

## Greenhouse Gas Reduction Targets and Low Emissions Community Plan 2024-2025 Refresh

### ISSUE

The City of Saskatoon (City) established its greenhouse gas (GHG) reduction targets in 2017 using best practises at the time. Since then, climate models and projections have been updated, indicating that more aggressive action is needed. Jurisdictions across Canada and internationally have updated their GHG reduction targets to align with Intergovernmental Panel on Climate Change (IPCC) targets to stay within 1.5°C and attaining net-zero emissions by 2050. Should the City update the GHG emission reduction target?

### RECOMMENDATION

That the Standing Policy Committee on Environment, Utilities, and Corporate Services Committee recommend to City Council that:

1. The City update its long-term greenhouse gas reduction target to net-zero by 2050;
2. The City use a science-based approach to set interim targets through the 2024-2025 Low Emissions Community Plan Refresh; and
3. \$250,000 from the Environmental Sustainability Reserve be used to fund the 2024-2025 Low Emissions Community Plan Refresh in 2024, and that this be considered at the 2024-2025 Multi-Year Business Plan and Budget deliberations.

### BACKGROUND

At the [June 26, 2017 meeting, City Council](#) approved the recommended greenhouse reduction targets for Saskatoon, as proposed by the Saskatoon Environmental Advisory Committee (SEAC), including:

- Community-wide targets of 15% emissions reductions below 2014 levels by 2023; and 80% emissions reductions below 2014 levels by 2050.
- City of Saskatoon (corporate) targets of 40% below 2014 levels by 2023; and 80% below 2014 levels by 2050.

At that same meeting, City Council also approved that incremental targets be set every five years after 2023 and that there be yearly reporting on progress in relation to the City's corporate target.

The [Low Emission Community \(LEC\) Plan](#) was received by City Council on August 29, 2019.

The *2022-2025 Strategic Plan* Environmental Sustainability priority includes:

“Implement climate actions in the Low Emissions Community Plan and the Corporate Adaptation Strategy within proposed timeframes.”

At the [November 7, 2022 Standing Policy Committee on Environment, Utilities, and Corporate Services](#), Committee received the Climate Action Plan: Progress Report 2021 and resolved, in part, that:

“In anticipation of the 2025 Climate Action Plan Refresh, that the Administration report on options to meet revised international climate targets, such as Net Zero.”

At the [November 21, 2022 meeting of City Council](#), they resolved:

1. That the reporting timeline set out in Appendix 2: Climate Action Plan: Reporting Timeline be approved in principle; and
2. That the Administration report every second year on Climate Action Plan progress (including emissions inventories, Low Emissions Community Plan, Corporate Climate Adaptation Strategy, and other relevant sustainability strategies).

## CURRENT STATUS

The [Climate Action Plan: Progress Report 2021](#) includes the 2021 GHG inventory, progress toward GHG reduction targets, and progress on Climate actions. As stated in that report, Saskatoon’s GHG emissions have decreased compared to the baseline, including:

- The City, as a corporation, emitted 217,800 tonnes CO<sub>2</sub>e in 2021, a decrease of 3% compared to the 2014 baseline. A further 37% reduction in corporate emissions is needed over the next two years to meet the City’s target of 40% below 2014 levels. The City is not on track to meet this target.
- Saskatoon, as a community, emitted 3,509,600 tonnes of CO<sub>2</sub>e in 2021, a decrease of 9% compared to the 2014 baseline. A further 6% reduction is needed over the next two years to meet the City’s target of 15% below 2014 levels. As a community, Saskatoon is currently on track to meet this target.

The City reports to [CDP](#)<sup>1</sup> regularly and received a score of A- in 2021, a reduction from the 2020 score of A. The 2022 *CDP Feedback Report* is attached as Appendix 1. The City is a signatory to the Global Covenant of Mayors for Climate and Energy but has not declared a Climate Emergency, joined the United Nation’s Race-to-zero, or participated in the World Wildlife Fund’s One Planet City Challenge.

## DISCUSSION/ANALYSIS

### Approaches in Other Jurisdictions

Countries and cities around the world are committing to bold climate targets. The 26<sup>th</sup> Conference of the Parties Summit occurred in Glasgow in November 2021. At that

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<sup>1</sup> CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states, and regions to manage their environmental impacts.

meeting, 197 governments agreed to the Glasgow Climate Pact which includes new or updated emissions targets known as Nationally Determined Contributions (NDCs) that cover around 80% of the world's greenhouse gas emissions.

The Government of Canada has a net-zero emissions target by 2050, in alignment with the 1.5°C warming threshold, and has adopted the *Canadian Net-Zero Emissions Accountability Act* to provide an accountable and transparent framework to deliver on this target. In March 2022, *Canada's 2030 Emissions Reduction Plan* was introduced, which provides a roadmap for the Canadian economy to achieve 40-45% emissions reductions below 2005 levels by 2030, building upon the actions outlined in Canada's previous climate plans.

Appendix 2 includes targets and climate declarations from a sample of Canadian cities.

### Net Zero by 2050 Target

According to the IPCC's 2018 report, [Global Warming of 1.5°C](#), all available 1.5°C mitigation pathways from 2020 onwards require that global GHG emissions peak before 2030 and that emissions be reduced below 2010 levels by 2030.<sup>2</sup>

The IPCC released its [6th Assessment report](#) in February 2022, reinforcing this message, stating that near-term actions that limit global warming to close to 1.5°C would substantially reduce projected losses and damages related to climate change in human systems and ecosystems, compared to higher warming levels, but cannot eliminate them all. They emphasize that the time for minor, marginal, reactive, or incremental changes will not be sufficient. In addition to technological and economic changes, shifts in most aspects of society are required to overcome limits to adaptation, build resilience, reduce climate risk to tolerable levels, guarantee inclusive, equitable and just development and achieve societal goals without leaving anyone behind.

The 2022 IPCC Report assesses a detailed list of observed and projected climate impacts and risks and found that the extent and magnitude of climate change impacts are larger than estimated in previous assessments and that climate change is causing severe and widespread disruption in nature and in society; it is reducing our ability to grow nutritious food or provide enough clean drinking water, and therefore affects people's health, well-being and livelihood; and that these impacts are expected to intensify with additional warming.

The City's current target of 80% below 2014 levels by 2050 does not align with the 1.5°C warming threshold. This report recommends that Saskatoon update both its community and corporate target to net zero by 2050.

Rationale for this change includes:

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<sup>2</sup> IPCC. (2018). Summary for Policymakers. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty. <https://www.ipcc.ch/sr15/chapter/spm/>

- Aligns with international recommendations, following the example of numerous cities in Canada and across the globe;
- Helps the City be seen as a leader in climate action and avoids reputational damage that may result in having outdated targets;
- Allows the City to join the Race to Zero and participate in the OPCC;
- May attract investment to our community due to the increasing importance of optimizing environmental, social, and governance (ESG) considerations; and
- May mitigate or avoid costs associated with climate change if targets help us to act faster.

### Approaches for Updating Interim GHG Reduction Targets

The Science Based Targets Network has established a *Guide for Cities*, included as Appendix 3, which outlines approaches to target-setting. These include methods from:

- C40 Cities' Deadline 2020;
- The World Wide Fund for Nature One Planet City Challenge (OPCC); and
- The Tyndall Centre.

Three approaches align with the following principles:

1. Science-based - meaning they are in line with the goals of the Paris Agreement and Special Report on Global Warming of 1.5 C (i.e., limit global warming to 1.5°C above pre-industrial levels).
2. Equitable - accounting for historical GHG contributions and socioeconomic developments. Cities that have historically emitted more GHG's are tasked with reducing their emissions sooner.
3. Complete - meaning robust and comprehensive, covering the same GHG emission sources as a GPC Inventory.

All three approaches require net zero by 2050 but vary in how they set interim targets. A [2020 analysis](#) by the Science Based Targets Network found that the methods varied in factors such as:

- GHG emission scopes considered;
- If carbon budgets are defined (only the Tyndall method requires this);
- GHG emission sectors and scopes considered;
- Factors defining higher or lower reductions and the application of an equity lens; and
- Amount of data needed and complexity to use.

Administration completed preliminary calculations using the OPCC and C40's methods and found that for an interim target, 2030 community GHG reductions of 50-62% would be required using either of these methods. Corporate interim targets were not analysed.

This report recommends that a more robust analysis through the 2024-2025 LEC Plan Refresh is used to identify the interim target for 2030 GHG reductions in alignment with

published guidance. This approach is recommended so that interim target-setting can be informed through modelling work carried out by a third party with subject-matter expertise and through the development of actions and initiatives specific to Saskatoon and local conditions.

This approach is common in other municipalities such as Halifax, Edmonton, Toronto, and Ottawa where technical papers that set targets and modeled actions were completed as an update to their climate action plans.

### Low Emissions Community Plan Refresh

The 2019 LEC Plan identifies that an update to the plan is required in five-year intervals. The 2024-2025 LEC Plan Refresh would accomplish the following:

- Model the business as planned scenario using updated assumptions and changes since last published;
- Model a net zero scenario, showing the trajectory for reductions over time and the actions required to achieve interim and 2050 targets as established;
- Update the actions and implementation plan from 2025-2050 including removing any actions that are not feasible and adding additional actions required to meet the updated targets;
- Update the Marginal Abatement Cost Curve, wedge diagrams, investment and return graphs, and energy cost graphs; and
- Undertake community engagement on the updated targets and actions.

This report recommends that the LEC Plan be updated with 2024 funding from the Sustainability Reserve and an updated plan be brought forward to City Council for approval in 2025.

### Climate Emergency, Race to Zero, and OPCC

Twenty-nine Canadian cities (including City of Regina) have pledged net-zero commitments and joined the United Nation's *Race to Zero*, along with 1,049 global cities. The *Race to Zero* campaign aims to rally cities, businesses, regions, investors, and educational institutions to the overarching goal of "reducing emissions, across all scopes, swiftly and fairly in line with the Paris Agreement, with transparent action plans and robust near-term targets." Saskatoon could join the [Cities Race to Zero Campaign](#) by completing the [pledge form](#).

Over 2,000 local governments and jurisdictions have declared [climate emergencies](#) by passing binding motions by their councils, 125 of these are in Canada such as the Government of Canada, Toronto, Ottawa, Halifax, Edmonton, Calgary, Vancouver, and many others. Saskatoon could declare a climate emergency through a motion of City Council.

The One Planet City Challenge is a biennial competition organized by WWF to guide cities towards effective climate action, while publicly recognizing the most ambitious cities as leaders in the field. In 2022, 280 Cities joined the challenge. Cities can join when reporting through CDP.

## FINANCIAL IMPLICATIONS

The 2024-2025 LEC Plan Refresh is expected to cost \$250,000 to deliver the scope of work described in this report. Recommended funding is through the Sustainability Reserve in 2024.

The financial impact of adjusting the City's GHG emissions target will be determined through the work to develop the 2024-2025 LEC Plan Refresh. More specifically, the work will quantify a revised business as planned scenario and deliver a financial analysis and new marginal abatement cost curve with new targets and additional actions. Capital investments, returns and co-benefits of climate action will be updated.

## OTHER IMPLICATIONS

The LEC Plan identifies many environmental, social, and economic benefits associated with the implementation of the actions such as:

- Improved human and environmental health;
- A diverse and resilient economy;
- Employment opportunities resulting from growth in the low-emissions community;
- Lowered risk to the City by building better; and
- Improved equity and quality of life.

The 2024-2025 LEC Plan Refresh would include community engagement on the updated targets and actions. A communication plan will be developed to support these efforts.

## NEXT STEPS

A number of initiatives are underway that relate to this report, including:

- Financing Climate Action report – June EUCS;
- Climate Budget in 2024/2025; and
- GHG Modeling software – currently being procured with development / implementation by the end of 2024.

If approved, the LEC Plan Refresh would begin in 2024 and presented to City Council in 2025, including recommendations on 2030 GHG community reduction targets.

## APPENDICES

1. 2022 CDP Feedback Report - Saskatoon
2. Climate Targets of Canadian Cities
3. Science-based Climate Targets: A Guide for Cities

### Report Approval

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