



P.O. Box 1749
Halifax, Nova Scotia
B3J 3A5 Canada

Item No. 15.4.2
Halifax Regional Council
July 9, 2024

TO: Mayor Savage Members of Halifax Regional Council

FROM: Councillor Tony Mancini, Chair, Environment and Sustainability Standing Committee

DATE: June 13, 2024

SUBJECT: **Municipal Letter of Support for Community Solar Program**

ORIGIN

June 13, 2024 meeting of Environment and Sustainability Standing Committee, Item 10.3.1.

RECOMMENDATION

The Environment and Sustainability Standing Committee recommends that Halifax Regional Council direct the Chief Administrative Officer to provide a staff report to consider a Municipal letter of support for SolarBank Corporation's application to the provincial Community Solar Program.

BACKGROUND

Environment and Sustainability Standing Committee received a presentation dated June 13, 2024 to consider a Municipal letter of support for SolarBank Corporation's application to the provincial Community Solar Program.

For further information refer to the attached presentation dated June 13, 2024.

DISCUSSION

Environment and Sustainability Standing Committee considered the presentation dated June 13, 2024 and approved the recommendation to Halifax Regional Council as outlined in this report.

FINANCIAL IMPLICATIONS

No financial implications were identified.

RISK CONSIDERATION

No risk considerations were identified.

COMMUNITY ENGAGEMENT

Meetings of the Environment and Sustainability Standing Committee are open to public attendance and members of the public are invited to address the Standing Committee for up to five (5) minutes during the Public Participation portion of the meeting. Meetings are live webcast on Halifax.ca. The agenda, reports, video, and minutes of the Standing Committee are posted on Halifax.ca.

ENVIRONMENTAL IMPLICATIONS

No environmental implications were identified.

ALTERNATIVES

Environment and Sustainability Standing Committee did not provide alternatives.

LEGISLATIVE AUTHORITY

Administrative Order One, *Respecting the Procedures of the Council Administrative Order*, Schedule 5 Environment and Sustainability Standing Committee Terms of Reference, subsection 1(2)(b) and subsections 4(a) and (b) provide:

Purpose

1. (1) Subject to subsection 1A, the purpose of the Environment and Sustainability Standing Committee is to provide advice to the Council relating to the Environment and Sustainability including Solid Waste Resources, energy security and sustainable parks, forests (urban and rural) and open spaces and water resource management.

...

- (2) The other purposes of the Environment and Sustainability Standing Committee are to:

....

- (b) assist the Council in meeting sustainability and energy objectives;

Energy Choice and Security

4. The Environment and Sustainability Standing Committee shall:
 - (a) promote and enable a variety of energy choices for residents of the municipality;
 - (b) promote and enable sustainable and renewable sources of energy in the Municipality;

ATTACHMENTS

Attachment 1 – Presentation dated June 13, 2024

Report Prepared by: Dorothy Maponga, Legislative Assistant, Municipal Clerk's Office 902.478.2408

Attachment 1

Item 10.3.1

The future is bright

Nova Scotia Community Solar Program

Petpeswick Solar Project – up to 7 MW

Presented to

Halifax Regional Municipality

June 11, 2024



Table of Contents



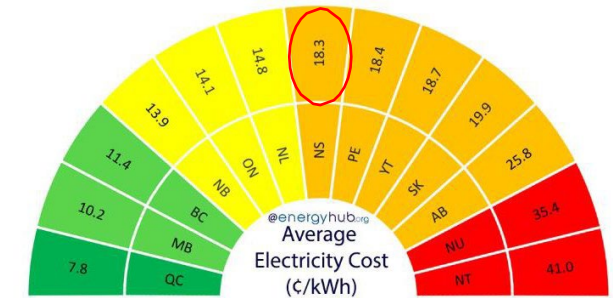
Community Solar Program
Opportunities/Benefits to Community
Company Information and The Sites
Communities Engagements, Project Progress, Municipal Support

Nova Scotia Needs Renewable Energy

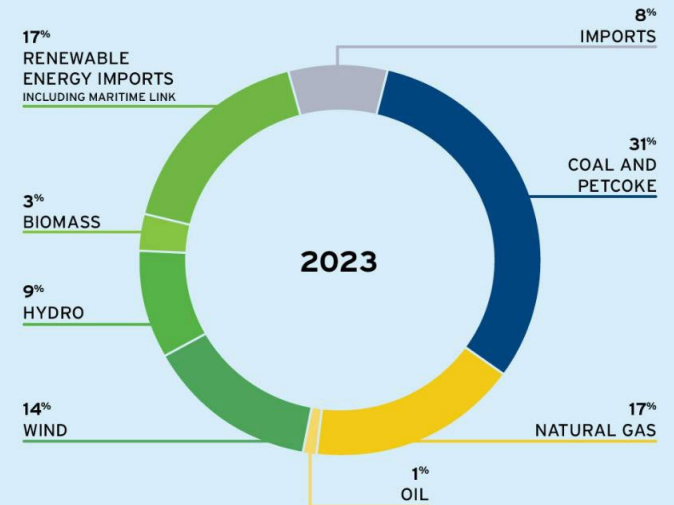
- NS has the following challenges:
 - High electricity price: \$0.183/kWh
 - High emission on electricity generation
 - Fossil fuel reduction: **31% of electricity from Coal; 17% from Natural Gas**
- NS has the most ambitious goals in Canada for cutting GHG emissions:
 - Phase-out of coal-fired generation by 2030, net-zero electricity by 2035
- NS will get 80% of its electricity from renewable resources by 2030 by:
 - **Rate-Based Procurement (RFP): 350 MW** of PPA issued in February 2022
 - **Green Choice Program (RFP): up to 350 MW** of PPA issued December 2023,
Submission Deadline: Jun 14, 2024
 - **Community Solar Programs: 100 MW** (2024)
- Community Solar Program was Launched on March 1, 2024. **Review at first come first serve basis.**

Electricity Prices in Canada 2023

Published by Rylan Urban on Feb 14, 2020. Last updated Sep 3, 2023.

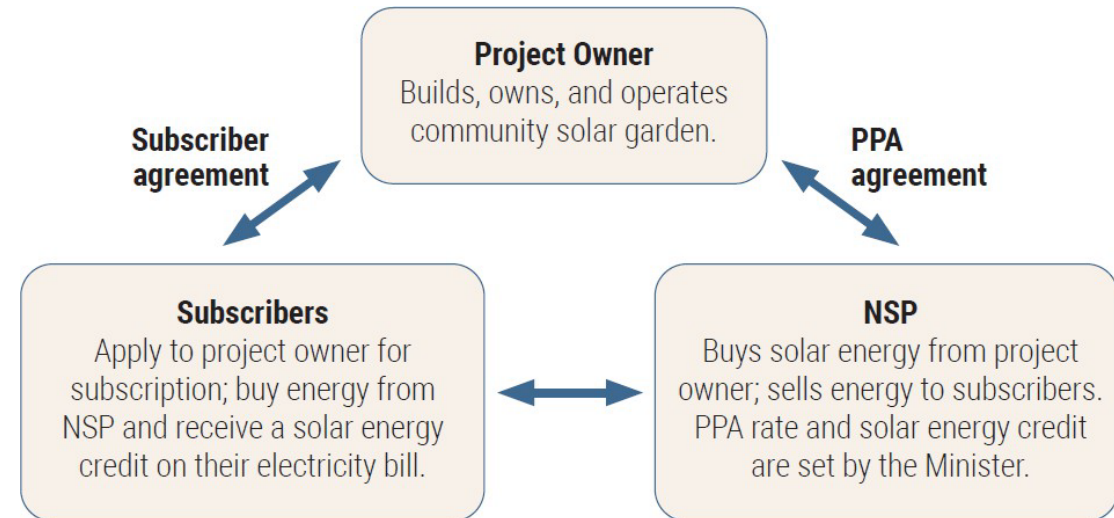


WHERE YOUR ENERGY COMES FROM NOW



Nova Scotia's Community Solar Program

- ✓ The NS Community Solar Program seeks to expand solar energy to those residences or businesses who are interested in using green energy but are unable to install solar PV panels
 - ✓ To build a community solar garden between 500 kW to 10 MW AC
 - ✓ Total Capacity for 2024 procurement: 100 MW AC
- ✓ How it works:
 - ✓ Project owners construct, generate and operate the community solar garden
 - ✓ Generated solar energy is sold to Nova Scotia Power (NSP) through a Power Purchase Agreement (PPA)
 - ✓ Residences or businesses (Subscribers) enter into a Subscription Agreement with the Project Owner and continue buying energy from NSP and receive \$0.02/kWh solar energy credit on their NSP bill
 - ✓ NSP administers the solar energy to subscribers, such as billing, payments
 - ✓ Project owners continue to engage subscribers and manage subscription
- ✓ Review at first come first serve basis.
- ✓ Contract Term: 25 Years



Community Benefits

This community solar project in Halifax Regional Municipality has numerous benefits to surrounding communities, and can play a significant role in strengthening future renewable energy initiatives:

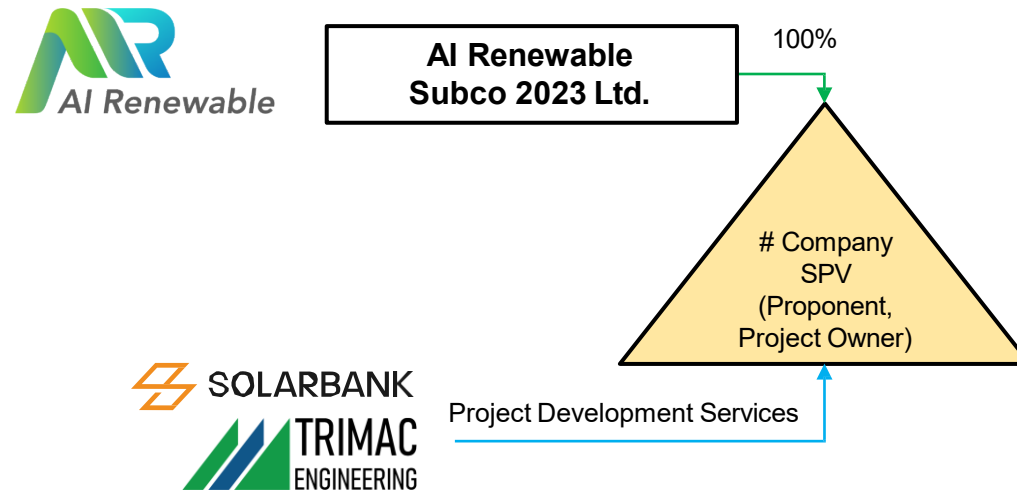
- Energy cost savings: Subscriber will receive **\$0.02/kWh credit** on their bills for the solar electricity subscribed
- Local **job creation** and economic growth
- Local green energy generation to **increase grid resilience**
- **Reduce emissions** (GHG)

The Proponent

Proponent

Proponent is a Special Purpose Vehicle (SPV) that is 100% owned by AI Renewable Subco 2023 Ltd (Subco). The parent company for the Subco is AI Renewable fund, a Canadian Flow-through Limited Partnership.

AI Renewable is actively offering partnership opportunity to marginalized community.





AI Renewable 2023 Limited Partnership

The AI Renewable 2023 LP, Is A **Flow-through** Limited Partnership, To invest on **Clean Infrastructure** and/or **Renewable** Energy Projects That Help To Reduce Energy Costs and GHG Emissions In Canada While Producing **Tax Benefits** And **Long-term Steady Cash Flows** For Investors.

MISSION STATEMENT:

To Be Part Of The Solution To Climate Change Through Tax-effective Sustainable Investments In Clean Infrastructure & Renewable Energy Technologies.



1,000+
Development
Projects

1,000MW+
Potential
Development Pipeline

100+
Solar Plants Under
Management

60 MW+
Projects
Built

4,000+
Homes
Powered

24/7/365
Control
Center

\$100M+
Managed Project
Financing

WE ARE A LEADING DEVELOPER IN DISTRIBUTED SOLAR AND STORAGE PROJECTS ACROSS U.S. AND CANADA

SolarBank is an established and trusted developer, engineer, and asset operator in the economy-wide pursuit of Net-Zero carbon emissions. We specialize in behind-the-meter (BTM) solar power plants, grid-connected community solar gardens, battery energy storage systems (BESS) and EV Chargers.

We are a first mover led by a seasoned management team. Our end-to-end solution has been validated by our 100% customer retention rate over more than a decade in projects of varying scope and scale. Our customers are stable, comprised of 90% government, utility and large commercial contracts. Against the backdrop of a favorable regulatory climate and surging customer demand for renewable energy and reduced emissions, we are uniquely positioned to expand into new markets throughout Canada and the U.S. while also transitioning to a more lucrative model that includes both “build and manage” and “build and own” renewable energy projects.



Full Vertical Integration

- While most of our competitors focus on single areas of the renewable energy value chain, **our expertise at every stage makes us highly competitive on cost and volume.**
- **We create value by designing, constructing and operating projects to maximize long-term performance and returns.**
- **Our in-house development, engineering and construction expertise means that we can finish turnkey solar projects in an efficient and timely manner.**

ORIGINATION:

- Policy analysis
- Financial analysis
- Site control

DEVELOPMENT:

- Grid Interconnection
- Regulatory Permitting
- Environmental Approvals
- Incentives & Tax Agmt.
- Power Purchase Agmt.

FINANCING:

- Equity
- Investment Tax Credit (ITC)
- Long-term Debt
- Construction financing

DELIVERY:

- Engineering
- Procurement
- Construction
- Commercial Operation

On-going Operation:

- Operation & Maintenance
- Subscriber Management
- Asset Management

Trimac Engineering



TriMac Engineering is a locally owned engineering firm with offices located in Sydney and Halifax, Nova Scotia. We are Mechanical and Electrical Engineering Consultants. Incorporated in 2015 with roots dating back to 1991, TriMac Engineering initially offered its clients mechanical and electrical Engineering Consulting services. We have since grown to offer clients a wide range of Engineering Consulting, Sustainability and Energy, Project Management and Development services across the entire province, with active projects from Yarmouth to Sydney.

The firm has particular expertise in the power generation, with a 30+ year working relationship with Nova Scotia Power.

Our Engineering process is guided by a value-added and client-focused philosophy. No matter the project complexity, the goal is simple – optimize project outcome, minimize project lifetime cost (www.trimaceng.ca).



**Andrew MacNeil,
P.Eng.Senior
Mechanical
Engineer,
Principal**

Andrew has over 16 years of mechanical engineering experience including HVAC, plumbing, fire protection, process equipment and piping, metals fabrication, commissioning and project management. He has overseen, managed and executed all aspects of projects from scoping/concept, through detailed design, construction, to final commissioning and completion. Andrew has worked in the engineering consulting, power generation and manufacturing industries.



**Blair MacNeil,
P.Eng.Senior
E&I Engineer,
Principal**

Blair has over 40 years of E&I engineering experience with designing, programming & commissioning PLC/DCS based industrial control systems, industrial measurements & final control elements. He also has experience in electrical distribution & motor control systems up to 4kv, and building electrical services such as lighting, fire detection and communications. Blair has worked in a wide range of industries including mining, pulp & paper, power generation & construction.



**Joel MacNeil,
P.Eng.
Mechanical
Engineer,
Principal**

Joel has over 10 years of mechanical engineering experience, the majority of which has focused on Renewable Energy. Joel's experience includes pumping systems, oil/water separation, process piping and equipment, instrumentation & controls (PLC), metals fabrication, machining, machine safety, and more. As a design engineer, project manager, and commissioning engineer, Joel uses his diverse knowledge base and skills portfolio to quickly find solutions to any challenge.

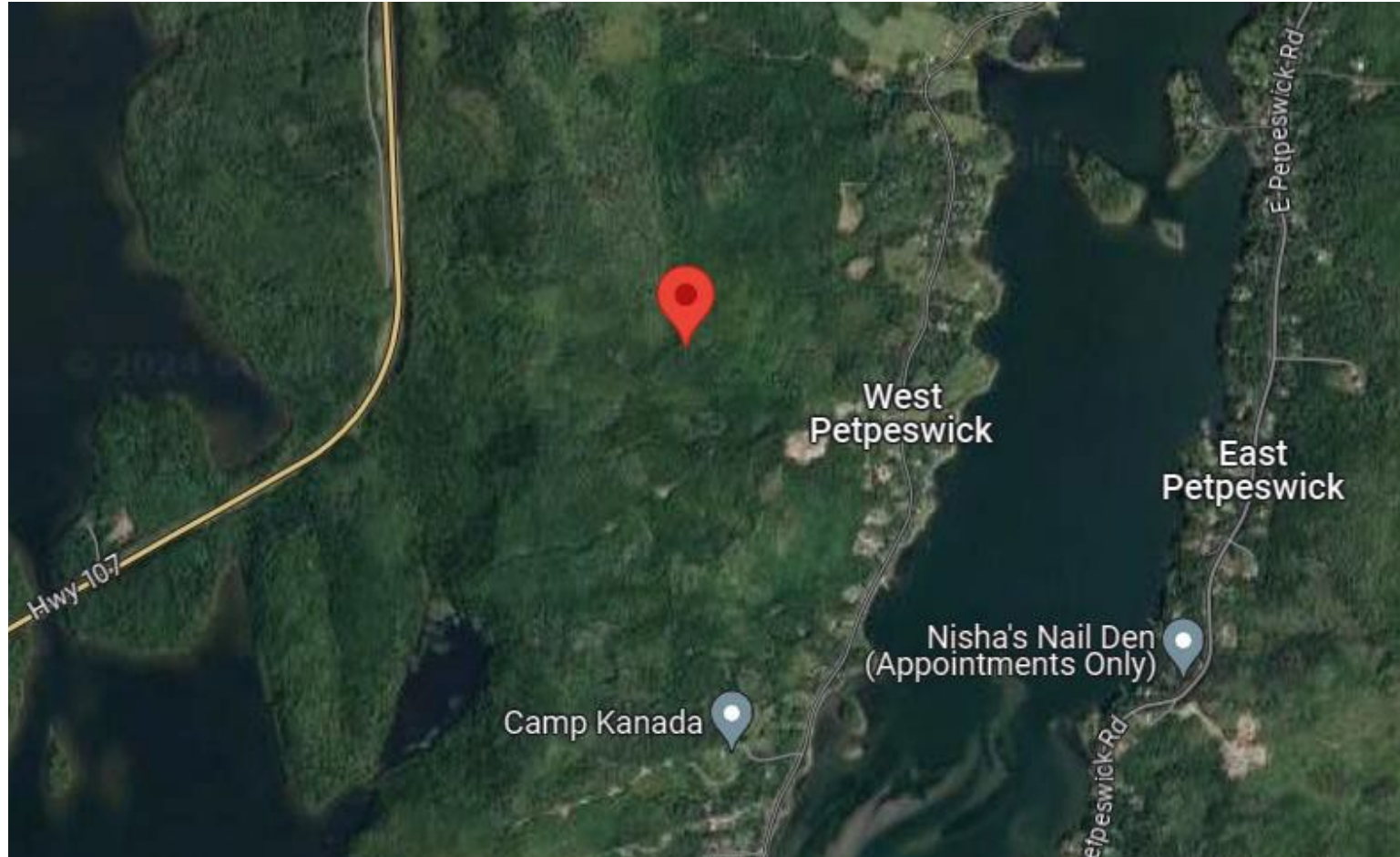
Solar Projects – Locations



Red Mark – Project Site

- Total 4 Solar Sites:**
Brooklyn (Annapolis)
West Petpeswick (HRM)
Enon Solar (CBRM)
Sydney (CBRM)

Petpeswick Solar Project – Site Location



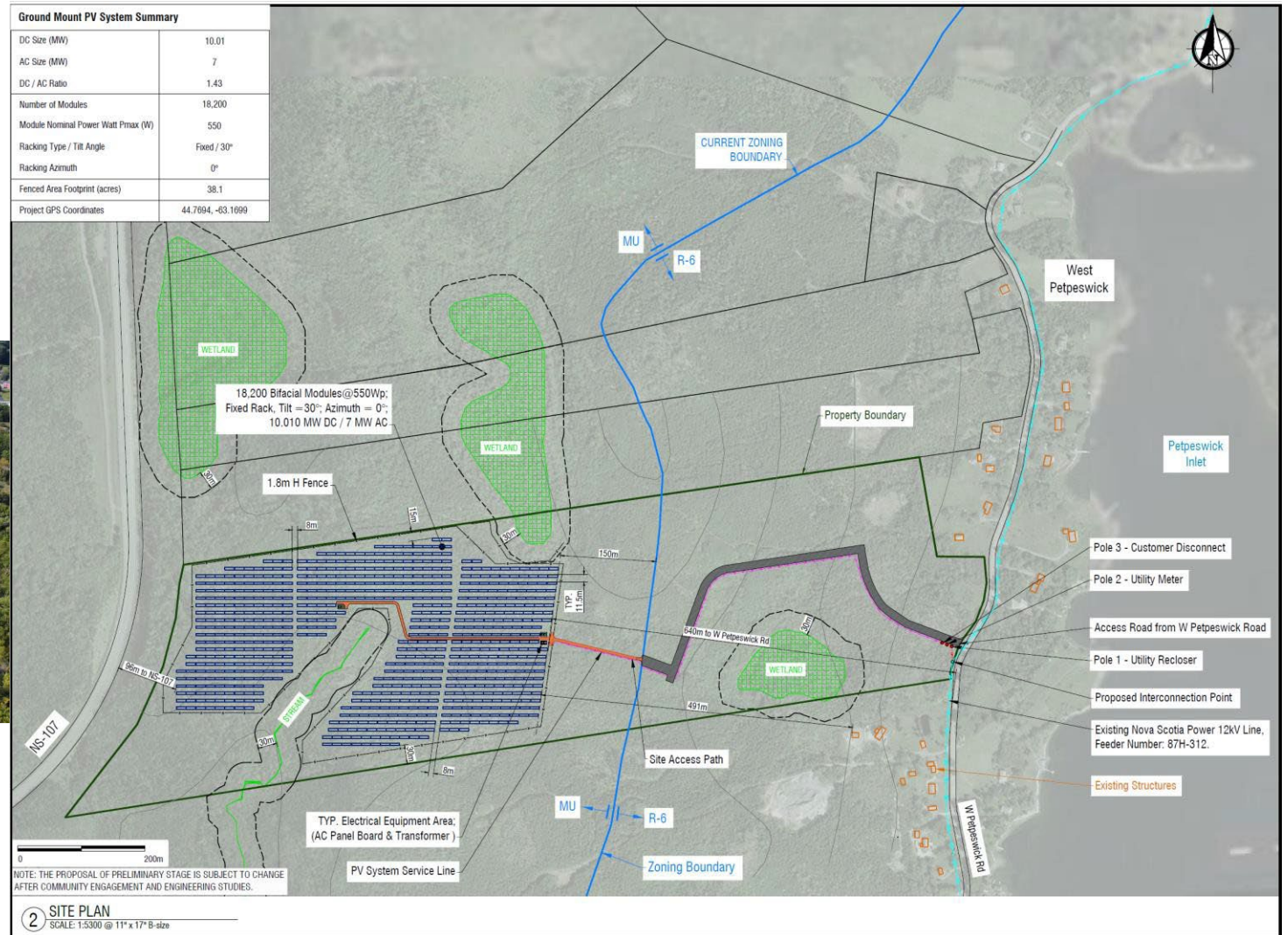
Red Mark – Project Site
Address: West Petpeswick Rd, Musquodoboit Harbour, Halifax, NS B0J 2L0
GPS: 44.7692, -63.1678

Petpeswick Solar Project – up to 7 MW AC

- Approximately 35 Acres are required for a 7 MW AC Project.
- Able to power around 900 homes.
- 3-Phase distribution connection.



Illustration of solar farm built by SolarBank



* Site Plan will be adjusted after engaging with communities, utility and municipalities, and to be finalized after detailed engineering studies.

Community Solar Development

- We are currently in the phase of preparing a proposal to submit to the Community Solar Program for review and working through the program requirements such as seeking for the Letter of Municipal Support.
- A Municipal Support Resolution or Letter is one of the requirements for project submission.



- The program first launched on March 1, 2024 and operates on a first-come, first-serve basis until the full 100MW is allocated
- We have completed the site assessment, preliminary design as well as other preliminary feasibility studies
- Once we have completed all application requirements, we will submit a proposal submission to the province (Goal: by June 2024)
- If selected for a contract, permitting and development would commence after the contract is granted; and all protocols including, but not limited to site plan approval, environmental assessment, applicable visual screening, and building permit, will be followed.

Community Solar Application Requirements

Community solar projects require activities/plans in the program application process. Examples include but are not limited to:

- Community Engagement
- First Nation Engagement
- **Municipal Support**
- Permitting
- Community Benefits
- Geotechnical Preliminary Assessment
- Preliminary Engineering and Design
- Interconnection Preliminary Assessment
- Economic Viability and Risk Assessment
- Subscription Management Plan
- Financing Plan
- Construction Plan

First Nation & Community Engagements

- First Nation and Marginalized Communities Engagements
 - Reach out to the communities and entities to notify them of the project. Discuss any questions or concerns if have.
 - Opportunities to be priority list of subscribers for solar electricity
- General Public:
 - In-person Public Meeting hosted near the project site
 - On-line Public Meeting
 - Notification on AI Renewable website (<https://www.airenewable.ca/community-solar/>) and local social media groups
 - Emailed or mailed around 300 letter **correspondence**, notifying of project outline and public meeting to:
 - Project neighborhood residents and property owners, targeting local mailing routes.
 - The municipal staff and council.

Progress & Subscription Plan

Below is a summary of the engagement activities completed/scheduled for Petpeswick Solar:

- Public Meeting #1 and #2: Monday, April 15th, 2024 at 2:00 pm and 6:30 pm
- Public Meeting #3 (online): Wednesday, April 16th, 2024
- Introduction Meeting with Municipality: Tuesday, April 16th, 2024
- Public Meeting #4 (In-person): Tuesday, May 14th, 2024
- Environmental and Sustainability Standing Committee (Presentation): Thursday, June 13th, 2024

Priority Subscription Plan

We are offering priority subscriptions to communities interested in green energy & energy savings

- First to project surrounding communities and marginalized communities, such as Petpeswick local residences, senior housing, and other marginalized communities
- Then to all other communities in project adjacent areas
- Finally to the general public and businesses in the Halifax region for the excessive capacity

Next Step: Municipal Support Resolution or Letter

Thank You

Q&A

Stock Symbol Cboe CA: SUNN
Nasdaq: SUUN

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