Financing Energy Projects

A Primer

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Agenda

1 Tribal Roles

2 Sources of Capital

3 Ownership Structures

Paying for the Project

- **Three Major Costs/Phases in Energy Project Development**
  - **Feasibility:** techno-economic analysis to determine business case for project
  - **Development/Preconstruction:** site control and preparation; permitting; equipment procurement; financial close
  - **Construction:** Equipment delivery; project construction; commissioning testing

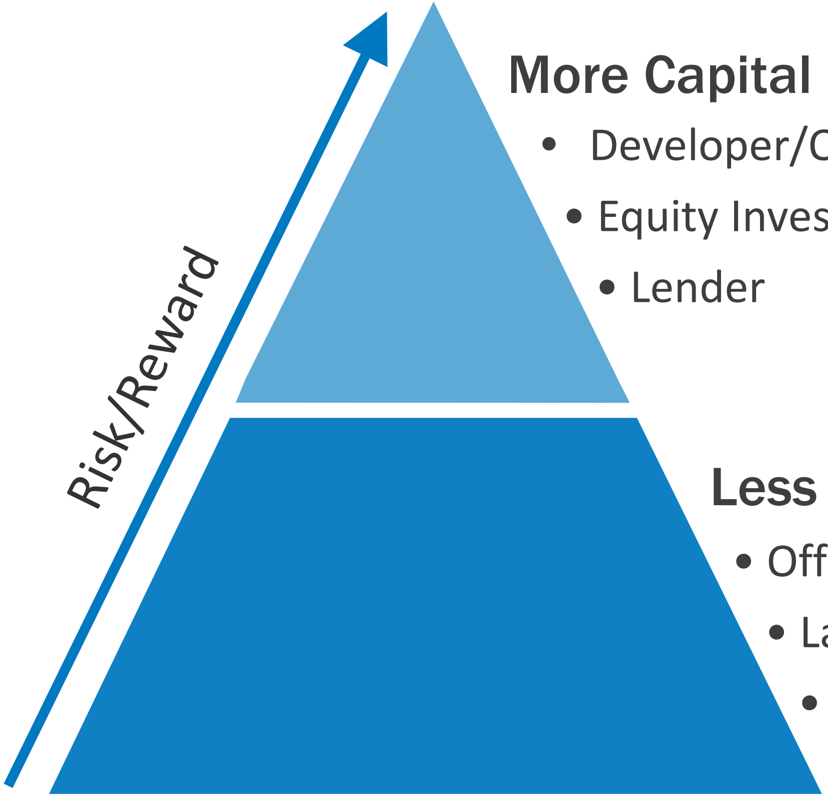
Tribal Roles

What benefits can the tribe realize from energy project development and operations?

Initial Considerations

- Project technology?
- Size?
  - Distributed (facility level)?
  - Utility-scale?
- Purpose?
  - Offset utility purchases?
  - Revenue generation?
- Tribal goal?
  - Operating savings? Business opportunity?

Tribal Roles



More Capital Intensive

- Developer/Owner
- Equity Investor
- Lender

Less Capital Intensive

- Off-taker (energy purchaser)
- Land Owner
- O&M subcontractor

Tribal Business Structures

Business Structure Option	Simplicity and Quick Formation	Shield Tribal Assets from Business Liabilities	Avoid Federal Income Taxes	Separate Business from Tribal Control	Ability to Secure Financing
Tribal Instrumentality	●		●		●
Political Subdivision			●		●
Section 17 Corporation		●	●	●	●
Tribal Law Corporation	●	●	●	●	●
State Law Corporation	●	●		●	●
LLCs/Joint Venture		●	●	●	●
LLC (only if Tribe is sole member)	●		●		

Sources of Capital

What funds are available for project development and construction?

Energy Project Finance, Generally

Debt

i.e. Loanership

Equity

i.e. Ownership

Financing Options and Sources of Capital

- Cash on hand
- Debt (bonds, project loans, back-leverage, etc.)
- Grants
- Incentives
- Guaranteed savings contracts
- Operating revenues/savings

Varieties of Capital Sources

Cash	Loans	Grants	Incentives	Guaranteed Savings Contracts	Operating Revenue/Savings
Reserves and General Funds	Commercial loans or project loans (recourse, or non-recourse)	2019 Infrastructure Deployment on Tribal Lands	Tax incentives (e.g. credits, deductions)	Energy Savings Performance Contracts	Energy sales
Trusts	Bonds (standard and tax-exempt)	Tribal Solar Accelerator Fund	Production- and investment-based rebates	Utility Energy Savings Contracts	Energy Purchases below avoided cost
Operating revenues from other projects	Loan guarantees (not debt, but improves loan terms)	USDA Community Facilities	Environmental attributes (e.g. RECs)		

	PTC	ITC	Accelerated Depreciation
Value	Tax credit of 0.96¢/kWh	Tax credit of 30% of project costs	Depreciation of eligible costs according to an annual schedule
Primary Technology	Wind	Solar	Can be taken with either PTC or ITC
Basis	Energy produced over 10-year period	Eligible project cost. Credit taken at the time the project is placed in service	Qualifying project cost. If used with ITC, basis is reduced by half of the credit (i.e. 85% of qualifying costs)
Expiration/ Step Down	Phasedown from 2016 - 2019	Phasedown from 2020 – 2021	**MACRS:** None **Bonus:** phasedown starting in 2023

Securing Debt (Lender Due Diligence)

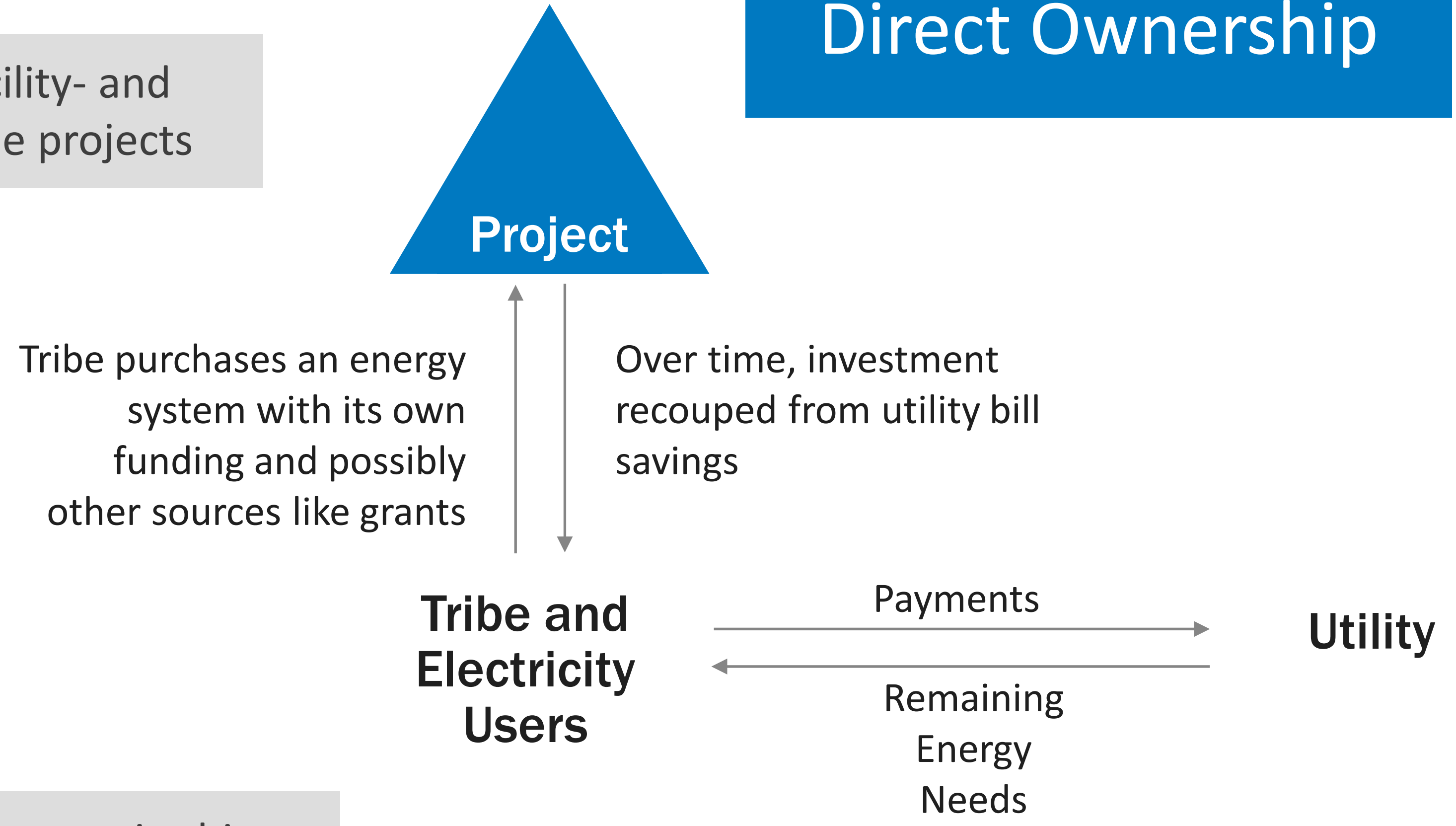
General Criteria / Requirements	• Ability to provide reasonable and valuable collateral • Good credit history for partners in the business • Experience and industry track record for partners in the business • Purpose of the loan is sound • Specified minimum percentage of owner equity invested in the project
Tribal Criteria / Requirements	• Limited waivers of sovereign immunity • Tribal court system independent of business and government • Stable and functional tribal government • Well understood contract enforcement and dispute resolution system • Specified minimum percentage of tribal equity invested in the project
Information Required	• Proof of credit history of the borrower • Proof of credit history, if available, of the business • Audited financial statements for the business (existing and projected) • A detailed and conservative business plan • Cash flow history and projected cash flow for the business

Ownership Structures

How does the tribe participate in the project structure?

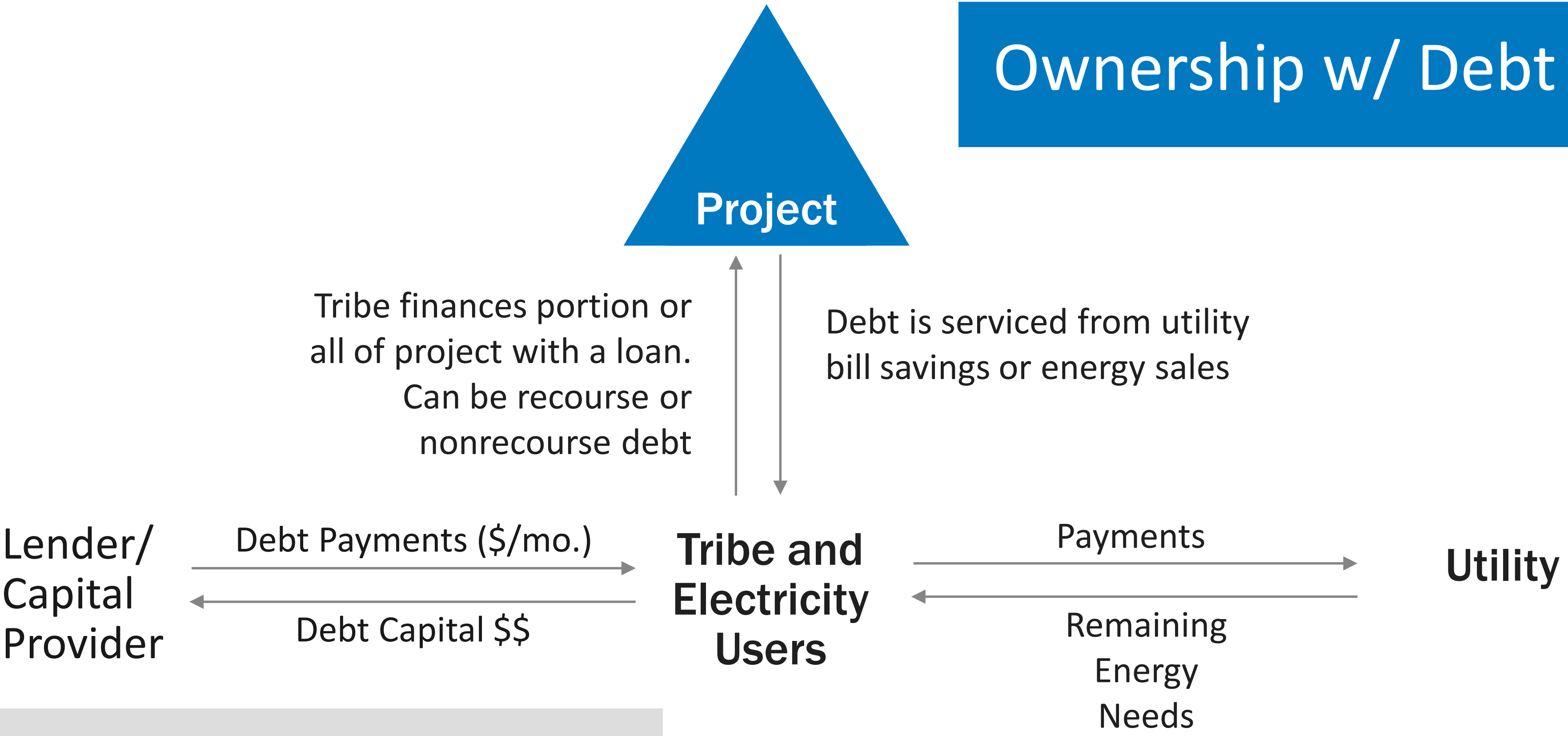
Direct Ownership

Primarily for facility- and community-scale projects



The tribe is the owner in this structure and self-generates its electricity

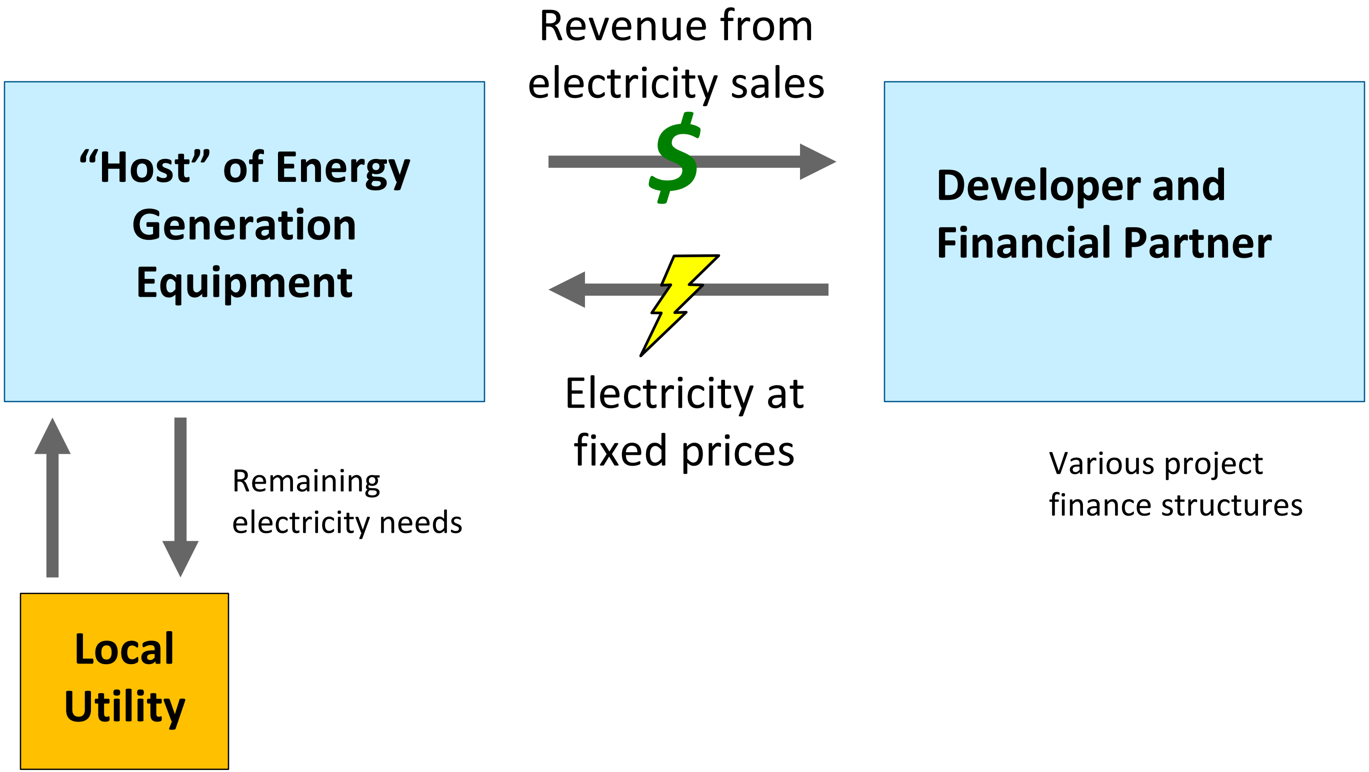
Ownership w/ Debt



The tribe is still the owner in this structure. Cash flows/savings go partially or entirely to debt service

Power Purchase Agreement

Customer agrees to **host** the system and **purchase** the electricity



PPA Considerations

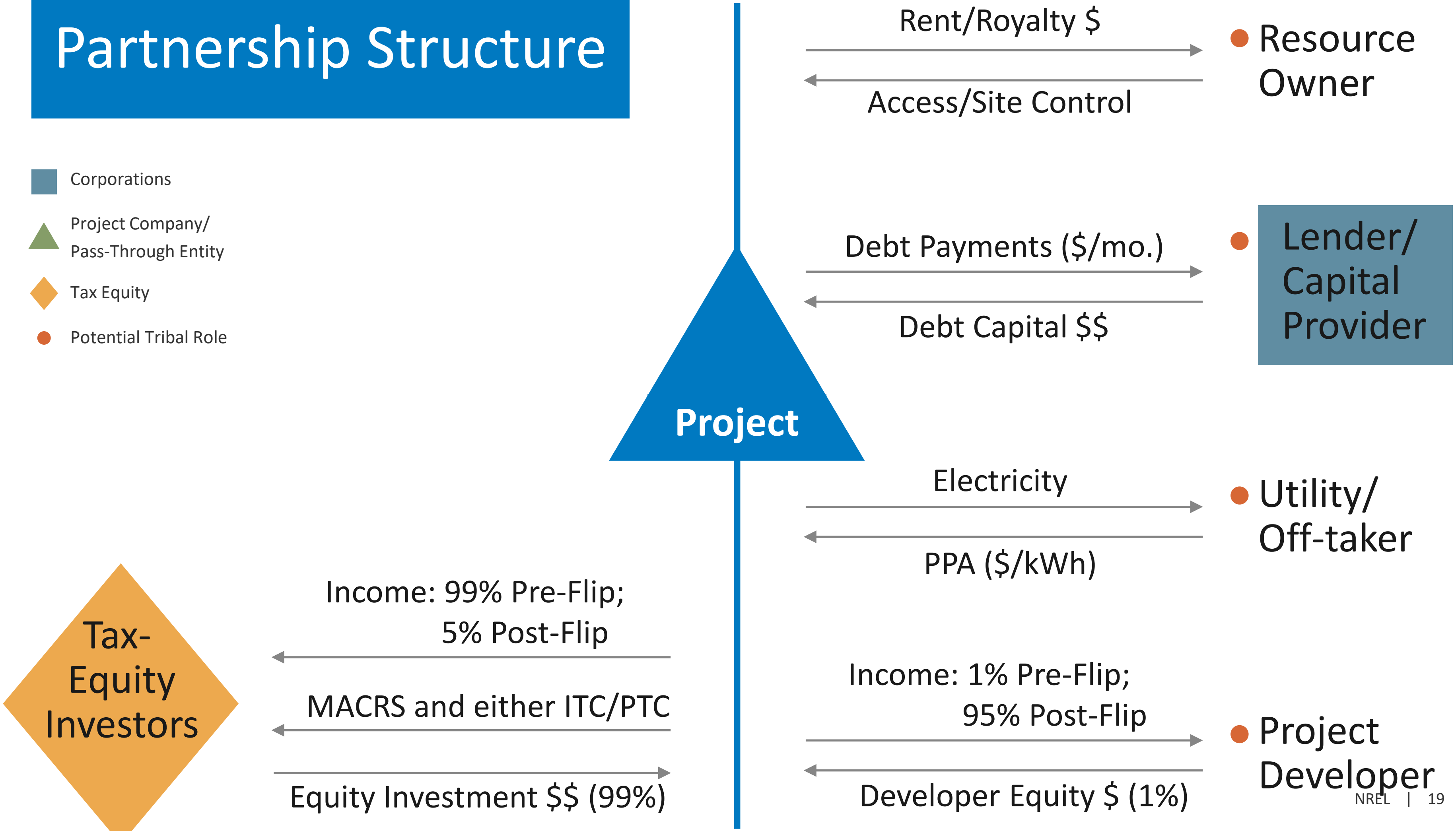
Advantages

- No/low up-front costs
- No O&M
- Benefit from tax incentives
- Locked-in energy price
- Path to ownership

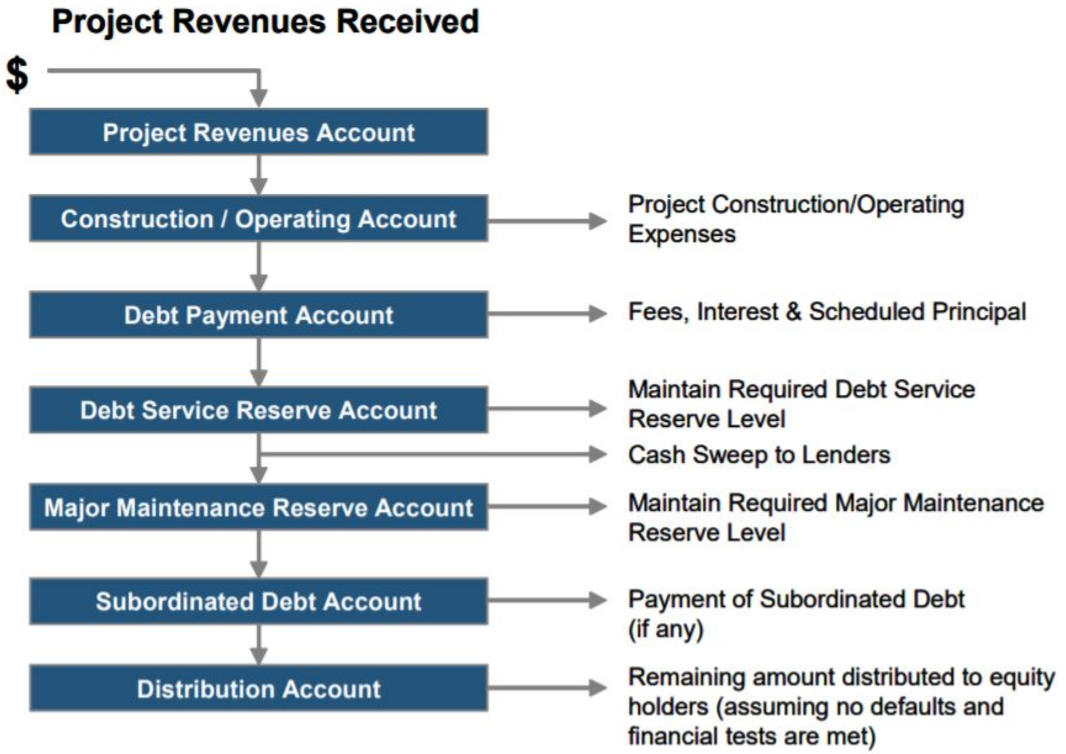
Disadvantages

- May not beat current electricity rates
- Tough economics for small projects
- Higher transaction costs
- REC and project ownership requirements

Partnership Structure



Project Waterfall



Appendix

Definitions

- Debt
  - An amount of money borrowed by one person (borrower) from another (lender). A loan. Typically, the debt arrangement will have a stipulated repayment schedule that will allow the borrower to repay the loan in full (the principal) on a regular schedule while also paying interest on top of that principal. In some cases, debt will be collateralized by an asset as a security for the lender.
- Non-recourse debt
  - A source of debt capital in project finance that is collateralized project assets. When debt is collateralized by the borrower's balance sheet, this is called recourse debt.
- Equity
  - An ownership stake in an asset, commonly purchased through a monetary investment. In project financing, equity is usually in a *subordinate* position to debt. In other words, if the project goes into default, the lender will be paid out from the liquidation of project assets before equity (according to the waterfall of accounts). This makes equity a higher risk investment, but it can also be correspondingly higher reward

Definitions (cont.)

- PTC (Production Tax Credit)
  - Tax credit available through Section 45 of the U.S. Internal Revenue Code which provides a tax credit to specified technologies on a generation basis, expressed in ¢/kWh. Wind energy is the primary beneficiary of the PTC
- ITC (Corporate Investment Tax Credit)
  - Tax credit available through Section 48 of the U.S. Internal Revenue Code (Section 25D for the personal credit) which provides a tax credit to specified technologies on an investment basis, expressed as a percentage of “qualifying costs” of the capital cost of the project. Solar PV is the primary beneficiary of the ITC
- MACRS (Modified Accelerated Cost Recovery System)
  - Accelerated depreciation of assets available through Section 168 of the U.S. Internal Revenue Code. MACRS for renewable energy projects follows a five-year schedule and allows investors to take heavy tax losses with which they can offset their taxable income

Resources – Tribal Business Structures

- **Renewable Energy Development in Indian Country: A Handbook for Tribes (**Douglas MacCourt and Ater Wynne LLP)
  http://www.nrel.gov/docs/fy10osti/48078.pdf

- **Tribal Business Structure Handbook (**The Office of the Assistant Secretary – Indian Affairs U.S. Department of Interior)
  http://www.irs.gov/pub/irs-tege/tribal_business_structure_handbook.pdf

- **Structuring Tribal Business Enterprises and Joint Ventures (**Kathleen M. Nilles, and Karen J. Atkinson)
  http://apps1.eere.energy.gov/tribalenergy/pdfs/course_biz0904_nilles.pdf

- **Tribal Energy Development Primer (**Quapaw Tribe of Oklahoma)
  http://www.cwlaw.com/wp-content/uploads/2010/03/Indian-Tribal-Energy-Development-Primer1.pdf

Resources – Project Finance and PPAs

- **Project Finance – A Primer** (Corporate Finance Institute) https://corporatefinanceinstitute.com/resources/knowledge/finance/project-finance-primer/
- **Project Finance for Renewable and Clean Technologies** (Wilson Sonsini Goodrich & Rosati LLP) https://www.wsgr.com/publications/PDFSearch/renewable-energy-primer-0914.pdf
- **Power Purchase Agreements** (U.S. Department of Energy) https://www.energy.gov/eere/femp/downloads/power-purchase-agreements

Thank you!

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