



ENVIRONMENTAL IMPACT STATEMENT SUMMARY

EVREC Green Energy Hub

Prepared for: Exploits Valley Renewable Energy Corporation



May 2026

List of Terms

Term	Definition
Abraxas	Abraxas Power
EVREC	Exploits Valley Renewable Energy Corporation
EDFps	EDF Power Solutions
NF Power	Newfoundland Power
Project	EVREC Green Energy Hub
GW	gigawatt
NL	Newfoundland and Labrador
MW	megawatt
WPA	Wind Project Area
BWPA	Botwood Wind Project Area
SLWPA	Seabrights Lake Wind Project Area
LTWPA	Leading Tickles Wind Project Area
TLWPA	Twin Lakes Wind Project Area
IPA	Industrial Project Area
SPA	Solar Project Area
kV	kilovolt
ha	hectare
BESS	Battery Energy Storage System
L	litres
EIS	Environmental Impact Statement
GHG	Greenhouse Gas
GDP	Gross Domestic Product
PA	Project Area
HRIA	Historic Resources Impact Assessment
SAR	Species At Risk
DFO	Fisheries and Oceans Canada
dBA	A-weighted decibels
PF	Project Footprint

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The Proponent

Exploits Valley Renewable Energy Corporation (EVREC), a joint venture between Abraxas Power (Abraxas) and EDF power solutions (EDFps), is building one of the world's largest energy transition projects, in Botwood, Newfoundland, Canada. Abraxas is a global green energy developer focused on creating a portfolio of assets diversified by geography, technology, and scale. Abraxas consists of experienced management professionals who have significant depth in renewable power, specialty gases, electrical distribution and storage, and large-scale industrial facilities. EDFps brings extensive experience in developing, constructing, and operating grid-scale renewable energy development across North America, including onshore and offshore wind, solar, and battery storage projects.

Together, EVREC consists of a world class team of experienced management professionals with significant depth across a number of disciplines and sectors that will contribute to successful development of one of the world's largest green hydrogen projects.

Project Description

EVREC is proposing the development of EVREC Green Energy Hub (the "Project"), a 3.5 gigawatt (GW) green hydrogen project in central Newfoundland and Labrador (NL), located near the town of Botwood, NL. The Project includes an approximate 3,500+ megawatt (MW) Wind Project, a 150 MW Solar Project, and an Industrial Facility to process hydrogen and ammonia.

The wind project will consist of up to 534 turbines throughout four Wind Project Areas (WPA). The Botwood WPA (BWPA) is the most easterly located near the town of Botwood and is located west of the Industrial Facility (Drawing 1). The Seabrights Lake and Leading Tickles WPAs (SLWPA, LTWPA) are located west and north of Botwood wind area, respectively (Drawing 1). The Twin Lakes WPA (TLWPA) is located the furthest west from Botwood, approximately 40 km (Drawing 1). The WPAs are connected by a 230 kilovolt (kV) transmission line that will be constructed to support the Project. Although the Project is planned to be fully off-grid, there is an application submitted to Newfoundland Power (NF Power) for up to 50 MW grid connection for construction support and additional backup power to critical systems.

The solar and industrial projects are located approximately 2.5 kilometers (km) from the town of Botwood, excepting the heavy haul road and ammonia pipeline which run along the Port of Botwood (Drawing 1). The Solar Project will consist of up to 300,000 solar PV modules over 242 hectares (ha). The industrial Project (1,157 ha) is made up of several integrated component groups. These component groups include the pre-construction support infrastructure and permanent support facilities; the hydrogen plant, including the electrolyzer systems and hydrogen purification, compression, and storage systems; the ammonia plant, including the air separation units, ammonia synthesis trains, refrigeration and steam systems, storage and distribution systems, and flare and control systems; fuel and hazardous-materials storage; the battery energy storage system (BESS); water supply, treatment, storage,

stormwater, wastewater, and effluent infrastructure; solid-waste management infrastructure; and 30 diesel backup generators to provide emergency backup power for safe standby and/or shutdown when wind and solar supply are unavailable.

The Project will require up to 12.64 million litres (L) of water per day from Peters Pond for maximum production. Modelling has indicated that recycling back to Peters Pond may be required periodically through the months of July through October to maintain ecological flow in Peters River. Water will be managed through intake and return lines from Peters Pond to the Industrial Facility. Wastewater will be monitored, treated if required, and discharged to a creek north of the facility. EVREC is planning for shipment of approximately 1,000,000 tonnes of ammonia to the European market each year. The ammonia will be transported by an underground pipeline from the Industrial Facility to the Port of Botwood, in parallel with the location of the heavy haul road. The marine export facilities will be located at the Port of Botwood and will utilize existing port infrastructure upgraded for ammonia service. The heavy haul road will connect the Industrial Facility to Route 350 (“Botwood Highway”) and the Port of Botwood, facilitating the transport of equipment and materials. The Port of Botwood jetty physical upgrades (including a portion of the heavy haul road) and shipping are managed by Exploits Valley Port Corporation and captured under separate cover for the purposes of permitting.

Construction is expected to take approximately three years, starting in mid to late 2027 with the BWPA, the Industrial Facility, the heavy haul road, and water management components. Temporary laydown areas, quarries, and accommodation camps will be placed throughout the Project as construction moves east to west. The Project is expected to have a 33-year operational lifetime, with a minimum of three operational accommodation camps, located at the Industrial Facility and within the WPA. Decommissioning will involve staged retirement and removal of infrastructure and follow local guidance and legislation at the time, expecting to take about two to three years. The haul road is expected to remain in place and regraded to the town of Botwood requirements.

The Project is considered an undertaking under Section 34 (1f) of the Newfoundland and Labrador Environmental Assessment Regulations (Newfoundland and Labrador, 2003a), where electrical power generation has a capacity greater than 1 MW and engages in the manufacture of green hydrogen and ammonia. Thus, this Project requires the registration of an Environmental Assessment Registration document. The Registration was submitted in October 2024, and the provincial government decided to request an Environmental Impact Statement (EIS) for the Project. This document is prepared in response to the issued provincial EIS guidelines (April 2025) for this Project, and following the Government of Newfoundland and Labrador Guidance for Registration of Onshore Wind Energy Generation and Green Hydrogen Production Projects.

In 2007, the Province released a target to reduce Greenhouse Gas (GHG) emissions by 10%, to reach 1990 levels by 2020 and 75-85% of 2001 levels by 2050 in an effort to reach Canada’s net zero goal by 2050 (NLECCC, 2019). However, the Province has not reached its

interim 2020 goal. The Province adjusted its marker in 2015 to reduce 1990 levels of GHG emissions by 35-45% by 2030. The development of this Project will support Newfoundland and Labrador in achieving these targets.

EVREC considered alternatives to the Project and alternative methods of carrying out the Project. An off-grid and on-grid analysis was completed with off-grid wind design providing enough power for production stability and economic benefits. Alternative sources of energy, turbine sizes, solar energy sizes, access routes, water sources, effluent discharge points, and above/under ground storage options were evaluated. Project layout, location, infrastructure and technology was based on minimizing impacts to the environment such as footprint, proximity to communities, water quantity, and regulatory process, while providing economic benefits to the region.

Summary of Predicted Biophysical Environmental and Socio-economic Effects

Several valued components were chosen to assess the environmental and socio-economic effects of the Project, including air, greenhouse gases, noise, plants, wildlife, water, fish and fish habitat, historic resources, and the local communities (land use, community infrastructure and employment and economy).

The Project will contribute to provincial Gross Domestic Product (GDP) through employment and income generated by suppliers (by \$9.3 billion over the life of the Project). The Project will support over 4,200 jobs during peak construction and 835 jobs during operations, boosting annual household spending in NL by over \$4 billion and paying municipal tax revenues up to \$507 million. Potential impacts to traffic and accommodations in the community are addressed through EVREC's traffic management plan and the camp accommodations strategy for non-resident construction workers.

Air quality can be affected by the Project throughout the construction stage for all aspects of the Project, and also during operations of the Industrial Facility. Process emissions from the Industrial Facility (i.e., flares, generators) were considered in an air dispersion model, which showed no exceedances of air contaminants under the NL Air Pollution Control Regulations (Newfoundland and Labrador, 2022) during modelled operations. Short, intermittent exceedances are predicted to occur during the two-month commissioning phase and during abnormal conditions. Regular maintenance and erosion control methods are expected to mitigate temporary dust emissions from construction.

Construction and operational noise were also modelled for the wind and Industrial Facility components of the Project. Health Canada recommends 45 dBA as the acceptable level in their guidance on human health impacts for sleep disturbance during short term construction (Health Canada, 2023). The models reviewed noise impacts to receptors such as residential buildings, remote cabins- titled, remote cabins- untitled, and commercial operations. There are no exceedances for wind, industrial and solar at any residences for the Health Canada guidance following mitigation measures such as enclosed or low noise flares and generators with noise controls. EVREC is committed to using noise suppressants and will develop a

complaint response protocol.

Wind turbines can have the potential to create shadow flicker. There is no provincial or federal guidance on shadow flicker. Many jurisdictions in Canada, including NS and NL, have adapted the limit of 30 minutes of shadow flicker per day and 30 hours per year. Modelling showed that some nearby receptors would be affected. A proportion of the residential and remote cabin (titled and untitled) receptors may be exposed to shadow flicker above the generally accepted thresholds intermittently. EVREC will undertake further modelling of these receptors to determine the actual potential for exceedance with additional information relating to the nature of the receptor (such as reviewing number of, and forward facing, windows in remote cabins) and develop a mitigation plan accordingly to ensure the effects of shadow flicker are adequately addressed. EVREC will also develop a complaint response protocol.

Solar glare from solar projects can be an issue in climates with longer sunshine exposure days. Solar glare was modelled for the nearest receptors for the Solar Project Area (airport, highway intersections, residences). Solar glare can be classified as being in the green zone (low potential), yellow zone (no permanent damage over short exposures), or red zone (permanent damage to unprotected eyes). Solar glare for the Project was classified as yellow glare, Yellow glare may produce a temporary after-image after short exposures but is classified as not posing a risk to human health due to permanent effects on vision.

Potential accidents and malfunctions for the Project include accidental release of ammonia, hydrogen, and untreated liquid effluent, hazardous materials spills, turbine dislodgement, energy failure, failure of water supply, fires and explosions, thermal runaway, traffic accidents, and wildlife incidents. Risks associated with these potential accidents are determined by likelihood of an event occurring as well as the potential consequences the event could have. EVREC plans to implement a regiment training program for employees, with an on-site emergency response team for the Project. EVREC also commits to regular maintenance and leak detection, as well as emergency alerts and development of critical escape routes. Risks were determined to be low for accidental emission release, dislodgement of turbine/tower, and failure of water supply/energy transmission, and medium for ammonia and hydrogen release, fires, explosions, and traffic accidents.

Potential impacts to land use consider effects on municipalities, industrial and commercial operations (mining, quarries, forestry, agriculture, aquaculture), and recreational (tourism, outfitters, cabin owners) and traditional users.

EVREC will follow municipal and provincial legislation for permitted uses on the Project lands, within municipal planning areas and Crown lands, including application for development zoning and permits. Traffic within the Town of Botwood will increase temporarily, with expected daily traffic on Water St. and the Botwood Highway to increase by 9% and 10.7% during construction. EVREC will use the segregated heavy haul road to reduce traffic and operate a separate dedicated water and sewer system not connected to any municipal infrastructure to minimize potential impacts to nearby municipalities.

Industries in the Project Area (PA) include mining, quarries, forestry, and agriculture. While there is some overlap of mineral leases and quarries with the PA, EVREC will work with these industries to avoid infrastructure placement on active resource extraction areas, where possible, to minimize resource availability and land access. Cleared areas are required only during the construction phase and anticipated to return to a forest state through succession over time, resulting in a return to availability for forestry and agricultural users.

EVREC is working with local outfitters to address potential impacts to their business during construction and initial operations. Road densities in the WPA are anticipated to increase by 85%, potentially increasing access for recreational activities. EVREC is working with local trail associations, and the town of Botwood, to determine potential impacts to established trail networks, including the railway alignment along the Port of Botwood. Effects to local cabin owners, including clusters around some lakes in the PA, include shadow flicker, solar glare, and access. EVREC will maintain access throughout the PA, except in areas of critical infrastructure such as electrical substations, solar panels, and the Industrial Facility. EVREC intends to meaningfully engage with these stakeholders regularly, in an effort to develop the Project under good social license.

Ground disturbance can result in loss of historic and cultural resources. A review of the provincial archaeological database didn't identify any paleontological resources within the PA. A Historic Resources Impact Assessment (HRIA) was conducted on a representative sample of high potential areas within the WPA, as well as the planned infrastructure site for the solar and industrial facilities. No archaeological resources were identified within the Solar and Industrial Project Areas, with three archaeological resources registered within the LTWPA. EVREC will continue the HRIA throughout the detailed design and construction stage and also will adhere to the provincial Accidental Finds Procedure. As the region has been disturbed through a long logging history, there is low risk of finding archaeological resources. However, given the documentation around Indigenous groups such as the Beothuk in the area, additional HRIA is warranted.

Impacts to groundwater from the Project were evaluated and it was determined that foundation dewatering will not impact private wells. It is expected that local well levels and water flow to wetlands and streams will be preserved through limited dewatering in the PA. Quarry extraction will be above the water table and EVREC has committed to pre-blasting surveys for all structures and wells within the predicted blast zones of influence and as a result, there are no anticipated effects on local groundwater levels from quarry activities.

Surface water may be affected throughout the PA, namely through future stream crossings for access roads and the development of the Industrial Facility infrastructure. A representative number of streams were sampled throughout the PA, including all the scheduled salmon rivers, with fish habitat characteristics documented to support future permit applications. Only four species of fish were identified: Atlantic salmon, American eel, threespine stickleback and brook trout. Road crossings in the PA will require review with Fisheries and Oceans Canada (DFO) to confirm permitting requirements, and the diversion of two streams around the Industrial Facility

will require a federal *Fisheries Act* authorization. The proposed road crossing sites will be micro-sited and permitted, once engineering is finalized, to maintain watercourse conditions and fish passage. Although the availability of fish habitat is expected to be moderately affected, the quality will likely be maintained throughout the PA, not contributing a significant adverse effect on fish.

Water withdrawal for the Project, and the wastewater discharge into the natural environment, has the potential to impact water quality, quantity, and therefore fish habitat. A hydrological model was conducted to assess the impact of the proposed water withdrawal from Peters Pond. The model incorporated data from historical climate conditions, as well as recent low flow conditions in 2025, and concluded that Peters Pond has sufficient water available to accommodate the Project, when treated water is recirculated back to the pond during low flow periods (July to October). Wastewater from the Industrial Facility's stormwater/effluent pond will be monitored, treated if required, and discharged to a creek north of the facility. The treated wastewater is expected to meet Newfoundland and Labrador Environmental Control Water and Sewage Regulations (Newfoundland and Labrador, 2003b) and CCME Water Quality Guidelines for the Protection of Aquatic Life (CCME, 2025). The impact to fish and fish habitat would be limited because the creek naturally floods during periods of high flow, so the additional water proposed for discharge into this stream will not substantively change flood conditions. EVREC is committed to meeting minimum flow requirements and protecting the ecological flow downstream in Peters River. A groundwater and surface water monitoring program will be developed to manage water quantity and quality for the Project.

Loss of rare plants and habitat is expected to occur through vegetation clearing. The PA is primarily shrub land, with softwood and old growth/late-successional forest stands in the WPA, bogs in the Industrial Project Area (IPA), and barren lands and wetlands being the dominant features in the Solar Project Area (SPA). Field surveys have identified locations of some species at risk (SAR) (e.g., lichen, red pine) within the WPAs. EVREC has sited infrastructure to buffer wetlands by regulatory setbacks and avoid red pine, where stands have been identified. EVREC will microsite the Project during the detailed design stage to continue to reduce impacts to rare species or SAR and minimize footprint where possible. Unavoidable impacts to SAR will be permitted through the NL *Endangered Species Act*.

Risks to wildlife include loss of habitat and mortality, primarily during construction, as well as sensory disturbance from noise. Loss of habitat will occur in the more remote TLWPA and SLWPA, due to the lack of existing road density in those areas. Local animals found throughout the Project included moose, caribou, coyote, hare, and squirrel. No marten were identified through surveys that were conducted. Generally, moose and caribou tend to adapt to infrastructure with developed areas. EVREC is committed to developing a Wildlife Response Plan for the Project that minimizes disturbance to wildlife, including the use of existing roads wherever possible and establishing a wildlife incident reporting protocol.

Caribou may similarly be impacted by habitat alteration, mortality, and sensory disturbance. Caribou habitat was modelled using publicly available data, provincial collared data, and a

camera grid system designed to capture caribou movement throughout the PA. The modelling demonstrated habitat suitability, with TLWPA having the highest selection during calving. The WPA overlaps with 9% of the home range of the local Hodges Hill herd but the footprint only overlaps 1%. The primary activity to result in habitat alteration is clearing activities but these impacts are short-term in nature, and caribou may show reduced avoidance of cleared areas following remediation and completion of construction activities. EVREC will minimize clearing to the footprint required, revegetate areas as quickly as possible, and ensure all staff are trained on the wildlife response plan.

Birds can be affected by turbines, specifically due to loss of habitat and mortality from collisions. Four bird SAR were found throughout the PA. Even with evidence of historical logging activities throughout the region, habitat modelling indicated there is likely sufficient suitable habitat surrounding the Project Footprint (PF) to maintain habitat functionality within the PA. Generally, most birds were detected migrating above turbine height, except for the Leading Tickles area. EVREC has developed an Avifauna Management Plan to address the effectiveness of mitigations and monitoring to be implemented.

Bats can also be affected by turbines through habitat loss and mortality from collisions. During field surveys, only resident bat species were identified. Resident, non-migratory bat species fly shorter distances and at lower elevations, thereby proving less risk of impact to turbines. EVREC has drafted a specific bat adaptive mitigation program to actively monitor and react to any potential concerns. Mortality monitoring will form part of this program.

EVREC has drafted a number of management plans in support of the Project. These include monitoring programs for groundwater, surface water, air quality, and avifauna. Additionally, several consultation plans on domestic woodcutting, mineral resources, quarries, and the public will be implemented throughout the life of the Project. Safety concerns are addressed in EVREC's emergency response, traffic management, and erosion control plans.

Thirty-two activities were observed within the 10 km buffer assigned for cumulative effects. Activities included cranberry farms, the airport, mink farm, quarries, utilities, and the Port of Botwood. Each activity was assessed by considering potential residual effects from valued components such as air quality, noise, freshwater aquatics, terrestrial and land use. There were no other projects of a similar nature within the cumulative effects buffer. Overall, the cumulative effects assessment for the valued components are expected to be low and not significant and can be managed through Project level mitigation and monitoring.

Engagement

EVREC has consulted with regulators and engaged with Indigenous and public stakeholders regularly throughout the Project planning phase. Recurring meetings were held with the surrounding municipalities, local cabin owners, outfitting operators, Qalipu First Nation, and provincial and federal government regulators commencing in 2024 and continue through 2026. Three open houses were held to inform the public and stakeholders about the Project and provide status updates. EVREC received several letters of support for the environmental

assessment registration in 2024 and continues to listen to concerns brought forward by stakeholders. The Project has incorporated a number of design considerations following these engagements. Engagement will be ongoing throughout the Project as outlined in the consultation plans appended to the EIS.

Conclusion

The Project will have an effect on the environmental and socio-economic conditions in the PA. However, following several mitigation measures, design considerations, engagement follow-up, and regulatory permitting commitments, Considering the temporary nature of the effects from construction, and proposed mitigation measures, adverse residual effects are anticipated to be not significant. To support Project planning and environmental permitting, EVREC worked to understand additional considerations that might limit where turbines and associated infrastructure could be placed within the awarded reserve lands. During the planning process, several setbacks and commitments were made that resulted in a reduction of awarded lands. EVREC is requesting additional Crown lands in addition to those in the EIS PA to support the layout and engineering and mitigation planning advances. The additional lands “mitigation lands” surround Seabrights Lake and Twin Lakes Project Areas. Potential benefits for the communities include reduced disturbance around congested cabin areas, no traffic impacts to Leading Tickles, and no turbines near the community of Northern Arm. Potential adverse impacts from the Project with an adjusted turbine layout can generally be managed through follow up additional studies, existing proposed mitigation measures and monitoring in the EIS.

EVREC is confident that adverse effects from the Project with an adjusted turbine layout within the PMPA as proposed in Chapter 17 can generally be managed through existing proposed mitigation measures and monitoring programs/follow up as described within this EIS. Where this is not possible, EVREC commits to updating mitigation measures as needed during the pre-construction phase when final turbine layout is confirmed, and necessary follow up surveys will be completed and results shared with the province. Should the Project adjust to the proposed turbine layout proposed with the PMPA, EVREC will commit to a caribou collar monitoring program as an additional mitigation measure.

This EIS Summary provides a brief overview of the main findings and recommendations of the environmental assessment. Complete details are provided in the report and the attached Appendices. The statements made in this Executive Summary are subject to the same limitations as described in Section 21.0 for the EIS.

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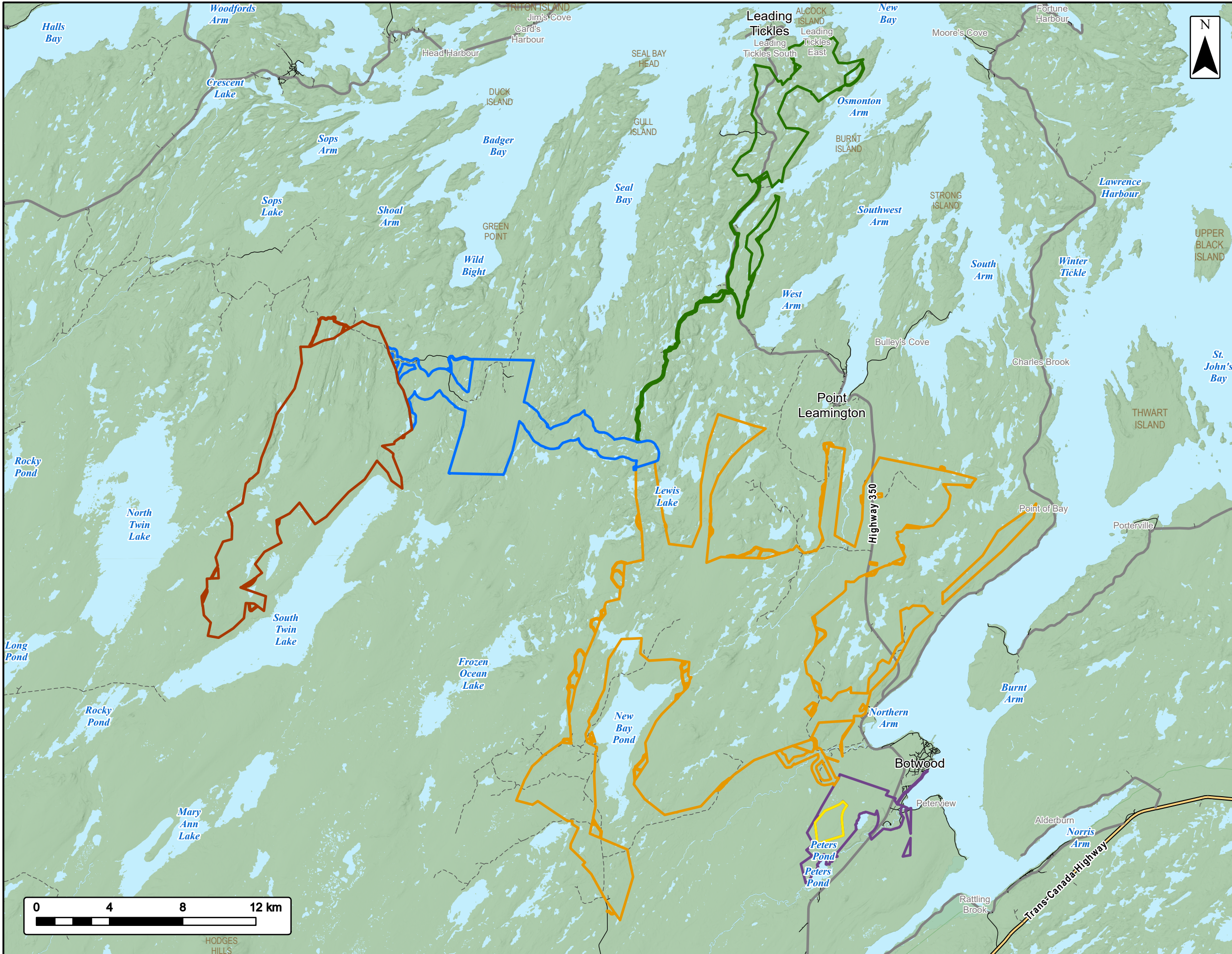
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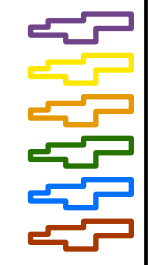
EVREC Green Energy Hub

Project Locator



Project Area

- Industrial Project Area
- Solar Project Area
- Botwood Wind Project Area
- Leading Ticks Wind Project Area
- Seabrights Lake Wind Project Area
- Twin Lakes Wind Project Area



Transportation

- Trans-Canada Highway
- Highway
- Road
- Unpaved Road



Water Features

- Mapped Waterbodies



Coordinate System: NAD 1983 CSRS UTM Zone 21N
Sources: Esri, NASA, NGA, USGS, GeoNOVA, SNSIS, NSNRR, ACCDC, IBA Canada, CNWI, HERE, Garmin, USGS

Date:	2026-03-06	Project #:	24-10265
Scale:	1:200,000	Drawing #:	1
Drawn By:	M. Partridge		
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