# Meadowview Solar Project

Glooscap First Nation March 20<sup>th</sup>, 2024

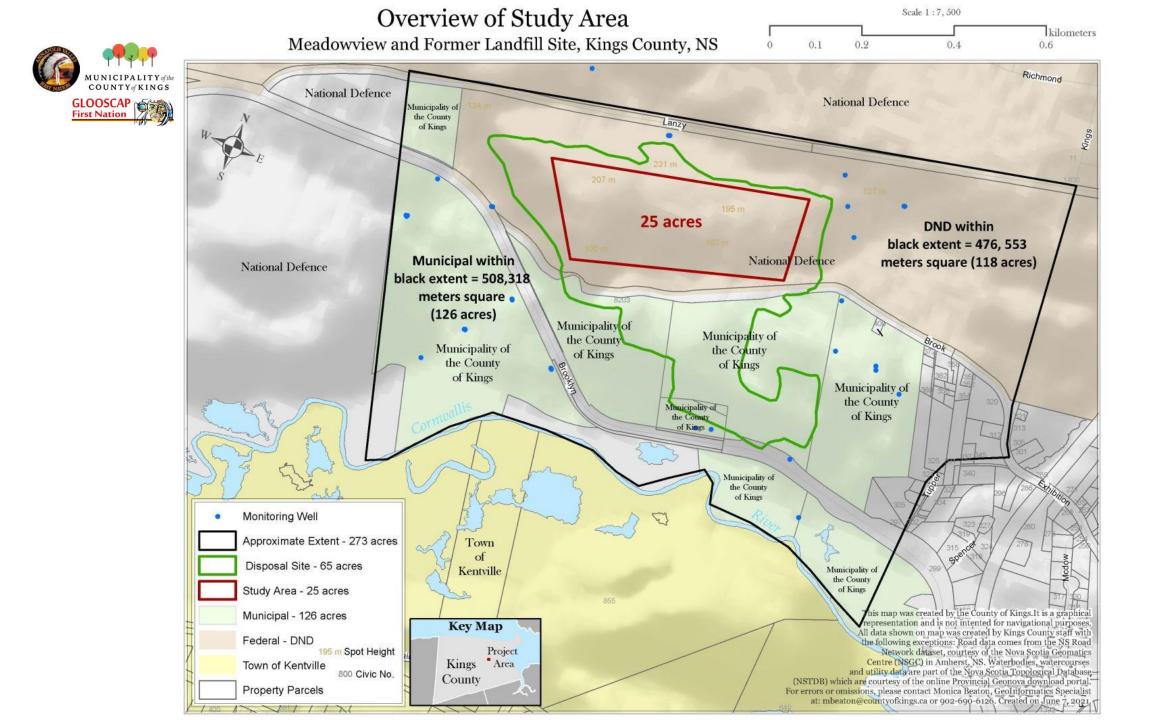


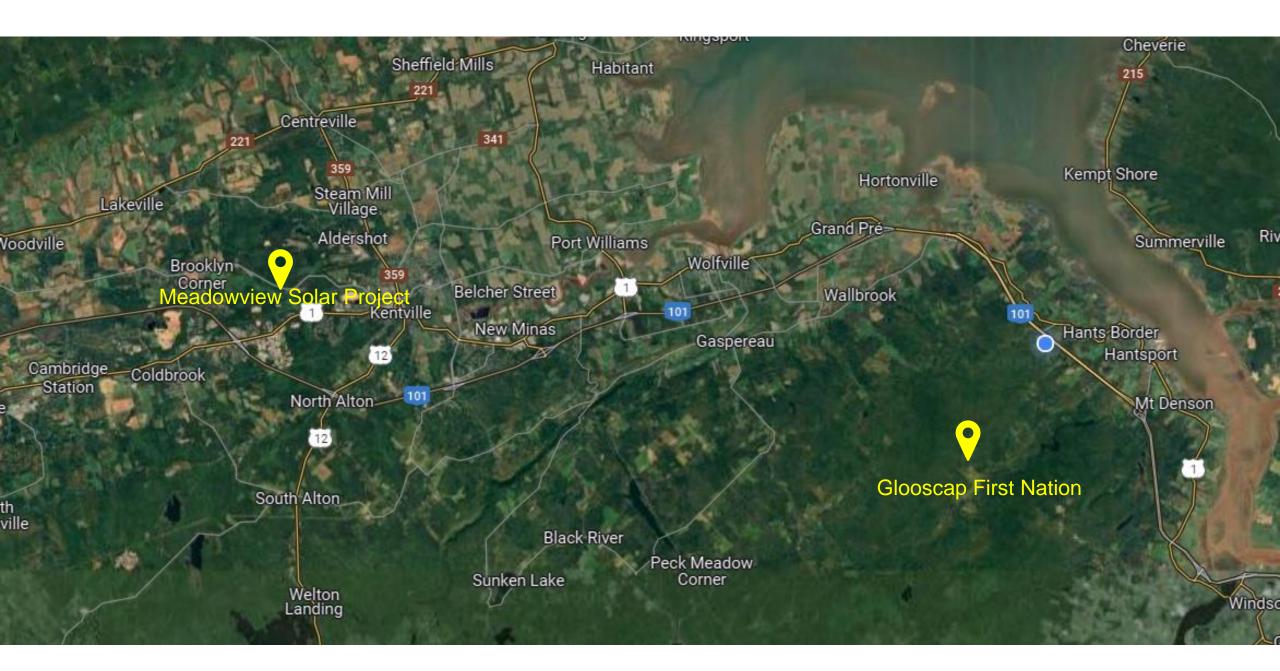


#### Meadowview Solar Project



- The Meadowview Solar Project is situated on a capped landfill site with a historically marginalized African Nova Scotia community (off Brooklyn Street in North Kentville)
- Project Purpose:
  - The project aims to repurpose the brownfield site into a 7 MW solar garden, transitioning it into a sustainable energy solution.
  - By harnessing solar energy, the project seeks to provide renewable power to the community with mitigating environmental impacts.





#### Significance for the Community



- It represents a step toward energy independence, sustainability, and resilience for the community
- By embracing renewable energy, the project aligns with broader objectives of environmental stewardship and community empowerment
- Community Impact:
  - Provide access to clean, renewable energy to residents through a subscription-based model
  - Creates economic opportunities through job creation, training, and local procurement
  - Fosters community pride and ownership in a project that directly benefits members



#### Historical Context of the Meadowview Community

- Meadowview, Nova Scotia, originated as an unplanned working-class community on the edge of the Cornwallis River floodplain, near Kentville
- It faced numerous challenges, including encroachment by a military base, a tuberculosis sanatorium, open- pit dumps, and a toxic county landfill.
- Residents endured unequal environmental risks due to the community's designation as a dumping ground
- The community was stigmatized as a rough area, exacerbating socio-economic disparities and limiting access to resources and opportunities.





#### Community Empowerment and Advocacy

Despite challenges, residents began advocating for improved conditions and successfully accessed better community services

Efforts led to the closure of the landfill, marking a significant milestone in the community history

COUNTY of KINGS



#### Importance of Repurposing Brownfield Sites



- Repurposing brownfield sites, such as the capped landfill in Meadowview, is crucial for environmental remediation and community revitalization
- Transforming former industrial or waste sites into renewable energy projects helps mitigate environmental risks and promotes sustainable development
- Projects like this demonstrate the potential to turn past challenges into opportunities for positive change and community empowerment



# Why this Project is Beneficial

- Converts brownfield site into a solar generation brightfield
- Project aligns with objectives of Community Solar Program
- Provides renewable energy to locals (subscription based)
- More renewable energy to NS grid
- Truth, Awareness & Advocacy



### Project partnerships

 Glooscap First Nation, Annapolis Valley First Nation, And Municipality of the County of Kings. Majority owned by First Nations



 Collaboration with consultant Natural Forces Solar to complete feasibility studies, environment reports, designs and costing estimates.









Build a solar garden with environmental and economic benefits for project partners and the communities they serve



Repurpose a closed landfill site to create a hub of green energy



Reduce greenhouse gas emissions and help reach emission reduction goals in nova scotia



Create and affordable green energy option for individuals who may not otherwise have the money or property required to invest in their own solar projects



Provide direct benefits to the host community and equitable access to green energy

#### Feasibility Studies



- Engaged third party subject matter experts
  - The Meadowview Solar Project has enlisted the expertise of third-party subject matter experts to conduct comprehensive feasibility studies
- Results of the technical and financial feasibility studies:
  - Technical Feasibility: Through detailed analysis, including solar capture studies, grid analysis, and geotechnical investigations, the project has confirmed its technical feasibility.
  - Financial Feasibility: Rigorous financial modeling and analysis have been conducted to assess the economic viability of the Meadowview Solar Project.





#### Technical Details



- Description of the proposed solar garden:
  - The Meadowview Solar Project proposes the development of a 7 MW solar garden on the capped landfill site
  - The solar garden will consist of PV mounted fixed-tilt solar racking system.
  - The project aims to convert the brownfield site into a brightfield for renewable energy generation.

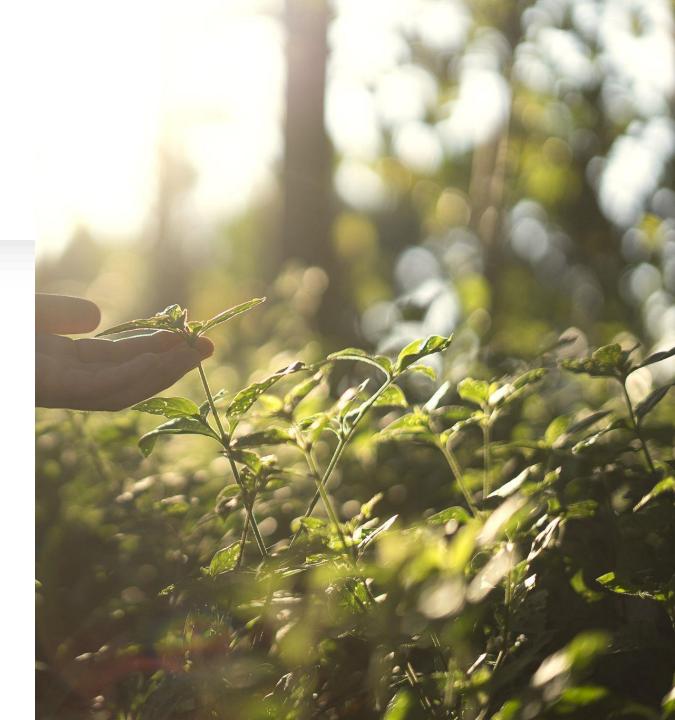
#### Specifications of the solar panel and racking system:

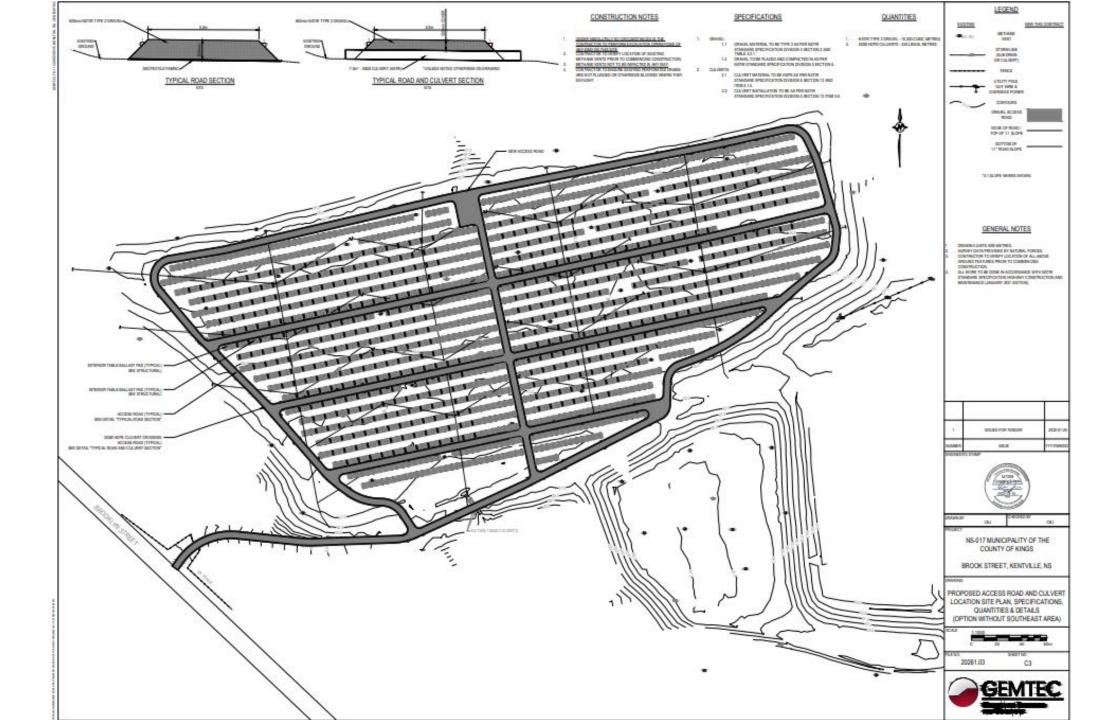
- Solar panels: High-efficiency solar panels will be utilized to maximize energy capture
- Racking System: The solar panels will be mounted on fixed-tilt racking systems, supported by concrete ballast blocks
- The racking system design ensures stability and minimizes environmental impact, as it does not require embedding into the ground.

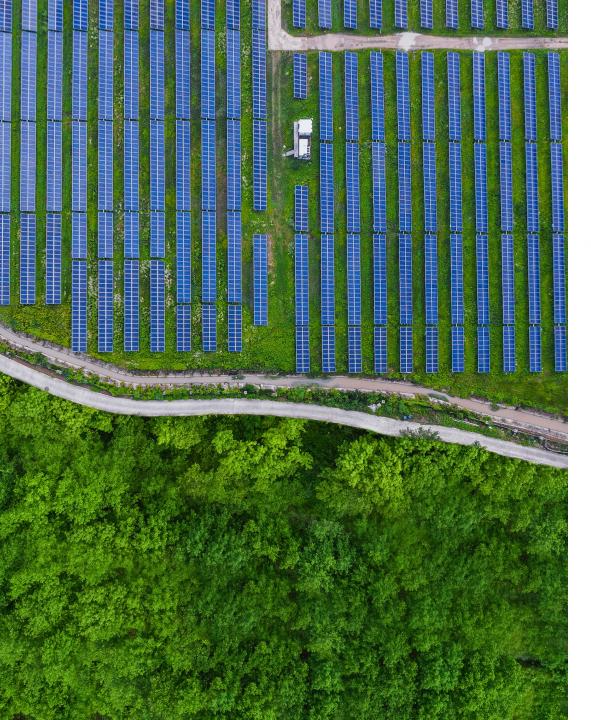
#### Technical Details



- Species at Risk Study and Findings:
  - A comprehensive study of species at risk was conducted to assess potential impact on local biodiversity (2021)
  - The project incorporates measure to mitigate potential impacts on wildlife and habitats, ensuring environmental stewardship.
- Geotechnical Investigation and Environmental Considerations:
  - Geotechnical investigations were conducted to assess soil conditions and determine the suitability of the site for solar development
  - Environmental considerations include measures to minimize disturbance to the capped landfill and surrounding ecosystem
  - The project adheres to strict environmental regulations and guidelines to ensure sustainable development and protection of natural resources







#### Energy Production and Benefits



- Energy production in 1 year = 11,000 Mega Watt Hours Benefits of renewable energy for the local community
- Equivalent energy = power for 1,000 homes
- The renewable energy generated will contribute to reducing carbon emissions and dependence on fossil fuels in the community.
- Subscription based renewable energy access:
  - Through subscription plans, participants can access clean energy generated by the solar project, supporting their sustainability goals
  - Subscription based models ensure equitable access to renewable energy, empowering the community to participate in the transition to a more sustainable energy future.

For more information, please visit the project website at: https://www.countyofkings.ca/meadowviewsolar



#### **Contact Information**

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Your feedback and insight are invaluable in shaping these projects for the community!