Adding Value In Alberta with Local Opportunities

Greenlight will create power for a sustainable future. Integrated combined cycle power generation will provide reliable, on-demand power, which will help keep electricity costs competitive and support Alberta's transition to a diverse and low-carbon energy future.

Efficiency and optimization of resources are critical. Greenlight will be a reliable supply of electricity which will help the Alberta Electric System Operator (AESO) integrate renewable resources into the transmission grid as more solar and wind projects come online, helping to protect consumers against price spikes and volatility.

Greenlight is expected to cost \$4-5 billion when fully complete. Should the project receive regulatory approval, it is anticipated that it will be developed in phases, with each phase requiring approximately three years of construction and approximately 4,500,000 workforce hours to complete. During operations, a full-time workforce of approximately 40 personnel will be supported by local services and contractors as needed.

Anticipated Project Schedule

Summer 2025: Completion of environmental studies, public and Indigenous engagement, and submission of regulatory applications to the Alberta Utilities Commission (AUC) and Alberta Environment (AE).

Spring 2026: Regulatory approval and contract awards for construction and equipment.

Fall 2026: Construction begins.

Fall 2029: Planned in-service date for the first phase.

Community Involvement and Benefits

The construction and operation of Greenlight will play a significant role in the local economy by providing well-paying jobs that benefit local and Indigenous communities. It will utilize local businesses and suppliers and generate additional tax revenue for Sturgeon County.

Greenlight is committed to working collaboratively with all stakeholders to address concerns and answer questions about the project.

Greenlight believes that strong Indigenous and stakeholder relationships lead to better business decisions. We strive to build long-term relationships by engaging with and listening to our neighbours, maintaining an open and respectful dialogue for years to come.

What can I expect during construction and operations?

We will continue to engage with stakeholders to understand how we can minimize impacts to nearby residents during the construction phase.

Visual Impact

The proposed Project site is located on a cleared site and would be visible from Highway 643. To reduce the visual impact of the facility, Greenlight will continue to assess options to modify the overall site plan.

Traffic Impact

Construction of the facility may impact traffic at various times during large equipment delivery. The project will prioritize safety and adhere to an approved traffic management plan.

Hours of Operation

We anticipate the project's working hours to be from 7:00 a.m. to 10:00 p.m.

For more information:

Phone: Rob Thomas 403-815-0203

For more information about the Project, please visit:

www.kineticor.ca

May 2025

Newsletter





Please join us at our community open house to learn more about the Greenlight Electricity Centre and to meet the Project team.

Thursday, June 26, 2025

5:00 p.m. – 8:00 p.m. Gibbons Cultural Centre 5115 52st Street Gibbons, Alberta TOA 1N0

Greenlight representatives will be available to share Project specific information, including studies being conducted to assess impacts to noise and air emissions and to gather feedback from the community. Light refreshments will be served. We look forward to seeing you.

Greenlight Electricity Centre (Greenlight) is a strategically located power plant in Alberta's Industrial Heartland. With 160 acres of secured land, the project is designed to be built in two to three phases, ultimately providing approximately 1,864 megawatts (MW) of capacity. The facility will leverage modern, high-efficiency industrial turbines fueled by natural gas and will capture waste heat to generate additional electricity via a steam turbine. In the future, carbon capture technology could be integrated into the facility, with infrastructure in place to support carbon sequestration.

Addressing the Evolving Energy Landscape

Greenlight Electricity Centre will address Alberta's increasing energy demand, particularly from the rapid growth of data centres. This demand surge is driven by advancements in artificial intelligence (AI), cloud computing, and digital transformation, with global data centre electricity consumption projected to double by 2027, reaching 2.6% of global electricity usage.

Why Greenlight Matters

Greenlight Electricity Centre plays a crucial role in supporting both data centres and the overall increase in energy demand, while aligning with national and provincial sustainability goals:

- The electrification of transportation and industry is expected to drive a significant rise in electricity demand.
- The Province of Alberta is actively seeking \$100 billion of investment in Al technology to drive innovation, create jobs and diversify its economy. All of which will create additional power requirements within the province.

Leveraging Alberta's Natural Gas Advantage

Alberta's abundant natural gas reserves provide one of the cleanest, most cost-effective, and efficient energy sources. Greenlight Electricity Centre will capitalize on this resource to deliver stable, low-carbon electricity that supports Alberta's growing industries and digital economy.

Powering the Next Generation of Innovation

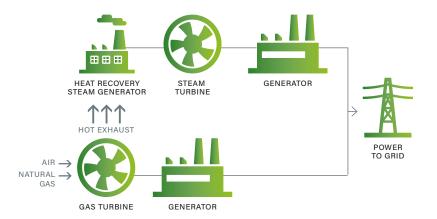
With its strategic location, high-efficiency power generation, and future-ready infrastructure, Greenlight Electricity Centre is positioned to be a cornerstone of Alberta's energy future—supporting the province's digital transformation, and economic growth.

Combined Cycle Power Generation: Efficiency & Sustainability

Greenlight Electricity Centre will utilize **combined cycle power generation**, a highly efficient and environmentally responsible approach to electricity production. This technology combines gas and steam power production, where:

- A gas turbine generator uses natural gas as fuel to produce electricity.
- Waste heat from the exhaust is captured to produce **steam**, which drives a **steam turbine generator** to generate additional electricity.
- This process increases energy efficiency by up to 50% compared to traditional gas turbine generators.

To fuel the facility, natural gas will be supplied via a pipeline tied into Alberta's existing natural gas network, ensuring a steady and reliable energy source.



The project will require a connection to the electrical grid, a natural gas pipeline, and a water source. The site location is considered extremely favourable due to its proximity to these essential services:



Electricity

Power will be supplied by interconnecting with an AltaLink substation near the project site via a short transmission line.



Natural Gas

A new supply pipeline will be constructed, tying into an existing natural gas transportation network located nearby.



Water Usage

Limited water is required, as the project will utilize air-cooled condensers. The steam cycle requires minimal make-up water, which will be sourced locally.

Environmental Commitment

Greenlight is committed to minimizing environmental impacts through best practices and rigorous management programs. The focus will be to meet or exceed industry standards and environmental regulations, ensuring responsible power generation.

The project is being designed and will be operated in a manner that minimizes potential environmental effects while supporting Alberta's efforts to diversify and clean its power production mix. As part of the regulatory application, comprehensive environmental studies and assessments will be conducted, including:

Air Quality — A dispersion modeling assessment, compliant with the Alberta Air Quality Model Guideline (AQMG), will be completed to evaluate Greenlight's impact on air quality. The facility will meet the National Base Level Industrial Emissions Requirements (BLIERS).

Noise Assessment — A detailed noise impact study will assess Greenlight's impact during both the construction and operational phases. The facility will comply with regulatory noise limits, including the Alberta Utilities Commission (AUC) Rule 012: Noise Control.

Field Surveys — Various environmental surveys and desktop reviews focusing on soils, vegetation and wildlife have been conducted and will continue as part of the development process.

Carbon Capture — The ability to integrate carbon capture in the future would lead to over 90% of carbon emissions from the combined cycle generating units being captured and permanently stored in a local carbon sequestration hub.

Timeline at a Glance



Greenlight is being designed and will be operated to minimize environmental impacts while supporting the rising electricity demand in Alberta.