Climate Leadership Plan

District of Highlands

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Submitted to: District of Highlands

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Background

Purpose

The District of Highlands (District) has identified climate action as a strategic priority for the municipality to address. In March of 2019, Council carried a motion to declare a climate emergency, committing to the objective of achieving carbon neutrality for the community by 2030. Developing a community climate leadership plan is intended to serve as a guide to move the District towards this goal. This report provides a baseline greenhouse gas (GHG) emissions assessment of where the community currently stands, a forecast of future GHG emissions, and a prioritized list of policies and practices to reduce emissions that are to be implemented in the District.

Addressing climate change is one of the most critical issues of our time – both locally and across the planet. Changes to our climate are already noticeable with more frequent extreme-weather events (droughts, floods, heat waves, fires), and these changes are projected to increase over the coming decades. A changing climate could have many implications in this region – potentially affecting health, infrastructure, water supply, agriculture, and ecosystems and species. The scientific community agrees that **the more we reduce total emissions in the short term, the less intense these changes will be over time**, and that acting earlier is likely to be less costly than delaying action.[1]

A history of sustainability

The District has a history of prioritizing climate action and sustainability. For example, in 2011 Council adopted the **Integrated Community Sustainability Plan** (ICSP), a framework developed through community consultation to help guide decision making for the community's vision of a successful and sustainable community. Following this plan, a **Sustainable Highlands Decision Making Framework** was adopted by Council to evaluate operational plan items brought forward from Council's approved strategic priorities.

The District has encouraged sustainability when it comes to land development though **Development Permit Area #6**, which covers the entirety of the District, and promotes energy and water conservation measures as well as the reduction of GHG emissions. Further, all rezoning or Official Community Plan amendment applications are required to fill out the **Highlands Sustainability Appraisal Form** to ensure all elements of sustainability are considered in land use planning and other major decisions.

Even with these earlier efforts, more substantive and immediate action is needed to address the climate emergency. This document identifies the next steps for the District of Highlands.

[1] https://www.ipcc.ch/site/assets/uploads/sites/2/2019/05/SR15_SPM_version_report_LR.pdf; C.2.7 states that marginal abatement costs in modelled pathways limiting temperature increase to 1.5°C are quite variable, but roughly 3-4 times higher than pathways limiting to 2.0°C (high confidence).

Baseline: Where are we now?

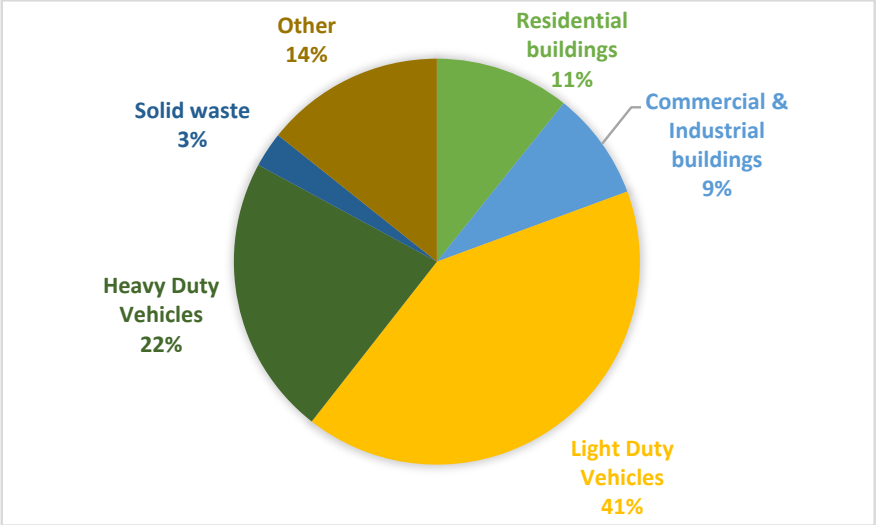
Establishing an emissions baseline helps the District identify areas that need to be addressed to meet a desired outcome. The Global Protocol for Community-Scale Greenhouse Gas Emission Inventories[2] provides an accounting and reporting standard for cities. This standard states that it is important to establish the "scope" of emissions being included in a community inventory, and that ideally this scope matches the scope of the action plan that is developed. In 2020, the Capital Regional District (CRD) led the development of "territorial" GHG emission inventories for each municipality in the region, including Highlands. The results are summarized below and in Appendix A. In future, the Highlands may also have access to a "consumption-based" inventory, and this is briefly described below. This planning process considered both territorial and consumption-based emissions, with a focus on reduction of territorial emissions.

Territorial inventory

A "territorial" emission inventory focuses on quantifying emissions from activities taking place within the borders of the municipality, including: stationary energy used in buildings in the community (electricity, natural gas, heating oil, etc.), energy used in transportation based on vehicles registered in the community, tonnage of solid waste generated in the community, and agriculture, forestry and other land-use management activities. In 2018, these activities resulted in the estimated emissions in Figure 1, see also a detailed table provided in Appendix A.

Since 2007, **community emissions in Highlands are estimated to have grown over 20%** - the most significant increase in the region.[3] This increase is mostly due to an increase in emissions from trucks, vans, SUVs and heavy-duty vehicles.

Figure 1: Community GHG Emissions (2018)

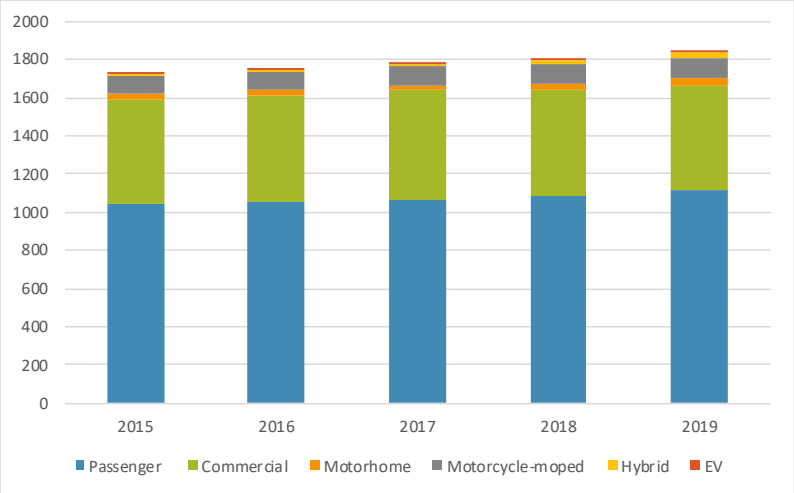


[2] https://ghgprotocol.org/sites/default/files/standards/GHGP_GPC_0.pdf

[3] Adapted from Capital Region District – Municipalities and Electoral Areas 2007 Base Year and 2018 Reporting Year Energy & GHG Emissions Inventory: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/crd-ghgmembermunicipality200727.pdf?sfvrsn=28161ecc_2

Transportation of goods and services is the most significant source of GHG emissions in Highlands. For on-road transportation, this includes personal vehicles and commercial vehicles. As of 2019, there were roughly 1,850 vehicles insured in the District, 28 of those vehicles were hybrid and 20 were electric (Figure).

Figure 2. Registered vehicles in Highlands (ICBC), 2015 to 2019



According to the 2016 census, about 92% of the population commuted to work by vehicle, while 2% took each of the following modes: transit, walking, cycling, other.

For off-road transportation, this category includes estimates for aviation, marine and off-road vehicle use.

Buildings are another significant source of GHG emissions, primarily due to fossil-fuel heating systems (propane, natural gas, oil and diesel). Wood heating also results in GHG emissions. Although electricity is the most used energy source in buildings, it results in a relatively small amount of emissions due to BC's supply of low-emission hydroelectricity. Residential and commercial buildings are included.

Waste includes emissions from the disposal and management of solid waste at Hartland landfill. Waste does not directly consume energy, but releases GHG emissions because of decomposition, burning and other management methods.

Industrial Process & Product Use (IPPU) includes GHG emissions from products such as refrigerants, foams or aerosol cans that release potent GHG emissions. There are no Industrial Process emissions in Highlands.

Agriculture, Forestry and Other Land-Use (AFOLU) are GHG emissions that are captured or released as a result of land-management activities. These activities can range from the preservation of forested lands to the development of crop land, and include manure and livestock management.

Consumption-based inventory

A "consumption-based" emission inventory takes an alternative approach by focusing on the consumption of goods and services by residents in a community, allocating GHG emissions to the consumer rather than the producer of goods and services. Consumption-based inventories include GHG emissions from food, water and other consumables. They require tracking more types of data than a territorial-based inventory to capture the lifecycle emissions of goods and services.

The CRD plans to pilot the preparation of "consumption-based" inventories later this year. For example, the District of Saanich previously completed both types of inventories. The results showed that emissions in the territorial inventory were only about half of the emissions in the consumption-based inventory, demonstrating the importance of considering these emissions in this plan. The additional emissions largely came from the food, building materials and other products purchased annually.

GHG forecast: what is our current trajectory?

Historically, energy consumption and levels of GHG emissions have shown a strong correlation with population growth in Canada – indicating that energy consumption and GHG emissions will continue to grow unless significant shifts in behaviours, technologies and policies help us to decouple these trends. In recent years both the federal and provincial governments have adopted policies to do just that, helping to decouple population and economic growth from emissions growth. This section outlines the trajectory of territorial GHG emissions based on projected population changes and key federal and provincial policies that are in place today that are anticipated to reduce GHG emissions.

The CRD anticipates continued strong population growth over the coming decades. Based on data from BC Stats[4], Highlands' population is projected to reach 2,800 by 2028 and 3,200 by 2038, increases of 34% and 51%, relative to 2011.

Highlands "business-as-usual" forecast

In addition to preparing an inventory of emissions, the CRD also prepared a "business-as-usual" forecast of GHG emissions for each municipality in the region. The forecast for Highlands shows that **GHG emissions would continue to increase substantially without further action** (see Appendix A). Remember that this territorial inventory only represents about half of the community's emissions, but a forecast that includes emissions from our consumption habits (food, other consumables, building materials) is not currently available.

Significant action is needed from **all levels of government** to halt the growth of our emissions and reset them on a downward trajectory. Below we outline what the federal and provincial governments have committed to do. In the next chapter of this report, we outline the action plan for the District of Highlands.

Even if all governments fulfill all of the commitments that have been made to date, more will still need to be done. **Communities, including all businesses, residents and community groups** can support these initiatives, stay informed and make choices that minimize their impact.

Federal and provincial policies

Over the last decade, there has been increasing focus across the globe and across all sectors on the state of the earth's climate. This increased attention has manifested as key commitments at all levels of government, including:

Canada GHG target: Reduce GHG emissions 30% by 2030, relative to 2005. The Throne Speech in 2020 stated that the current government will legislate a target to achieve net-zero emissions by 2050. Canada developed the Pan-Canadian Framework on Clean Growth and Climate Change, which includes:

- A **call on municipal governments to set ambitious targets** and cut emissions in their purview;

[4] Capital Regional District 2019-2038 Population, Dwelling Units and Employment Projection Report, prepared by BC Stats. URL: https://www.crd.bc.ca/docs/default-source/crd-document-library/bylaws/regionalgrowthstrategy/crd-2019-2038-population-dwelling-units-and-employment-projection-repor.pdf?sfvrsn=92ce43cc_2

- Updated **light duty vehicle standards** that are anticipated to reduce vehicle GHG emissions 5% per year 2017 to 2025; and
- A goal that **all provinces adopt net-zero energy ready building codes** by 2030.

BC GHG targets: Reduce GHG emissions 40% by 2030, 60% by 2040, and 80% by 2050, relative to 2007. In 2018, the Province adopted **CleanBC**, a province-wide plan estimated to reduce BC's emissions by 18.9 MT CO_2e, 75% of the way to the 2030 target. Actions of interest to local governments include:

Transportation & land use	• *Zero Emission Vehicle (ZEV) standard*: 100% vehicle sales by 2040, including 10% by 2025 and 30% by 2030 • *Low carbon fuel standard*: reduce lifecycle carbon intensity of fuel by 20% by 2030
Buildings	• *BC Building Code*: 20% more energy efficient by 2022 and 80% more efficient by 2032 (net-zero energy ready standard) • *Renewable natural gas*: 15% renewable content in natural gas by 2030
Waste	• *Organic waste*: 95% of organic waste diverted from landfills and turned into other products by 2030

Climate Leadership

A vision for a Carbon Neutral Highlands

If we are to limit global warming to 1.5°C, and avoid the consequences of catastrophic climate change, there is a limited amount of carbon we can emit globally. The Intergovernmental Panel on Climate Change (IPCC) has stated that globally we need to have net-zero emissions by 2050, and reduce emission by about 45% by 2030 relative to 2010. To achieve this, some sectors and regions need to become carbon neutral even sooner than 2050.

In light of this global imperative, the District declared a climate emergency and *committed to the objectives of achieving carbon neutrality in the District of Highlands by 2030*. This plan outlines the key actions the District will endeavour to take in the near term to help move the community toward carbon neutrality as soon as possible. This means shifting off of fossil fuels to cleaner alternatives in our transportation and buildings, while also reducing the amount of carbon-intensive goods that we consume and throw away.

This plan recognizes that substantial effort is needed from the provincial and federal governments – not only to fulfill the policies already identified, but to move beyond this to accelerate policies and expand funding programs to support a just and swift transition.

Success will also involve community members – residents and businesses – participating in emission reduction efforts and making choices to minimize their impact.

Climate emergency scenario

What would it take for Highlands to become carbon neutral in the community by 2030? By 2030:

- Residents use alternatives to vehicles like **walking, cycling and transit** to get around.
- Vehicle owners (residential and commercial) **switch to zero-emission vehicles** before 2030. If zero-emission vehicles aren't available for all cases, then these owners use sustainable bio-based fuels instead of fossil fuels.
- New buildings are **built to net-zero energy standards**.
- Homes and commercial buildings get **deep energy retrofits** so that they need half of the energy compared to before.
- Homes and buildings **switch to zero-emission heating sources** (such as electric heat pumps).
- Residents and businesses make wise choices to **minimize consumption emissions and minimize waste**.
- **Natural areas are preserved and fostered** to maintain this important carbon sink.

This is a massive effort, and it will take commitment from all levels of government, industry, community groups and individuals to achieve this. Achieving carbon neutrality by 2030 is an ambitious goal that goes beyond the current policies in place at the provincial and federal levels and would require substantive changes to these policies. However, it is an important goal to demonstrate leadership in the current climate emergency.

Although the District cannot directly make each of the above items happen, the District can support and accelerate actions through advocacy to the Province, updating local policies and programs, and communicating opportunities for action with the community.

Methods: Climate leadership plan development

The District retained Pinna Sustainability to facilitate a process and develop a plan to address the climate emergency. This project included hosting an online workshop in spring 2020, bringing together staff and council to discuss previous climate action by the District and identify priorities moving forward.

Following the online workshop, Pinna continued to engage with staff and Council to develop a "long list" of potential actions – focusing on the actions that fall within the jurisdiction of the District to implement. Recognizing the District has limited resources, the long list was turned into a survey for staff and Council to prioritize actions that the District can implement in the short and medium term.

The following criteria was considered when selecting actions:

- What could be the impact on emissions by implementing the action;
- What resources will be needed to implement the action;
- What would the timeframe be to implement the action;
- What benefits will it bring (in terms of other co-benefits).

Climate leadership areas

Nine high priority actions were chosen by staff and Council for implementation. The high priority actions are divided into six action area and are outlined by action area below.

Action Area	Priority Action
Corporate policy	1. Explore establishing a climate action fund 2. Advocate to Province and CRD to develop consumption-based emission inventories
Transportation	3. Create safe biking lanes 4. Require new buildings to be electric-vehicle ready
New Development	5. Implement the BC Energy Step Code 6. Develop a secondary suite policy 7. Support requirements for low carbon building materials
Building retrofit	8. Review permit fees and promote existing rebates
Organic waste, food & consumables	No priority action selected
Communication & engagement	9. Promote and support community groups to undertake climate actions

Each action identified as a priority is described in this section of the plan. Other important actions were identified during this process, but were not selected as priority actions. These are outlined in Appendix B as a reference for future consideration as opportunities arise and/or resources allow.

Corporate policy

Corporate policy is a meaningful way to take a leadership role for climate action within the community. District of Highlands' corporate policy already includes: climate emergency declaration; inclusion of climate action planning within strategic priorities; the Integrated Community Sustainability Plan; and the Sustainable Highlands Decision Making Framework. The District will build on these through the following two actions:

Action #1	
Explore establishing a climate action fund	
Description	This fund would be directed toward initiatives to reduce community GHG emissions. Funding sources to explore could include: • annually allocating CARIP grant toward fund, • allocating funds as an "offset" for GHG emissions from District operations, and/or • establishing an internal carbon price (e.g. District of Saanich does this). Examples of fund use: provide incentives to accelerate turnover of fossil fuel heating systems to electric heat pumps in homes. This program is already in place in the CRD. Highlands would provide additional top-ups of $350 each in their community.[5]
Impact	Funds can be directed toward the most impactful area. The proposed approach would accelerate the shift off of fossil fuels in homes – currently the second largest source of emissions in Highlands.
Effort	Moderate - Initial and Ongoing: Staff or consultant to review other municipal approaches and develop policy for Highlands. Ongoing effort expected to be low if District participates in the provincial program.

Action #2	
Advocate to Province and CRD to develop consumption-based inventories	
Description	As opportunities arise, advocate to the Province to update, maintain and expand the scope of the Community Energy and Emissions Inventories for municipalities across BC to include consumption-based emissions. This would alleviate effort at local government level, and provide a consistent framework for carbon accounting. Where provincial data is not available, continue to advocate for consumption-based inventories for all municipalities in the CRD.
Impact	Enables Highlands to communicate progress to the community on the climate emergency declaration. This information can also help residents and businesses understand where they can have the most impact in the choices they make.
Effort	Low - Ongoing: Staff or Council to advocate to Province.

[5] https://www.crd.bc.ca/education/climate-action/at-home/building-energy-retrofits

Transportation

Transportation of goods and services is the most significant source of GHG emissions in Highlands: making up over half of all community emissions. Getting off of fossil fuels for transportation will involve everyone using more alternative forms of transportation (walking, biking, scootering, transit, etc.) and adopting zero emission vehicles for the rest.

In CleanBC, the provincial government has committed to reduce GHG emissions from transportation by having 100% of vehicle sales be zero emission by 2040, and supporting alternative modes of transportation. This will help, but alone is not enough to meet the climate emergency. The District will prioritize the following two actions to support reducing transportation emissions:

Action #3	
Create safe biking lanes	
Description	Assess opportunity to reline main roads with safe bike lanes to support uptake of electric and non-electric cycling. If the assessment is positive, find funding and/or budget for road relining (e.g. B.C. Active Transportation Infrastructure Grants).
Impact	Essential to enable broad uptake of cycling and e-biking.
Effort	Moderate - Initial**:** Consultant to conduct assessment of suitability for bike lanes, staff to coordinate with partners and find funding.

Action #4	
Require new buildings to be EV ready	
Description	Update the Zoning Bylaw to require all new buildings to install electric vehicle infrastructure. District of Saanich adopted this into its Zoning Bylaw last year and it came into force June 2020. Example bylaw language is available through research conducted for the CRD Inter-municipal working group. [6]
Impact	Future vehicles are expected to be primarily electric and new development is the most cost-effective time to plan for this.
Effort	Moderate - Initial**:** Staff to lead a Zoning Bylaw update. Lower effort if included with other bylaw updates. Examples available.

[6] Additional information is available in the Capital Region Local Government Electric Vehicle (EV) + Electric Bike (E-Bike) Infrastructure Planning Guide: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/infrastructure-planning-guide_capital-region-ev-ebike-infrastructure-project-nov-2018.pdf?sfvrsn=d767c5ca_2

New development

New development results in GHG emissions through construction activities, clearing of land, the embodied carbon in building materials, and through the ongoing heating, hot water and energy needs in the building over time. Buildings last for decades. New development is the most cost-effective way to reduce the overall GHG emissions from buildings, while avoiding investing in infrastructure that is likely to be "stranded" over the coming decades. The provincial government is adopting increasingly stringent building codes, with the goal of having a building code that is net-zero energy ready by 2032. The BC Energy Step Code can accelerate this.

In the past, Highlands has developed a Sustainability Appraisal form for all rezoning/OCP amendment applications, as well as Development Permit Area #6 to promote energy and water conservation measures, and reduce GHG emissions from new buildings. The District will build on this through the following actions:

Action #5	
Implement BC Energy Step Code	
Description	Prepare a plan to adopt step code, starting with mid-steps and charting out a path to adopt the upper steps for all new development. This will require conducting consultation and amending the Building Bylaw. To support use of low-carbon energy sources, allow for lower steps that use efficient sustainable energy sources instead of fossil fuel heating and hot water (District of West Vancouver recently adopted this model).
Impact	Strong tool to ensure very efficient new buildings that use low or zero emission energy for heating and hot water.
Effort	High - initial**:** Requires consultation period and Building bylaw update, examples available from other municipalities.

Action #6	
Develop secondary suite policy	
Description	As identified in the Highlands Strategic Plan, advance a policy to enable secondary suites and/or accessory dwelling units in existing and new homes to support a diversity of housing options. For existing suites, follow provincial guidelines to relax requirements for approval of suites. For new homes, explore the option to provide suites as an incentive if the home meets requirements for low carbon energy systems.
Impact	Provides more diverse housing options, and supports more compact community and greenspace preservation. Because secondary suites and accessory units are smaller than typical single-family dwellings, they generally use much less energy and have lower emissions.
Effort	Moderate: Staff time to research and prepare new policy, consultation, amend Zoning Bylaw.

Action #7	
Support requirements for low carbon building materials	
Description	Currently municipalities in BC do not have authority to require low carbon building materials, but the Province has identified this as a future policy change. Support from municipalities may accelerate this policy. The District can stay abreast of what the Province is considering, advocate and provide input as opportunities arise.
Impact	May lead to provincial policy which could have a significant impact on consumption-based emissions.
Effort	Low: Staff and/or Council time to communicate with Province.

Building retrofits

Existing buildings are a significant source of GHG emissions in the Highlands, making up an estimated one-third of territorial-based emissions.

Both the federal and provincial governments are working to encourage building retrofits through different programs, and they are currently working together with industry to form a building code for existing buildings. Energy efficiency programs are delivered by electricity and natural gas utilities, as well as provincial and federal governments. The District will support through the following action:

Action #8	
Review permit fees and promote existing rebates	
Description	The District can review existing permit fees to reduce potential barriers to decommissioning fossil fuel heating systems and replacing them with low carbon heating systems, such as high-efficiency electric heat pumps. Additionally, the District can actively promote Provincial and utility rebates available to shift toward sustainable energy sources for heating and hot water in existing buildings through the District website, social media, and other outreach with community organizations. Examples of programs outlined here, and are also summarized on the CRD website: https://betterhomesbc.ca/rebates/financing/ https://betterhomesbc.ca/rebates/gpr/ https://betterhomesbc.ca/rebates/combination-space-and-water-heat-pump-rebate/ This action also aligns with Action #1 to create a climate action fund that can be directed towards topping up these existing incentives.
Impact	High potential change in emissions per home that participates. Note that in addition to fossil fuel heating systems, replacing old wood-burning appliances with zero-emission heat sources reduces particulate matter pollution, which is a known carcinogen, while also reducing black carbon emissions that contribute to climate change.
Effort	Low: Staff effort would be focused on updating communication channels and outreach, and reviewing existing permit fees.

Organic waste, food and consumables

Although a consumption-based inventory is not available, it is estimated that these categories combined would constitute in the range of 30% of Highlands' consumption-based emissions.

In CleanBC, the Province has identified a target of having 95% of organic waste diverted from landfills and turned into other products by 2030.

Highlands has encouraged local food through the community garden and previously through the Highlands Farmers Market (currently on hiatus). A priority action was not chosen in this category at this time, however, potential future actions for this category are included in Appendix B.

Communications and engagement

Communication and engagement are important for enabling GHG emission reductions in a community. The District has tried different approaches in this regard, including the 'Sustainable Highlands' portion of the website.

There are a wide variety of ways a municipality can promote climate action within the community through communication and engagement, including community challenges, communication on their website and social media, as well as at local events. The District can also develop key messages and coordinate communications to increase its impact.

Action #9	
Promote and support community groups to undertake climate actions	
Description	The District can undertake many actions to address the climate emergency, but ultimately it will be essential that all citizens and businesses do their part. The District can promote and support community-driven initiatives – through the provision of small grants, resources or letters of support when the initiative advances climate action. Examples include: • Coordinating carpooling opportunities • Coordinating shared resources for food processing and preserving • Increasing awareness of local supply chains • Purchasing / setting-up bear safe composting as a demonstration • Composting workshops • Establishing community food kitchen or facility • Establishing tool libraries or other shared / cooperative ownership of seldom used items
Impact	Good community education opportunity, enhances local sustainability.
Effort	Low - Ongoing: Varies depending on the number and scale of initiatives and level of District involvement.

Monitoring and reporting

In order to understand whether this plan is being effectively implemented, it will be important to evaluate progress regularly, and to post results publicly. At the same time, where a community has limited resources, it is important to streamline and minimize administrative efforts around tracking, analyzing and reporting.

The following table provides a simple framework for annual evaluation and reporting of progress, together with proposed sources of the information:

Item to monitor	Data source	Frequency
Status of high priority actions in the Climate Leadership Plan (not started, underway, complete)	District of Highlands	Annual
Community GHG emissions by source (buildings, transport, waste)	CRD GHG emissions inventories for each municipality	Annual, or as provided by CRD
Trips by travel mode (driver, passenger, transit, bicycle, walk)	CRD origin destination survey[7]	Every 5 years, or as provided by CRD
Length of roadway with designated bicycle lane	District of Highlands	Annual, or as new lanes are added
Number of registered EVs	ICBC online vehicle population data[8]	Annual
Number of incentives to replace fossil fuel heating	CRD Inter-Municipal Working Group	Annual
Number of buildings built to each level of Step Code	District of Highlands building permits	Annual tabulation

[7] 2017 OD Survey is available at: https://www.crd.bc.ca/project/regional-transportation/origin-destination-household-travel

[8] https://public.tableau.com/profile/icbc#!/vizhome/VehiclePopulationIntroPage/VehiclePopulationData

Next steps

The strength of a climate leadership plan can only be measured after its release: in the success of the policies to reduce the carbon footprint and improve the resilience of a community. In order to move forward with acting on the climate emergency, the District can move forward with the action priorities through:

- Incorporating the priority actions into strategic priorities and resource plans.
- Continued involvement with the CRD Intermunicipal Working Group.
- Reviewing progress annually and publishing monitoring one-page summary of progress using framework in section above.
- Implementing the nine priority actions identified in this report.
- Where feasible, reviewing and incorporating additional actions identified in Appendix B into the District's strategic priorities and resource plans.

The following table is provided as a guide for implementation of the nine priority actions over the next 1-5 years. It includes the priority action, timing, and implementation next steps.

Priority Action	Timing	Next Steps
1. Explore establishing a climate action fund	2021-2022	Allocate resources for a staff member or consultant to review other municipal approaches and develop policy for Highlands.
2. Advocate for consumption-based inventories	2021-ongoing	Designate staff and Council members to continue to advocate to Province and CRD.
3. Create safe biking lanes	2022-2024	Allocate resources for a consultant to conduct assessment of suitability for bike lanes. Following suitability assessment, staff to coordinate with partners and find funding.
4. Require new buildings to be EV ready	2022-2023	Begin process to amend Zoning Bylaw. Language and information available from the CRD.
5. Implement BC Energy Step Code	2021	Review examples from other municipalities and create a plan for community consultation and Building Bylaw update.
6. Develop secondary suite policy	2021	Staff to begin research and prepare new policy, host consultation and public hearing, amend Zoning Bylaw, and manage implementation. This action is laid out in the Strategic Plan to be completed by the end of 2021.
7. Advocate for low-carbon building policy	2021-ongoing	Designate staff and Council members to advocate to Province.
8. Review fees and promote rebates	2021-2022	Staff effort to be focused on updating communication channels and outreach, and reviewing existing permit fees.
9. Promote and support community groups to undertake climate actions	2021-2024	Begin by reaching out to groups advising that the District is open to receiving proposals that address the climate emergency and/or support the Climate Leadership Plan.

Appendix A – Community territorial GHG emission inventory and forecast for Highlands

Table 2: Community Energy Use and GHG Emissions (2018), provided [9]

Source	Type	2018 Energy (GJ)	2018 GHG Emissions (tCO_2e)
Stationary Energy			
Residential Buildings	Electricity	67,596	200
	Natural Gas	4,110	205
	Fuel Oil	11,536	789
	Propane	1,541	94
	Wood	3,471	82
	Diesel	1,261,890	92
Commercial & Industrial Buildings	Electricity	14,442	43
	Natural Gas	18,766	936
	Fuel Oil	0	0
	Diesel	2,712,634	197
Agriculture, Forestry And Fishing Activities	Diesel	6,790,169	493
Natural Gas Fugitive Emissions			2
Total		**10,886,155**	**3,131**
On-Road Transportation			
Electric Vehicles	Electricity	-	-
Passenger Vehicles	Gasoline + Diesel + Propane	24,269,672	1,547
Light Trucks, Vans, SUVs	Gasoline + Diesel + Propane	62,911,067	4,042
Heavy Duty Vehicles	Gasoline + Diesel + Propane	46,021,538	3,038
Motorcycles	Gasoline	227,892	16
Total On-Road Transportation		**133,430,169**	**8,643**
Off-Road Transportation			
Marine, Aviation and Other Off-Road Vehicles	Marine Gasoline + Marine Diesel + Jet Fuel	7,477,786	666
Total Off-Road Transportation		**7,477,786**	**666**
Waste			
Solid Waste			382
Agriculture Forestry & Other Land Use (AFOLU)			

[9] Adapted from Capital Region District – Municipalities and Electoral Areas 2007 Base Year and 2018 Reporting Year Energy & GHG Emissions Inventory: https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/crd-ghgmembermunicipality200727.pdf?sfvrsn=28161ecc_2

Source	Type	2018 Energy (GJ)	2018 GHG Emissions (tCO_2e)
Land-Use			-4,233
Livestock, Aggregate Sources and Non-CO_2 Emission Sources on Land			4
Total AFOLU			**-4,229**
Industrial Process & Product Use (IPPU)			
Process Use Emissions			780
Total IPPU			**780**
TOTAL		**151,794,110**	**9,373**

Appendix B – Additional climate actions for Highlands

In addition to the priority actions selected and described in the core document, there are several other important actions that were identified through this process. Each year Highlands completes strategic planning and updates their strategic priorities. These actions are included for future reference, to be adopted as opportunities arise (e.g. supportive grant funding) and/or resources allow.

Corporate Policy

Action description	Effort	Impact
Conduct regular community well-being assessments: to track community health as climate action programs are implemented. An indicators report was previously developed with the ICSP, but has not been maintained. This effort would renew / update the indicators with a community well-being lens.	High - Initial and Ongoing: Staff or consultant to identify appropriate indicators, data sources and create a template for annually tracking and reporting data collected	Enables the District to communicate progress to the community on the climate emergency declaration; can be a good engagement tool
Review the decision-making framework to integrate the climate emergency: The District already uses a decision-making framework and this action would review and update or replace this framework with a climate emergency lens. This action may be well suited to implement after the climate risk assessment is completed (planned for 2021).	Low-Moderate: Effort will depend on approach taken, and could reduce current effort if the decision-making framework is streamlined during this review	Intended to influence Council decisions to ensure they align and support the climate emergency declaration

Transportation

Action description	Effort	Impact
Monitor potential for on-demand transit: Continue to liaise with BC Transit to review the opportunity to provide on-demand transit in the Highlands. Translink recently piloted this on Bowen Island using a custom app and found it to be quite successful.	Low: Ongoing liaison with BC Transit and possibly with neighbouring municipalities to gauge interest	Alternative transportation is a core opportunity to reduce emissions, build community, and support an ageing population
Promote ride sharing: Support local community association to set up local ride sharing opportunities. These may include promoting a ride sharing app and/or installing "car stops" as meeting places similar to those on the Gulf Islands.	Low - Initial: Staff provide information on website, possible grants or other support for network	

New development

Action description	Effort	Impact
Review need for continuation of DPA6: The District has been progressive in advancing sustainability guidelines for new development. This process serves to raise awareness among applicants for including green and sustainable features in new homes and major renovations. With the implementation of BC Energy Step Code, the energy efficiency portion of this may become redundant. This may be an opportune time to review and streamline or even discontinue its use in order to focus staff time on other priorities. An alternative may be to institute a "sustainability checklist" or pamphlet at the time of building permit application.	Moderate initial, may reduce or increase effort ongoing: Staff time to conduct the review, but may alleviate staff time overall if DPA6 requirements are streamlined	DPA6 currently provides an engagement opportunity, though it is unclear if it changes the outcomes in development; other forms of engagement or incentive may have more impact
Develop policy to reduce maximum dwelling sizes: By reducing dwelling sizes, less materials are needed for the building and less energy is needed to keep it going, generally resulting in a lower impact building.	High - Initial: Requires amendment to OCP and Zoning Bylaw, community consultation	Only affects new buildings, may not have significant impact; depends on standards buildings are built to and materials used

Building retrofits

Action description	Effort	Impact
Advocate for financing tools to enable low carbon home upgrades: To enable residents to easily finance energy efficiency and clean energy projects at home, many municipalities in the US, Ontario and more recently Alberta have programs to finance these programs through municipalities, where residents pay back the loan through Local Improvement Charges or through property taxes. This authority is not currently provided to local governments in BC. Advocating to the provincial government, together with other municipalities, may accelerate this opportunity.	Low: Staff or Council advocate to province together with other local government partners Note: This may be very high effort to implement if authority is provided by the Province to create such a program	Potential for high impact if the Province enables this across BC while providing local jobs

Organic waste, food & consumables

Action description	Effort	Impact
Support community groups to set up bear-safe composting: Provide support to research and purchase a bear-safe composting system that is commercially available, and organize workshops to teach community members how to safely and effectively compost their organic waste.	Low: Staff or hired coordinator (e.g. summer staff) research and coordination time	Good community education opportunity, enhances local sustainability, emissions reductions will be relatively small

Create a corporate food policy: When purchasing catering, the District can implement a policy to request local businesses to use local foods or lower emission foods. District of Saanich has a policy as an example.	Low: Staff or hired coordinator (e.g. summer staff) research and policy development	Supports local food networks and sets an example

Communication & engagement

Action description	Effort	Impact
Develop and implement a communication plan: The District can develop and disseminate key messages that support climate action for different audiences. This document would synchronize the messages being put forward by staff and Council. May include education for residents and businesses, as well as key messages for working with regional partners, and for advocacy to the Province.	Moderate – Initial and ongoing: Staff or consultant to prepare a clear plan with Council input, devising key messages that can be maintained by staff over time	Aligns messages coming from the District to increase impact of individual voices
Update website: Review and update the Sustainable Highlands website to highlight all aspects of action to support the climate emergency. Initial focus could be on building resources, particularly in conjunction with adopting Step Code.	Low – Ongoing: Staff or hired coordinated to review and update content, align with communication plan (if prepared)	Provides a one-stop shop to influence resident choices