

# COUNCIL ADMINISTRATIVE REPORT

## Department: Community Services – Energy Management



TITLE: Council Authorization for the Installation of ~465kW Rooftop Solar PV System at SSSR.

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**PURPOSE:** Seek Council's authorization to proceed with the implementation of a proposed ~465kW grid-tied rooftop solar PV project at SSSR.

**BACKGROUND:** During 25<sup>th</sup> May 2022 Council meeting, Council gave support to this project as part of the County's energy management plan presented by the Energy Manager. Council also authorized submission of the funding application to the GICB program through Infrastructure Canada. In December 2022, Infrastructure Canada approved the funding application to cover 80% of total project costs and has requested a signed resolution of Council as part of conditions to execute the funding agreement.

### Project Estimate Summary:

<u>Estimated Cost</u> <u>(\$)</u>	<u>GICB Portion 80%</u> <u>(\$)</u>	<u>Foothills County</u> <u>Portion 20% (\$)</u>	<u>Estimated</u> <u>Annual Energy</u> <u>Savings (kWh)</u>	<u>Estimated</u> <u>Annual Savings</u> <u>(\$)</u>	<u>Estimated</u> <u>Payback Period</u> <u>(yrs.)</u>
\$1,300,000	\$1,040,000	\$260,000	577,910 kWh	\$63,570	4.1 years

### Possible Options for Foothills County Portion 20%:

	County's Portion 20% (\$)	FCM Grant (\$)	Amount Financed by FCM (\$)	5-Year Term Monthly Loan Repayment (\$)	5-Year Term Total Cost of Borrowing (\$)	Overall 5- Year Payment from County	Overall Payback Period (yrs.)
Option 1-Scenario 1- MSI	0	0	0	0	0	0	0
Option 1-Scenario 2 - Out of Pocket	\$260,000	0	0	0	0	\$260,000	4.1
Option 2-Scenario 1 - FCM Grant & Loan at 3%	\$260,000	\$65,000	\$195,000	\$3,504	\$15,234	\$210,234	3.3
Option 2-Scenario 5 - FCM Grant & Loan at 7%	\$260,000	\$65,000	\$195,000	\$3,861	\$36,674	\$231,674	3.6

### Other Potential Project Life-cycle Maintenance Costs

- 1) Insurance: \$1270 increase in annual premium. Coverage will include repairs/replacement of damaged solar panels and roof.

- 2) End of Life Disposal: ARMA piloted a project for solar panels recycling. Solar panel recycling and refurbishing industry expected to grow as supply of end-of-life panels increases.
- 3) Solar PV Panels Removal and Re-install in case of Roof Repairs: Estimate of this cost is \$100k-\$150k. This situation is unlikely since the panels will completely cover the existing aluminum roof, thereby shielding it from direct sunlight and extending its lifespan.

**RECOMMENDATION:**

That Council consider this project for Implementation and provide administration with direction on its preferred method of financing. If support is provided by council, the Energy Manager would proceed with releasing an RFP to seek proposals from qualified solar PV contractors. Council will then make final decision based on the proposals/quotes received.