

Frequently Asked Questions (FAQ)

August 24, 2026

What is a MW and how much electricity can Little Smoky 1 provide?

A megawatt, or MW, is a unit of electrical power equal to one million watts. For context, Little Smoky 1 is expected to generate enough electricity annually to equal the annual electricity use of approximately 43,000 to 55,000 Alberta residences.

Where is the Little Smoky 1 Project equipment sourced from?

Solar panels and other equipment may be sourced from a variety of qualified international manufacturers, including suppliers based in Indonesia, Malaysia, Vietnam and Thailand. Any manufacturer selected for the Project must comply with applicable Canadian customs, import and supply chain requirements. Canada prohibits the importation of goods that are mined, manufactured or produced wholly or partly using forced labour. The Project's procurement process will require appropriate due diligence, traceability of information, and supporting documentation from selected manufacturers. Northern Renewables is in discussions with Alberta-based and local manufacturers to provide the screw piles and steel racking necessary to support the panel installation.

How will the Project affect the land it is installed on?

Solar farms are designed with the environment in mind. The panels are typically mounted on piles screwed into the ground, ensuring minimal disturbance to the soil. The land underneath remains dormant, allowing it to rejuvenate for future growth. Moreover, many solar developers, including Northern Renewables Ltd., implement biodiversity management plans. These plans often involve planting native species around the panels, promoting local flora and fauna, and enhancing the site's ecological value. In Alberta, new solar farms must also have agrivoltaics plans to ensure energy production strikes a balance with the preservation of agricultural land. These plans help ensure that agricultural productivity and land capability are preserved throughout the Project's operating life.

Are there hazardous materials in solar panels and can any toxic metals leach while in use?

Most solar panels are made from silicon, glass, and aluminium, all of which are non-toxic. While some older or specific types of panels may contain trace amounts of heavy metals, these are sealed and pose no risk to the environment. No leaks can occur when solar panels are in operation, and there is no risk to human health. Globally, new solar panels are crystalline silicon or cadmium telluride panels, not commonly referenced heavy metals like arsenic, gallium, and germanium. New panels will be used at Little Smoky 1. While trace amounts of lead may exist in some solar panels, they can be carefully managed during decommissioning and recycling. Moreover, strict regulations ensure the safe disposal or recycling of solar panels at the end of the project life.

Will the solar panels create glare?

Solar panels are designed to absorb sunlight, not reflect it. The anti-reflective coatings on the panels ensure that they convert as much sunlight into electricity as possible, minimizing glare. Furthermore, solar farms undergo legislated glare assessment during the project planning phase to ensure public safety, including no impacts on nearby roads or neighbors. Recent new AUC Rule 007 codes of practice require that drivers will have zero yellow glare. The Project has been designed to satisfy this higher safety standard, with zero yellow glare predicted on nearby roads. Also, NRL has become one of the first developers in Alberta to design a solar farm to meet these enhanced road glare requirements, with its Oyen 1 Solar Project.

How will fire and emergency risks be managed?

Fire prevention and emergency preparedness will be incorporated into the design, construction, and operation of the Project. A detailed Emergency Response Plan and Fire Protection Plan have been prepared in collaboration with the Fire Chiefs, Chief Kingsbury (Alberta Forest and Parks - AFP) and Chief Power (Greenview) and Northern Renewables. The Fire Chiefs and NRL have met in person several times to develop these plans for outlining emergency procedures, communication protocols, site requirements, and other safety measures to protect workers, neighboring properties, forest and the surrounding environment.

How will reclamation obligations be financially secured?

The project developer must provide financial security for end-of-life decommissioning and reclamation, in accordance with the *Code of Practice for Solar and Wind Renewable Energy Operation*, either through security posted with the Government of Alberta, security negotiated with participating landowners, or a combination of both. The amount is based on an independent reclamation cost estimate which is updated over the Project life and must be fully funded through the project life to cover future reclamation.

Can solar panels be recycled?

Solar panels can be redeployed, reused or recycled without ending up in landfills. The Alberta Recycling Management Authority's draft solar panel recycling program includes a \$14 per panel environmental fee, which is expected to come into effect on October 1, 2026. Solar panels supplied in Alberta on or after October 1, 2026, will be subject to the environmental fee to fund Alberta's solar panel recycling program. Even panels that are not working optimally can be sent to municipalities or community members for reuse, such as ice fishing huts. According to the Canadian Renewable Energy Association, up to 90% of the mass of a solar panel – including metals and glass – can be recycled.

Will there be water sources at the Project site for use in the event of a fire?

There will be water storage on site for emergency response use for the Project. Northern Renewables has had several meetings with Chief Kingsbury (Alberta Forest and Parks - AFP) and Chief Power (Greenview), and together they have identified several potential water storage locations for fire response. These provisions have been updated in the Little Smoky 1 Emergency Response Plan (ERP). As Northern Renewables advances through the engineering process - from preliminary design to detailed design prior to construction, more details will be included in the ERP in collaboration with AFP, Greenview Fire Protection, and Northern Renewables.

What local economic benefits could the Project create?

Potential local benefits include an estimated: \$100 million in municipal tax revenue over the 35-year project life; 300 construction jobs and 35 long-term operational roles. Northern Renewables has already identified over \$50 million in project life local contract value. The Project will create local procurement opportunities, spending that supports local businesses, support for community programs and services, and lasting infrastructure benefits such as road improvements and reusable materials. NRL has already begun jointly developing the community benefits program in collaboration with the community and Greenview.

How can I get more information about the project?

You can find more information about the Little Smoky 1 Project, and solar power, on the [Project website](#). If you have more questions or would like additional information, you can submit an inquiry through the website's contact form or contact the Northern Renewables team directly at northern.renewables@korkia.fi. We welcome your questions and feedback.