



REQUEST FOR DECISION

Meeting: April 28, 2025

ARENA SOLAR RFP

DESCRIPTION/BACKGROUND:

Council has directed administration to prepare a RFP for a solar project on the arena. The Town received 15 proposals and administration has conducted a review of the proposals, based on the following criteria:

- 25% Products, methodology, work plan / schedule and deliverables
- 20% Qualifications, experience and references
- 15% Warranty
- 40% Fee Schedule

Additionally, administration hired 8760 Ltd., a utility management company to provide a solar feasibility study, along with an independent review of the proposals based upon the above criteria.

DISCUSSION/OPTIONS:

Regarding the feasibility of a solar project at the arena, 8760 noted that their analysis

...explores the feasibility of a rooftop solar PV system for Town of Claresholm, considering various factors such as electricity consumption profiles, roof size and capacity, site location, regulatory conditions and requirements, various costs, and the environmental impact. The Town of Claresholm's electricity consumption profile and hourly demand profile aligns well with the monthly solar production profile and hourly solar generation, respectively. A solar array around 134 kW can fully offset the Ice Arena's annual electricity use. Alberta provides favorable conditions for microgenerators, with those between 150 kW and 5,000 kW receiving market prices for excess electricity, and those under 150 kW can access Solar Club rates, which are currently more attractive than forward capture prices.

It is expected that the installation of a solar system can be a viable option for The Town, offering significant benefits in terms of energy and cost savings, and reduced environmental impact. Overall, 8760's recommendation is to review...proposals for final selection. It is advised to design the solar array with minimal environmental impact, apply risk management strategies, ensure regular monitoring, and secure funding or financing. We suggest the risks associated with potential changes to Alberta's electricity market be evaluated against the project's benefits.

There are several considerations in reviewing the proposals, including total energy generated and offset, and cost.

From 8760: *If The Town decides to proceed with a large microgeneration system (over 150kW), two strong proposal candidates are the International Renewable Energy Systems Inc. and Empower Energy Corp.*

Company	Array Size kW	Cost	8760 Est. Payback Yrs	Annual Savings	Electricity Offset	Price/Watt
International Renewable Energy Systems	263	\$516,000	22.8	\$19,628	100%	\$1.96
Empower Energy Corp.	312	\$419,200	15.9	Not stated	108%	\$1.34

Alternatively, if The Town proceeds with a small microgeneration project, DCOM, RMSC, and AltaPro are strong proposals.

Company	Array Size kW	Cost	Estimated Payback Yrs	Annual Savings	Electricity Offset	Price/Watt
D-Com	280	\$513,498	10.0	\$75,387	92%	\$1.83
AltaPro	223.2	\$330,860	5.3	\$33,537	70%	\$1.48
RMSC	147	\$237,500	6.2	\$34,262	52%	\$1.62

The large microgen projects propose to offset the Town’s electricity use at the arena by 100% or more. However, their payback periods and annual savings are not as attractive because they are large microgeneration projects and not eligible for Solar Club rates. 8760 has estimated the electricity rates over the next five years to be anywhere from \$0.045/Kwh to \$0.061 kWh.

The small micro-generation projects are eligible for Solar Club pricing, with current pricing at \$0.30 kWh, which provides significantly more credits to the Town’s accounts, leading to shorter payback periods and more annual savings. It should be noted that the estimated payback periods are assuming the town pays for this project in cash. However, we do not have the reserves to fully fund this project and will have to borrow, which will add to the payback period. If Council approves this project, administration will prepare possible funding scenarios for discussion at a future meeting.

RECOMMENDATION:

Administration and 8760 are recommending that Council proceed with a small micro-generation solar project. All three options above are recommended by administration and 8760, with the primary consideration for Council being cost and electricity proposed electricity offset. The smaller offset project will be more economically feasible, but produce less savings over the course of the life of the project.

If Council approves the project, administration will connect with the successful proponent to begin the MCCAC Municipal Energy Generation Program application, which can offset total project costs by 30%. The application requires an assessment by a structural engineer to confirm that the building can support the weight of the proposed project. This may be a cost that the Town will have to incur if there is no funding left in the grant (the grant is open until funding is fully allocated). This cost can be covered by the Town’s recreation reserves.

The RFP states that the project will only proceed with successful MCCAC funding. However, Council can decide to proceed with this project regardless of funding, as the above project costs are assuming there is no grant funding.

PROPOSED RESOLUTIONS:

Moved by Councillor _____ to award the Claresholm Arena Solar project to _____ in the amount of \$_____, pending MCCAC MEGP rebate approval.

Or

Moved by Councillor _____ to award the Claresholm Arena Solar project to _____ in the amount of \$_____,

ATTACHMENTS:

- 1.) Town of Claresholm RFP Package

PREPARED BY: Abe Tinney, CAO

DATE: April 25, 2025
