

View Royal Residents' Climate Action Guidebook



VIEW ROYAL
COMMUNITY
CLIMATE ACTION
STRATEGY



Overview

The Town of View Royal is one of nearly 1,500 communities around the world that has declared a climate emergency. Now, more than ever, we as individuals and communities are being called to take bold climate action that reflects the gravity of this declaration.

We can strengthen our community's sustainability and prosperity with near-term decisions and actions to reduce our contribution to climate change-causing greenhouse gas (GHG) emissions. That is why we are doing a Community Climate Action Strategy (CCAS). The CCAS will reflect scientific data as well as our values and our Town's needs so we can build social, economic and environmental benefits while protecting what makes View Royal unique.

The good news is we know what we have to do and we are in a good place to get started. Plus, taking action to address climate change can make life better now! Climate actions can, for example, improve health, create jobs, save money on getting around and heating and cooling, improve equity and make our natural spaces healthier and more vibrant.

The full CCAS is available online and outlines the actions the Town needs to take to reduce GHG emissions in our community. But we cannot rely on local government action alone – we all have a role to play. Our success depends on everyone working together: residents, businesses, community groups and organizations, neighbouring local governments and provincial and federal governments.



This Guide

The CCAS goes into specific detail on what the Town can do to reduce emissions through infrastructure decisions, outreach and engagement activities and policy and regulation. This is just one piece of the emissions mitigation puzzle though; we need help from residents and businesses to make low carbon decisions, too!

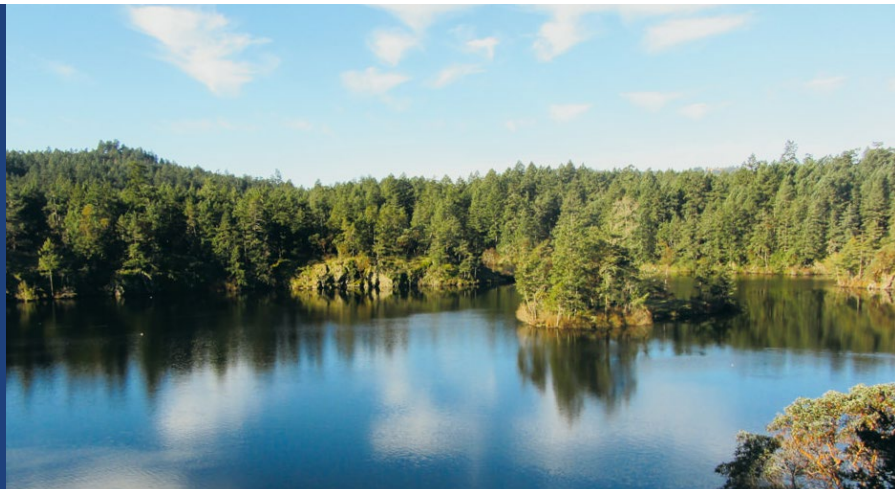
This *View Royal Residents' Guide to Climate Action* is meant to help residents of View Royal understand what we are doing as a local government and the many ways that individuals can reduce their emissions through actions big and small.

There are four sections in this Guide:

1. Climate Change Background
2. Climate Change in View Royal
3. Solutions for Our Community
4. Solutions for Our Residents



TIP: This icon represents an outcome from the CCAS public engagement the Town conducted in the fall of 2021.



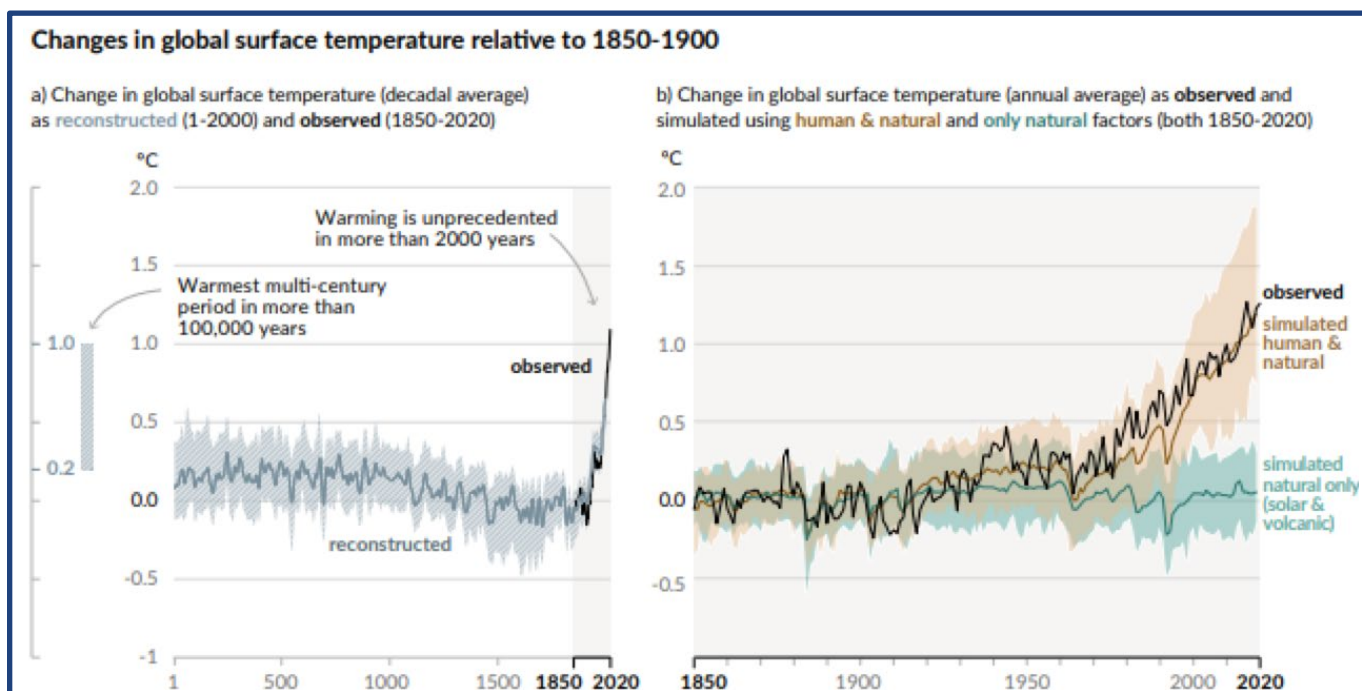


Climate Change Background

WHAT IS CLIMATE CHANGE?

Climate is sometimes mistaken for weather. Weather is how you describe what is happening day-to-day or from year-to-year. But climate is measured over a long period of time. So, even if we have a particularly cold winter or summer, projections show our climate is still getting warmer over time.

Seasonal temperature isn't the only way we know climate change is happening.¹ Scientists also look at rainfall averages and wind patterns, for example.

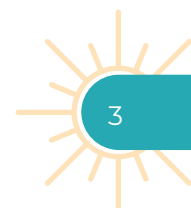


It is true that throughout Earth's history, climate has continually changed. But when climate changes naturally, it is a slow process that has taken place over hundreds and thousands of years. Experts have overwhelmingly alerted us to a climate change emergency because the changes we have seen since the mid 1900's is no longer Earth's natural cycles, and it's happening so fast that Earth's life-sustaining systems can't adapt. In addition, we are rapidly moving towards climates that are well outside the scope of what human civilization has had to deal with to date.

Figure Source: IPCC Sixth Assessment Report ²

¹ <https://www.ipcc.ch/report/ar6/wg1/#outreach>

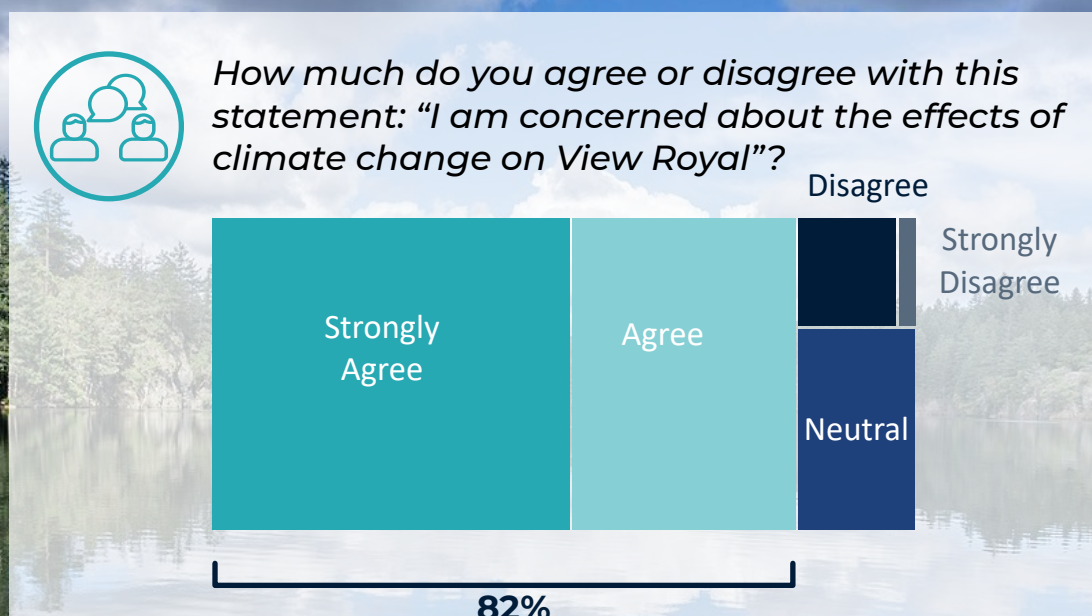
² https://www.ipcc.ch/report/ar6/wg1/downloads/outreach/IPCC_AR6_WGI_SPM_Basic_Slide_Deck_Figures.pdf





In October 2018, the world's leading scientific body on climate change, the United Nations Intergovernmental Panel on Climate Change (IPCC), released a major report that emphasized the dramatic difference in consequences between a 1.5°C and 2°C world: increased impacts of extreme weather, more wildfires and floods, increases in sea-level rise, and severe threats to human health and well-being.³

By reducing the GHGs we emit, primarily through reducing the amount of fossil fuels (natural gas, oil, diesel, and coal) we burn for energy, we can limit these impacts and ensure a healthy environment, economy and society for ourselves and future generations. While it is not too late, time is of the essence.



What is the difference between "weather" and "climate"?

Sometimes weather is talked about as if it proves or disproves that climate change is happening (for example, when there is a late snowstorm or a heat wave).

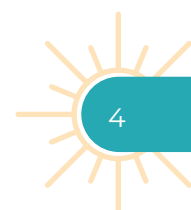


Weather is what is happening day-to-day.



Climate is the overall trend or average of the weather over the long term.

³ <https://www.ipcc.ch/sr15/>

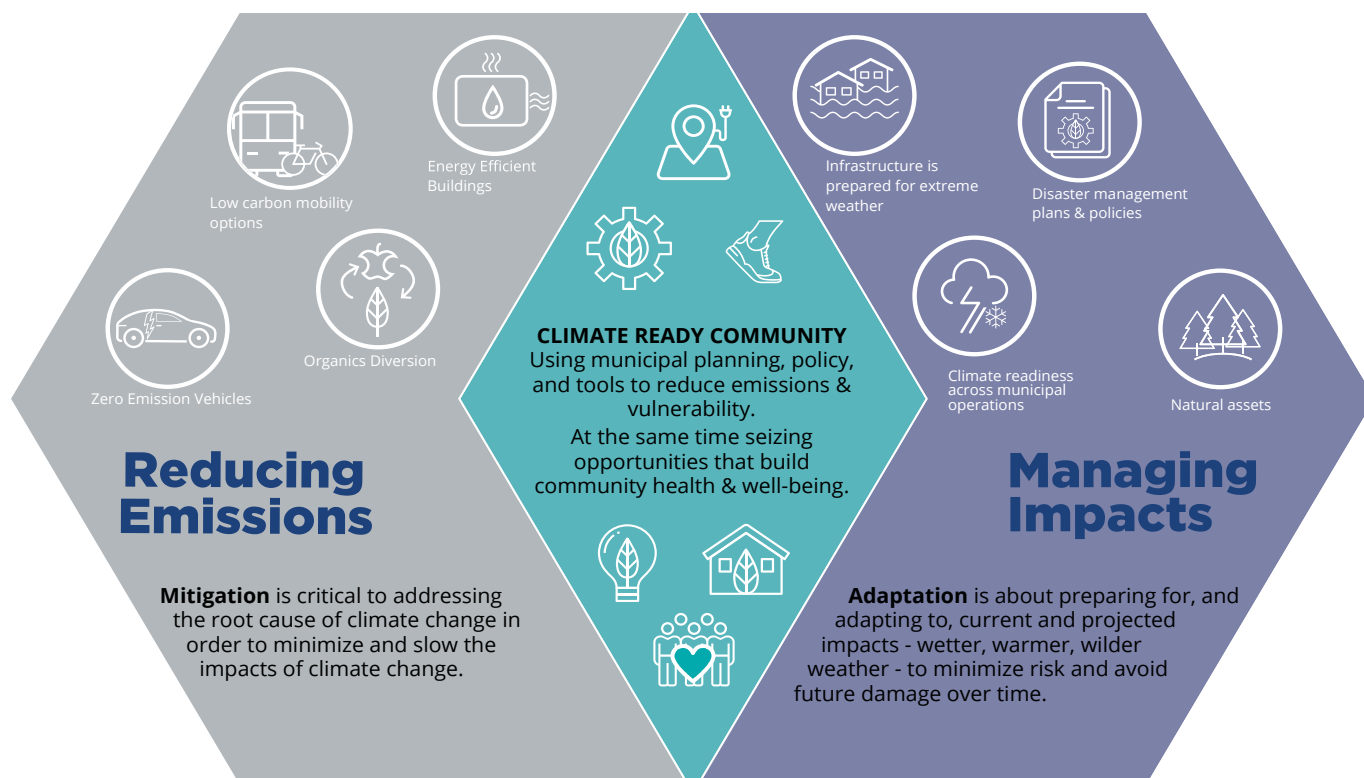




MITIGATION VS. ADAPTATION

We can avoid the worst impacts of climate change by dramatically reducing the amount of greenhouse gases we emit into the atmosphere. This is called “mitigation”. If every community around the world takes on the challenge of reducing GHG emissions, we can avoid the worst impacts of climate change.

But some of the impacts of climate change are already being felt in View Royal just as they are around the world. We experience the changing climate primarily through wilder and more frequent extreme weather events. So it is critical we start to prepare for impacts. This is called “adaptation”.



Examples of actions that reduce emissions while preparing for climate change impacts:



Walking/biking paths: reduces emissions, increases access for vulnerable populations, reduces congestion, reduces pollution, and increases air quality and health.



Building retrofits: use less energy, reduce emissions, save costs, increase thermal comfort and air quality during extreme heat and wildfire events.



Green infrastructure: increases rainfall absorption, reduces flood risk, sequesters carbon, recharges aquifers, increases green space.



Climate Change in View Royal

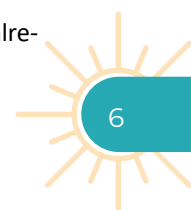
The impacts of climate change are being felt in View Royal just as they are across Canada and the world. From heat domes and more frequent, intense storms to wildfires and sea level rise, our local infrastructure (roads, buildings, sewer systems), ecosystems, health and safety are at risk (For more details, view pages 36 – 42 of the Climate Projections for the CRD Report).⁴

PROJECTED CHANGES TO CRD CLIMATE ⁴



These changes will not always happen consistently over the region or over time, as seasonal and yearly variations will occur. For most variables, projected change appears somewhat different from the past by the 2050s. By the 2080s, projections indicate substantial changes, resulting in a very different lived experience than the capital region of today.⁴

⁴ https://www.crd.bc.ca/docs/default-source/climate-action-pdf/reports/2017-07-17_climateprojectionsforthe-capital-region_final.pdf?sfvrsn=bb9f39ca_12

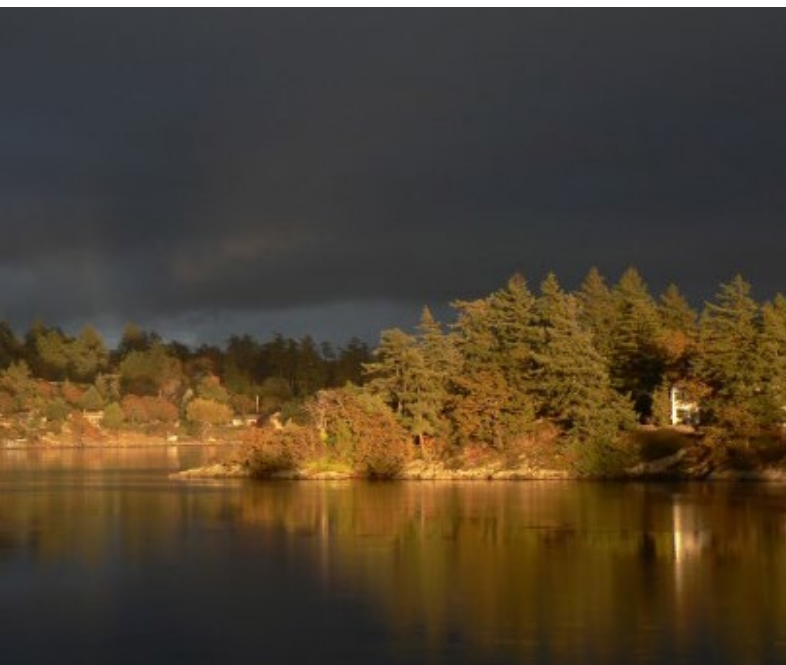
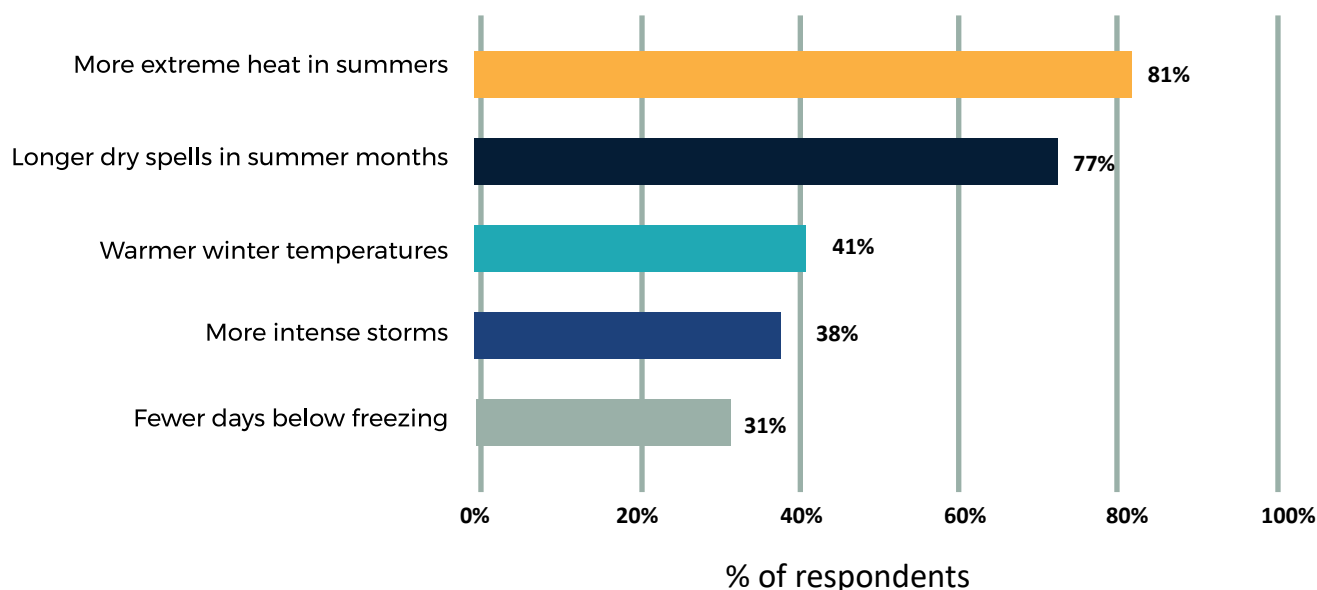




In the first community survey, respondents were asked, *“Have you noticed any changes in our local climate and weather over the last 5-10 years?”*



Respondents were able to select all the impacts they have observed and results are consistent with changes that are projected for our region.



REFLECTIONS FROM A VIEW ROYAL RESIDENT:

“Climate change will have other impacts on the residents of View Royal beyond just environmental and climate changes. There will also be knock-on effects of climate change events around the world such as higher food and energy prices, supply chain difficulties, and effects to our bird and animal life. I would like to see View Royal build community and social resilience to help residents weather these coming challenges.”



SOLUTIONS FOR OUR COMMUNITY

The Town of View Royal is committed to protecting our community. We know that by reducing local risks that come from a changing climate, we can make life better for residents today and in the future.

The CCAS is one step in our community climate action journey. The process to create the plan started in the summer of 2021 and focuses on areas where the Town has the greatest influence and areas that present the strongest benefits to community members. The plan is efficient, effective, beneficial and actionable. There were three phases during its creation:

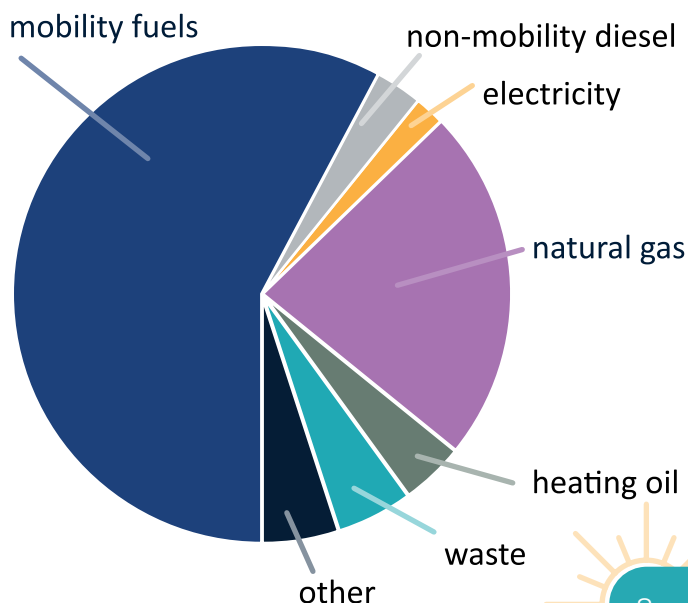


CURRENT EMISSIONS:

Analyzing current and future sources of GHGs ensures that climate actions we prioritize are relevant.

This graph shows that the majority of our emissions come from driving vehicles (mobility fuels) and heating/cooling buildings (natural gas). We can therefore see a path to success centered around reducing energy used, using energy more efficiently and switching to renewable and low carbon energy sources at home and on the road.

View Royal's Emissions by Sector





WHAT IS IN OUR CONTROL: LOCAL CLIMATE ACTION IN CONTEXT

Tackling climate change requires bold, sustained action from each of us; we all have a role to play. *What are the roles of each level of government?*

The federal government uses national standards and provides funding for climate action to provincial governments because provinces have constitutional jurisdiction over both energy and local governments.

Local governments are on the front lines of climate action because communities are where the vehicles, buildings and infrastructure are.

Federal



Provincial



Local



CLIMATE ACTIONS & LEVERS

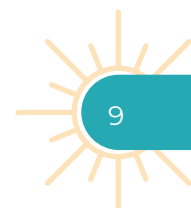
- Vehicle fuel efficiency standards
- Infrastructure funding
- Model national building codes
- Energy ratings & tools (e.g., EnerGuide)
- Green infrastructure bank
- National carbon price
- CCS (Carbon Capture & Sequestration)
- Information sharing

- Codes (e.g., Building code including Energy Step Code)
- Data (e.g., Community Energy & Emissions Inventory)
- Green infrastructure (e.g., EV charging)
- Provincial roads & transit funding
- Direction to BCUC on BC Hydro, FortisBC, ICBC
- Municipal regulation & authority
- Carbon tax
- Renewable Natural Gas
- Zero Emissions Vehicle mandate

- New /adjusted community infrastructure
- Restricting land use in key areas
- Sidewalks/bike & scooter lanes
- Transit
- EV strategy
- BC Energy Step Code
- Local engagement
- Energy retrofit programs
- Organics diversion
- Natural assets
- Water management
- Extreme climatic event/disaster preparation



Governments set the stage, but it is residents and businesses who make daily decisions to reduce their emissions and carbon footprint.





VISION FOR THE FUTURE

As part of the process to create the CCAS, we engaged stakeholders and citizens to describe a vision for a vibrant, resilient, and climate friendly View Royal. Here is what community stakeholders envisioned:



The Future of Transportation

Integrated and multimodal transportation network.

Electrified transportation network.

Culture shift towards cycling and other forms of active transportation.

Continuous and safe infrastructure for walking.

Fewer cars due to autonomous vehicles and electric car share options.

The Future of Buildings

By 2030, zero fossil fuels and wood are used for heating buildings in View Royal. We've transitioned all buildings to electricity using heat pumps and geothermal, etc.

All new buildings are built to the best energy efficiency standards and powered with renewable energy. They are built using low carbon products and recycled materials.

Residents have accessed support to walk them through the retrofit process and half of all the buildings have received a low carbon retrofit that includes insulation, windows, and heat pumps.

Our buildings are resilient to the impacts of climate change with green and white roofs, heat pumps for cooling, and air filtration.

Increased density along corridors where transit is available.

Reduced waste from demolition of buildings through deconstruction and recycling of materials.

The Future of Waste

In 2040 - no unnecessary packaging, we have extended producer responsibility on all products so everything is long lasting and recyclable, all waste is reused or recycled, everyone knows what to do with their waste.

We have changed mindsets so less is more, organics are diverted from landfill in a clean manner, and landfill gas is captured and used, and we have new economic opportunities as a result of all of this. Waste emissions should be brought to as close to zero GHGs as possible.

And we grow much of our own food, are maintaining and preserving natural assets including our urban tree canopy.



What does a vibrant and resilient View Royal look like to you in 2040? How are you and your family thriving and enjoying day-to-day life?



TARGETS

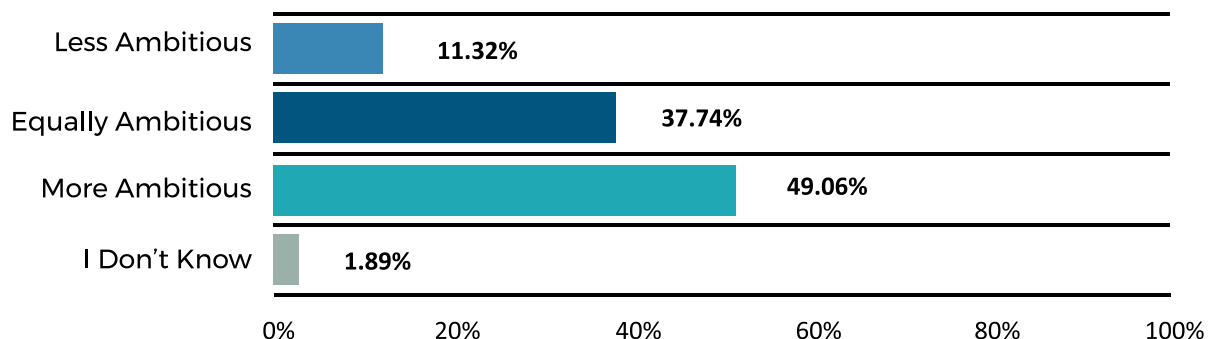
A key component of the CCAS is setting GHG emission reduction targets for the community. Targets show the urgency of the challenge we are facing and the scale of action required. View Royal's long-term community target is now aligned with the Intergovernmental Panel on Climate Change's recommendations for limiting warming to 1.5°C to avoid the worst impacts of climate change.

45% reduction in emissions below 2007 levels by 2030

100% reduction in emissions below 2007 levels by 2050



Do You Want View Royal's suggested GHG target of 40-45% reduction by 2030 and net zero by 2050 to be:





ACTION PLAN - THE VIEW ROYAL CCAS

The CCAS is our community's pathway to achieve our vision and GHG emissions targets given where we are now.

The strategy is organized into five broad categories of actions that have the biggest impact on reducing emissions in the community. These are called "Big Moves". The Big Moves focus on the types of emissions that are most in the control of local government powers: emissions from transportation, buildings and waste.* It lays out strategies and actions under each of the five Big Moves and focuses on what the Town can do to help individuals and families:

Infrastructure: Investments in to Town of View Royal owned infrastructure that enable residents to make lower-emissions choices such as active transportation networks and public charging stations.

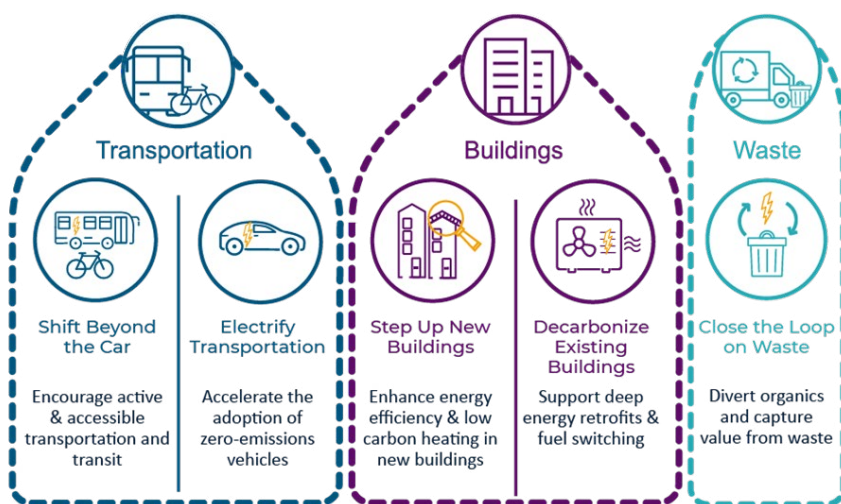
73% of survey respondents are supportive of Town efforts to encourage active (walking, cycling, etc.) and accessible transportation and transit?

Policy: Changes to Town of View Royal policy and regulation that lead to energy and emission reductions in the community such as requirements and incentives for enhanced energy efficiency in new buildings.

90% of survey respondents are Very or Somewhat supportive of efforts to accelerate the adoption of EVs.

Engagement: Outreach, education, and incentives that inspire residents and businesses to make choices to reduce energy and emissions and prepare for a low carbon future.

84% of survey respondents think it's fair to offer incentives or subsidies to make sure everyone has access to low carbon technology.

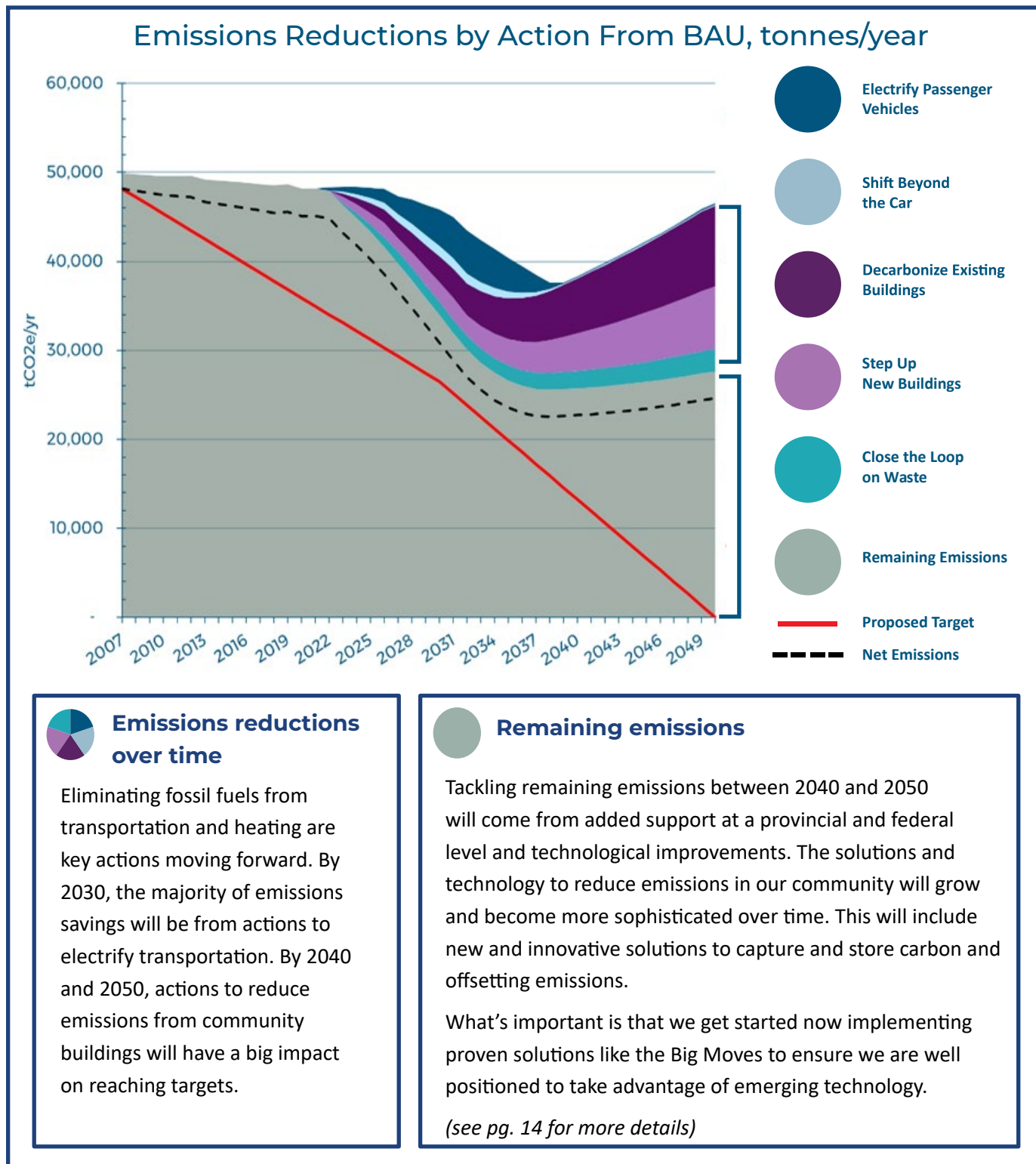


* The full Community Climate Action Strategy is available online.



ACTION PLAN - THE VIEW ROYAL CCAS continued

The CCAS includes a 'Pathway' to achieve the new 2030 and 2050 climate targets. The graph below is a model that shows how our community's emissions will decrease as we implement the strategies and actions associated with each Big Move.





ACTION PLAN - THE VIEW ROYAL CCAS continued

Bringing it all together

Below is a summary of how the Town will support individuals in our community to make low carbon and climate friendly choices - big and small - each day.

TRANSPORTATION



Vision: A complete zero emissions transportation system connects our community and region.

Shift beyond the car

- ✓ Optimize land use planning tools to enable compact growth
- ✓ Enable walking, cycling and other forms of zero emissions mobility
- ✓ Promote transit ridership and support a zero emissions transit network

Electrify transportation

- ✓ Enable charging on-the-go
- ✓ Enable charging at home and work
- ✓ Encourage EV's through outreach and supportive policies

BUILDINGS



Vision: Our community's buildings are exceptionally energy efficient, and powered, heated and cooled with 100% renewable energy.

Step up new buildings

- ✓ Adopt higher steps of the BC Energy Step Code and implement a low carbon approach
- ✓ Build industry capacity

Decarbonize buildings

- ✓ Improve energy efficiency and enable fuel switching
- ✓ Build industry capacity and increase demand

WASTE



Vision: Our community diverts all of our organic waste, such as food scraps and yard trimmings, from landfills and recovers value from everything that enters the waste stream.

Close the loop on waste

- ✓ Explore other resource recovery technologies
- ✓ Divert organics from landfill



SOLUTIONS FOR RESIDENTS

Acting on climate change will ensure our community continues to be a healthy place for us – and future generations. The good news is that as we take action to reduce GHG emissions at home, on the road, and at work. We can also improve health and well-being, protect our natural environment, save money, support clean energy jobs, and prepare for extreme weather.

We can start with taking a look at how we currently live and where our household emissions come from.

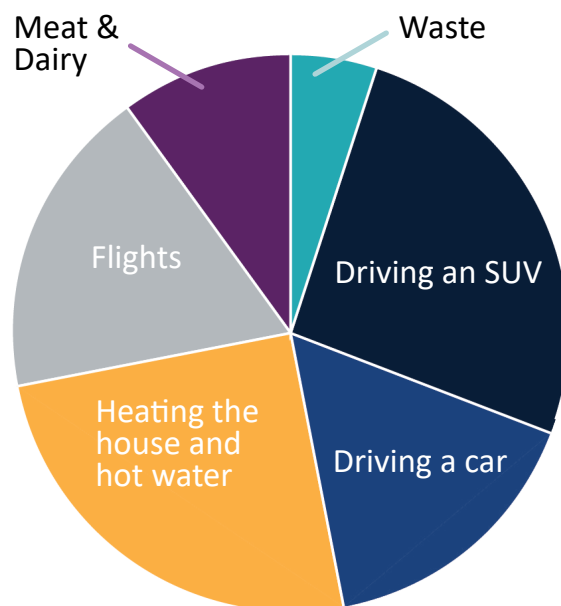
Let's look at an average family living in View Royal.

- Family of 4
- Single family home which uses natural gas for space heating and hot water
- 1 Car and 1 SUV
- 1 family trip each year to Toronto or Mexico
- Eat beef 1-2 times per week, chicken 1-2 times a week and dairy every day

This household would produce about 21 tCO₂ per year



Snapshot of sources of emissions for this family of four



One family trip per year to Toronto or Mexico produces more greenhouse gas emissions than running a car for an entire year!



WHAT CAN INDIVIDUALS AND FAMILIES DO?

Each family and individual can decide to start with smaller day-to-day actions or move right to big impact actions. What is critical is that we all start now and commit to ramping up our low carbon choices over time.

Here is how a few actions can reduce annual emissions of this average family of four:

We are driving less and walking and cycling to work and school. This saves us money on gas and we feel healthier and more connected to our neighbourhood.
Save 0.7 tCO₂/yr

We replaced our natural gas furnace with an electric heat pump. Our heat pump provides air conditioning in the summer and we have better air quality inside after switching to an electric heat pump. Plus, we took advantage of incentives and rebates.
Save 3.6 tCO₂/yr

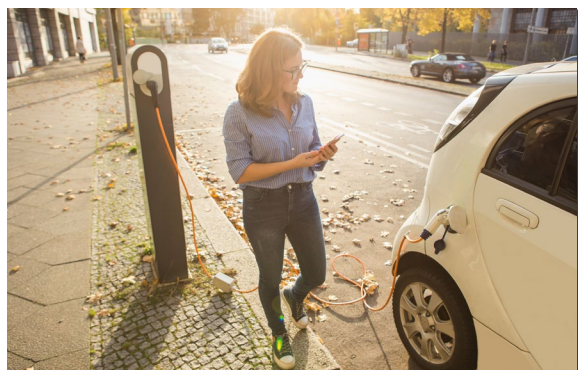
We're reducing how much meat we eat each week, by half.
Save 0.4 tCO₂/yr



We compost some of our kitchen waste and are working to compost more where possible. I now have compost for my garden.
Save 0.4 tCO₂/yr

We replaced our car with a battery electric vehicle. We charge our car at home which is cheaper than gas, and we are saving money on maintenance.
Save 2.4 tCO₂/yr

We're taking a "staycation" instead of flying this year.
Save 3.0 tCO₂/yr



*We joined a local car share program which allowed us to downsize to just one vehicle.
This saves us money and
2.7tCO₂e*





WHAT CAN INDIVIDUALS DO?

There are many ways we can each start to reduce how much energy we use, use energy more efficiently and switch to low carbon energy. The good news is that many of the actions listed in this section have benefits beyond reducing GHG emissions! Many can save you money, make the air you breath cleaner and safer and help keep you comfortable and safe during extreme weather like heat domes and winter storms.

Our home:

Switch to an air source heat pump



- Switching to a super-efficient, electric, air source heat pump is the single biggest GHG saving opportunity for most homes. Especially important if you use heating oil!
- It can be expensive, depending on your situation, but generous rebates can be available from different levels of government and utilities
- Air source heat pumps also provide air filtration and keep the air in your home healthy all year round, especially during forest fires. Will also provide cooling for hot summers

Turn down the thermostat



- When you go to bed and are out of the home. One of the easiest things you can do, plus it will save you money!
- But to improve your home's comfort, you'll need to do more...



Look in to available incentives and financing options



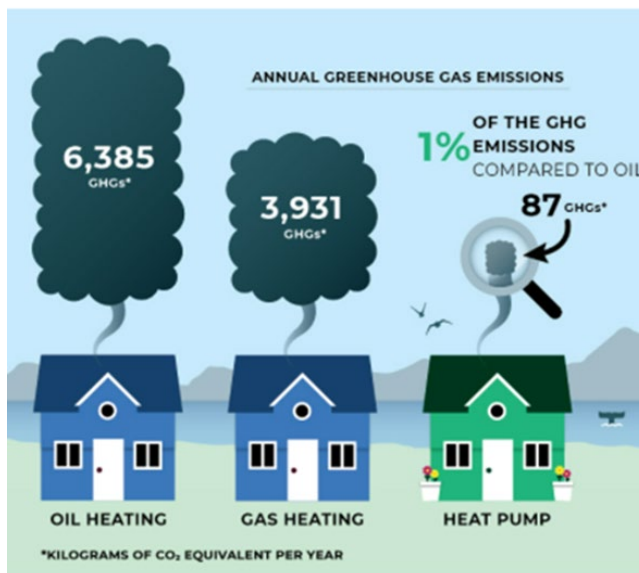
- Incentives can be available for all kinds of energy upgrades
- Check websites for the Province, Federal government, local governments, and utilities
- These can vary depending on your situation (e.g. income), and in some cases can be free!
- Find information and incentives to reduce emissions in your home at [Better Homes BC](#). There are specific programs for income qualifying households available!

Air seal your home – fix leaks



- Easy DIY job. Use caulking and weather-stripping to fix leaks around windows and doors
- An in-person energy assessment can help you identify less obvious places to fix





Source: www.bringithome4climate.ca

Get a free online energy assessment



- This is the best way to start identifying and prioritizing the steps in your household journey to make your home climate friendly
- Check the Town's and CRD's climate webpages for more information
- Not as comprehensive as an in-person assessment
- [Bring It Home for the Climate](#) provides homeowners in the CRD with a free virtual home energy check-up, resource library and links to events and webinars

Get an in-person energy assessment



- EnerGuide home evaluations are a great way to get an even deeper understanding of the current state of your home and what upgrades are needed. An energy advisor will come inspect your home, develop a customized renovation report and give your home a rating of its energy efficiency
- Look in to local, Provincial, or Federal incentives for assessments

Insulate your home – attic, exterior, etc.



- Energy assessment can identify places to insulate
- This can help protect your home from hot summers as well as cold weather

Renters and strata owners



- Talk to your landlord or your strata council about similar actions and rebates available
- For strata and market rentals buildings, information is available at [Better Buildings BC](#)



Walk more



- The easiest thing for most people to do
- Improve your health, and enjoy walking in your beautiful community
- Use a device or an app on your phone to count your steps, and help motivate you



Ride a bike as much as possible instead of driving



- View Royal has some of the best bike paths available in any community in BC
- Getting panniers for your bike or a cargo bike can help you do more as you cycle (e.g. some shopping)
- Electric bikes or e-bikes: make cycling easy, helping you get up hills, go farther distances, carry kids and groceries, and wear regular instead of exercise clothes. They run on renewable electricity and your own human power, and charging them is easy anywhere you have a regular outlet!
- Check out the following useful resources: [Capital Region Bike Map](#) , [Bike Safety Skills Courses through Capital Bike](#) and [Walk and Wheel to School](#)

Use public transit



- The region has some of the best public transit available in BC
- Let someone else have the stress from driving. Sit back, enjoy the scenery, and read that book
- Use the Transit App for real time transit information and trip planning, visit [BC Transit](#) or Phone: 250-382-6161

Have a “staycation” instead of flying



- Let’s face it, you live in a vacation spot! Enjoy your beautiful island and province
- Plus you’ll save money

4

Join a local car share

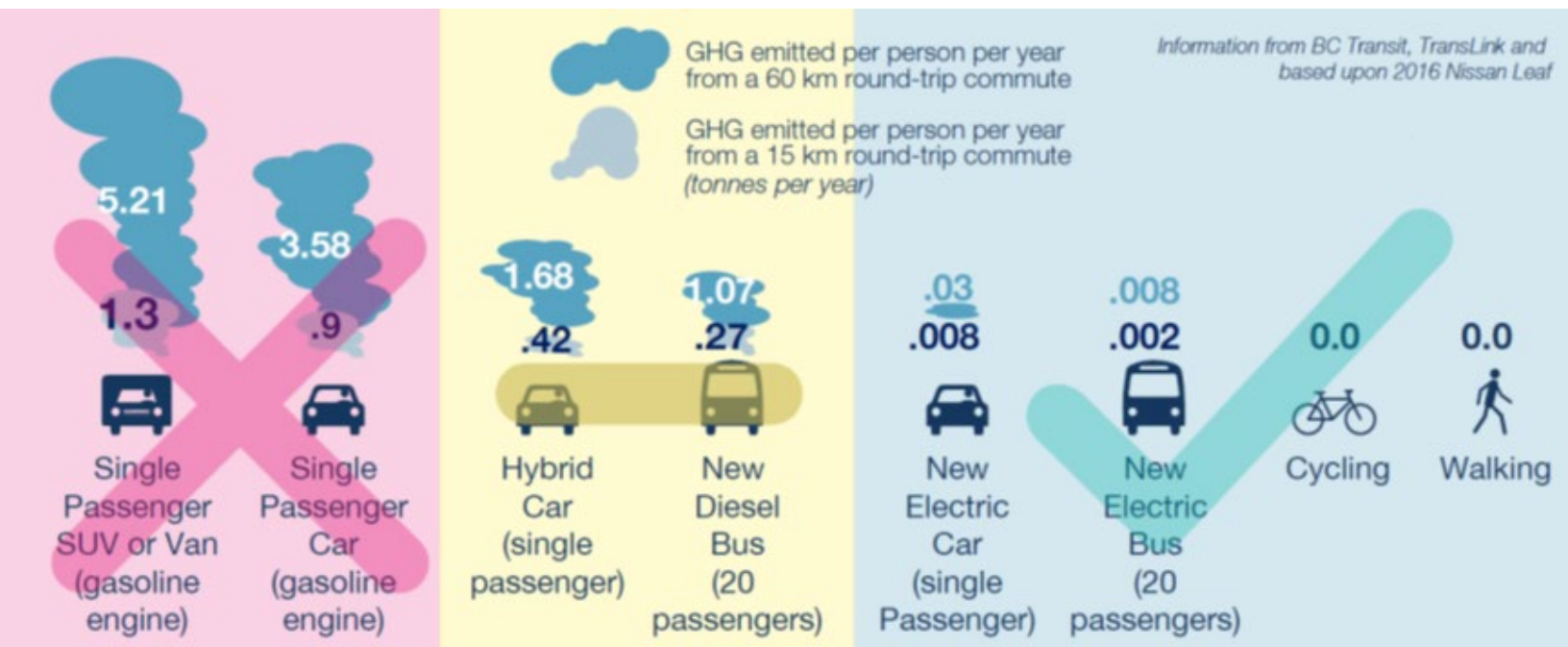


- Many households only use the second vehicle intermittently, and yet still must pay a lot for insurance and maintenance
- Car shares can provide access to local vehicles, and a variety of vehicles e.g. trucks, vans, and EVs
- Most households that join car shares and downsize to one vehicle end up driving less and saving emissions

Replace a gas car with an electric vehicle



- BC's renewable electricity means that switching to an EV is one of the single biggest GHG saving opportunity for most households
- Can be expensive, but incentives can be available and you will reduce your fuel costs by about $\frac{3}{4}$
- The following sites have lots of information on Electric Vehicles:
 - <https://pluginbc.ca/> - information on financial incentives
 - <https://www.emotivebc.ca/> - Educational resources on EV's
 - <https://www.plugshare.com/> - EV charging station maps



Source: Saanich Climate Plan

4

Eat less meat



- Reducing your meat and dairy intake can be an easy and affordable choice to make



Buy local food



- Vancouver Island is blessed with local food producers
- Support your local economy, and eat local healthy food when possible

Grow some of your own food



- Cut down on food miles by growing your own food in your yard or a community garden

Buy perennial food producers for your garden



- Could be a fruit or nut tree
- Try growing something that you like but is expensive in the store

Rent chickens / bee hives



- These can be available locally
- Great way to learn and teach your family about how food is produced
- See: [Local bee and chicken rental service](#)

Waste less food



- A lot of energy and emission goes into producing food that ends up in the landfill
- Plan your recipes and grocery lists ahead of time
- Store food properly so it lasts longer
- For tips on reducing food waste through meal planning, food storage and dealing with picky eaters, see: [Love Food Hate Waste](#) campaign



Compost at home



- Food that ends up in the landfill turns into methane, a potent greenhouse gas. Keeping food out of the landfill is key to reducing the emissions in our Town
- Ensure that you put food scraps into your compost bin for pick-up or start your own backyard compost bin
- Composting at home will give you great soil for your plants
- Composters for condos / apartments are available
- [Learn to compost at home](#)



Recycle

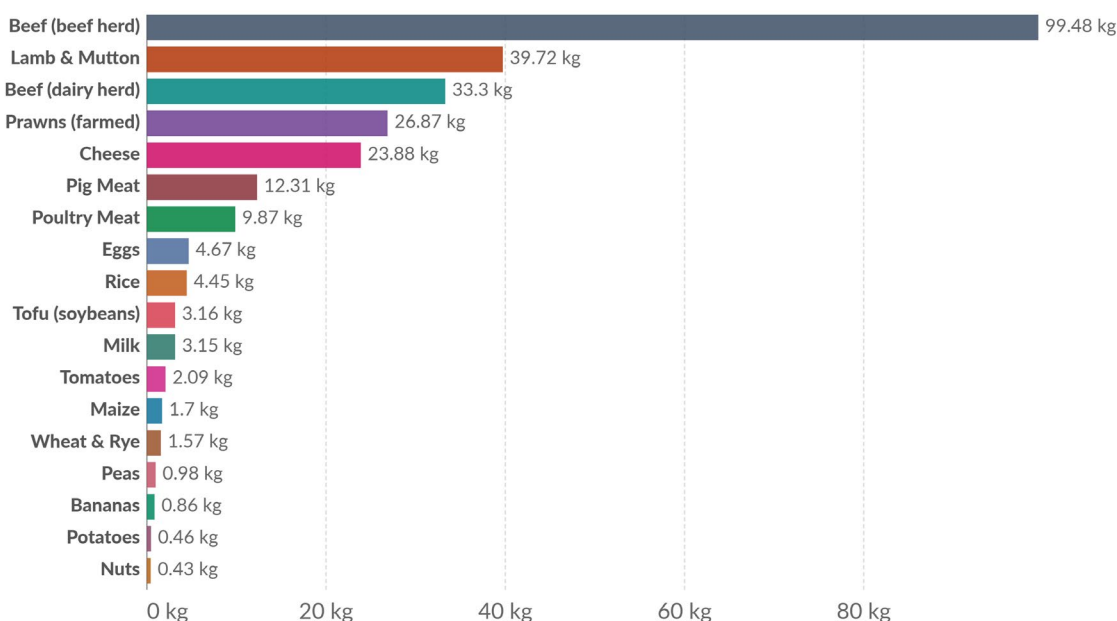


- Visit the CRD's [Myrecyclopedia](#) for more info about recycling specific products

Greenhouse gas emissions per kilogram of food product

Greenhouse gas emissions are measured in kilograms of carbon dioxide equivalents (kgCO₂eq) per kilogram of food product. This means non-CO₂ greenhouse gases are included and weighted by their relative warming impact.

Our World
in Data



Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. OurWorldInData.org/environmental-impacts-of-food • CC BY





Stay up-to-date and support local and regional climate action initiatives



- Participate in educational events and make your voice heard on important local projects that impact the climate
- There are many local environmental groups
- The Capital Regional District has a comprehensive list of [climate action resources](#)
- [Borrow a Climate Action To-Go Kit from the Library](#)

Talk to your friends and neighbours about how to support climate action



- You've completed some of the actions in this guide, tell your neighbours! Word of mouth is an important motivator when it comes to climate action
- Find ways to work together. In Portland, Oregon, neighbours have worked together for joint solar panel purchases to bring down the installation costs

Borrow or share



- Check with neighbours or join a local sharing group like a tool library to avoid owning yourself
- Check out the following useful resources: [Victoria Tool Library](#), [Buy Nothing View Royal](#), [Modo Carshare](#), [Evo Carshare](#)



Buy less



- Reuse by buying second hand or thrifted items. Get creative with repurposing
- Repair the goods you already have instead of buying new

Buy local



- Purchase food that is produced on the Island, shop at local stores to avoid emissions from home delivery

Buy carbon offsets



- What emissions you can't reduce, consider offsetting
- Look for high quality or certified offsets
- Local carbon offset opportunities can be available



HOW CAN YOU PREPARE FOR A CHANGING CLIMATE AND EXTREME WEATHER?

We are already experiencing some of the impacts of climate change. In our region we see hotter temperatures and wilder weather. How can you prepare for a changing climate and extreme weather events in order to protect your family and property?



Do research: e.g. flood maps, sea level rise, fire interface zones



Fire: [Fire Smart](#) your home and property for wildfires. Fixing air leaks in your home, adding insulation and having an air source heat pump can improve indoor air quality during smoke events.



Air quality: air sealing, purchase an air purifier, purchase a Heat Recovery Ventilator, air source heat pump



Flooding: think ahead, find ways to divert water. [Build a rain garden](#) to better manage stormwater



Drought: mulch around plants, plant drought tolerant species, collect rainwater. See: [natural gardening](#)



Extreme heat: air tightness, attic insulation, air source heat pump will keep air cool



Supply disruptions: keep a supply of non perishable food (dried items, cans)



Emergencies: have an emergency plan, know your evacuation routes, and have a 72 hour emergency kit on-hand

