Climate Action Team

COMMUNITY CLIMATE ACTION PLAN

BRANDON

MARCH 2024

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ABOUT US

Manitoba's Climate Action Team (CAT) is a coalition of environmental organizations working together to envision, investigate, and promote a road to climate resilience in our province.

Climate Action Team

WHY CAT EXISTS

Member groups came together in late 2017 to independently review and consult with the public over the Province's recently released Climate and Green Plan.

CAT was formed one short year later when the Intergovernmental Panel for Climate Change (IPCC) 1.5 Report was released, stating how fast we need to drastically cut greenhouse gas emissions in order to prevent irreversible outcomes.

This drove home the need for an intentional, collaborative, and grassroots effort to push toward the future that we want.

Coalition members include:

- Climate Change Connection
- Green Action Centre
- Canadian Centre for Policy Alternatives – Manitoba Office
- Manitoba Energy Justice Coalition
- Wilderness Committee – Manitoba Office

ABOUT THE PROJECT

The purpose of this project is to build momentum for climate action by engaging and educating Manitobans, and directly supporting specific settler and First Nation communities to create community climate action plans, including implementation of an action(s).

OUR MISSION

Our mission is to provide a framework for individuals, organizations, and communities to communicate and collaborate on a non-partisan, specific, and actionable path that will help Manitoba achieve resilience to climate impacts and move swiftly toward a fossil-fuel free future. This pathway is outlined in The Road to Resilience and companion documents.

Find more information and how to get involved at: climateactionmb.ca

OVERVIEW

This Community Climate Action Plan for Brandon came about through the input of committed volunteers who participated in a variety of activities including a:

- Working group that met seven times in 2023 to identify current climate actions taking place in Brandon along with opportunities and priorities.
- Green audit of the Brandon Friendship Centre.
- Series of community presentations and workshops.

THE ROAD TO RESILIENCE

The objective of The Road to Resilience document is to provide a decarbonization path in Manitoba to achieve zero greenhouse gas emissions by 2050. As we build that pathway we will be building our local resilience.

Resilience means providing for our essential needs ourselves without fossil fuels, such as gasoline, diesel, coal, natural gas. Burning these fuels creates air pollution, hurts the health of all, and produces the toxic emissions that propel climate change.

The Road to Resilience presents the challenges and viable climate solutions in seven areas: Energy & Electricity, Buildings, Transportation, Food & Agriculture, Human Impacts, Economy & Green Jobs, and Natural Spaces / Wilderness.

Learn more here: climateactionmb.ca/road2resilience

KEY AREAS

Community discussions in Brandon focused on these same key areas, with the addition of waste management, to recognize what is already happening and identify where there are gaps and opportunities for climate action.

Human Impacts and the Economy & Green Jobs are considered to be woven into each of the other six key areas.

Community Action

While climate change takes place at a global level, the impacts and the responsibility to take climate action funnels down to what we are doing in Canada, in Manitoba, in our community, and within our own lives.

Taking action at a community level contributes to addressing climate change and re-establishes a sense of control over our future outcomes. Action at the global, national, provincial and municipal level is critical but we can each play a role to help make that happen.

BRANDON'S CLIMATE WORKING GROUP

- Madelyn Robinson, Community Coordinator
- Betty Kelly
- Lonnie Patterson
- Debby Dandy
- Pearl Smith
- Ingrid Gatin
- MB Climate Action Team members (not shown): Durdana Islam, Curt Hull, Beth McKechnie, Sarah Reid, and Hannah Muhajarine

OUR PROCESS

#1 Review the 7 key areas of the Road to Resilience in Manitoba

#2 Identify climate progress to date in Brandon related to these key areas

#3 Determine gaps and opportunities for climate actions in the community

#4 Rank the climate actions based on doability and climate impact.

#5 Identify a short list of climate actions and select inital action(s) for implementation.

CLIMATE PROGRESS TO DATE

While not an exhaustive list, the following includes a number of the great community and municipal activities already happening in Brandon:

MUNICIPAL PLANS & POLICIES

- Adopted new Climate Action Plan on May 15, 2023 with updated targets to reach zero emissions by 2050
- Designated as a Fair Trade Town by making a commitment to support the principles of Fair Trade through ethical and sustainable purchasing choices
- Member of Bee City Canada program to create pollinator habitat
- Water conservation plan
- Brownfield strategy
- Tree Protection by-law to protect, preserve and retain trees in public spaces
- Member of the Leaders in Brownfield Renewal Program

BUILDINGS & ENERGY

- Lighting of all Brandon transit shelters powered by solar
- LEED Gold Airport demonstrating leadership in efficient building design

FOOD & AGRICULTURE

- Brandon Food Council operates a food rescue grocery store
- Nine community gardens
- Municipal rain garden pilot program for homeowners

WASTE MANAGEMENT

- Curbside compost pickup of organic waste through City of Brandon (Municipal Green Cart Program)
- Landfill gas capture program

TRANSPORTATION

- Lighting of all Brandon transit shelters powered by solar
- LEED Gold Airport demonstrating leadership in efficient building design

In a series of discussions, the Brandon Working Group identified a number of **gaps and opportunities** for climate actions in their community.

BUILDINGS

GAP / OPPORTUNITY	CLIMATE ACTION
Sustainable community spaces	Pilot / Demonstration project (e.g. build on Green Audit results)
Green roofs / gardens	Pilot / Demonstration project
Stronger building codes	Advocacy / Policy
Smaller home sizes	Promotion / Demonstration project (e.g. kit houses)
Lower property tax for using permeable surfaces (to reduce burden on storm sewer system)	Advocacy / Policy

ENERGY

GAP / OPPORTUNITY	CLIMATE ACTION
Geothermal (utility or neighbourhood)	Feasibility study Pilot / demonstration project (e.g. Keystone Centre, Sportsplex)
Wind / solar / air source heat pumps	Promotion & Education Demonstration project / data collection
Wind / solar / air source heat pumps	Demonstration project / data collection
Retrofit loans paid back through savings	Advocacy / Better Buildings partnership
Require geothermal and other green requirements in new developments	Advocacy / Policy

NATURAL SPACES

GAP / OPPORTUNITY	CLIMATE ACTION
Protect wetlands and species at risk	Advocacy / Education / Demonstration project
Native planting on street medians	Pilot / Demonstration project / Policy

FOOD & AGRICULTURE

GAP / OPPORTUNITY	CLIMATE ACTION
Greenhouses / cold frames, hydroponics, aquaponics	Promotion & Education Demonstration project
Food preservation	Workshop delivery
Fruit share program	Support existing project / Partnership
Rain gardens / subsidy	Promotion & Education
Transition of agriculture	Education support

WASTE

GAP / OPPORTUNITY	CLIMATE ACTION
Curbside compost pickup	Promotion & Education to increase uptake and reduce contamination
Food rescue project	Support existing project / Partnership

TRANSPORTATION

GAP / OPPORTUNITY	CLIMATE ACTION
Frequent transit service	Advocacy / Data collection
Improve walking and cycling routes / connections	Advocacy / Support
Carpooling (ridesharing)	Promote GoManitoba app
Improve connections between walking / cycling and transit	Advocacy / Support
EV charging stations (including powered by solar)	Infrastructure
Carsharing service	Develop program with Peg City Car Co-op
Bikeshare / bike rental program	Advocacy / Support
Transit between communities	Advocacy / Support

RANKING CLIMATE ACTIONS

To transform the ideas into actions, the following 1-5 ranking system was used:

1 - being the lowest rating

5 - being the highest rating

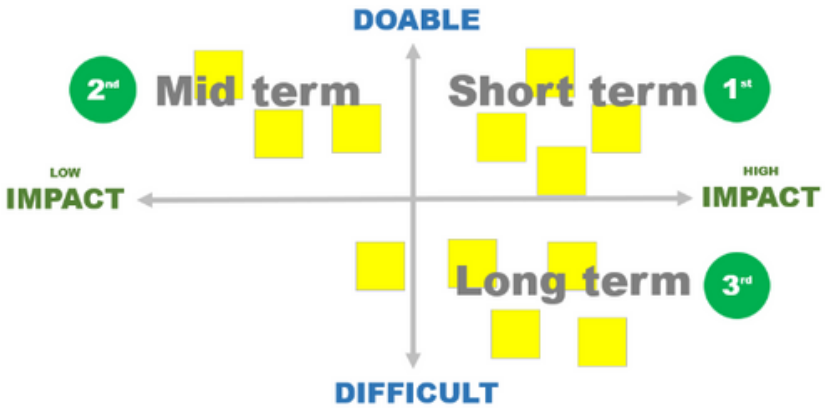
These ratings were used to determine both how **doable** the action is, and how big its **climate impact** would be

Doable Factors

- Cost
- Time Required
- Complexity
- Subjective Rating

Climate Impact Factors

- Environmental Culture
- Emissions Reductions / Energy Savings
- Resource Conservation



The actions in the **1st** quadrant: Implement in the short term, as they are potentially easy to execute with a high impact.

The actions in the **2nd** quadrant: Implement in the mid term, as they are potentially easy to accomplish but have a lower impact.

The actions in the **3rd** quadrant: Implement in the long term, as they are potentially challenging to implement but with a high impact.

To focus decision making and the research required, the Brandon Working Group created a short list from their full complement of climate action ideas. The table below summarizes the average ranking of each idea based on perceived doability and climate impact.

CLIMATE ACTION IDEA		AVERAGE DOABILITY	AVERAGE IMPACT	AVERAGE TOTAL
Wind / solar / air source heat pumps	Demonstration project / Data collection	2.7	4.4	**3.6**
Food rescue	Support existing project / Work with partnership	3.6	3.6	**3.6**
Geothermal (utility or neighbourhood)	Demonstration project, e.g. Keystone Centre, Sportsplex, Wawanesa example	2.6	4.6	**3.6**
Wind / solar / air source heat pumps	Promotion / Education	3.3	3.6	**3.5**
Reduce contamination and increase uptake of composting service	Education / Advocacy	3.5	3.4	**3.5**
Lower property tax for using permeable surfaces (reduced burden on the storm sewer system)	Advocacy / Policy	3.6	3.3	**3.5**
Retrofit loans paid back through savings	Advocacy, Better Buildings partnership	2.9	4.0	**3.45**
Frequent transit	Advocacy / Data collection	3.2	3.6	**3.4**
Geothermal (utility or neighbourhood)	Feasibility study	2.6	3.7	**3.2**
Greenfield development - require geothermal and other green requirements	Advocacy / Policy	3.2	3	**3.1**
Protect wetlands and species at risk	Advocacy / Education / Demonstration project	2.65	3.6	**3.1**
Green roofs / gardens	Pilot / Demonstration project	2.1	3.6	**2.9**
Greenhouses / cold frames, hydroponics, aquaponics	Promotion & Education / Demonstration project	2.4	3.3	**2.9**
Data collection	Pilot / Partner with Community Wellness Collaborative	3.3	2.5	**2.9**
Sustainable community spaces	Pilot / Demonstration project e.g. build on green audit of Brandon Friendship Centre	2.1	3.1	**2.6**

IDENTIFYING PRIORITIES

After a lot of productive dialogue, the Brandon Working Group identified eight concepts for climate action to investigate and develop further. They identified the need to access expertise available locally and through Manitoba's Climate Action Team to help them better understand the cost, impact, feasibility, and long-term responsibilities of each concept. In addition, feedback gathered would help them to better understand which projects have the best chance for success and how to implement them so they do succeed.

- A project to support the work of the Earth Team at the Brandon Friendship Centre.
- Retrofits at Brandon's Community Sportsplex that could include: using ice to make energy, changing energy sources, a green roof, or an electric vehicle charger. Use the retrofits to demonstrate energy use.
- Eco House demonstration to show the community the benefits of and climate impact from small, sustainable, and efficient housing.
- EcoDays, similar to AgDays, to show the community how easy it is to make ecologically-friendly changes that will save them money and help fight climate change. This would include a Trade Show and Workshops from experts.
- Collect data to help understand how to change perceptions and behaviour with respect to transit and transit use in Brandon.
- Partner with the Food Rescue program to establish a demonstration project for using refrigerators and freezers to heat the building.
- Educate the community about the importance of wetlands and advocate for the protection of wetlands within and around the City of Brandon.
- Explore the feasibility of a retrofit loan program including who it would be for, how it could be financed, who could run it, and how it fits with existing retrofit loan programs.

IMPLEMENTATION PROJECT

In collaboration with Sustainable Brandon, the Working Group approached the Riverbank Discovery Centre to implement a demonstration project. This collaboration leveraged additional funds through the Riverbank Discovery Centre and potentially through other government initiatives.

After careful consideration of alternatives, Sustainable Brandon and Brandon Riverbank determined that the installation of a solar array on the roof of the Riverbank Discovery Centre would be the preferred project.

As Brandon's largest naturalized greenspace, Brandon Riverbank is committed to reducing its environmental footprint. The installation of a 52-kilowatt solar array would reduce Brandon Riverbank's annual electricity consumption by approximately 40%. A 52-kilowatt system was selected as it provides the best cost / benefit to Brandon Riverbank while working within the financial resources available to that organization. The system would also maximize potential rebates from Efficiency Manitoba and the Federal Clean Tech ITC programs. The system would span the entire width of the Riverbank Discovery Centre roof and would be large enough to potentially "spin the hydro meter backwards" during the summer months.

Riverbank will have a "dashboard" of the system available on monitors whereby the public could view system performance in real time. As a means of educating the public about the feasibility and practicalities of solar power, Riverbank will ensure that staff are trained to speak knowledgeably and/or answer questions about the system. Lastly, Brandon Riverbank will work with Sustainable Brandon to welcome school or public tours whereby solar power could be promoted as a viable option for households or commercial operators.

ACKNOWLEDGEMENTS

Sincere thank you to the members of the Brandon Climate Working Group for your active and thoughtful engagement in this project. We hope the information contained in this plan will help and inspire you to implement more of these climate actions!

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Climate Action Team

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