**GEORGETOWN SOLAR + ENERGY STORAGE PROJECT** 

# WELCOME

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### GEORGETOWN SOLAR + BATTERY ENERGY STORAGE PROJECT STAKEHOLDER OPEN HOUSE

Please sign in at the registration desk then come say hello and check out our display boards



The Westbridge Team is here to listen to your feedback, provide information about the Project, and answer your questions

# **THANKS FOR ATTENDING!**

# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT ABOUT US

### WESTBRIDGE ENERGY CORPORATION

Westbridge is a publicy-traded renewable energy company listed on the Toronto Venture Exchange with a focus on originating and developing utilityscale solar and energy storage projects to deliver clean electricity. The management team behind Westbridge has developed more than 2gigawatts of renewable energy capacity across Europe and North America, including 576  $MW_{ac}$  of near-construction utility scale solar PV projects in Alberta. These projects will support clean energy procurements by government, various industries, and utilities.



**GEORGETOWN SOLAR + ENERGY STORAGE PROJECT** 

# **PROJECT INFORMATION**

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### **PROJECT TYPE AND SIZE:**

- 230 MW<sub>ac</sub> Solar Photovoltaic
- 100 MW Lithium Ion Battery Storage

### TOTAL CAPACITY DELIVERED TO THE GRID:

• 230 MW<sub>ac</sub>

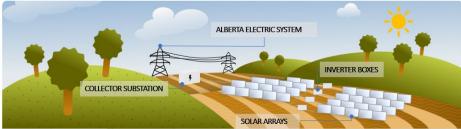
### **EXPECTED COMMERCIAL OPERATION DATE:**

• Q3 2023

### **PROJECT DURATION:**

• 35 + Years

#### SOLAR FARM COMPONENTS



# SOLAR PROJECT COMPONENTS SOLAR MODULES (PANELS):

• Approximately 433,000 bifacial modules

### **COLLECTION SYSTEM:**

• 34.5 kV collector lines will connect to the Project substation. Collector lines will be located underground where feasible.

### **POWER CONVERSION STATIONS:**

• 75 Inverter/Transformer Stations to convert direct current to alternating current and to boost the voltage to 34.5 kV.

### **PROJECT COLLECTOR SUBSTATION:**

• Proposed location is 15-08-21-25W4M

### **ACCESS AND ROADS:**

 Access will be in common with collector lines. Existing trails and roads will be used where possible.

**GEORGETOWN SOLAR + ENERGY STORAGE PROJECT** 

# **PROJECT INFORMATION**

### **PURPOSE AND USE**

### WHAT IS LARGE SCALE BATTERY STORAGE?

- Battery storage enables power system operators and utilities to store energy for later use.
- A battery energy storage system charges from the electric grid or solar power plant and then discharges that energy for use at a later time.



### **BATTERY STORAGE COMPONENTS**

### **BATTERY MODULES:**

- Storage of electric energy
- Number to be determined

### **SENSORS AND CONTROLS:**

 Required for monitoring and communication with the grid system operator

#### **INVERTERS:**

 Convert direct current to alternating current

### WEATHER PROOF CONTAINERS:

• BESS containers are modular structures that house the major system components

### **HVAC SYSTEMS:**

• Provide the necessary climate control

# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT PROJECT LOCATION

Carseland



Capacity and proximity of the transmission power line



Favorable sunlight resource



Suitable land characteristics for solar installation – level terrain, cultivation, dryland

Landowner, community, and municipality open to hosting a solar development



Georgetown Solar Project Area

# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT PROJECT LAYOUT



The Project area encompasses approximately 690 acres of buildable area



Use of existing approaches and access trails where possible Environmental constraints mapping was used to avoid wetlands, drainages, and grassland habitats

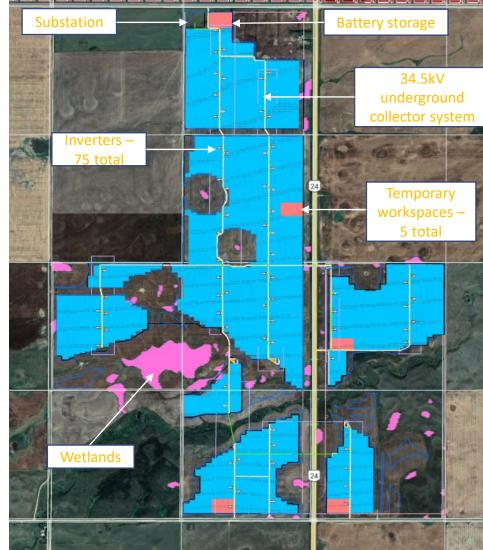
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**Design considers** 

municipal, provincial

& infrastructure

setbacks



# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT COMMUNITY & ECONOMIC VALUE

## VALUE CREATION

#### LOCAL EMPLOYMENT:

- Approximately 250 full-time jobs during construction
- 2-5 full time and part time jobs during operations

#### LOCAL ECONOMY:

 Local businesses will experience increased activity in hospitality, retail, and other service industries during development, construction, and operation

#### **PROPERTY TAXES:**

• Annual property taxes paid to Vulcan County resulting in financial benefits to the community

#### **CLEAN ELECTRICITY:**

- Local generation of renewable energy adds to the province's energy mix providing a long-term, low cost and low carbon energy source
- The Project is expected to generate emission-free electricity to power approximately 30,000 Alberta homes





GEORGETOWN SOLAR + ENERGY STORAGE PROJECT REGULATORY AGENCIES

## **REGULATORY APPROVAL**

We are engaging with various agencies at all levels of government. Alberta's electrical system is regulated by the Alberta Utilities Commission (AUC), an independent agency of the province that ensures fair and responsible delivery of utility services. AUC approval is required for the construction, operation and maintenance and decommissioning of power plants in Alberta. It is the AUC's responsibility to examine and approve siting and construction of any electric power plant facility in Alberta, including solar power and battery storage facilities.

Before Westbridge can begin construction of the proposed project, the AUC must approve the facility applications, which we anticipate filing in Q4 2021. Residents and other stakeholders will have another opportunity to share their feedback prior to a decision being made regarding the project.

**KEY REGULATORY STAKEHOLDERS INCLUDE:** 







# WESTBRIDGEGEORGETOWN SOLAR + ENERGY STORAGE PROJECTENERGY CORPENVIRONMENTAL CONSIDERATIONS

### **ENVIRONMENTAL STUDIES**

#### FIELD STUDIES WERE INITIATED IN 2020 AND COMPLETED IN 2021

- Environmental constraints mapping to identify buildable areas of land and avoid environmentally sensitive areas
- Desktop wetland delineation and field verification to minimize impacts to wetlands and surface waters
- Wildlife surveys to mitigate effects to local wildlife and habitat included:
  - breeding bird
  - spring and fall bird migration
  - raptor
  - amphibian
  - sharp-tailed grouse

### CONSULTATION WITH ALBERTA ENVIRONMENT AND PARKS (AEP) IS ONGOING

- The Renewable Energy Submission Report was submitted to AEP on September 3, 2021
- AEP's review is expected to be complete in December 2021/January 2022



### **UPCOMING ENVIRONMENTAL STUDIES:**

- Conservation and Reclamation Plan
- Environmental Protection Plan
- Environmental Evaluation

# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT STAKEHOLDER CONSIDERATIONS

#### DUST

• Westbridge will work with the County to ensure dust mitigation is in place and impact is kept to a minimum

#### **INCREASED TRAFFIC**

- Main access into the Project site is proposed via Township Road 212 and Highway 24
- Speed limits will be enforced through the Project area and on county roads
- Traffic will be increased during the construction phase of the Project. During the operations phase, site visits will be weekly.

#### FIRE AND EMERGENCY RESPONSE PLAN

• Westbridge will work with the County and local Fire Chief to develop a Fire and Emergency Response Plan

#### WATER RESOURCES

 Solar farms do not require access to water. Solar panels are not washed during operations except in extreme cases of soiling.



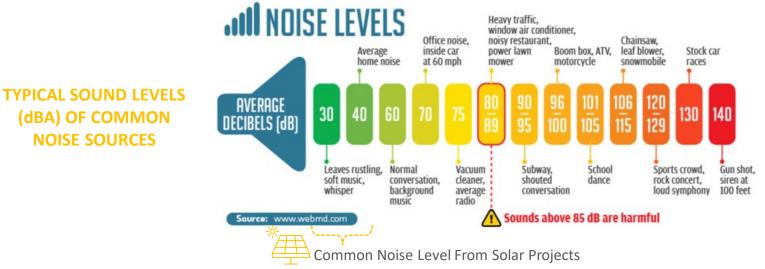
# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT STAKEHOLDER CONSIDERATIONS

### NOISE

- All solar energy projects must comply with AUC Rule 012: Noise control
- A cumulative Noise Impact Assessment is underway for all residences and dwellings within 1.5 km of the project
- Solar modules do not emit any sound, inverters and transformers emit a very low-level noise

## **GLINT AND GLARE**

- All solar energy projects must comply AUC Rule 007 to obtain approval
- Solar glare assessment reports must include dwellings and roads within 800 m from the boundary of the project and aerodromes within 4,000 m from the boundary of the project
- The glint and glare study for the project is underway



# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT STAKEHOLDER CONSIDERATIONS

### WEED MANAGEMENT AND SOIL EROSION

- Westbridge will abide by the *Weed Management Act* to minimize weeds during operation
- A detailed Conservation and Reclamation Plan will be prepared for the management of soils, weeds, and revegetation and will be submitted to the AUC
- An experienced O&M contractor will be retained to oversee weed control during operations





### SITE MAINTENANCE

- It will be necessary to maintain the land in such a way that vegetation does not shade or in other ways impact the solar panels
- It is anticipated that the site will be planted with mostly native grassland plant species offering several benefits:
  - Maintain the nutrient quality of the soil
  - Manage weed growth
  - Reduce soil erosion
  - Create pollinator-friendly habitat





# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT PROJECT LIFE CYCLE

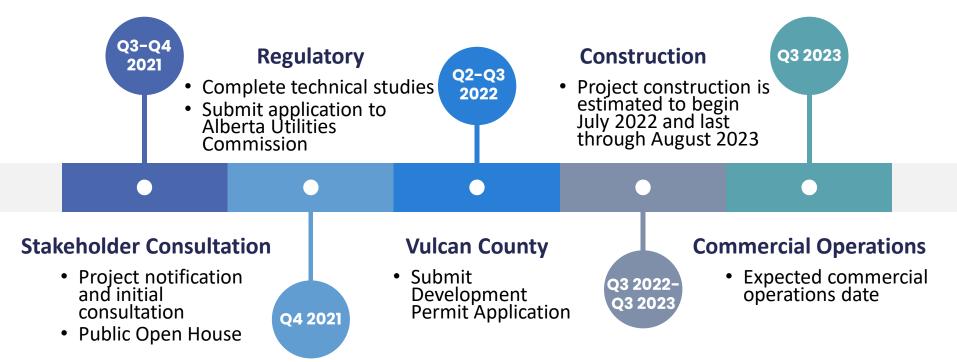
## **PROJECT END OF LIFE**

- At the end of the project's life, it will be decommissioned or repowered
- When decommissioned, equipment such as the solar modules and racking will be salvaged and recycled
- Solar installations primarily use steel posts that are driven or screwed into the ground, and only rarely use concrete foundations
- Reclamation will be consistent with the Alberta Conservation and Reclamation Directive for Renewable Energy Operations
- The landowner can resume normal agricultural operations following the 35 + year lifespan of the solar project



# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT PROJECT SCHEDULE

### **PROJECT SCHEDULE**



# GEORGETOWN SOLAR + ENERGY STORAGE PROJECT WHAT'S NEXT

### STAKEHOLDER AND COMMUNITY CONSULTATION

Westbridge will be following up with the Georgetown Solar Project stakeholders to provide additional information about the Project. We encourage you to reach out at any time to discuss the project with us.



For more information on how you can participate in the AUC process, the AUC brochure, "Public Involvement in a Proposed Utility Development", is available at the registration desk

# **THANK YOU FOR ATTENDING!**