



The Corporation of the
City of Sault Ste. Marie

COUNCIL REPORT

August 11, 2025

TO: Mayor Matthew Shoemaker and Members of City Council
AUTHOR: Emily Cormier, Sustainability Coordinator
DEPARTMENT: Community Development and Enterprise Services
RE: Deep Energy Retrofit Feasibility Study Project Report

Purpose

The purpose of this report is to provide Council with a summary of the Deep Energy Retrofit Feasibility Study Project conducted at six major City owned facilities.

Background

Greenhouse gases (GHG) originating from utilizing fossil fuels to power and heat buildings are a substantial source of municipal corporate emissions, accounting for 35% of the City's corporate GHG emissions in 2023¹. Reducing energy use in City facilities is a key action in the City's GHG Reduction Plan and essential to reaching Council's net-zero target by 2050².

To support this goal, staff applied for funding from the Federation of Canadian Municipalities to conduct a feasibility study for deep energy retrofits. The grant covered 80% of the study costs. In 2023, the City hired consultant WalterFedy to analyze six City facilities and recommend cost estimates as well as practical upgrades that will reduce emissions and energy costs. The study outlines options to significantly reduce greenhouse gas (GHG) emissions from these buildings by 50% in 10 years, 80% in 20 years and reaching net zero by 2050.

The assessed buildings include:

1. John Rhodes Community Centre;
2. GFL Memorial Gardens;
3. East End Water Treatment Plant;
4. Fire Hall 4 / RESC Centre;
5. Public Works; and,
6. Transit Administration

Analysis

This report does not request funding at this time, but provides the foundation for future capital planning, grant applications, and climate action initiatives. Staff are

¹ https://saultstemarie.ca/Cityweb/media/Community-Services/FutureSSM/Sault-Ste-Marie-Sustainability-Report-2023-2024_FINAL.pdf

² <https://saultstemarie.ca/Cityweb/media/Community-Services/FutureSSM/GHG/2021-07-12-GHG-Reduction-Plan-Final.pdf>

seeking Council support to pursue funding opportunities and to explore financing tools that will help implement these upgrades over time. WalterFedy proposed energy conservation measures after completing the facility site investigations. Individual measures were presented to the City's facility teams and selected for measure analysis modeling. Once the financial and GHG impact for each energy conservation measure was determined, the City team nominated the measures that were the best opportunity for each facility. WalterFedy then completed the scenario level analysis that identified which GHG reduction pathway (50% in 10 years, 80% in 20 years or net zero by 2050) each energy conservation measure should be placed.

The recommended path is the Net Zero Roadmap, which combines efficiency upgrades, fuel switching, carbon offsets³, and renewable energy. If implemented, all measures will reduce emissions by 3,530 tCO₂e annually. They would also cut facility natural gas use by over 1.3 million m³/year and increase electricity use (aligned with provincial grid decarbonization) as well as deliver annual utility savings of approximately \$687,913 by 2050.

The retrofits will need to be phased over many years as funding becomes available. Each facility has a tailored roadmap. For example, the John Rhodes Community Centre has the highest energy use but also the highest potential for utility savings (\$107,000 annually). The GFL Gardens offers a strong emissions impact but requires substantial investment, whereas Transit and RESC buildings can achieve full natural gas phase-out with relatively modest capital costs. Full details for each facility, including lifecycle costs and technical recommendations, are available in the attached presentation and technical reports are available upon request.

While the GHG Net Zero Roadmap aligns with the City's 2050 net zero target and offers long-term environmental and financial benefits, its successful implementation will require significant upfront investment and ongoing collaboration between various City departments, including Facilities, Sustainability, Senior Management, and City Council. Integration of the deep energy retrofit measures has been incorporated into Council's recently approved City Facility Asset Management Plan and will help ensure long-term viability and cost-effectiveness. The measures will help inform future capital budgets and identify grant opportunities as they arise. See slide 16 in the attached presentation for the facility savings breakdown.

There are options for the City to consider to advance energy retrofit initiatives which staff are recommending for further investigation. These include:

³ This study highlights the estimated carbon offsets needed to reduce remaining emissions and meet the City's sustainability targets. Across Ontario and Canada, carbon offset programs are gaining traction as governments and businesses align with ambitious climate goals, integrating renewable energy contracts and offset mechanisms into their climate action plans.

- Climate Action Reserve - A Climate Action Reserve would leverage energy savings from retrofit projects available resources to fund future energy conservation projects aimed at reducing greenhouse gas emissions from municipal facilities, aligning with both financial and environmental objectives. Other municipalities have developed innovative approaches to reduce operational costs while meeting sustainability goals which the City can evaluate to adopt best practices.⁴
- Energy Service Company (ESCO) Financing - This performance-based approach eliminates upfront costs by using energy savings to cover the investment, ensuring optimal results and alignment with the City's purchasing policy. Issuing an RFI for competitive bids will ensure the best value, while partnering with ESCOs or aggregators allows municipalities to accelerate project timelines, maximize grants, and maintain full asset ownership without impacting debt capacity.

Financial Implications

No new funds are requested at this time; however funding may be requested in the future on a phased approach, based on available funding and grants to support the implementation of the projects.

Strategic Plan / Policy Impact / Climate Impact

This report directly supports the following objectives from the 2024–2027 Corporate Strategic Plan:

- Environmental Stewardship by promoting emissions reduction and sustainable infrastructure.
- The energy conservation measures recommended by WalterFedy will directly lower the carbon intensity of selected facilities to achieve net zero by 2050

As well, the Deep Energy Retrofit Feasibility Study provides City staff with valuable insight into how GHG emissions can be mitigated at facilities. The estimated costs and expected timeline for implementing each energy conservation measure afford City staff the ability to develop capital budgets accordingly. Lastly, prior to the study commencing, City staff had limited understanding of which energy conservation measure should be pursued, the mitigation potential of the measure, and the overall financial ramifications of the measure to achieve net zero GHG emission reductions.

Recommendation

It is therefore recommended that Council take the following action:

⁴ The Town of Caledon, Ontario, provides a relevant example with its Corporate Energy Revolving (CER) Fund, established in 2015. The fund, which began with an initial seed investment of \$147,000 derived from solar installation revenue and repurposed funds from another energy project, has proven to be an effective tool for financing energy upgrades across the town. <https://greenmunicipalfund.ca/case-studies/caledons-corporate-energy-revolving-fund-sustaining-itself>

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Resolved that the report of the Sustainability Coordinator dated August 14, 2025 concerning Deep Energy Retrofit Feasibility Study Report be received and that;

- a. Council authorize City staff to seek funding opportunities from external agencies or other levels of government to supplement approved budgets in support of priority initiatives; and
- b. That the Deep Energy Retrofit Feasibility Studies be used to inform future budget requests for energy efficiency and emission reduction projects; and
- c. That staff be requested to explore and report back to Council on the creation of a Climate Action Reserve as a source of eligible funding, under the delegated authority of the CAO, for energy conservation measures to decarbonize corporate facilities; and
- d. That staff be requested to explore the use of the Energy Service Company (ESCO) financing model and/or a retrofit aggregator for future projects.

Respectfully submitted,

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