

# Climate Action Plan – Progress Report 2021

## ISSUE

The City of Saskatoon (City) is committed to climate action through the Global Covenant of Mayors for Climate & Energy. The City's Climate Action Plan consists of two frameworks: the [Low Emissions Community Plan \(LEC Plan\)](#) and [Corporate Climate Adaptation Strategy](#).

The *Climate Action Plan: Progress Report 2021* presents the status of the Climate Action Plan including an updated greenhouse gas inventory and Report Cards showing advancement of the actions in the *LEC Plan* and *Corporate Climate Adaptation Strategy*.

Furthermore, a reporting timeline to 2050 is proposed, which revises the climate action progress report to a two-year cycle to align accountability, information need, the two-year budget cycle, and resources. A regular cycle to refresh the Climate Action Plan is also illustrated in the timeline.

## RECOMMENDATION

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

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).

## BACKGROUND

The 2022-2025 Strategic Plan includes a City Council priority on the Environmental Sustainability outcome in which “greenhouse gases are reduced in a way that maximizes co-benefits and doesn’t leave anyone behind”. A key action is to implement climate actions in the *LEC Plan* and the *Corporate Climate Adaptation Strategy* within the proposed timeframes.

On June 26, 2017, City Council adopted two greenhouse gas (GHG) emission targets for Saskatoon:

1. 40% reduction in emissions for the City (as a corporation) below 2014 levels by 2023; and 80% by 2050.
2. 15% reduction in emissions for Saskatoon (as a community) below 2014 levels by 2023; and 80% by 2050.

On August 26, 2019, City Council received the *LEC Plan*.

On October 21, 2019, the Governance and Priorities Committee received a subsequent report, *Low Emissions Community Plan – Opportunities and Partnerships*. It was resolved, in part:

That Administration report annually on the *LEC Plan* progress, including any changes to assumptions made in the preparation of the report. This includes changes to any provincial, federal, or international targets or programs that impact the ability to implement the *LEC Plan*. An example of this would be any changes to National Building Code targets.

On December 16, 2019, City Council received *The Corporate Climate Adaptation Strategy – Local Actions: Saskatoon’s Adaptation Strategy (Part Two)*.

On April 6, 2021, the Standing Policy Committee on Environment, Utilities and Corporate Services, received the [Climate Action Plan Progress Report 2020](#).

### **CURRENT STATUS**

In 2019, the City defined a Climate Action Plan comprised of the *LEC Plan* and the *Corporate Climate Adaptation Strategy*. A Community Climate Adaptation Strategy will be developed in 2022 and will also be encompassed within the *Climate Action Plan*. Other sustainability strategies and plans related to the *Climate Action Plan* have also been developed such as:

- [Pathways for and Integrated Green Network: An Implementation Plan for Saskatoon’s Green Infrastructure Strategy](#);
- [Water Conservation Strategy](#);
- [Solid Waste Reduction and Diversion Plan](#); and
- *Alternative Currents: Renewable and Low Emissions Energy Implementation Plan*.

*Appendix 1 - Climate Action Plan: Progress Report 2021*, outlines climate actions undertaken by the City and community towards the City’s *Climate Action Plan*. It is currently updated on an annual cycle with the inaugural report completed in 2021 (based on 2020 data). The *Progress Report* details our GHG emissions and progress toward our reduction targets, as well as providing report cards for progress towards actions in the *LEC Plan* and *Corporate Climate Adaptation Strategy*.

### Progress Towards Emission Targets

As a community, Saskatoon emitted 3,509,600 tonnes of CO<sub>2e</sub> in 2021 with 217,800 tonnes of these emissions attributed to the City’s own operations, also called corporate emissions.

Community-wide emissions have trended downward since 2019, at 2% below the 2014 baseline in 2019, 14% below in 2020, and a slight increase to 9% below in 2021. A further 6% reduction from 2021 is needed over the next two years to meet the City’s 2023 target of 15% below 2014 levels. As a community, Saskatoon is currently on-track to meet this target.

Reductions were seen in all sectors except Agriculture. While Wastewater emissions rose 11%, emissions for the overall Waste sector (which includes Wastewater) decreased by 16%. Reductions were seen in Stationary Energy (-4%), Transportation (-6%), Industrial Processing and Product Use (-92%), while emissions from Agriculture, Forestry and Other Land Use rose (1,895%) primarily due to improved methodologies to track emissions.

The City’s corporate GHG emissions have trended downward since 2019, with 2021 emissions at 3% below 2014 levels. A change was made in 2021 to the way the City calculates its corporate emissions that resulted in additional emissions being included as corporate emissions. Baselines were also recalculated to allow for continued comparison against the baseline. Because corporate emissions are a component of community-wide emissions, the community inventory was unaffected by the change. From the corporate sectors, streetlighting has achieved the most significant reduction, with a 40% decrease over 2014 levels, while at the opposite end, water and wastewater emissions were 7% above 2014 levels. Overall, 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.

While the City is currently lagging corporately relative to its 2023 target, emission reductions are expected to be realized over the next 1-5 years as a result of corporate actions currently underway or recently completed such as lighting fixture replacements, the High Performance Civic Building Policy which requires all new buildings to be build to a net-zero energy-ready standard, and electric vehicle pilots for both transit and fleet. Feasibility studies and planning for heat pumps, deep energy retrofits, fleet electrification, and solar panels are also underway or planned for the next year. A determination of whether the City has achieved its 2023 targets will be made in a future *Progress Report*.

Climate Mitigation Report Card

The Climate mitigation report card includes progress towards all 40 actions in the *LEC Plan*. A status summary is shown in Table 1 below.

*Table 1. Status of climate mitigation actions.*

Sector	Status	Emissions Change <sup>1</sup>
<b>Buildings and energy efficiency</b>	11/16 actions on track	-4% CO <sub>2</sub> e from 2014
<b>Transportation</b>	7/7 actions on track	-6% CO <sub>2</sub> e from 2014
<b>Waste</b>	1/1 action on track	-16% CO <sub>2</sub> e from 2014
<b>Water conservation</b>	2/2 actions on track	+7% CO <sub>2</sub> e from 2014 <sup>2</sup>
<b>Land use</b>	2/2 actions on track	NA
<b>Energy generation</b>	10/12 actions on track	+11.6 MW renewable capacity installed to date

**Notes:**

**<sup>1</sup>CO<sub>2</sub>e figures from the 2021 GHG inventory shown may include non-action emissions.**

**<sup>2</sup>The Water & Wastewater sector (of the corporate inventory) includes emissions resulting from energy use at the water and wastewater treatment plants, as well as emissions from non-energy related activities at the wastewater treatment plant (digester gas and flaring).**

Of the 40 LEC Plan actions, 33 are currently on track, 23 progressed in 2021, while the other 10 are not yet scheduled to start. Some highlights include:

- Twelve buildings have been retrofitted to date under the current Energy Performance Contract to progress Action 4, with funding allocated for deep energy feasibility studies to progress Action 2.
- The Home Energy Loan Program progresses Actions 10, 13, 14, and 32 with additional work funded in 2022/2023.
- Electric vehicle pilots (transit, fleet, and charging stations) began and funding was approved for an Electric Vehicle Roadmap to progress Actions 17, 18, 21, and 22.
- Construction of a pilot Bus Rapid Transit station occurred and funding for full deployment is being sought to progress Action 20.
- Construction of infill sidewalks was approved and began, traffic calming devices were added to roadways, pedestrian curb ramps were installed, a Pedestrian and Cyclist Accommodation in Work Zones and Detours Policy was approved, and a request for information was released for a household travel survey to progress active transportation via Action 23.
- Waste diversion work progressed including planning for 2022/2023 initiatives such as the ICI Waste regulation, curbside organics collection, and Recovery Park with additional studies and work funded to progress Action 24.
- *The Water Conservation Strategy* was developed and implementation of advanced metering infrastructure, irrigation pilots, and other work received funding to progress Actions 25 and 26.
- Work on the University sector plan, College corridor plan, and corridor infill development is progressing Land Use Actions 27 and 28.
- Studies for installing solar panels on municipal buildings received funding to progress Action 29.
- Construction of a 2.2 MW solar farm was approved to progress Action 30.
- Expanding landfill gas capture will progress LEC action 31.

Those not on track are presented in Table 2 below.

Table 2. Actions behind the LEC Plan timeframe.

Action	Update
<b>1. Apply energy efficiency standards (build to Passive House) to all new municipal buildings</b>	Behind schedule. The High-Performance Civic Building Policy enacted in 2022 requires new buildings be net-zero energy-ready, which is equated with Passive House. Fire Hall 5 was designed to LEED Silver (not Passive House / Net-zero Energy-ready).
<b>3. Upgrade plugged appliances and energy conservation behaviours in municipal buildings.</b>	Behind schedule. An appliance inventory is planned to inform a business case for requesting funding for upgrades for the 2024-25 budget.
<b>6. Create an electric and thermal energy consumption cap for new home construction by utilizing a municipal step code.</b>	Not approved to proceed. Provincial code consultation to begin in 2022.
<b>8. Create an electric and thermal energy consumption cap for new Industrial, Commercial, and Institutional (ICI) construction by utilizing a municipal step code.</b>	Not approved to proceed. Provincial code consultation to begin in 2022.
<b>11. Incentivize and later mandate ICI owners and operators to perform deep energy retrofits.</b>	Behind schedule. Funding approved to research and design a program to incentivize energy retrofits in ICI buildings. Program to launch late 2023, pending approval.
<b>35. Install a CHP facility at St. Paul’s Hospital.</b>	Project cancelled in 2020.
<b>37. Construct a hydropower plant at the weir.</b>	On hold unless adequate funding becomes available.

Climate Adaptation Report Card

Progress towards all 30 initiatives in the *Corporate Climate Adaptation Strategy* is reported in the climate adaptation report card. The *Adaptation Strategy* forms a framework to help the City (as a corporation) prepare for and adapt to a changing climate. A status summary is shown in Table 3 below.

Table 3 Status of climate adaptation actions.

Focus area	Status
<b>Decision-making</b>	5/7 actions on track
<b>Staff</b>	7/7 actions on track
<b>Services</b>	9/9 actions on track
<b>Assets</b>	7/8 actions on track

Twenty-six out of 30 initiatives in the *Corporate Climate Adaptation Strategy* are currently on track. Those not on track are presented in Table 4 below.

*Table 4. Initiatives behind the Corporate Climate Adaptation Strategy timeframe.*

Initiative	Reason
<b>A02. Create internal training sessions that can be delivered on demand to support workgroups as they build climate change impact understanding and adaptation innovation capacity.</b>	Behind schedule. To start in 2023 with approved operating funding for climate adaptation implementation.
<b>B04. Create and maintain a list of existing programs that fund resiliency building projects (include application process and requirements).</b>	Behind schedule. To start in 2023 with approved operating funding for climate adaptation implementation.
<b>K24. Develop and document processes that allow future climate projections to be considered in the design of new and upgraded corporate assets.</b>	Behind schedule. Updates to the City's new Enterprise Asset Management System are planned after it launches in 2022.
<b>K26. Network and share information with other municipalities that will likely experience Saskatoon's projected climate conditions.</b>	Behind schedule. Operating funding approved for staff to begin work in 2023.

## DISCUSSION/ANALYSIS

### Reporting Frequency Change

Administration is recommending a change from annual progress reporting to once every two years. The next report would occur in 2024 and would be based on emissions and progress from 2022 and 2023. A proposed reporting timeline is presented in Appendix 2 - *Climate Action Plan: Reporting Timeline* for reference.

### *Benefits:*

The change would allow alignment with the City's two-year budget cycles (including climate budget reporting, if approved), optimization of staff resources, less burden on the community for providing GHG data, and for the inclusion of *Green Pathways* and community climate adaptation reporting beginning in 2024.

### *Implications:*

This change will impact voluntary reporting to the CDP (formerly Carbon Disclosure Project) and National Climate League, meaning the City would report and receive a score every second year.

The Reporting Timeline also maps out refreshing the Climate Action Plan on a regular schedule through to 2050. Resource requirements to carry out this work would be brought forward for consideration through the budget process.

## FINANCIAL IMPLICATIONS

Switching to reporting every two years will allow City staff allocated to this task to progress other work related to climate action such as the climate/carbon budget (if approved), climate action education and engagement, switch to automation, and funding applications/business case development.

There are no financial implications directly resulting from the *Progress Report*. Funding for individual climate actions was approved by City Council during the *2022/2023 Business Plan and Budget* deliberations and is outlined in *Appendix 1 - Climate Action Plan: Progress Report 2021*. Future funding will continue to be sought in the same manner by Departments responsible for individual actions.

## OTHER IMPLICATIONS

Actions being undertaken through the *City Climate Action Plan* will help the City meet its GHG reduction targets and adapt to a changing climate. Further benefits to Saskatoon include:

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

Risks of inaction include:

- Missing the City's GHG reduction targets;
- Greater long-term costs;
- Less resilient energy system and infrastructure;
- More severe impacts from climate change, and
- Missed opportunity to benefit from the low-carbon economy.

## NEXT STEPS

Administration will continue to work on the initiatives outlined within the *Climate Action Plan* strategies and implementation plans. If the recommendation is approved, the next *Progress Report* will occur in 2024.

## APPENDICES

1. Climate Action Plan: Progress Report 2021
2. Climate Action Plan: Reporting Timeline

### Report Approval

Written by: Kristian Hermann, Project Manager, Sustainability  
Amber Weckworth, Manager, Climate, Strategy and Data

Reviewed by: Jeanna South, Director of Sustainability

Approved by: Angela Gardiner, General Manager, Utilities and Environment