# INDIGENOUS CLEAN ENERGY REPORT (WEEK 1)

Executive Director, Michael Maracle-Polak's Summary Report to Council

## **Executive Summary**

Energy is the centre of everything we do as a Nation. It intersects with business development, the health and wellness of the people, housing, emergency preparedness and risk mitigation and our Nations Sovereignty. If we are able to develop, own, manage and maintain our energy generation, we own our destiny and future for 7 generations.

The 20/20 Catalysts Program is an intensive Indigenous clean energy capacity-building program unlike any other. The Program provides practical and applied learning about renewable energy projects, community energy planning, energy efficiency and conservation, business management, and advanced energy systems.

What is the Sacred Aspect of Clean Energy?

Bring Culture into the Project.

#### **Housing Efficiency**

The low hanging fruit of energy is "Efficiency" and the best place to start addressing efficiency is in Housing.

Actions like information and awareness for residents, blower door tests, sealing drafts and leaks, replacement of doors and windows and the installation of heat pumps are lower effort, high impact activities that can drive significant efficiencies in housing energy usage.

Subdivision and housing design. We have the option to set our own building standards and codes. We can elevate our mandatory minimum design standards to include Net-Zero criteria, more sustainable materials, and thoughtfulness around orientation of homes to optimize sunlight intake.

Ensuring our housing department and maintenance team are trained and hold knowledge of clean energy technology and infrastructure. primarily solar and battery energy management systems and that our emergency response teams are trained in how to address emergencies such as fire or disposal of damaged energy assets.

- Net Metering Solar Project 100KW
  capacity Natural Forces is our primary
  partner. 3 capital buildings and 3 homes
  are receiving solar panels (Fisheries,
  Fire Hall, Community Hub). Total Cost
  Savings = \$400,000 over 25 years
- Blower Door Tests and Housing assessments with Confederacy of Mainland Mi'kmaq
- Installation of Heat Pumps with Efficiency Nova Scotia
- Housing Policy Development with Net Zero Building Standards
- Funding application and feasibility of adding solar panels and batteries to every PLFN Home



## Opportunities in Energy Regionally and Nationally

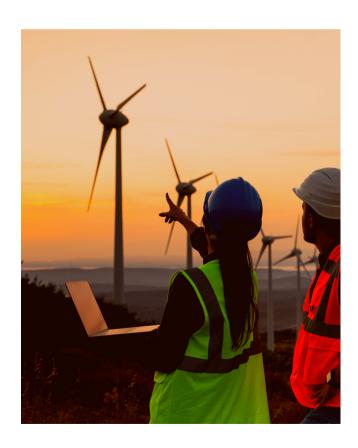
Indigenous people are poised to lead the Clean Energy Transition. To do this we must study, understand and anticipate the changing energy landscape.

In Canada, there are over 500 Hydro Dams that are going to need to be replaced in the next 20 years. One of the largest and most lucrative energy opportunities on the horizon is the rebuild and retrofit of Hydro Dam infrastructure.

Regional Energy in Mi'kma'ki will be dominated by Wind, Offshore Wind, Green Hydrogen, Energy Storage and Solar. The bulk of the first phase of the regions energy transition is to take place between now and 2030.

It is critically important that we not only participate in Joint Venture Energy projects but that we also own every step of the process. The development, General and Civil Construction for Procurement, Design, Activation, and Operations and Maintenance. For example on a \$27 Million Wind Project, \$11 million may be slotted for civil construction costs and O&M may be several hundred thousand annually for 25 years or longer. We want our economic opportunity to participate here as well as on the revenue generated from the Power Purchase Agreement.

- · Community Energy Planning weekly
- · Funding Coordination
- Capacity planning and employment and training prioritization
- Discussion with all major Energy stakeholders, from Government to the wind, solar and battery developers to partner First Nations
- Structuring a PLFN Construction Management General Contractor
- Exploring the purchase of Civil Construction company
- Establishing and promoting a reputation with a history and track record of successful completion of energy projects on time and on budget



## Community Energy Planning; Large Utility Scale Vs Community Solar

Large utility scale solar projects are opportunities for the Nation to generate relatively consistent sources of Economic Development revenue while aligning our economy with our worldview of restoring balance with the environment. There is a lot of non repayable Capital being allocated to First Nations for Clean Energy projects in the near term and we must capitalize on the open funding.

Caution should be exercised on the joint venture or project partners and the agreements the Nation enters into with Government, Utilities and other corporate entities. The principles of our agreements should be flexible, negotiable and rooted in our Indigenous value systems. Power Purchase Agreements extend 25 years or more, so accurate modelling and projections of inflation and other risk mitigates must be considered to ensure projects remain financial viable throughout the entire lifecycle.

Start planning for decommissioning, recommissioning, remediation and restoration at the early stages of the project before it comes online.

Determine what the revenues will be used for...land management, housing, education, direct to members, to Band Administration?

Community micro grid and energy management systems are the path to energy Sovereignty, Self sufficiency and the easiest way to deliver Direct member benefits with energy.

Simplicity is Key.

- . 10 MW Solar Park
- · 345 MW Wind Project
- · 200 MW Battery Project
- . 100 KW Net Metering Community Solar
- District Heat Biomass Feasibility Study for Pictou County
- Conversion of Fishing Vessel Fleet to Hybrid/Diesel Engines
- · Level 3 Electric Charger installation
- · Community Energy Plan
- · All homes Solar and Battery Install



## Community Engagement and Participation

If you move too fast you may scare people from participating or supporting the effort.

Understand that no energy solution today is perfect nor has it ever been. Many forms of Clean Energy generation still impact the land or disturb the natural environment.

Employ the highest standards of environmental assessment on projects. Source and procure materials in the most responsible way possible. Ensure enough money is set aside for contingency and potential waste clean up.

Awareness comes first, Acceptance is next, Action comes last. We can never do enough listening and the people will always want to be Seen, Heard and Understood.

This does not mean we must agree just that we acknowledge each others voice and opinions.

What is the mechanism we use to get through disagreements. How is it that we may find consensus that is representative of the voice of the whole people?

Recognizing that not all people are at a place of mental, emotional or spiritual readiness to contribute to critical decisions.

Trust is built through frequent, consistent, open forum dialogue, effective and transparent communications and accountability.

- Communications Director Return to Work
- · Weekly Community Energy Planning
- Outreach to Partner Organizations for Technical support with communications
- The creation of a new role, Community Energy Planning Coordinator
- Multi Channel Communications, door to door, in person, online website, social media, panel discussions and industry events

