
Subject: Grant Application for Facilities Energy Conservation and Feasibility Study

Staff Report No. CS-005-25

**Department/
Commission:** Community Services Commission

Date: June 18, 2025

Recommendation:

- 1) That Council direct staff to submit an application to the Green Building Retrofit Fund in the maximum amount of \$200,000 to support the completion of a \$250,000 ASHRAE Level III Energy Conservation Study focused on municipal facilities and renewable energy opportunities;
- 2) Funding for the Town's share of the Study to be reallocated from Facility Lifecycle Upgrades within the approved 2025 Capital budget;
- 3) That Council authorize the Mayor and Clerk to execute any associated agreements, declarations, or documentation as required to secure funding.

Report Highlights

- The study will provide detailed recommendations for each facility, including equipment upgrades, cost savings, greenhouse gas reductions, and the potential for solar energy and battery storage.
- The study will result in a strategic implementation plan that outlines timelines, funding options, and expected return on investment for both energy-saving upgrades and renewable energy generation opportunities.
- If approved, the Town will procure a qualified service provider through a competitive process, with the full study expected to be completed within 4–5 months of vendor selection.
- The study is contingent on securing the grant; without external funding support, the study will not proceed at the proposed depth or scope.

1. Purpose:

The purpose of this report is to seek Council's approval to pursue external funding from the Green Building Retrofit Fund to support a comprehensive ASHRAE Level III Energy Conservation Study. The study will focus on energy-intensive Town facilities and will provide actionable recommendations to improve energy performance, reduce greenhouse gas emissions, and explore opportunities for renewable energy generation. It will also fulfill Council's directive to evaluate energy offsetting strategies and report back with detailed implementation planning.

2. Background:

At the March 19, 2025 Council meeting, Council unanimously adopted the following resolution:

WHEREAS the Town of Whitchurch-Stouffville is committed to sustainability and reducing its environmental impact;

AND WHEREAS the Town has published the Energy Conservation and Demand Management Plan (ECDM) 2024–2029, which identifies opportunities for energy efficiency improvements and long-term cost savings;

AND WHEREAS a comprehensive energy audit of the Town's facilities will help identify areas where energy efficiency can be improved;

AND WHEREAS developing a strategy for offsetting the Town's energy usage will contribute to the Town's sustainability goals and reduce its carbon footprint;

NOW THEREFORE BE IT RESOLVED THAT Council directs staff to conduct a minimum of two ASHRAE Level II audits of the Town's two largest energy-consuming facilities and to develop a comprehensive strategy for offsetting the Town's energy usage, including potential costs, benefits, and implementation timelines and report back to Council before the end of the year.

In response to this motion, staff are recommending a more advanced and strategically beneficial course of action. Rather than limiting the initiative to two (2) ASHRAE Level II audits, staff propose securing external funding to complete a broader ASHRAE Level III Energy Conservation Study across seven (7) Town facilities. This elevated approach provides investment-grade analysis, deeper system insights, and a foundation for long-term infrastructure and energy planning.

3. Analysis:

An ASHRAE Level III study is the most detailed type of audit available, focusing on high-resolution data collection, performance modeling, and the development of a strategic implementation plan for energy conservation measures (ECMs). It goes significantly beyond Level II audits, which typically rely on benchmarking and preliminary assessments.

The proposed study will include the Town's seven (7) most energy-intensive facilities; the W-S Leisure Centre, Stouffville Clippers Sports Complex, Stouffville Arena, Municipal Offices, Operations Centre, Fire Station 5-1 and the W-S Museum. Each facility-specific study conducted as part of the ASHRAE Level III Energy Conservation Study will include a comprehensive on-site assessment of existing mechanical, electrical, and building systems to evaluate current performance, identify inefficiencies, and determine opportunities for optimization. These diagnostics will inform the identification of energy conservation measures (ECMs), categorized by low-, medium-, and high-capital investment levels. For each ECM, the study will provide detailed cost-benefit analyses, including estimated capital costs, projected utility savings, and simple and lifecycle payback periods. In addition, each recommendation will include an estimate of the potential greenhouse gas (GHG) emission reductions to support the Town's climate objectives.

The study will also assess the technical and financial feasibility of integrating renewable energy solutions—ex. solar photovoltaic (PV) systems—and may explore options for battery storage to enhance resiliency and energy independence. Each facility report will culminate in a strategic implementation plan outlining project sequencing, funding eligibility (including alignment with available federal and provincial incentive programs), and a projected return on investment (ROI), thereby offering the Town a clear and actionable roadmap toward long-term energy sustainability.

Upon Council's approval for grant application, staff will initiate a competitive procurement process to select a qualified provider with demonstrated experience in delivering ASHRAE Level III energy studies and renewable energy assessments. This process will ensure transparency, value for money, and alignment with municipal purchasing policies. Once a provider is selected and contracted, it is anticipated that the full scope of work—including grant application submission support, site assessments, analysis, and delivery of final reports—will take approximately four to five months to complete. This timeline allows for thorough data collection, stakeholder engagement, and the development of detailed, actionable recommendations. Staff have been requested to bring this report back to Council before the end of the year, timelines may require to be adjusted to Q1 of 2026 depending on timing of award announcement and procurement process.

4. Options:

Proceeding with the application to the Green Building Retrofit Fund enables the Town to fully leverage external funding to support a high-impact, multi-facility energy study that will inform capital planning, funding applications, and operational upgrades.

If grant funding is not secured, the study will not proceed at the current scope, and staff will reassess feasible alternatives. While a reduced study is possible, it would result in a higher relative cost to the Town and limited strategic value.

5. Financial Implications:

Upon successful award of the Green Building Retrofit Fund grant at the maximum value of \$200,000, the remaining \$50,000 expenditure will be reallocated from Facility Lifecycle Upgrades within the approved 2025 Capital budget. No additional funding sources are required.

6. Broader Intergovernmental Impacts and/or Considerations:

This project aligns the Town with both provincial and federal mandates for public sector energy conservation. A robust audit will better position Whitchurch-Stouffville as a municipal leader in climate action, enable future funding partnerships, and support regional GHG reduction objectives shared with York Region and adjacent municipalities.

7. Communication:

N/A

8. Alignment with Strategic Plan:

1. A Healthy and Greener Town
Increase offerings and opportunities for Active Living
2. Organizational Effectiveness
To elevate our organizational effectiveness

9. Attachments:

Attachment No. 1 – Energy Conservation Demand Management Plan

10. Related Reports:

None

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For further information on this report, please contact the Department Head: Rob Braid, Commissioner, Community Services at 905-640-1900 or via email at rob.braid@townofws.ca