

WHALE COVE

MOBILE WIND RESOURCE ASSESSMENT PROJECT

KIVALLIQ ALTERNATIVE ENERGY

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An Inuit-led partnership in clean energy

- Sakku Investments Corporation
- Northern Energy Capital
- Spanning the Kivalliq Region of Nunavut

Our Mandates

- Reducing carbon emissions
- Training and capacity building in the clean energy sector
- Increasing local clean energy production in the communities





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- **What** is a wind resource assessment project
- **Why** Whale Cove
- **Where** is the project located
- **When** will the project occur
- **How** can the Hamlet Council show support

WIND RESOURCE ASSESSMENT

Project Overview

- Collects wind data (speed, direction, frequency) over 12 months
- Data is used to assess feasibility of a wind energy project at that site
- Creates local training and capacity building opportunities
- Project spans three Nunavut communities over three years: (1) **Baker Lake**, (2) **Chesterfield Inlet**, and (3) **Whale Cove**

Sonic Detection and Ranging (SoDAR) Technology

- Uses sound waves to measure real-time wind and weather data
- Compact mobile set-up with minimal impact to land
- Cost-effective with fewer permitting requirements



Above: SoDAR device in Baker Lake, Nunavut.



WHALE COVE

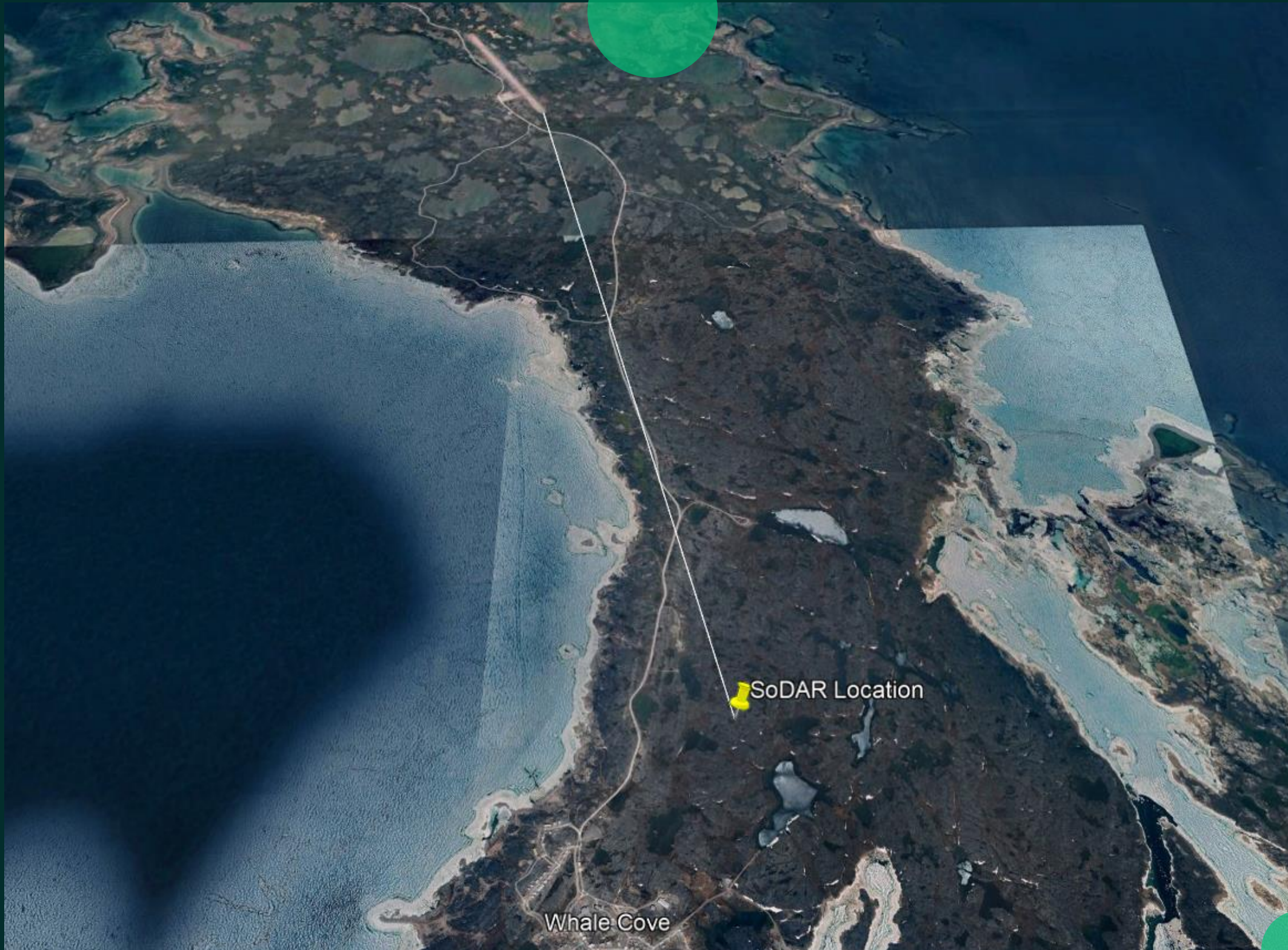
Community Energy Profile

- Powered by aging diesel generators (40+ years old) that do not meet the needs energy demands of the community
- Generators emit carbon emissions contributing to climate change
- 100% of fossil fuels are imported and subject to global market prices

Benefits of Wind Energy

- Renewable and locally available resource
- Zero carbon emissions in producing energy
- Local jobs, training, and capacity building
- Increased energy independence from the south
- Stable and predictable energy prices





PROJECT LOCATION

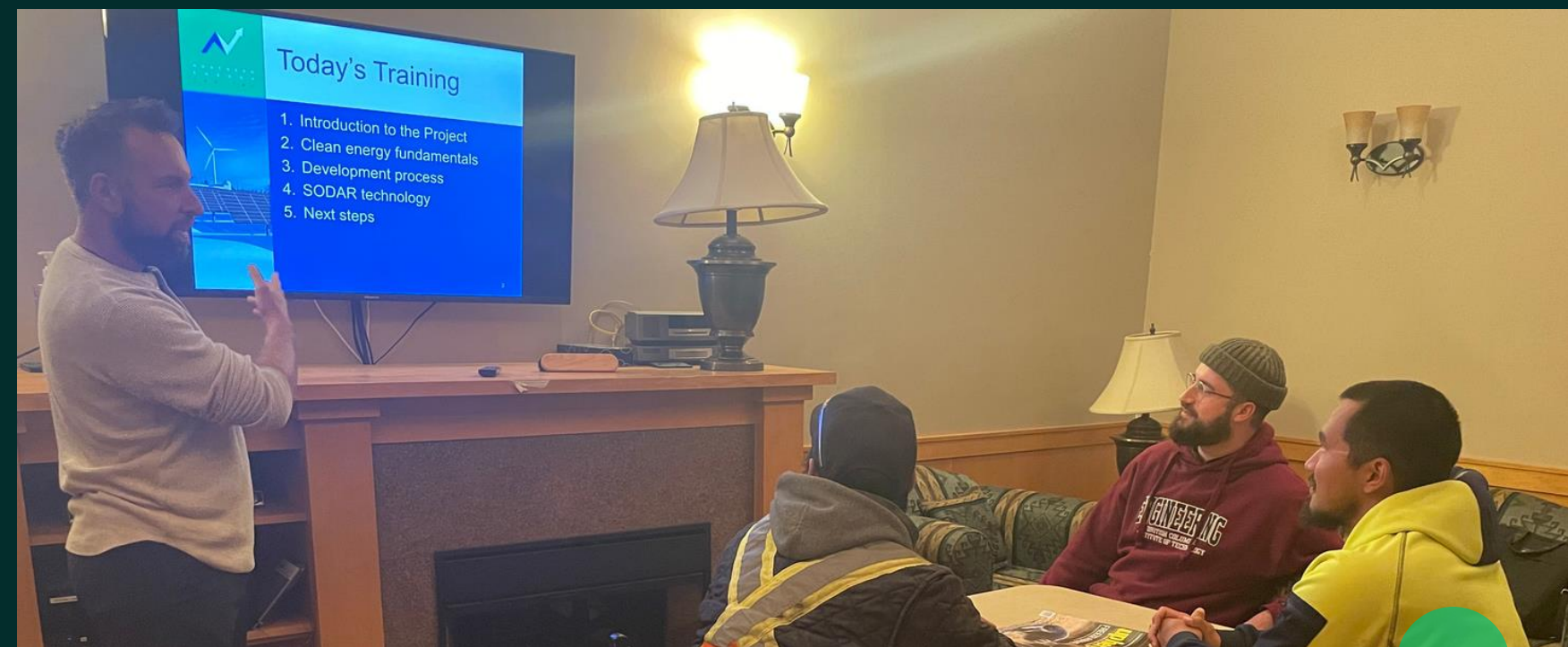
- 2km NW from town of Chesterfield Inlet
- Latitude: 62°11'2.00"N
- Longitude: 92°33'58.09"W
- Access by car/ATV in summer, snowmobile in winter
- Estimated project area: 20 x 45 ft.
- Equipment: SoDAR, solar panels, fuel cylinder, tent

PROGRESS TO DATE

2021 – Present



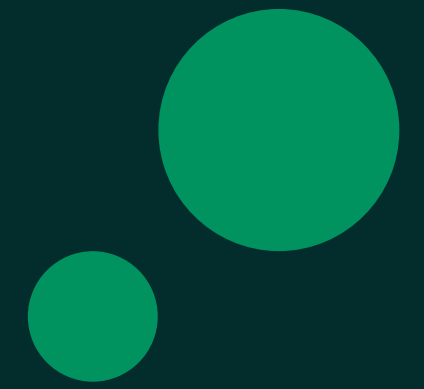
- Project fully funded through Natural Resources Canada
- Second SoDAR deployment in Chesterfield Inlet (top image)
- First local training session completed (bottom image)
- Project site selection in Whale Cove
- Permitting process underway in Whale Cove



Above: SoDAR deployment and training in Chesterfield Inlet and Baker Lake

NEXT STEPS

Whale Cove 2024/2025



Community Engagement

Hamlet Mayor & Council

Confirm site access

Identify & engage local technician candidates

Permits

Land Use Permit

Development Permit

Environmental Impact Assessments (EIA)

Nunavut Planning Commission (NPC)

Nunavut Impact Review Board (NIRB)

SoDAR Relocation & Deployment

Decommission
Chesterfield Inlet

Transport & deployment
in Whale Cove

Local technician training

Capacity Building & Reporting

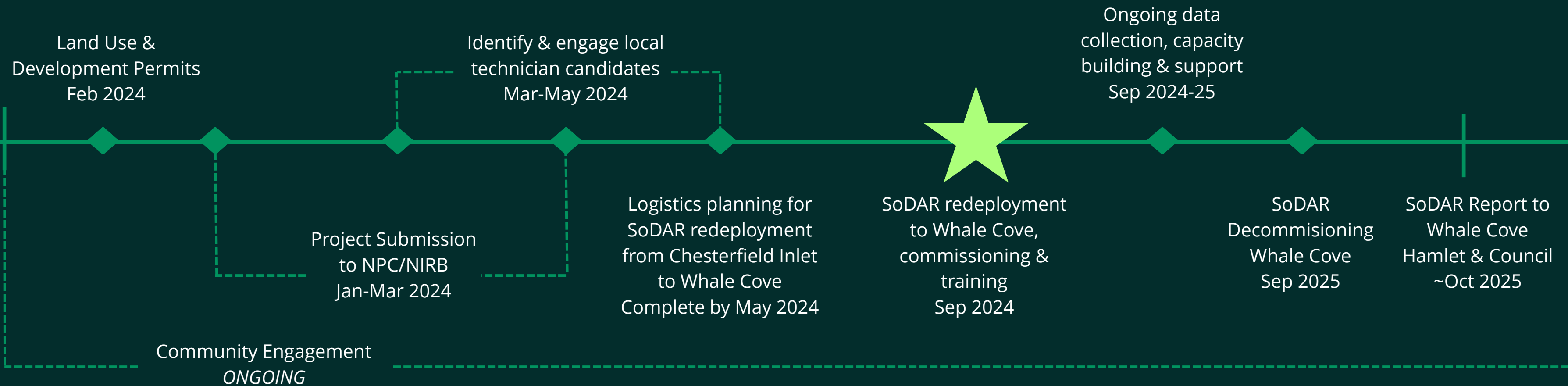
Quarterly check-ins &
video training sessions

Bankable wind resource &
energy production report

Project development
recommendations

DEVELOPMENT TIMELINE

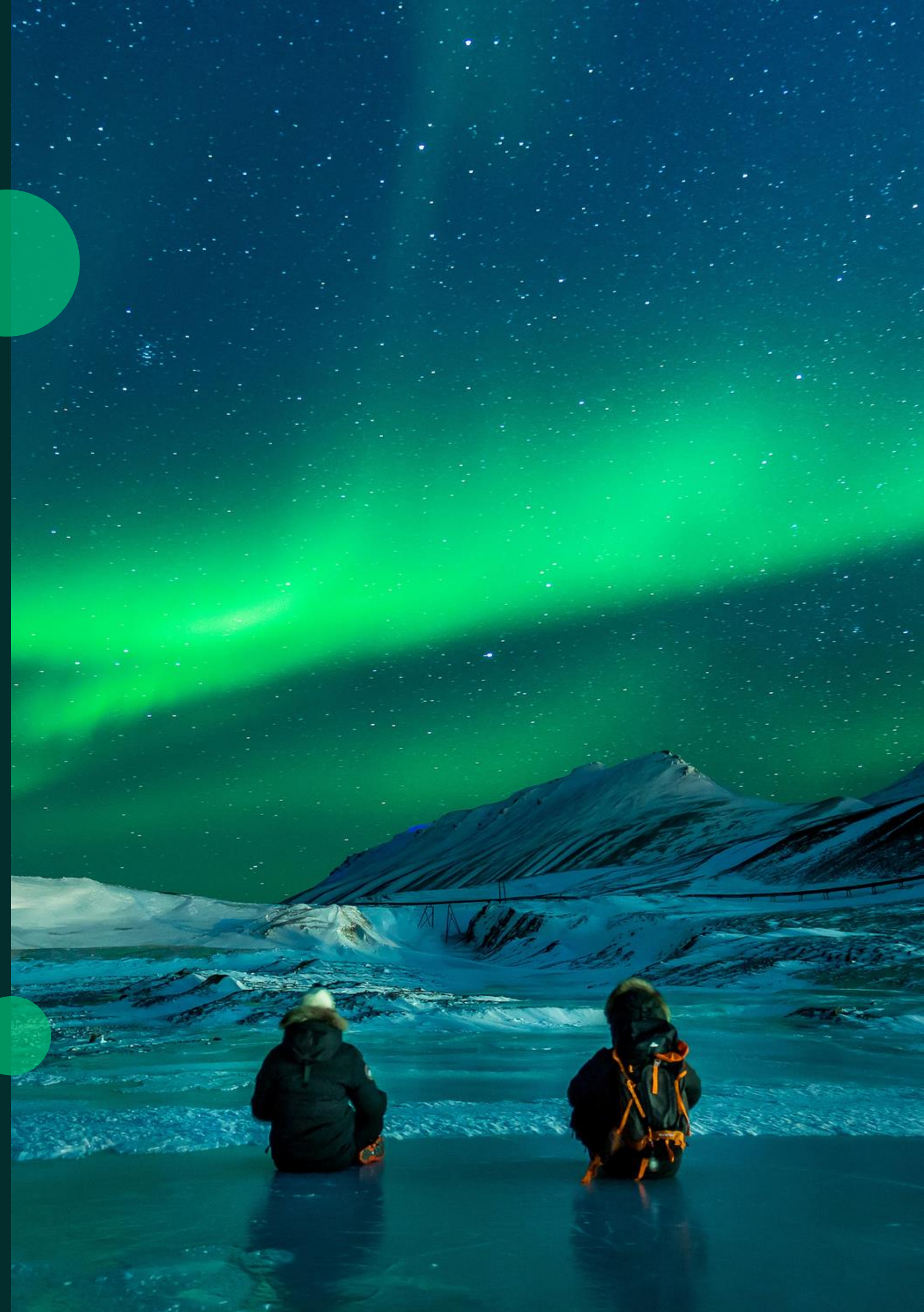
Whale Cove 2024/2025



COUNCIL SUPPORT

Opportunities for Hamlet Council to show support for the Mobile Wind Assessment Project in Whale Cove:

- Work with KAE to present a Motion of support for the Project at an upcoming Hamlet Council Meeting
- Collaborate on the Development Permit Process
- Write a letter of support for the Project from the Mayor & Council





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THANK YOU

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