

**REPORT TO ENVIRONMENTAL SERVICES COMMITTEE
MEETING OF WEDNESDAY, OCTOBER 21, 2020**

SUBJECT **2019-2022 Climate Action & Environmental Stewardship Service Planning**

ISSUE SUMMARY

To provide the Environmental Services Committee with an overview of relevant initiatives undertaken by the Environmental Protection division in 2020 and planned for 2021 to deliver on approved Board Priorities and the Corporate Plan.

BACKGROUND

The Capital Regional District (CRD) Board completed its strategic planning early in 2019 and approved the CRD Board Strategic Priorities 2019-2022.

The four priorities are:

1. Community Wellbeing – Transportation & Housing
2. Climate Action & Environmental Stewardship
3. First Nations Reconciliation
4. Advocacy, Governance & Accountability

The priorities were confirmed at the annual check-in on May 13, 2020.

The 2019-2022 CRD Corporate Plan is aligned to the Board direction. It highlights the initiatives the CRD needs to deliver over the Board's four-year term to address the region's most important needs. The Corporate Plan identified 14 of initiatives under Climate Action & Adaptation, which fall under the Environmental Services Committee's mandate.

Appendix A, *Community Need Summary - Climate Action & Adaptation 2021*, is a summary of the planned activities for 2021. It contains details about core service levels, new initiatives proposed and performance metrics.

Appendix B, *Climate Action & Adaptation - Initiatives Progress Report*, provides insights into what has been delivered through the 12 delivery initiatives approved last year, for delivery in 2020.

The Service Planning process gathered information necessary to assemble a provisional budget for Committee and Board review. The purpose of this report is to explain how the Environmental Protection divisional program of work connects to the Board Priorities, Corporate Plan and provisional budget.

In addition to the above, the following motion was carried at the CRD Board meeting on May 13, 2020:

That the Capital Regional Board extend the previously approved two-year increase of \$95,000 for climate action initiatives, including a potential extension of the BC Hydro

matching funds for the Community Energy Manager and to provide staff support to seek grant funds and update the CRD Climate Action Strategy and refer the report back to staff for a further report on additional expenditures in the 2021 budget to accelerate the priority actions that staff have identified in the report including the Regional Energy Retrofit Program and the CRD Climate Action Strategy Update.

ALTERNATIVES

Alternative 1

The Environmental Services Committee recommends to the CRD Board:

1. That Appendix A, Community Needs Summary – Climate Action & Adaptation, be approved as presented and advanced to the October 28, 2020 provisional budget review process;
2. That staff pursue the completion of an updated Climate Action Strategy;
3. That staff pursue completion of a detailed business case for a Regional Energy Retrofit Program; and
4. That staff report back in 2021 with 2022 budget implications (as proposed in the May 13, 2020 CRD Board staff report).

Alternative 2

1. That Appendix A, Community Needs Summary - Climate Action & Adaptation, be approved as presented and advanced to the October 28, 2020 provisional budget review process; and
2. That staff initiate a Climate Action Service bylaw amendment process to increase the maximum annual requisition by \$1,100,000 to allow the CRD to advance priority regional retrofit and electric vehicle charging infrastructure programs in the future.

IMPLICATIONS

Service Delivery Implications

The Community Need Summary provides an overview of all work that needs to be undertaken in order to meet our regulatory requirements, satisfy Board direction and meet the needs of the communities we serve.

Financial Implications

Initiatives identified in the Corporate Plan (including Board Priorities) cannot be undertaken without resourcing. The Board determines resourcing through its annual review and approval of financial plans. To support the Board's decision-making, staff, through the service planning process, provide recommendations on funding, timing and service levels. During this year's service planning process, staff have been mindful of the fiscal challenges facing the region in the months ahead.

Staff have identified one initiative that will have budget and/or staffing implications for 2021: the continued co-funding of the Community Energy Manager position to update the Climate Action Strategy and complete a building energy retrofit program business case (\$95,000/year).

The Climate Action service is currently at its maximum requisition limit. An increase in annual funding above \$95,000 would trigger a bylaw amendment process, requiring two-thirds agreement by local governments.

Staff are actively pursuing external grants and partnership opportunities to advance regional climate action goals and strategic priorities. This includes an application to the Federation of Municipalities Community Efficiency Financing Grant (approved by the Board October 14, 2020).

Environmental & Climate Implications

According to recent analysis, buildings account for 32% of emissions (18% residential buildings and 14% commercial/institutional buildings) across the capital region. On-road transportation accounts for approximately 46% of regional emissions.

From a residential building perspective, the CRD's Transition 2050 Retrofit Acceleration Strategy indicates that approximately 2,600 single family dwellings need to be retrofitted each year for our community to contribute to the achievement of an 80% to 100% GHG emissions reduction by 2050. This equates to approximately 10,000 tonnes of GHG emissions reduction annually from single family dwellings.

Staff will determine zero emissions vehicle adoption projections and GHG savings through a forthcoming EV Roadmap project.

Intergovernmental Implications

The CRD administers the Climate Action Inter-Municipal Working Group and Climate Action Inter-Municipal Task Force to support communication and collaboration between municipalities and electoral areas across the capital region, and provide information, feedback and support to programs and initiatives related to regional climate action. These groups would be utilized to refine the development of a Regional Energy Retrofit Program and a Zero Emission Vehicle Program and update the CRD Climate Action Strategy.

Regional Growth Strategy Implications

The Regional Growth Strategy includes a target to reduce GHG emissions by 61% by 2038, from a base year of 2007.

Financial Implications

A continuation of \$95,000/year requisition increase would allow for potential extension of the BC Hydro matching funds for the Community Energy Manager position, update the CRD Climate Action Strategy and complete a business case for a Regional Energy Retrofit Program.

To implement both a Regional Energy Retrofit Program and Zero Emission Vehicle Program, staff anticipate that annual costs would range between \$700,000 and \$1,100,000 per year. These

costs would be better determined as part of completion of a business case for implementing a Regional Building Energy Retrofit Program and further engagement with regional stakeholders, as part of the CRD's EV Roadmap project in 2021.

CONCLUSION

Staff have been progressing initiatives and actions identified in the Corporate Plan, including Board Priorities. The Board determines resourcing through its annual review and approval of financial plans. As per previous years, to support the Board's decision-making, staff are providing recommendations on funding, timing and service levels through the service and financial planning processes.

RECOMMENDATION

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

1. That Appendix A, Community Needs Summary - Climate Action & Adaptation, be approved as presented and advanced to the October 28, 2020 provisional budget review process;
2. That staff pursue the completion of an updated Climate Action Strategy;
3. That staff pursue completion of a detailed business case for a Regional Energy Retrofit Program; and
4. That staff report back in 2021 with 2022 budget implications (as proposed in the May 13, 2020 CRD Board staff report).

| | |
|---------------|---|
| Submitted by: | Glenn Harris, Ph.D., R.P.Bio., Senior Manager, Environmental Protection |
| Concurrence: | Larisa Hutcheson, P.Eng., General Manager, Parks & Environmental Services |
| Concurrence: | Robert Lapham, MCIP, RPP, Chief Administrative Officer |

ATTACHMENTS

Appendix A: Community Need Summary - Climate Action

Appendix B: Climate Action & Adaptation - Initiatives Progress Report

Community Need

2021 Summary



Climate Action & Adaptation

Strategy

Target Outcome

We envision reduced greenhouse gas emissions, triple-bottom-line solutions and progress on adaptation

Strategic Context

Strategies

- [Corporate Climate Action Strategy](#)
- [Regional Climate Action Strategy](#)
- [Regional Growth Strategy](#)
- [Regional Water Supply Strategic Plan](#)
- [Special Task Force on First Nations Relations](#)
- [Statement of Reconciliation](#)
- [Solid Waste Management Plan](#)

Trends, risks and issues

- A Climate Emergency Declaration with a commitment to accelerate corporate and community efforts was made in February 2019; this will guide the updating of the CRD's Climate Action Strategies in 2021.
- There was a 1% reduction in the overall regional greenhouse gas emissions (GHG) reductions between 2007 and 2018, equivalent to 14% reduction per capita. Population growth and concurrent economic growth will continue to add emissions as the region transitions to a reduced dependence on fossil fuels.
- Climate is changing, which will result in various regional impacts to human health, water supply and demand, rainwater and coastal storm management, transportation networks, ecosystems and species, buildings and energy systems, tourism and recreation, and food and agriculture
- Climate action is a shared responsibility and the regional government has a limited role focused on research, education and outreach, facilitation, regional program delivery, and managing emissions and adaptation within its own service delivery.

Services

| Core Services Levels | |
|---|---|
| Service | Levels |
| Community Climate Action To support and align regional climate action efforts with local governments related to strategies, policies and programs, and liaising and coordinating information and efforts with senior levels of government. Provide climate data and indicators, public education and community programming. | <ul style="list-style-type: none"> • Advance regional and climate mitigation and adaptation goals. • Lead regional-scale community initiatives and research activities. Pursue grants for regional programming. • Facilitate regional coordination, knowledge sharing, capacity building and advocacy. |
| Corporate Climate Action CRD services will embed climate action within their own service delivery with support from Climate Action program staff. The program will support the organization with its corporate climate goals/commitments, develop and monitor corporate policies related to climate action, undertake annual reporting, support corporate building and fleet emission reduction and climate preparedness initiatives. | <ul style="list-style-type: none"> • Development of corporate climate action policy related to corporate fleet, buildings and other capital projects • Develop and monitor corporate climate action plans and strategies • Complete annual reporting |
| Support Services The core services listed rely on the support of several corporate and support divisions to effectively operate on a daily basis. These services are reported on in the Accountability Community Need Summary. | <ul style="list-style-type: none"> • Services include: Human Resources & Corporate Safety, Corporate Communications, Asset Management, Financial Services, Information Technology & GIS, Information Services, Legislative Services, Facility Management, Fleet Management, Legal Services, Risk & Insurance and Real Estate Services. |

Community Need



2021 Summary

Initiatives

Initiatives approved in prior years, which have been now been delivered or absorbed in Core Services.

- 5a-1 – Climate Emergency
- 5a-2 – Collaborate with local governments
- 5a-4 – Facilitate networks
- 5a-5 – Create partnerships
- 5b-1 – Reduce corporate emissions
- 5b-2 – Landfill Gas Usage
- 5c-1 – Regional Sea Level Rise

Business Model

Funding

Who contributes

- All municipalities & Electoral Areas participate in these services.
- Support Services: varies per service

Funding Sources

- Requisitions and grants

Reporting Structure

- [Environmental Services Committee](#)

| Community Need Key Performance Indicator (KPI) | | | |
|--|--|--|--|
| Definition and Source | 2019 Actual | 2020 Forecast | 2021 Target |
| <p>Metric 1: Community GHG Emissions – target to decrease community GHG emissions by 33% from 2007 levels by 2020 and 61% by 2038.</p> <p>Percentage reduction in GHG emissions generated by community activities, including stationary energy, transportation, waste, industrial process and product use, agriculture, forestry and other land use; data from Regional GHG Inventory Study (Stantec, 2020)</p> | <p>1%* overall 14%* per capita</p> | <p>1%* overall 14%* per capita</p> | <p>Annualized target not currently available</p> |
| <p>Metric 2: Corporate GHG Emissions – target to decrease corporate GHG emissions by 33% from 2007 levels by 2020.</p> <p>Percentage reduction in GHG emissions generated by CRD operations; data from CRD 2019 Climate Action Annual Report</p> <p style="text-align: right;">* Based on 2018 results</p> | <p>18%*</p> | <p>20%</p> | <p>Annualized target not currently available</p> |

Discussion

Link to Target Outcome

The metrics included provide community and corporate GHG reduction results.

Discussion

- Metric 1:** The CRD completed a regional GHG inventory in 2020, which provides emissions for 2007, 2010, 2012 and 2018 following the GPC Basic+ Framework. In 2018, the CRD emitted approximately 1.7 million tonnes of CO₂e. The region is not on track to meet its 2020 Regional Growth Strategy GHG reduction target. While a decrease is expected, it is unknown at this time what the impacts of COVID-19 will be on regional emissions. Refined KPIs will be determined during the update of the CRD Climate Action Strategy in 2021.
- Metric 2:** In 2018, CRD operations produced 2,299 tonnes of CO₂e. This represents an 18% reduction compared to 2007 levels. The CRD has been carbon neutral since 2012, through a combination of corporate reductions and with carbon credits generated through previous methane destruction from the Hartland landfill gas capture system. While COVID-19 impacts are expected to slightly reduce corporate emission in 2020, new services such as the McLaughlin Point Wastewater Treatment Plant are expected to increase overall emissions in 2020. A new target will be determined during the update of the CRD Climate Action Strategy in 2021.

Community Need

Initiative Progress Report



Climate Action & Adaptation

| Initiatives approved in 2020 Budget | | |
|-------------------------------------|---|--|
| Ref | Initiative | Progress to date |
| 5a-1 | Climate Emergency | Progressing – declaration passed by Board February 29, 2019. Recruitment of a term position (co-funded with BC Hydro). Focus is now on community planning. |
| 5a-2 | Collaborate with local governments | Part of core services – ongoing through inter-municipal working groups and for specific projects. |
| 5a-3 | Model Bylaws | Progressing – developing model bylaw language for electric vehicle charging performance standard. |
| 5a-4 | Facilitate networks | Part of core services – Inter-Municipal Working Group, Inter-Municipal Task Force, Inter-regional work group (Transition 2050), Province-wide Community Energy Managers Network and associated local government sub-groups |
| 5a-5 | Create partnerships | Part of core services – same as per 5a-4, project-based work. |
| 5b-1 | Reduce corporate emissions | Progressing – developing a corporate energy management process for buildings, facilities and infrastructure, including tools to monitor and report on facility energy consumption. Continue to pursue Zero Emission Fleet Initiative. |
| 5b-2 | Landfill Gas Usage | Progressing – the CRD and Fortis BC are negotiating a supply contract to direct landfill gas into the established distribution system. |
| 5b-4 | GHGe Reduction through alternative fuel | On hold – Fortis BC could not provide RNG alternate fuel to offset corporate emissions in 2020 due to provincial demand. |
| 5c-1 | Regional Sea Level Rise | Completed – project completed and released to local government and First Nations. |
| 5c-2 | Regional Climate Action Strategy | Progressing – update of the Plan to be started in Q4 2020 |