Presentation to Executive Policy Committee of Winnipeg City Council
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Why is a Zero-Carbon City not a Strategic Priority for Council?

Winnipeg Executive Policy Committee of City Council will vote today to approve *Council's Strategic Priorities Action Plan 2023-2026*. This Plan presents 41+ strategic priorities to guide council policy and finances over the next four years. A serious commitment to a comprehensive zero-carbon strategy for Winnipeg is not a guiding priority. Why?

The City of Vancouver declared a Climate Emergency in 2020 and stated that "the climate crisis is the defining issue of our time". Around the globe, there are over 2500 cities and municipalities in 40 countries that have formalized a binding motion declaring a climate emergency. In Canada, there are 652. Many of these jurisdictions have proceeded to set up action plans to guide the transition to zero-carbon economies and then have committed funding to implement the plans. Calgary has committed $87B to a net-zero plan over 28 years; Edmonton $24B over 10 years; Saskatoon $19B over 28 years and Ottawa $30B over 28 years.

Winnipeg has not declared a climate emergency. It has not formally committed funding for a zero-carbon action plan. However, as you know, it has commissioned an action plan entitled the **Community Energy Investment Roadmap (CEIR).** This is a taxpayer-funded, evidence-based plan that defines the actions, scale and economics necessary for the transformation of Winnipeg to a net-zero economy by 2050. The CEIR report was formally approved as a motion of City Council in July 2022 with direction for the public service to "analyze and research how to include climate change impact in the operating and capital investment processes and decisions."

And yet, there no mention of the CEIR report anywhere on *Council's Strategic Priorities Action Plan 2023-2026*? Other Canadian cities realize that if you don't get the zero-carbon action plan right, the rest doesn't matter. If you reduce carbon costs starting now, and view all decisions through a climate lens, the climate dividend will start to provide the funds to accomplish many of the *Strategic Priorities*. The CEIR report can be used as the tool to achieve many of Council's priority items while at the same time implementing serious carbon reductions. Sustainable Building Manitoba has prepared a two page summary of that plan and attach for your information. Key benefits from the implementation of from the report are identified as follows:

1. **A zero-carbon economy is a good investment**:

The net community **benefit** to Winnipeg is $35.6 billion over 28 years, a climate dividend that averages $1.2 billion per year. By 2050 the total energy cost savings will be nearly $2 billion per year - and all this energy is made-in-Manitoba. The billions sent to Alberta every year recirculate inside Winnipeg for additional benefits.

Employment between 2020-2050 is projected to increase over 100,000 person years

To achieve this result, the CEIR report recommends a societal investment (from public and private sources) of $23 billion over 28 years (from 2022–2050), averaging $800 million per year (or 1% of Manitoba's GDP).

This investment pays for itself two times over, generating savings of $53.7 billion from avoided carbon costs, reduced energy costs, and avoided maintenance costs and revenues of nearly $5 billion until 2050.

2. **Households save money and improve health**:

If the CEIR report is implemented, household expenditure will shift away from natural gas and gasoline to electricity, using high efficiency space heating and cooling with heat pumps or geothermal, and improving the efficiency of homes and reducing energy costs by 56% per year.

With carbon tax increases and reduced energy costs, an average household in 2050 will save $4500 per year. These savings can be used to finance the incremental capital expenditures required to achieve the carbon targets.

Health is improved with better air quality as we eliminate fossil fuels. Clean energy reduces asthma, bronchial conditions and absenteeism while improving mental health.

Achieving a net-zero economy can reduce energy poverty, when a household's energy costs represent a disproportionate share of their income.

The timeline is tight and the pathway ambitious. The CEIR report recommends that the next generation of climate action focuses on the systematic transformation of the built environment, as opposed to a long list of actions. In particular, this means embedding a climate test where each investment is evaluated to identify its contributions to decreasing or increasing emissions, a whole city approach. In the event that an evaluation results in increased emissions, the project or policy should not proceed. This whole city approach requires applying a climate lens and an annual carbon budget for all policies and expenditures; annual greenhouse gas reporting; an expanded Office of Sustainability; net-zero City buildings and fleet and the establishment of a climate advisory committee.

Make no mistake, all cities will be transformed to become zero-carbon, it is just a matter of when. The sooner a city commits to zero-carbon and starts to act, the less it will cost, the better the economy and the more competitive it will be. Winnipeg City Council itself has approved the direction outlined by the CEIR report. Council just needs to follow its own climate action plan.

Thank you.

A Summary of the City of Winnipeg's Community Energy Investment Roadmap (CEIR)

1. CEIR was commissioned and approved by City Council.

- The Community Energy Investment Roadmap (CEIR) is a taxpayer-funded, evidence-based study that defines the actions, scale and economics necessary for the transformation of Winnipeg to a net-zero economy by 2050. The CEIR was approved as a motion of City Council in June 2022.
- CEIR builds on the earlier *City of Winnipeg Climate Action Plan* and the *OurWinnipeg 2045* development plan. These reports established the vision to establish a climate target for Winnipeg to meet or exceed net-zero emissions by 2050.
- CEIR identifies the response to climate change as a **Climate Emergency**.

2. Climate action is a good investment.

- The net community **benefit** to Winnipeg is $35.6 billion over 28 years, a climate dividend that averages $1.2 billion per year. By 2050 the total energy costs savings will be nearly $2 billion per year.
- CEIR projects an increase of over 100,000 person years of employment between 2020-2050.
- To achieve this result, CEIR recommends a societal investment (from public and private sources) of $23 billion over 28 years (from 2022–2050), averaging $800 million per year (1% of Manitoba's GDP).
- This investment pays for itself two times over, generating savings of $53.7 billion from avoided carbon costs, reduced energy costs, and avoided maintenance costs and revenues of nearly $5 billion until 2050.

3. Households save money and improve health.

- If CEIR is implemented, household expenditure will shift away from natural gas and gasoline to electricity, using high efficiency space heating and cooling with heat pumps, and improving the efficiency of homes and reducing energy costs by 56% per year
- With carbon tax increases and CEIR reduced costs, an average household in 2050 will save $4500 per year.
- These savings can be used to finance the incremental capital expenditures required to achieve the carbon targets – for example, reduced heating costs can be used to finance a heat pump.
- Health is improved with better air quality as we eliminate fossil fuels. Clean energy reduces asthma, bronchial conditions and absenteeism while improving mental health.

4. Efficiency First.

- The priority of actions to achieve a net-zero economy is "Reduce, Improve, Switch". Step one to reduce energy consumption. Step two is to improve and maximize energy efficiency improvements. Step three is to switch to low-carbon energy sources for the remaining demand.

5. Electricity is the lynchpin of a net-zero economy.

- Manitoba has the cleanest electricity in Canada. From a greenhouse gas (GHG) emissions perspective, once you have reduced and improved, then it is possible to switch heating and transportation systems from fossil fuels to electricity as the primary strategy to achieve the net-zero target.

6. Pathways to a zero emissions economy.

CEIR proposes four pathways to achieve net-zero emissions: in buildings, transportation, waste management and renewable energy.

A. Buildings.

- Emissions from buildings account for 44% of the GHG in Winnipeg. CEIR recommends retrofitting 100% of all existing dwellings built before 1980 by 2035, in order to improve thermal and electrical efficiency by 50%. It also recommends retrofitting 100% of all remaining buildings by 2050, to improve thermal and electrical efficiency by 50%.
- As heating and transportation are electrified, annual electricity consumption does not increase in the net-zero economy. The combination of replacing electric baseboards with heat pumps and retrofitting homes and buildings generate electricity savings are then used to power heating and transportation.

- Building retrofits are also the key strategy for stimulating employment, addressing energy poverty, and improving living conditions for vulnerable populations.

B. Transportation.

- Emissions from transportation account for 48% of the GHG use in Winnipeg. Much of the reductions in GHG will come from the federally mandated conversion of vehicle manufacturing to zero-carbon by 2035
- CEIR recommends the electrification of 100% of personal vehicles by 2050 with 15% electrified by 2030. It also recommends the electrification of 100% of transit by 2050 with 75% electrification by 2030.
- CEIR recommends changes to urban planning to reach zero-carbon including to densify land use plans; create 15-minute city planning, remove parking minimums for new developments, increase walking and cycling infrastructure, coordinate EV charging stations and implement the proposed Transit Masterplan.

C. Waste Management.

- Emissions from waste account for 6% of the GHG in Winnipeg. CEIR recommends a 75% waste diversion to be implemented by 2050 with 33% reduction by 2025. It also recommends a 25% reduction in water consumption by 2050 with a 7% decrease by 2030

D. Pathway to Renewable Energy for Everyone.

- CEIR recommends, starting in 2022, to installing 2500MW of solar Photo Voltaic power on existing buildings to achieve 50% of their electrical load by 2050. Starting in 2031, CEIR recommends that all new commercial buildings provide 50% of their energy from solar PV. It also outlines a timetable to implement the installation of district energy from geo-thermal and the capture of renewable bio-gas from wastewater and landfills.

7. Implementation strategies designed to address equity.

- Today with climate change, increased energy costs will impact vulnerable communities disproportionally. Many actions outlined in this Roadmap will benefit low-income and equity-seeking groups. Achieving the net-zero economy can also reduce energy poverty, when a household's energy costs represent a disproportionate share of their income.

8. A Climate Test will avoid malinvestments.

- The timeline is tight and the pathway ambitious. Any investments or policies that the City undertakes which result in increased emissions going forward will become stranded investments that are costly to undo, or malinvestments.
- To ensure the City's policies and expenditures align with the net-zero economy pathway, CEIR recommends that the City implement a climate test, where each investment is evaluated to identify its contributions to decreasing or increasing emissions. In the event that an evaluation results in increased emissions, the project or policy should not proceed.

9. A whole-city climate lens approach.

- The next generation of climate action planning focuses on the systematic transformation of the built environment, as opposed to a long list of actions. In particular, this means embedding the consideration of climate into every policy and expenditure in alignment with the net-zero economy, a whole city approach.
- This whole city approach requires applying a climate lens and an annual carbon budget for all policies and expenditures; annual GHG reporting; expanded Office of Sustainability; net-zero City buildings and fleet and the establishment of a climate advisory committee.

Prepared by Sustainable Building Manitoba - May 2023. For detailed CEIR report go to: City of Winnipeg CEIR report and follow the links

Other Canadian Cities are implementing net-zero carbon plans.

- Over 650 Canadian cities and municipalities have declared a Climate Emergency.
- The consultants for the Winnipeg CEIR have done similar plans for Toronto, Edmonton, Hamilton and Victoria.
- Calgary has committed to an $87B net-zero plan over 28 years; Edmonton $24B over 10 years; Saskatoon $19B over 28 years; Ottawa $30B over 28 years and Vancouver $500m over 5 years.