

The Wind Power Game

It's not if you can play as a tribe, but how.

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Goals for Today:

To have you realize and understand:

- ❑ It's not if you can play in the wind game, but how;
- ❑ The three main types of wind projects;
- ❑ The key components of wind project development;
- ❑ Typical development timelines;
- ❑ The 3 main development methods;
- ❑ How to select the best development method for your tribe; and
- ❑ What to do next.

MFE Background

- ❑ Mission Statement: *Leading community renewable energy projects from concept to completion.*
- ❑ Been around since 1979 in MT, TX
- ❑ Over the last 5 years have worked on 7 small wind projects
 - 65-kW to 2-MW:
 - Land, financing, engineering, construction, O&M oversight
- ❑ Currently working in 8 Midwestern and Western States on:
 - Pre-development projects
 - “Flip” projects
 - Farmer/Rancher owned projects
 - Tribal projects
 - Easement negotiations

Wind Power Project Types

☐ **Big wind:**

- Turbines: MW-class, 300+' high
- Project sizes: 10-MW to the 100's or 1,000's of MW
- Ownership: Developer (e.g. private equity corporations or utilities)

☐ **Community wind:**

- Turbines: sub-MW or MW-class, <120' to 300+' high
- Project sizes: 50-kW to 10-MW
- Ownership: Tribe or Private Equity FLIP (we'll get to this...)

☐ **Small wind:**

- Turbines: <10-kW, <120' high
- Project sizes: 1-kW to 50-kW
- Ownership: Tribe or tribal members

Pros and Cons of Project Types

Big Wind

□ Pros

- Very little upfront \$
- Consistent cash flow
- Everything handled by developer

□ Cons

- 5 / 95 Rule: *Very site dependent*
- Low deal frequency
- Trans. vs. Distr. Lines
- Need big turbines
- Complicated PPA

Community/Small Wind

□ Pros

- 95 / 5 Rule: *Do something instead of nothing*
- Distr. vs. Trans. Lines
- Small projects (<20MW)
- Keep \$ local
- Various turbine sizes
- Many “Flip” investors
- “Easy” access to financing

□ Cons

- Upfront \$ is req'd (typically)
- Lumpy cash flow (“Flip”)
- Increased responsibility

Wind Project Development Steps

- Wind Projects are a 3-legged stool:
 1. Wind Resources: 12-36 months
 2. Transmission Access/Capacity: 6-12 months
 3. Energy Purchaser/Power Purchase Agreement: 1-12 months
 - Without strong legs, your stool will collapse—*assess these first!*
- Other activities (the details...):
 4. Permitting (local, state, federal): 2-36 months
 5. Engineering design and specifications: 2-6 months
 6. Equipment selection and purchase: 2-4 months
 7. Contractor selection: 1-3 months
 8. Easement agreement(s): 1-6 months
 9. Project ownership structure: 1-3 months
 10. Project financing options: 1-6 months
 11. REC / Green Tag purchaser: 1-3 months
 12. O&M Agreements: 1-3 months

Typical Project Phases

- Typical Development Phases / Timelines:
 - Phase I: Wind Resource Assessment (*12-36 months*)
 - Phase II: Planning/Permitting (*3-36 months*)
 - Phase III: Construction (*1-6 months*)
 - Phase IV: Re-powering / De-commissioning (*>20 years*)
- Many activities can be done in parallel, but I strongly urge you to crawl before you walk and walk before you run—with your time and your money
- Refer to MFE’s “Community Wind Development Program” (CWDP)

Assessing Your Wind Resource

- ❑ If you are not (or have never) monitored your tribal wind resources, START NOW
 - ❑ Select where to monitor via atmospheric mapping exercise
 - ❑ Important to remember:
 - Transmission: Closer is better (<3 miles-depending on project type)
 - Environmental: Make sure no on-site deal breakers present (*e.g. endangered prairie _____*)
 - ❑ I recommend conducting a preliminary site assessment with a qualified environmental assessment firm (~\$5k) (*e.g. Tetra Tech*)
 - ❑ Install 60m meteorological (met) tower at chosen site
 - Cost ~\$30k; many qualified installers
 - Monitor for 12-36 months
 - Make sure to use a qualified data analysis firm
- Can be the same company*

3 Main Development Methods

1. **Developer** (*ex. FPL, Horizon, Gamesa; 50-3,000 MW projects*)
 - ❑ Outside developer comes in, pays all project costs, and leaves behind tribal fees and easement payments
2. **Tax Equity “Flip”** (*ex. MN Flip Projects; 1-20 MW*)
 - ❑ Tribe works on key development tasks and brings in a tax equity investor to utilize project tax benefits.
 - ❑ Depending upon how much work the tribe completes, the project ownership will “flip” to the tribe in year 10-15 for little or no cost
 - ❑ General Rule: More work = Better deal
3. **Tribal** (*ex. Blackfeet Wind Turbine Project; 50 kW to 20 MW*)
 - ❑ Tribe takes on all of the development steps and owns the project from the get go
 - ❑ Will almost certainly need to bring in outside help to get the project done

Selecting a Development Method

- ❑ Select your method to maximize project objectives and goals
 - e.g. time, money, ownership, etc
- ❑ Additionally, take realistic stock of your cash and risk thresholds
- ❑ The following development matrix should help

Development Method	Upfront Tribal Cash Outlay	Investment Risk	Tribal Cash Flow	Industry Expertise Required	Access to Project Financing	Tribal Desire to <u>Own</u> Project
Developer	Low	Low	Low-High	High	Low	Low
Equity Flip	Moderate	Moderate	Moderate	High	Low	Moderate
Tribal	High	High	High	High	Low	High

Available Debt Financing Sources

- ❑ USDA-Rural Utility Services (RUS) loans
- ❑ BIA energy loans
- ❑ New Market Tax Credit loans
- ❑ Various state energy loan programs
- ❑ Clean Renewable Energy Bonds (CREBs)
- ❑ *Locating debt financing for tribally-owned wind projects is typically not an issue*

Important Project Considerations

- ❑ Confidentiality Agreements
 - Watch out for term, exclusivity, and what and who is included
- ❑ Term Sheets
 - Establish key deal terms without legal blabber (I mean language)
- ❑ Easement Agreement
 - Three main methods:
 1. Single-up Front Payment (rare by itself) -- $\$/MW$, $\$/acre$
 2. Fixed Annual Payment (rare by itself) -- $\$/MW$, $\$/acre$
 3. Percentage of Revenues (semi-customary) -- % of *GROSS energy/REC profits*
 - Easement payments are typically comprised of a combination of all 3 of the above methods
- ❑ If you have specific questions, don't hesitate to phone / email me – I'm more than willing to help

How Can Your Tribe Benefit? (\$)

- Cash will accrue to your tribe via:
 - A. Upfront tribal fees
 - B. Easement Agreements (land payments)
 - C. Percentage of project revenues (energy and/or RECs)
- The level of tribal compensation is driven by:
 1. Wind resource and access to transmission
 2. Size of developable acreage
 3. Ownership structure
 4. Project size
 5. Number and value of completed project tasks

Things to be Thinking About

1. There is no such thing as a dumb question!
2. It's not if, but how you participate in wind
3. Select your project type and development method to maximize project goals/objectives
4. Get going on wind resource assessments
5. Understand your land's value
6. Work with a qualified team
7. DO SOMETHING!



Thank you for your time



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