

Climate Action Annual Report (2023)

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Report Summary

This presentation provides an update regarding the municipality’s progress in implementing the Greater Sudbury Community Energy & Emissions Plan (CEEP) and the Community Climate Change Adaptation Plan (CCCAP), which together guide the City’s Climate Action initiatives.

Relationship to the Strategic Plan, Health Impact Assessment and Climate Action Plans

This report directly meets Objective 3.2 (Develop and Strengthen Strategies and Policies to Mitigate Impact of Climate Change) under the “Climate Change” strategic priority by identifying ways to improve climate resilience of Greater Sudbury’s social, economic, built and natural systems and by providing opportunities to reduce Greenhouse Gas (GHG) emissions within our community.

By providing guidance for climate change adaptation and community resilience, the City’s climate action meets several of the City’s priorities listed under Asset Management and Service Excellence, Economic Capacity and Investment Readiness and Create a Healthier Community. Becoming more resilient to extreme weather events, for example, will require improving infrastructure and enhancing communication between many sectors, especially populations most affected.

Together, the CEEP and the CCCAP provide climate action guidance for the Greater Sudbury community.

Financial Implications

There are no financial implications associated with this report.

Background

The City of Greater Sudbury has undertaken numerous initiatives to lower municipal greenhouse gas (GHG) emissions and enhance the resilience of its facilities, infrastructure, and operations to climate change impacts. Additionally, numerous community-focused initiatives aimed at achieving the ambitious target of becoming a resilient, net-zero emissions community by 2050. The 2023 Climate Action Annual Report reviews both corporate and community climate action within Greater Sudbury (Appendix 1).

The City's Climate Action Resource Team (CART) is a coordinated group of City staff representing several municipal service areas and divisions that help implement the climate action plans (i.e., CEEP and CCCAP). CART continues to be an integral part in the development of Greater Sudbury's Climate Action Annual Reports. Various positions and divisions within the organization are also essential for providing the necessary support, infrastructure, and guidance to the community on climate action across residential, commercial, and industrial sectors. Key topics requiring internal staff assistance include asset services, active transportation, water and wastewater management, lake water quality, financial services, solid waste management, and leisure activities. At the community level, climate action depends on the commitment of dedicated residents, organizations, and First Nations whose collective efforts move us closer to the net-zero target. The City is grateful for the contributions of all those who take action, make choices to be more efficient and resilient, and serve as climate champions wherever they live, work and play.

City Climate Action

Notable climate action achievements in 2023 include: 1) reaching five million in annual transit ridership, 2) the digitization of several municipal processes, 3) upgrading lighting in over 50 buildings. Achieving a new transit ridership record in the City highlights the collective importance of modest individual actions in reducing GHG emissions. Continued transit system improvements should help sustain and even increase ridership levels going forward. The digitization of several City processes such as building permit applications and public works logs, reduces paper use by tens of thousands of pages each year and enhances efficiency in delivering municipal services. It also reduces the number of vehicle trips taken by members of the public to Tom Davies Square as they are now able to access these services online.

Similar to the 2022 Climate Action Annual Report, the overall corporate emissions for the City have not shown a major decrease. However, this year's report provides a deeper analysis of the utilities data, uncovering opportunities to explore trends in greater detail. For example, comparing electricity consumption data from 2016 to 2023 across divisions demonstrates a reduction in energy use in those that implemented lighting upgrades. The impact of switching all 11,000 streetlights to LED is also clearly recognized in this report. The natural gas data indicate some reductions in several divisions. Upgrades to the Howard Armstrong Recreation Centre, for example, have increased the energy efficiency of this facility leading to lower heating costs and GHG emissions. These types of deep retrofits will be required throughout the corporate building stock to reach Goal 4 of the CEEP: Achieve net-zero emissions in City buildings by 2040. To reach this goal in the next 15 years would require prioritizing deep retrofits, assessing building needs, and implementing renewable energy installations.

The City's liquid fuel use highlights the impacts of competing priorities. A service level increase related to community safety was prioritized and resulted in more vehicles and more fuel use. When initiatives like this are not aligned with climate goals, there are opportunities to explore efficiencies. For example, if additional vehicles are required, the City can seek more options for low or no-emission vehicles. Both By-Law and Community Safety now have electric vehicles within their fleet. Similarly, when new buildings or additions are necessary, there are opportunities to implement high-efficiency solutions and explore net-zero options.

The 5-year implementation plan outlines projects focused on reducing greenhouse gas emissions and increasing resiliency to climate change impacts. It is included in Annual Report and will show progress of the City's climate action each year.

Community Climate Action

Community GHG emissions have decreased since 2016, largely attributed to the emission reduction efforts of the local industrial sector. However, the annual report graphs indicate that community transportation, the largest source of GHG emissions, and residential emissions have seen minimal reduction since 2019. Despite these findings, community action is well underway. Over 1000 electric vehicles have been registered in Greater Sudbury, over 700 homes performed home energy audits in 2023 and, as mentioned above, transit ridership reached over five million. This indicates that residents are choosing to become more energy efficient. Future initiatives will focus on enhancing education, inspiration, and incentives for promoting

efficient homes and using sustainable transportation. For climate change adaptation, community groups have initiated impactful adaptation projects, such as removing invasive species and planting trees. The City is also working with the community as well as First Nations on initiatives to aid First Nations communities displaced due to flooding or wildfires. Future reports aim to explore climate change adaptation initiatives more deeply, focusing on critical areas such as wildland fires, heat waves, and flooding. By examining these topics, we can better understand and enhance strategies to mitigate the effects of climate change on communities.

Conclusion

This report reviews the contributions of both the City and the community toward climate action in 2023. While there have been many successes and accomplishments, GHG emissions need to decrease at a faster rate and more commitment to energy efficient buildings, sustainable transportation and renewable energy production is still required. Many municipalities within Ontario face similar challenges since achieving net-zero emissions status as a community is an ambitious goal that will require sustained effort and collaboration from both residents and municipalities. The City of Greater Sudbury will continue to show leadership in its climate action through the 5-year Implementation Plan that aligns with key strategic priorities set by City Council.

Climate actions are being implemented across various municipal service areas and within the community, as demonstrated by the wide range of projects highlighted in this report. The City and community will continue to collaborate to integrate climate change action into projects, budgets, and daily decisions.

Upcoming Projects

- Transit Services is currently developing a Transit Fleet Zero Emission Transition Plan to reduce greenhouse gas emissions and meet CEEP goals.
- Strategic and Environmental Planning is examining a home retrofit program to guide homeowners through the process of achieving greater energy efficiency and climate resilience in their home.
- Explore opportunities to extract additional information on the City's Climate Action progress through Compass Data.

Next Steps

- Continue to work with external data providers to ensure accurate reporting of energy and GHG emission trends.
- Continue to work with staff through the Climate Action Resource Team (CART).
- Continue to develop climate action tracking and reporting systems that offer comparison to other municipalities in Ontario, Canada and globally.
- Present the Climate Action Annual Report 2024 to Council in late 2025.

Resources Cited

Community Climate Change Adaptation Plan (CCCAP). 2023. City of Greater Sudbury.

<https://www.greatersudbury.ca/live/environment-and-sustainability1/climate-action/community-climate-change-adaptation-plan/>

Community Energy and Emissions Plan (CEEP). 2021. City of Greater Sudbury.

<https://www.greatersudbury.ca/live/environment-and-sustainability1/climate-action/net-zero-2050/>