

***TomorrowNow—
Manitoba's Green Plan:
Toward a New Provincial Climate
Change and Green Economy Plan***

Consultations Background Paper

***Engaging the Public in a New Provincial
Climate Change and Green Economy Plan:***
Reducing emissions, enhancing our resilience to
climate change and building a green economy

January 2015

TomorrowNow—Manitoba’s Green Plan

Preface

In 2012 the Government of Manitoba released *TomorrowNow—Manitoba’s Green Plan*, which includes commitments to update its climate change plan and create the first green economy action plan for Manitoba. As an initial step in this process, the province has asked the International Institute for Sustainable Development (IISD) to host a series of consultation sessions with key stakeholders on climate change and the green economy. Each meeting will focus on a specific sector, and will seek an open dialogue on Manitoba’s new climate change and green economy action plan.

Where Do We Stand?

Climate change threatens our social, economic and environmental systems on a global scale. Governments at every level are seeking to increase climate resilience, lower vulnerability to the impacts of climate change, reduce greenhouse gas (GHG) emissions, implement adaptive actions and participate in the newly emerging green economy. Manitoba is no exception to these efforts.

In 2008 the Government of Manitoba released its Beyond Kyoto climate change action plan (Government of Manitoba, 2008), which listed over 60 actions to effectively reduce GHG emissions across Manitoba’s economy and established initial actions to adapt to climate change. Although most of these actions were successfully implemented, Manitoba was unable to achieve the desired target level of GHG reductions. Figure 1 illustrates Manitoba’s emissions from 1990 to 2012.

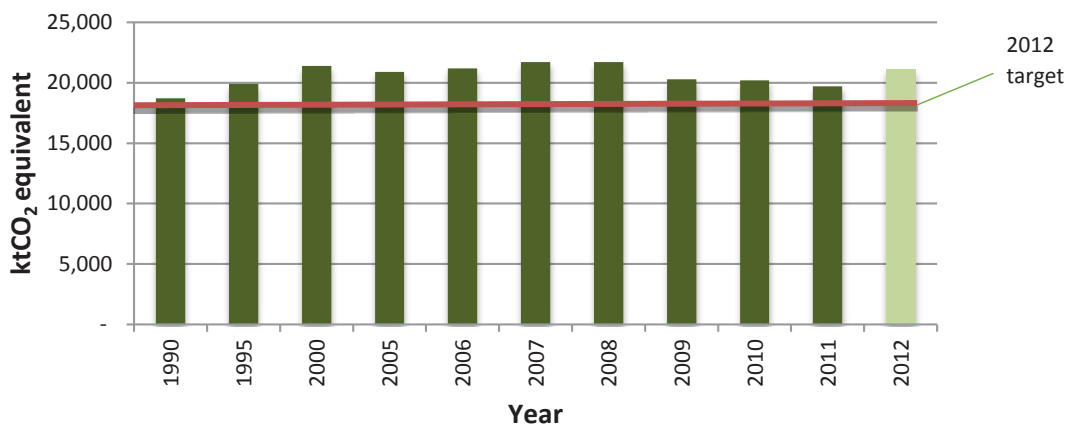


FIGURE 1: TOTAL PROVINCIAL EMISSION (IN KILOTONNES OF CO₂E) FROM 1990 TO 2012

Environment Canada (2014); Manitoba Conservation and Water Stewardship (2014).

The provincial government released *Manitoba's Report on Climate Change for 2012* (Manitoba Conservation and Water Stewardship, 2014b) as the final report on performance under the Climate Change and Emissions Reductions Act (CCERA). This report noted that emissions at the end of 2012 were 500 kilotonnes (kt) lower than emission levels in the year 2000, but failed to meet the 2012 target goal of 6 per cent below 1990 levels. The majority of GHG reductions were attributed to the energy sector through the ethanol mandate (410 kt), implementation of regulations limiting the use of Manitoba Hydro's single remaining coal-fired facility (343 kt) and Manitoba Hydro's Power Smart programs (140 kt). The report also noted that in 2012 Manitoba Hydro, through electricity exports, had contributed to 6,300 kt of GHG emissions reductions in jurisdictions outside of Manitoba.

Manitoba is continuing its efforts to reduce GHG emissions, pursue green economic development and adapt to climate change. Public participation is integral to the policy development process, ensuring future policies and programs will motivate action to reduce emissions and compel us to take proactive steps to adapt. Moreover, it allows for the policy development process to be built from the bottom up¹ for an inclusive policy development process and a climate change and green economy framework that all Manitobans have a hand in creating.

Manitoba's Emissions by Sector

Manitoba has unique characteristics that drive emissions, adaptation needs and green economic opportunities. These characteristics shape the way that Manitobans respond to climate change and pursue resilient, low-carbon economic development.

Manitoba's **energy mix** presents opportunities as well as some challenges. Manitoba is blessed with abundant, stable, clean energy resources. The province has achieved a standard of approximately 98 per cent of locally generated electricity from clean, renewable sources with significant export capacity. This abundance allows Manitoba to adopt a flexible approach to the integration of new sources of energy to provide a backstop, such as geothermal, wind and biomass.

Manitoba provides a significant service to GHG mitigation in North America through clean energy exports that allow customers to switch from GHG-intensive fuels (such as coal) to hydroelectricity. While hydroelectricity exports cannot be counted against provincial GHG targets, they are a significant contribution to emission reductions in other jurisdictions, as they displace coal and natural gas-fired electricity.

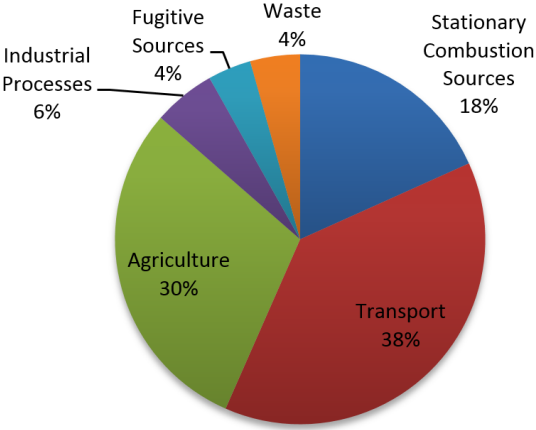


FIGURE 2: MANITOBA 2012 GHG EMISSIONS BY SECTOR
Source: Environment Canada (2014).

Due to its importance to the provincial economy, as well as the relatively low carbon intensity of both the energy and industry sectors in Manitoba, the **agriculture sector** is the second-largest contributing sector to provincial GHG emissions (Figure 2). The size of the agriculture sector relative to the provincial GHG portfolio is unique: in only two

¹ Through a "bottom up" approach, stakeholders' views and policy suggestions feed into the decision-making process for the Government of Manitoba, including priorities to be pursued under each plan.

other provinces does agriculture represent over 10 per cent of provincial emissions, and even there it does not approach 20 per cent. As a breakdown, the agriculture sector’s emissions include enteric fermentation, manure management and agriculture soils, where each contribute 25 per cent, 10 per cent and 63 per cent, respectively, to the overall emissions in the sector in 2012 (Environment Canada, 2014).

The built environment and the energy infrastructure are not only emission sources—they are also vulnerable to the impacts of climate change. Extreme climate events threaten residential and commercial buildings, affecting the well-being of individuals and communities. These concerns also apply to the energy infrastructure, where extreme events such as ice storms and floods impact not only the ability to mitigate emissions but also energy transmission to local residents and business. As noted in the Insurance Bureau of Canada’s report *Telling the Weather Story* (2012), Canada’s insured losses, caused primarily by extreme weather events, amounted to CAD\$1.6 billion in 2011 and increased to CAD\$ 3.2 billion in 2013.

Developing the Next Climate Change Plan: What Have Others Done?

The development of Manitoba’s next climate change strategy will take into account how other jurisdictions are proceeding on climate change policy development, and what influences external policies will have on Manitoba. Table 1 illustrates some of these policies.

TABLE 1. CLIMATE CHANGE POLICIES IMPLEMENTED IN OTHER JURISDICTIONS

JURISDICTION	ACTIONS	YEAR IMPLEMENTED
Federal government	Regulations for both heavy-duty and light-duty vehicle tailpipe emissions	2012
	Coal-fired electricity sector regulations	2012
	Negotiations with oil and gas and other industrial sectors	Ongoing
Quebec	New climate change action plan and adaptation strategy	2012-2020
	Launched first joint emissions trading with California	2014
	First auction of its cap and trade system	2013
British Columbia	Review of Revenue-Neutral Carbon Tax completed; tax retained at \$30 per tonne	2013
Nova Scotia	Finalized federal equivalency agreement for electricity sector GHG regulations	2012
Ontario	Released a climate change progress report and a report from the environmental commissioner	2013
	Emissions mitigation discussion paper	2013
	Phase out of coal-fired power	Completed in 2014
Newfoundland & Labrador and Nova Scotia	Finalized hydroelectric link	2012
Alberta	Policy review of the Specified Gas Emitter Regulation	Deadline extended to June 2015

In past years, provinces had taken it upon themselves to act unilaterally or in partnership with other provinces and U.S. states to address GHG emissions, while federal policy remained either in development or stalled. The advent of federal GHG regulations raises the potential for conflict over jurisdictional control of emissions policy, which can have major influence over provincial economies. As a result, **equivalency agreements** are an option that would allow provincial approaches to GHG mitigation to take precedence over federal sector regulations. The most prominent early example of this was the equivalency agreement reached between the federal government and Nova Scotia that installed provincial regulations in place of proposed federal regulations for electricity (Nova Scotia Department of Energy, 2012).

To date, there have been six consultations with stakeholders from various sectors. During the consultations, participants have discussed the current barriers they face to address climate change, as well as opportunities to reduce emissions, increase competitiveness and adapt to a changing climate. They also suggested specific tools and actions government and stakeholders can take to enable the transition to a green economy. Table 2 lists some key messages from the different sector consultations carried out to date that are specific to the civil society sector.

TABLE 2. KEY MESSAGES FROM PREVIOUS CONSULTATIONS.

SECTOR	ACTIONS
All Sectors	Manitoba is in a unique position to capitalize several resources—including natural resources, such as renewable energy and water; specialized skills, such as expertise in green building in an extremely cold climate; and its inland port and transport sector—to feed a green economy at the local and global scales.
All Sectors	There is a gap in reliable information and climate data limits capacity to make well-informed and sustainable decisions to enable effective solutions.
All Sectors	Stronger accounting of carbon (mandatory reporting) would give a more accurate picture of the provincial emissions portfolio and how to address it.
Building and Energy Sector	Policy drivers and tools include clear vision, policy coordination, access to information, increased awareness and capacity building related to green buildings, energy efficiency and climate resiliency. As one of the largest building owners, the government could lead in energy retrofits and lead by example by setting energy-use reduction targets.
Agriculture and Water Sector	Strengthen the capacity of crop insurance to respond to interprovincial water and excess moisture conditions. Conserve wetlands and build retention ponds to help manage water in wet and dry cycles, diversify crop production as the frost-free period lengthens and increase infrastructure capacity to manage altered climatic conditions. Increase research for adaptation innovation and access to clean technologies. Establishing a cap-and-trade system for nutrients could lead to an overall reduction and involve farmers and municipalities.
Transportation and Infrastructure Sector	Remove provincial sales tax from environmental technologies in transportation. Partner with technical schools or colleges to take advantage of cold weather to test efficiency technology in cold conditions. Use green public procurement in the purchase of clean fuel vehicle fleets and invest in efficient technologies to increase fuel efficiency. Convert gas guzzlers to electric vehicles where possible. Create partnerships with private, not-for-profit and academic sectoral players on order to bring together the best practices of good research. Renew and enhance the GrEEEn Trucking program, as well as rebates and loan guarantees.
Peatlands Sector	Life-cycle emissions in peat harvesting will allow us to better understand its end use and its impacts on overall emissions. Revisit management practices and identify if there is a role for carbon offsets.
Bioproducts Sector	Within Canada, the bioeconomy industry is worth approximately CAD\$80 billion; it is the second largest bioeconomy in the world per capita. Manitoba’s advantage in developing bioproducts includes its proximity to markets that encourage bioethanol use and its easy access to multiple biomass sources through agriculture and forestry residue, cattails and prairie grass sources. Overcome barriers such as static policy, price competition from fossil fuels and natural gas, the cost of transportation, and limited skilled labour and access to capital.

Building Blocks for Manitoba's Climate Change and Green Economy Plan

The Government of Manitoba recognizes that a concerted effort is required to meet Manitoba's responsibility to adapt to climate change and mitigate GHG emissions. Manitoba has committed to actions on climate change in a number of strategy documents, including *TomorrowNow—Manitoba's Green Plan* and *Focused on What Matters Most: Manitoba's Clean Energy Strategy* (Manitoba Innovation, Energy and Mines, 2012), as well as following up on the recommendations in the Auditor General's 2010 Performance Audit on Managing Climate Change (Manitoba Office of the Auditor General, 2010).

Manitoba's next plan will also require a consideration of the types of principles that are important for addressing climate change policy in Manitoba. These principles are expected to evolve and could include elements such as:

- Achieve GHG emissions targets in a cost-effective way that considers competitiveness
- Employ simplicity, policy coherence, transparency and administrative efficiency
- Treat sectors and facilities equitably
- Account for early action by industry leaders
- Use accurate and verified emissions data to support policy development
- Promote development and deployment of clean technologies
- Align with emissions reduction programs in other jurisdictions (linking)
- Integrate with other provincial environmental policies where possible

These principles are open to input and their discussion will be part of the consultation process for the new climate change plan and green economy plan. Manitobans are encouraged to share their views regarding which principles should be embedded in climate change action in the province.

Integrating Adaptation and Mitigation

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The next climate change plan will integrate both adaptation and mitigation strategies, with an increased focus on adaptation. It will be important for the coming plan to consider the adaptation impacts of mitigation actions (and vice versa), as well as identify areas where co-benefits can be achieved and negative side effects avoided regarding mitigation or adaptation actions. The consultation process with stakeholders will seek input on how best to integrate a more balanced approach for adaptation and mitigation.

For adaptation, capacity building in key areas can assist Manitobans to undertake meaningful, informed action with regards to adaptation to climate change. Some examples of areas where capacity may be lacking include areas related to climate data and risk mitigation—an assessment of vulnerabilities and potential impacts is important.

Green Economy and Green Jobs

The development of a green economy action plan is one of the core pillars for the achievement of *TomorrowNow*'s goal in protecting the environment while ensuring a prosperous and environmentally conscious economy. The vision is of a resilient, low-carbon economy that respects environmental sustainability and supports social well-being. Sector-specific consultations are an important element in shaping Manitoba's green economy and green jobs by identifying opportunities and actions that feed into sector-specific comparative advantages within a sustainable development pathway.

The Role of Civil Society in the New Climate Change Plan and Green Economy Action Plans

The civil society sector plays an essential role in climate change and the green economy and, therefore, in the development of their associated planning under *TomorrowNow*.

A new climate change and green economy plan will reflect the need to address the challenges of climate change while identifying opportunities to build Manitoba's green economy. As part of Manitoba's new climate change and green economy action plan, it is key to ensure the new plan meets the needs of both Manitobans and our climate while protecting the long-term economic prosperity of our province. Through this bottom-up policy process, the government is seeking to connect with communities and stakeholders across the province to hear how to respond to climate change and identify solutions that reflect the challenges and opportunities climate change represents for all Manitobans.

The Province of Manitoba has supported various community-based climate actions and developed Manitoba's Education for Sustainability Action Plan. Climate Change Connection has been Manitoba's climate change public education and outreach hub since 2001. A four-year Community Led Emissions Reduction program provided tools and resources to help municipalities, individuals, businesses and institutions plan and act to reduce GHG emissions and to make more sustainable long-term decisions. Since 2000, the Neighbourhoods Alive! Neighbourhood Renewal Fund has funded 40 community greening projects and in 2008, Green Manitoba, a special operating agency of the Manitoba government, launched the Green Schools Initiative and a province-wide waste reduction and recycling support program (Government of Manitoba, 2012).

In 2008 the Manitoba Round Table for Sustainable Development established the Manitoba Excellence in Sustainability Awards to recognize and honour people, projects and ideas that successfully apply the established Principles and Guidelines of Sustainable Development into concrete and lasting achievements (Manitoba Conservation and Water Stewardship, 2014a).

As Manitoba moves forward, renewing its climate change action plan, and implementing and setting new targets in consultation, the engagement and participation of all Manitobans will be critical to address climate change and create more sustainable communities while further building a prosperous economy.

Questionnaire

The questions below will feed into needs and opportunities in the new climate change plan as well as Manitoba's first green economy action plan. Written or verbal responses are welcomed. Written responses may be sent to tomorrownow@iisd.ca.

Action Plan Goals and Strategy

1. What are the current approaches and good practices in Manitoba and elsewhere in Canada to address climate change that can be built upon and enhanced over time?
2. What are the broad and specific barriers you see in Manitoba to the achievement of deeper emissions reductions?
3. What are unfulfilled opportunities in Manitoba to achieve deeper emissions reductions and create capacities to deal with extreme weather events?
4. What opportunities exist to increase collaboration with other jurisdictions to advance on climate change goals?
5. What specific actions should be taken to effect a substantial reduction in GHG emissions in Manitoba?

Science, Information and Capacity Building

6. What types of information, capacity and tools are required by Manitobans to identify the actions they need to take in preparation for climate change? What mechanisms could be used to enable access to this knowledge?
7. How can we provide better access to Manitoba-specific climate data and climate projections, and the potential socioeconomic and ecological impacts of these projected changes?
8. What are the metrics to assess progress on actions taken to manage GHG emissions?

Encouraging Action Among Manitobans

9. In terms of actions responding to climate change adaptation and GHG mitigation, what are the responsibilities of citizens, the government and private sector/industry when responding to climate change adaptation and mitigation?

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