

Report

Date September 6, 2023
Subject August Environmental Advisory Committee Report

File:

PURPOSE

To provide Council with staff's advice prior to consideration of the Environmental Advisory Committee's solar power recommendation.

BACKGROUND

Council approved the [Climate Action and Energy Plan](#) (CAEP) in January 2022, including the goal to reduce emissions to 80% below the 2007 levels, with interim targets of 15% by 2025 and 35% by 2030¹. The CAEP provides enabling actions for solar through Goals 9 and 10: "Build local capacity to install solar PV systems, coordinate renewable energy incentive programs, and provide renewable energy education" and "Starting in 2030 at the latest, install net metered solar photovoltaic (PV) systems on all new buildings, supplying at least 10% of their electric load".

Staff previously presented a report to Council discussing the potential of solar energy on December 7, 2021, which recommended that the market be monitored for financial and technological improvement. Following this report, Peter Nix and Tom Mommsen presented their response to the Environmental Advisory Committee on April 26, 2022.

At the April 19, 2023, Council meeting, Peter Nix presented the benefits of solar energy in achieving carbon reduction goals in North Cowichan using personal experience from their solar farm near Maple Bay. Council subsequently passed a motion directing the Environmental Advisory Committee (EAC) "...to have them take another look at the Municipality's approach to solar power in the Climate Action and Energy Plan".

DISCUSSION

Peter Nix, Don Skerik and Dr. Tom Mommsen were invited to present at the August 22, 2023 EAC meeting. The presenters suggested three recommendations to advance greater climate action:

1. Accelerate net metering and develop a public engagement plan
2. Install a municipal solar array as a demonstration opportunity
3. Pursue the feasibility of a large solar project

The EAC raised the following points in the discussion:

- The direction to advance solar is right for North Cowichan; the information presented is important and should be acted on.

¹ Interim targets are outlined in the emissions reduction summary on page 44 of the CAEP.

- Solar energy offers an opportunity for increased local resiliency. It offers an economic opportunity to grow the technology and local economy, but additional economic analysis should occur to further develop the business case for installations on municipal buildings. Battery technology is also necessary when the BC Hydro grid is unavailable, which would add complexity to the installation examples provided during the meeting.
- Increased awareness and demonstration of this technology is necessary to uptake and review of local government tools that can be used to advance this technology.

Staff offered that the CAEP prioritizes actions by reducing energy use, shifting to improved, low-carbon energy sources, and switching to renewable sources. With grid electricity in B.C. offering low-cost, low-carbon energy, the CAEP prioritizes actions that shift from higher carbon-intensity fuel use. In addition, the new RCMP building under construction has a large solar array installed.

The EAC passed the following motion:

THAT the Environmental Advisory Committee recommend that Council direct staff to:

- a) investigate the environmental, social, and economic impacts of installations on civic buildings and typical single-family buildings, mindful of the recommendations brought forward at the August 22, 2023, Environmental Advisory Committee meeting about solar power,
- b) look for opportunities to educate and demonstrate to residents to advance solar power,
- c) investigate municipal tools and incentives available to advance solar projects in North Cowichan and
- d) bring back a report to the Environmental Advisory Committee for review.

OPTIONS

1. **(Recommended Option)** THAT Council direct staff to:
 - (1) investigate the environmental, social, and economic impacts of installations on civic buildings and typical single-family buildings, mindful of the recommendations brought forward at the August 22, 2023, Environmental Advisory Committee meeting about solar power,
 - (2) look for opportunities to educate and demonstrate to residents to advance solar power,
 - (3) investigate municipal tools and incentives available to advance solar projects in North Cowichan; and
 - (4) bring back a report to the Environmental Advisory Committee for review.
 - *This option advances CAEP implementation and can explore the additional benefits of local economic development and municipal energy resiliency.*
2. THAT Council receive the Climate Change Specialist's Report dated September 6, 2023, for information.
 - *The solar report is not resourced in the 2023 Business Plan and may slow down the implementation of existing projects.*

IMPLICATIONS

The motion by the EAC is consistent with developing specific strategies and actions to advance the goals in the CAEP. The 2021 staff report discussed the potential of solar energy for residential properties in North Cowichan. The EAC motion from August 2023 expands the scope from this previous report to recommend the inclusion of municipal buildings, awareness, and municipal tools. Regardless of this motion, staff are pursuing opportunities to use solar on public buildings, for example, the new RCMP building project.

The EAC recommendation is incremental to the existing 2023 Business Plan and budget. To manage the incremental workload, staff will be allocating up to \$10,000 from the Engineering Services' existing consulting services budget so that other projects/priorities identified in the department's business plan may advance without delay.

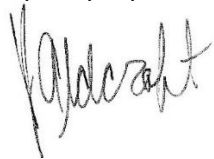
Should Council accept the recommendation for an updated report, staff will also explore the resource implications required to advance findings. While some of the opportunities to advance solar projects and awareness could be absorbed internally, additional demands could be placed on internal teams, such as communication resources to educate and demonstrate solar projects.

RECOMMENDATION

THAT Council direct staff to:

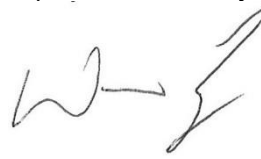
- (1) investigate the environmental, social, and economic impacts of installations on civic buildings and typical single-family buildings, mindful of the recommendations brought forward at the August 22, 2023, Environmental Advisory Committee meeting about solar power,
- (2) look for opportunities to educate and demonstrate to residents to advance solar power,
- (3) investigate municipal tools and incentives available to advance solar projects in North Cowichan; and
- (4) bring back a report to the Environmental Advisory Committee for review.

Report prepared by:



Jennifer Aldcroft
Climate Change Specialist

Report reviewed by:



David Conway
Director, Subdivision and Environmental Services

Approved to be forwarded to Council:



Ted Swabey
Chief Administrative Officer