

Greenlight Electricity Centre

Project Fact Sheet

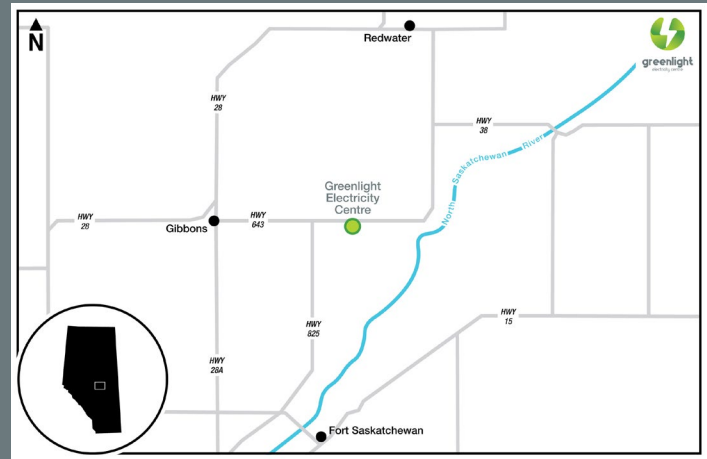


About the Greenlight Electricity Centre

The Greenlight Electricity Centre (Greenlight) is a new 932 megawatt power generation facility being built in Sturgeon County, within Alberta's Industrial Heartland. The facility will supply power to Meta's nearby Sturgeon Data Centre.

Greenlight is a joint venture between Pembina Pipeline Corporation (Pembina), Morgan Stanley Infrastructure Partners, and Kinetico. The project has received all major regulatory approvals and will be built and operated in compliance with applicable regulations, with measures in place to minimize impacts on the environment and surrounding communities.

Greenlight is committed to open communication, meaningful engagement and building positive relationships with local residents, Indigenous communities, municipal leaders, and other stakeholders.



Is Greenlight the same project as Meta's Sturgeon Data Centre?

Greenlight and Meta's Sturgeon Data Centre are separate projects, with separate ownership and operations. Greenlight's role is to generate electricity, while Meta owns, and operates the data centre that will use that electricity. The map below shows both Greenlight and Meta's Sturgeon Data Centre. For questions about the data centre, including its design, construction, or operations, please visit the [Sturgeon Data Centre](https://www.sturgeondatacentre.com) website or contact Meta at commdev@meta.com.



How is Greenlight powered?

Greenlight is a high-efficiency combined cycle natural gas power facility that uses both gas and steam turbines to generate electricity, which will minimize natural gas use and produce fewer emissions than older natural gas generation facilities. Natural gas is an important part of Alberta's

electricity system because it provides reliable, around-the-clock power regardless of weather conditions, a requirement for large energy users, including data centres and other industrial facilities. Greenlight creates valuable new demand for approximately 150 million cubic feet per day of Alberta natural gas, supporting production growth in the Western Canadian Sedimentary Basin and royalties benefits to the province of Alberta.

Will Greenlight increase electricity costs for Albertans?

No. By building a dedicated electricity facility to meet demand, Greenlight helps ensure that large new electricity users, such as Meta's Sturgeon Data Centre, have access to a reliable power supply without creating additional pressure on Alberta's existing electricity system or the cost of electricity for Albertans. This approach supports economic growth while helping maintain affordability and reliability of Alberta's power grid.

How will Greenlight affect Alberta's electricity grid?

The electricity generated by Greenlight will be supplied directly to meet part of the demand from Meta's Sturgeon Data Centre. Greenlight will remain connected to Alberta's electricity grid, helping support overall system reliability.

How was this location selected?

Alberta's Industrial Heartland was selected because it is already designated for industrial development, has access to existing natural gas, power transmission, water and wastewater infrastructure, and is near potential carbon capture development. The location also provides access to a highly skilled local workforce in the Edmonton region.



An aerial view looking west towards the Greenlight Electricity Centre site.

Protecting Water Resources & the Environment

Greenlight has been designed to meet Alberta's environmental requirements and includes measures to minimize impacts on air, water, land, and surrounding communities. Environmental considerations will be integrated throughout project planning, design, construction, and operations. Greenlight is in alignment with responsible industrial water use within the province and Alberta's Industrial Heartland – Pembina's nearby Redwater facility has been a safe and responsible operator in the area for more than 40 years.

How much water will Greenlight use?

Greenlight has been designed to use water as efficiently as possible. Water use at the facility will fluctuate throughout the year due to several factors, including weather. Greenlight's annual average daily water use is anticipated to be less than 750 cubic metres per day and continues to be refined through detailed engineering. Greenlight will use air cooling technology instead of evaporative water cooling – significantly reducing our water usage. The facility will also use a closed-loop glycol system that only requires an initial fill of water for cooling certain equipment, further reducing overall water requirements.

Where will Greenlight get its water?

Water for Greenlight will be supplied by Sturgeon County through the Capital Region Northeast Water Servicing Commission's water system. The facility's water needs represent a small portion of the available regional water supply and will be managed in accordance with all applicable regulatory approvals, environmental requirements, and municipal service agreements. Greenlight will use modern, efficient technologies designed to minimize water consumption while supporting reliable operations.

What happens during drought conditions?

Greenlight will operate in accordance with applicable water use requirements and approvals. The facility will comply with any water management measures, restrictions, or operating requirements established by regulators or municipal service providers during drought conditions. Water management plans and operating practices will support responsible water use throughout the life of the project.

Will wastewater be discharged from the facility?

Greenlight has been designed with water efficiency in mind, including systems that reuse water wherever possible. Water is primarily used for steam systems and a portion will be discharged as wastewater to prevent mineral buildup. Any discharged water will be tested to ensure compliance with applicable environmental regulations and approval requirements.

Will there be greenhouse gases emitted from the facility?

Yes, as with any natural gas-fired generation, there will be greenhouse gas (GHG) emissions from the operation of the facility. Greenlight's combined cycle power generation will be up to 50% more efficient than traditional simple cycle gas turbine generation. The facility includes quick-ramping technology, meaning it can turn on and off quickly, supporting the integration of renewable energy projects in Alberta. Greenlight will also be carbon capture ready, which means that future upgrades could enable emissions to be captured and stored rather than emitted. Greenlight is expected to generate approximately 2.6 megatonnes of CO₂e annually if highly utilized. An air monitoring system will be installed at the facility to measure and report air quality data.

Safe Operations

Greenlight has been designed and will be operated in accordance with Alberta's rigorous safety and regulatory requirements. The facility will include multiple safety systems, routine inspections and ongoing monitoring to support safe and reliable operations. Throughout construction and operations, protecting workers, the public, and the environment will remain a priority while minimizing impacts on surrounding communities.

Construction

Greenlight has received its major regulatory approvals, and early construction activities are underway. Construction will be managed by Pembina, leveraging its extensive experience of delivering major infrastructure projects in Western Canada. Construction will continue to progress over the coming years, with updates provided through our website and community engagement channels. The Greenlight site is located on industrial zoned land and will be visible from Highway 643. As design and construction planning continue, the project team will assess opportunities to reduce the visual impact of the facility through site planning and landscaping considerations.

Will construction increase traffic?

Construction activities, including the delivery of large equipment, may result in temporary traffic impacts. Safety will remain a priority, and all activities will be managed in accordance with an approved traffic management plan.

How will noise be managed?

Greenlight will be designed and operated to meet applicable noise requirements and regulatory standards. Noise mitigation measures will be incorporated into the project design and implemented as required.

Creating Jobs & Community Benefit

Greenlight is expected to create economic opportunities and benefits for the region. During peak construction, the project is expected to employ more than 1,000 workers and generate nearly 4.5 million hours of work. Once operational, Greenlight is expected to support 30 long-term skilled positions. We expect Greenlight will also create opportunities for local and Indigenous businesses and suppliers, while contributing tax revenue that supports municipal services and community programs.

How are Indigenous communities being involved

Engagement with Indigenous communities has been an important part of project planning from the beginning. Our approach focuses on early, respectful, and ongoing dialogue to understand community interests, identify potential impacts, and explore opportunities for participation in the project. We remain committed to maintaining these relationships throughout construction and operations.

How can businesses learn about contracting opportunities?

Businesses interested in potential contracting or supplier opportunities can contact us at info@greenlightelectricitycentre.ca.

More Information

Questions about the Greenlight Electricity Centre?

For questions about Greenlight, please contact:

Greenlight Electricity Centre
info@greenlightelectricitycentre.ca
www.greenlightelectricitycentre.ca

Questions about Meta's Sturgeon Data Centre?

For information about the design, construction, operations, employment opportunities, or community engagement activities related to Meta's Sturgeon Data Centre, please contact Meta directly:

Meta's Sturgeon Data Centre
commdev@meta.com
www.sturgeondatacentre.com

We want to hear from you

Community input is important to us. Throughout construction and operations, we are committed to providing information, responding to questions and addressing concerns in a timely manner.