

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 11.1.2 Halifax Regional Council June 8, 2021

TO: Mayor Savage and Members of Halifax Regional Council

Original Signed by SUBMITTED BY:

Jacques Dubé, Chief Administrative Officer

DATE: March 16, 2021

SUBJECT: Green Choice Program

ORIGIN

On June 23, 2020, the following motion of Regional Council was put and passed:

- 1. Authorize the direction contained in the HalifACT 2050: Acting on Climate Together plan, as contained in Attachment A of the staff report dated May 4, 2020;
- 2. Direct the Chief Administrative Officer to carry out the actions contained in the HalifACT 2050: Acting on Climate Together plan as part of the multi-year budgeting and business planning process, including establishing a target of net-zero municipal operations by the year 2030;
- 3. Direct the Chief Administrative Officer to prioritize efforts in the following critical core areas:
 - a. Create new energy retrofit and renewable energy programming;
 - b. Develop a detailed and costed plan for retrofitting existing municipal buildings to be net-zero ready and climate resilient;
 - c. Develop an electric vehicle strategy, increase charging infrastructure and replace fleet vehicles with electric vehicles;
 - d. Explore opportunities to require net-zero standards for new buildings in the municipality;
 - e. Develop a framework for assessing and protecting critical infrastructure;
 - f. Support communities for climate adaptation and climate-related emergencies; and
 - g. Develop a financing strategy to operationalize the HalifACT 2050 plan over 30 years.

- 4. Accept in principle the need to resource the plan and direct the CAO to return to Council with a resource plan for consideration in the 2021/2022 budget; and
- 5. Request that the Chief Administrative Officer provide annual progress reports on the implementation of the HalifACT 2050: Acting on Climate Together plan, to Regional Council through the Environment and Sustainability Standing Committee.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, S.N.S. 2008, c. 39:

Section 34(3): "The Council shall provide direction on the administration, plans, policies, and programs of the Municipality to the Chief Administrative Officer."

Section 313(1): "Subject to the *Public Utilities Act*, the Council may contract with Nova Scotia Power Incorporated or another municipality for transmission and supply of electric power."

Section 79A(1): Subject to subsections (2) to (4), the Municipality may only spend money for municipal purposes if (a) the expenditure is included in the Municipality's operating budget or capital budget or is otherwise authorized by the Municipality; (b) the expenditure is in respect of an emergency under the Emergency Management Act; or (c) the expenditure is legally required to be paid.

RECOMMENDATION

It is recommended that Halifax Regional Council direct the Chief Administrative Officer to:

- 1. Submit an expression of interest to the Province of Nova Scotia for enrollment in the Green Choice Program to procure 100% of the Municipality's corporate electricity need through renewable resources:
- 2. Pay the non-refundable application fee of \$500 to apply for enrollment in the Green Choice Program; and
- 3. If accepted into the Green Choice Program, negotiate a Subscriber Agreement and return to Regional Council with the finalized Subscriber Agreement, including term length and financial risk considerations for approval.

BACKGROUND

The federal government has committed to purchasing 100% of electricity used in federal buildings across Canada from renewable sources by 2022. This renewable energy will be purchased from large scale wind and solar developments across the country.

In October 2019, the Province of Nova Scotia passed the *Sustainable Development Goals Act*, legislating provincial emission reduction targets of 53% below 2005 levels by 2030, and net zero emissions by 2050.

In February 2021, the Province announced that 80% of electricity consumption within the province would come from renewable sources by 2030. To achieve these targets, the Province of Nova Scotia passed legislation to amend the *Electricity Act*. The amendment and accompanying regulations have created the Green Choice Program which gives large electricity consumers the ability to purchase clean electricity from new, local, renewable energy projects.

In June 2020, Halifax Regional Council unanimously approved the Municipality's long-term climate action plan, HalifACT¹, which outlines a suite of actions required to achieve a low carbon future. One of these actions is showing municipal leadership by achieving net-zero municipal operations by 2030. To achieve this target, the Municipality should consider participation in the Green Choice Program.

DISCUSSION

The Green Choice Program

The Green Choice Program (GCP) will offer large electricity consumers (in excess of 10,000 megawatthours annually) the option of purchasing 100% of their annual electricity need through new, local renewable sources. As shown in Figure 1, customers will purchase this renewable energy via a Green Tariff, which is made up of a Power Purchase Agreement (PPA) price plus an integration charge. The green tariff would appear as a separate line item on the customer's electricity bill.

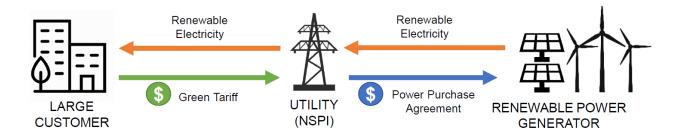


Figure 1: Green Choice Program project costs and energy flow

The PPA price will be determined by a Procurement Administrator, hired by the Province, through a competitive Request for Proposals (RFP) process. The RFP will be led by CustomerFirst Renewables, an energy advisor based in Maryland that has more than a decade of experience conducting renewable energy procurements for institutional and corporate users. The procurement process will follow similar best practices used in other recent procurements in Canada, which have resulted in record low pricing. If results in Nova Scotia are similar, the final Green Tariff is expected to be competitive with current electricity rates charged to the customer.

In early May, an expression of interest (EOI) will be issued to potential customers requesting the total energy load to be purchased, the electricity meter locations and a non-refundable application fee (expected to be \$500). The EOIs will be due mid-June. Upon review by the Minister of Energy and Mines, enrollment in the GCP will be determined and written approval will be issued to each successful customer.

Successful customers will confirm their desire to be enrolled in the program, and based on the final aggregated load of all customers CustomerFirst Renewables will prepare and issue the RFP mid-July. The most competitive bids will be considered, and enrolled customers will be re-engaged to discuss contractual provisions via a Subscriber Agreement as the final PPA price is determined. The final Subscriber Agreements will be issued to customers by October 2021 for execution by the end of November 2021. The RFP will be awarded mid October and the finalized, 25-year PPA will be executed between the utility and successful proponent(s).

¹ HalifACT – Acting on Climate Together, Halifax Regional Council Package https://www.halifax.ca/sites/default/files/documents/city-hall/regional-council/200623rc916.pdf

² "Renewable Electricity Program" Alberta https://www.alberta.ca/renewable-electricity-program.aspx

The PPA, the integration charge and Subscriber Agreement is subject to approval by the Nova Scotia Utility and Review Board to ensure minimal impact on the non-participating rate payer. The renewable energy plants are expected to be in operation no later than 2025.

Details of the Subscriber Agreement will be determined as bids are received, however it is understood that customers will have the option of selecting a term length between 5 and 25 years. The Green Tariff will remain unchanged for the duration of the selected term, with longer terms offering a more attractive tariff. Customers who sign a Subscriber Agreement will have the option of ending the agreement at any time after paying a termination fee that has yet to be determined. If after executing an agreement the customer sees a significant reduction in energy demand, partial termination penalties may be enforced. No customer who has confirmed their desire to be enrolled in the program will be obligated to sign a Subscriber Agreement.

Corporate Opportunity

The latest corporate greenhouse gas inventory (2017/18) found that 75 gigawatt-hours of electricity was consumed by municipally-owned buildings and lighting. It is recommended that an EOI be submitted to procure the maximum allowable under the GCP to ensure all electricity consumed in our corporate buildings is 100% renewable. This purchase would effectively reduce the Municipality's annual corporate emission levels by 88%.

Participating in the GCP will not negate the need to continue performing deep energy retrofits on our corporate buildings, as there remains the need to demonstrate leadership and drive the market to achieve community-wide targets. Additionally, continuing this work comes with various co-benefits such as increasing occupant comfort, increasing resiliency against future climate impacts (rooftop solar and storage, backflow valves etc.) and reducing future operating costs. While it is recommended that 100% of our energy consumption be submitted for consideration, the risk of being contracted to purchase more electricity than required is low, even though deep energy retrofits will continue. While our total energy consumption will decrease, electricity needs will increase due to the electrification of major mechanical equipment, the electrification of our corporate fleet and the electrification of transit. Alternatively, should our electricity consumption increase in future years, the Municipality may have the option of increasing its purchase through possible future intakes to the GCP. For example, a 10-year term could be most advantageous as it would provide the Municipality time to plan and gain a better understanding of the electricity consumption impacts of our corporate deep energy retrofit plan. The finalized Subscriber Agreement and recommended term length will be presented to Regional Council for consideration.

The Green Tariff will remain unchanged for the duration of the selected term. This provides the Municipality with cost security against future electricity rates, allowing for more stable long-term budgeting. It will also offer substantial financial benefit as the Green Tariff is expected to be competitive with a customer's current electricity costs. While future rate increases by the utility are unknown, the average annual rate increase over the past 10 years for Rate Code 11 (93% of all corporate accounts) has been 2.5%. Using this rate escalation and a conservative premium for the Green tariff of 10%, the Municipality would expect to pay more for electricity in the first four years of the term before starting to realize savings. At a 10-year term, the Municipality could see approximately \$1.4 million in net real savings and a net present value of approximately \$965,000. Since the savings grow over time a 20-year term could result in approximately \$24M in net real savings and a net present value of approximately \$17M. Once the results of the RFP are known, and the specifics of the Subscriber Agreement is known, staff will be able to more accurately project the long-term cost savings and recommend a term appropriate for the Municipality. If the terms of the Subscriber Agreement are not acceptable, there is no obligation for the Municipality to sign.

The Green Choice Program is a significant opportunity for the Municipality to advance HalifACT, advance its target of net-zero municipal operations by 2030, increase the deployment of large-scale renewable energy, and support the creation of local, green jobs.

FINANCIAL IMPLICATIONS

Financial implications include the \$500 non-refundable application fee and staff time needed to gather information to complete the EOI. This can be accommodated in the 2021/22 approved operating budget.

There could be significant cost savings over the life of the Green Choice Program. Based on current data and assumptions, cost savings could be anywhere between approximately \$1.4M and \$24M pending the outcome of the RFP and the length of the term selected. When the RFP is concluded, and the amount of the tariff is known, staff will be able to more accurately estimate long-term cost savings and bring options back to Council for consideration.

RISK CONSIDERATION

There is no risk associated with submitting an EOI aside from losing the \$500 non-refundable application fee. This is a low and acceptable risk to allow the Municipality to explore this opportunity. Enrolled customers may elect to cancel their enrollment prior to the signing of any contractual agreements.

COMMUNITY ENGAGEMENT

There has been no community engagement completed to inform this report. However, significant community engagement relating to the items discussed above was completed during the development of HalifACT.

ENVIRONMENTAL IMPLICATIONS

There is significant environmental benefit to the recommendation as outlined in the report.

ALTERNATIVES

Halifax Regional Council can choose not to submit an EOI to the Green Choice Program. This is not recommended as any enrolled Customer can cancel their enrollment before signing the subscriber agreement, losing only the application fee described above.

ATTACHMENTS

None.

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Chris Bernard, Clean Energy Specialist, Energy and Environment, 902.237.4765

Kevin Boutilier, Clean Energy Specialist, Energy and Environment, 902.490.6821