



Climate Leadership Plan

District of Central Saanich





CLIMATE LEADERSHIP PLAN

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Updated by: District of Central Saanich, 2020

July 2020 REVISION

This plan was updated July 2020 with new climate targets adopted by the District of Central Saanich in 2019. These updated targets are in alignment with the latest recommendation to limit global temperature increase to 1.5°C, set by the United Nations Intergovernmental Panel on Climate Change.

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*This Climate Leadership Plan
renews the District of Central
Saanich's commitment to work
with other levels of government,
residents, businesses and
community groups to advance
climate action initiatives.*

Introduction

Principles

This plan identifies actions within the District's realm of authority and influence. Concerted and coordinated effort by all levels of government, in partnership with community members and industry will be necessary to achieve the desired outcomes. The District's plan includes the following principles:

- » **Take early action** in District areas of authority or influence
- » **Advocate for action** where other authorities have responsibility
- » **Be nimble and opportunistic** by seeking funding and partnership opportunities that align with our vision, while focusing the municipality's resources
- » **Maximize local value creation** by supporting education, training, capacity building
- » **Use a climate lens** to evaluate significant expenditures by considering both emission reductions (mitigation) and climate adaptation implications
- » **Monitor and report progress** with clear, concise communication to improve transparency and accountability

Our areas of focus

This plan outlines key objectives and actions in five areas, focusing on actions that are within the realm of responsibility and influence of the District:

- » transportation;
- » buildings;
- » solid waste;
- » municipal operations;
- » and adaptation to climate change.

Successfully implementing this plan will involve dedicated staff time and resources. However, we cannot reach our goals in isolation. Making significant shifts in our energy use and sources will require action by all levels of government, residents, businesses and community organizations.

Goal 1: 100% less GHG emissions by 2050, relative to 2007

Interim target: 45% less GHG emissions by 2030, relative to 2007

The 2018 Central Saanich Climate Action Plan included a target to reduce community-scale GHG emissions by 80% by 2050, and reduce municipal GHG emissions by 90% by 2050, relative to 2007. The new climate targets adopted by the District in 2019 accelerate this target to a reduction of 100% at both the community and municipal-scale by 2050.

Goal 2: 100% renewable energy community-wide by 2050

In 2007, approximately 38% of all energy used community-wide in Central Saanich was from renewable sources. By 2050, the community will aim to obtain all of its energy from renewable sources.



The District of Central Saanich has been taking steps to reduce climate impacts over the last decade.

Starting in 2008, the District adopted the *Central Saanich Energy Plan – An Action Plan to Reduce Energy Consumption and Greenhouse Gas Emissions in Our Community*. The 2008 plan provided a baseline of energy use and resulting emissions in our community, set reduction targets, and identified 27 actions to support the targets. Ten years later, the District has reflected on the progress made to date and refreshed the plan to guide climate action planning, programs and activities in the community for the next 10 years. In 2019, the District of Central Saanich declared a state of climate emergency and adopted accelerated climate targets recommended by the United Nations Intergovernmental Panel on Climate Change to limit global temperature increase to 1.5°C.

The costs of stabilizing the climate are significant but manageable; delay would be dangerous and much more costly.²



Climate projections and impacts

Our climate is changing and addressing the changes is one of the most critical issues of our time. Some of these changes are already noticeable with more frequent extreme-weather events (droughts, floods, heat waves, fires); these changes are projected to increase the severity and duration of events over the coming decades. The Capital Regional District's climate projection report anticipates more extreme heat days and longer dry spells in summer, more precipitation in fall, winter and spring, and warmer winters with more intense extreme weather events, and rising sea levels.¹

A changing climate has many implications in our region — affecting our health, infrastructure, water supply, agriculture, ecosystems and species, and marine environments. The global scientific community agrees that the more we reduce our total greenhouse gas (GHG) emissions in the short term, the less intense these climate changes will be over time.

The costs of inaction exceed the cost of action, which has been estimated to be roughly 1% of global GDP if strong action is taken now. In addition, there are significant co-benefits to climate action, including, improved air quality, healthier active lifestyles, reduced operating costs, and potential local economic opportunities.

¹ https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/2017-07-17_climateprojectionsforthecapitalregion_final.pdf

² Stern Review, The Economics of Climate Change, 2007. http://unionsforenergydemocracy.org/wp-content/uploads/2015/08/sternreview_report_complete.pdf

Global, national and provincial action

In response, international governments have set aggressive targets to reduce GHG emissions — collectively aiming to limit global temperature rise below 2 degrees Celsius this century.³ In fall 2018, the IPCC released a *Special Report on Global Warming of 1.5°C*, which highlights the substantial elevated risk of long-lasting or irreversible changes associated with warming of 1.5°C or higher. The report states that global emission reductions on the order of 45% by 2030 (from 2010) are needed, reaching net zero by 2050, in order to limit warming to 1.5°C.⁴

Starting in 2007, when BC's first climate targets were established, our provincial emissions generally went down until 2010, but since then they have started rising again. In 2016, both the Federal and BC governments released new climate action plans that commit Canada and BC to accelerated climate action. Both of these plans recognize we have a lot of work to do, and that all levels of governments need to work together with citizens and businesses to meet these targets.

The BC government recently announced new targets: 40% reduction in community-wide GHG emissions by 2030, 60% reduction by 2040 and 80% reduction by 2050 (all relative to emissions in 2007), and released a new climate action plan in Fall 2018 that details how these targets will be met. Canada has committed to the Paris agreement, and released the Pan-Canadian Framework on Clean Growth and Climate Change outlining how we will achieve Canada's targets.



³ Compared to pre-industrial temperatures.

⁴ See <https://www.ipcc.ch/sr15/>

GHG Emissions in Central Saanich

In Central Saanich, there are three primary sources of community-scale GHG emissions.

- » **Transportation:** Burning gasoline, diesel and propane in vehicles
- » **Buildings:** Using electricity, natural gas, heating oil and propane
- » **Solid Waste:** Throwing organic garbage into our landfill that releases methane

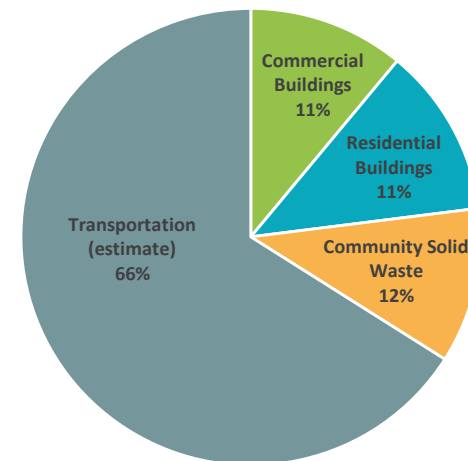
Because electricity generated in BC is almost exclusively hydropower, the GHG emissions associated with electricity use in our community are very low. As a result, almost all of our energy-based emissions result from fossil fuels: gasoline, diesel, natural gas, heating oil, and propane.

Baseline community emissions (2007)

In 2007, the community emitted an estimated 76,000 tonnes of GHG emissions.⁵ Approximately 66% of these emissions resulted from fuels used in our vehicles (personal and commercial), 22% result from powering and heating our buildings, and approximately 12% resulted from organic waste breaking down in the landfills.

Our progress to date (2007–2017)

Based on the data released by the Province for Central Saanich, combined with indicators from our Census data, Central Saanich emissions are beginning to go down, but a lot more work is needed in all areas: transportation, buildings and waste to achieve our target.



⁵ Community Energy and Emissions Inventories were prepared by the Province for 2007, 2010 and 2012. Building and solid waste data continues to be released (to 2016), while the transportation component of the inventories are currently being reviewed. This baseline represents a preliminary estimate of emissions that will need to be revised when the Province releases updated data for transportation.

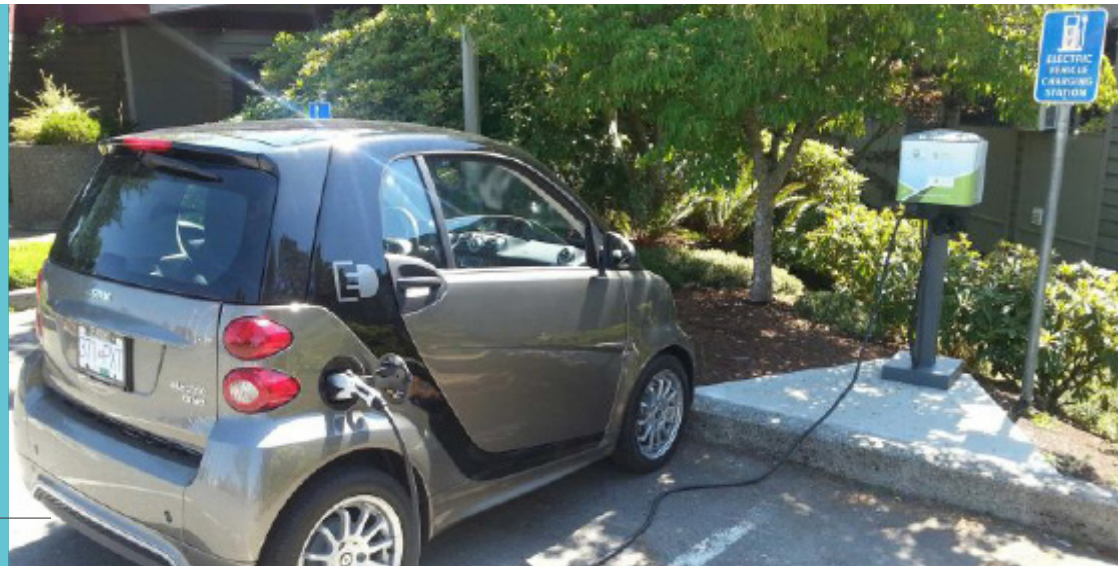
TRANSPORTATION

There are a number of ways to reduce our transportation emissions, for example: creating more compact, complete communities, switching some vehicle trips to other modes (walking, cycling, taking transit — collectively referred to as *active transportation*), using more efficient or low emission vehicles, and making shorter or consolidated vehicle trips. Census data shows Central Saanich is creating more compact residential neighbourhoods: in 1996 less than 30% of homes were multi-family dwellings, and as of 2016, 45% were multi-family dwellings. We are also gradually shifting toward more active transportation trips when commuting, increasing from 12% to 13% of commuting trips by active modes from 1996 to 2016.⁶

Since 2008, District actions include:

- » Keeping the **majority of new growth in Central Saanich within the Urban Settlement Area**
- » Developing a plan for **protecting industrial land** in the Keating Business District to preserve local employment opportunities, and to ensure adequate transit for this area.
- » Investing in infrastructure improvements, including walking paths, pedestrian crossings, bike lanes and transit stops (1 to 3 are upgraded annually to improve shelters and accessibility). The community currently has approximately **15 kilometres of bike lanes**.
- » In 2012, the District participated in and supported the **Regional Pedestrian and Cycling Master Plan** developed by the CRD.
- » In 2012, the District installed **two electric-vehicle-charging stations** for public use.
- » In 2019, the District began developing an **Active Transportation Plan, plus EV and E-bike strategy**.
- » In 2019, the District brought **Modo Car Share** to the community.

To reach our targets for reducing transportation emissions, the community needs to make more significant shifts to active transportation and/or zero or very low emission vehicles, such as electric vehicles.

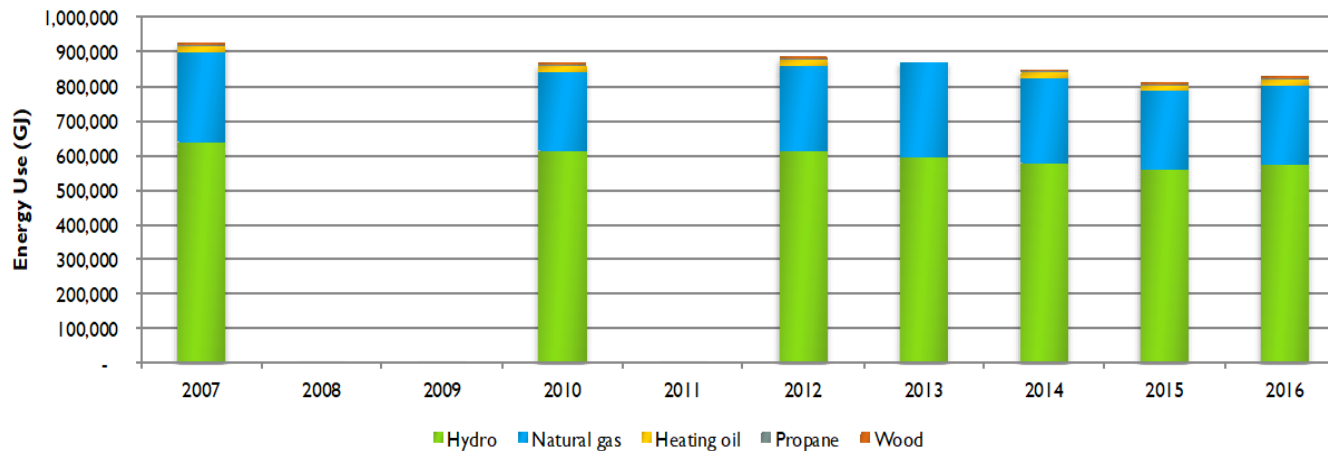


⁶ Statistics Canada Census data.

BUILDINGS

Reducing energy use in existing buildings—most of which will still be around for the next few decades—and building more efficient new buildings are another key to reducing our emissions. Based on utility data collected by the Province, buildings in Central Saanich use approximately 10% less energy in 2016 relative to 2007.

Energy Use in Buildings in Central Saanich, by fuel type (2007-2016)



Since 2008, District actions include:

- » Requiring new homes that go through a rezoning process to meet a minimum of **Energuide 80 rating and Step Code**, making these new buildings more energy efficient than the Building Code.
- » A **30% discount on Development Cost Charge** to incent developments that are affordable, have lower energy use or lower GHG emissions.
- » The **ReAction** program to provide financial incentives for energy audits and upgrades to community groups leasing District-owned buildings.
- » Partnering with other municipalities in the **Transitions 2050 Program** to improve the energy efficiency of existing residential buildings.
- » Implementing the **BC Energy Step Code** for new construction starting in 2020.

To reach our targets for reducing buildings emissions, the community needs to make more significant shifts toward:

- net-zero energy new buildings
- retrofit existing buildings

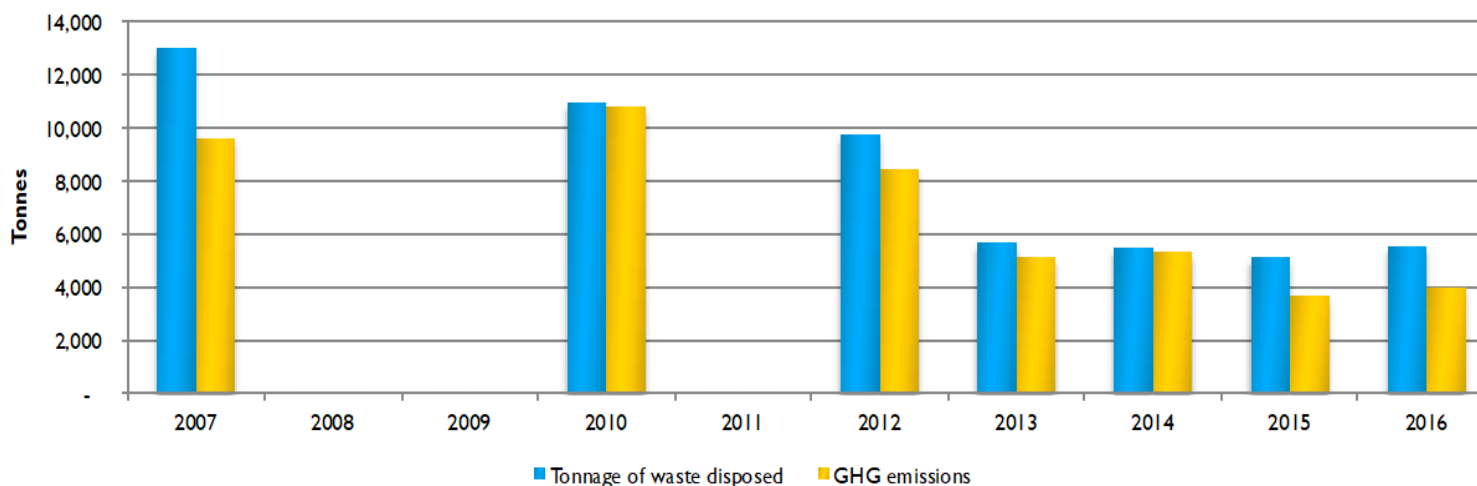


SOLID WASTE

Since 2008, District actions include:

- » diverting yard and food waste from going to the landfill (5,400 to 7,400 tonnes diverted annually 2013-2015); and
- » expanding the landfill gas capture system to reduce the total GHGs being released from landfill waste.

Solid waste disposed and resulting GHG emissions from Central Saanich (2007-2016)



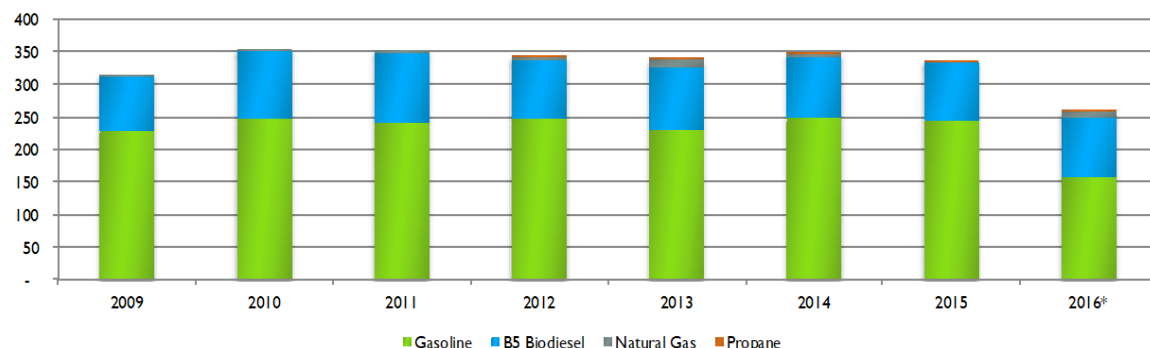
We have a good start in reducing emissions from solid waste disposal, but more can be accomplished with further waste reduction, diversion and gas capture initiatives.



MUNICIPAL OPERATIONS

The District has been tracking and reporting emissions resulting from municipal operations (community buildings, fleet vehicles, and contracted vehicles and equipment) since 2009, and the District has been carbon neutral in its operations since 2015. The majority of corporate emissions result from fuels used in the District fleet vehicles. In 2017, total corporate emissions were 287.5 tonnes CO₂e, a small fraction of community emissions.

Corporate GHG emissions for the District of Central Saanich, by fuel type used (tonnes CO₂e)



*NOTE: In 2016 the District removed fuel use by police vehicles from the inventory, as these are not in scope for municipal inventories.

District actions include:

- » Using a **B5 biodiesel blend** in all diesel vehicles, and biodegradable hydraulic oil.
- » Building a **LEED Silver Fire Station 1**, with geothermal and solar hot water technologies.
- » Adding **360 solar panels** to the roof of Fire Station #1.
- » Completing LED lighting and **energy efficiency upgrades** to facilities.
- » Implementing **small-scale demonstration projects** to conserve energy and reduce emissions.
 - piloting electric landscaping equipment (leaf blowers, chainsaws, weed eaters)
 - piloting an electric bike for water metering
- » Selecting the most **fuel efficient and right sized vehicles** for the job.
- » Adding electric vehicles, an e-bike and Modo Car Share to the municipal light-duty fleet.

We can continue to reduce emissions by shifting to more efficient, low emission vehicles.



Achieving Our Goals

A scenario for achieving our municipal operations goals

One example scenario for achieving the municipal operations goal includes a combination of electrification, where suitable to the application and technology is available, and biofuels/renewable natural gas for other applications, with natural gas as a transition fuel:

- » 100% conversion of light-duty fleet to electric by 2030 (where suitable technology is available).
- » 100% conversion of remaining fleet to natural gas or biodiesel by 2035.
- » 100% shift to biofuels (renewable natural gas or biodiesel) for remaining fleet by 2050.
- » 100% conversion of heating and hot water systems to zero emission systems

A scenario for achieving our community-scale goals

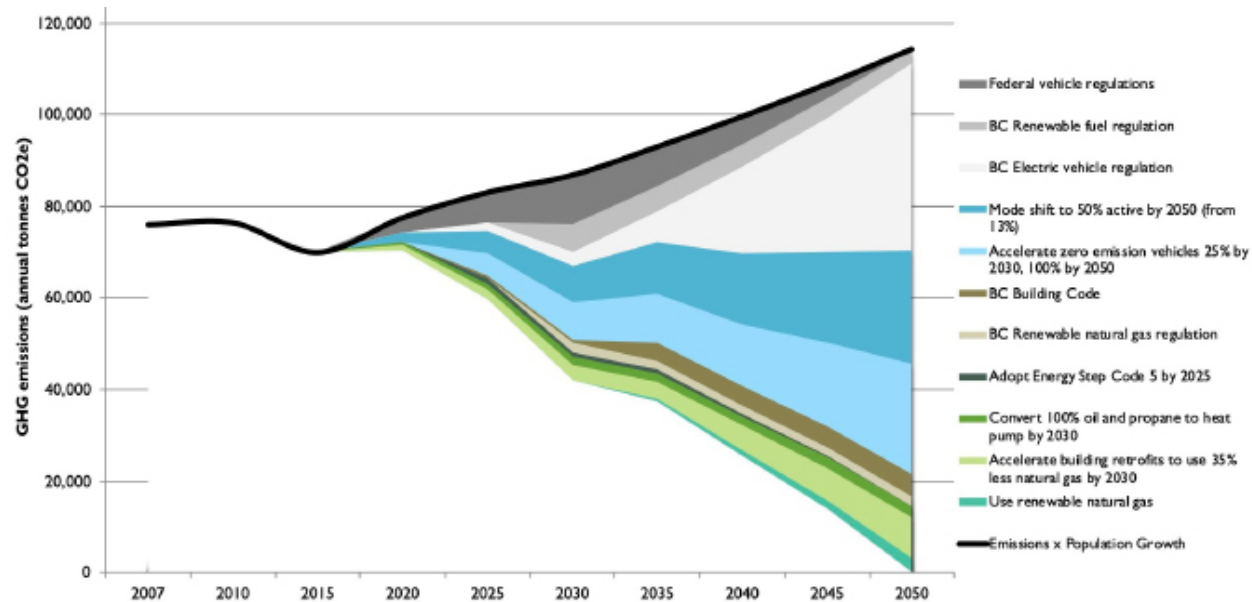
Based on our knowledge of where our emissions currently come from and estimates of the impact of senior government regulations, we can chart out a scenario that demonstrates one path for reaching our target. Achieving such significant reductions in our emissions will require action from all levels of government, as well as citizens, businesses, and partner organizations. The precise path that will get us to this reduction target is still unknown.

The following scenario demonstrates one path toward meeting the community goals for buildings and transportation that includes:

- » Estimated emission reductions that will happen because of Federal and Provincial regulations⁸
- » Building emission reductions resulting from:
 - 100% of remaining oil heaters converted to heat pumps by 2030
 - 100% of new construction net-zero ready starting in 2025 (BC Energy Step Code 5)
 - ~3% of our existing buildings renovated per year to use 50% less energy and install zero emission home heating and hot water systems
 - All remaining building fuel use transition to renewable natural gas by 2050
- » Transportation emission reductions resulting from:
 - 50% of trips are made with active transportation or transit by 2050
 - 100% of vehicles are zero emissions by 2050, and 25% are zero emissions by 2030

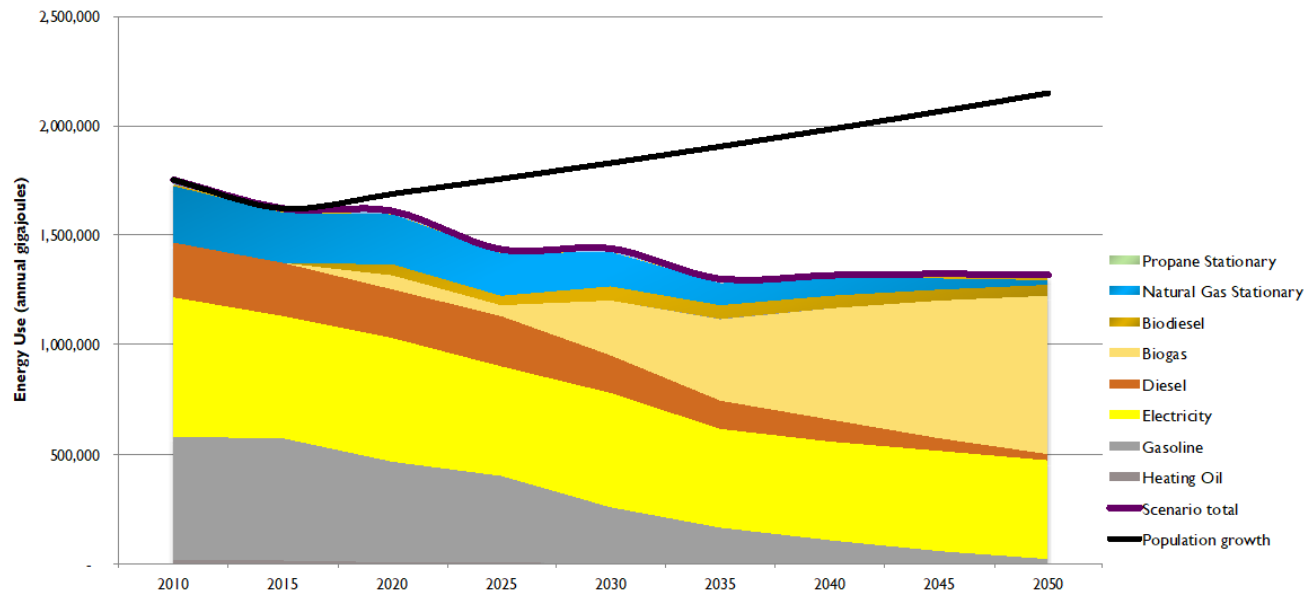
The transition for GHG emissions and renewable energy, based on this scenario:

Potential Path to Goal 1: 100% Less GHGs Than 2007



In addition to the building and transportation efforts, the District will continue to work with the Capital Regional District to achieve significant reductions in emissions from solid waste through a combination of waste reduction, diversion, and landfill gas capture.

Potential Path to Goal 2: Transition to Renewable Energy by 2050



Significant shifts are needed in our transportation, buildings and solid waste profiles if we are to meet our goals, as outlined in the scenario in the previous section. The most significant shifts for community emissions in Central Saanich will focus on improving energy efficiency and increasing renewable energy in our transportation and buildings sectors.

The Federal and BC governments have implemented regulations that will affect future GHG emissions and improve the efficiency of and reduce emissions from new vehicles and new buildings, and have developed programs to support further reductions. While these programs and regulations will help reduce community-scale emissions in Central Saanich, it is not sufficient to meet the target of net zero GHG emissions by 2050, and further actions are required. The majority of emissions are from transportation but buildings are long lasting infrastructure and must be addressed now. This section outlines actions for the District of Central Saanich to implement in support of our long-term goals.



5 Action Areas to Achieve our Goals



TRANSPORTATION AND LAND USE

- Compact and complete community
- Active Transportation Plan
- Electric and plug-in hybrid vehicles
- Connect with existing programs
- Support the transition to biofuels

BUILDINGS (residential and commercial)

- Energy efficient new buildings
- Energy efficient retrofits
- Connect with existing programs
- Support the transition to biofuels
- District energy system

SOLID WASTE

- Support regional diversion efforts
- Capture and optimize use of landfill gas
- Consolidate garbage collection services

MUNICIPAL OPERATIONS

- Carbon neutral operations
- Green fleet transition
- Support biofuels
- Showcase renewable energy
- Highly efficient new buildings
- Carbon sequestration

ADAPTATION TO CLIMATE CHANGE

- Risk and vulnerability assessment
- Climate considerations in operations and planning
- Public awareness of risks and adaptation strategies
- Value natural assets

Transportation and Land Use

OBJECTIVES

- » To make *significant shifts toward active modes of transportation* that support a healthy, safe and vibrant community
- » To *transition toward electric and biofuel sources of energy for all vehicle transportation needs, making use of cleaner fossil fuels in the shorter-term to support the transition*

ACTIONS

Compact and complete community

Continue to focus development in the Urban Settlement Areas through residential infill and densification. Furthermore, support opportunities to incorporate local business areas and other amenities close to residential infill with the goal of increasing the number of homes within 400 metres of: work places, transit stops, bike paths, grocery stores, elementary schools, and parks. Compact and complete communities encourage trips on foot, by bicycle or transit rather than car.

Identify additional opportunities to support reduced vehicle travel, including supporting home-based businesses with appropriate bylaws, and supporting neighbourhood commercial within neighbourhoods located within urban settlement areas. Incorporate low carbon considerations in new infrastructure designs (e.g. safe routes for all modes, roundabouts that reduce idling).

Active transportation plan

Create an active transportation plan that outlines a policy and key actions for supporting a significant mode shift toward walking, cycling, ride share and transit within the community. Actions for consideration include:

Electric and plug-in hybrid vehicles

Develop a community electric vehicle strategy that includes a plan for increasing charging facilities at key locations throughout the community, considering requirements for charging stations in new residential and commercial developments, and providing parking spots for EVs only. EV sales continue to increase quarterly in BC, however, the share of new passenger car sales that are electric is still less than 10% in BC. Building supportive infrastructure is critical to assisting with a more rapid transition toward electric vehicles in our community.

Connect with existing programs

Actively connect community members with existing provincial, utility or other programs such as the Clean Energy Vehicle Program by raising awareness through marketing, social media, and community events.

Support the transition to biofuels (including renewable natural gas)

Collaborate with the Capital Regional District, neighbouring municipalities, researchers and local industry to identify and support opportunities to generate, distribute and/or purchase biofuels or renewable natural gas in the region.

Buildings (Residential and Commercial)

OBJECTIVES

- » *To develop net-zero ready buildings in new construction that have low energy needs (lowering utility costs and emissions), are more comfortable, and are well-suited to our changing climate*
- » *To substantially improve the energy efficiency of existing buildings through cost-effective building retrofits that reduce utility costs, improve comfort, and are adapted to our changing climate*

ACTIONS

Energy efficient new buildings

Develop and implement a BC Energy Step Code adoption strategy that goes beyond the base BC Building Code, beginning with the lower steps (1-3). Monitor implementation and increase requirements over time as industry builds capacity and costs come down – aiming to implement the upper steps (4-5) by 2025.

Support development of buildings that go beyond the required steps by adjusting development cost charge reductions, or providing other incentives such as building permit rebates.

Energy efficient retrofits

Establish a Deep Green Retrofits program with a target of having 3% of existing buildings (residential and commercial) undertake energy efficiency retrofits and install zero emission home heating and hot water systems annually. Typical renovation rates are closer to 1% per year. Partnerships with utilities, senior governments and other agencies will be important to provide incentives that are sufficient to substantially increase the rate of retrofits occurring.

In addition to external funding, the District can also evaluate local funding opportunities such as building permit rebates, and implementing a broad green development fee that gets re-distributed to these initiatives. As a first step, the District can reimburse the cost of a building energy audit and follow-up coaching to support the selection of the most cost-effective upgrades.

Consider incorporating water-saving retrofits into the same program, supporting climate change adaptation for anticipated hotter, drier summers.

Connect with existing programs

Actively connect community members with existing provincial, utility or other programs by raising awareness through marketing, social media, and community events. Investigate the potential to provide “top-up” incentives for specific outcomes – for example, an incentive that facilitate a 100% shift away from heating oil in the community.

Support the transition to biofuels (including renewable natural gas)

Collaborate with the Capital Regional District, neighbouring municipalities, researchers and local industry to identify and support opportunities to generate, distribute and/or purchase renewable natural gas in the region. Potential sources could include anaerobic digestion of municipal and/or agricultural organic waste, and gasification of forestry by-products.

District energy system

Explore the development of a low carbon district energy system for the Keating Industrial area.



Solid Waste

OBJECTIVES

- » To *minimize waste* going to the landfill
- » To *maximize the capture and re-purposing of waste* in the landfill

ACTIONS

Support regional diversion efforts

Work with the Capital Regional District, residents and local businesses to achieve 100% organic waste diversion from residential and commercial sources. Consider opportunities to phase-out or ban single use items (e.g. straws and take-out containers).

Capture and optimize use of landfill gas

Support regional efforts to maximize the capture of landfill gas from the Hartland landfill, and to pursue opportunities to transform the captured gas into an energy resource (for example, renewable natural gas).

Consolidate garbage collection services

Currently multiple private companies provide collection services in the community – resulting in multiple trucks covering the same route. Review opportunities to consolidate services by area to reduce truck trips.



Municipal Operations

OBJECTIVES

- » *To transition the fleet to electric and low emission vehicles and fuels*
- » *To build new buildings to be net-zero energy ready*
- » *To use a "climate lens" to ensure significant capital decisions incorporate climate change implications (both mitigation and adaptation)*

ACTIONS

Carbon neutral operations

Since 2015, the District has been carbon neutral in its operations through the purchase of carbon offsets. Continue to support carbon reduction projects through the purchase of carbon offsets, with a focus on local or near-local projects where possible.

Green fleet transition

Beginning in 2018, transition the light-duty fleet to electric vehicles at time of renewal, or in advance of renewal where fuel and maintenance cost savings support the investment. Identify suitable applications where the use of vehicles can be replaced with zero emission alternatives (e.g. electric bicycles).

In 2019, develop a strategy to convert heavier-duty fleet vehicles to lower emission vehicles best suited to meet the performance requirements. In the near-term this is most likely a conversion to natural gas vehicles

Support biofuels

Identify opportunities to support increased use of biofuels in the fleet (e.g. through use of higher blends of biodiesel such as B20, or the purchase of renewable natural gas in natural gas vehicles).

Showcase renewable energy

Identify opportunities to showcase various renewable energy projects that are visible to the community as a means to raise awareness, support local capacity building opportunities and encourage community members to uptake renewable energy. For example, installing a solar array on a municipal building demonstrates a visible commitment to renewable energy. Other examples include branding on fleet vehicles that are low or zero emission, or are powered with biofuels.

Highly efficient new buildings

Ensure new facilities meet high standards of energy efficiency, demonstrating leadership in the community and supporting industry transition toward more efficient building practices. Where appropriate, integrate use of alternative energy technologies such as geo-exchange and solar technologies.

Carbon sequestration

Identify opportunities to protect and increase tree canopy and other natural assets that contribute to carbon sequestration, and consider carbon sequestration in all land acquisition and management activities.

Adaptation to Climate Change

OBJECTIVES

- » To ensure the District and community members *understand the range of potential impacts* of climate change in our area
- » To ensure the District and community members are *prepared for and resilient to the impacts* of climate change
- » To foster our *natural asset resiliency to the impacts* of climate change

ACTIONS

Risk and vulnerability assessment

To prepare ourselves for potential changes to our climate, we need to understand how sensitive our community systems (people, economy, food), infrastructure and natural assets are to the range of potential projected changes in our climate (from hotter, drier summers, to wetter winters, to more intense rainfall events, etc.) This risk and vulnerability assessment can build off the CRD climate projections work completed recently to help us identify how to prepare for the changes with minimal disruption and costs, while seeking to maximize the benefits.

Climate considerations in operations and planning

Identify opportunities to build from emerging technical resources to support integration of climate considerations into planning and operations to address risks and vulnerabilities identified during the initial assessment. Examples may include partnerships with Engineers and Geoscientists of BC to apply new future 'climate-proof' IDF curves to infrastructure design standards, making improvements to hard infrastructure, informing development considerations for expanding flood plains and areas affected by sea level rise, promoting local food systems that increase resilience, and enhancing emergency response programs. Incorporate climate considerations into future updates of the Official Community Plan.

Public awareness of risks and adaptation strategies

Collaborate with the Capital Regional District and neighbouring communities to incorporate climate-related communications, emergency preparedness and disaster planning, and promotion of local food systems into public outreach materials and activities.

Value natural assets

Participate in regional efforts to identify the value of natural assets in climate change adaptation (e.g. reducing flood inundation, protecting shorelines from erosion, providing shade during extreme heat events) and incorporate findings into park and land management decisions.



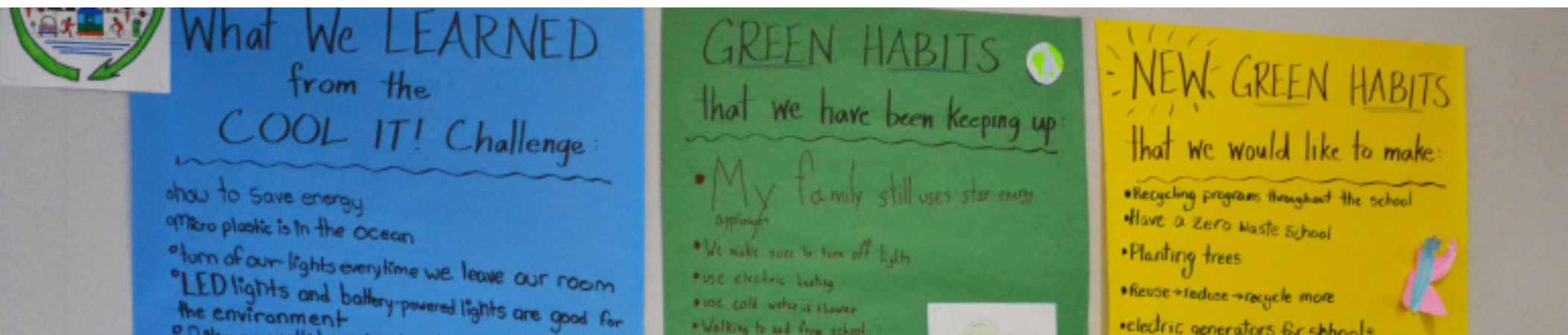
Implementation and Monitoring

Resources

Implementation of this Climate Leadership Plan will involve a commitment of staff time and municipal resources to plan, develop and oversee actions – including policy development, engagement and outreach with government and industry partners, communication and education with public and more – while also staying abreast of leading practices, opportunities and funding. With renewed senior government focus on climate action, support may be available for partial funding of municipal staff positions that support implementation of climate action plans like this one. The responsible staff would also oversee monitoring and reporting progress, and undertake a review of this plan in 5 to 10 years. In 2018, the District received a two-year climate action staff grant from the Federation of Canadian Municipalities.

A \$350, 000 Climate Leadership Reserve Fund is used as an internal bank to fund climate leadership projects, such as the solar array on the roof of Fire Station 1, which includes a plan to recoup the investment through internal repayment of the savings from reduced hydro costs.

The District continues to focus on applying for grants to support climate action related infrastructure and programs while also utilizing the District's Climate Leadership Reserve Fund to fund new projects.



Monitoring and reporting

The District annually reports to the Province on climate action activities undertaken in relation to community-scale and municipal operations through the CARIP report. The District will also publish the following measurements with all available data at minimum three times a year in the District's Financial Plan, Annual Report, and Mid Year Report.

Community measurements will include:

Measurement (tonnes CO ₂ e)	2007 Baseline	2030 Target	2050 Target
Transportation	50,500	-	0
Buildings	18,700	-	0
Landfill	6,800	-	0
Total (tonnes CO₂e)	76,000	41,800	0
Measurement	Annually reported		
Oil furnaces replaced with heat pumps			
Number of all fossil fuel heating systems replaced with heat pumps			
Number of Electric Vehicles (EVs) in Central Saanich			
% Vehicles that are EVs in Central Saanich			
Number of public EV chargers in Central Saanich			
% of bus stops that include a shelter			
% community roads that have on street bikeways			
% of community roads with sidewalk facilities			
Active transportation within Central Saanich	2011	2017	
% all trips by walking	16%	14%	Will be reported as CRD supplies data every 5 years.
% all trips by bicycle	1%	3%	
% all trips by transit	1%	2%	
% all trips by automobile	79%	79%	
% all trips by other	3%	2%	
% of all trips by sustainable means	21%	21%	

Municipal measurements will include:

Measurement (tonnes CO ₂ e)	2007 Baseline	2030 Target	2050 Target
Transportation	265	-	0
Buildings	67	-	0
Total (tonnes CO₂e)	332	183	0
Measurement	Annually reported		
Public trees planted and removed			
Electric vehicle chargers (property of DCS)			
Electric vehicles (property of DCS)			
Fire Hall solar power generated (MWh)			
Climate action event attendees			

Conclusion

It is necessary for the District to take early and substantial action to reduce the potential impacts of climate change.

Currently, our emissions are remaining relatively flat, even with a modestly growing population. However, there is much work to do to make significant shifts in our transportation, buildings and solid waste sectors in order to achieve our goals to reduce overall community-scale emissions and transition to 100% renewable energy by 2050.

Even if we achieve significant reductions in emissions, we are already facing changes in our climate – leading toward hotter, drier summers and wetter winters. This plan also highlights the need to understand the risks and hazards associated with a changing climate, and to prepare our infrastructure, social and economic systems and natural systems to handle these changes.

The longer we delay, the more costly and difficult it becomes to achieve these goals. This action plan lays out how the District can move forward; but the District needs support from senior governments, community members, industry and other partners to set us on a path to meeting our goals.

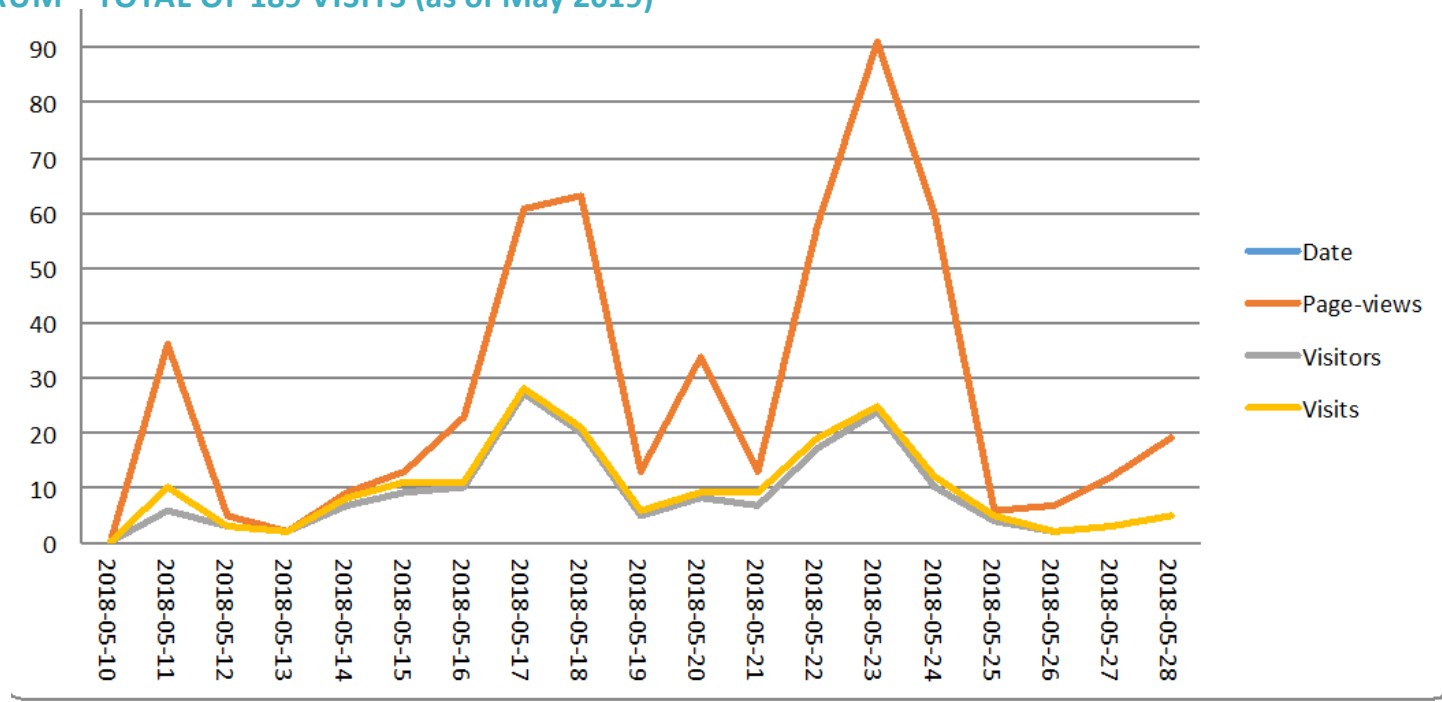


Appendix A: Community Feedback

During the plan development period (May to June 2018), two forums were offered to community members to provide input to refreshing this plan: 1) a public open house hosted at Municipal Hall; and 2) on online engagement site, which opened May 11, 2018 and will run until the end of June, 2018.

The online engagement consists of adding ideas, voting on ideas, and answering poll questions. To date, the engagement site has been visited by 156 people. Of the visitors, 75 visited multiple pages and 14 downloaded the Climate Leadership Plan Background document. The site's Ideas tool solicited 17 ideas from the public about ways to reduce greenhouse gas emissions, which visitors are able to vote for (a list of submitted ideas is provided below). Three polls were posted on the site and have received 32 responses to date. The highlights of these forums to date are summarized here.

ONLINE FORUM – TOTAL OF 189 VISITS (as of May 2019)



LIST OF IDEAS GENERATED THROUGH ALL ENGAGEMENT FORUMS

(with associated votes in brackets, where applicable)

Transportation – Community

- » Transit advocacy
 - Keating Transit Hub needs District support
 - Work with BC transit/set targets for increased services
 - Acknowledge increase taxes to support
 - Create incentives for local businesses to offer transit passes to employees
- » Active transportation plan – design and implement
- » Park & ride on District property
- » Improve access to active/alternative transportation
 - Improve safety of non-vehicle infrastructure (e.g. bike lanes, walking paths) and design for walking (6)
 - Improve connection of bike lanes and walking paths to other parts of the community and neighbouring communities (5)
 - Create policy to ensure new developments incorporate car share and EV charging infrastructure
 - Increase access to electric vehicles and public charging stations
 - Encourage car share businesses to include electric vehicles in their fleets
- » Introduce roundabouts to improve traffic flow (and reduce emissions from start/stop vehicle operations)
- » Consolidate private garbage collection amongst private collection companies (4)

Buildings – Community

- » Advocate for Provincial incentive program for retrofits
- » Incentive program with creative funding and grant opportunities
- » Self-funding renewables project promotion
- » District heating system for Keating
- » Adopt a higher step code sooner for new buildings (1)
- » Residential buildings
 - Encourage water collection through incentives
 - Incentivize heat pumps (3)
 - Encourage / incentivize energy efficient technologies and retrofits in homes

Waste – Community

- » Host a Reuse Rendezvous and other waste reduction events (1)
- » Collect compost and yard waste to reduce backyard burning and produce high-quality compost (3)
- » Develop policy on one-time use items, e.g. plastic bags and straws, to eliminate these items from the waste stream (1)

District Operations

- » Employee incentives for alternative/low carbon travel to work
- » Employee wellness pass for local recreation
- » Apply to provide discounted bus passes to staff
- » Organized carpooling
- » Promote bike to work / car-free days
- » Support telecommuting / flex work days
- » Raise awareness about climate change impacts in the community
- » Adaptation planning
- » Identify carbon capture opportunities
- » Purchase electric vehicles for District fleet
- » Convert District fleet to low carbon fuels, e.g. propane, or renewable natural gas



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