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IISDREPORT

TomorrowNow Manitoba: Dialogues toward a green economy

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International Institute for Sustainable Development

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October 4, 2013 ~ Winnipeg, Manitoba ~ University of Winnipeg Cisco Theatre

Background

In 2012 the Government of Manitoba released its climate change plan, TomorrowNow, and among its commitments is the creation of a green economy action plan for the Province of Manitoba. In efforts to meet this commitment, the International Institute for Sustainable Development (IISD) and University of Winnipeg are assisting the province in developing its updated green economy action plan to address the need to transition to a green economy framework for Manitoba. The work will be done through a series of research activities and public meetings with Manitobans, which will be led by the project partners. The first such consultation was held on October 4, 2013, which facilitated an open dialogue with stakeholders on what Manitoba's green economy could look like. This report outlines what was discussed during the green economy consultation and outlines some of the key areas for future action.

Green Economy Policy Drivers, Enabling Conditions and Identified Actions: Key Messages

Manitoba's green economy policy dialogue was the first consultation in a series of sessions to examine what Manitobans consider important for the province's first green economy plan and its next climate change plan. The objective of this policy dialogue was to provide an opportunity for:

- An introduction to how the world is changing, highlighting the need to adopt greener and more sustainable practices.
- Identification of the best practice influences of green economies across Canada and around the world, looking for policies, enabling conditions and actions that will enhance Manitoba's competitiveness.
- An open dialogue of what Manitobans need to see from their government and leaders to enable the transition to a more innovative and prosperous future.

Key Messages from the Policy Dialogue Session

- Establishing a green economy is a way to motivate all sectors to support green activity and incents general economic activity to be green economic activity.
- The international market is moving toward a demand for services and products that are less intensively resource based.
- Manitoba is in a unique position to capitalize several resources—including natural resources, such as renewable energy and water; specialized skills, such as its 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.



- In order to transition to a green economy, Manitoba needs to: identify the barriers to and opportunities for a green economy; identify the proper enabling conditions that will stimulate the evolution of general economic activities into more sustainable ones; identify the policy tools and actions to help Manitobans create these conditions; and identify what analysis and modelling is needed to undertake testing on options and assumptions about Manitoba's transition to a green economy.
- Policy tools to be developed in Manitoba include: renewable energy performance standards, procurement standards, public and private coalition, public finance to mitigate upfront high costs, workforce training, and measurability and accountability.
- Not all green activities are sustainable, therefore research is important to identify what has worked and to learn from initiatives that have not worked, including those due to unintended consequences.



TomorrowNow: Manitoba's Green Economy Plan: Positioning Manitoba to thrive in a green economy

October 4, 2013 ~ Winnipeg, Manitoba ~ University of Winnipeg Cisco Theatre

Introduction

Forty-two participants gathered in Winnipeg and remotely connected from Ottawa and Geneva on October 4, 2013, for the policy dialogue session TomorrowNow: Manitoba's Green Economy Plan: Positioning Manitoba to Thrive in a Green Economy. The session was hosted by the International Institute for Sustainable Development (IISD), in collaboration with the University of Winnipeg and the Government of Manitoba. The consultation session aimed to:

- Provide an introduction to how the world is changing, highlighting the need to adopt greener and more sustainable practices.
- Identify best practices across Canada and around the world, looking for policies and actions that will enhance Manitoba's competitiveness.
- Host an open discussion of what Manitobans need to see from their government and leaders to enable the transition to a more innovative and prosperous future.

Terry Duguid, director of the Northern Sustainability Prosperity Initiative at the University of Winnipeg, provided the opening remarks and welcomed all participants located in Winnipeg, Ottawa and Geneva. Next, Juliane Schaible, senior economic development consultant, Climate Change Branch, Government of Manitoba, highlighted the importance of this session as an opportunity to explore where priorities for a green economy and jobs lie within the province, where to focus the analysis and how to move towards a green economy within a Manitoba context.

Scott Vaughan, president and CEO of IISD, welcomed those present. He thanked the Government of Manitoba for giving IISD the opportunity to facilitate the consultation process and thanked the University of Winnipeg for hosting the session and providing access to their Cisco System to connect virtually across buildings, cities and borders. He also praised Manitoba for its green economy leadership through its innovative stances on sustainable development and green economic issues, including TomorrowNow¹ and the Green Prosperity Act.²

Setting the stage, Mr. Vaughan highlighted the drivers for the need to shift to a green economy, including the Intergovernmental Panel on Climate Change's latest release of its fifth assessment report,³ which states with higher certainty than previous reports that human activities are responsible for the increase in global temperatures in recent decades. He also highlighted that climate change impacts involve environmental, social and economic risks, such as the costs and impacts of extreme weather events (floods and droughts), and that such events are projected to become more frequent and more intense. He noted that Canada is also exposed to other economic risks, including the health

¹ Government of Manitoba. (2012). TomorrowNow. Retrieved from <http://www.gov.mb.ca/conservation/tomorrownowgreenplan/>

² The creation of the Green Prosperity Act is within the commitments of TomorrowNow. The goal of the act is to "clearly define government's goals, and link all currently and future activities and legislations related to environmental sustainability in Manitoba." See: <http://policymonitor.ca/manitobas-green-prosperity-act-consultation>

³ Intergovernmental Panel on Climate Change (IPCC). (2013). *Climate change 2013: The physical science basis*. Retrieved from http://www.climatechange2013.org/images/uploads/WGIAR5_WGI-12Doc2b_FinalDraft_All.pdf



of Canadians, where the most vulnerable populations are susceptible to heat waves and other health hazards such as West Nile Virus. In addition, he indicated that it is important to learn from traditional knowledge, particularly from the perspective of the North. He stressed the need for coherent policies to provide the overarching vision and define the direction all policies and programs need to take to optimize the opportunities and reduce the risks in a changing global economy.

The first half of the morning proceeded with presentations from Alex Wood from Sustainable Prosperity, Phil Gass from IISD, Dudley Thompson from Prairie Architects, Bruce Duggan from Providence University College and Seminary and Charles Loewen from Loewen Windows.

Presentations

Alex Wood, senior director, Policy and Markets, Sustainable Prosperity, presented "Greening Manitoba's Economy: How Is the World Changing and Why?" which examined how a green economy is viewed broadly and defined on a global scale, as well as its implications for Canada and where Manitoba can align itself with emerging opportunities. Mr. Wood explained that a green economy calls for decoupling or disengaging economic activity from a heavily resource-based economy toward one that reduces its dependence on material inputs. Currently, Canada's economy depends heavily on exports of raw materials, including fossil fuels. In transitioning to a green economy, Canada should balance the benefits it receives from extractive resources with pursuing low-carbon development through investments in clean technologies. For Manitoba, this development creates an opportunity to find its strength within the local and international markets, deriving primarily from its abundance in water resources, bioproducts, the transportation sector and hydroelectricity. Manitoba is in a position to continue the leadership role it began when it was the first to pass a Sustainable Development Act in Canada and the first to create a provincial Round Table for Sustainable Development, both of which are being modernized in the proposed Green Prosperity Act

Phil Gass, project manager, Climate Change and Energy, IISD, presented on "Translating Success: Green Economy Enabling Conditions and Policy Tools." Mr. Gass introduced the concepts of policy tools and enabling conditions, and identified four primary policy tools: standards and regulations (e.g., regulatory reform to reduce barriers to investment); fiscal policy instruments (e.g., feed-in tariffs for renewable energy); institutional and policy processes to support reform (e.g., sustainable procurement policies); and financing (e.g., grants and concessional loans). Mr. Gass gave examples of how these policy tools have been applied in different jurisdictions, both in Canada and internationally. The metrics that helped these jurisdictions transition to a green economy included: the conditions for quick-start actions and results, early engagement with stakeholders, repurposing existing tax structures, the potential for public-private participation, partnership with the private sector, a phased approach to implementation, acting in line with neighbours and a track record of successful policy tools. Drawing parallels to Manitoba, Mr. Gass identified existing programs and initiatives within the province that already have enabling conditions to move into a green economy, including the province's Green Procurement Guidelines, Manitoba Sustainable Agriculture Practices Program for payment for ecosystem services, Manitoba Hydro Power Smart programs, the coal tax and eventual ban on coal, and the former hybrid automobile rebate program. He concluded that in order to fully start its transition to a green economy, Manitoba needs to identify the opportunities and challenges to a green economy, the proper enabling conditions that will create an innovative environment to mainstream green economic activity within the broad economy, the policy tools and actions needed to help Manitobans create these conditions, and what analysis and modelling are needed to undertake testing on options and assumptions about that transition.



Dudley Thompson, principal, Prairie Architects, shared the success story of his architecture firm, which was established in 1981 with a vision to work towards a more environmentally and socially balanced business model and more sustainable architecture. He explained that by building sustainable buildings under Leadership in Energy and Environmental Design (LEED) metrics, businesses can promote a healthy work environment where productivity increases and personnel is retained. Using LEED also enhances energy and water performance and conservation, which contribute to the reduction of greenhouse gases and result in long-term profitability for the building owner. He provided a few examples of green buildings, such as the Manitoba Hydro headquarters, which saves 67 per cent on energy annually with four changes of fresh air every hour throughout the winter. He highlighted that, in order to move toward a green economy in the building sector, there needs to be a sustainable vision that understands the connection between green buildings, human health and productivity. In order to transition more fully in this new green direction, he suggested that pragmatic conservation targets will need to be set by governments that are supported by metrics, accountability and prototypes.

Bruce Duggan, director, Buller Centre of Business, Providence University College and Seminary, presented "Putting a Green Energy Policy into Action: A Providence Perspective." His presentation focused on a biomass heating initiative that has been implemented at Providence over the past two years, the creation of an online Biomass Brokerage and the vision of the 50by30 group. Providence's biomass heating initiative works in tandem with the current natural gas heating systems on campus. So far, this initiative has led to an 80 per cent reduction in natural gas use by Providence. Mr. Duggan indicated that replication of this process is feasible in other universities and institutions, including University of Manitoba, which has a 140 megawatt natural gas heating unit. Mr. Duggan also noted that Manitoba is rich in biomass, such as cattails, and by harvesting local biomass, it can reduce natural gas imports from Alberta and foster a local biomass sector. As part of the development of a viable biomass economy, the Buller Centre has created an online Biomass Brokerage, which provides an essential element of a biomass economy's infrastructure. He also showcased 50by30, which is a group of dedicated Manitobans whose vision for the province is to have 50 per cent of its energy generated by hydro, wind, biomass, solar and geothermal by 2030. He concluded that to achieve a sustainable energy path, the transition has to be scalable, with a gradual reduction in fossil fuel and natural gas consumption as the renewable energy supply grows.

Charles Loewen, chair, Loewen Windows, shared the history of Loewen Windows and its transition to a thriving sustainable business model. The company started as a family business in the early 20th century, and has grown significantly. Business expanded due to a spike in oil prices in the 1970s and the elimination of Manitoba's provincial sales tax (PST) on triple-glazed windows in the 1990s. These two enabling factors—market demand and provincial regulation—geared research and development in energy-efficient windows and doors and created a business opportunity for Loewen Windows to be the first Manitoban supplier of triple-glazed doors and windows. Profits gained through their expansion in the market were reinvested in sustainable practices. By the 1990s the company had fully implemented a green business model, including procurement measures, such as the purchase of Forest Stewardship Council (FSC) certified wood. Loewen Windows exemplifies how chief executive officers can get on board with persuasive green initiatives. It is not important why business leaders take the first step; what is important is that they are on board. All business sectors are in need of greening. Mr. Loewen cautioned, however, that it is important to present good research on green initiatives, as not all are truly sustainable.



Discussion Questions

The second half of the meeting focused on an open discussion of the following questions:

- What information do Manitobans need to properly take advantage of opportunities for a green economic transition? What types of analyses (economic, social and environmental) should the government undertake to enable green economics within the Manitoba context?
- What specific actions can government take to enable a privately driven transition within the economy to more sustainable practices? What barriers exist, and how can they be overcome?
- How do you want to be involved through the process, and more generally, how should the facilitators of this process (University of Winnipeg, IISD and the Government of Manitoba) engage more broadly to ensure that the plan reflects the desires, viewpoints and inputs of Manitobans?

What information do Manitobans need to properly take advantage of opportunities for a green economic transition? What types of analyses (economic, social and environmental) should the government undertake to enable green economics within the Manitoba context?

During the discussion, it was proposed that Manitoba should focus its transition to a green economy in four main sectors: water, energy, the built environment and transportation. Manitoba has a competitive advantage with its abundance of natural capital—including water, biomass and biofuels—providing Manitoba with an opportunity to find a niche market within the renewable energy sector. Drivers for innovation and investment include improved water management related to the local impacts of climate change—in terms of droughts and floods—and water quality—as seen with the algae blooms in Lake Winnipeg. Also, with Manitoba's expertise in construction of high performance buildings in extreme climates, it should aim to become a leader within North America. Lastly, Winnipeg has 20,000 acres of inland port, where the transportation sector serves as the hub that unites all other sectors operating in the province. This creates a unique opportunity for the province to be a leader in the design and implementation of a local transportation framework for smarter land use and minimized unintended consequences, such as cars idling while a three-kilometre train is crossing.

What specific actions can government take to enable a privately driven transition within the economy to more sustainable practices? What barriers exist, and how can they be overcome?

To optimize Manitoba's comparative advantage in the sectors identified below, policy tools and enabling conditions are needed to promote the development of green initiatives.

For the **energy and water** sectors, barriers identified include:

1. Currently, consumers' level of energy policy literacy is too low to demand greener forms of energy.
2. Absence of a coherent connection between climate change and energy use policies.
3. Lack of specialized labour in services such as measurement reporting and verification, energy modelling, energy auditing, carbon footprint management and retrofitting.
4. Limited reinvestment of profits derived from extractive resources into green technology and/or activities.
5. Inaccurate valuation of water in economic calculations.



Identified actions to reduce these barriers include:

1. Create synergy between energy and climate change policies that lead to a reduction in greenhouse gas emissions.
2. Collaborate with post-secondary institutions to provide specialized training for green jobs.
3. Reinvest profits from extractive resources into technology for renewable energy generation (e.g., biomass for heating buildings).
4. Properly value water in economic calculations.

For the **built environment**, barriers identified include:

1. No standardized building code to ensure high energy and water performance in buildings.
2. Gaps in building codes to enable the integration of renewable-source heating.
3. Limited access to upfront capital for new green building or retrofitting costs.
4. No energy conservation targets set by governments in all sectors.
5. Several key parts of the buildings sector are not included in Manitoba's sustainability policies (multi-resident buildings, renovations, rentals)

Identified actions to reduce these barriers include:

1. Create standards under the building code for energy labelling.
2. Develop a rating system for buildings based on energy and water performance.
3. Include energy audits in real estate transactions (residential, commercial buildings).
4. Enact the new code for sustainability.
5. Include all sectors of the built environment under sustainability guidelines.
6. Set energy targets for all building sectors and make them accountable.

For **transportation**, barriers identified include:

1. Poor land-use management.
2. Government transport vehicles incur the highest use of fossil fuels.

Identified actions to reduce these barriers include:

1. Reduce the amount of fossil fuel consumed by the government through a scale-up process.
2. As the highest consumer of fossil fuels, the government can create demand for renewable fuel and energy.

Challenges for **rural municipalities**, particularly those with low population density, were also highlighted during the session, including:

1. Small-scale innovation is limited by policies (e.g., insurance policies).
2. There exists poor infrastructure and limited budget to invest in green construction or retrofitting.



Identified actions to reduce these barriers include:

1. Run an analysis on the rate of return for small business in low-density population areas if they were to invest in green initiatives (e.g., composting, water treatment centres).
2. Change how funding is allocated to municipalities.

Overall, the discussions highlighted that, in order to develop effective green policy, decision-makers need to understand the local market. By understanding local demand, there is a clearer vision on the type of innovation that is needed. By understanding the local supply, primarily composed of small to medium-sized businesses, capacity building and training can then be tailored to local business needs and foster change and readiness for private investments in green technologies and practices. As a way to move forward, incentives that shift from voluntary to mandatory actions over time should be in place.

In the bigger picture, in order to move forward, the Government of Manitoba needs to create a vision to become a leader in green economic activities and define what sectors make up its competitive advantage. Once the vision is clear, investments in research, development and education are essential in order to create green jobs within the priority sectors. Growth in these sectors will attract expertise and investment into the province. To support the drive to a green economy, commercial support and venture capital are needed, as is the expansion of incubators and social enterprises to facilitate sustainable practices in small to medium-sized businesses. Big players, such as Manitoba Hydro and New Flyer, also need to be on board. Ultimately, a commitment to local markets is necessary to create the foundation for green thinking in everyday economic activities.

How do you want to be involved through the process, and more generally, how should the facilitators of this process (University of Winnipeg, IISD and the Government of Manitoba) engage more broadly to ensure that the plan reflects the desires, viewpoints and inputs of Manitobans?

To answer these questions participants indicated that a business approach is necessary. First, areas of interest need to be defined (such as green buildings, training, regulations, etc.), and working groups need to be created accordingly. By listing the ideas of each group, a prioritization process should take place using measurable criteria (e.g., triple-bottom-line cost-benefit analysis). Once the priority areas of the green plan are selected, it is necessary to identify who or what is needed to accomplish the plan's objectives (e.g., industry buy-in, political commitment, etc.). Key to the success of the plan are political leadership, an effective communication strategy and accountability for the green actions undertaken. Additionally, the presence and participation of other stakeholders, including aboriginal and Northern communities, youth and immigrants, was recommended.



Closing Remarks

Scott Vaughn stated that this is the first of a series of consultations moving forward. To this end, the province seeks to go from broad goals to specific actions that Manitobans know work. He explained that the first step in this process is to get the objective right and to have a vision. Second, he noted that it is important to identify where the impediments are and how to remove them in order to obtain concrete gains. He stressed that public policy matters and policy coherence are critical to success. Mr. Vaughn noted that the discussion identified a number of sectors in Manitoba to spearhead the green economy transition: the built environment, renewable energy, water and transport. For each sector, specific barriers were highlighted, as were the necessary policy tools to remove these barriers. These policy tools included renewable performance standards, green procurement standards, public and private partnerships, public financing to cover initial costs in green investments and initiatives, workforce training for green jobs, and measurability and accountability of the activities and overall plan. He cautioned, however, that in this transition to a green economy it is important to have targeted and applied research to understand what conditions are required for success and to learn how to avoid unintended consequences. In closing, Mr. Vaughn emphasized that the many important steps required to green the economy will assure that the whole is greater than the sum of its parts.



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