



MEMORANDUM

TO: Mayor Lawlor and Members of Council

FROM: Michelle Bourdeau, Manager of Environment and Climate

DATE: March 8, 2024

MEMO NO.: BEC-2024-003

SUBJECT: Land-Based Solar Energy Opportunities Study Update

PURPOSE OF THE MEMORANDUM:

This Memorandum provides members of Council with an update on a technical study to explore opportunities and the feasibility for land-based solar energy generation within the Town of Halton Hills. Council is receiving this Memorandum in order to have project background and context in advance of Town staff bringing forward to Council the final results and recommendations of the study.

BACKGROUND:

In November 2021, Council approved the [Low Carbon Transition Strategy](#) (LCTS) through [Report ADMIN-2021-0046](#). The Low Carbon Transition Strategy sets out the pathway for reducing emissions and building resilience to anticipated impacts of a changing climate. The four main action areas identified in the Strategy are: i) Low-Carbon Mobility; ii) Energy Efficiency and Green Development; iii) Local Renewable Energy; and iv) Natural Assets. Solar power generation is recognized as a significant opportunity to adopt renewable sources of energy, reduce emissions, increase resiliency, and provide local economic benefits and potential investment opportunities. To explore this opportunity, the LCTS recommended considering the potential for solar power generation.

COMMENTS:

In July 2023, the Town awarded a contract to undertake a detailed analysis and mapping of land-based solar opportunities in Halton Hills through RFP 2023-058-P. The

scope of work includes a technical analysis of available technologies, land use compatibility considerations, funding and partnership opportunities, and the development of a local policy framework and implementation plan, to capture appropriate opportunities for land-based solar. The project consists of two distinct phases:

- Phase 1: Technical report and maps that evaluate the technical, legal, and economic opportunities for land-based solar.
- Phase 2: Final report that builds on Phase 1 with a recommended policy framework and implementation strategy. This report will include considerations for agrivoltaics. Agrivoltaics allow for the simultaneous use of land for both solar and agricultural practices.

The project is being led by the Climate Change and Asset Management division with an internal cross-departmental project team to provide expertise relating to land-use policies and implications, mapping and data, and attracting green business investment. The project team consists of staff from Planning Policy, Investment Attraction, and Information Technology. External stakeholders, including Halton Hills Hydro, Halton Region Federation of Agriculture, local agrivoltaics business, and First Nations, have also been engaged on the project. Due to staff changes and other priorities, the project has taken longer than originally anticipated.

The consultant has completed preliminary mapping of land-based solar opportunities based on technical feasibility and land-use policies. Initial consultation with Halton Hills Hydro and a local agrivoltaics business was conducted as part of this phase. The draft Phase 1 report has been received and reviewed by the project team. Expected project completion is in Q3 2024. The Town's Senior Management Team and Council will be engaged as part of Phase 2.

The expected outcomes of the project include:

- Better understanding of land-based solar potential, including opportunities and barriers, resulting in:
 - Increased accuracy in renewable energy feasibility modelling
 - Increased ability to support local inquiries (i.e. Agriculture businesses)
- Policy and program recommendations to further support and/or encourage land-based solar energy where appropriate.
- Supporting information to attract solar energy developers through Investment Attraction

More recently, on December 11, 2023, the [IESO announced](#) the intention to procure 5,000 MW of new non-emitting electricity generation (including solar). The Town's study will assist the Town in responding to and/or supporting any proposed projects in a coordinated way, based on a sound technical and policy assessment of the local context and opportunities.

CONCLUSION:

The Land-Based Solar Energy Opportunities Study supports the Town's Strategic Plan as it relates to the priority areas of Thriving Economy, and Infrastructure and Asset Management.

Reviewed and approved by,

Dharmen Dhaliah, Senior Manager of Climate Change and Asset Management

Damian Szybalski, Commissioner of Business, Environment & Culture

Chris Mills, Chief Administrative Officer