

# Sugar Maple Wind Energy Project

## Project Summary

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The Sugar Mountain Wind Energy Project (the 'Project') is a proposed new-build wind energy project located in Pictou County, Nova Scotia, approximately 2 km from the rural community of Upper Barney's River, 11 km to the south of the Trans-Canada Highway 104 at Barney's River Station, and 6.5 km northeast of the community of Garden of Eden. The Project includes up to 16 wind turbines generators (referred to as 'WTGs') of up to 7.0 megawatts (MW) each, for a combined total installed capacity of up to 112 MW. It also includes access roads, a collector system, an electrical substation and switchyard, a short transmission tie-in to the existing Nova Scotia Power (NSPI) transmission line, and a small service building. The WTGs will be approximately 200 m in height, from the bottom of the WTG to the top of the blade. The Project is being developed by WEB Sugar Maple Wind Inc. (the Proponent), a partnership between Glooscap First Nation as the majority owner and SWEB Development limited partnership (SWEB), a North American subsidiary of W.E.B. group.

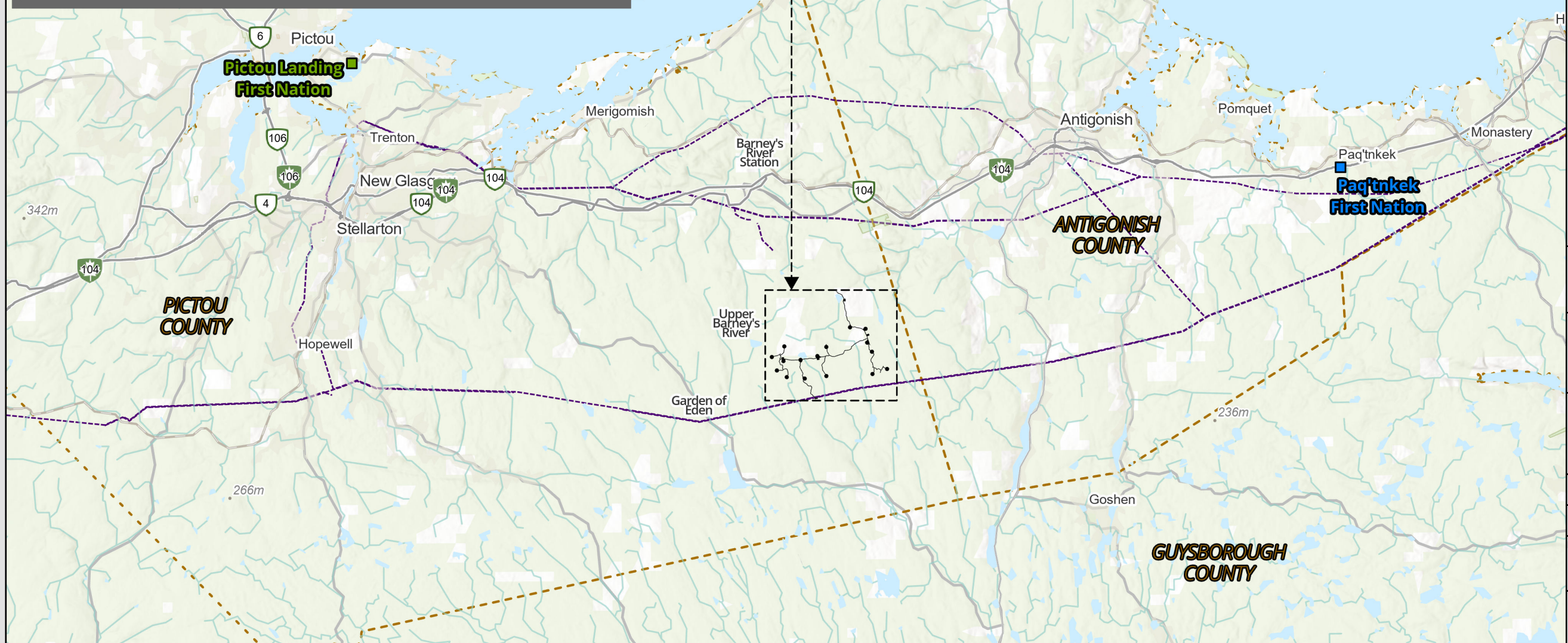
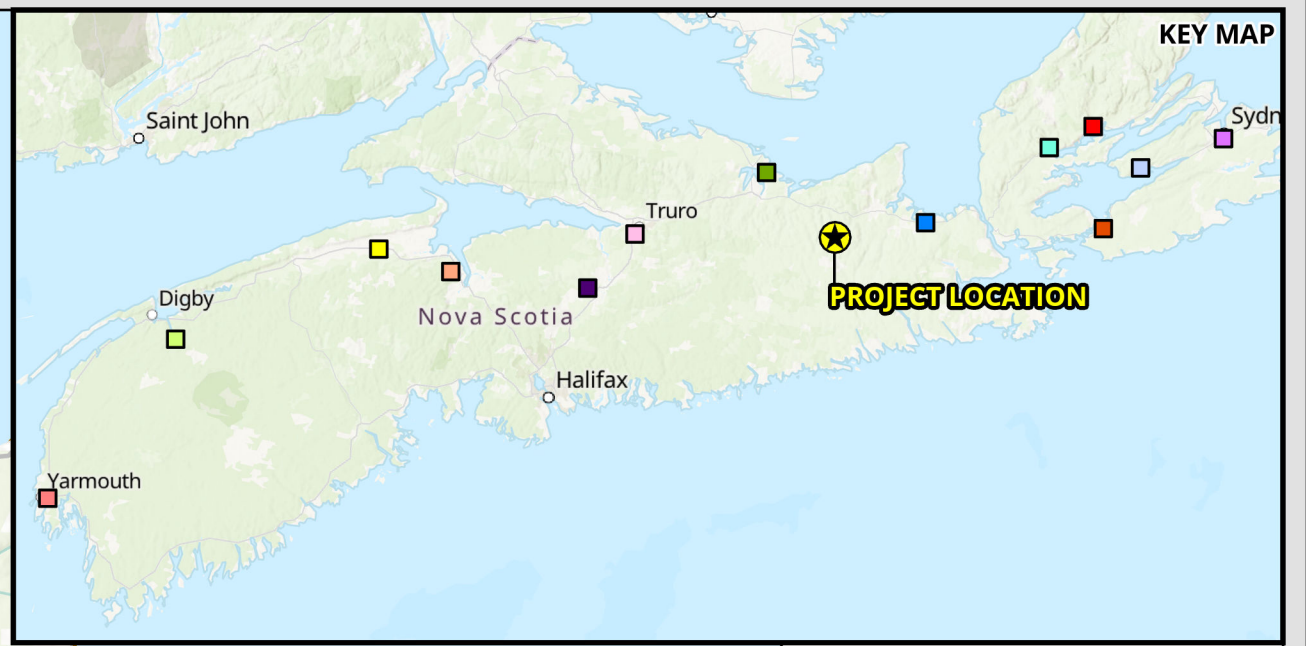
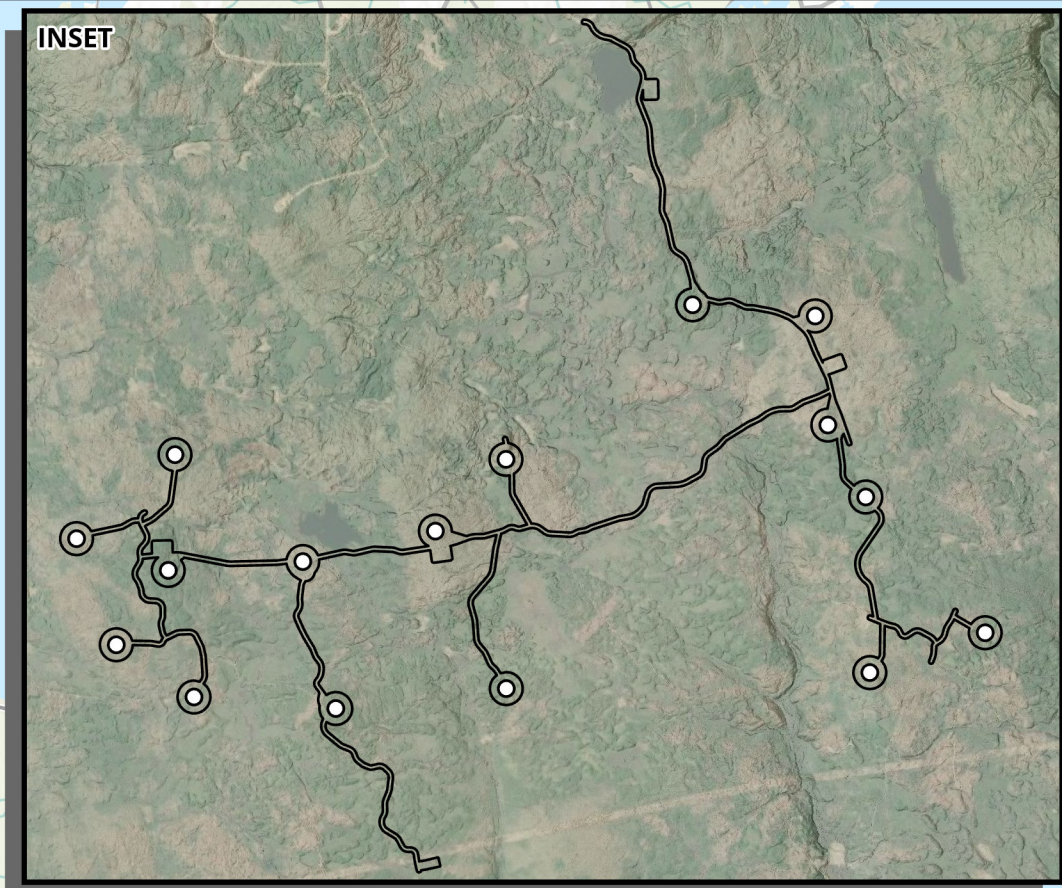
The Project was submitted to the Province's Green Choice Program, which was created to provide clean electricity to 11 of the largest energy consumers in the province, including universities, public schools, hospitals, provincial government, and major industrial and commercial businesses. The Project was awarded under this program and will sell its electricity to Nova Scotia Power Inc., under a power purchase agreement. The electricity generated will be delivered directly into Nova Scotia's power grid and used within the province as part of the existing electricity system.

Once operational, the Project will generate enough electricity to power approximately 35,000 homes each year and is expected to reduce about 234,900 tonnes of greenhouse gas emissions each year. By generating renewable electricity, the Project will help support Nova Scotia's climate goals, including achieving 80% renewable electricity by 2030 and net-zero greenhouse gas emissions by 2050.

The Project WTGs (as required under the Green Choice Program), substation and switchyard, small service building, and the transmission tie-in are all proposed on privately-held lands. The location of the Project is shown in Figure 1.

Major construction is expected to begin in early Spring of 2027 (if approved) and will take approximately 18-20 months, beginning operation by the end of 2028. Construction includes, but is not limited to, tree clearing, building new access roads, or upgrading existing access roads, preparing WTG pad sites and foundations, installing WTGs, installing electrical equipment, constructing an electrical substation and switchyard, and constructing a service building.

The Nova Scotia power purchase agreement for the Project is for 25 years. However, the Project may continue to operate beyond this point, if the power purchase agreement is extended, and if all necessary permits, approvals, and any other regulatory requirements at that time are updated. During the operational period, the Project will be monitored by Proponent staff, as well as the WTG supplier on a 24/7 basis. The WTG supplier will maintain WTGs in collaboration with the Proponent, while the Proponent and its affiliates will manage on-site vegetation, infrastructure issues, as well as handle snow clearing and site upkeep.



**LEGEND**

- Municipality Boundary
- Potential Development Area
- Existing NSPI Transmission Line

**Mi'kmaq Communities**

- Acadia
- Annapolis Valley
- Bear River
- Eskasoni
- Glooscap
- Membertou
- Millbrook
- Paq'tnkek
- Pictou Landing
- Potlotek
- Sipeknek'katik
- Wagmatcook
- We'Kiqma'q



**SUGAR MAPLE WIND ENERGY PROJECT**

**Project Location**

DATE: 3/26/2026	PROJ N°: 251616	FIGURE: <b>1</b>
DRAWN BY: SF	CHECKED BY: NM	APPROVED: LH

NOTES:

0 4,000 8,000 16,000 m

SCALE: 1:325,000 Coordinate System: NAD 1983 UTM Zone 20N  
Units: Meter

## Project Benefits

The Project is expected to bring several environmental and economic benefits. One of the most important contributions is its role in helping Nova Scotia move away from coal-fired electricity generation and to help reduce greenhouse gas emissions. The Project will also provide economic benefits, including local employment, revenue for the Municipality of Pictou County, and local business opportunities:

- ▶ Approximately 150 jobs during construction
- ▶ Long-term employment during operations
- ▶ More municipal tax revenue
- ▶ Business opportunities for local companies and contractors
- ▶ Funding of bursaries and education for under-represented groups
- ▶ Benefits agreements with various community groups and Indigenous communities

## Engagement with the Mi'kmaq of Nova Scotia

The Project lands are part of Mi'kma'ki, the traditional and unceded homeland of the Mi'kmaq. The Proponent has engaged with Mi'kmaq communities and organizations, including Membertou Geomatics Solutions, the Office of L'Nu Affairs, Ulnooweg, Mi'kmaq Kina'matnewey, and Kwilmu'kw Maw-klusuaqn.

A Mi'kmaq Ecological Knowledge Study identified culturally important areas, species, and activities in the region. This information helped guide Project design and was used in the environmental assessment. The Proponent is committed to ongoing communication with the Mi'kmaq of Nova Scotia for this Project.

## Engagement with the Local Community

The Proponent has and will continue to connect with the community in several ways as part of this Project. Previous engagement included holding in-person public engagement sessions, meetings and phone calls with interested groups and individual community members, handing out information pamphlets, posting updates in local gathering places, and sharing news online through newsletters, websites, and email lists.

The community meetings aimed to explain the Project, address questions, and gather local insights. Open-house sessions enabled direct discussions with the team. Feedback from these events was recorded to inform future Project planning.

## Managing Environmental Impact

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### Air Quality, Noise, and Lighting

Environmental protection is a major part of the Project planning. Because construction can affect air quality, noise levels, and nighttime lighting, the Project includes measures such as

watering roads to control dust, limiting disruptive activities to daytime hours, and only using the minimum lighting needed for safety. Operation of WTGs generates noise; however, all WTGs are located at least 2 kilometres from homes, and assessments show that the Project will meet all required limits for both noise and shadow flicker. The Proponent will maintain a Project website to provide updates and will have a process in place to handle concerns from the public.

## Geology and Groundwater

The land itself will also be carefully managed. Construction may disturb soils and require occasional blasting, so workers will stabilize exposed soils, leave root systems wherever possible to prevent erosion, and stabilize disturbed or compacted soils during construction and decommissioning. Strict procedures will be followed to handle fuel and other hazardous materials safely.

## Surface Water, Fish, and Fish Habitat

The environmental assessment has assessed how watercourses, waterbodies, and fish may be impacted by Project activities. To maintain natural water flow and allow fish to pass where roads cross streams, well-designed culverts will be installed. Since construction near waterways may temporarily disturb sediments, the Proponent plans to carry out this work during the lowest risk period in the summer, when water levels are lowest. Natural vegetation buffers will be left intact around streams and lakes, and a management plan will direct how waterbodies and fish habitats are protected during the construction process.

## Wetlands, Plants, and Lichens

The Project has been designed to avoid most wetlands, but some impacts cannot be prevented. In these cases, the Proponent will minimize disturbance, follow all permit approval requirements, and provide compensation for lost wetland area. Sensitive plants and lichens, such as species at risk, have been avoided, and old-growth forest areas have been excluded from the design. Most of the land on which the Project is located has previously been disturbed by forestry operations, and therefore, there will be limited new disturbance to the landscape.

## Wildlife

Wildlife protection and risks to wildlife resulting from the Project is a key focus of the Project. Mainland Moose, a species at risk in Nova Scotia, is a major focus of the environmental assessment and has been a topic of concern for local community members in the region. To reduce the Project's impact, the design makes use of existing roads where possible, avoids important habitat, and includes vegetated buffers around watercourses and wetlands to maintain habitat connectivity. Wildlife monitoring will continue after the Project is built. As for all wind power projects and many other development projects, birds and bats can sometimes collide with WTGs. The Project avoids high-value habitat where possible, minimizes lighting

that may attract birds, and will carry out post-construction monitoring to better understand the effects of the Project. If this monitoring shows that the WTGs are having a greater impact than expected, the Proponent will adjust operations based on provincial guidance.

## Socio-economic Considerations

From a community perspective, most of the Project's social and economic effects are expected to be positive, but there may be some temporary inconveniences. For example, during winter months, plowing of trails is not currently planned during construction or operations; however, plowing may be required if there are construction delays or issues during project operations. It is expected that any plowing needs will be temporary and will be communicated to trail-users in advance. The Project will also increase local traffic during the construction period. A traffic management plan will be created to allow safe and efficient movement of construction vehicles, and this disturbance will only be temporary. WTGs will also alter the appearance of the landscape, but modelling shows that this visual change will be minimal, due to topography of the region.

## Heritage and Culture

The Project has not yet undergone a full archaeological assessment with field investigations. However, based on preliminary research results, effects to archaeological resources will be minor. If areas of high potential for finding archaeological materials are identified through the archaeological assessment, field surveys will be done to check these areas. If heritage or cultural items are found during construction, a contingency plan will be followed, which begins with putting an immediate stop to all construction activities on site.

## Climate Change Considerations

Although building the Project will create some emissions, particularly during construction from construction equipment, these are relatively small and are expected to be offset within the first year the WTGs are running. The Project is expected to offset approximately 234,905 tons of CO<sub>2</sub> equivalent emissions annually. Furthermore, the Project will create enough clean energy to power approximately 35,000 homes annually.

## Cumulative Effects

The Project is located close to several other wind energy developments, as well as areas where forestry have taken place in the past and continue today. Most of the land on which the Project will be constructed has already been logged, and there has been considerable forest loss in the region. There is also a network of recreational trails used for snowmobiling and ATV riding, which runs through the Project site and surrounding areas. The Project may have some similar environmental effects to these pre-existing activities (forestry and recreation). However, the Project is planned so that it will have a low overall environmental effect. Ongoing monitoring of wildlife, including Mainland Moose, bats, and birds, in the area will help identify any combined effects from all activities in the area, and will guide any needed actions.

## Conclusion

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The Project has been carefully designed using various environmental studies, historical and contemporary Mi'kmaq knowledge, regulatory guidance, and public feedback. Although the Project spans a large area, only a fraction of this area is used for the Project's infrastructure. Furthermore, the area on which the Project is situated has previously undergone extensive forestry operations, so it is expected any added environmental effects from the Project will be low. With planned protective and preventative measures, this environmental assessment concludes that no significant negative environmental effects are expected. Through engagement efforts with the local community, Indigenous groups, and local stakeholders and government representatives, the Project is well-received and supported by the community.

The Project supports Nova Scotia's transition to clean energy, will provide numerous economic benefits to the local community and Mi'kmaw communities, and will also contribute to the province's long-term environmental and climate change goals.