



Are Clean Energy Projects Right For Your Community?

March 29, 2023

Key Questions



What is "clean energy"?

Is it right for my community?

How do I plan for success?

Clean Energy and CED





Renewable Energy Generation

- Solar and wind
- Hydrogen*, geothermal, biomass, hydro, tidal
- Micro-scale e.g. solar panels on roofs
- Community-scale Under 5 MW
- Utility-scale Over 5 MW to... hundreds of MW!

Energy Efficiency

- Upgrades to new and existing homes and buildings in community
- Improvements to local distribution
- Developing businesses that improve things elsewhere

Community Economic Development

• Investments that are aligned with community priorities and that build the wealth and economic well-being of all members.

Renewable Generation



- Four Basic Components:
 - Land or Location (e.g. rooftops)
 - Energy producing asset (e.g. wind turbines)
 - Transmission or Distribution
 - Retail/Consumer

Land Considerations

- Land has value!
- Expect approx. 4-7 acres per megawatt of solar capacity
- Sometimes smaller is better, sometimes not
- Not all land is equally suited for projects

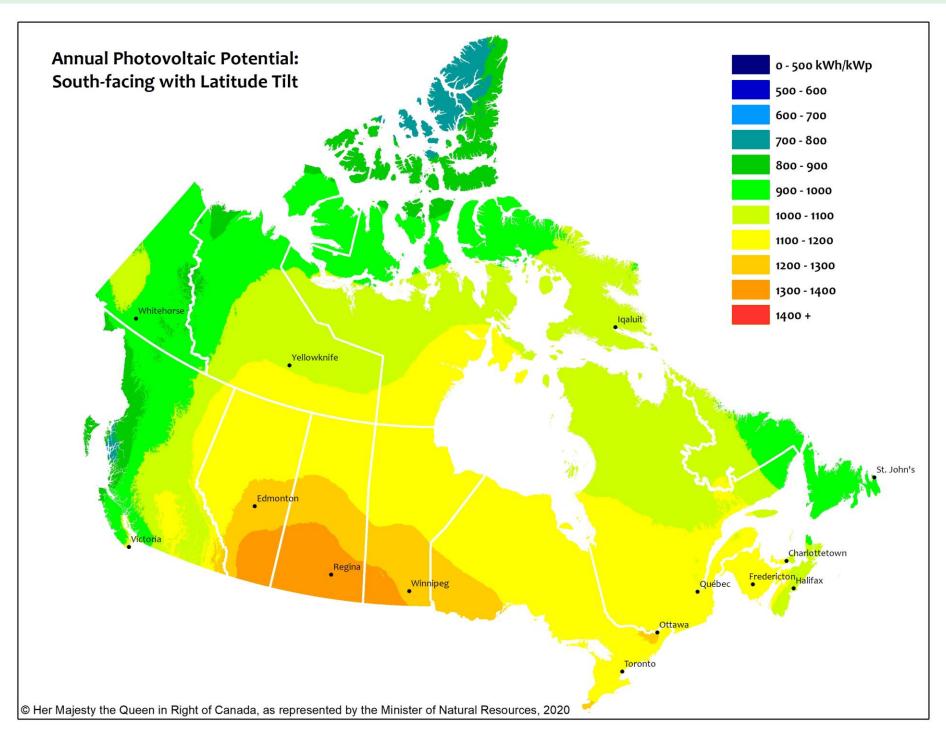
Regulatory Matters

- Varies by province
- Alberta is deregulated for generation and retail, which creates investment opportunities



Solar in Canada

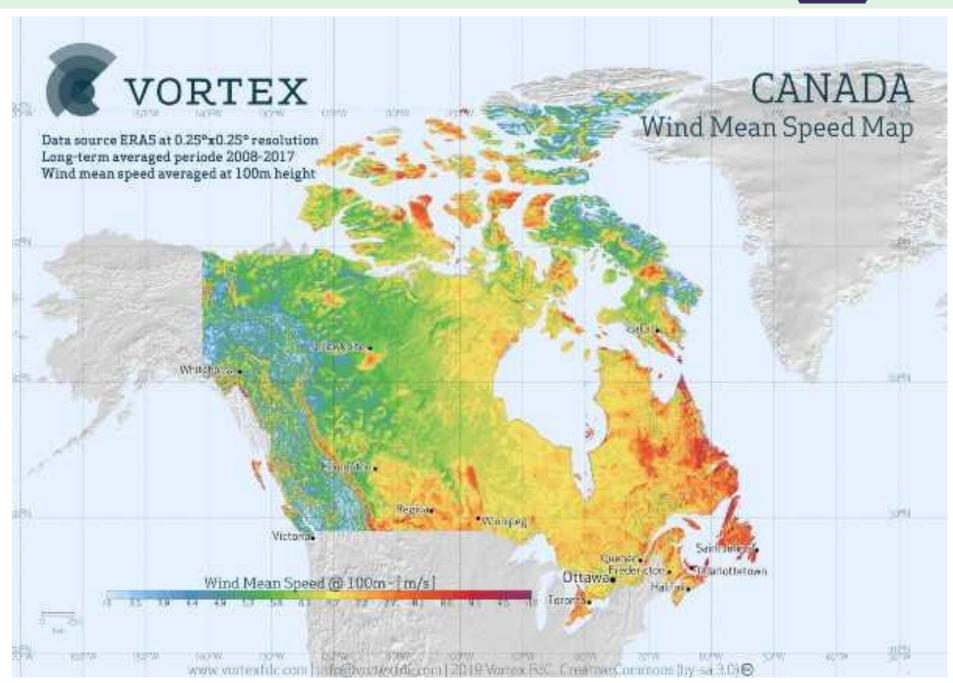






Wind in Canada





Energy Efficiency



- Often ignored, and often the best
 - 1 kW saved is better than 1 kW generated
 - Can be better ROI depending on investment
 - Can create more long term jobs
 - Can have more impact on quality of life
 - Really dovetails with renewable generation
- So why is it ignored as an investment?
 - Not sexy (like why people talk about Teslas but not inflating their tires correctly)
 - Often considered public works (cost) rather than economic development (opportunity)
- Project Examples
 - Energy efficient upgrades (cost savings)
 - Building a retrofit business
 - Building a home/building constriction business



Question



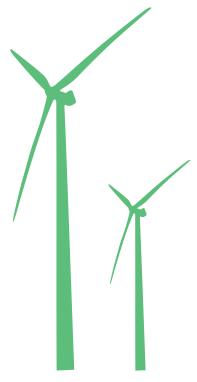
Which type of clean energy project are you most interested in (and why)?



Is It Right For Your Community?



- Great projects can be great for someone else, but not for you....
 - Every project involves trade-offs money, time, and/or opportunity
 - Taking time to establish community vision, values, and priorities is invaluable
 - Take stock of your community's advantages, skills, and assets (e.g. Enoch)
 - Consider where your community is now and where it wants to be in 30 years
 - Develop a long-term community plan, ecdev strategic plan, and/or community energy plan with leadership <u>and</u> membership
 - Work the plan. Review the plan. Adjust the plan.
- Always assess projects and opportunities according to community priorities (and be realistic about capacity)
 - Does the opportunity align with community values?
 - Will it provide good benefits in line with community priorities?
 (e.g. income vs jobs vs service/benefit to the community)
 - Will it advance the community along its plan?
 - Will it provide good value (time, money, opportunity)?
 - Is it too risky for the community (money, land, health, etc.)?



Canadä

Questions – BREAK OUT! (10 mins) FOR INDIGENOUS PROSPERITY



Discuss your community's priorities. Is there a plan? Obstacles to a plan? Does your project align with the plan?

How do community plans fit into your funding decisions? Do you provide planning support?

How do community plans & priorities influence your work? Do you ask about them before you start working on a project?

Develop on Reserve/Settlement?



Pros:

- Counts as equity contribution without dipping into community cash or credit.
- More employment and other benefits when located nearer to community (though private land can do this too)
- Greater sense of community pride
- Creates learning opportunities (future businesses, school learning opportunities).

Cons:

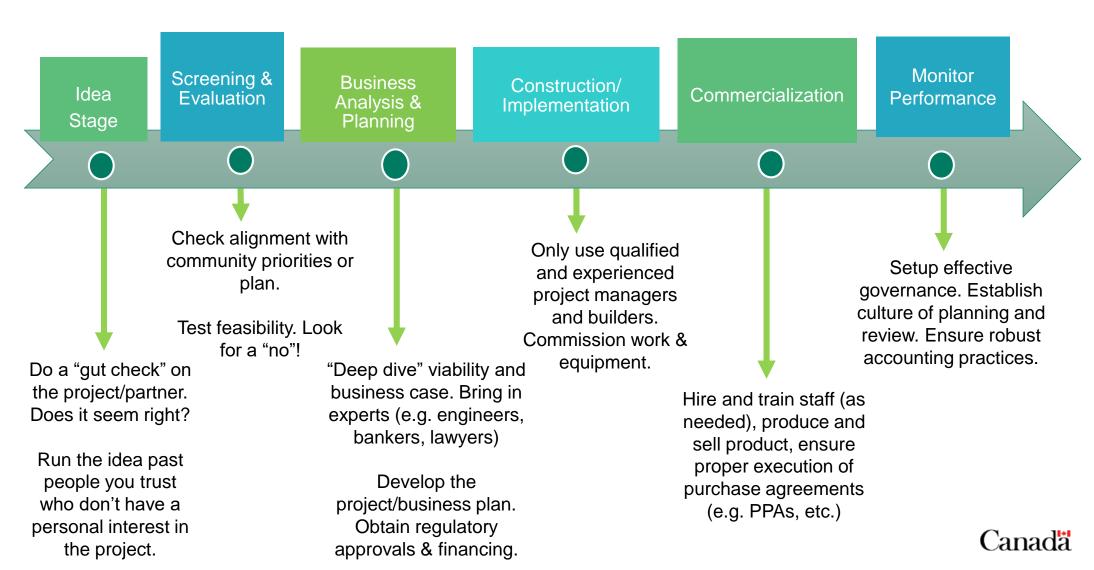
- Reserve lands usually subject to the Indian Act, which can be tricky to navigate.
- Settlements have own rules (members only)
- May be difficult to get community buy-in.
- May take up land that could be needed for other things (i.e. up to 35 years for solar)



Planning for Success (Partner Edition)



- Partners can be invaluable and critical to success, but....
 - Community and partner interests are not entirely aligned.



To Partner, Or Not To Partner?



- What are your goals for partnership?
 - Just a quick and easy way to get in?
 - Are you being approached?
- What are the partner's intentions?
 - Are their values aligned with community's?
 - Why are they approaching you?
- What does the partner bring?
 - Opportunity? Cash? Expertise?
 - Have they been in business for a long time?
 - Are they reputable?
 - Have they completed similar projects before (with Indigenous communities, on reserve)?
- What does your community bring?
 - Grant/funding opportunities?
 - Land and/or cash?
 - Reputation (ESG, goodwill on other projects)?



Even MORE on Partners....



JV Profit Share

- Pros: Revenue with limited cost, gain exp. for future projects, agreements
- Cons: Partner owns asset, community has limited influence over direction, requires trust in partner.

50 - 50

- Pros: Greater control, returns & profits, builds community capital (credit)
- Cons: Uses up community cash/ credit, months to find a partner/ setup structure, legal & financial liabilities/risks.

Majority + Op

- Pros: Capture most profits, decision control, community owns asset (++ credit), partner incentive
- Cons: Comm.
 carries most risk
 project/financial/
 business, uses
 lots cash/credit,
 requires more
 capacity.

Total Own

- **Pros**: All profits, simple business model, 100% of asset, total control, most spin-off opps.
- Cons: Comm.
 holds all the
 risks. Requires a
 lot of community
 capacity to pull
 off the project
 successfully.

- How to put a partnership in place:
 - Sign a non-disclosure agreement to start conversations
 - Sign a MOU to lay out the basic structure of the agreement
 - (Eventually) Formalize a final agreement through lawyers



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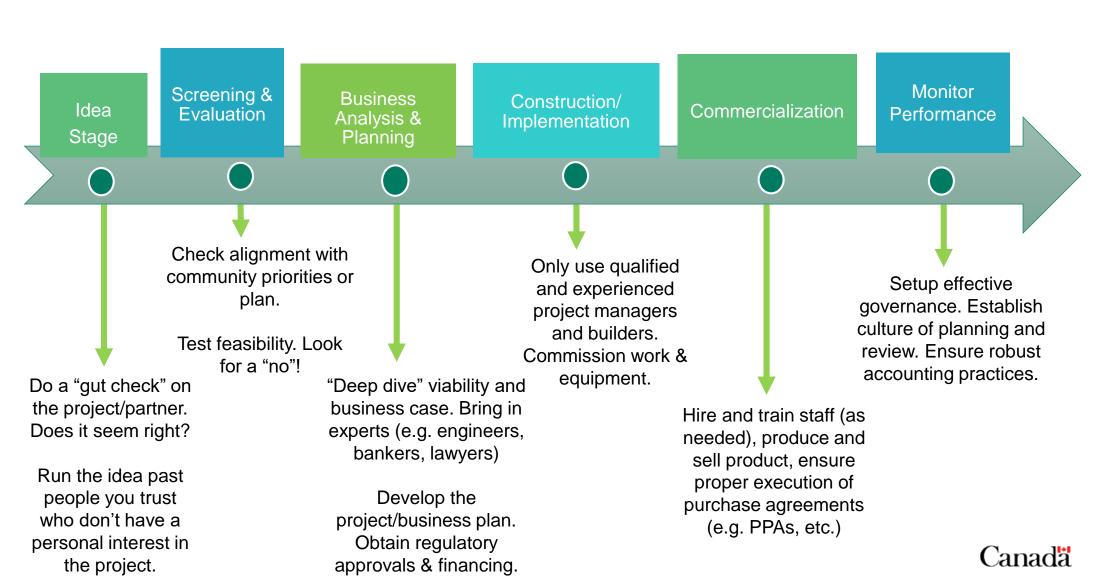
Will your project require you to partner or will your community go it alone? Why and how will it affect your project?

How do you value partnerships when evaluating community applications? Are they a positive, a negative, or does it depend?

Do you exclusively work for a fee or do you accept project equity in lieu? If fee only, how do you help clients navigate partnerships? If equity, how does it affect your judgement?

Return of the Success Plan!





Costs (and how to pay for them)



- Projects can take a long time and cost a lot of money (plus, they may not happen)
 - E.g. Expect <u>at least</u> two full years for a utility-scale solar project at \$2 million per MW (not including transmission lines at \$750k per km)
- Engage funders early, even if you don't need or want them now
 - Grants are a good way to subsidize "early money" activities like feasibility and testing
 - Plan as though you will pay everything; use programs to reduce costs (stronger apps)
 - Programs may also fund community planning
 - ISC, PrairiesCan, SPIs, NRCan all have programs
- Capital costs can be steep, so expect to need:
 - Community cash & credit (banks, AIOC, PrairiesCan)
 - Partners or other equity investors
 - Government programs (e.g. NRCan, ISC, CMHC, AB)





Thank You

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