



Stettler Solar and Storage Project

Newsletter – Q4, 2022

The Stettler Solar + Storage Project (the Project) is a 34 megawatts (MW) solar and storage project proposed by ABO Wind Canada Ltd. (ABO Wind) that would displace approximately 120,000 tonnes of CO₂ equivalent annually and 3.6 million tonnes of CO₂ over 30 years. The Project would provide a cost-effective source of enough clean energy for approximately 10,000 homes and will contribute to Alberta's increasing percentage of renewable energy generation.

The Project is located on privately owned, cultivated land approximately 2 kilometers southeast of the Town limits of Stettler. The approximate \$160 million project would export up to 25 MW of capacity to the Alberta electricity grid.

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WIND**

The Project

The Project will include:

- **Photovoltaic (PV) Panels** - Approximately 72,000 PV panels will be used to convert sunlight into electricity. The Project will use bifacial PV modules that are approximately 2 metres long and 1 metre wide. Due to continual innovation and availability of PV modules, the modules and layout are subject to change.
- **Ground-mounting Systems** – The solar panels will be placed on a ground-mounted racking system. The racking will be supported by pile foundations. The Project will also look to utilize a single-axis tracking system. This will allow for the PV panels to follow the sun's path throughout the day which will maximize power generation.
- **Inverter/Transformer Stations** – The electricity generated from the PV panels will be in the form of direct current (DC). Inverter/Transformer Stations will convert DC electricity into alternating current (AC) electricity before increasing the voltage in order to connect to the Alberta electricity grid.
- **Access roads** – The Project will be accessed via existing County roads and only pre-determined locations secured with locked gates and fences. The Project may also require upgrades to existing County roads in the area. All road upgrades will result from consultation with the County of Stettler.
- **Interconnection** - ABO Wind will look to connect the Project to the grid via a distribution line that will link directly to the Stettler 796S substation. The substation is owned by the local DFO (Distribution Facility Owner), ATCO Electric. Grid studies are ongoing with the DFO and the Alberta Electric System Operator (AESO).
- **Energy Storage/Battery:** The proposed (16 MW/48MWh) battery will store electricity in periods of excess generation from the solar site and discharge the electricity to the grid during periods of high demand. This allows for shifting the renewable energy generation to times when it is most needed. The inclusion of storage will also allow for more penetration of intermittent renewable resources.
- **Other Infrastructure:** In addition to the components listed above, the Project will also look to include a fence, laydown yard area to store materials and parking, as well as an Operation and Maintenance building to be used for the solar development once operational.



Example racking system



Example PV panels

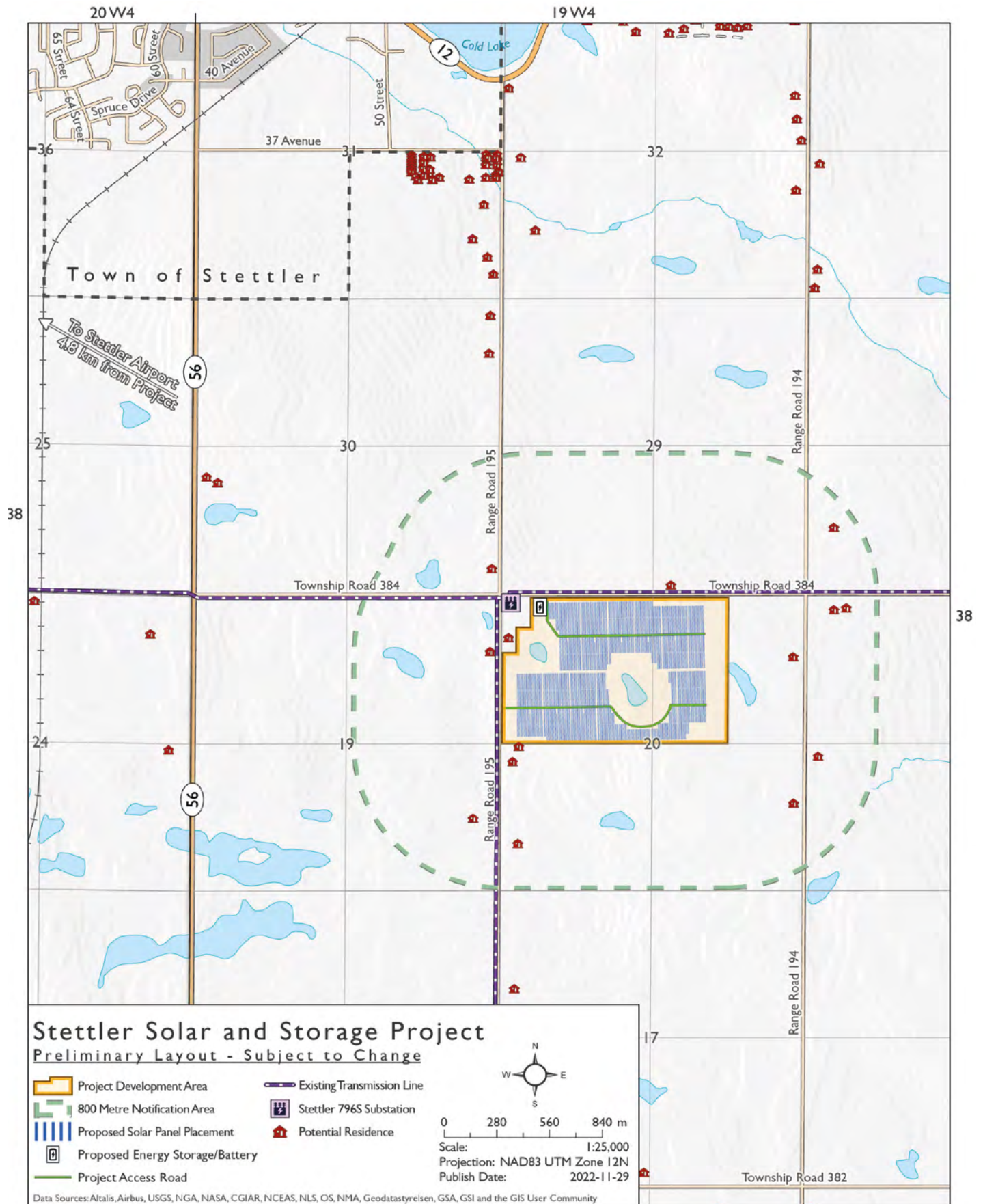


Example inverter/transformer station



Example energy storage/battery

The Project Development Area is located between Range Roads 194 and 195 on the North West and North East quarters of Section 20, Range 19, Township 38 West of the 4 Meridian, which is in close proximity to an existing ATCO Substation (see brochure map). The site was selected based on availability of existing private cultivated land, grid capacity, proximity to substation and suitable access.



Setbacks and Potential Impacts

Setbacks

There are a number of setbacks that ABO Wind adheres to in order to eliminate or minimize impact to people and environment. These include:

- Project Infrastructure placed a minimum of 100 metres from Class III+ wetlands
- Required setbacks from County roads
- Setbacks needed to comply with the maximum sound levels at residences as per AUC Rule 012

Potential Impacts and Studies

ABO Wind is working with third-party experts to perform the required technical and environmental studies needed to support the Project. The studies include:



Project Development Area

Environment

Environmental studies commenced April 2022 and will continue throughout the year, concluding in Q4, 2022. These studies include vegetation, wildlife, and wetlands and are performed to understand potential project-related effects. The results of the studies will be submitted to Alberta Environment and Protected Areas (AEPA) – Fish and Wildlife Stewardship, for review and feedback by way of a Renewable Referral Report, which will form part of our application to the Alberta Utility Commission (AUC).

Furthermore, Water Act applications will be submitted to AEPA for construction activities in Ephemeral Water Bodies (“Class I”) and Temporary (“Class II”) wetlands. In-lieu wetland replacement fees will be paid to AEPA for any wetland losses; these fees contribute to wetland replacement initiatives throughout in the province.



Noise

The Project will have sound-generating infrastructure, which include the inverter/transformer stations and the battery storage units. Third-party experts will conduct a noise impact assessment as per AUC Rule 012: Noise Control guidelines to ensure sound generated from the Project will be below required levels.



Glint and Glare

Glare can occur when an individual sees a reflection of the sun off the surface of a PV module. Third-party analysis of glare will be performed at various locations, including known residences at the time of assessment, within 400m of the Project Development Area.



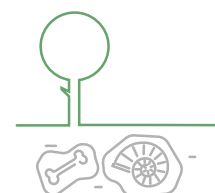
Visualizations

Visualizations will be prepared to demonstrate how the proposed Project will appear on the landscape from different viewpoints.



Historical Resources

Historical Resources, including archaeological and paleontological sites, will be considered for the Project. ABO Wind will consult with Alberta Culture and Status of Women in order to obtain clearance for the Project.





Benefits



ABO Wind commits to creating a positive impact in the communities where we develop renewable projects. The Project will generate the following positive benefits for the surrounding community:

- Tax dollars for the County of Stettler
- Contracts for local goods and service providers
- Local employment opportunities
- ABO Wind commits to financially supporting local initiatives that build community spirit and will attribute a set amount each year of Project operation for these initiatives.

At ABO Wind, we believe that we are more than just the projects we develop but are a part of the communities where they are developed.



Project Development Area and Surrounding Land

Preliminary Schedule

2022			2023				2024			
Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		Public Notification Package 1 November 2022	Submission to AEPA	File Development Permit Application with County of Stettler			Start of Construction			Commencement of Operation
			Open House in Stettler February 2023	AUC Application Submission						
				AUC Review and Approval						
Environmental Field Studies				MD Permit Review and Approval						

Open House Information

ABO Wind will host an Open House in Q1 2023. Details regarding the Open House will be provided via mail and local media a minimum of two weeks prior to the event.

Consultation

The consultation process is guided by the Alberta Utilities Commission (AUC), Rule 007, Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines. ABO Wind commits to forthright and meaningful communication that is timely and respectful. If you have questions about the Regulatory and Consultation Process, you can contact ABO Wind. Alternatively, you can contact the AUC at 403-592-4500, info@auc.ab.ca. or visit their website at www.auc.ab.ca.

ABO Wind Canada Ltd

ABO Wind was founded in 1996 and is a leading developer of renewable energy projects and now has over 1000 team members in 16 countries around the globe. ABO Wind opened its Canadian headquarters in Calgary in 2017 and focuses on developing wind, solar, energy storage, and green hydrogen projects throughout Canada. For more information, please visit: www.abo-wind.com.

Project Contact

We look forward to hearing from you. For more information, please visit our website at www.stettlersolar.com or contact us at:



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