Financing Tribal Energy Projects: Focus on Community Solar

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Agenda

What is Project Finance?

Project Finance: the financing of infrastructure using a **non-recourse** financial structure. The debt and equity used to finance the project are paid back from the cash flow generated by the project.

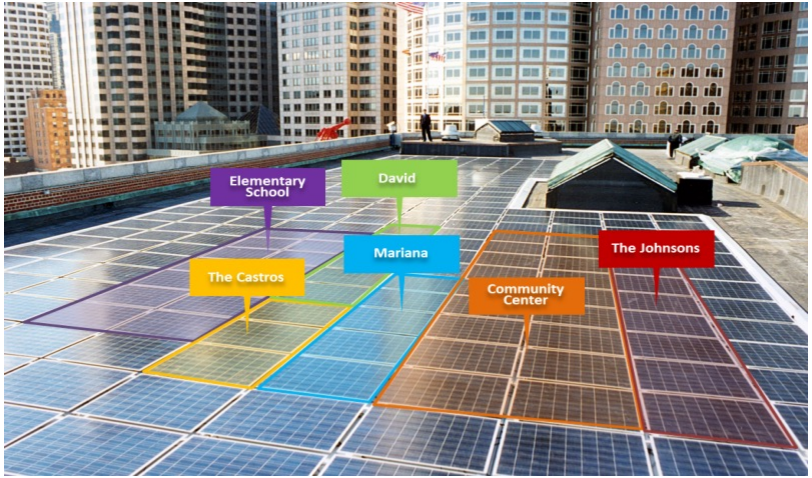
This presentation does not discuss: funding opportunities or grants.

The Southern Ute Indian Oxford Solar Project in Colorado

Image: https://www.fhwa.dot.gov/ipd/project_profiles/co_southern_ute_indian_tribe_oxford_solar_project.aspx

Financing Community Solar

- Can be financed like any other solar project
- Many offtakers → additional risk
- Manage risk:
  - Subscriber Management Organization
  - Anchor tenant



The many offtakers involved in a community solar project

Image: https://www.cookcountyil.gov/communitysolar/CaseStudies

Tribal Roles

Risk/Reward

Tribe Role	Opportunity	Constraints	Tribal Example
Resource/ Landowner	Land rent, taxes. Low risk, known reward, consistent income.	Limited project control. Must provide site access.	Cameron Solar Generation Plant: Navajo Nation leased land to developer for 30 years.
Debt or Equity Partner	Invest cash into project development. Profit opportunity.	Requires ready capital. Implications for tax credits	Forest County Potawatomi: partnership with SunVest Solar Inc.
Project Developer and Owner	Self-determination of project; potential for profits (and losses) is highest.	Capital intensive and complex Might forfeit tax benefits	Oxford Solar Project: the Southern Ute Indian Tribe received a grant from DOE, the Tribe covered remaining costs.

Adapted from: Travis Lowder, 2019

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 (Tribe is sole member)	🟢		🟢		

Adapted from: Travis Lowder, 2019

Questions?

Investment Tax Credit

- **Solar Investment Tax Credit (ITC):** tax credit that can be claimed on federal income taxes for a percentage of the cost of the PV system that is placed in service during the tax year.

ITC Step Down
(as of 9/2021)

2021
- Residential & Commercial: **26%**

2022
- Residential & Commercial: **26%**

2023
- Residential & Commercial: **22%**

2024
- Commercial & Utility Scale: **10%**
- Residential: **0%**

Adapted From: https://www.seia.org/sites/default/files/2021-01/SEIA-ITC-Factsheet-2021-Jan.pdf

MACRS

- Modified Accelerated Cost Recovery System
- Accelerated depreciation of assets (solar equipment)
- Allows businesses to recoup greater amounts early on in an asset's lifetime
- Five-year schedule for qualifying PV

Table A-1. **3-, 5-, 7-, 10-, 15-, and 20-Year Property Half-Year Convention**

Year	Depreciation rate for recovery period					
	3-year	5-year	7-year	10-year	15-year	20-year
1	33.33%	20.00%	14.29%	10.00%	5.00%	3.750%
2	44.45	32.00	24.49	18.00	9.50	7.219
3	14.81	19.20	17.49	14.40	8.55	6.677
4	7.41	11.52	12.49	11.52	7.70	6.177
5		11.52	8.93	9.22	6.93	5.713
6		5.76	8.92	7.37	6.23	5.285
7			8.93	6.55	5.90	4.888
8			4.46	6.55	5.90	4.522
9				6.56	5.91	4.462
10				6.55	5.90	4.461
11				3.28	5.91	4.462
12					5.90	4.461
13					5.91	4.462
14					5.90	4.461
15					5.91	4.462
16					2.95	4.461
17						4.462
18						4.461
19						4.462
20						4.461
21						2.231

Table: https://www.irs.gov/pub/irs-pdf/p946.pdf

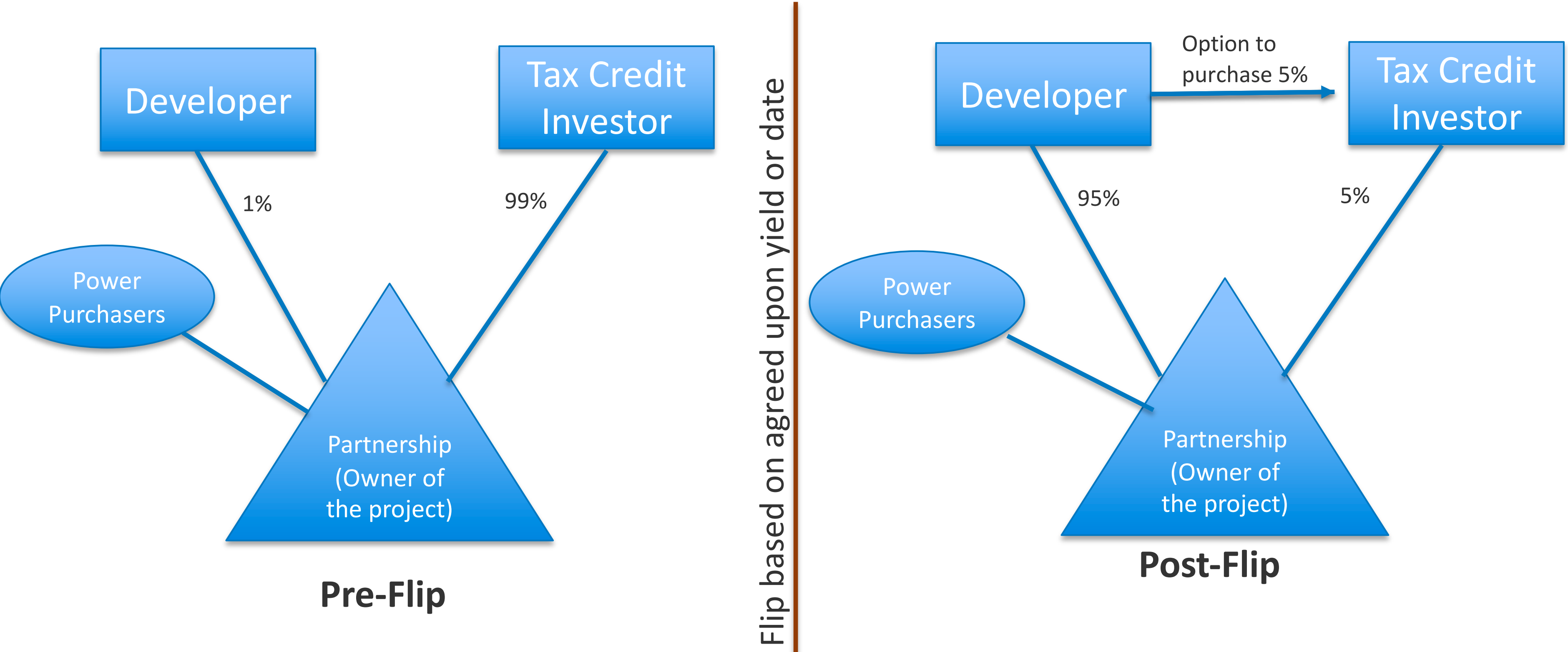
Tribes & Tax Incentives

- Tribes & tribal corporations cannot monetize ITC, PTC, or MACRS because they do not pay federal income tax
- Tax Appetite
- A **Tax Equity Partnership** allows a Tribe to partner with a third party (**tax credit investor**) to be able to take advantage of tax benefits.

Solar PV on the Forest County Potawatomi assisted care building, a project completed using a tax equity partnership.

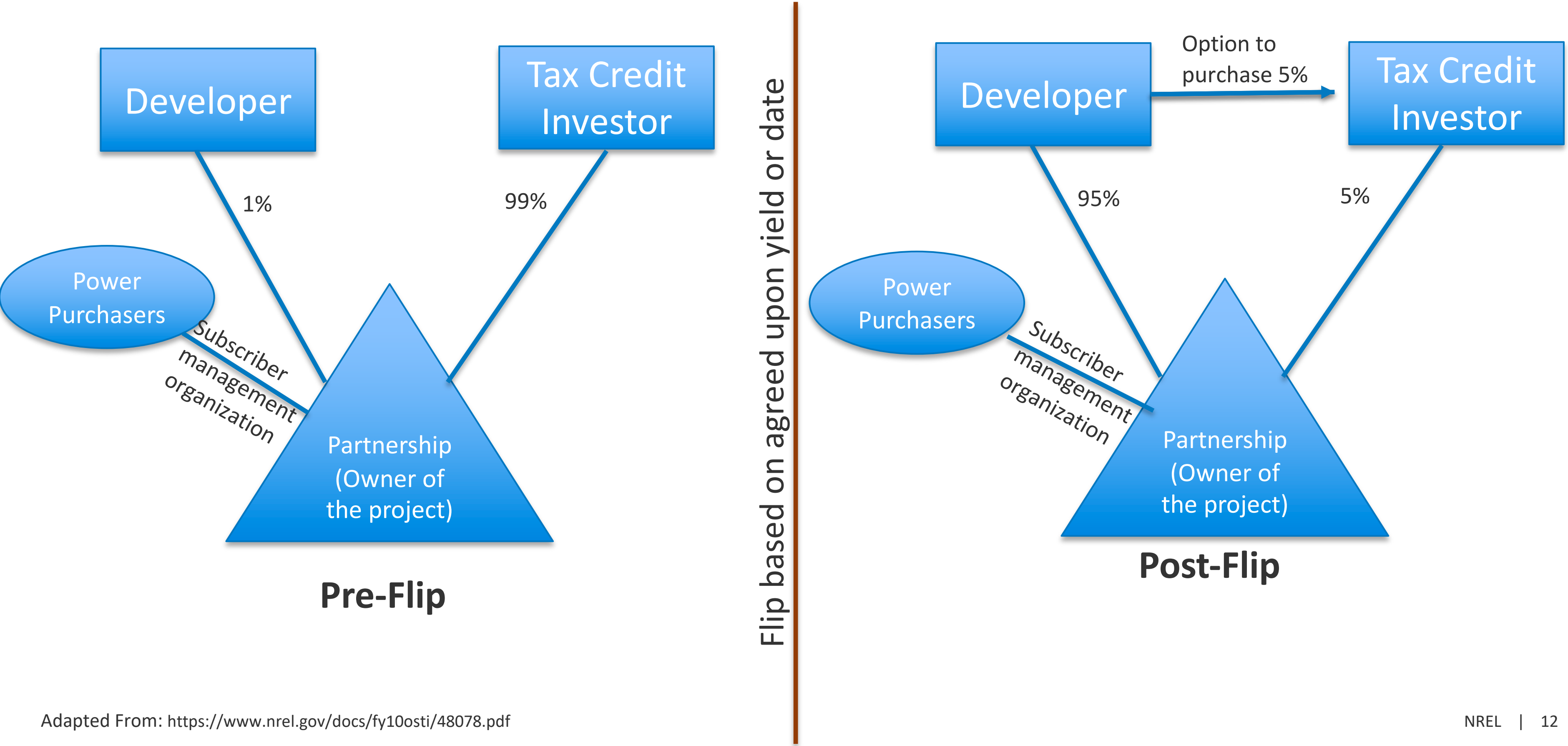
Image: https://www.osti.gov/servlets/purl/1244703/

Partnership Flip for Community Solar



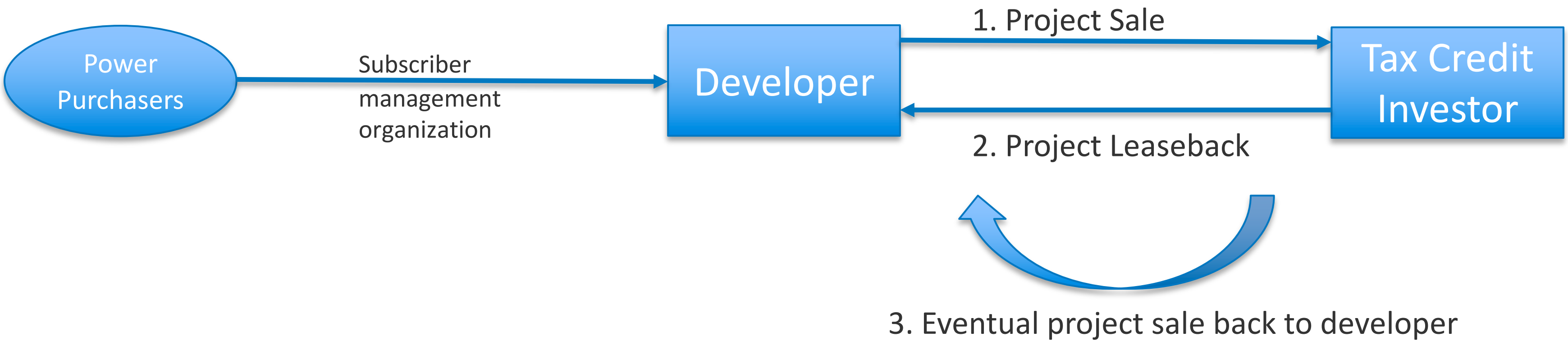
Adapted From: https://www.nrel.gov/docs/fy10osti/48078.pdf

Partnership Flip for Community Solar



Adapted From: https://www.nrel.gov/docs/fy10osti/48078.pdf

Sale Leaseback for Community Solar



Adapted From: https://www.nrel.gov/docs/fy10osti/48078.pdf and https://www.energy.gov/sites/prod/files/2013/07/f2/DOE-IE_Professional_ProjectDevelopment_AdvancedFinancingStructures.pdf

Financing Structures and Tribal Implications

	Partnership Flip	Sale Leaseback	Direct Ownership
Financing	Tax equity investor can provide up to 99% of financing	Tax equity investor provides 100% of financing	Tribe self-finances system, may consume power-onsite
Tribal Capital Required Up-Font	$	$, potentially $0	$$$$
Ownership	Co-ownership by developer (Tribe) & tax equity investor	Developer (Tribe) has option to purchase assets at the end of the lease term	Tribe-owned
Tax Credit Available	ITC and MACRS	ITC and MACRS	N/A

Adapted From: https://www.energy.gov/sites/prod/files/2014/06/f16/financing_%20tribal%20roles_heaps_2.pdf

Questions?

Thank you

www.nrel.gov

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Additional Resources

Glossary

- Community Solar: local solar facilities shared by multiple community subscribers who receive credit on their electricity bills for their share of the power produced.
- ITC: tax credit that can be claimed on federal income taxes for a percentage of the cost of the PV system that is placed in service during the tax year.
- MACRS: is a depreciation system that allows the capitalized cost of a solar system to be recovered over a specified period of time through annual reductions on taxes. Depreciation is the annual allowance for the wear and tear and deterioration of a property.
- Non-recourse debt: a debt secured by collateral, which is usually property. If the borrower defaults, the lender can seize the collateral but cannot go after the borrower's other assets.
- Project finance: the financing of infrastructure using a non-recourse financial structure. The debt and equity used to finance the project are paid back from the cash flow generated by the project.
- PTC: production tax credit, a per-kWh tax credit for electricity generated using qualified energy resources.
- Tax equity: monetization of tax credits

Resources

- Choosing a Tribal Business Structure (2015): this economic development primer from the Department of the Interior discusses tribal business structures.
- Community Solar: a fact sheet from SEIA on community solar
- Project Finance for Renewable Energy and Clean Technology Projects: an overview of project finance for the RE investor or developer from WSGR.
- Renewable Energy Development in Indian Country: A Handbook for Tribes (2010): a handbook on the RE project development process, finance structures, agreements, and financing options.
- Solar ITC 101: a fact sheet from SEIA on the ITC
- Tribal Business Structure Handbook (2008): handbook from the U.S Department of the Interior and the Office of Indian Energy on tribal business structures.
- Tribal Energy Finance & Business Models (2015): A presentation from Doug MacCort about tribal energy business structures, with the context of tribal sovereignty.
- Tribal Roles in Renewable Energy Projects (2014): a presentation from DOE Office of Indian Energy about tax incentives and tribal roles for energy projects.