



REQUEST FOR DECISION

Report Date: April 9, 2020

Contact: David Levasseur

Agenda Item Number: 9.2

Meeting Date: 04/15/2020

TO: Town Council

FROM: Infrastructure Service

SUBJECT: Strathmore Solar Deployment

RECOMMENDATION:

THAT COUNCIL approve Administration to move forward with solar deployment (subject to grant funding) and give direction as to which solar partner and financing approach is preferred in delivering this project for the Town.

REPORT SUMMARY

The following report provides key information regarding Administrations proposed solar deployment on the roof of the new Town hall.

CHIEF ADMINISTRATIVE OFFICER'S COMMENTS

That Council approve the recommendation.

REPORT

DISCUSSION

Project Evolution & Introduction:

Administration has been working through its evaluation of a Town sponsored solar deployment for some time. Originally the economic viability of 7 separate projects were evaluated and found to be

economically feasible largely due to the considerable amount of grant funding available. Recently, availability for this grant funding has been significantly reduced by subscribed interest. As a result, Administration has reduced the scope of its efforts to focus on the “Solar Ready” rooftop of the new Town hall. Currently, the characteristics of this project best match the remaining grant funding available and the limited time available to apply for it.

Please note: Administration is aware and has been in contact with the Mark Schweitzer, Program Director of the Net Zero Project at the Golden Hills High School. Initial discussions suggest that the Town may be in a mutually beneficial position to support Mark and the Net Zero Program. Given some unique aspects of this project, further discussion and information is required. Upon receipt, Administration will provide Council with a separate report outlining the parameters of this support.

New Town Hall Solar Deployment - Partner Options:

Project Parameters:

New Town Hall 1 Parklane Drive	ENMAX	SkyFire
Solar System Capacity	88.0KW	88.0 KW
Project Deliverables	<ul style="list-style-type: none"> ▪ Turnkey System ▪ All permits, design, procurement, construction, commissioning and safety requirements included. 	<ul style="list-style-type: none"> ▪ Turnkey System ▪ All permits, design, procurement, construction, commissioning and safety requirements included.
System & Maintenance Warranty	<ul style="list-style-type: none"> ▪ Modules & Inverters 25 Years ▪ Limited operations and maintenance warranty 15 years. 	<ul style="list-style-type: none"> ▪ Modules & Inverters 25 Years ▪ Limited operations and maintenance warranty 15 years.
Remote Monitoring	<ul style="list-style-type: none"> ▪ Included 	<ul style="list-style-type: none"> ▪ Included
Quoted Capital Cost*	\$187.3K	\$143.8
Targeted Grant Funding	\$78.2K	\$65.1K
Grant Adj. Capital Cost	\$109.1K	\$78.7
Net Capital Costs Per KW	\$1.24/Watt	\$0.89/Watt

*Amounts shown do not include GST which is expected to be recovered by the Town within the first year of deploying funds.

Funding Sources:



Municipal Climate Change Action Centre (MCCAC) - Alberta Municipal Solar Program (ASMP)

- Administration has been in regular contact with the MCCAC. Most recently (April 2, 2020), their project coordinator contacted Administration to confirm that funds had been re-allocated from another fund to bolster additional funding through the ASMP.

Applicable ASMP funding is provided through two features:

- o Rebate for \$0.75/watt on total installed capacity, up to 30% of eligible expenses.
- o Bonus first-time application bonus for \$0.25/watt (\$250k max)
- ASMP funding could provide up to \$78k of financial project support subject to Council's approval and chosen solar partner.

New Town Hall 1 Parklane Drive	ENMAX	SkyFire
Capital Funding Source	ENMAX Financing	ACFA Debt
Proposed Term	15 Years	15 Years
Capital Funding Cost	3.00%	2.521%**
Annual Capital Service	\$9k	\$6.3k

**Alberta Capital Finance Authority (ACFA) 15-year rates as of April 1, 2020.

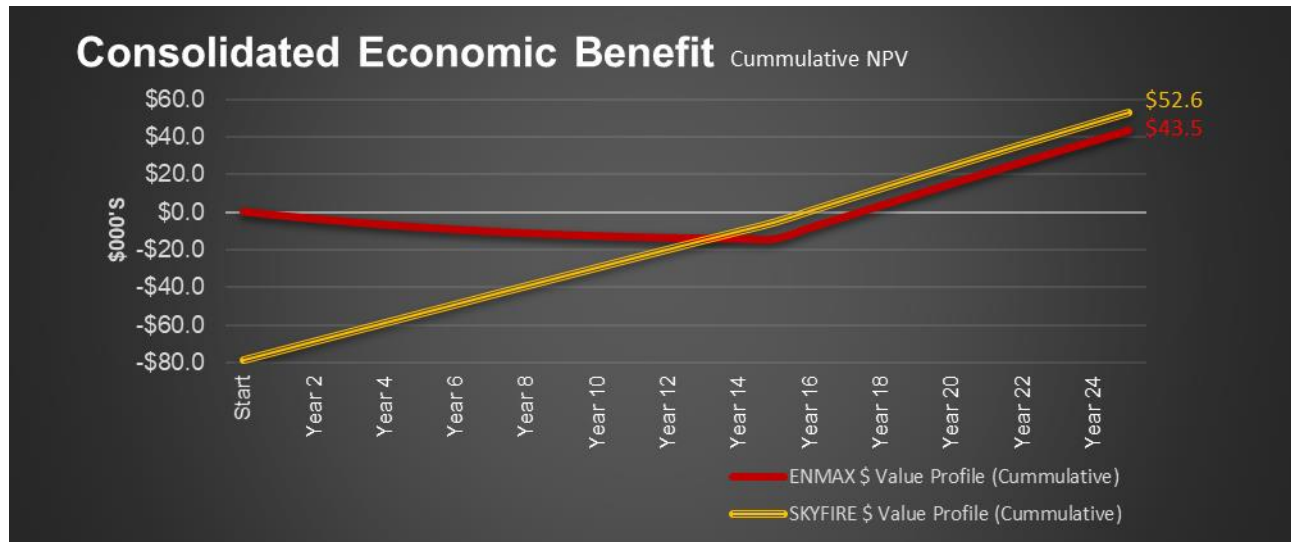
Financials & Economics:

Conservatism & Limitations Associated with Economics:

The following financial information was prepared by Administration leveraging the financial information and quotes provided by ENMAX and SkyFire. When key financial assumptions were estimated differently between these parties, Administration has applied the most conservative assumption to both offers when preparing its financial analysis. This approach ensures both parties are evaluated on equal terms and the resulting analysis is conservatively skewed.

New Town Hall 1 Parklane Drive	ENMAX	SkyFire
25 Year Average Annual Solar Production	94,648 KWh	
25 Year Average Annual Revenue/Savings	\$8,654/Year*	
Annual Capital Service (15 Years)	\$9k	\$6.3k
25 Year Average Annual Net Cashflow	\$3.2k	\$4.2k
25 Year Consolidated Economic Benefit	\$43.5k	\$52.6k

*Solar generation revenue/savings per KWh are fixed for the life of the project with the exception of annual 2.00% CPI adjustment.



Key Financial Considerations:

1. The resulting 25-year economic benefit for the Town is comparable for both solar partner offers.
2. Key financial differences between these offers are characterized by:
 - a. SkyFire's offer leverages the Town's debt capacity and balance sheet to fund the solar project costs in exchange for annual solar revenue/savings which exceed the Town's debt service costs throughout the life of the project.
 - b. In contrast, ENMAX's offer finances project costs internally with no impact to the Town's debt balance, resulting in annual capital service costs exceeding annual solar revenue/savings for the first 15 years of the project.
3. Should Council be opposed to using debt to fund this project, ENMAX's offer addresses this concern at a higher capital and financing cost.
4. Should Council be open to using debt, SkyFire's offer provides better economic benefit to the Town over the life of the project.

Other Project Consideration:

- End of Life Solar Decommissioning: Useful life of the asset is considered to be 25 years at which time there is a chance that the system would need to be repowered. There are many unknowns as to whether system components could be repurposed, but costs are likely to be anchored by labour costs which are estimated at roughly 20% of project costs. Most of the system components have a marketable value which could be recycled.
- This project sends a positive message to Town stakeholders, demonstrating Council and Administration's commitment to renewal energy and innovation while doing so in an economically responsible manner.
- This project provides a measured approach to acquiring the knowledge and experience needed to pursue other solar projects in the future.

Next Steps:

Subject to Council's approval and direction, Administration will move forward with the selected Solar Partner to complete the following project requirements:

- Legal review and execution of construction and operations contracts. Please note that all contracts will include language which provide the Town with an exit strategy should grant funding not be attained.
- Structural engineering confirmation.
- MCCAC Final Application Submission.
- Construction: Dates to be communicated to Council upon working through project deliverables above. Construction timeline is currently expected to take 3 weeks.

SUPPORTING DOCUMENTATION

- SkyFire's solar quote and financial information. Available upon request.
- ENMAX's solar quote and financial information. Available upon request.
- Administrations internal financial analysis.

REVIEWED & APPROVED BY R. ROYCROFT