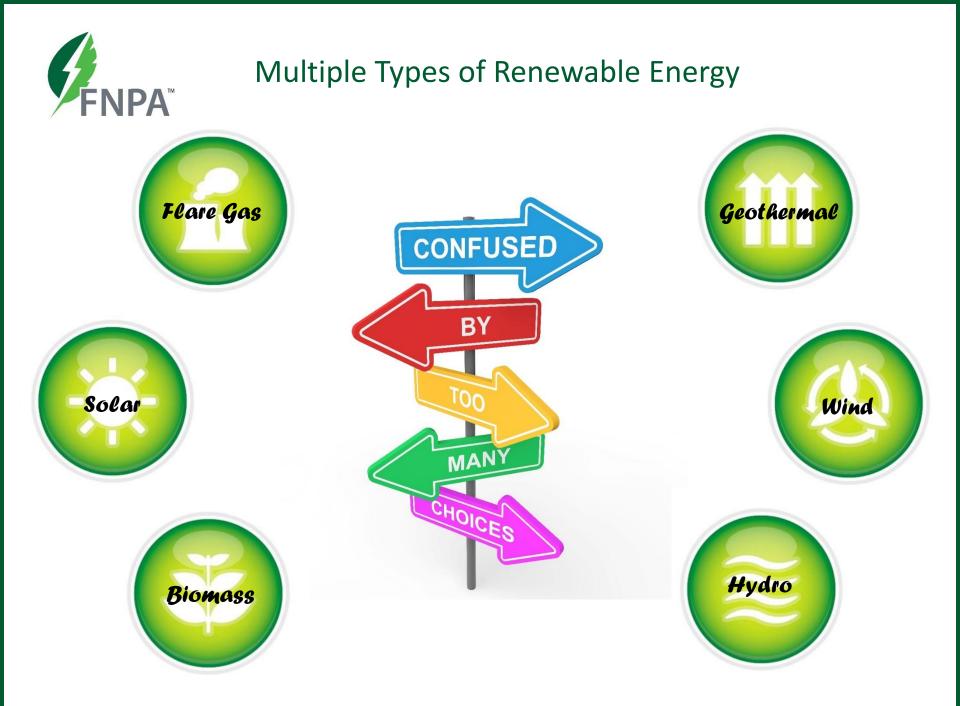


OPPORTUNITIES IN COMMUNITY ENERGY SEPTEMBER 20TH, 2017

ENOCH, AB





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
- **YFNPA** 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
- 3. Benefits of Community Energy Planning
- 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



What is FNPA?

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

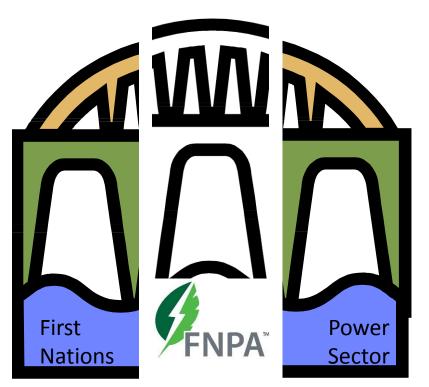


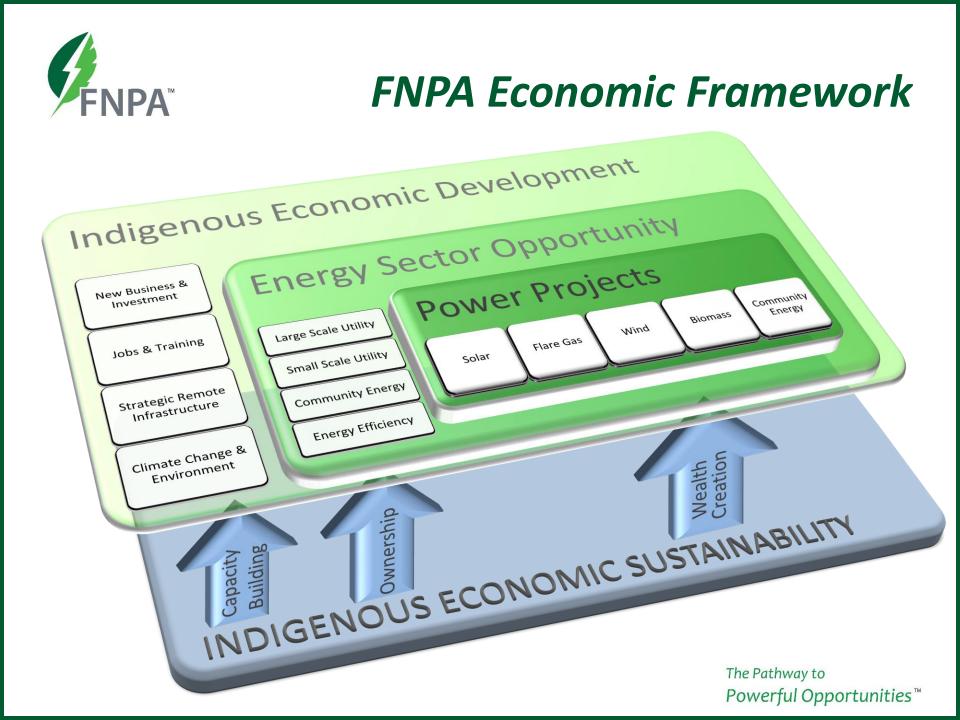
FNPA Approach – Indigenous Led

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





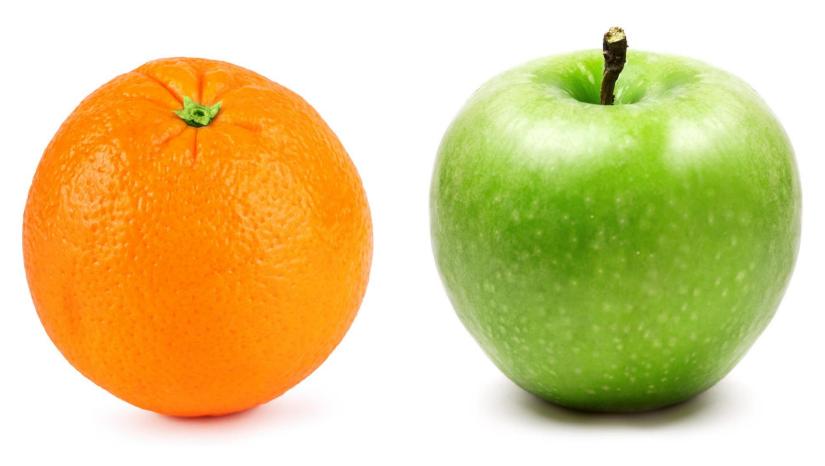


Exercise: Identifying Community Goals

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



Community Energy

Community Energy Planning				
 Baseline information Opportunities study Goal setting and community energy vision 	Energy Conservation is generally the lowest cost solution for community energy savings.	Community Energy Project		
		- Solar - Wind - Hydro - Biomass - Geothermal		



Community Energy Planning



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



Energy Conservation

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

300 KM NORTH OF SASKATOON, SASKATCHEWAN...



Green Lake, SK

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





Community Energy Projects

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

CAPACITY BUILDING	COMMUNITY ENERGY	TRAINING & EMPLOYMENT	UTILITY-SCALE RENEWABLES
Alberta Indigenous Climate Capacity Program (AICCP)	Alberta Indigenous Climate Planning Program (AICPP)	Alberta Indigenous Green Energy Employment Program (AIGEP)	Alberta Indigenous Green Energy Development Program
Lands and Economic Development Services Program (INAC-LEDSP)	Alberta Indigenous Community Energy (Audit) Program (AICEP)	Aboriginal Employment Partnership Program	Community Opportunity Readiness Program (INAC-CORP)
Aboriginal Economic Partnerships Program (AB-AEPP)	Alberta Indigenous Energy Efficiency Retrofit Program (AIEERP)		Smart Grids (NRCan – questionnaire due Oct 2, 2017)
	Alberta Indigenous Solar Program (AISP)		Aboriginal Business Investment Fund (AB-ABIF) – shovel ready
	Next Generation Clean Energy Infrastructure – net zero construction (NRCan - EOI due Monday, September 25!!)		
	Promoting Clean Energy for Remote Communities (NRCan – questionnaire due Oct 2, 2017)		



Montana First Nation



Green Arrow Akamihk Community Example Vickie Wetchie



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?



Key Take Aways

 Keep learning, you're on the right track!
 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?

Power 101	 Access to power fundamentals – know what we don't know
Power Development Process	 'how-to' for Communities to lead a development process.
Community Energy Projects and Planning	• Community energy planning and full project assistance with community self generation projects.
Pre-Feasibility	 Cost effective approach to arrive at a go/no go
Stakeholder Relationships	• Community, Industry, Government
Project Development Support	 Procurement, Network, "Owner's Advisor



Conclusion

Become a FNPA Member today!

- 1. Become a Member!
- FNPA Annual Energy Forum Wednesday, November 15, 2017 in Saskatoon, SK
- 3. Book a meeting!
 - Darren Huculak, Alberta Business Manager, <u>dhuculak@fnpa.ca</u>
 - info@fnpa.ca
 - 1-855-359-3672
 - www.fnpa.ca



Conclusion

Questions?

Thank you!

Up Next Part 2:

Utility Scale Renewable Energy Projects