

Project overview

Forty Mile Granlea Wind GP Inc., a wholly-owned subsidiary of Suncor Energy Inc. (Suncor), is planning to develop a solar power generation facility in the County of Forty Mile, Alberta. The proposed Forty Mile Solar Power Project is co-located with the Forty Mile Wind Power Project, which is currently under construction.

The proposed project is to be located entirely on privately owned and cultivated land and its boundary will encompass 24 quarter sections. The technical components of the facility include approximately 600,000 solar modules, power inverters, piling / racking system to support the modules, an underground electrical collection system, access roads, temporary construction facilities, fencing around the project perimeter and an expansion of the substation developed for the Forty Mile Wind Power Project. Within the substation there will be two new transformers, multiple new circuit breakers and other control equipment. No new electrical transmission lines are required for the proposed project.

The maximum output capacity of the proposed project is expected to be 220 megawatts, which will be delivered to the Alberta Interconnected Electric System (AIES).

Project update

In March 2021, Suncor provided project information to potentially affected landowners, community stakeholders and Indigenous groups. This communication is to provide further information based on the input received and the ongoing planning of the proposed project.

Suncor has recently selected a single axis tracking system to support the solar modules. A single axis tracking system slowly tilts the solar modules from east to west to follow the sun. A tracking system allows more energy to be generated as the modules face the sun for a longer period.

Thanks to feedback from stakeholders, completed environmental studies and regulatory adherence, the proposed project layout has been further developed.

A Noise Impact Assessment (NIA) was completed for the proposed project and concluded the proposed layout is compliant with the Alberta Utilities Commission (AUC) Rule 012, *Noise Control*.

A Solar Glare Assessment (SGA) was also completed, which investigates the potential for sunlight to reflect off the solar modules and create glare. The SGA concluded no glare is expected at any adjacent residences. There is the potential for minor amounts of glare on portions of specific roadways at certain times of day and year. Road safety is a high priority for Suncor and the results of the study will be discussed with the County of Forty Mile and Alberta Transportation.

Visual representations of the proposed project from eight locations have been developed to assist stakeholders in understanding the project. The full set of visual representations will be available on www.suncor.com in August 2021.

What's involved in a solar facility?

Solar modules – Photovoltaic solar modules use sunlight as a source of energy to generate electricity.

Racking system – Solar modules are supported by a metal support system. Suncor will use a single-axis tracking system that slowly tilts the modules from east to west to follow the sun.

Inverters – Inverters are used to convert direct current generated by the solar modules to alternating current, which is the primary form of electricity transmitted and used throughout Alberta. The inverters are distributed across the project site.

Collector system – A network of electrical cables that conducts electricity from the inverters to the substation.

Substation - A collection of electrical equipment used to increase the voltage and control the electrical system for energy transmission on the Alberta Interconnected Electric System (AIES). The equipment is within a fenced area.

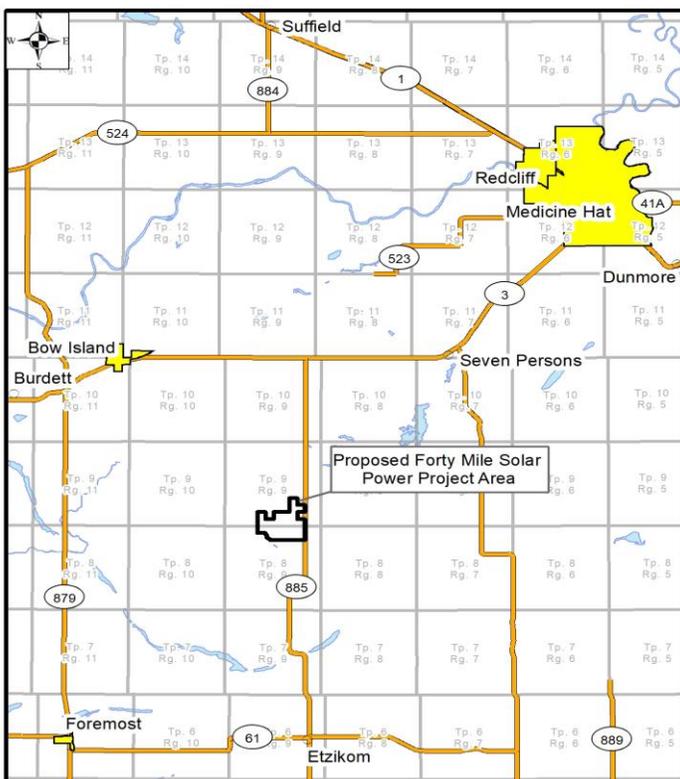


Figure 1: Project Location

Next steps

Suncor will continue to seek input from all stakeholders and request agency approvals over the coming months.

Alberta Utilities Commission

In fall 2021, Suncor is planning to apply to the AUC to seek approval to construct and operate the proposed project, which is anticipated to be fully constructed and in operation by late 2024. However, Suncor plans to request a construction completion date from the AUC for late 2026 to accommodate any unforeseen circumstances that may delay construction start.

County of Forty Mile

Suncor will continue to consult with the County on the proposed project. In fall 2021, Suncor will seek approval of the County to amend the land use bylaw for a Solar Energy Facility District, which is an overlay of the existing district. Prior to construction, Suncor will seek a Development Permit from the County.

Historical resources

Suncor will submit project information to the Alberta Ministry of Culture, Multiculturalism and Status of Women for their review and to obtain approvals pursuant to the Historical Resource Act.

Environmental evaluation

Suncor is committed to designing and constructing the proposed project in an environmentally conscious manner. Suncor has been conducting environmental surveys in the area since 2016 and in 2020, the wildlife studies were updated. The wildlife and wildlife habitat information has been submitted to Alberta Environment and Parks (AEP) for their evaluation of the proposed project. If required, a Water Act Approval will be requested from AEP.

Activity	Date
Consultation	Early 2021 – Fall 2021
AUC application	Fall 2021
Anticipated AUC approval	Early 2022
Anticipated Final Investment Decision	Early 2022
Site mobilization (construction start)	Late 2022
Full commercial operation	Late 2024

Project benefits

Suncor's purpose is to provide trusted energy that enhances people's lives, while caring for each other and the earth.

Suncor strives to deliver direct and indirect benefits in its development projects that create contracting and business opportunities, generate income for governments through royalties and taxes, and support community programs, events and quality of life.

Upon completion, the project is anticipated to generate enough carbon-free energy to supply the equivalent of 70,000 homes in Alberta.

We are listening

What happens at the end of project life?

The proposed project is expected to operate for 30 years. At the end of the project's lifecycle, the project may be re-powered or decommissioned. In the situation where the project is decommissioned, Suncor is committed and obligated to reclaim the land to equivalent land capabilities as existed prior to the project. This is mandated through the Conservation and Reclamation Directive for Renewable Energy Operations. Suncor plans to remove all underground infrastructure to a minimum depth of 1 meter.

How will weeds be managed?

Suncor will manage weeds on the project site during construction and operation. Suncor is in the process of hiring an experienced solar operations and maintenance contractor to assist in the creation of a weed management strategy. Suncor plans to use herbicides, as required, for weed management.

Traffic/Dust Control

During construction there will be vehicle traffic and construction equipment on the road. Suncor will work with the County and local stakeholders in creating a Traffic Management Plan with the purpose of minimizing impact on local residence and maintaining road safety. This plan may include designating the use of specific roads to access the site, using dust control in front of residences, and limiting speed of construction vehicles.

Further questions

Thank you for taking the time to review this information. If you have questions or concerns, please contact us at fortymile@suncor.com or at 1-866-344-0178 (extension 2). Our project team is available to meet with you via phone, video chat or in person at your convenience. To ensure your comments are received and responded to prior to the proposed project being submitted to the AUC for approval, please contact Suncor prior to September 15, 2021.