Climate Change Working Group
Final Report

Prepared by:

Climate Change Working Group

Comprised of:

Councillor Gerbasi (Chair)

Councillor Allard

Councillor Gilroy



January 2017

Consultation in Preparation for this Report

Consultation occurred through informal discussions with a broad range of stakeholders, including members of Council.

External stakeholders consulted included businesses, non-profit organizations, educational institutions, environmental non-governmental organizations, and Crown Corporations. The following table provides a more detailed list of external consultations:

External Stakeholder Consultations held by Councillor Gerbasi	
Marten Duhoux	MB Chapter, Canada Green Building Council
Philip Gass	International Institute of Sustainable Development
Membership includes businesses, non-profit organizations, educational institutions, environmental non-governmental organizations, Crown Corporations	MB Sustainability Coordinators Group
Terry Shaw	Manitoba Trucking Association
Mark Hutcheson	Canada Green Building Council
Curt Hull	Climate Change Connection
Dany Robidoux	Eco-West
Joelle Saltel and Rachel Deslauriers	Federation of Canadian Municipalities
Membership includes businesses, non-profit organizations, environmental non-governmental organizations	Chamber of Commerce Environmental Leadership Council
Gord Delbridge and Dave Sauer	Winnipeg Labour Council & CUPE
Elijah Dietrich	Kelvin High School, incoming President
Honourable Cathy Cox	Minister of Sustainable Development, Province of Manitoba

Internal consultation from the following City of Winnipeg departments:

Office of the Chief Administration Officer and Chief of Corporate Services Officer
Corporate Finance: Asset Management Division
Public Works: Parks and Open Spaces and Transportation Divisions
Water & Waste: Wastewater, Water Services, and Solid Waste Divisions
Winnipeg Fleet Management Agency
Winnipeg Transit: Planning Division

With Support from:

Urban Planning Division, Planning, Property and Development

Executive Summary

Cities have a critical role to play in mitigating and adapting to climate change as they are responsible for producing 70% of climate-changing GHG emissions world-wide. As such, many Canadian cities are showing leadership by developing and implementing strategies to mitigate climate-changing GHG emissions. Climate change and sustainability should be framed through a triple bottom line lens of environment, economy and social well-being. It is about doing the right thing for the people of your community (protecting them from climate impacts), the planet (doing your part to mitigate the harmful local and global effects of climate change), and local business (creating economic opportunities through climate initiatives).

The City of Winnipeg wishes to be a leader in taking action on climate change as evidenced by sustainability policy and direction found in *OurWinnipeg*, and Council's long history of participation in the Federation of Canadian Municipalities Partners for Climate Protection Program.

To further these efforts, in April 2016, the Executive Policy Committee created the Climate Change Working Group and provided the group a three-part mandate of: 1) assessing the status of the City's commitment to Federation of Canadian Municipalities' Partner for Climate Protection model 2) reviewing the current status of *OurWinnipeg* as it relates to climate change initiatives and 3) reviewing new and developing climate change funding sources and partnerships.

This report provides a background on Winnipeg's climate-related policy and Council direction, and key findings related to the Climates Change Working Group's mandate. It contains eleven recommendations that will not only assist the City of Winnipeg in capitalizing on funding opportunities to invest in green infrastructure and renewable energy, but also help enable the municipality to become a more sustainable, livable and climate resilient community.

1. Introduction

The 1992 Earth Summit in Rio de Janeiro is often cited as the first time governments in developed countries from around the world agreed that climate change action “is necessary to prevent dangerous anthropogenic interference with the climate system". Today, 97% of climate scientists agree that climate change is real, it is happening now, and it is human-caused. Cities have a critical role to play in mitigating and adapting to climate change as they are responsible for producing 70% of climate-changing GHG emissions world-wide. As such, many Canadian cities are showing leadership by developing and implementing strategies to mitigate climate-changing GHG emissions. Actions taken by Canadian cities to address climate change enhance and improve the quality of life, economic prosperity and livability of our cities.

At the December 2015 Conference of the Parties (COP21) 195 countries, including Canada, reached an historic agreement to keep the global temperature increase below 2 degrees Celsius. Councillor Gerbasi participated as part of the Canadian FCM delegation to emphasize the important role of municipal governments in taking action on climate change and reducing the local production of greenhouse gas emissions.

Canada’s Parliament has since ratified the Paris Agreement on Climate Change and formally requires Canada’s provinces to develop an approach to address climate change. If they do not, the federal government will intervene with carbon pricing at a minimum of $10 per tonne of carbon dioxide emissions in 2018, rising by $10 each year to $50 a tonne by 2022.

These historical steps taken at the global and national levels present an important opportunity for the City of Winnipeg to show leadership and take action on carbon reduction at the community and corporate levels. However, to date, the City of Winnipeg has been unsuccessful in meeting its climate targets and commitments. As such, Council has directed the establishment of a Climate Change Working Group to provide recommendations on next steps for achieving our climate goals.

1.1. Climate Change Working Group Mandate, EPC motion and Membership

On April 13, 2016 (EPC Minute No.12) the Executive Policy Committee passed the following motion:

WHEREAS the City of Winnipeg has a role to play in reducing greenhouse gas emissions and an opportunity to re-engage efforts and provide leadership from its municipal government;

AND WHEREAS the City of Winnipeg began to address climate change on November 25, 1998 when Council agreed to sign on to the Federation of Canadian Municipalities (FCM) initiative, Partner for Climate Protection;

THEREFORE BE IT RESOLVED:

1. That a Working Group on Climate Change be created with the following mandate:
    - A. Assess the status of the City’s commitment to Federation of Canadian Municipalities’ Partner for Climate Protection model.
    - B. Review the current status of *OurWinnipeg* as it relates to climate change initiatives.
    - C. Review new and developing climate change funding sources and partnerships.

2. That the Working Group be comprised as follows:
    - Councillor Gerbasi – Chair
    - Councillor Allard
    - Councillor Gilroy

3. That the Working Group on Climate Change report directly to the Executive Policy Committee, and conclude at the end of 2016.

2. Background on Climate Policy and related Council Direction in Winnipeg

2.1. Climate Change and *OurWinnipeg*

OurWinnipeg is Winnipeg's 25-year blueprint that will guide the growth and progress of the City's physical, social, environmental, and economic development as per The Winnipeg Charter. *OurWinnipeg* integrates four Direction Strategies (*Sustainable Water and Waste, Sustainable Transportation, Complete Communities and A Sustainable Winnipeg)* that provide detailed policies, directions, and strategies necessary for implementation. *OurWinnipeg* is framed as a sustainability plan and includes significant references and policy direction related to climate change issues in both the corporate and community sectors. An overview of corporate and community direction from *OurWinnipeg* is provided below, and more detailed information may be found in *Attachment A.*

2.1.1. *OurWinnipeg* direction related to Corporate Climate Change Action

A Sustainable Winnipeg is one of four *OurWinnipeg* Direction Strategies. It is an integrated community sustainability strategy that outlines a plan of action, proposes a system of sustainability indicators and measures.

A Sustainable Winnipeg Direction Strategy includes the following references to corporate GHG emissions:

- Establish corporate GHG reduction targets for 2020 and 2035.
- Maintain a Climate Change Action Plan to reduce the City of Winnipeg's operational GHG emissions by a further 20 per cent below 1998 levels.
- Green the City's fleet operations through a plan that includes direction on anti-idling, efficient vehicles, use of alternate fuels and the right-sizing of the fleet.
- Investigate opportunities to sell GHG emission reductions as carbon-offset credits.

2.1.2. *OurWinnipeg* direction related to Community Climate Change Action

A Sustainable Winnipeg Direction Strategy includes the following references to community GHG emissions:

- Create and maintain a Climate Change Action Plan to reduce Winnipeg's community-wide greenhouse gas emission by 6 per cent below 1998 levels.
- Establish a community-wide GHG reduction target for 2020 and 2035.

OurWinnipeg includes the following references to community GHG emissions:

- Support improved energy efficiency and GHG emission reductions, and move towards compliance with contemporary building code standards.
- Reduce the environmental impact of our activities, through strategies such as planning for sustainable energy use and GHG reduction.

2.2. Council's commitment to the Federation of Canadian Municipalities Partners for Climate Protection Program

On November 25, 1998 Council passed a resolution signing on to the Federation of Canadian Municipalities (FCM) *Partners for Climate Protection Program* (PCP) and committed to reducing its corporate greenhouse gas emissions by 20% and its community-wide greenhouse gas emissions by 6% over a baseline year of 1998. As described below, in 2009 Council approved a target of a further 20% reduction in corporate greenhouse gas emissions (totaling 40%) below 1998 levels.

The FCM Partners for Climate Protection Program applies a milestone approach to developing, implementing, and monitoring a Local Action Plan to achieve targeted emissions reductions, and relies upon an inventory and forecast of corporate and community-wide energy use and emissions. The milestone approach is a flexible, performance-based process through which FCM members can build capacity to incorporate climate change into their planning and decision making. The City sets targets and makes recommendations for the GHG emissions reduction action plans following the Five-Milestone Framework for Reducing Greenhouse Gas Emissions. The five milestones are:

Milestone 1 Create a baseline emissions inventory and forecast
Milestone 2 Set emissions reduction targets
Milestone 3 Develop a local action plan
Milestone 4 Implement the local action plan
Milestone 5 Monitor progress and report results

2.3. The City of Winnipeg's Corporate Change Climate Action Plan

Winnipeg focused its initial efforts on accomplishing the corporate GHG reduction target to demonstrate leadership before embarking upon the community climate change action plan. Corporate GHG emissions include those occurring within the operational control of the City.

The corporate inventory records data from municipal government facilities and operations, including buildings, street lighting, water and wastewater treatment, the municipal fleet and corporate solid waste.

In 2006, the Corporate *Climate Change Action Plan* (CCAP) was adopted by Council targeting a 20% reduction in corporate emissions below a baseline year of 1998. A 2007 progress report demonstrated that the 20% target had nearly been achieved, though this was primarily a result of exceptional circumstances (e.g. the sale of Winnipeg Hydro) and incomplete reporting rather than strategic investment. In the 2008 State of the City address, Mayor Katz committed to a further 20% emission reduction. In May 2009, Council directed the Public Service, in consultation with the Mayor's Environmental Advisory Committee, to develop a strategy for achieving a further 20% reduction in corporate GHGs. In September 2009, the Public Service submitted the 2008 annual report on corporate CCAP as well as a proposed strategy for

achieving a further 20% emission reduction. This strategy was endorsed by Council and built upon the previous CCAP with additional actions such as inclusion of forecast scenarios for the period of 2010-2019 as a way of providing Council with an overview of emission reduction opportunities to aid in strategic climate investments.

In July 2016, Council received an update on the Corporate Climate Action Plan with a report highlighting that the City did not achieve the ambitious 40% target. The Public Service was directed to work with the CCWG on developing timelines and targets for reducing GHG emissions within the City of Winnipeg.

2.4. The City of Winnipeg's Community Climate Change Targets

Council's community-wide target (6% below 1998 levels) which was set in 1998 when the City first joined the Partners for Climate Protection Program (PCP) and it does not have a complementary action plan or strategy.

In November 2016, a technical report entitled *Winnipeg's 2011 Community Greenhouse Gas Inventory and Forecast* was received by Council. The administrative report was referred to the CCWG to develop recommendations for reducing community greenhouse emissions within the City of Winnipeg.

This community inventory includes all GHG emissions related to energy consumed and waste produced in Winnipeg. The community GHG inventory records data from the institutional, commercial, industrial (ICI), transportation, and residential waste sectors. This is inclusive of the City's corporate emissions, which account for approximately 1% of the community total.

2.5. Other Canadian Cities Climate Targets and Status in Partners for Climate Protection Program

Most similarly-sized Canadian cities, and nearly all large cities around the world, have either adopted or have committed to adopting stand-alone or policy-integrated climate change goals, targets, and action plans. Strong leadership is key to cities taking action on climate change, and many Canadian cities that have staff focusing on climate policy and programming are making progress on their climate targets.

For example, Toronto has achieved [and even exceeded] their original community emission reduction target of 6% below 1990 levels by 2012. During that same time, emissions in city-owned buildings fell by 40% below 1990 levels. Toronto has also been making substantial progress towards their revised short-term community and corporate targets for 2020. According to their 2015 Environmental Progress Report, community GHG emissions were 25% below 1990 levels, and corporate emissions were 49% below the baseline. Most recent projections put Toronto on track to achieving both of its 2020 targets. Furthermore, Toronto has achieved 5/5 milestones in both the community and corporate climate programs.

Another example is Vancouver where they have a 100% renewable energy target by 2030 and a longer term community emissions reduction target of 80% by 2050. Vancouver has made substantial progress towards achieving their short-term community emission reduction target of 33% below 2007 levels by 2020. In 2014, emissions were 7% below 2007 levels and by 2015,

emission reductions had doubled, reaching 15% below 2007 levels. Additionally, GHG emissions from buildings in 2015 fell by 20% relative to 2007 baseline levels, while total fleet emissions decreased by 13% during that same time. In terms of corporate emissions, Vancouver has managed to achieve a 49% reduction vs. baseline levels. In 2015, Vancouver was acknowledged by Carbon Disclosure Project as one of the '10 Top Cities for Climate Reporting and Disclosure'. Furthermore, Vancouver has achieved 5/5 milestones in both the community and corporate climate programs.

In Victoria, BC, they recently committed to community target of 33% by 2020 and 80% GHG reductions by 2050 and 100% renewable energy by 2050.At the corporate level Victoria has achieved carbon neutrality as of 2014.

A key point in comparing cities across Canada is that our current climate targets do not have a target year for achieving them and they are not broken down into short, medium and long term horizons of 2020, 2035, and 2050. Because they are not time bound, it is challenging to hold ourselves accountable for reporting on progress and achieving our goals within a certain timeframe. Other Canadian cities do establish target years and have advanced through the PCP milestone framework.

Another important observation is that other cities that are achieving their targets have a significant level of dedicated resources to climate change initiatives.

3. Climate Change Working Group Findings

The Executive Policy Committee established the Climate Change Working Group (CCWG) to assess the City's current climate change plans and recommend actions to address climate change. In cooperation with the relevant City departments, the CCWG is reporting back to the Executive Policy Committee with findings on the following mandate:

1. Assess the status of the City's commitment to Federation of Canadian Municipalities' Partner for Climate Protection model.
2. Current status of *OurWinnipeg* as it relates to climate change initiatives.
3. Review new and developing climate change funding sources and partnerships.

3.1. Current Status of the City's commitment to Federation of Canadian Municipalities' Partner for Climate Protection model

The City's commitment, which began in 1998, to the Federation of Canadian Municipalities' (FCM) Partners for Climate Protection Program (PCP) includes both corporate and community GHG emissions targets adopted by Council, as outlined below:

- The [Corporate] *Climate Change Action Plan* was last updated in 2008 and responds to Council's target to reduce emissions from municipal operations to 40% below 1998 levels. The scope of this target is GHG emissions occurring within the operational control of the City. These account for approximately 1% of the overall community total.
- Council's community-wide target (6% below 1998 levels) includes all GHG emissions related to energy consumed and waste produced in Winnipeg.

The Public Service is not on track to achieve Council's 40% corporate reduction target. Furthermore, Council's community-wide target (6% below 1998 levels) does not have a complementary action plan or strategy. Several of the strategies to reduce GHG emissions do not have dedicated staff. Resourcing carbon reduction strategies is required in order to to meet the corporate and community GHG reduction targets.

Additional information on the status of the City's commitment to the FCM Partners for Climate Protection program and climate change action plan funding can be found in *Attachment B*.

3.1.1. Current Status of Corporate Climate Change Action Plan & City's Commitment to the FCM PCP Program

To date, the City has advanced through the first four milestones of the PCP Program for corporate emissions, with the most recent milestone completed in 2008.

Reporting to Council in 2016 on the results of our plan would technically make us eligible to make a submission to FCM for Milestone 5 recognition. However, since the City did not achieve the ambitious 40% target, the Public Service is reviewing our corporate climate plan with the intent to resubmit our application to the PCP program with an update that includes more achievable targets. This resubmission will assist in determining our true current position within the PCP milestone framework.

As previously noted, an update on the Corporate Climate Action Plan was received by Council in July 2016. The report highlighted that the City did not achieve the ambitious 40% target and therefore the Public Service was directed to work with the CCWG on developing timelines and targets for reducing GHG emissions within the City of Winnipeg.

The most current GHG emissions inventory was completed in 2013 and shows a total of 71,832 tonnes of CO_2e were emitted as a result of corporate energy consumption and greenhouse gas emissions from all sectors. Total corporate emissions in 2013 originated from the following sectors: buildings (41%), fleet (26%), water and sewage (17%), solid waste (16%) and traffic signal/street lighting (0%).

It is worth noting that as per corporate emissions account for approximately 1% of the overall community total.

Based on a review of corporate climate change initiatives, and what is achievable, a short-term target of 10% below 1998 by 2022 is recommended. The short-term corporate climate target is based on the latest (2013) corporate emissions inventory and reflects the expected impact if all previously adopted direction and strategies, as well as the recommendations of this report are fully implemented by 2022. Of the specific actions that are modeled into this target scenario, the largest sources of GHG reductions will be attributed to: (i) the expansion of the Brady Road Resource Recovery Centre's landfill gas collection system, and (ii) achievement of the Green Fleet Plan's targeted 17.65% reduction below 1998 levels. Other planned actions that will contribute to achieving this target include modest energy efficiency improvement to existing buildings, organics diversion programs for City facilities and completion of the LED traffic signal conversion project. Further details regarding these planned actions can be found in the 2015 Update to the Corporate Climate Change Action Plan report.

In the medium to longer term, areas of opportunity for additional carbon reductions include:

- Targeting carbon neutrality in new City buildings;
- Creating a comprehensive energy management program for existing buildings;
- Investing in renewable energy in buildings;
- Additional reductions in vehicle emissions through the Green Fleet Plan;
- Investing in organics diversion programs for City facilities and operations.

These opportunities for emission reductions should be considered in a future strategy that establishes longer term targets to 2035 and 2050 based on a comprehensive analysis of current and future emissions. When quantifying current emissions from corporate operations, transit fleet emissions and contracted services such as for winter snow clearing, and residential solid waste and recycling collection should be measured and reported, even if those services are delivered, in part or in full, by private contractors. This allows for meaningful year over-year measurement and recognizes the responsibility of municipal government regardless of the method of service procurement

3.1.2. Current Status on Community Climate Change & FCM PCP Program

Winnipeg achieved Milestone One of the PCP Program in 2002 with the completion of a 1998 community emissions inventory. That inventory has since been updated to a 2011 baseline year, as described in the consultant report entitled *Winnipeg's 2011 Community Greenhouse Gas Inventory and Forecast* which was received by Council in 2016.

Council's community-wide target of reducing greenhouse gas emissions by 6% below 1998 levels does not have a complementary action plan nor does it identify the target year for which it is to be achieved. The above noted report (*Winnipeg's 2011 Community Greenhouse Gas Inventory and Forecast*) details three scenarios projected along three separate emission forecasts: *(i)* Business-As-Usual pathway; *(ii)* 'Our Winnipeg' pathway; and *(iii)* Low Carbon pathway.

Since a community-wide climate action plan and related GHG reduction targets in the medium (2035) and longer term (2050) have not been established, it is important that we commence public consultation to develop a Community Climate Change Action Plan as soon as possible. The City has received a grant, in the amount of $94,000, from FCM's Green Municipal Fund to develop an integrated community-wide strategy to reduce GHG emissions that will involve extensive public consultation. The public engagement program will consider best practices and be guided by resources such as the FCM Participatory Toolkit, the IAP2 Principles for Public Participation, and the City of Winnipeg's Public Engagement Handbook. To ensure meaningful participation and inclusion of community partners in the development of our Community Climate Plan, it is important that a stakeholder advisory committee be established that includes broad representation and technical expertise from the community.

3.2. Current status of *OurWinnipeg* as it relates to climate change initiatives

OurWinnipeg is Winnipeg's 25-year blueprint that will guide the growth and development the physical, social, environmental, and economic development of our city as per The Winnipeg Charter. *OurWinnipeg* integrates four Direction Strategies that provide detailed policies, directions, and strategies necessary for implementation. *OurWinnipeg* is framed as a sustainability plan and includes significant references to climate change issues.

The CCWG reviewed the current status of *OurWinnipeg* as it relates to climate change initiatives. *Attachment A* summarizes the climate change references in *OurWinnipeg*, as well as the policies, directions, and strategies related to climate change included in each of the four Direction Strategies. In addition, *Attachment A* provides references to climate change in the Transportation Master Plan - Moving Winnipeg Toward 2031.

3.3. Current Status of New and Developing Climate Change Funding Sources and Partnerships

There are a variety of new funding opportunities evolving from all levels of government, including, but not limited to: federal green infrastructure funding, provincial carbon pricing revenue recycling, and additional municipal funding through FCM. Furthermore, cities that are showing leadership in sustainability and climate action planning are being innovative in partnering with community stakeholders to finance and support action on climate change.

3.3.1. Federal Funding Opportunities

The federal government has recently committed $19.7 billion each for public transit, social, and green infrastructure over 10 years. Starting in the upcoming 2017-18 fiscal year, the federal government will start rolling out the next phase of its infrastructure funding, committing $81 billion more over 11 years. The funding will include:

- *$25.3 billion* for *public transit projects*;
- *$21.9 billion* for *green infrastructure* including, but not limited to: interprovincial transmission lines, renewable power projects, and water treatment facilities;
- *$21.9 billion* for *social infrastructure* such as affordable housing, early learning and childcare, and cultural and recreational infrastructure.

To provide a roadmap for how and when funding will be dispersed, the federal government has recently released a short-term costing plan framework which is extended over a 2020 timeline, as illustrated below.

INFRASTRUCTURE

Investment	2016/17	2017/18	2018/19	2019/20
Public transit infrastructure	1,675	1,675	1,150	1,150
Social infrastructure	1,675	1,675	1,150	1,150
Green infrastructure	1,675	1,675	1,150	1,150

Figures in millions of dollars

Additionally, the federal government has also earmarked a modest amount of funding specifically for projects & initiatives which support the environment and economy, as illustrated below. This includes a newly-unveiled four-year, $2 billion Low Carbon Economy Trust that is designed to fund projects that materially reduce GHG emissions.

ENVIRONMENT AND ECONOMY

Investment	2016/17	2017/18	2018/19	2019/20
Low Carbon Economy Trust	0	1,000	1,000	0
Resource sector clean-tech strategies	200	200	200	200
Clean-tech production	100	100	100	100
National Parks programming and science	50	50	50	50
Water science and monitoring	50	50	50	50
Free entry to National Parks in 2017	15	45	0	0

Figures in millions of dollars

The federal government has also announced they will also table legislation in 2017 to establish a new $35-billion Canada infrastructure bank to help other levels of government undertake transformative infrastructure projects by allowing them to borrow at the federal government rate to reduce the cost of borrowing for larger projects. The federal government hopes to leverage potentially $4 or $5 of private sector investment for every $1 in federal, provincial and municipal funding for a project. Additionally, as the federal government continues to identify and define applicable funding initiatives, the City of Winnipeg should endeavour to pursue opportunities to fund projects that are in step with the municipal climate change plans.

The 2016 Federal Budget announced an additional $75 million capacity-building fund to be delivered by FCM's Green Municipal Fund to support climate change mitigation and adaptation in municipalities across Canada. The program will be targeted specifically at municipalities and their partners. The program will support a range of activities including plans, studies and demonstration projects under a mitigation and adaptation stream from 2017 to 2020. Grants may range from $175,000 to up to $1,000,000 depending on the nature of the projects; details related to planned funding will be communicated early in 2017.

To best manage the funding available and to support the strongest initiatives, FCM implemented new updates to the GMF that went into effect on April 1, 2015, including:

- An updated competitive selection process for capital projects in the energy, transportation, waste and water sectors;
- Updated eligibility criteria and funding limits for all funding streams; and
- An updated application process, as well as new application forms and support tools for applicants.

Opportunities for the City of Winnipeg to apply for GMF funds are organized according to the sectors of municipal activity: Brownfields, Energy, Transportation, Waste, Water, and Multi-Sector. Additional information on the eligibility criteria of the Green Municipal Fund is included in *Attachment C.*

3.3.2. Provincial Funding Opportunities

The provincial government's supports innovative solutions to environmental issues through the Sustainable Development Innovations Fund (SDIF). The SDIF is designed for projects, activities, research and developments that further the sustainability of Manitoba's environment, economy, human health and social well-being. Targeted funding programs under the Fund are:

- Waste Reduction and Pollution Prevention (WRAPP) Fund
- Manitoba Climate Change Action Fund (MCCAF)
- Water Stewardship Fund

Manitoba Hydro has introduced a Solar PV Energy Incentive Program available to all residential, commercial, and industrial customers interested solar energy systems up to 200kW. Manitoba Hydro will pay $1 per watt installed; the incentive is paid at the end of the project, once the PV system passes inspection.

On May 3, 2016, Premier Brian Pallister released a mandate letter addressed to Catherine Cox, Minister of Sustainable Development, to develop a made-in-Manitoba provincial climate action plan containing the following elements:

- Carbon pricing and revenue recycling that fosters emissions reduction, keeps investment capital here and stimulates innovation in clean energy, businesses and jobs.
- Land-use and conservation measures that sequester carbon and foster adaptation to climate change.
- Reduce emissions from commercial buildings through building codes and other measures putting government operations and infrastructure on a path to carbon-neutrality.
- Encourage the adoption of fuel saving technologies and measures within the transportation sector.
- Additionally, as the provincial government continues to identify and define applicable funding initiatives, the City of Winnipeg shall endeavor to pursue opportunities to fund projects that are in step with the municipal climate change plans.

Opportunities for the City may exist through revenue recycling as an outcome of the yet to be unveiled provincial strategy on carbon pricing. Other Canadian jurisdictions, such as the City of Vancouver, support sustainability initiatives and climate action using this model.

3.3.3. Other Potential Funding and Partnership Opportunities

Partnering with local foundations and granting agencies is another opportunity for the community to take action climate change. An example of a grant program that specifically supports the concept of local governments partnering with local foundations is Partners for Places.

Partners for Places is a successful matching grant program that creates opportunities for cities and counties in the United States and Canada to improve communities by building partnerships between local government sustainability offices and place-based foundations. National funders invest in local projects to promote a healthy environment, a strong economy, and well-being of all residents. Through these projects, Partners for Places fosters long-term relationships that make our urban areas more prosperous, livable, and vibrant.

The grant program provides partnership investments between $25,000 and $75,000 for one year projects, or $50,000 and $150,000 for two year projects, with a 1:1 match required by one or more local foundations.

The Funders' Network for Smart Growth and Livable Communities and the Urban Sustainability Directors Network (USDN) joined together to launch Partners for Places. Now a project of the Funders' Network, the grant program was made possible by generous support from Bloomberg Philanthropies, the JPB Foundation, Kendeda Fund, John D. and Catherine T. MacArthur Foundation, New York Community Trust, Summit Foundation, and Surdna Foundation.

4. Discussion

Winnipeg is a major Canadian city with 718,400 people (and steadily growing) and the capital region contains over 60% of the total population of Manitoba. Despite Council direction provided as far back as 1998 and a long-range development plan *OurWinnipeg* that pledges to integrate sustainability into every aspect of City operations, the City is not on track to achieve its current climate goals and targets. Recent reports to Council show that only 0.2% of the targeted 40% of greenhouse gases has been reduced from City Operations and the community-wide target of reducing greenhouse gas emissions by 6% below 1998 levels does not have a complementary action plan or strategy in place as to how to achieve this target.

A key factor in the success of a Sustainability Office is that the City's organizational structure reflects a desire for strong leadership in this area. Sustainability and climate change issues are cross-departmental issues that need to be integrated into all operations and services. This is illustrated well in the case of the City of Vancouver, where sustainability is identified as one of five priority areas that fall under the Office of the City Manager with direct reporting lines to the Mayor.

Underlying our lack of progress in achieving climate goals is a lack of resources, and in particular staff and funding resources, to reduce GHGs and mitigate the risks associated with climate change. The CCWG has explored opportunities to leverage funding on climate change as previously discussed. However, many of the City's strategies to reduce GHG emissions do not have dedicated staff and there is no centralized Sustainability Office to work on streamlining and integrating climate change action across City departments. The Winnipeg Public Service has one permanent position (Environmental Coordinator) and one temporary position (Sustainability Planner) located in the Department of Planning, Property and Development.

In order for the City of Winnipeg to develop the capacity to meet corporate and community GHG reduction targets, some additional resources, such as dedicated staff within an Office of Sustainability, will be required. An Office of Sustainability should take the lead in researching and recommending climate change initiatives and targets, as well as coordinating implementation efforts within municipal departments, other levels of government, and community stakeholders. CCWG supports an evidence-based approach using best practices of target setting from the bottom-up to ensure selected actions are realistic and achievable. The advantages of a 'bottom-up' approach when setting a long-term (+10 year) corporate climate target include: (i) understanding of the actions required to meet the target and their potential costs, (ii) greater confidence that the target can be met with proper implementation, (iii) more

detail on sub-sector and interim reductions, and (iv) providing municipalities with important indicators that can help guide ongoing implementation and support future improvement

As shown in **Table 1**, many cities across Canada have dedicated staff working in a Sustainability Office. In Canadian cities with a population over 500,000, there is an average of 11 positions in the Sustainability Office and, even where the numbers of staff numbers are fewer, there is often a substantial budget in place to support work on sustainability issues. Furthermore, recent studies indicate that 'dedicated municipal environment departments increase the likelihood that a local government will adopt high impact climate policy.'[1]

Table 1: Approximate Number of Staff working in Sustainability Offices in several Canadian cities

City	Population	Number of Staff working in Sustainability office
Toronto	2.8 million	16
Ville de Montréal, QC	1.8 million	7
Calgary	over 1 million	4[2]
Edmonton	over 900,000	16
Vancouver	600,000	16
Surrey	500,000	5[3]
Saanich	110,000	3
Victoria	less than 100,000	3

The following list describes typical duties that staff working in a City Sustainability Office may be required to carry out:

- Preparation and implementation of cross corporate/community wide strategies (e.g. climate change action plan, adaptation and resiliency strategies)
- Provision of expertise and support to other Departments (e.g. environmental risk assessments; local food procurement policy; emissions tracking in support of the City's Green Fleet Plan)

[1] Schwartz, E (2016). Local Solutions to a Global Problem? Canadian Municipal Policy Responses to Climate Change. The University of British Columbia. Canada

[2] Three of these four positions are permanent positions.

[3] The fifth staff member is embedded in the buildings department.

- Policy development & implementation (e.g. carbon pricing; green building policy)
- Program design and delivery (e.g. community facing programs related to electric vehicles, home and building energy labelling, green roof incentive programs, brownfield redevelopment)
- Inter-governmental affairs – coordinate and prepare City submissions in response to proposed Provincial and Federal environmental legislative/regulatory changes
- Reporting – prepare annual environmental progress report, the annual GHG inventory, and coordinate the City's submissions to CDP; Compact of Mayors etc
- Coordination – coordinate the City's submissions to the FCM Green Municipal Fund, Environmental management system (ISO 14001), manage the City's involvement in the C40 Cities; Compact of Mayors; 100 Resilient Cities; Urban Sustainability Directors Network, etc
- Research in support any one of the above activities

Three areas where significant benefits may be achieved through the reduction of greenhouse gas emissions are: green buildings, waste reduction and community initiatives.

Buildings make up a significant portion of our greenhouse gas emissions and therefore represent a great opportunity to achieve Winnipeg's climate goals at both the corporate and community levels. For instance, since 2011, the City has had a *Green Building Policy for Existing City-owned and leased Buildings* and as per Council's recommendation the policy should be "based on the continuous improvement of building environmental and energy performance, through energy and water-performance benchmarking exercise for City-owned and operated buildings over 3,000 square metres (33,000 square feet)". To be effective in delivering on the objectives of this policy, we need technical expertise and dedicated staff to develop an energy management program that includes energy and water benchmarking. Reasonable levels of resources dedicated to building energy management will help create the business case for efficiency retrofits to existing buildings and ultimately, we could achieve great success in reducing our carbon footprint.

Waste reduction is another significant greenhouse gas emissions reduction opportunity, and in particular, diversion of organic materials from corporate and community waste streams will directly contribute to target achievement and GHG reductions. The *City of Winnipeg Corporate Waste Strategy* and its associated waste diversion targets (approved by Council in 2015) identify the need for dedicated staff. Waste reduction initiatives that focus on diverting recyclable and compostable materials from the waste stream and result in GHG savings should be prioritized.

Community initiatives include the work of developing, coordinating, implementing and reporting on community wide strategies related to climate change mitigation, adaptation and resiliency in the face of a changing climate. Community partnerships will be critical to success in this area as municipal governments have influence and the ability to lead in some sectors (for example, land use planning) but in other areas have little to no direct authority over community emissions.

Finally, in response to feedback that the CCWG received from internal and external consultation efforts, it is important that staff dedicate time to examining carbon reduction opportunities

associated with sustainable asset management and climate-friendly procurement. High impact procurement categories for climate protection include examining energy efficient products, greening electronics and IT equipment, green fleet opportunities (e.g. the use of renewable fuels), and green building procurement strategies that include operations and maintenance, in addition to construction and renovation stages of the lifecycle. Furthermore, consideration for overall costs of ownership from the initial purchase price, operating and utility costs (including energy and water use), maintenance costs (for labour and repair) and end-of-life costs (for disposal and recycling) is critical to sustainable asset management and climate friendly procurement.

5. Recommendations

The following recommendations provide a pathway for Council to achieve its climate goals and targets and support future community climate change action planning that is to take place in the community.

The CCWG recommends that:

1. The recommended corporate short-term target is a reduction of GHGs by 10% below 1998 by 2022. Longer-term corporate targets, to 2035 and 2050, should be established following more comprehensive analysis carried out by the Public Service.
2. That, as per previous direction from Council and *OurWinnipeg*, the City should proceed immediately with an RFP to support a comprehensive public consultation to develop a community-wide climate change action plan. This will be funded through an existing Green Municipal Funds grant (GMF) of $94,000. Community-wide targets to 2035 and 2050 should be established as an outcome of the community consultation and community-wide climate change action plan in line with timeframes set by other cities.
3. An Office of Sustainability be established in 2017, located in the office of the CAO. The Office of Sustainability should be responsible for all sustainability initiatives related to the City (both corporate and community-wide emissions).The Office of Sustainability would work collaboratively with City departments, other levels of government and the community to achieve the City's goals of sustainability and environmental quality as directed by Council.
4. The Office of Sustainability should incorporate the existing positions of the Environmental Coordinator and the Sustainability Planner. The Sustainability Planner which is currently temporary should become a permanent position.
5. At minimum, an additional three dedicated staff are required in order to meet established climate targets. These additional dedicated positions should be in place by 2018 to support work in the areas of green building, waste reduction and community initiatives.
6. A climate change cross-departmental working group should be created that will be responsible for monitoring GHG emissions and achieving carbon reduction objectives, led by the Office of Sustainability.
7. The Office of Sustainability should collaborate with related citizen advisory groups, including, but not limited to the Active Transportation Advisory Committee, Green Fleet Advisory Committee, Waste and Diversion Advisory Committee, and Winnipeg Food Policy

Council. Furthermore, a Stakeholder Advisory Committee made up of representatives from various sectors and with different expertise on climate change issues should be established to guide the development of a Community Climate Change Action Plan. This will reaffirm the important role of citizen advisory groups in continuing to inform and advise the Public Service on important climate and sustainability issues.

8. Annual reporting to Council on progress reducing greenhouse gas emissions, and continued climate change communications through *OurWinnipeg*. In terms of national and global reporting, the Public Service should continue to report through FCM *Partners for Climate Change Protection* Program and the global reporting platform Carbon Disclosure Project.
9. The Office of Sustainability should communicate information about emerging climate change related funding opportunities to City departments. The Office of Sustainability should regularly review and consider available funding opportunities from other levels of government, FCM and other sources.
10. That the Public Service should collaborate with the Office of Sustainability to provide a report on best practices of sustainable procurement for consideration of the appropriate committee of Council.
11. That the Public Service should collaborate with the Office of Sustainability to review the City's sustainable asset management strategies for opportunities to cut GHG emissions, identify the risks posed by climate change, and how those risks will be mitigated.

LIST OF ATTACHMENTS:

Attachment A:
OurWinnipeg Climate Change Initiatives



OurWinnipeg & Climate Change.pdf

Attachment B:
FCM Partners for Climate Protection Program - Status Report



FCM Partners for Climate Protection Pr

Attachment C:
FCM Funding Program & Opportunities



FCM Funding Program & Opportuni