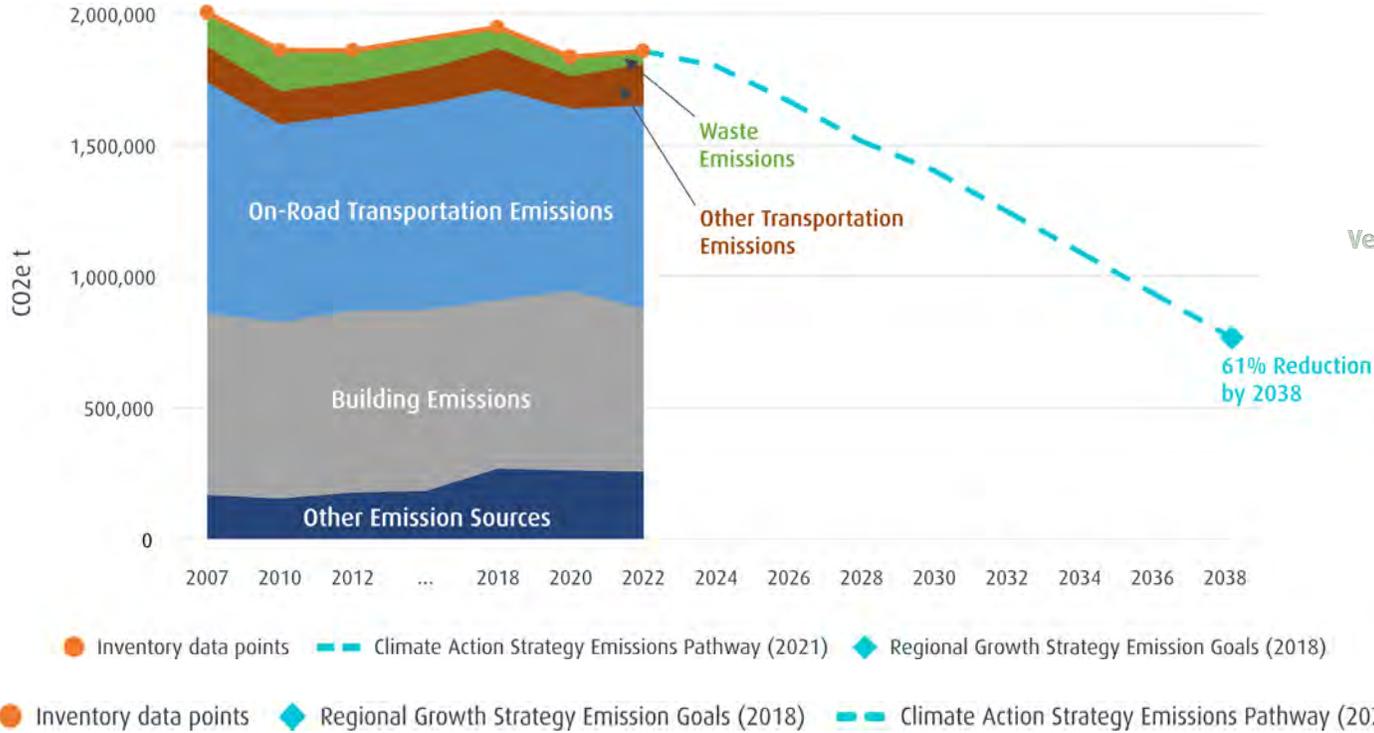
Low-carbon mobility

Low-carbon and resilient buildings and infrastructure

Resilient and abundant nature, ecosystems and food systems

Minimized waste

# Current Status



# Summary 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 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



## 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



## Progress Summary

- Approved and implemented a new corporate green building policy
- Adopted an internal carbon price policy (\$170 per tonne)
- Complete corporate greenhouse gas inventory (GHG) and improved energy management.
- Developed and provided a variety of staff training sessions
- Maintained Climate Action Reserve Fund to support several corporate climate initiatives
- Attended the 2023 Cultural Heritage Climate Change Workshop where Indigenous perspectives on heritage conservation were shared



## 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



### Progress Summary

- Undertook the Capital Region Extreme Heat Information Portal project
- Partnered with the University of Victoria to research health impacts of extreme heat using an equity lens.
- Completed Electoral Area Community Wildfire Resiliency Plans and shared with residents
- Completed the 2022 Regional GHG Inventory Study
- Successfully applied for the UBCM Complete Communities grant to initiate a Growth and Mobility Study.
- Hosted an inter-municipal workshop on carbon budgeting
- Continued to facilitate and administer several inter-municipal networks that serve to coordinate climate action and disseminate resources



## 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



## Progress Summary

- Continued implementation of the corporate Green Fleet Policy
- Installed 54 EV chargers at 13 CRD sites
- Developed public EV charger installation guidelines
- Updated the Regional Cycling Network framework and developed a planning tool to support a consistent cycling network across jurisdictions
- Administered the Origin Destination Household Travel Survey
- Accelerated the Regional Trails Widening and Lighting Project
- Completed repairs to Regional Parks Selkirk Trestle and Phase 4 of the E&N Rail Trail
- Completed Salt Spring Island Active Transportation Plan
- Supported the connection of downtown to the Westshore through RapidBus delivery and the Ministry of Transportation and Infrastructure to improve transit service in suburban and rural areas



## 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



## Progress Summary

- Finalized and began implementation of the Corporate Green Building policy
- Completed energy audits and net-zero energy pathway feasibility studies at the CRD's three recreation centres
- Registered nearly 700 residents with the Home Energy Navigator and supported ~125-150 heat pump retrofits
- Supported and engaged municipalities on Zero Carbon Step Code (ZCSC) and energy and carbon emission reporting requirements for large buildings
- Became the first regional district in BC to adopt Step 3 of ZCSC in electoral areas
- Supported climate leadership training workshops for students through the BC Sustainable Energy Association
- Promoted green stormwater management to local governments and residents via workshops



## 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



## 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
- Advanced several initiatives to assess climate change impacts on ecosystem health and water supply in the GVWSA
- Provided various regional and local ecological data sets to support planning and policy efforts
- Continued to support efforts to monitor stream flows in the region
- Continued to coordinate the Capital Region Invasive Species Partnership
- Advanced work on a proposed Regional Foodlands Trust, obtaining initial support from the Board
- Continued to collaborate with First Nations on park management planning, the protection of culturally significant sites and ecological restoration planning



## 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.



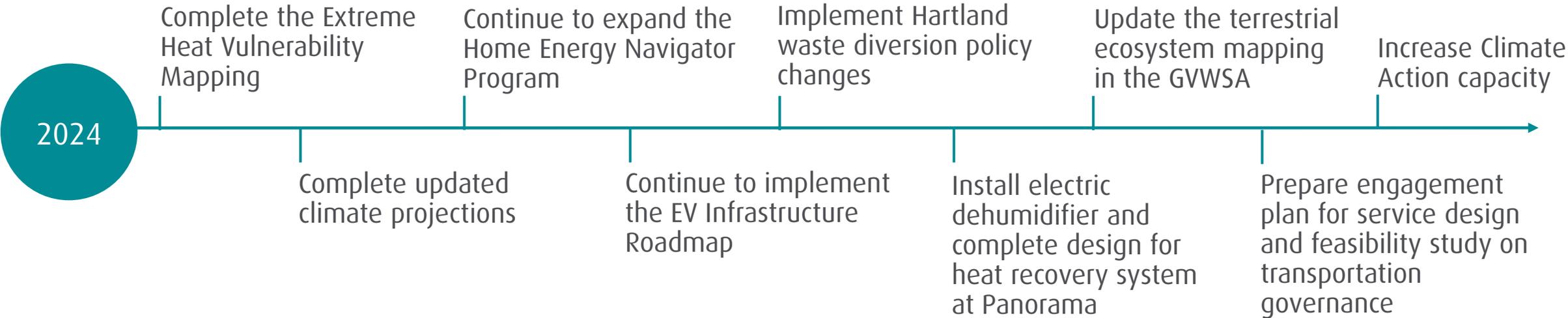
Overall Action Status:  
Opportunity for  
Improvement

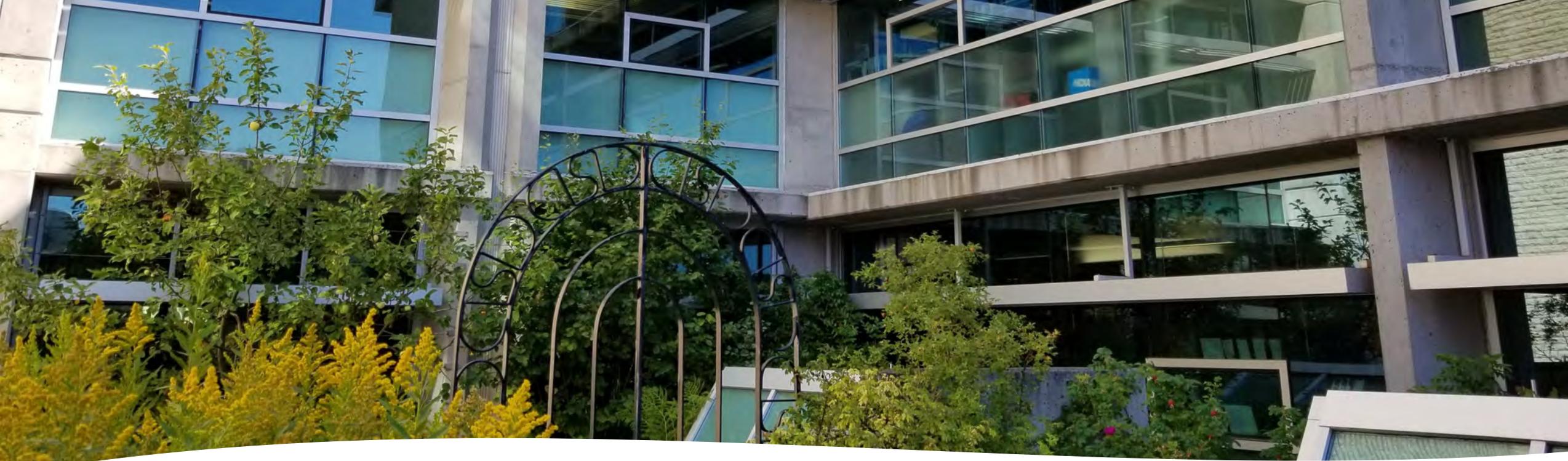


## Progress Summary

- Received approval from the Ministry of Environment & Climate Change Strategy on the Solid Waste Management Plan
- Received Board approval for policy changes to increase waste diversion
- Initiated procurement for a Material Diversion Transfer Station, which will facilitate the diversion of up to 40,500 tonnes of waste per year
- Implemented the Multi-family Dwelling Waste Diversion Project, which promoted recycling education to 50 buildings
- Advanced several education programs
- Supported 22 projects with approximately \$60,000 in funds through the Rethink Waste Community Grant
- Initiated a jurisdictional scan of municipal solid waste processing technologies, including investigating incineration with energy recovery
- Produced approximately 7.9 megawatts of green power from landfill gas, an increase from 1.6 megawatts in 2022

# Looking Ahead – 2024 Initiatives





## Thank you

nelliott@crd.bc.ca | 250.360.3048



@crdvictoria



Capital Regional District



CRDVictoria



crd.bc.ca

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, APRIL 17, 2024**

---

**SUBJECT**     **Biosolids Literature Review – Update**

**ISSUE SUMMARY**

To provide the Environmental Services Committee with an update on the proposal for an independent academic review of the risks and benefits of biosolids land application.

**BACKGROUND**

At the August 9, 2023 Capital Regional District (CRD) Board meeting, staff were directed to *report back with a proposal that CRD Environment Service fund University of Victoria or other suitable independent academic institution to prepare a review: a) of available literature, to determine whether there are validated examples and/or peer reviewed papers assessing the risks and benefits of the application of biosolids on environmental and human health, and b) based on this and on The Precautionary Principle, whether CRD may have a legal liability for such application.*

At the October 18, 2023 Environmental Services Committee meeting, staff presented a proposal for an academic institution to conduct a literature review. At that time, the provincial government's Technical Working Group (TWG) was expected to issue a report on its review of the *Organic Matter Recycling Regulation* in late 2023. Given the upcoming report, the committee passed the following motion: *That the committee postpone discussion on this item until the January 2024 committee meeting.* Staff have been receiving semi-regular status updates from the TWG Secretariat and other provincial staff.

The TWG consists of academics, consulting practitioners, and representatives from federal, various provincial and local governments. The TWG is effectively undertaking the same literature review exercise that the CRD Board requested. The final TWG meeting was held at the end of September 2023 and a summary report of its findings and recommendations was initially expected by the end of November 2023 at the earliest. At the February 14, 2024 CRD Board meeting, staff reported that the TWG report was delayed "to the end of Q1 2024."

At the March 13, 2024 Board meeting, staff reported that the report had been delayed again until Q2 2024. Staff were then directed to reinitiate the process of authorizing the literature review by the following motion: *Given delays to provincial reporting on Organic Matter Recycling Regulation, and the Board's previous direction to initiate an academic analysis, that the Board direct staff to move forward with a third-party academic review of the scientific literature on the uses and impacts of biosolids.*

Staff have reconfirmed the interest of only one of the three independent academic institutions initially willing to undertake the literature review, which is the Toronto Metropolitan University (TMU) Department of Chemistry and Biology, led by Dr. Lynda McCarthy. The intended lead author from University of Victoria Department of Engineering and Computer Science (civil engineering) has since gone on leave and the author from The University of Washington College of the Environment has not yet responded. The TMU team has a confirmed lead author who will rely on support from various co-authors.

Any literature review is expected to take at least two to three months to organize and complete. The review would be guided by the Terms of Reference (Appendix A).

**ALTERNATIVES**

*Alternative 1*

The Environmental Services Committee recommends to the CRD Board:  
That staff be directed to proceed with an academic review of the risks and benefits of biosolids land application with the team from Toronto Metropolitan University, with a budget not to exceed \$40,000.

*Alternative 2*

The Environmental Services Committee recommends to the CRD Board:  
That an academic review of the risks and benefits of biosolids land application be reconsidered after the provincial technical working group has completed its review of Organic Matter Recycling Regulation and released its report.

**IMPLICATIONS**

*Financial Implications*

Costs for the proposed biosolids literature review will be approximately \$40,000 and can be covered by existing Core Area wastewater and biosolids budgets.

**CONCLUSION**

The CRD Board directed staff to reinstate consideration of an additional literature review of biosolids land application, given the recent delays in reports supporting the current BC Organic Matter Recycling Regulation review. Staff have reconfirmed that a knowledgeable, independent academic institution is available to complete this review. The review is expected to take at least three months to administer and complete.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:  
That staff be directed to proceed with an academic review of the risks and benefits of biosolids land application with the team from Toronto Metropolitan University, with a budget not to exceed \$40,000.

Submitted by:	Glenn Harris, Ph.D., R.P. Bio., Senior Manager, Environmental Protection
Concurrence:	Larisa Hutcheson, P. Eng., Acting General Manager, Parks & Environmental Services
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer

**ATTACHMENT**

Appendix A: Biosolids Literature Review – Terms of Reference

**BIOSOLIDS LITERATURE REVIEW****TERMS OF REFERENCE****April 2024**

---

**BACKGROUND**

In 2011, the Capital Regional District (CRD) Board passed a resolution to ban the land application of biosolids from CRD facilities primarily due to concerns about the potential human and environmental risks of contaminants therein. This ban ended a small CRD program that distributed lime-stabilized Class A biosolids (as defined under the BC Organic Matter Recycling Regulations [OMRR]) from a sub-regional wastewater treatment plant to the general public and local landscaping businesses. In 2020, the CRD commissioned a new wastewater treatment plant that substantially increased the volume of Class A biosolids produced annually to approximately 3,600 tonnes. Biosolids management options were subsequently introduced.

As per BC Ministry of Environment and Climate Change Strategy (ENV) expectations, Canadian Council of Ministers of the Environment guidance, and CRD commitments under its Core Area Liquid Waste Management Plan, the CRD is required to beneficially use all biosolids output. In BC, biosolids land application is regulated under OMRR. A long-term biosolids management plan is currently under development and is due to ENV by June 2024.

Currently, CRD Class A biosolids are being managed under a short-term biosolids management plan (2020-2025), with the primary beneficial use options being incineration as an alternative fuel in a cement manufacturing plant in Richmond, BC, and integration with landfill cover systems as contingencies. When neither of these options are available, landfilling biosolids at the regional landfill has been the only alternative. However, in 2023, given significant operational and logistical challenges with the short-term options, the CRD Board amended its position to allow for limited non-agricultural land application of biosolids as a contingency option. The CRD has secured the use of biosolids for industrial land reclamation at a quarry near Cassidy, BC. CRD staff continue to seek additional short-term beneficial use contingency options that meet Board limits, in order to limit or avoid landfilling of biosolids when the other options are not available.

As part of development of the CRD's long-term biosolids management plan, the CRD has external technical advice that recommends that land application be included in a portfolio of options to ensure program redundancy and resiliency. Land application is typically the most reliable and cost-effective beneficial use option. However, there continue to be concerns raised about the potential human health and environmental risks associated with biosolids land application.

In response to these concerns, raised both in the CRD and elsewhere in the province and around the world, ENV convened a technical working group to review the OMRR to ensure it remains protective of human health and the environment. A summary report is expected in Q2 2024. In the meantime, the CRD Board is seeking its own independent literature review on the risks and benefits of biosolids land application.

**PURPOSE**

The purpose of the literature review is to provide the Board and general public a summary of the human health and environmental risks, and benefits of the land application of CRD Class A biosolids.

## **AUTHOR(S) QUALIFICATIONS**

The author(s) undertaking the literature review must include at least one tenured faculty member from an independent academic institution(s) with expertise and experience in assessing human health and environmental risk, knowledge of biosolids land application practices, and an understanding of contaminant fate and impact. Additional co-authors with relevant expertise can be included if a team approach is taken.

## **SCOPE**

The literature review must:

- Build on previous literature reviews through a comprehensive scan of up-to-date primary scientific literature and other relevant studies.
- Consider environmental conditions typical of BC's south coastal region.
- Assess the human health and environmental risks of legacy contaminants, and those of emerging concern, that are potentially found in biosolids.
- Summarize contaminant concentrations in biosolids relative to levels of exposure in general society.
- Discuss the limitations of extrapolating lab-based toxicity testing to observations in the environment.
- Summarize areas of uncertainty in biosolids land application risk, including a summary of relevant techniques for evaluating and addressing uncertainty.
- Summarize biosolids land application techniques that can reduce risk and/or address uncertainty.
- Briefly summarize risks and concerns that have resulted in land application bans elsewhere.
- Briefly summarize risks and benefits of longstanding land application programs elsewhere.
- Assess the overall risks of biosolids land application considering the intent of the Precautionary Principle (Rio Declaration, 1992 and subsequent derivations).

The CRD will provide the author(s) with a summary of the known contaminant concentrations in CRD Class A biosolids and a list of the potential land application opportunities that have been identified as the long-term biosolids management plan is being developed.

The literature review author(s) are not expected to undertake new scientific experiments as part of this project.

## **DELIVERABLES**

The literature review must provide a comprehensive and up-to-date summary of the human health and environmental risks, and benefits, of biosolids land application. It must include an executive summary and/or conclusions section that is understandable by a non-technical general public.

## **TIMELINE**

The literature review must be completed within three months of project commencement.

## **BUDGET**

The literature review will have a maximum budget of \$40,000.



**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE  
MEETING OF WEDNESDAY, APRIL 17, 2024**

---

**SUBJECT**     **Amendment to Environmental Resource Management Capital Plan**

**ISSUE SUMMARY**

To seek an amendment to the Environmental Resource Management (ERM) 2024 capital budget.

**BACKGROUND**

Several developments over recent months have resulted in the need to amend the ERM capital budget. In 2023, the Harland Landfill completed its multi-year airspace excavation campaign to prepare for liner construction of Phase 2, Cells 4, 5 & 6 to handle the region's waste to 2050. Going forward, the annual aggregate capital budget will be used to process the blast rock into an appropriate aggregate for landfilling operations and site capital projects. Given the number of projects under construction in 2024 and a higher operational aggregate consumption as the final contours of Cell 3 are reached, the site requires an additional 20,000 m<sup>3</sup> (\$480,000) of aggregate production in 2024. This additional quantity will ensure that operations can continue until July 2025, when the next landfill operations contractor will mobilize onsite to produce aggregate.

A capital project for the design and construction of a new Kitchen Scrap Transfer Station on the north side of the landfill has been under development for several years. Completion of this transfer station is required at the same time as Cell 4 completion (October 2024). Detailed design has been completed, resulting in an updated project estimate of \$1.5M versus the initial estimate of \$700K. The cost is higher than anticipated due to escalation in material/equipment costs, and the station requires additional scope (civil, electrical and mechanical) that was not included in the conceptual design during the 2023 budget process. Staff are planning to tender the project in April 2024 to receive competitive construction bids. To ensure the contract can be awarded and construction is complete prior to Cell 4 filling, additional funds are required to award a contract.

**ALTERNATIVES**

*Alternative 1*

The Environmental Services Committee recommends to the Capital Regional District Board:

1. That an advancement of \$500K from the 2025 Aggregate capital budget to the 2024 capital budget be approved; and
2. That the budget for the 2024 capital project Kitchen Scraps Transfer Station Relocation be increased by \$800K to ensure a contract can be awarded at the completion of the procurement process.

*Alternative 2*

That staff be requested to bring further information back to the committee.

**IMPLICATIONS**

*Financial Implications*

An amendment to the 2024 ERM capital budget is proposed for two currently active projects. The aggregate usage in late 2023 and early 2024 is higher than planned for several reasons, thereby

requiring additional production in 2024. To ensure an uninterrupted supply of aggregate is available, it is proposed to advance \$500K from the aggregate production budget in the approved 2025 capital plan to the aggregate production budget in the 2024 capital plan. For the 2024 capital project Hartland Kitchen Scraps Transfer Station Relocation, an \$800K increase in the budget is required, bringing the total project budget to \$1.5M. \$650K of the increase will be from the Capital Reserve Fund and \$150K from the Hartland Capital on-hand account.

**CONCLUSION**

Increased operational and project aggregate requirements at Hartland landfill require additional aggregate production of 20,000m<sup>3</sup> to ensure there is sufficient aggregate until the next landfill operations contractor mobilizes onsite (July 2025). An advancement of \$500K from the 2025 aggregate budget to the 2024 budget is necessary. In addition, capital project Hartland Kitchen Scrap Transfer Station Relocation requires an increase from \$700K to \$1.5M to ensure a contract can be awarded upon completion of public tendering.

**RECOMMENDATION**

The Environmental Services Committee recommends to the Capital Regional District Board:

1. That an advancement of \$500K from the 2025 Aggregate capital budget to the 2024 capital budget be approved; and
2. That the budget for the 2024 capital project Kitchen Scraps Transfer Station Relocation be increased by \$800K to ensure a contract can be awarded at the completion of the procurement process.

Submitted by:	Stephen May, P.Eng., Senior Manager, Facilities Management & Engineering Services
Concurrence:	Larisa Hutcheson, P.Eng., Acting General Manager, Parks & Environmental Services
Concurrence:	Rianna Lachance, BCom, CPA, CA, Sr. Mgr., Financial Services/Deputy CFO
Concurrence:	Ted Robbins, B. Sc., C. Tech., Chief Administrative Officer



Making a difference...together

File: 0360-20  
Climate Action Task Force

## Capital Regional District

### Meeting Minutes

### Climate Action Inter-Municipal Task Force (IMTF)

---

Friday, March 15, 2024

9:30 AM

Room 129/MS Teams  
625 Fisgard St.  
Victoria, BC V8W 1R7

---

Present:

Councillor D. Grove (Colwood), Councillor M. Wagner (Langford), Councillor A. MacKenzie (View Royal), Councillor C. Smart (Oak Bay), S. Duck (Sidney)

Electronic Participation: Councillor S. Gray (Metchosin), Councillor T. St-Pierre (Sooke), Director G. Holman (SSI EA), Councillor M. Gardiner (Victoria), Councillor S. Riddell (Central Saanich), J. Brownoff (Saanich), A. Baird (Highlands)

Staff: N. Elliott (Manager, Climate Action Programs), M. Rowe (Climate Action Program Assistant; Recorder), M. Greeno (Community Energy Specialist)

Regrets: Mayor P. Jones (North Saanich), Councillor D. Cavens (Esquimalt), Director A. Wickheim (JdF EA), Director P. Brent (SGI EA)

The meeting was called to order at 9:30 am.

#### 1. Welcome and Introductions

- A round of introductions was then made by Task Force members and CRD staff.

#### 2. Territorial Acknowledgement

- N. Elliott provided a Territorial Acknowledgment.

#### 3. Approval of Agenda

- Agenda for the [March 15, 2024](#) Climate Action Inter-Municipal Task Force meeting.

#### 4. Adoption of Minutes

- Minutes from the [December 1, 2023](#) Climate Action Inter-Municipal Task Force meeting.

**MOVED by D. Grove, SECONDED by A. Baird**

**That the minutes of the December 1, 2023 Climate Action Inter-Municipal Task Force meeting be adopted as circulated.**

**CARRIED**

Actions:

- a) CRD staff to attach the minutes from the previous Task Force meeting with future meeting invites, in addition to linking to the SharePoint collaboration site.

## 5. Climate Action Program Updates

- N. Elliott provided background information and updates for the CRD Climate Action Service, including:
  - Heat vulnerability mapping and updated regional climate projections reports to be presented to the Environmental Services Committee (ESC) on March 20 and the CRD Board on April 10, BC Hydro/CRD Memorandum of Understanding related to public electric vehicle (EV) chargers (DCFCs and DCFC/level 2 combo) and community hub sites, Zero Carbon Step Code policy updates, Home Energy Navigator regional building retrofit program spring/summer community outreach, energy benchmarking/Energy and Carbon Emissions Reporting, recent ESC and CRD Board meeting motions and discussions, including transportation governance, GHG emissions reduction policy mapping and analysis, and approval of the budget amendment for funding climate action community engagement programming.

Actions:

- b) CRD staff to connect with Oak Bay staff regarding Zero Carbon Step Code motion.
- c) CRD staff to investigate CRD Board decision to explore gasification of biosolids and determine how climate implications are to be considered.

## 6. Presentation: Vancouver Island and Coastal Communities Climate Leadership (VICC-CL) Overview

- *Will Cole-Hamilton, Courtenay City Councillor, Director of the Comox Valley Regional District and Co-Chair of the VICC-CL provided an overview of VICC-CL to Task Force members, including ways to connect and get involved.*
  - For more information see VICC-CLP's report [Territorial Analysis and a Survey of Local Government Priorities for Climate Action: Vancouver Island and Coastal Communities \(2020\)](#) and the [outcome reports](#) from previous summits.
  - VICC-CL intends to host a meet-up during the AVICC Convention, April 12-14. CRD staff will forward the invite to Task Force members once the details are confirmed.
  - VICC-CL virtual symposium scheduled for May 6 and 13, from 8:30 am-12:30 pm. Staff and elected officials are invited. Aim is to identify priorities for Vancouver Island.

Action:

- d) CRD staff to forward VICC-CL meet-up invite to Task Force members.

## 7. Emerging Topics – RUSH Initiative

- N. Elliott provided a brief overview of the [RUSH Initiative](#):
  - A collaborative, interactive mapping site intended to support municipal planning and increase public education and awareness. Anne-Marie Daniel (UVic), the creator of RUSH, has been presenting to local councils and community groups, some Task Force members have already seen her presentation. CRD staff have

scheduled a meeting with Anne-Marie in April for our inter-municipal staff working group and will invite her to present at a future Task Force meeting as well.

Action:

- e) CRD staff to request a RUSH Initiative presentation for a future Task Force meeting.

**8. Municipal Roundtable – Open Discussion**

- Attendees provided brief updates regarding current projects and areas of interest in their respective municipalities and electoral areas. Discussion related to limits to growth as being explored by Tofino, securing grants for climate resilience initiatives, promoting and supporting active and public transportation initiatives, Zero Carbon Step Code policy and council presentations, deconstruction bylaws, staff capacity increases, Sue Big Oil Campaign considerations, public education and engagement, and fleet and equipment electrification.

**9. Task Force SharePoint Site**

- Members were asked to contact Megan Rowe, Climate Action Program Assistant at [mrowe@crd.bc.ca](mailto:mrowe@crd.bc.ca) if they had any issues accessing or uploading documents to the [collaboration site](#).

Action:

- f) Members to utilize Task Force SharePoint site to share key documents and resources between members.

**10. Adjournment**

- Meeting adjourned at 11:50 am.

New Actions	Responsibility	Timeline
CRD staff to attach the minutes from the previous meeting with future meeting invites, in addition to linking to the SharePoint collaboration site.	Staff	Ongoing
CRD staff to connect with Oak Bay staff regarding Zero Carbon Step Code motion.	Staff	ASAP
CRD staff to investigate CRD Board decision to explore gasification of biosolids and determine how climate implications are to be considered.	Staff	ASAP
CRD staff to forward the VICC-CL meet-up invite to Task Force members prior to the AVICC convention.	Staff	ASAP
CRD staff to request a RUSH Initiative presentation for a future Task Force meeting.	Staff	By next meeting.
Members to utilize Task Force SharePoint site to share key documents and resources between members. If you need assistance accessing the collaborative site, please contact staff.	IMTF	Ongoing
Members to provide future meeting topic requests to Manager, Climate Action Programs.	IMTF	Ongoing



**TECHNICAL AND COMMUNITY ADVISORY COMMITTEE  
CORE AREA WASTEWATER TREATMENT  
Meeting Minutes**

---

**Thursday, March 14, 2024**

**1:00 pm**

**Online only (MS Teams)**

---

PRESENT: B. Donald, C. Valeo, D. Kobayashi (Acting Chair), D. Monsour, G. Gillespie, I. Leung, J. Andrews, J. Clary, J. Paul, K. Wilson, L. Hatch, M. Engelsjord, S. Rennick, W. Pugh

STAFF: D. Green, G. Harris, L. Nickerson (Recorder), P. Kickham, T. Urquhart

GUESTS: D. Liddy, K. Hamilton, R. Beise

REGRETS: C. Counce, C. Coleman (Chair), C. Remington, J. Roe

Electronic Participation Only

---

Acting Chair Kobayashi called the meeting to order at 1:01 pm.

**1. Territorial Acknowledgement**

Acting Chair Kobayashi provided a Territorial Acknowledgement.

**2. Approval of Agenda**

Agenda for the [March 14, 2024](#) Technical and Community Advisory Committee meeting:

**MOVED by G. Gillispie and SECONDED by W. Pugh  
That the agenda be approved as circulated.  
CARRIED**

**3. Adoption of Minutes of February 13, 2024**

Minutes from the [February 13, 2024](#) Technical and Community Advisory Committee meeting.

**MOVED by G. Gillispie and SECONDED by W. Pugh  
That the minutes of the February 13, 2024 Technical and Community  
Advisory Committee be adopted as circulated.  
CARRIED**

**4. Chair's Remarks**

Welcome to S. Rennick representing Oak Bay Engineering & Public Works.

**5. Biosolids Management Options Discussion - P. Kickham, CRD**

- a. Thermal, Advanced Thermal and Land Application**
- b. Portfolio Approach**

P. Kickham reviewed the available beneficial use options and reiterated the technical consultant's recommendation to develop a portfolio of several options to ensure operational



resiliency and redundancy to the group (see [Attachment A](#)). The group asked questions and P. Kickham (CRD), G. Harris (CRD) and D. Liddy (GHD) provided answers.

## 6. Biosolids Management Options Ranking – D. Green, CRD

The TCAC members participated in an anonymous online voting survey to:

- indicate their level of support for each of the seven biosolids management options, and
- provide comments on each option.

The members then discussed the averaged option scores and all comments provided. See [Attachment B](#) for the summarized results of this survey.

CRD staff will collate these survey results with the questions and comments made by the TCAC to establish the portfolio of options that will be presented to the CRD Board in the draft Long-Term Biosolids Management Plan.

## 7. Update on Public Engagement – K. Hamilton, Tavola Strategy Group

K. Hamilton gave an update on the biosolids public consultation process. She informed the group that the public online survey on the CRD [Get Involved](#) website was open for approximately two months and closed on March 6, 2024. During that time, the [Get Involved](#) website had about 3,000 visitors including 580 engaged visitors who either completed the survey or submitted questions to the project team. 569 visitors completed this survey and 13 questions were submitted with answers being posted on the website. Almost all engaged visitors viewed the [FAQ page](#), which was the most visited page on the site. Over 100 people downloaded documents and over 200 documents were downloaded. The most popular downloaded document was the [GHD technical report](#).

A representative survey (in parallel with the voluntary survey on the [Get Involved](#) website) was done by Ipsos Reid between March 1-11, 2024. 516 residents participated in this survey with representation from all municipalities and associated demographics in the Capital Region.

A Virtual Open House on Harnessing the Benefits of Biosolids was held on February 20, 2024, facilitated by Jim Beatty, Communications Consultant. There were 90 RSVP's with 59 active participants and approximately 150 questions were asked and answered by the project team. The Open House was over two hours and the recording can be viewed [here](#).

Staff will continue to respond to questions received through the [Get Involved](#) website and [biosolids@crd.bc.ca](mailto:biosolids@crd.bc.ca) email. A thorough analysis and results from both surveys, the open house and questions asked will be provided in a "What We Heard" report that will be made available to the TCAC, CRD Board and the public.

## 8. Other Business

There was no other business.

## 9. Next meeting:

The next TCAC meeting will be scheduled in April – date to be determined.



Making a difference...together

## 10. Closing Comments – G. Harris

CRD staff will draft the Long-Term Biosolids Management Plan (the “Plan”) to be presented at the April 10, 2024 CRD Board meeting with a recommendation that the Plan be referred back to the TCAC for review and discussion. The Plan will be posted for public consideration with the “What We Heard” report from Tavola Strategy Group and information regarding First Nations consultation. A final package compiling information from all sources will then be provided to the CRD Board for discussion at their May 8, 2024 meeting where the Board will decide to adopt or amend the Plan and provide CRD staff with direction to meet the provincial obligations under the Ministry of Environment and Climate Change Strategy.

## 11. Adjournment

The meeting was adjourned at 2:36 pm.

**MOVED by G. Gillispie and SECONDED by W. Pugh  
That the Technical and Community Advisory Committee meeting be adjourned.  
CARRIED**