

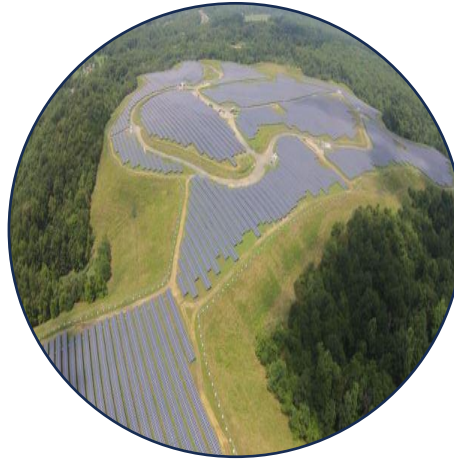


Meadowview Solar Project

“Brownfield to Brightfield”



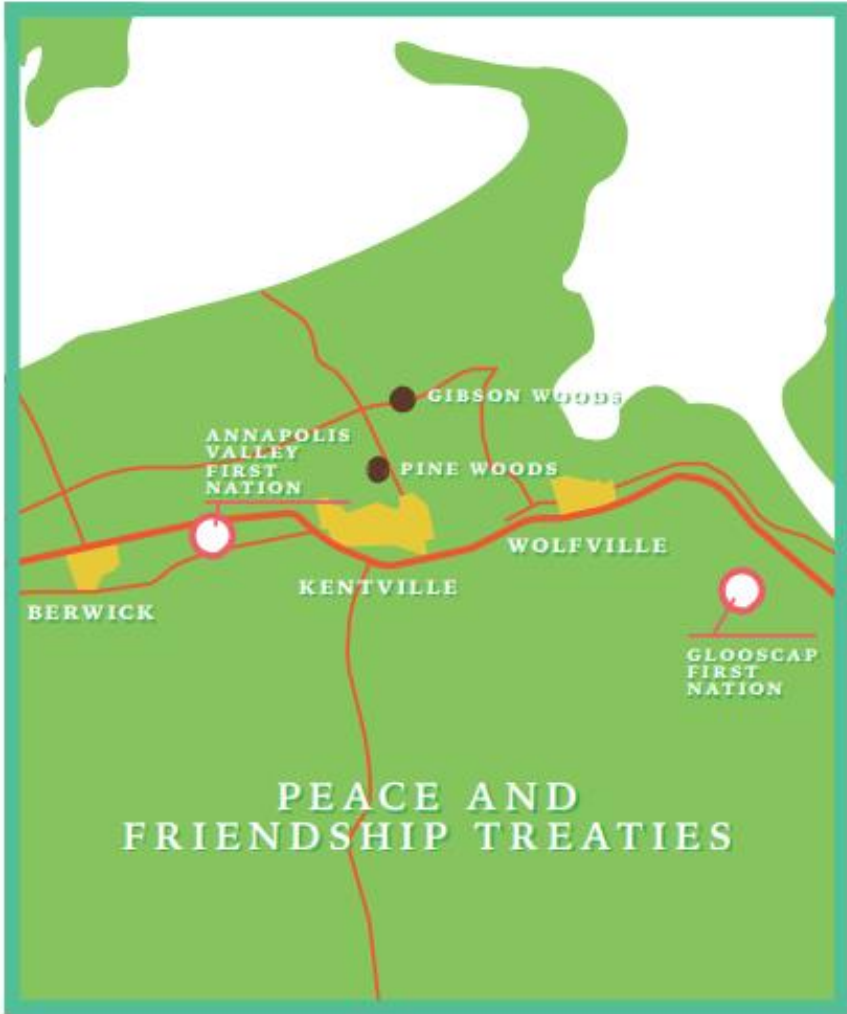
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COUNTY of KINGS



Monday, February 12th, 2024



Land Acknowledgement



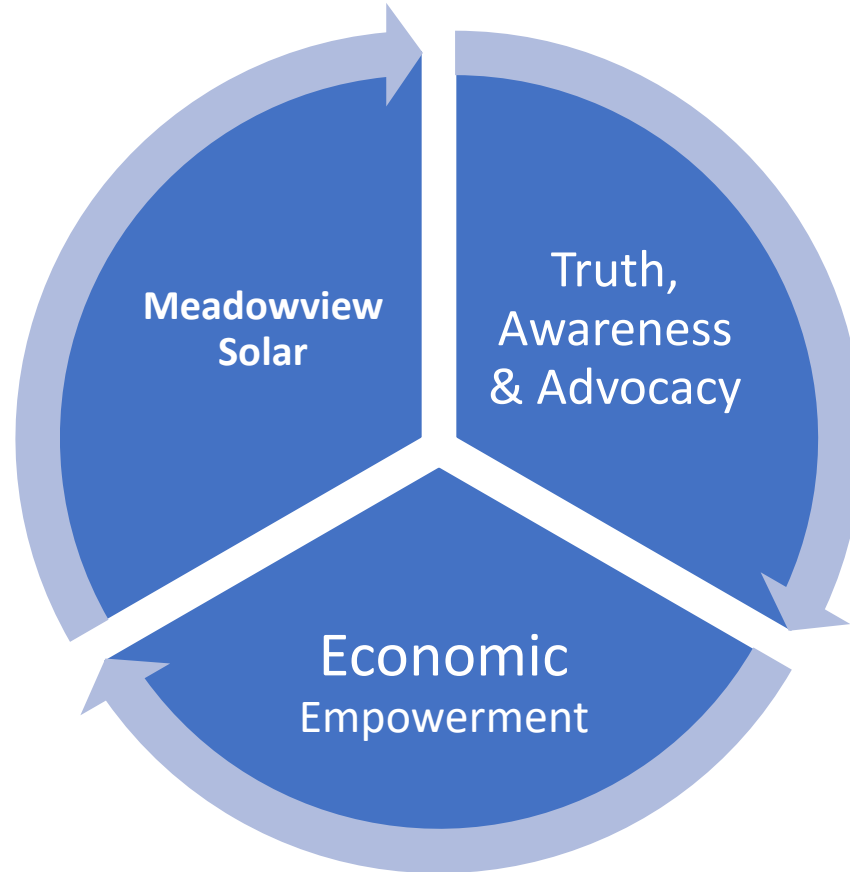
Discussion Points

- Introduction
- **Background**
- Technical Aspects
- **Envisioned Provincial Program**
- About the Partnership
- **Next Steps**
- Questions & Answers



Introduction:

The Project & Strategy of Belonging:



Introduction:

Key Project Elements



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- *Located on a closed Municipal Landfill*
- **Requires a Provincial Program (late spring?)**
- *Assumed it will be a competitive and subscriber based Provincial program*
- **A lease of land from DND**
- *Significant construction \$ subsidy*
- **Ongoing Community Engagement**



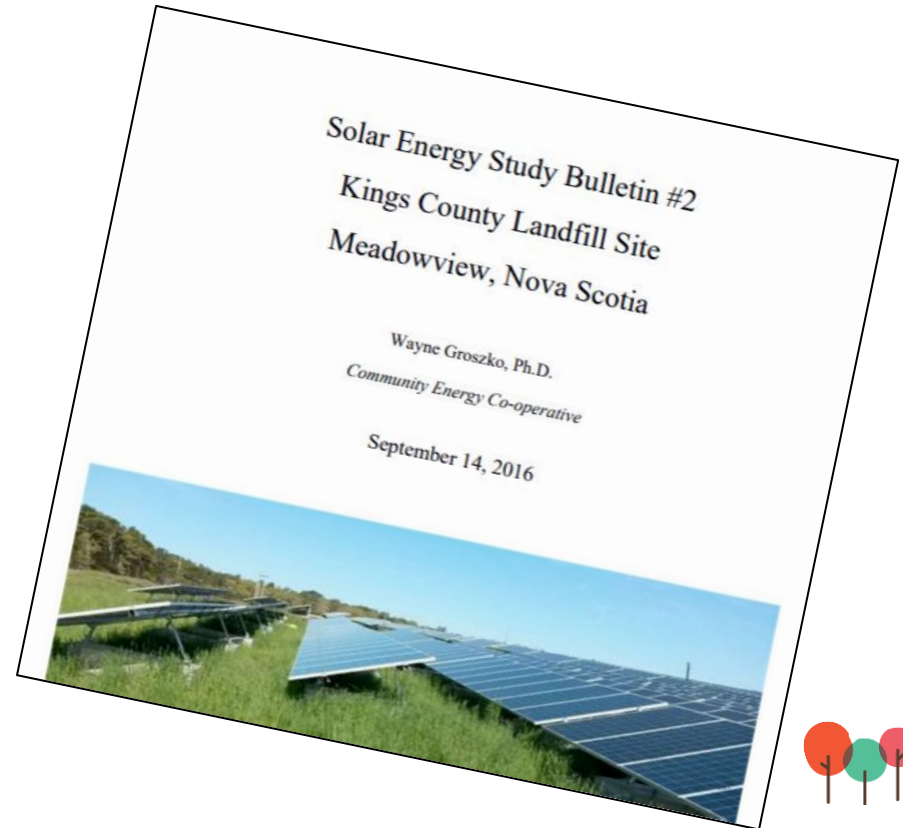
Background:

Community Origin of Project

- *Meadowview Community Development Association (MCDA)*
- **2016 Report - NSCC**



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Background:

Project Timeline



Significant Dates	Project Element Description
May 2016	<i>Solar Energy Feasibility Study – Kings County Landfill Site (Energy Sustainability Engineering Technology Program, NSCC) - MCDA</i>
February 2018	<i>Proposal for Feasibility Study – Solar Electric Project (Municipality of the County of Kings)</i>
November 2020	<i>Preliminary Feasibility Report – Meadowview Solar Energy Project (Natural Forces Solar Inc.)</i>
July 2022	<i>Meadowview Solar – Phase 2 Feasibility Assessment (Natural Forces Solar Inc.)</i>
October 2022	Project presentation to the Provincial Ministers of Natural Resources & Renewables & Municipal Affairs & Housing
Winter/Spring 2024	<i>Community Solar Program</i> anticipated to be open for applications

Background:

Study & Project Design



- Switch from a *Behind the Meter* sale to *In Front of the Meter* “grid supply”
- *Building on the MCDA report*
 - Engagement of subject matter experts
 - *Engineered design and financially modelled*
 - Program input provided to the Province



Technical Aspects

Due Diligence



- Advice from Subject Matter Experts:
 - Geotechnical Investigations
 - Structural & Civil Engineered Design
 - Environmental
 - Solar Capture Studies
 - Grid Analysis



Technical Aspects

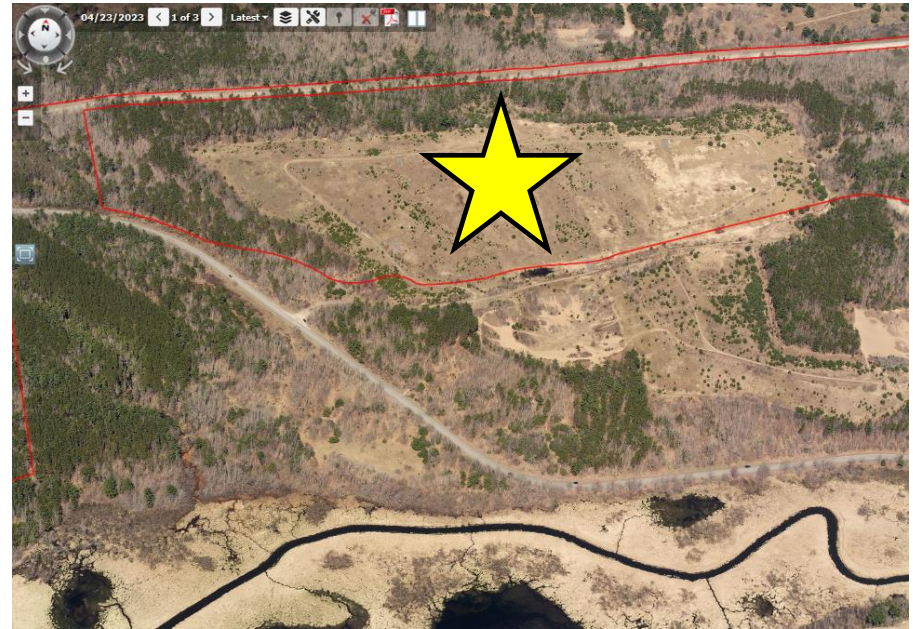
Geotechnical Investigations



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- Settling of landfill
- Existing waste-in-place & final cover of landfill cannot be disturbed
- Design considerations for roads



Technical Aspects

Solar Capture Studies & Financial Modelling

- Solar Capture study completed
- **Modelling confirmed project is viable**
- Construction, operating and rate of return estimates generated



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Technical Aspects

Structural / Civil Design



- Fixed-Tilt solar racking (best “Dollar per KW)
- Concrete ballast blocks for solar racking (not embedded into ground)



Technical Aspects

Environmental



- Species at Risk (SAR) Study completed (2021)
- No amendments to Site Closure Plan



Technical Aspects

Grid Analysis

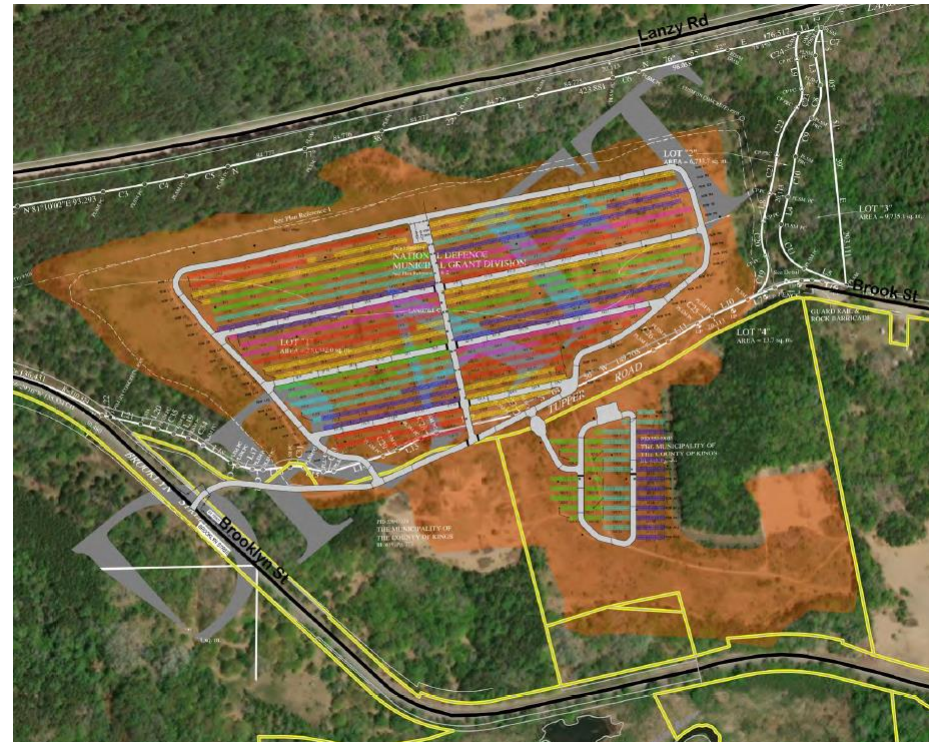


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GLOOSCAP
First Nation



- Electrical grid & local substation capacity review = sufficient



Technical Aspects

Power Generation & Capacity



- 7-Megawatt Project
- Energy production in Year 1 =
~ 11,000 Mega Watt Hours
- Equivalent energy = power for
~ 1,000 homes



Envisioned Provincial Program *Grid Supply*



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- “Grid Supply” model
- e.g., energy fed onto existing electrical grid



Envisioned Provincial Program

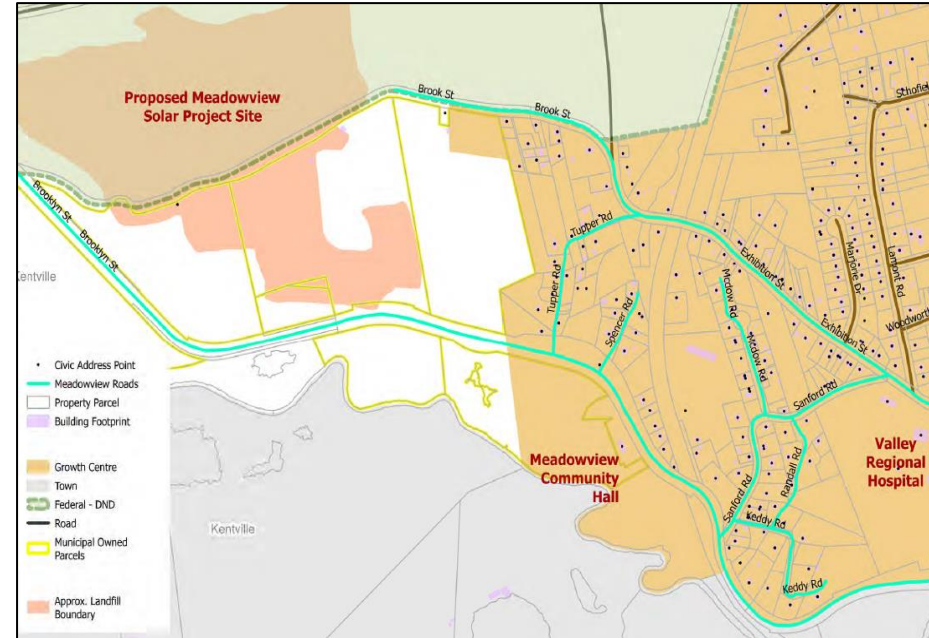


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- Targeted Subscribers:
 - Moderate income homes
 - Virtual purchase of solar energy
- Energy Rate set at amount required for viability
- Project to be advanced under a Provincial program

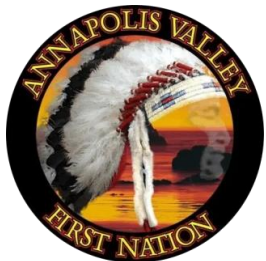


Envisioned Provincial Program

Grant Funding Needs



- Significant public (grant) funding required for construction
- Partnership of First Nations & Municipality = broader opportunities for public funding



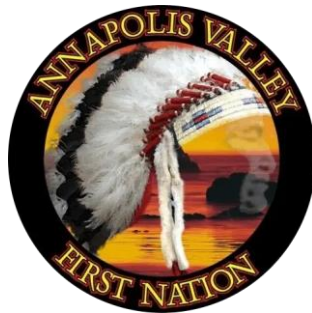
GLOOSCAP
First Nation



About the Project Partnership



- **Glooscap First Nation**
- **Annapolis Valley First Nation**
- **Municipality of the County of Kings**



GLOOSCAP
First Nation

About the Project Partnership



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- Is seen to be one means of acting upon truth and reconciliation
- Municipality benefits from First Nation experience in larger alternative energy projects
- Opens the project to broader range of public funding (programs tailored for partnerships)

Next Steps

From the Province

- Community Solar Program (2024)
- Provide “roadmap” to NSP Power Purchase Agreement
- Establishes Energy Rate (\$/KWhr)
- Term of contract set, e.g., sale of energy over 25 years



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Next Steps

For Partnership



- **Finalize technical aspects:**
 - Prepare our application for competitive intake
 - **Update cost estimate & project design**
 - Ensure conformance of project to Provincial Community Solar Program

Next Steps

For the Public



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- Project partners produce “*What We Heard Report*” to summarize public input
- Report back to the community (anticipated for spring 2024)



Next Steps

Commitment to Report Back



- Our commitment = to engage with you & keep you up-to-date
- Watch our Website for details!



<https://www.countyofkings.ca/meadowviewsolar>

Discussion



- Questions and answers



Thank-you

Special Thanks To:



- Meadowview Community Development Association
- **Annapolis Valley First Nation**
- Glooscap First Nation

For More Information, Please Visit Our Project Website at:

<https://www.countyofkings.ca/meadowviewsolar>

