

Project overview

Forty Mile Granlea Wind GP Inc., a wholly-owned subsidiary of Suncor Energy Inc., is planning to develop the Forty Mile Solar Power Project southeast of Bow Island in the County of Forty Mile, Alberta. The project is an expansion of the approved Forty Mile Wind Power Project. Phase 1 of the wind project is scheduled for construction restart in April 2021.

The project is to be located entirely on privately owned land and will have a maximum output capacity of 220 megawatts to the Alberta Interconnected Electric System (AIES).

Technical components will include solar modules, power inverters, an electrical collection system, access roads, temporary construction facilities, fencing around the project perimeter and an expansion of a substation.



Aerial view of a solar facility.

Responsible development means community involvement

As Suncor prepares for the future, the community continues to be an important part of responsible development. We believe our stakeholders have a right to be informed about our activities, participate in a transparent engagement process, and be involved in the issues and opportunities affecting them.

Since Suncor began talking with community members about our separate wind project, we've hosted a Community Meet and Greet, met with County Council, supported and attended HALO fundraisers, donated to the Bow Island & District Health Foundation, met with our project landowners, participated in the Bow Island Trade Show, donated to the solarium project at the Bow Island Library, supported the North Forty Mile 4-H Club and hosted community open houses to share information about our wind project.



Solar modules and racking systems.

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. We are excited about renewables as part of the energy mix and continue to look forward to opportunities to invest in facilities and operations that support a lower-carbon future.

Studies being performed

Environmental evaluation - Suncor has been conducting environmental surveys in the area since 2016. The wildlife studies were updated in 2020. The environmental information and proposed mitigations will be submitted to Alberta Environment and Parks – Fish and Wildlife Stewardship (AEP-WFS) for their evaluation of the project. The Referral Report developed by AEP-WFS, will be submitted to the Alberta Utilities Commission (AUC) for their review of the project.

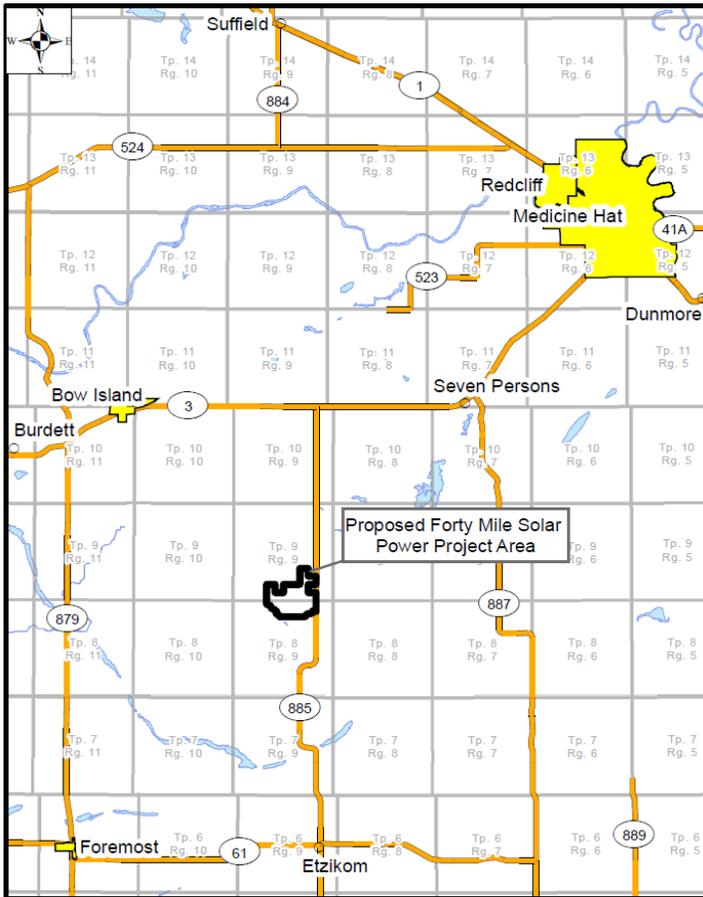
Noise impact assessment - The transformers at the substation and power inverters throughout the project will produce various levels of noise. An independent Noise Impact Assessment will be completed. Suncor is committed to maintaining compliance with the AUC's Rule 12, Noise Control. A noise contour will be provided to stakeholders after the project layout has been further refined.

Glare assessment - Suncor will complete a Glare Assessment Report to evaluate the potential for glare from the sun to occur at specific receptors. At a minimum, this assessment will include residences within 800 metres of the project boundary and critical points along the highway.

Visual representations - Suncor will develop visual representations of the project and provide these images to stakeholders after the layout has been further developed.

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

Layout – The project layout will be further developed and will consider environmental setbacks, laws, stakeholder feedback, and other considerations.



Schedule 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)	Early 2023
Full commercial operation	Late 2024

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 racking system. Suncor is investigating the use of either a fixed tilt racking system where the modules face south in a fixed position, or a single-axis tracking system that slowly rotates the modules from east to west to follow the sun.

Inverters – Inverters are used to convert direct current electricity 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 wires that conducts electricity from the inverters to the substation.

Substation - A collection of electrical equipment used to increase the voltage for energy transmission on the AIES. The equipment is within a fenced area.