



Neoen is a leading independent power producer of exclusively renewable energy, including solar and wind power, and battery energy storage.

We have a portfolio capacity of 8.7-gigawatts (GW) in operation or under construction across four continents. Our develop-to-own strategy means that we are around for the long-term.

Neoen has an active solar plant, Fox Coulee Solar Farm, in Starland County, Alberta, and several projects in development in Canada.



- Valley Edge BESS is a 250-megawatt (MW), 1000-megawatt hour (MWh) battery energy storage system (BESS) proposed for development on private land located at Range Road 260 and Township Road 381 in Red Deer County, 11-kilometres east of the City of Red Deer.
- Valley Edge BESS is a standalone BESS proposed to store and discharge electricity to the Alberta Interconnected Electric System (AIES), and to provide ancillary services such as frequency support, virtual inertia, and network support.
- Neoen Renewables Canada Inc. (Neoen) is exclusively leading development of the Valley Edge BESS project.
- Neoen submitted the Valley Edge BESS project to the Alberta Electric System Operator's (AESO) Interconnection Process in October 2024 (Cluster 2).
- Valley Edge BESS is subject to the Alberta Utilities Commission's (AUC) Rule 007: Applications for Power Plants, Substations, Transmission Lines, Industrial System Designations, Hydro Developments and Gas Utility Pipelines.

- A Battery Energy Storage System (BESS) stores (or “charges”) electricity in batteries and later discharges it to an electrical grid.
- Typically, BESS charge when demand is low and discharge when demand rises.
- A BESS can standalone or accompany a renewable technology, like wind or solar power.
- In addition to energy storage, BESS can provide ancillary services such as frequency and voltage support, and virtual inertia.

A - Battery Containers

- Thousands of battery cells in steel containers
- Charge and discharge electricity to-and-from an electrical grid

C - Transformer Station

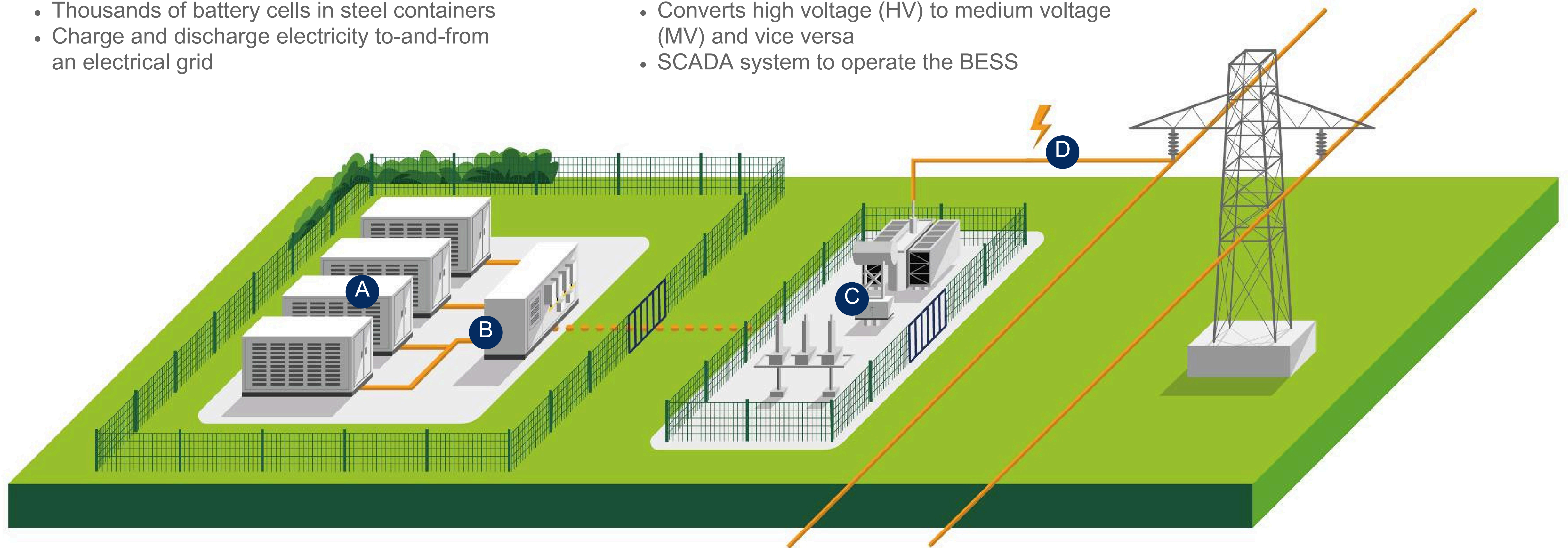
- Converts high voltage (HV) to medium voltage (MV) and vice versa
- SCADA system to operate the BESS

B - Inverter

- Converts direct current (DC) to alternating current (AC) and vice versa

D - Transmission Lines

- Transmission lines move electricity to-and-from the BESS
- Steel structures hold the lines overhead
- Electricity travels to-and-from the grid





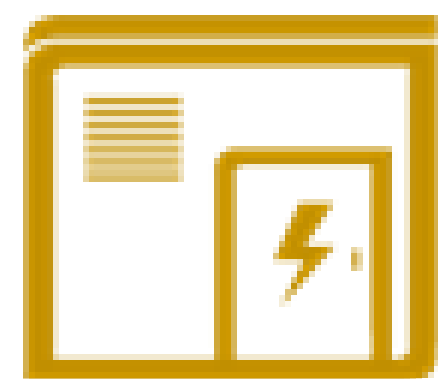
STANDALONE BESS
FACILITY



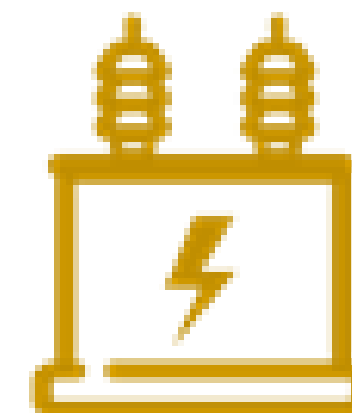
250 MW CAPACITY



~12 ACRES OF
AT-GRADE
INFRASTRUCTURE



288 LITHIUM-ION
BATTERY CONTAINERS



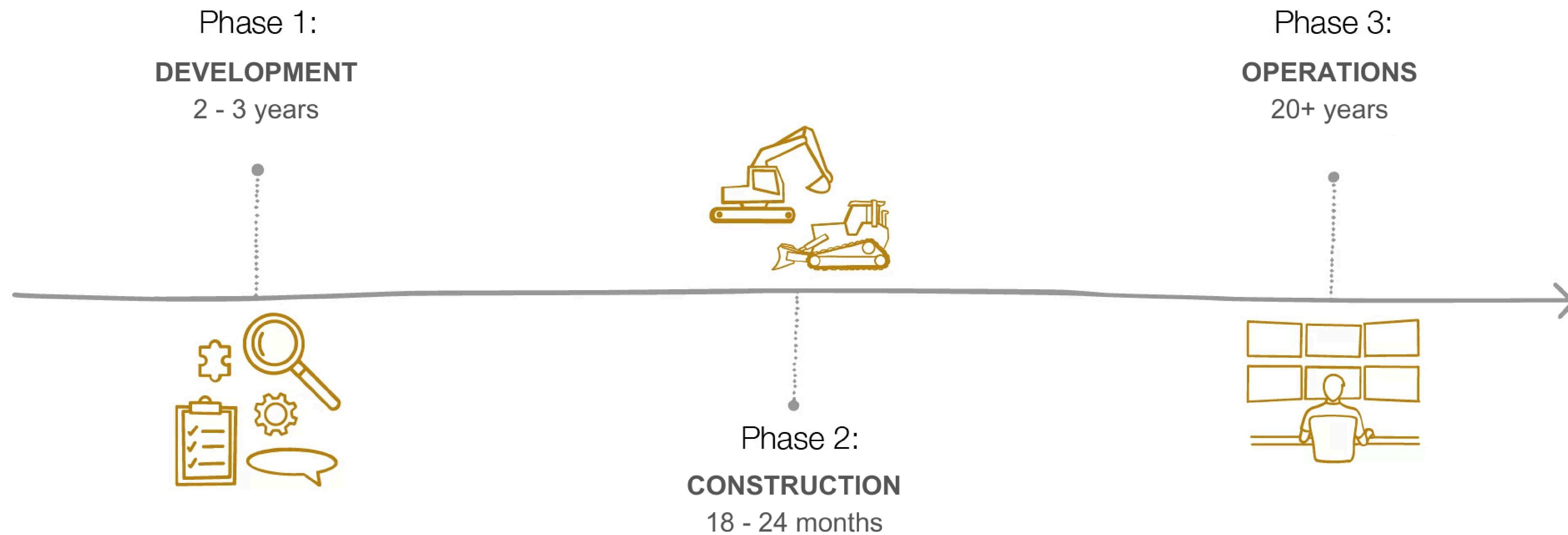
2 HIGH-VOLTAGE
TRANSFORMERS



~750 METRES OF
OVERHEAD
TRANSMISSION LINE +
STRUCTURES*

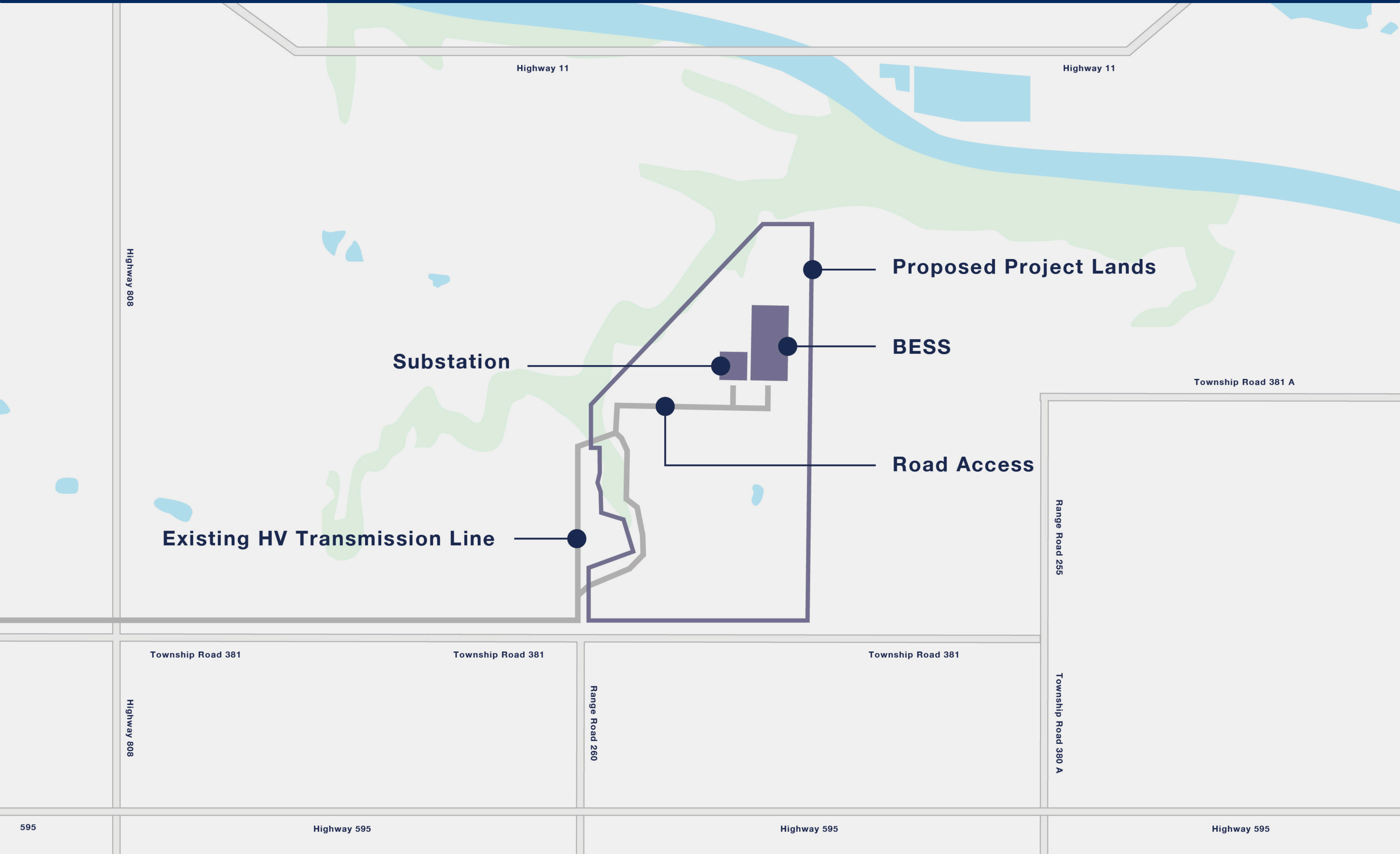
THIS INFORMATION IS PRELIMINARY AND SUBJECT TO CHANGE.

*TRANSMISSION CONSULTATION AND IMPLEMENTATION WILL BE PERFORMED BY ALTALINK.



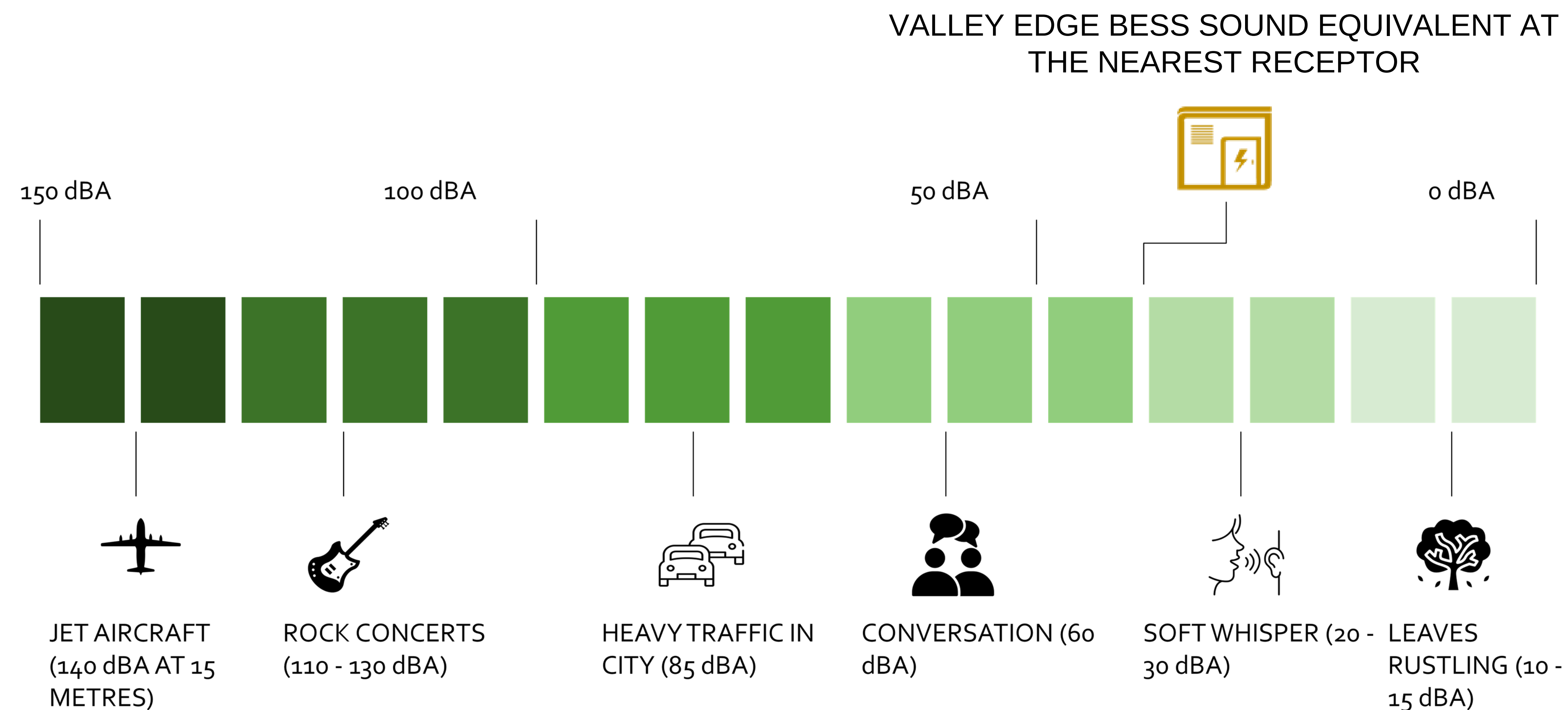


Why here? The proposed project location satisfies the conditions necessary to develop a BESS, including regional need, land owner willingness, proximity to transmission, low environmental impact, flat terrain, construction feasibility, and site accessibility.



- An Environmental Evaluation and Environmental Protection Plan for Valley Edge BESS is underway to assess potential impacts to the environment resulting from BESS development.
- Where necessary, measures will be identified to mitigate potential impacts.
- The Environmental Evaluation and Environmental Protection Plan will be submitted to the Ministry of Environment and Protected Areas for review and feedback.

- Both battery container fans and transformers emit noise - fans oscillate to cool the batteries during warm conditions, and transformers emit a humming noise.
- A Noise Impact Assessment has been conducted and will be included in Neoen's AUC application.
- Valley Edge BESS will comply with AUC Rule 012: Noise Control, which is below 40 dBA at the nearest dwelling.



- BESS are designed to prevent risk of hazard, including thermal runaway and spill events.
- Thermal runaway occurs when damaged battery cells heat abnormally, resulting in the possibility of smoke, fire, or combustion.
- Spill events, including refrigerant, coolant, and oil spills, can result from equipment malfunctions or blunt force to BESS components.
- Hazard events are rare and are prevented by rigorous safety design, thorough maintenance, 24/7 monitoring, and stringent safety protocols.
- Valley Edge BESS will incorporate active and passive protections, such as the use of fire barriers, battery spacing, and the use of non-combustible oils, to mitigate risks.
- Neoen engages local emergency responders in the development of its fire prevention and emergency response plans, and provides first responder facility training.



BESS construction typically takes 1.5 years to complete, and includes the following activities:

- Temporary fence installation
- Equipment mobilization
- Temporary storage areas
- Material and soil deliveries (by truck)
- Clearing and grading
- Shallow excavation and pouring of concrete slabs or pile installation
- Hoisting of pre-assembled battery containers and transformers
- Erection of steel structures and transmission lines
- Electrical connection work
- Acoustic barrier wall installation
- Landscaping





Did you know that Neoen is a pioneer in battery energy storage? Neoen delivered the world's first utility scale battery, Victorian Big Battery, located in South Australia.

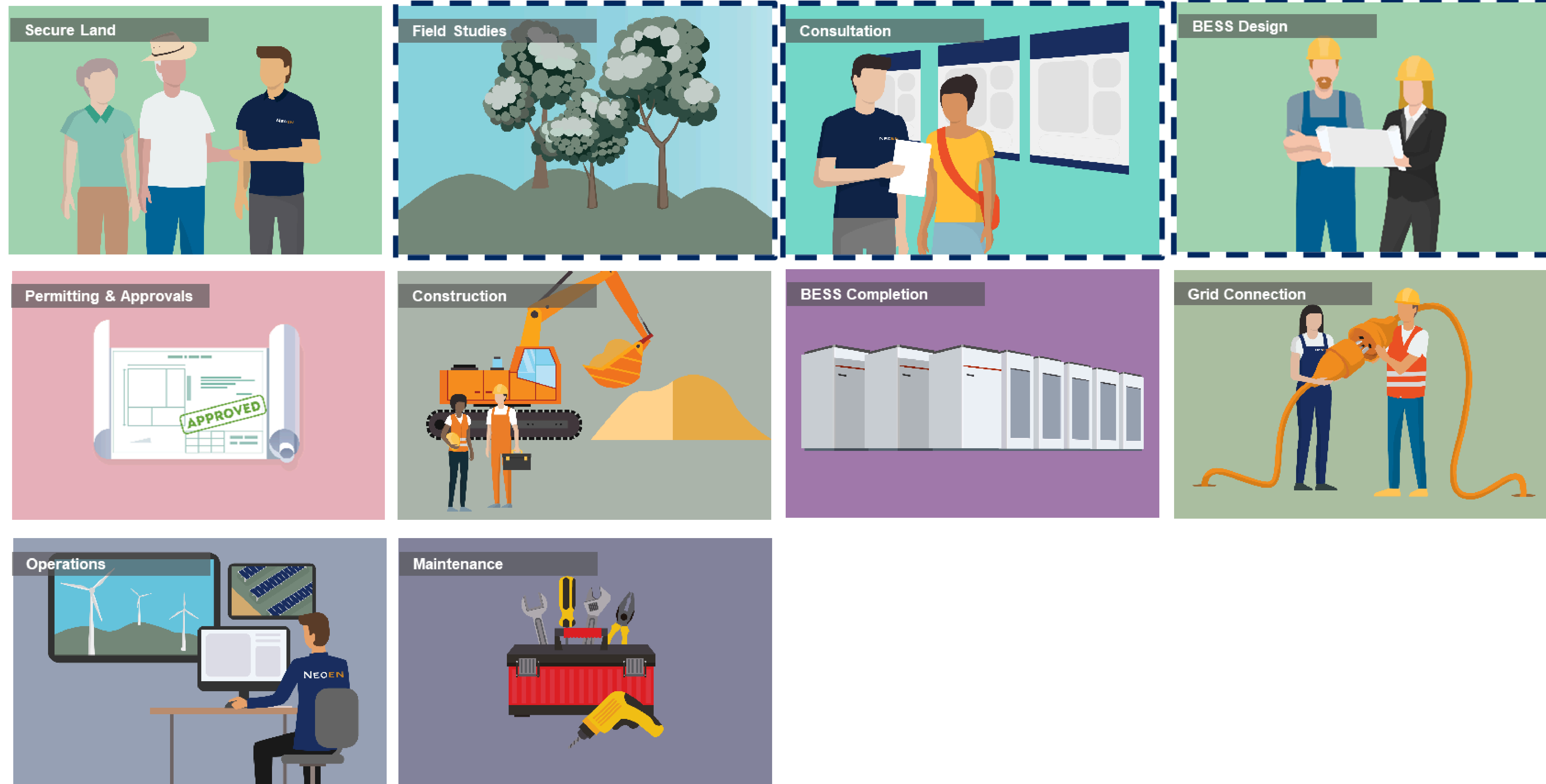


Valley Edge BESS is expected to complete one charge and discharge cycle per day.

A small crew of workers, contracted by Neoen, will operate Valley Edge BESS. Neoen can elect to operate each day or not.



WE ARE HERE



2024 - Q2 2025

PROJECT DEVELOPMENT
PUBLIC CONSULTATION

Q3 - Q4 2025

SUBMISSION OF AUC &
MUNICIPAL DEVELOPMENT
APPLICATIONS

Q4 2027

CONSTRUCTION

2029

OPERATIONS
(20+ YEARS)

- The consultation period for Valley Edge BESS began in late 2024 and will continue through spring 2025.
- Neoen is consulting landowners and occupants within an 800-metre radius of the proposed project lands as well as stakeholders and Indigenous communities.
- Feedback gathered during the consultation period will inform potential project improvements and will be entered into a public consultation record that will form part of Neoen's AUC application.



We want to hear from you!

- Phone: (587) 434-7547
- Email: sbrown@sabreenergyconsulting.com
- Web: www.valleyedgebattery.ca (via feedback form)
- Mail: Box 3, Suite 530, 150 9th Avenue SW, Calgary, AB T2P 3H9
- Request a 1-on-1 meeting

- Neoen believes its projects should benefit the communities that host them.
- Community benefits for Valley Edge BESS will include:
 - Local job and spending opportunities.
 - A community benefits fund to support clean energy, biodiversity, environmental, Indigenous-specific, cultural, social and/or educational initiatives.
 - A local art initiative.
- Community benefits for Valley Edge BESS will come into effect as early as construction.



VALLEY EDGE BESS OPEN HOUSE