



CLIMATE ACTION REVENUE INCENTIVE PROGRAM (CARIP)

PUBLIC REPORT, 2020



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Introduction:

The B.C. Climate Action Charter is a voluntary agreement between the Province of British Columbia, the Union of British Columbia Municipalities and each local government signatory. The Charter was launched at the 2007 UBCM Convention; since then, the majority of local governments in B.C. have become signatories.

The overarching goal of the Charter is to take collaborative action on climate change by promoting the reduction of greenhouse gasses emitted in the provision of local government services. Charter signatories are eligible to participate in the *Climate Action Revenue Incentive Program (CARIP)*.

CARIP is a conditional grant program that provides local governments funding equal to 100% of the carbon taxes they pay directly in the provision of services. The goal of CARIP is to help local governments achieve carbon neutrality. Participating local governments are obligated to report their progress towards carbon neutrality to the public annually. Under the Charter, local governments are also required to:

- Work towards carbon neutrality in their corporate operations (service delivery);
- Measure and report on their community GHG emissions profile;
- Create complete compact, energy-efficient rural and urban communities; and
- Report associated emissions and program data to the public and the Province annually.

Organization Context:

The Regional District of Central Okanagan (RDCO) is a signatory of the B.C. Climate Action Charter, and therefore, eligible to apply for a grant under the program. The RDCO serves well over 100,000 Okanagan residents and is committed to making progress in reducing greenhouse gas emissions by consistently reporting progress towards carbon neutrality since becoming a signatory of the Charter. ***The following report is based on the “2020 Climate Action Revenue Incentive Program (CARIP) Survey”, and outlines specific actions taken by the RDCO in 2020 to support carbon neutrality progress.***

The RDCO’s commitment to the B.C. Climate Action Charter is continued through the new Regional Board Strategic Priorities Plan (2019-2022). The Strategic Priorities Plan supports the creation of compact, complete, and energy efficient communities by prioritizing transportation and mobility, sustainable communities, economic development, and the environment.

Specific actions noted in the plan include:

- Strengthening the linkage between land use and transportation in the Regional Growth Strategy,
- Completing the Regional Transportation Plan,
- Advancing the inter-regional Rail Trail Corridor initiative,
- Developing best practices to encourage housing innovation and the adoption of sustainable building standards (e.g., BC Energy Step Code), and
- Exploring regional waste-to-energy opportunities and an approach to single use plastics pursuant to the Solid Waste Management Plan.

Further RDCO activities, undertaken in 2020, that support progress towards clean, compact, and energy efficient communities are listed throughout this report, they include:

- Coordination, policy development, and implementation for region-wide Comprehensive Planning.
- Continue to implement of the Regional Growth Strategy (RGS)
- Continue reviewing and updating Policy & Procedures and Regional Board policies, as required.
- Continue to implement the Biodiversity Conservation Strategy and related projects with the Okanagan Collaborative Conservation Program (OCCP).
- Continue to work with the Sustainable Transportation Partnership of the Central Okanagan (STPCO) and regional partners on the development of the Regional Transportation Plan
- Continue to participate in the Regional Air Quality Technical Committee.
- Continue to involve the public in joint planning processes dealing with regional issues and providing information through brochures, public meetings, workshops, and on the internet.
- As a result of the Climate Projections Report continued discussions with the Regional District of North Okanagan and South Okanagan-Similkameen on next steps to work towards climate adaptation and mitigation planning at a valley-wide, regional level.

2020 CORPORATE CLIMATE ACTION

Corporate climate actions refer to actions that reduce the GHG emissions produced as a result of a local government's delivery of "traditional services," including fire protection, solid waste management, recreational/cultural services, road and traffic operations, water and wastewater management, and local government administration.

In 2020, when it comes to corporate climate action, did your local government undertake any of the following (PLEASE SELECT ALL THAT APPLY):

Building and Lighting Actions

Energy Generation Actions

Greenspace Actions

Planning Actions

Solid Waste Actions

Transportation Actions

Water and Wastewater Actions

Other Climate Actions (PLEASE SPECIFY)

Don't know



CORPORATE BUILDING AND LIGHTING ACTIONS:

When it comes to corporate Building and Lighting Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

New or upgraded energy-efficient lighting systems

New or upgraded energy-efficient heating systems

New or upgraded building envelope initiatives

Upgrades to amenities in recreation facilities

Studies related to building and/or lighting energy efficiency

Other (PLEASE SPECIFY)

Don't know

Creating Energy Efficient Facilities

- LED lighting ballasts replacing any fluorescent light ballasts when they cease working
- Investigation continues into the cost of replacing fluorescent ballasts and lights and rebates offered to complete this work in the administrative building.

CORPORATE ENERGY GENERATION ACTIONS:

When it comes to corporate Energy Generation Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

Solar power projects

Heat recovery or heat reclamation projects

Biomass or bio-gas projects

Geo-exchange or geothermal projects

Studies related to energy generation

Other (PLEASE SPECIFY)

Don't know

Solar Projects

- Regional parks Solar Powered Automatic Gate Upgrades, install more solar panels and energy storage to support increased usage.

CORPORATE GREENSPACE ACTIONS:

When it comes to corporate Greenspace Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Tree planting
- Greenspace acquisition
- New or upgraded amenities in parks
- Invasive species management
- Plans or strategies related to greenspace
- Other (PLEASE SPECIFY)
- Don't know

Greenspace initiatives included tree planting, upgrades in parks, post-flooding restoration, invasive species management, and land acquisition, plans, or strategies related to greenspace.

Protection of Wetlands, Waterways, and Other Naturally Occurring Features

- The continued enforcement of Environmental Development Permit Areas under multiple Official Community Plans and one Rural Land Use Bylaw for the protection of the natural environment, or protection of development from hazardous conditions.
- Volunteer invasive weed management in various parks
- Replacement of outhouse washrooms with tank or vault washrooms

Parks Development and Post-Flooding Restoration

- The development of parks trails, including the Goats Peak Regional Park Summit Trail, the Tower Ranch Trail in Black Mountain Regional Park (connection to other parks), and an accessible path in Mission Creek Regional Park.
- The post-flooding and landslide restoration projects including the ecological restoration of a streamside landslide in Johns Family Nature Conservancy Regional Park, the realignment of flood-damaged Mission Creek Greenway Regional Park Trail, and the repairs to foreshore damage at Okanagan Centre Safe Harbor Regional Park and Killiney Beach Community Park. Further activities due to flood damage included repairs to the

Bellevue Creek intake and the replacement of two flood-damaged bridges in Hardy Falls Regional Park.

- Protective works included:
 - Streambank protection for the Woodhaven Nature Conservancy Regional Park and surrounding area;
 - Streambank erosion repairs incorporating ecological restoration and bioengineering to support staircase in Glen Canyon Regional Park; and
 - The reinforcement of fencing around the ephemeral ponds in Black Mountain Regional Park, which protects the Great Basin Spadefoot Toad.
- Mission Creek Regional Park Management Plan implementation initiated.

CORPORATE PLANNING ACTIONS:

When it comes to corporate Planning Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

Energy/Emissions Management Plan (New or Updated)

Asset Management Plan (New or Updated)

Corporate Climate Action Plan (New or Updated)

Strategic Plan (New or Updated)

Other (PLEASE SPECIFY)

Don't know

Park Management Plan

- The commencement of the Mission Creek Regional Park Management Plan to guide the use and development of the park; this project will extend into 2021.

Strategic Monitoring and Review

- The completion, in collaboration with member municipalities, of the Regional Growth Strategy Monitoring Program. The Program provides the foundation for ongoing monitoring

and evaluation of the Regional Growth Strategy through the implementation of progress monitoring measures.

- The continued monitoring and measurement of park usage via a Visitor Use Metrics Data Collection process.

Asset Management

- The continuous implementation of asset renewal strategies across all asset classes that provide the most significant value to our communities and customers. RDCO asset renewal strategies include the timely renewal of assets in poor condition, as well as the updating of outdated technology as innovations in engineering can provide for lower energy consumption. Capital asset renewal actions are made in alignment with the strategic priorities and approved through the budget bylaw approval process.
- The continuation of inter-departmental collaboration furthered the development of the park's asset condition assessment tool, which was completed by Parks Services in 2020.

Capacity Building

The continuation of capacity building in asset management, energy/emissions management, and climate action planning:

- The RDCO built internal capacity for Asset Management, including staff education, further aligning asset management practices with lifecycle decision-making, and drafting an Asset Management Policy and Strategic Asset Management Plan.
- The RDCO reviewed opportunities to further energy/emissions management, including the Fortis BC Climate Action Partners Program (Senior Energy Specialist), various GHG emission reduction strategies, as well as alternative energy projects, such as solar, for inclusion in the 2020-2024 Budget Bylaw.
- The RDCO collaborated with the Regional District of North Okanagan, the Regional District of Okanagan-Similkameen, the Pacific Climate Impacts Consortium, and Pinna Sustainability to develop a Climate Projections Report. The report offers science-based information on how the Okanagan's climate is projected to change. The intent of this report is to enable community leaders and local decision-makers to explore how, together, we can prepare the Okanagan for the inter-related impacts facing our region.

CORPORATE SOLID WASTE ACTIONS:

When it comes to corporate Solid Waste Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Introduction, expansion, or improvement of recycling initiatives at corporate facilities
- Introduction, expansion, or improvement of composting initiatives at corporate facilities
- Communication or education for staff related to corporate solid waste initiatives
- Studies or research related to corporate solid waste initiatives
- Plans or strategies related to corporate solid waste initiatives
- Other (PLEASE SPECIFY)
- Don't know

Communication and Staff Education

- Waste reduction actions included the distribution of recycling reference materials and the promotion of reduction events such as the repair café, the trunk sale, and free tire collection.

Recycling

- Continued staff participation in the separation of recyclables from waste streams in all major office facilities, including the KLO Administrative Building and parks offices.

CORPORATE TRANSPORTATION ACTIONS:

When it comes to corporate Transportation Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Fleet replacement or upgrades
- New or improved electric vehicle initiatives
- New or improved active transportation infrastructure for staff

- Communication or outreach for staff related to corporate transportation initiatives
- New or improved public transportation initiatives for staff
- Other (PLEASE SPECIFY)
- Don't know

CORPORATE WATER AND WASTEWATER ACTIONS:

When it comes to corporate Water and Wastewater Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- New or improved water or wastewater infrastructure
- Studies or research related to water conservation
- Plans or strategies related to water or wastewater
- Water reduction initiative(s)
- Other (PLEASE SPECIFY)
- Don't know

Water and Wastewater Actions

The District continued implementing the RDCO Water Conservation Plan, which was updated in 2018. Water conservation initiatives include:

- Information sharing: RDCO has to date implemented sprinkling restrictions and has included water conservation-related pamphlets with utility bills and applicable information on the website. Further tips to our water customers on water conservation are included in the Water Talk Newsletter. The newsletter is sent out to all RDCO water customers each spring and fall, discussing system updates, new construction and conservation tips and ideas. Also, the RDCO website is updated regularly with new information. Each water system has a dedicated webpage providing system-specific updates and information.
- Consumption Fee: The four-tiered rate consumption fee promotes water conservation in all the RDCO water systems.

- Similar to 2019, a second more local processing location was selected in 2020 to process a portion of the bio solids produced the Westside Regional Wastewater Treatment Plant reducing the hauling distance.
- Project completed to replace old AHU on Filter Building (WWTP) with high efficiency heat recovery unit.
- Universal Metering: The RDCO has completed installing water meters to all active customers.
- Leak Detection: The RDCO resources and undertakes leak detection projects annually.
- Xeriscaping: Information will continue to be accessible to customers and the general public via newsletters and the RDCO website.

CORPORATE CLIMATE ACTIONS FOCUSED ON REDUCING GHG EMISSIONS:

When it comes to the corporate climate action, please highlight up to three significant actions focused on reducing GHG emissions that your local government undertook in 2020:

Corporate Action #1

Composed the Regional Board Strategic Priorities Plan (2019-2022), which provides high-level guidance for corporate activities, including efforts to reduce our environmental footprint, adapt to climate change and connect with nature.

Corporate Action #2

The continuation of planning, collaboration, and information sharing to promote the overall reduction of corporate GHG emissions. Of note, in 2020, are actions taken in the Broad Planning, Greenspace/Natural Resource Protection, and Solid Waste categories.

Corporate Action #3

The continuation of infrastructure and asset renewal with energy-efficient and climate change resilient alternatives. Infrastructure, replaced as a result of flooding events, has been adapted to take climate change and extreme weather into account.

2020 COMMUNITY-WIDE CLIMATE ACTION

Community-wide actions refer to actions that reduce GHG emissions across the community (i.e. actions not related to "traditional services" corporate operations). In 2020, this included actions pertaining to building and lighting, greenspace, planning, solid waste, transportation, water, and wastewater.

When it comes to community-wide climate action in 2020, did your local government undertake any of the following (PLEASE SELECT ALL THAT APPLY):

Building and Lighting Actions

Energy Generation Actions

Greenspace Actions

Planning Actions

Solid Waste Actions

Transportation Actions

Water and Wastewater Actions

Other Climate Actions (PLEASE SPECIFY)

Don't know

Building improvements

- Upgraded draught sealing and door seals at Joe Rich Community Hall.
- Replaced the roof at Joe Rich Community Hall and Ellison Heritage Community Hall.
- Replaced main entrance door at Joe Rich Community Hall.
- Replacement of old and outdated picnic structures with new long-life structures.

COMMUNITY-WIDE BUILDING AND LIGHTING ACTIONS:

When it comes to community-wide Building and Lighting Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- New or upgraded energy-efficient lighting systems
- New or upgraded energy-efficient heating systems
- BC Energy Step Code related projects
- Incentives/rebate programs related to energy-efficient building or lighting
- Outreach, education, or communication related to energy-efficient building or lighting
- Other (PLEASE SPECIFY)
- Don't know

COMMUNITY-WIDE ENERGY GENERATION ACTIONS:

When it comes to community-wide Energy Generation Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Solar power projects
- Heat recovery or heat reclamation projects
- Landfill gas capture/utilization projects
- Micro-hydro projects
- Studies or research related to energy generation
- Other (PLEASE SPECIFY)
- Don't know

COMMUNITY-WIDE GREENSPACE ACTIONS:

When it comes to community-wide Greenspace Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Tree planting
- Greenspace restoration or maintenance
- Greenspace acquisition
- Invasive species management
- Plans or strategies related to greenspace
- Other (PLEASE SPECIFY)
- Don't know

Community-Wide Greenspace Actions

- Continue to implement and enforce Environmental Development Permit Areas under multiple Official Community Plans and one Rural Land Use Bylaw for the protection of the natural environment, or protection of development from hazardous conditions. This includes the protection of community forests, agriculture, wetlands, and riparian areas.
- Continue to implement the Provincial *Riparian Area Protection Regulation*.
- Continue to implement the Biodiversity Conservation Strategy and related projects with the Okanagan Collaborative Conservation Program (OCCP).
- Participate on the Water Stewardship Council, and related projects with the Okanagan Basin Water Board (OBWB).
- Advance foreshore and riparian management, and outreach activities.
- Actively participate to advance the protection of the identified Ecosystem / Wildlife Connectivity Corridor from Okanagan Mountain Provincial Park to Kalamalka Lake Provincial Park.
- Continue with ongoing watershed improvements and streamside restoration through updated mapping projects and collaboration with partners.
- Collaborate with OBWB on the Hydrometric Monitoring Partnership.

- Provided two (2) panel presentations through the B.C. Wildlife Federation during the 'Wetland Institute Speaker Series' on the importance of the protection of wetlands, waterways, floodplains, and surrounding natural areas.

Education Programs and Bylaws

- The continued promotion of educational materials regarding noxious weeds and invasive weed species.
- The continued enforcement of Bylaw No. 179, which requires property owners within the Regional District of Central Okanagan electoral areas, the City of Kelowna, District of Lake Country, and District of Peachland to prevent the growth of noxious weeds and tall grasses. The Bylaw also requires property owners to provide for the cutting or destruction of noxious weeds and tall grasses.

COMMUNITY-WIDE PLANNING ACTIONS:

When it comes to community-wide Planning Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Official Community Plan (New or Updated)
- Climate Action Plan (New or Updated)
- Regional Growth Strategy (New or Updated)
- New or updated Bylaw (s) or zoning addressing climate issues
- Other (PLEASE SPECIFY)
- Don't know

Further Community-Wide Planning Actions undertaken by the RDCO in 2020 include:

- Promoted coordinated planning that addresses issues affecting all levels of local and First Nations governments within the Central Okanagan, in order to manage growth and support human settlement that is socially, economically, and environmentally sustainable.
- Explored opportunities to the review and revise Official Community Plans.
- Participated in a joint planning approach among all levels of government in order to identify appropriate courses of action to manage growth within the key issue areas of the Regional Growth Strategy.

- Continued to develop enhanced communication, coordination, and collaboration among the various levels of government, First Nations, and the public to build an understanding and an awareness of regional growth impacts.
- Coordination, policy development, and implementation for region-wide Comprehensive Planning.
- Continued Implementation of the Regional Growth Strategy (RGS).
- Continued to collaboratively explore options for increased shoreline management of Okanagan Lake at a multi-jurisdictional level.
- Continued efforts on the completion of Phase 2 of the Regional Floodplain Management Plan.

COMMUNITY-WIDE SOLID WASTE ACTIONS:

When it comes to community-wide Solid Waste Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Introduction, expansion, or improvement of recycling initiatives
- Introduction, expansion, or improvement of composting initiatives
- Community clean-up initiatives
- General waste reduction initiative (including landfill diversion strategies)
- Outreach, education, or communication related to solid waste
- Other (PLEASE SPECIFY)
- Don't know



Further Solid Waste Actions taken in 2020 include:

- Subsidized composter program (sold)
- Conducted Waste Composition study at regions landfill
- Continued Commercial Diversion Program – supporting and encouraging diversion of recyclables by the ICI sector.

- Recycling Ambassador program, two students conducting on the street education on recycling
- Bear cart Pilot phase 2
- Continue to divert yard waste from single family homes (composted)

COMMUNITY-WIDE TRANSPORTATION ACTIONS:

When it comes to community-wide Transportation Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- New or improved active transportation infrastructure
- New or improved public transportation initiatives
- New or improved electric vehicle initiatives
- Outreach, education, or communication related to transportation
- Plans or strategies related to transportation
- Other (PLEASE SPECIFY)
- Don't know

Participation in Regional Programs

- The RDCO continued participation with the Sustainable Transportation Partnership of the Central Okanagan. The organization coordinates the regional delivery of sustainable transportation programs and projects in support of common regional policies, plans and interests (economic, social, and environmental). In 2020, the Regional Transportation Plan was finalized.
- Continued discouragement of vehicle idling in collaboration with the Regional Air Quality Coordinator. Idling information and links to further educational materials are provided on the RDCO website.

COMMUNITY-WIDE WATER AND WASTEWATER ACTIONS:

When it comes to community-wide Water and Wastewater Actions, did your local government undertake any of the following in 2020 (PLEASE SELECT ALL THAT APPLY):

- Water restrictions
- Incentives/rebate programs related to water or wastewater
- Outreach, education or communication related to water or wastewater
- Studies or research related to water or wastewater
- Plans or strategies related to water or wastewater
- Other (PLEASE SPECIFY)
- Don't know

Wastewater Research Partnership

- Participated on the Steering Committee for the development of the Okanagan Basin Water Board's Source Water Protection Strategy.
- Held a workshop regarding on-site sewerage disposal systems and the long-term sustainability of various types of disposal systems in rural areas. This workshop was organized by RDCO staff and held with the RDCO Environmental Advisory Commission with presentations from Interior Health Authority Healthy Built Communities staff and a Registered on Site Wastewater Practitioner.

Water Restrictions

- Outdoor Irrigation: Restrictions are effective for customers of RDCO water systems as follows:

Stage 1 Alternate Days <i>Sprinkling</i>:	
Effective	September 16th to June 15th, unless Notice of Stage 3 or 4 in Effect
Even numbered addresses:	<i>Sprinkling</i> is only permitted on Even Calendar Days
Odd numbered addresses:	<i>Sprinkling</i> is only permitted on Odd Calendar Days
Stage 2 Twice a Week <i>Sprinkling</i>:	
Effective	June 16th to September 15th, unless Notice of Stage 3 or 4 in Effect
Even numbered addresses:	<i>Sprinkling</i> is only permitted on Saturdays & Tuesdays
Odd numbered addresses:	<i>Sprinkling</i> is only permitted on Sundays & Wednesdays
Stage 3 Restriction Period - Once a Week <i>Sprinkling</i>:	
Effective	Upon Notice Issued by <i>Regional District Officer</i>
Even numbered addresses:	<i>Sprinkling</i> is only permitted on Saturdays
Odd numbered addresses:	<i>Sprinkling</i> is only permitted on Sundays
Stage 4 Restriction Period – No <i>Sprinkling</i>	
Effective	Upon Notice Issued by <i>Regional District Officer</i>

Resources for Public Education and Awareness

- Continued provision of water conservation tips on the RDCO website.
- Promotion and distribution of Free Garden Rain Barrels.

COMMUNITY-WIDE ACTIONS FOCUSED ON REDUCING GHG EMISSIONS:

When it comes to the community-wide climate action, please highlight up to three significant actions focused on reducing GHG emissions that your local government undertook in 2020:

Community-Wide Action #1

Composition of the Regional Board Strategic Priorities (2019-2022), which provide high-level guidance for corporate involvement in community-wide activities, including the promotion of transportation and land use approaches that enhance movement throughout the region and reduce our collective reliance on vehicles. And protection of core natural habitat in parks through good management and planning. Also, plan asset renewal of buildings and structures to include energy efficiencies and green alternatives.

Community-Wide Action #2

Collaboration with the Regional District of North Okanagan, the Regional District of Okanagan-Similkameen, the Pacific Climate Impacts Consortium, and Pinna Sustainability to develop a Climate Projections Report that offers science-based information on how the Okanagan's climate

is projected to change. The intent of this report is to enable community leaders and local decision-makers to explore how, together, we can prepare the Okanagan for the inter-related impacts facing our region.

Community-Wide Action #3

The UBC Okanagan & Regional District of Central Okanagan NSERC Collaborative Research Development Partnership. The research hopes to solve challenges associated with Biosolids, which are a byproduct of the wastewater process and can be applied in agricultural operations.

2020 CLIMATE PREPAREDNESS AND ADAPTATION ACTION:

CLIMATE IMPACTS:

Please identify the climate impacts that are most relevant to your local government (PLEASE SELECT ALL THAT APPLY):

- Increased temperatures increasing wildfire activity
- Extreme weather events contributing to urban and overland flooding
- Changes to temperature and precipitation causing seasonal drought
- Warmer winter temperatures reducing snowpack
- Sea level rise and storms causing coastal flooding and/or erosion
- Other (PLEASE SPECIFY)
- Don't know

In 2020, did your local government take any of the following actions in an effort to consider or address the impacts of climate change? (PLEASE SELECT ALL THAT APPLY)

- Emergency response planning
- Asset management

- Infrastructure upgrades
- Public education and awareness
- Strategic and financial planning
- Risk and vulnerability assessments
- Risk reduction strategies
- Official Community Plan policy changes
- Other (PLEASE SPECIFY)
- Don't know

In 2020, did your local government partnered with any of the following organizations to prepare for and adapt to a changing climate? (PLEASE SELECT ALL THAT APPLY)

- Adaptation to Climate Change Team (SFU)
- Columbia Basin Trust
- Community Emergency Preparedness Fund (UBCM)
- Federation of Canadian Municipalities
- Fraser Basin Council
- Pacific Institute for Climate Solutions (UVIC)
- Other (PLEASE SPECIFY)
- Don't know

When it comes to climate preparedness and adaptation actions, please highlight up to three significant actions/initiatives that your local government undertook in 2020:

Adaptation Action #1

Hosted a public event “Building Community Resilience in a Changing Climate” regarding impacts of climate change, globally and locally – our lived experiences with natural disasters, among other topics and the need to embed climate action planning in the decisions that are made in our communities.

Climate is changing, both globally and locally, leading to increased hazards and extreme weather events. We need to be preparing for these inevitable impacts of climate change and working towards adaptation and mitigation by reducing our environmental footprint. This will require increased community awareness, change in the way we do things, and collaboration.

In February 2020, the RDCO hosted a sold-out public event at UBCO. The purpose of the event was to build climate change awareness and encourage dialogue within the community to inspire hope and action. The event featured the public launch of the Climate Projections Report for the Okanagan Region on how our climate is projected to change over the next 30-60 years in order to inform planning and decision making.

Attendees also explored the impacts of climate change in British Columbia and across Canada and understand efforts currently underway to address resiliency. The evening featured keynote speaker Sheila Watt-Cloutier, Environmental, Cultural and Human Rights Advocate and Nobel Peace Prize nominee who provided a global perspective on climate change and a shared vision for the future.

The evening closed with a panel of local experts highlighting what is being done in the region to address climate change from different perspectives including health, agriculture, emergency response, among others. The panel participants identified how the community at large can get involved to adapt to climate change in the Okanagan.

Adaptation Action #2

Completion of Phase 2 of the Regional Floodplain Management Plan. The Project contributed to the comprehensive and collaborative work currently occurring across the Okanagan region.

Phase 2 focused on delineation and confirmation of the flood-prone streams and floodplains identified in Phase 1. Through various funding sources and partnerships, the following projects were completed:

- LiDAR and Aerial Image Acquisition for the Okanagan Valley Watershed: With multiple funding partners, OBWB and GeoBC teamed up to manage the capture of LiDAR and digital aerial imagery for the Okanagan watershed.
- Okanagan Mainstem Flood Mapping: A joint project with RDCO, OBWB, Regional District of Okanagan-Similkameen and Regional District of North Okanagan for flood modeling and mapping for the Okanagan mainstem lakes shorelines and reaches of the Okanagan River (completed May 2020).
- The joint initiative by RDCO and Black Mountain Irrigation District to complete the dam inundation study for Ideal (Belgo) Lake Dam (completed June 2018).
- The joint initiative by RDCO and District of Lake Country to complete the dam inundation study for Crooked Lake Dam (completed June 2018).
- The RDCO's Peachland / Trepanier Creeks Floodplain Mapping Project (completed November 2019).
- The joint initiative by RDCO and the City of Kelowna to complete the Mill Creek Flood Mitigation Planning & Mapping Project (completed April 2020).
- The joint initiative by RDCO and the City of Kelowna to complete the Mission Creek Flood Mitigation Planning & Mapping Project (completed May 2020).

Adaptation Action #3

Continue working with Okanagan Nation Alliance and Okanagan Collaborative Conservation Program on the Okanagan Lake Protection Strategy and Responsibility Planning Initiative.

This project is being co-led by the Okanagan Nation Alliance (ONA), Okanagan Collaborative Conservation Program (OCCP), the South Okanagan Collaborative Conservation Program (SOSCP), and the Regional District of Central Okanagan. The Project Team will include members and representatives of Syilx Okanagan Nation, provincial and federal agencies, local governments, academia, conservation organizations, and others who will be identified throughout the process.

The aim of this project is to develop a visioning and experiential learning process that will create a greater awareness and understanding of the challenges and opportunities for protecting the environmental, cultural, and economic values of Okanagan Lake. The visioning process will lead to the development of a strategy that will enhance the ways of caring for, protecting, and restoring the values and interests of Okanagan Lake's foreshore and associated tributaries within the

watershed. The work generated through this project will provide the knowledge and expertise to inform important decisions regarding how natural areas are cared for and managed, help address climate impacts, support sustainable development, and help secure resources and funding to carry out the actions that will be identified in the strategy.

The project is addressing current challenges of shoreline protection, and planning for the region's future at a multi-regional scale. The main objectives are to identify the most pertinent issues impacting Okanagan Lake and collaborate to develop a practical and enforceable strategy.

2020 Carbon Neutral Reporting

Local governments are required to report on their progress in achieving their carbon-neutral corporate goal under the B.C. Climate Action Charter. Working with B.C. local governments, the joint Provincial-UBCM Green Communities Committee has established a common approach to determining corporate carbon neutrality for the purposes of the Charter, including a Carbon Neutral Framework, and supporting guidance for local governments on how to become carbon neutral.

Please note: As a result of the BC Recycling Regulation, local governments are no longer required to account for GHG emissions from vehicles, equipment and machinery required for the collection, transportation, and diversion of packaging and printed paper in their annual CARIP reports.

Additional Notes:

1. The year 2020 was chaotic, unplanned, and exhausting. But, in terms of climate action projects, RDCO managed to undertake some projects which will continue into the next year.
2. The community engagements and educational workshops had minimum attendance due to the complexity of conducting/attending online workshops.
3. There are new and on-hold projects, which will gain traction once the restrictions are lifted.
4. The curbside garbage collection went up as population increased by 2.3% and per capita garbage collection increased from 129 to 141 Kg/Capita, as most of residents had to stay at home.



2020 Carbon Emissions

Did your local government measure corporate GHG emissions for 2020?

- Yes
 No
 Don't Know

If your local government measured 2020 corporate GHG emissions, please report the number of corporate GHG emissions (in tonnes of carbon dioxide equivalent (tCO_{2e})) from:

Service Delivery Type	2020 Corporate GHG Emissions
Services Delivered Directly by your Local Government	892
Contracted Services	509

Total A - Corporate GHG Emissions (Direct + Contracted) For 2020: 1401 tCO_{2e}

2020 Carbon Reductions

To be carbon neutral, a local government must balance their TOTAL corporate GHG emissions generated in 2020 by one or a combination of the following actions:

- Undertake Green Communities Committee-supported Option 1 Project(s)
- Undertake Green Communities Committee-supported Option 2 Project(s)
- Purchase carbon offsets from a credible offset provider

For more information about options to balance or offset corporate GHG emissions, please refer to *Becoming Carbon Neutral: A Guidebook for Local Governments in British Columbia*. If applicable, please report the 2020 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from any of the following Option 1 GHG Reduction Projects:

Option 1 GHG Reduction Projects	2020 GHG Emissions Reductions
1A Energy Efficiency Retrofits	
1B Solar Thermal	
1C Household Organic Waste	
1D Low Emission Vehicles	
1E Avoided Forest Conversion	
1F Trenchless Technology	

TOTAL B - Reductions from All Option 1 Projects For 2020: 0

If applicable, please report the names and 2020 GHG emissions reductions (in tonnes of carbon dioxide equivalent (tCO₂e)) being claimed from Option 2 GHG Reduction Projects:

	Names of Option 2 GHG Reduction Projects	2020 GHG Emissions Reductions
1		
2		
3		

4		
5		
6		

TOTAL C - Reductions from All Option 2 Projects For 2020: 0

2020 Carbon Offsets
 If applicable, please report the name of the offset provider, type of project and number of offsets purchased (in tonnes of carbon dioxide equivalent (tCO₂e)) from an offset provider for the 2020 reporting year:

	Name Of Offset Provider	Name of Project	2020 GHG Emissions Reductions
1			
2			
3			
4			
5			
6			

Total D - Offsets Purchased For 2020: 0

Total Reductions and Offsets For 2020 (Total B+C+D): 0

Corporate GHG Emissions Balance for 2020

Your local government's corporate GHG emissions balance is the difference between total corporate offsetable GHG emissions (direct + contracted emissions) and the GHG emissions reduced through Green Communities Committee Option 1 and Option 2 projects and/or the purchase of offsets.

Corporate GHG Emissions Balance For 2020 = (Total A – (B+C+D)): 1401 tCO_{2e}

If your corporate GHG emissions balance is negative or zero, your local government is carbon neutral. CONGRATULATIONS!

If your local government was carbon neutral in 2020, please record any emissions reductions you will be carrying over for future years and the source of the reductions, including the year they were earned (e.g. organics diversion, 2020 100 tCO_{2e}):

	Source of Carryover Emission Reduction	Year Earned	2020 GHG Emissions Reductions
1			
2			
3			
4			
5			
6			

Total E - Balance of Reductions Eligible for Carry Over to Next Year: 0

Green Communities Committee Climate Action Recognition Program:

The joint Provincial-UBCM Green Communities Committee is pleased to be continuing the Climate Action Recognition Program again this year. This multi-level program provides the Green Communities Committee with an opportunity to review and publicly recognize the progress and achievements of each Climate Action Charter (Charter) signatory. Recognition is provided on an annual basis to local governments who demonstrate progress on their Charter commitments, according to the following:

- Level 1 - **Demonstrating Progress on Charter Commitments:** For local governments who demonstrate progress on fulfilling one or more of their Charter commitments.
- Level 2 - **Measuring GHG Emissions:** For local governments that achieve Level 1, who measure their corporate GHG emissions for the reporting year and demonstrate that they are familiar with their community's energy and emissions inventory (i.e. CEEI).
- Level 3 - **Accelerating Progress on Charter Commitments:** For those local governments who have achieved Level 1 and 2 and demonstrate significant action (corporately or community-wide) in reducing GHG emissions in the reporting year (e.g. through undertaking a GHG reduction project, purchasing offsets, establishing a reserve fund).
- Level 4 - **Achievement of Carbon Neutrality:** For local governments who achieve corporate carbon neutrality in the reporting year.

Based on your local government's 2020 CARIP Climate Action/Carbon Neutral Progress Survey, please check the Green Communities Committee Climate Action Recognition Program level that best applies:

- Level 1 – Demonstrating Progress on Charter Commitments
- Level 2 – Measuring GHG Emissions
- Level 3 – Accelerating Progress on Charter Commitments
- Level 4 - Achievement of Carbon Neutrality
- Don't know

Related to Level 3 recognition, if applicable, please identify any new or on-going corporate or community wide GHG reduction projects (other than an Option 1 or Option 2 project) undertaken by your local government that reflects a significant investment of time and/or financial resources and is intended to result in significant GHG reductions:

In 2020 the RDCO considered and researched various energy and emission management projects, including solar projects, green fleet strategy and hiring posted ad for hiring a senior energy specialist. No new projects were started in 2020.

Does your local government set aside funds in a climate reserve fund or similar?

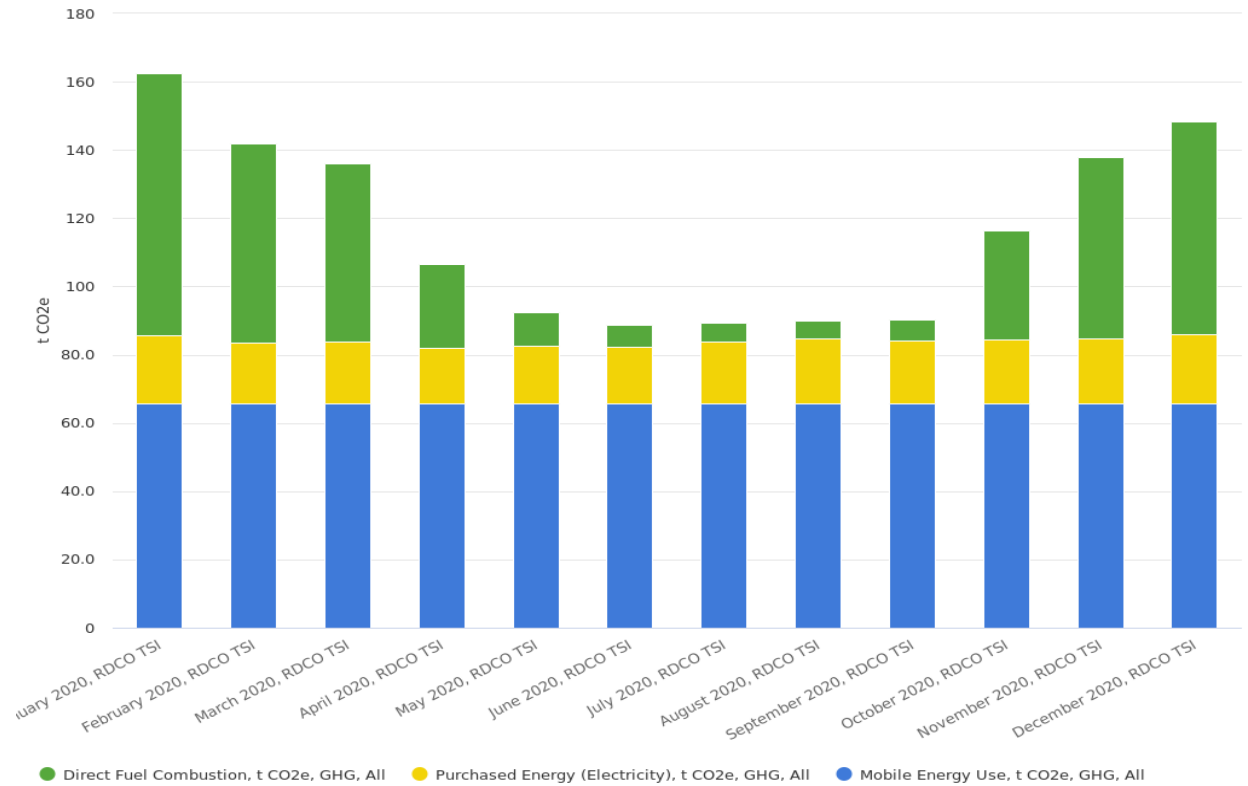
- Yes
- No
- Don't Know



2020 BC Traditional Services GHG Inventory

<u>Reporting Entity:</u>	Regional District of Central Okanagan
<u>Reporting Year:</u>	Calendar Year 2020
<u>Inventory Scope:</u>	BC Traditional Services Inventory “TSI”
<u>Quantification Methodology:</u>	2020 B.C. Best Practices Methodology for Quantification GHG Emissions, Local Governments & Public Sector Organizations
<u>System Support:</u>	SoFi GHG Reporting by GHG Accounting Services
<u>Data collection:</u>	Regional District of Central Okanagan
<u>Data Entry:</u>	Data Upload

Total TSI GHG Inventory: 1,401 tCO₂e



Total Energy Consumption by Energy Type for Traditional Services Inventory:

	Regional District of Central Okanagan TSI	
Natural Gas Stationary [GJ]		6,783
Propane [l]		9,458
Electricity [kWh]		5,470,848
Gasoline [l]		105,511
Diesel [l]		197,282
Natural Gas Mobile [l]		32,454,720

Category 1:

	Regional District of Central Okanagan TSI				
	GJ, Energy	t CO ₂	t CH ₄	t N ₂ O	t CO ₂ e, GHG, Category 1
Direct Fuel Combustion	7,585	0.00898	0.013012	389	393

Category 2:

	Regional District of Central Okanagan TSI	
	kWh	t CO ₂ e, GHG, Category 2
Purchased Energy (Electricity)	5,470,848	219

Category 3:

	Regional District of Central Okanagan TSI				
	GJ, Energy	t CO ₂	t CH ₄	t N ₂ O	t CO ₂ e, GHG, Category 3
Mobile Energy Use	10,653	765	0.337524	0.049886	789

Biogenic GHG Emissions:

	Regional District of Central Okanagan TSI		
	t Bio CH ₄	t Bio CO ₂	t Bio CO ₂ e, GHG, All
Direct Fuel Combustion		1.46	1.46
Mobile Energy Use		26.0	26.0
Total		27.5	27.5

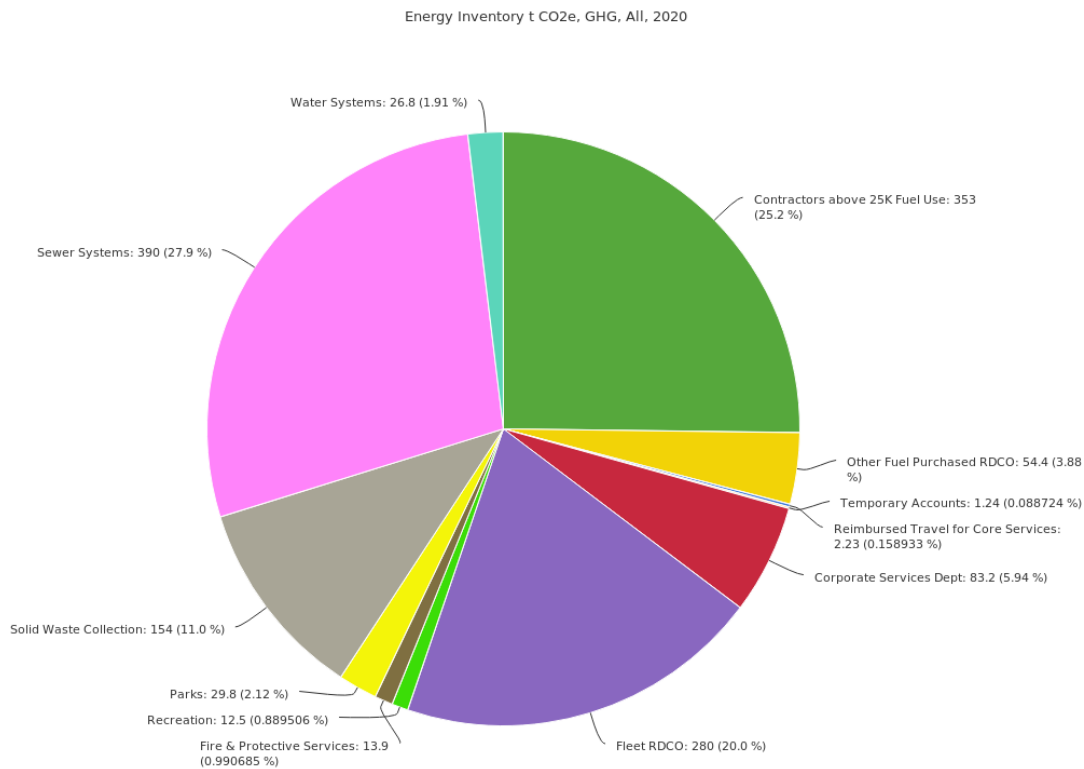
Totals by Service Delivery:

	Regional District of Central Okanagan		Total
	Delivered Directly	Contracted Services	
	Energy Inventory	Energy Inventory	
	t CO ₂ e, GHG, All	t CO ₂ e, GHG, All	
2020	892	509	1,401

Summary:

	2020	
	Energy Inventory	Total
	t CO ₂ e, GHG, All	
Regional District of Central Okanagan Corporate TSI	1,401	<u>1,401</u>

Overview by Service Areas:



Top GHG Emitters:

	t CO ₂ e, GHG	%
Total Regional District of Central Okanagan TSI	1,401	100
Sewer System	390	27.9
Contractors >25k fuel use	353	25.2
Fleet	280	20.0