Date	February 26, 2024
Topic	Cambridge Bay Solar and Storage Project, Community Engagement Activities, February 2024

I. Introduction

1. Background

Findings from the Community Energy Plan (CEP) showed that community support is strong for large scale renewable energy projects. As part of the CEP, multiple stakeholder and resident' engagements were conducted and showed that future engagement regarding large scale renewable energy should address the following questions and concerns from the community:

- Community members do not have a good understanding of what "large scale" entails. Visual support and infographics could help residents conceptualize these projects.
- Any large-scale project should be seeking approval for site location and gather community feedback on site topography, local knowledge and concerns during construction and operation of the project.
- Community should be informed, engaged and involved. It is important to show that every step is taken to ensure the technical viability of the projects.
- The potential for wind power should be addressed and a rational for project prioritization should be clearly laid out.
- Residents wanted to know more about what other communities in Nunavut are planning and constructing with regards to renewable energy.

The Cambridge Bay Solar and Storage Project feasibility study was first announced on July 23, 2024. Posters were distributed in the community and shared through the community Facebook page.

AES Team presenting project details to community members

Cambridge Bay Community Energy Plan Infographics

CBSS Project Renderings and FAQs

Information shared on Nunavut Projects

Sharing project details with community elders

2. Activities and Engagement Format

The goals of the February 2024 engagement activities were to:

- Formally introduce the project,
- Ensure that the community still approved of the project,
- Present preliminary data and renderings,
- Get feedback on the project, especially regarding the proposed location,
- Identify potential issues that the site could present for construction and operation,
- Gather collect community knowledge of the site for the first high level climate risk assessment of the project.

Engagement activities were conducted over the course of several days: 1) the team used the Cambridge Bay Trade Show February 5-7, 2024 as an opportunity to informally present the project ahead of the main community event; 2) the main engagement event occurred on Tuesday February 20, 2024, 3) this event was followed by an afternoon at the Kitikmeot Corporation Office to provide an alternative for those who could not attend day before, 4) informal discussions with community members during the week of February 20th, 5) a presentation was given to students attending the Kullik Ilihakvik Elementary School (6th grade).

The main event was advertised through posts on the community Facebook page and announcements were posted in several locations including the Hamlet and KIA offices, grocery stores, retail stores, public housing office and the public library. The team rented the Luke Novoligak Community Hall for the day (10:00 am – 9:00 pm, and residents could stop by at any time. Food and refreshments were available. Upon entry all attendants received a raffle ticket for various solar energy related prizes, which facilitated participation counts. Transportation was arranged for a group of Elders and those wanting to attend but

who didn't have a car, and an Inuinnaqtun translator was on site all day. Finally, a table with coloring and balloons was organized for the children attending the event. There were draws for renewable energy related prizes such as solar powered lanterns and solar powered cabin kits that were won by attendees.

Key attendees of the engagement event included municipal staff, the Mayor, NIRB team members and community elders.

The team provided several different supporting documents and visuals to facilitate the project description and to gather feedback:

- Background infographics on the Community Energy Plan were provided to remind participants of the strong support for renewable energy development and to explain the rational for the CBSS feasibility study.
- To address the questions and concerns raised during the CEP engagement, as described in Section 1. Introduction, the team created several posters describing the feasibility study process (transparency on the assessment of the technical viability of the project), prepared infographics explaining the project potential impacts on diesel reduction and grid composition, and created high resolution renderings of the project by superimposing solar panels, battery storage system and fence onto a drone photograph of the site.
- A "frequently asked questions" booklet was prepared and distributed participants. This FQA covered several subject such as solar energy questions (for example what happens during the winter months when there is no daylight), community benefits if the project, and technical explanations (such as the definition of "diesel off").
- The participants could provide their feedback through several avenues including a box with anonymous comments, emails, and in person.
- A large map of Nunavut was created depicting renewable energy projects and studies currently on going in the Territory. Additionally, information on the Government of Nunavut cabin and home owners solar grants was provided.

II. Main Takeaways

1. Format

We estimate that we reached approximately 90 residents throughout the week of February 20th. In addition to that engagement there were over 300 interactions through the Kitikmeot trade show event with a mixture of local residents and visiting delegates and exhibitors. AES representatives attended a science workshop at the Canadian High Arctic Research Station where presentations were given to young students on how solar power works. The students were shown what the project could look like and asked what they thought. There was plenty of positive feedback from the students on the concept at the in-school and research station presentations.

From our perspective, the walk-in format was successful. Two AES staff were present all day and constantly attending to new participants dropping in. This format allowed for quality one-on-one with those genuinely interested in the project, and allowed the staff to gather in depth feedback. The event was

attended by a variety of stakeholders including Elders, Hamlet staff, Government representative, Kitikmeot Corporation, NICB and QEC employees, and residents interested in the project.

The project supporting documents including the renderings and infographics were appreciated by many participants, who praised their appealing lay out and accessible explanation of technical findings. NIRB representatives informed us that they will be using our renderings as example of good practices for community engagement and participation. One participant suggested to organize a talk show on the radio for residents to call in with their questions.

Finally, residents appreciated that an alternative date was provided for those who could not attend the main event.

2. General Project Feedback

Overall, we received overwhelming support for the project moving forward. Residents were excited about the potential to be powered by clean electricity and there was no concern with the size of the project.

Some participants were under the impression that solar energy is not a viable technology in the Arctic due to the total darkness during certain months of the year. The education component of our engagement allowed them to learn about solar potential and they left feeling informed and confident in the project.

3. Site Location

Most participants approved of the site location, often describing it as out of sight and not heavily used.

We received one negative feedback from an Elder being concerned with losing land for the community. In particular, they were worried about the Elders not being able to access other places further away from the community, which leaves only the places close to town, like this site, accessible to them. They proceeded to say that they would support the project for future generations. The other Elders present were in support of the project and didn't have an issue with the location.

The proposed location is bordered by two trails used for the Back Point and Aptalok Bay areas and residents wanted to ensure that the site would not impact their accessibility. Participants commented that the area along the shoreline and the road are busy during the summer, and they must remain accessible to the general public.

The current community growth being constricted by federal lands, location of sewage lagoon, drinking water source and town disposal facility, several participants were worried about future town expansion in this area if the solar project is built. It should be noted that the Hamlet Land Planner and the Mayor participated in the event, and that the Municipal Council gave their approval for the location of the project. One participant wondered how close one can built to a solar farm, should residents want to build cabins along the shoreline.

One resident was concerned with the look of the solar farm and wished it would be further away from the community as to not disturb the view. One Elder reported that they had no concerns about visual impact of the site or even wind turbines in the area. From their perspective, no one was concerned about the wind turbines in the past and as such they didn't feel anyone would have an issue with the visual impact of this project now.

4. Site Characteristics

In effort to gather valuable information to guide the design and construction of the project, as well as insight of potential future impacts of climate change on the site, AES asked specific questions about the conditions of the proposed location; the following comments were made:

- The site can be spongy and wet in certain areas,
- Surface water might be present on the northwest end of property, as seen on satellite imagery.
- Snow drift will be an issue in this location,
- Participants were not aware of any burial grounds or caches,
- Participants were not aware of any hunting in the area,
- There were concerns that the site might be contaminated, due to the remnants of the Old Town including old concrete footings and buried fuel barrels.

5. Construction

To access the site during construction, heavy equipment and construction material will have to be hauled across two riverbeds of Freshwater Creek. There are several points to be considered during construction:

- The start of the main part of construction season is often marked with the busiest time of year at the river mouth where people often fish the char run. Will construction activities impact the fishing season, i.e. would it require road closures, or would the community still be able to access the fishing spots?
- Although there is a new bridge on the first river crossing that can handle the weight of heavy equipment without disturbance to the riverbank, contractors raised concerns over the weight of gravel trucks on the second bridge. Alternative sources of gravel on this side of the bay might be considered for this project.
- NIRB representatives confirmed that considerations about crossing the river will be an issue for DFO and the Water Board.
    - From AES experience building the new power line to the tower site (adjacent to the current project location), the project team worked with DFO for approval of heavy equipment crossing the second river in August, once water flow was reduced and river was low.

In general, residents would like to see no impact on accessibility of the road leading to the construction site, as this is a busy travel road in the summertime. Additionally, residents were wondering if there would be roads improvement completed on the stretch of road between the bridges and the project site, which could benefit the community travelling to and from the bay.
There were concerns about the construction impacting the land around the project site and in particular the two trails straddling the project site. The trails and tundra around the project site should be protected or restored after construction.

6. Maintenance

The residents would like clarification on the frequency of maintenance required and the kind of maintenance vehicle that will be travelling on the access road. As mentioned previously this is a well travel road, for pedestrians and vehicles alike. Participants were also wondering if the site will need to be accessed during the winter, as the road is currently not plowed.

In the winter, snow drifting cold be a major concern on the site, and snow fences on the north side of the site might be considered a viable option. Participants felt that the panels will still be buried in June, unless frequent clearing of the panels is done throughout the winter. Finally, contractors recommended to pay close attention to the fence height. As currently seen at the tank farm, fences are not high enough during the winter due to snow accumulation; residents and children in particular could easily access the site in the wintertime.

7. Approval and Permitting

Several team members from the Nunavut Impact and Review Board attended the engagement event and commented that it was good effort to educate the community about the project, and that the resources provided were well done. The AES team discussed the NIRB review process at high level and comments were exchanged on what makes a good review submission. The team members emphasized submitting as much documentation as possible on the front end to minimize subsequent back and forth exchanges.

8. Long Term Considerations

Contractors were thinking of the future of construction if renewable energy becomes widely available, namely thinking of electric heat or duel heating system (diesel and electric heat).

A question was asked whether community projects such as greenhouses could be placed adjacent to the site to make use of excess/curtained energy and store it.

Residents were hoping that this project will result in a reduction in the cost of electricity to customers.

III. Next steps

The team will ensure that all questions and concerns raised during the engagement are properly addressed during design, construction and maintenance of the project.

There are several outstanding items to be addressed, including communicating the socio-economic impacts of the project on the community, address concerns from the community about town expansion and meet with the HTO representatives, who could not attend the event.

Another information session should be held at the conclusion of the feasibility study to update community members and stakeholders on the final design and construction plan.

Summary:

Engagement Feedback	Action Item
Event was successful and format of engagement was appropriate for scale of project	None
Community overall approves of the project and location and looks forward to further updates	Update community stakeholders as feasibility work progresses
Project site is bordered by two trails regularly used by the community. Shoreline and road to the west of the project site are heavily used in the summer.	Project site should consider the two travel trails and ensure that 1) the trails are still accessible to the community and 2) any damages done to the trails during construction should be remediated. Access to the road and shoreline should not be restricted.
Land disturbances around project site should be minimized where possible to not negatively impact functionality and aesthetics	Land around the project site, roads and trails should be restored to their original states.
Construction materials will be hauled across two bridges. Start of construction season coincides with peak char fishing season.	Construction plan must be well thought out and consider impacts to people and wildlife
Potential contamination due to the remnants of Old Town and old DEW Line activities	Phase 1&2 ESAs might be required.
Snow drifting and snow accumulation might impact site access and performance of solar panels.	Additional studies and research is warranted to understand impact of snow accumulation on site performance.

AES Team member with Cambridge Bay Mayor Wayne Gregory