OPPORTUNITIES IN COMMUNITY ENERGY
SEPTEMBER 20TH, 2017
ENOCHE, AB
Multiple Types of Renewable Energy

- Solar
- Flare Gas
- Biomass
- Geothermal
- Wind
- Hydro
Where to start? Lots of good resources, lots required

- Developers – small, medium, large
- Independent Power Producers
- Consultants
- Engineering Firms
- Technical Firms
- Legal
- Government
- Utilities
- Transmission Companies
- Distribution Companies
- Vendors
- Finance Companies
- Equity Firms
- Economic Development
- Other Service Providers

- FNPA™ – only non-profit option controlled by First Nation Members
Today’s Workshop – Part 1

1. **FNPA**: Who, what and why?
2. **Exercise**: Identifying community goals/vision
3. **Community Energy Projects**:
   1. Community Energy vs. Utility Scale Projects
   2. Example Community
   4. Benefits of energy conservation, self-generation and community energy projects
4. **Community Engagement**: Vickie Wetchie, Green Arrow
5. **Exercise**: Data, information and questions
6. **Conclusion**
**What is FNPA?**

FNPA – Centre of Excellence in Indigenous Renewable Energy

“safe harbor for Nations in Renewable Energy”

100% Indigenous-controlled non profit mandated to facilitate and develop opportunities for its Membership on a cost-recovery basis.

We are 89 Members - 22 Indigenous and 67 Industry Board & Management is 75% Indigenous.

Technical Team

Volunteer Board
People in the room today:
Leah Nelson Guay – Outgoing CEO, FNPA
Vickie Wetchie, Green Arrow Akamihk
Darren Huculak, Business Manager, Alberta
Kolja Vainstein, Solar/Wind Project Development Advisor
Jai Roberts – Project Management, FNPA
Audra Isaac – Membership, FNPA
Christina Swan - Financial & Administration, FNPA
Jenna Gall - Community Projects, FNPA

What is FNPA?
FNPA Approach – Indigenous Led

FNPA provides a bridge between Nations and Industry to create strong relationships and opportunities that benefit the Nation.

FNPA IMPROVES OUTCOMES and MANAGES RISK:

1. Objective
2. Experience
3. Knowledge Transfer
4. Optimize Investment
5. Managed Risk
Exercise: Identifying Community Goals

Take the next 5-7 minutes to complete Exercise 1 on your worksheet
Roof-Top to Utility Scale
Community Energy vs. Utility Scale

**Part 1: Community Energy Projects**
- Reduce costs of operating buildings
- Match energy production to local need and available energy source
- Quick timeline: 3-6 months to completion
- Low risk opportunity
- Visual representation of community commitment to environment/sustainability
- Maximise local ownership and decision making
- Generate local community jobs (1-3)
- Energy independence

**Part 2: Utility Scale Energy Projects**
- Generate revenue on a $/MW production basis
- Get involved in big business development
- Long timelines: 3-6 years to completion
- High risk opportunity
- Highly technical, requiring a highly technical team from start through commissioning
- Generate local community jobs (10-20)
- Develop strong business and investment partnerships

The Pathway to Powerful Opportunities™
Community Energy Planning
- Baseline information
- Opportunities study
- Goal setting and community energy vision

Energy Conservation
Energy conservation is generally the lowest cost solution for community energy savings.

Community Energy Project
- Solar
- Wind
- Hydro
- Biomass
- Geothermal
Benefits of Community Energy Planning:

- Access to funding for future renewable energy projects
- Easily able to report on funding – clear metrics
- Ability to review goals and assess progress
- Strong understanding of baseline data and future opportunities
Benefits of Energy Conservation:

- Increased comfort and efficiency of buildings
- Understanding where energy can be saved
- The cheapest kWh is the one you don’t use
- Energy savings = less self-generation costs
Green Lake, SK
Community Centre Solar Installation
30 kW will power 85-90% of the power for their community centre and hockey rink
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Community Centre Solar Installation
30 kW will power 85-90% of the power for their community centre and hockey rink
Fond du Lac Father Gamache Memorial School
Benefits of Community Energy Projects:

▪ Savings on utility bills for community buildings
  – Money saved can be put towards other costs or community programs.

▪ Visual representation of community commitment to environment/sustainability.

▪ Community support / ownership

▪ Local jobs

▪ Educational opportunities

▪ Segway to potential future larger power opportunities
# Potential Funding Programs

<table>
<thead>
<tr>
<th>CAPACITY BUILDING</th>
<th>COMMUNITY ENERGY</th>
<th>TRAINING &amp; EMPLOYMENT</th>
<th>UTILITY-SCALE RENEWABLES</th>
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<tbody>
<tr>
<td>Lands and Economic Development Services Program (INAC-LEDSP)</td>
<td>Alberta Indigenous Community Energy (Audit) Program (AICEP)</td>
<td>Aboriginal Employment Partnership Program</td>
<td>Community Opportunity Readiness Program (INAC-CORP)</td>
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<td>Aboriginal Economic Partnerships Program (AB-AEPP)</td>
<td>Alberta Indigenous Energy Efficiency Retrofit Program (AIEERP)</td>
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<td>Smart Grids <em>NRCan – questionnaire due Oct 2, 2017</em></td>
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<td>Alberta Indigenous Solar Program (AISP)</td>
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<td>Aboriginal Business Investment Fund (AB-ABIF) – shovel ready</td>
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<td>Next Generation Clean Energy Infrastructure – net zero construction <em>NRCan - EOI due Monday, September 25!!</em></td>
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<td>Promoting Clean Energy for Remote Communities <em>NRCan – questionnaire due Oct 2, 2017</em></td>
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*NRCan – questionnaire due Oct 2, 2017*
Exercise: Data, contacts and questions

Take the next 5-7 minutes to identify a building in your community.

Who are some key community contacts and stakeholders?

What questions do you still have?
1. Keep learning, you’re on the right track!
2. Community Energy Planning is baseline to renewable energy projects.
3. Find an objective advisor that provides multiple options and pathways to partners.

Still have questions? FNPA can help!
## What can FNPA offer?

<table>
<thead>
<tr>
<th>Category</th>
<th>Offer</th>
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<tbody>
<tr>
<td><strong>Power 101</strong></td>
<td>Access to power fundamentals – know what we don’t know</td>
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<tr>
<td><strong>Power Development Process</strong></td>
<td>‘how-to’ for Communities to lead a development process.</td>
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<tr>
<td><strong>Community Energy Projects and Planning</strong></td>
<td>Community energy planning and full project assistance with community self generation projects.</td>
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<tr>
<td><strong>Pre-Feasibility</strong></td>
<td>Cost effective approach to arrive at a go/no go</td>
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<td><strong>Stakeholder Relationships</strong></td>
<td>Community, Industry, Government</td>
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<tr>
<td><strong>Project Development Support</strong></td>
<td>Procurement, Network, “Owner’s Advisor”</td>
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Become a FNPA Member today!

1. Become a Member!

2. FNPA Annual Energy Forum – Wednesday, November 15, 2017 in Saskatoon, SK

3. Book a meeting!
   - Darren Huculak, Alberta Business Manager, dhuculak@fnpa.ca
   - info@fnpa.ca
   - 1-855-359-3672
   - www.fnpa.ca
Questions?

Thank you!

Up Next

Part 2: Utility Scale Renewable Energy Projects