

# Foothills Solar Project

COMMUNITY NEWSLETTER

November 2021



Elemental Energy is developing the 150 megawatt (MW) Foothills Solar Project (the Project) in your area. We are committed to engaging landowners, public stakeholders and members of the local community and we look forward to discussing the Project with you.

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## Who is Elemental Energy?

Elemental is a privately owned, Canadian, renewable energy project developer, investor, and owner. We're committed to projects that generate environmental benefits, positive social impacts for the communities in which we work, and long-term economic benefit. Our team is located in Alberta and British Columbia and has significant experience in the renewable energy business. We currently own and operate ten renewable energy projects (wind, solar, and hydro power) in Canada. This includes the 15 MW Brooks Solar project and 22 MW Innisfail Solar project. Elemental has three other projects in construction in Alberta and Saskatchewan, and a development portfolio of 1,000 MW across North America.

## Project Details

The proposed Project includes approximately 1,500 acres of privately-owned land southwest of the Hamlet of Blackie, as shown on the map to the right. The Project is located on cultivated land and will generate up to 150 MW of electricity for the Alberta power grid. Based on the preliminary design, the Project includes approximately 445,000 PV modules installed on a single-axis tracking system, 54 inverter/transformer stations, an electrical collection system, internal access roads and the construction of a Project Substation to connect to the Alberta Interconnected Electric System (AIES).

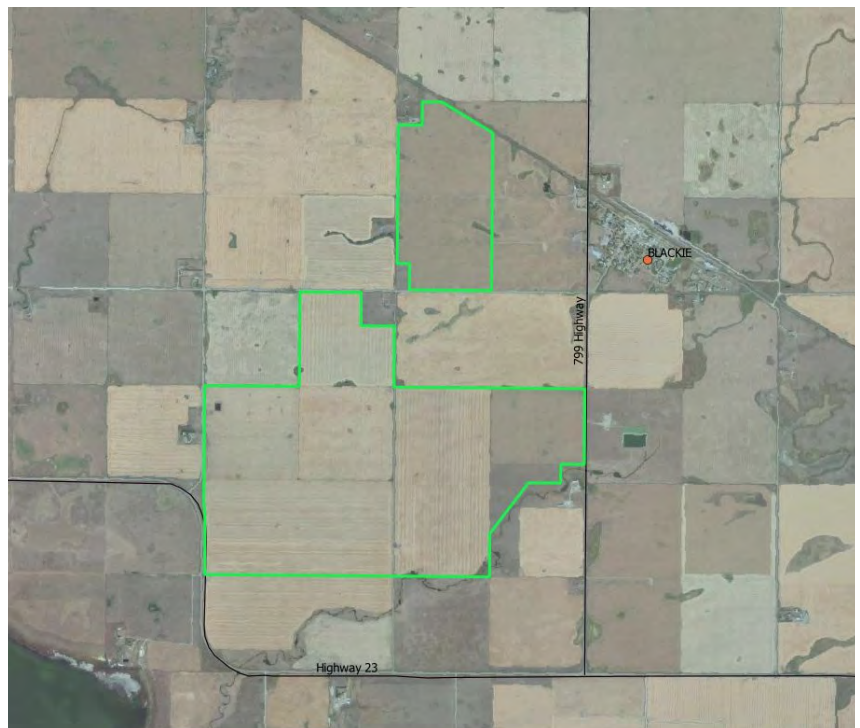




Photo: Elemental Energy's Brooks Solar

## Project Infrastructure

### Solar PV modules:

Bifacial PV modules have been proposed for installation at the Project. A bifacial module is a double-sided module that transforms sunlight into electrical energy on both its top and bottom sides. They are different from mono-facial modules which only use one side for solar energy production. Bifacial modules are capable of producing more power per module and typically have a higher efficiency than mono-facial modules, resulting in less land usage for the same or greater power output. Local weather conditions in Alberta are well suited to bifacial technology as there is substantial snow cover on the ground which will boost production. One of the benefits of using bifacial modules in Alberta is that sunlight is reflected from the surface of snow-covered land, which can generate electricity from the underside of the panel.

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### Other Infrastructure

The inverter/transformer stations in the Project will be connected through a combination of 34.5-kilovolt (kV) collector lines that connect to the Project Substation. In order to transport materials during the construction stage and to access the Project equipment for regular maintenance during operations, the Project will require the construction of new access roads and where possible, the upgrade of existing roads in the area to minimize disturbance.

### Ground-mounting systems:

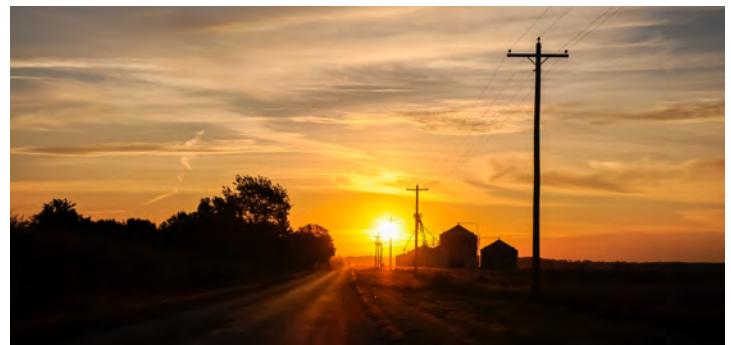
Elemental intends to install the modules on a single-axis tracker system which follows the path of the sun to produce additional electricity.

### Inverter/Transformer Stations:

Inverters are electrical devices that convert direct current (DC) to alternating current (AC). Transformers are electrical equipment that increase or decrease the voltage of the electricity within the solar PV facility. The Project will use inverters and transformers to convert the DC electricity from the solar PV module to AC electricity and increase the voltage to connect to the Alberta electricity grid.

### Interconnection:

Elemental is exploring options to connect the Project to the grid. The interconnection is subject to a separate public consultation and regulatory permitting process. Potentially impacted stakeholders will be contacted at a later date to discuss the interconnection of the Project.



### Privacy Statement:

Elemental is committed to protecting your privacy. Collected personal information will be protected under the provincial Personal Information Protection Act. As part of the regulatory process for new generation projects, Elemental may be required to provide your personal information to the AUC. For more information about how Elemental protects your personal information, contact us at [development@elementalenergy.ca](mailto:development@elementalenergy.ca)

## Community Involvement & Benefits:

Elemental is committed to making a positive social impact for the communities in which we work. We strive to be a good neighbour, and work closely with the community to identify areas of opportunity and concern. Our community engagement will continue throughout the Project phases, including Construction and Operation.

**The Project will have many community benefits, including the following:**

- ➔ **Local economic boost:** Local businesses will experience increased activity due to the spin-off opportunities the Project will create during construction and operations.
- ➔ **Community Benefit Fund:** A community benefit fund will be created to support local initiatives, education programming, and other special projects.
- ➔ **Property taxes:** The Project will generate significant property tax revenue for the County, resulting in financial benefits to the wider community.
- ➔ **Local employment:** During construction, the Project will create up to 200 jobs, creating opportunities for both local individuals and businesses. During operations a dedicated Alberta team will also be required to support the facility for up to 35 years.



Photo: Elemental Energy's Innisfail Solar

## Project Studies

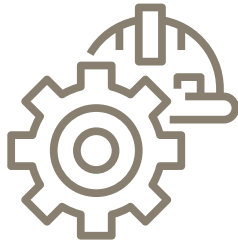
**Noise:** A detailed Noise Impact Assessment (NIA) has been undertaken to ensure the Project adheres to *AUC Rule 012: Noise Control* during both the construction and operation phases. A copy of the NIA will be included in the application to the Alberta Utilities Commission (AUC). The facility will not exceed the regulated limits set out by the AUC.

**Glare:** Green Cat Renewables completed a glare assessment for the Project to assess potential for glare at nearby residences, and along local roads and railways. The results conclude that no glare is reported at any residence, road or railway surrounding the project. This is primarily due to the tracking technology which rotates the panels to follow the sun throughout the day. A map showing the locations analyzed for potential glare is included in this package, and the full glare report will be included in the application to the AUC.

**Environmental:** Comprehensive environmental studies including wildlife studies, vegetation studies, wetlands delineation and habitat mapping have been completed for the Project and the results and potential mitigation will be submitted to Alberta Environment and Parks (AEP) in Q4 2021. AEP will issue a Renewable Energy Wildlife Referral Report following their review (anticipated in Q1 2022).

**Historical Resources:** Historical Resources Act approval was received on September 14th, 2021 from Alberta Culture, Multiculturalism and Status of Women.

# Preliminary Project Schedule



**Public Consultation – Ongoing**

**Public Open House – December 2021**

**AUC Application – Early 2022**

**Municipal Permitting – Mid 2022**

**Start Construction – Early 2023**

**Commercial Operations – Late 2023**

## Who is the Alberta Utilities Commission?

The Alberta Utilities Commission (AUC) is a quasi judicial independent agency established by the Government of Alberta, responsible to ensure that the delivery of Alberta's utility service takes place in a manner that is fair, responsible and in the public interest.

They regulate investor owned natural gas, electric and water utilities, and certain municipally-owned electric utilities to protect social, economic and environmental interests of Alberta where competitive market forces do not. For more information visit [www.auc.ab.ca](http://www.auc.ab.ca) or refer to the enclosed brochure.

## COMMUNITY OPEN HOUSE

To learn more about the Project, please join us at our community open house.

**When:** December 1, 2021

4:00pm to 7:30pm

**Where:** Blackie Community Centre,  
1205 Railway Avenue, Blackie, AB

\*Please note, masks are required as per AHS requirements.



### Contact:

If you have any questions about the Project, or to arrange a personal consultation, please contact:  
Samantha Brown, SABR Energy Consulting Inc.  
(587) 434-7547 | [sbrown@sabreenergyconsulting.com](mailto:sbrown@sabreenergyconsulting.com)