



Corporation of the Township of Brock

Staff Report to the Mayor and Members of Council

From: Wayne Ward
Position: Manager Parks, Recreation, Facilities and IT
Title / Subject: Arena Cost Savings
Date of Report: September 20, 2022
Date of Meeting: September 26, 2022
Report No: 2022-PRF-017

1.0 Issue / Origin

Rising costs for Electricity, Natural Gas and Water along with aging infrastructure within the three arenas has been an ongoing issue.

2.0 Background

The on-going operational costs for our three Arenas continue to rise with energy costs being the most significant. Achieving savings on how we operate our facilities continues to be challenging however with changes in technology and operations, we look to make decisions that can best achieve this.

3.0 Analysis

Recently staff met with Elexicon to review a number of programs they offer. One program that we are very keen to pursue is Real Ice. The technology allows the opportunity to make very good ice with reduced costs and lower CO2 emissions.

The change in making ice is using cold instead of hot water. It is estimated that this change would result in saving of \$10,000 to \$15,000 per year. Elexicon offers this on a trial basis and we would like to try this program out for the coming season and if it does what it is suggested to do, we would budget the \$45,000 to purchase in the 2023 budget. If the option to purchase is pursued, we would also be eligible for a rebate of \$6,000 through Enbridge Gas.

Real Ice uses pressure instead of heat to remove micro air bubbles from resurfacing water. This changes the physical properties of water which becomes denser and freezes faster. We have attached the brochure to this report that explains things further.

Our expectation is to make the decision at the end of the ice season. We would report back to Council on the savings and general observations regarding the condition of the ice, etc.

Our staff have met with the staff from Uxbridge and have watched the use of this while making ice. Further reference checking will continue while we go through the trial use period.

4.0 Related Policies / Procedures

Procurement policy

5.0 Financial / Budget Assessment

The Township would demo the product for the 2022-23 ice season which ends in the spring of 2023. The 2023 budget would carry the costs required to make the purchase later in 2023 after a successful review of the operations.

The cost is \$45,000 and a \$6,000 rebate would be offered by Enbridge at the time of purchase. This cost would be partially offset by savings realized between Jan 2023 and when the ice comes out in the spring

6.0 Climate Change Impacts

It is estimated that between 25 and 30 tonnes of CO2 emissions would be saved each year. Saving would be seen with both Natural Gas and Electricity. Reducing CO2 emissions from our municipal operations is key. The Township Community Sustainability Plan identified the need for us to make significant strides to continue to reduce the CO2 levels we generate. Staff will be recommending a review of our current GHG numbers across departments as part of the 2023 budget to help establish a more current bench-mark than our previous ICSP report. This should greatly assist us in tracking our numbers moving forward as we push forward with replacements and refurbishments that focus on greater reductions.

7.0 Communications

It is recommended that this information be shared with the public as it speaks to what we can achieve to assist with climate change mitigation.

8.0 Conclusion

The installation of this new technology will allow for the reduction of GHG along with cost savings for electricity and natural gas usage. Reducing the carbon footprint for the initial arena facility and planning for future facilities

9.0 Recommendation

BE IT RESOLVED THAT Council approve staff to enter into an agreement for the installation of the Real Ice system with Elexicon at the Foster Hewitt Memorial Community Center, and;

THAT staff report back on cost savings and other data from this trial during the 2023 Budget Submissions.

