



INFORMATION REQUEST

REQUESTED BY: Councillor MacDonald

TOPIC: Solar Panels on City Buildings

DATE OF REQUEST: November 7, 2023

DATE OF RESPONSE: November 8, 2023

QUESTION:

Can some analysis be provided regarding the solar panels that were installed on the Public Works building? Are we supplying power into the grid?

Response

Since their installation in 2019, the solar panels at PW have generated 976 MWh to date. This amounts to a savings of approximately \$76k of power the corporation did not need to purchase from our supplier. Using the metrics provided by our tracking software (solar edge) this amounts to approximately 843,000lbs of CO₂ emissions saved which is equivalent to planting approximately 11,400 trees.

Solar power produced is extremely variable over the year with highest production occurring around the summer solstice and the lowest production occurring around the winter solstice. In the month of June we have produced approximately 65 MWh of electricity at this site and in December we produce around 2 to 3 MWh. Site consumption ranges from 42 MWh in June to 79 MWh in December. While we do produce excess power in the summer we are a net consumer of electricity over the entire year. In 2022 we produced approximately 260 MWh and consumed 570 MWh. It should be noted that we have some issues with power inverters that reduced our production while replacement parts were on order.

Background

Solar panels are proposed to be added to the Protective Services Building for 2024 as per the Corporate Plan.

Financial Implications/Taxation Impact

n/a

Contact: Dean Carnduff, Director of Facilities and Fleet Management, Corporate Services