

Update to the Climate Action Plan: Priority Actions for 2020

The 2018 Climate Action Plan lists over 60 suggested actions that the Town can take to help achieve the following greenhouse gas reduction targets.

- By 2030, the community of Canmore will reduce its GHG emissions by 30% below 2015 levels.
- By 2030, the Town will achieve a 50% reduction in its Corporate emissions, given we have much greater control over our own buildings and operations emissions.
- By 2050, the Town will reduce community and Corporate emissions by 80% below 2015 levels.

The Plan does not prioritize the actions in terms of how effectively each would contribute to meeting these targets or lay out an implementation schedule. The actions vary greatly in terms of the degree of cost and effort involved, as well as their potential impact. A first step to implementing the Climate Change Action Plan is to better understand which actions most effectively reduce greenhouse gas emissions versus the level of effort and cost with consideration of the following:

- Which actions are an important enabling step for further actions;
- What external funding and resources are available and deadlines for these opportunities;
- How the actions align with time sensitive projects and policy changes happening in other Town of Canmore departments;
- How the actions compare to the best practices as identified by other municipalities and organizations leading and supporting local climate initiatives; and
- Any co-benefits, unintended consequences, and potential risk involved.

All of the actions in the Climate Change Action Plan were vetted using the above considerations. Town of Canmore staff from relevant departments provided input and helped prioritize the different actions in terms of potential impact versus effort and cost. With the increasing urgency of climate change and ever-growing number of jurisdictions developing strategies to reduce greenhouse gas emissions, there are organizations and networks that provide support, resources and best practices. The Urban Sustainability Director's Network, C40 Cities, US Office of Energy Efficiency and Renewable Energy, and Rocky Mountain Institute have all studied the carbon abatement potential of different policy areas and have mapped the most effective ways for cities to achieve meaningful reduction targets. The priority actions are in line with the high impact actions identified by each of these organizations.

The priority actions will form the workplan for the Climate Change Specialist for 2020. While much of the work will be done by the Climate Change Specialist and Sustainability Coordinator, due to the integrated nature of reducing greenhouse gas emissions at the municipal level these items have workplan implications for staff in other departments. The table below lays out the priority actions, timeframe, high level budget estimates, general type of work required, degree of effort, and the relevant departments that will need to be involved. It is important to note that not all actions will be complete by the end of 2020. Much of the work is only a first step in a longer effort.

Action	Requires 2020 budget	Level of effort	Required step to enable future actions	Timeframe		requires longer term ongoing effort	Lead	Support	Start date	Scope of work for 2020
				short complete by 2020	med complete by 2021					
1. Renewable Energy										
Conduct a renewable energy technical feasibility study to inform Renewable Energy targets and strategies to achieve those.	Y (<\$50,000)	High	Yes				Climate Change Specialist Sustainability Coordinator	Facilities Planning	2020 - Q1	research, scope development, contract management
Rationale:	<p>The 2018 Climate Action Plan recommends we consider setting an additional a renewable energy/low carbon target. A number of local governments around the world are adopting targets to shift one or more sectors of energy use away from fossil fuels and toward 100% renewable or low carbon energy. Prior to recommending targets, we need to better understand the options and implications for renewable energy. Renewable energy systems and infrastructure can be costly so as a first step, further research and analysis is required to better inform future decisions.</p> <p>This action will require a budget for consulting support. Funding is potentially available from the Federation of Canadian Municipalities for 50% of study costs.</p>									
2. Buildings (54% of total Canmore GHG emissions) - New Construction										
Explore options for requiring new development to be "solar ready" and "electric vehicle ready" and utilize passive and active solar energy and shading.	N	Low					Planning	Climate Change Specialist Sustainability Coordinator	2019 - Q4	research, consultation, policy and regulatory integration
Initiate research and discussions with the development industry on moving towards zero emissions new buildings.	N	Medium	Yes				Planning Climate Change Specialist	Sustainability Coordinator	2020 - Q1	research, stakeholder consultation
Explore options to support and encourage new development projects that are voluntarily aiming to significantly reduce GHG emissions.	N	Low					Planning	Climate Change Specialist Sustainability Coordinator	2020 - Q2	research, recommendations, process change
Support the building of affordable housing developments around central and transit supported centres.	N	Low					Planning/ Canmore Community Housing Corporation	Climate Change Specialist	2020 - Q1	policy integration
Through AUMA, advocate to the Province of Alberta for timely adoption of the National Model Building Code or Step Code similar to BC.	N	Low					Senior Management	Climate Change Specialist	TBD	research, advocacy
Rationale:	<p>New buildings are key for deep reductions and achieving longer term targets. Meeting our targets to reduce greenhouse gas emissions at the same time as population increases and new building stock is added will require significant improvements in efficiency. Housing and commercial spaces built in Canmore over the next few years may be standing for the next 100; once built it is more challenging and costlier to make improvements to energy efficiency.</p>									
3. Buildings (54% of total Canmore GHG emissions) - Existing Buildings										
Research options for requirements for energy efficiency in renovations.	N	Medium	Yes				Climate Change Specialist	Planning	2021	research
Continue to explore Property Assessed Clean Energy (PACE) programs.	N	Low					Sustainability Coordinator	Climate Change Specialist	ongoing	continued participation in a network currently conducting a PACE pilot project
Assess results of Biosphere energy efficiency community engagement project (in progress) and determine the most promising areas for further exploration and how the Town of Canmore can best support energy retrofits and upgrades.	N	Medium					Climate Change Specialist	Sustainability Coordinator	2020 - Q2	research, partner collaboration, recommendations
Consider how to best leverage Energy Efficiency Alberta as future of programs are confirmed.	N	Low					Climate Change Specialist	Sustainability Coordinator	2020 - Q1	partner collaboration, recommendations
Rationale:	<p>While acknowledging the challenges and limited policy levers for improving energy efficiency in existing building stock, we still need to consider actions targeting this area. Building highly efficient new buildings will not be sufficient to reach our GHG reduction targets. In addition to the actions listed above, investing in and developing renewable energy sources will be a key mechanism to reduce building emissions.</p>									

Action	Requires 2020 budget	Level of effort	Required step to enable future actions	Timeframe		requires longer term ongoing effort	Lead	Support	Start date	Scope of work for 2020
				short complete by 2020	med complete by 2021					
4. Transportation (40% of total Canmore GHG emissions)										
Further explore carsharing options.	N	Medium					Climate Change Specialist	Transportation	2020 - Q3	research, consultation, potential REOI
Continue to support market-driven electric vehicle (EV) charging stations.	N	Low					Sustainability Coordinator	Climate Change Specialist Planning	N/A	partner collaboration, permitting support
Initiate research to understand the Town's role in supporting EVs in the community, including infrastructure needs and appropriate balance between public and private charging. Start to prepare scope for developing an EV strategy and identify areas where consulting support may be required.	N	Medium	Yes				Climate Change Specialist	Sustainability Coordinator	2020 - Q4	research, partner collaboration, consultation
Consider offering a studded bike tire rebate, similar to the solar incentive.	Y (< \$5,000)	Low					Climate Change Specialist	Sustainability Coordinator	2020 - Q2	program development
Rationale:	<p>A number of actions in the CAP overlap with the Council-approved Integrated Transportation Plan (ITP) plans for network of infrastructure improvements to facilitate a mode shift and target of 40% of summer trips being taken by bus, foot or bicycle. The above Climate Action Plan priority actions are those that are not already resourced through the ITP. These actions primarily focus on reducing the emissions from the remaining 60% of trips that are by vehicles.</p> <p>Budget will be required for studded bike tire rebate.</p>									
5. Waste (6% of total Canmore GHG emissions)										
Continue implementing the Food Waste Diversion Residential pilot, followed by a Commercial program and evaluation of expanded residential program options.	Budgeted elsewhere	High					Solid Waste	Climate Change Specialist	ongoing	program development and implementation, communications, consultation
Explore how Food Waste Reduction Education/Food Rescue education can be integrated into diversion programs.	N	Low					Climate Change Specialist	Sustainability Coordinator	2020 - Q2	research, partner collaboration, communications
Initiate research of options for improved Construction, Demolition and Renovation Diversion.	N	Medium	Yes				Solid Waste	Climate Change Specialist	2020 - Q4	research, consultation
Rationale:	<p>The waste-related actions focus on the largest segments of the waste stream. In addition, because organic material produces methane when decomposing in a landfill, these areas have the biggest greenhouse gas reduction potential compared to initiatives aimed at reducing inorganic material.</p>									
6. Corporate actions (3% of total Canmore GHG emissions)										
Create flexible Green Building guidelines or policy for new Town buildings to replace the previous LEED policy.	N	Medium	Yes				Facilities	Climate Change Specialist	2019 - Q4	research, internal policy development
Explore green building design options for the new Firehall.	N	Medium					Facilities	Climate Change Specialist	2020 - Q1	research, recommendations
Assess suitability of electric vehicles for the passenger fleet ahead of vehicle replacement.	Y (<\$5,000)	Medium	Yes				Streets and Roads	Climate Change Specialist	2020 - Q1	research, partner collaboration, consultation, contract scope, contract management
Develop purchasing guidelines for fuel efficient vehicles.	N	Medium	Yes				Streets and Roads	Climate Change Specialist	2020 - Q2	research, recommendations
Rationale:	<p>While the Town of Canmore's Corporate emissions only account for 3% of the total emissions of Canmore, these actions are important in demonstrating leadership. It also allows us to integrate what we learn from our experience into programs and policies that affect the broader community.</p> <p>Funding is available through the Municipal Climate Change Action Centre (MCCAC) for a portion of a feasibility study to compare a defined portion of our existing fleet to viable and recommended EV replacements with detailed analysis and considerations to the financial, environmental, and operational impacts of shifting to EVs. MCCAC offers additional funding to help support EV fleet vehicle purchase.</p>									