

DOE OFFICE OF INDIAN ENERGY

# The Five-Step Development Process

## Step 3: Project Refinement



U.S. DEPARTMENT OF  
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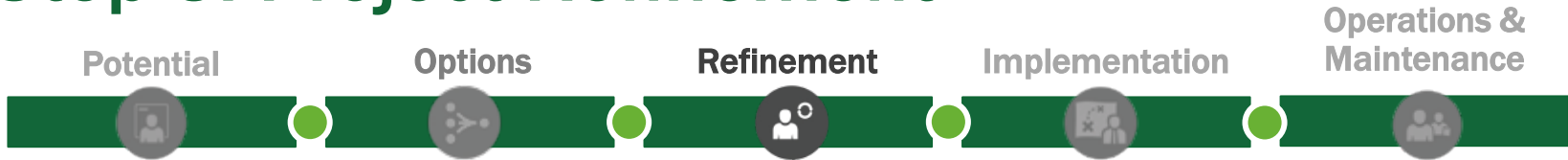
# 3 Refinement



## ■ Presentation Agenda – Step 3

- Project funding and financing
- Activity
- Break
- Procurement options
  - General Services Administration (GSA) purchasing
  - Request for Proposal (RFP) process and vendor selection
- Activity

# Step 3: Project Refinement



**Purpose:** Validate decisions and finalize project structure

## Tasks:

- Finalize ownership structure and project team identification responsibilities
- Finalize permitting (including environmental reviews), interconnection
- Finalize financing, and development costs

## Outputs:

- Proposed financing/commitments and organization structure
- Detailed economic models
- Vendors selected
- Completed environmental reviews and finalized permits
- Off-take and interconnection agreement
- Transmission finalized, if necessary



# FUNDING OPPORTUNITIES & FINANCING OPTIONS



# Paying for the Project

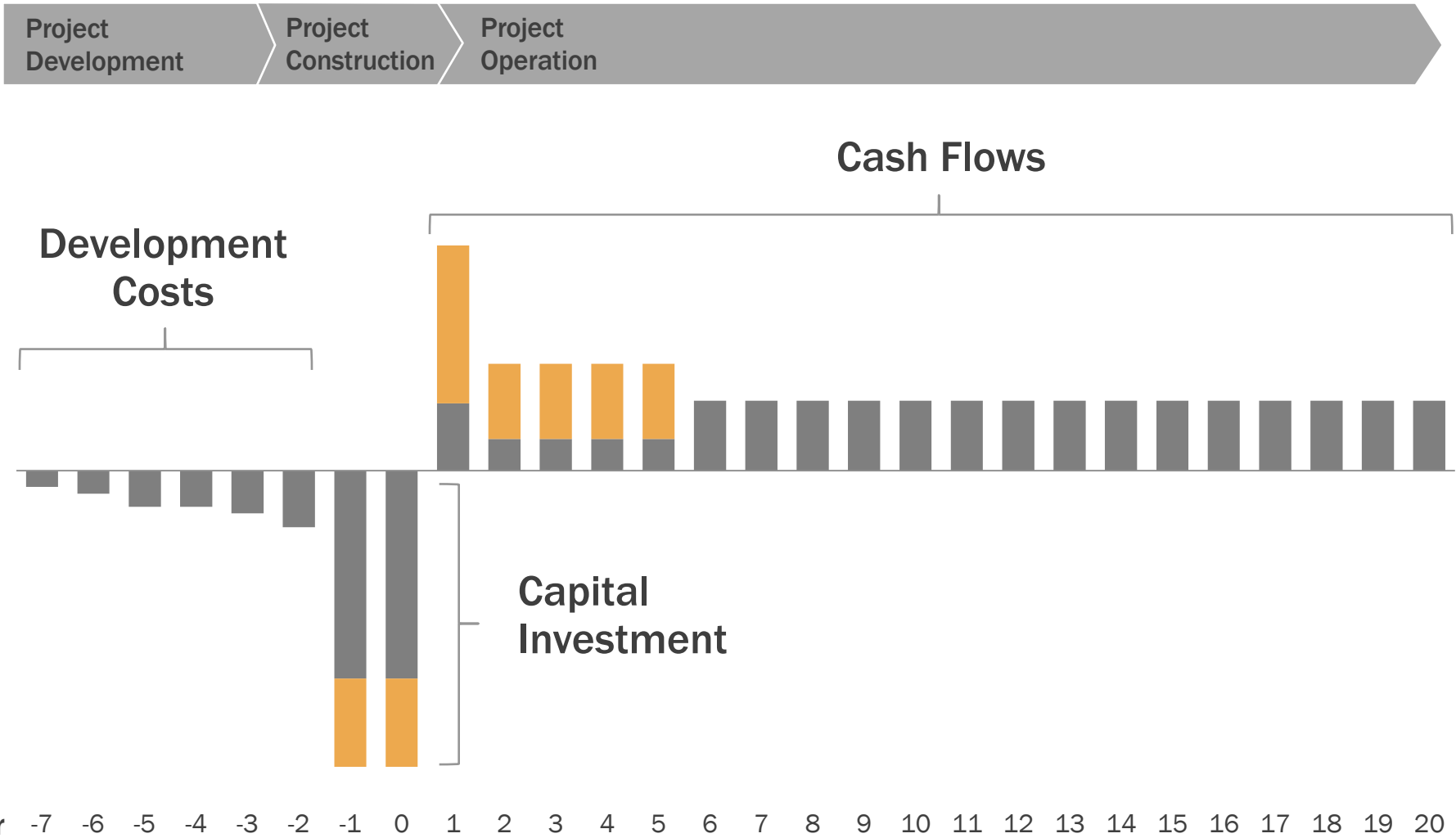
Three major costs to develop a project:

1. Feasibility: this is the potential analysis
2. Preconstruction: permitting, environmental
3. Construction: engineering, procurement of equipment, and actual construction of plant



PV panels installed on Grand Ronde Tribal Housing Authority carport.  
Photo from Grand Ronde Tribal Housing Authority

# Project Costs



# Project Ownership

Financing structure is highly dependent on size of the project and the capital available for a given project:

- Tribe owns the project
- Tribe hosts the project and buys the electricity
- Tribe partners with private sector and co-develops the project

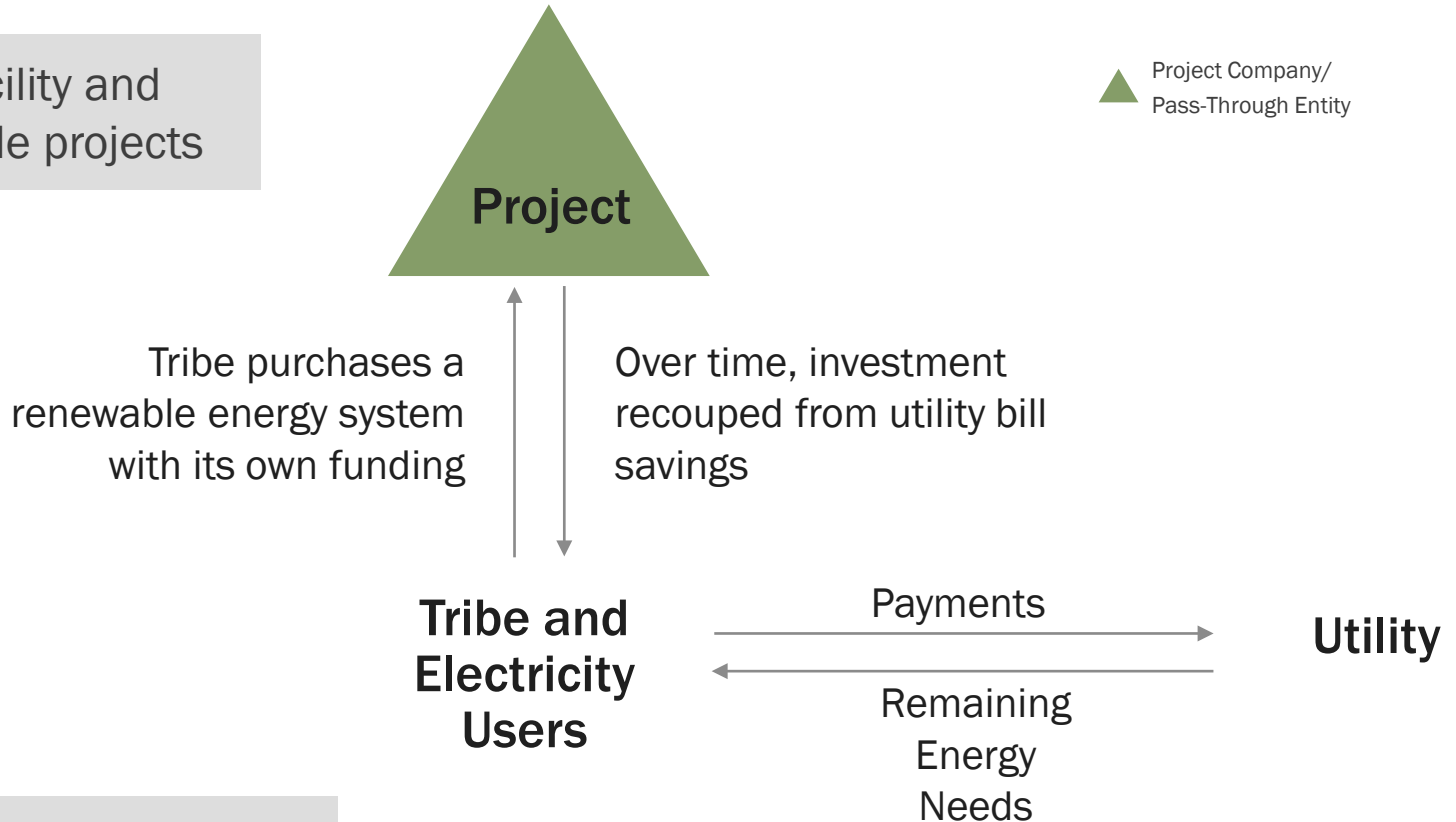


# Financing Options and Sources of Capital

- Cash on hand (e.g. reserves, trust, cash flow from other activities)
- Grants from third parties
- Renewable Energy Incentives
- Debt
  - Tribal Economic Development Bonds (TEDs)
  - Clean Renewable Energy Bonds (CREBS)
  - Qualified Energy Conservation Bonds (QECBs)
  - Others
- Tax equity investors seeking tax incentives
- Energy savings performance contracts (ESPCs) and Utility Energy Savings Contracts (UESCs)
- Monetizing green attributes-RECs
- Various combinations

# Direct Ownership Structure

Primarily for facility and community-scale projects



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

# Direct Ownership Using Tribal Funds

## Advantages

- Maximum reduction in electricity bills
- Lower finance costs (or none depending on source)
- Maximum control over a project: design, operations, and risks
- Own renewable energy certificates (RECs) and can choose to retain or monetize
- Might be only option for small projects

## Disadvantages

- Requires significant upfront financial resources
- Don't fully benefit from available tax incentives given tax-exempt status
- Responsibilities of ownership (operations & maintenance)
- Possible electricity rate impacts for tribe (increase or decrease)
- Opportunity costs of not using the cash for other competing investments such as housing, gaming, or other interests

# Grants

## Advantages

- Typically do not require repayment (free money)
- No financing costs

## Disadvantages

- Typically must be used for a specific purpose and may not cover the full cost of the project
- Eligibility requirements may limit the applicant pool
- Issued via competitive solicitations that may have high number of applicants for limited funding
- Application process may be difficult, costly, and time consuming or based on a funding cycle that can delay project
- Likely to involve significant reporting and monitoring efforts
- Likely to require other matching funds or tribal funds


# DSIRE Tool: Grants

Category: Financial Incentive X


State/Territory: Oklahoma X

Program Type: Grant Program X

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Name	State/Territory	Category	Policy/Incentive Type	Created	Last Updated
USDA - Rural Energy for America Program (REAP) Grants	US	Financial Incentive	Grant Program	04/09/2003	12/09/2014
Tribal Energy Program Grant	US	Financial Incentive	Grant Program	05/01/2003	03/05/2015
USDA - High Energy Cost Grant Program	US	Financial Incentive	Grant Program	09/27/2010	11/20/2014
USDA - Repowering Assistance Biorefinery Program	US	Financial Incentive	Grant Program	10/08/2012	02/06/2015
USDA - Rural Energy for America Program (REAP) Energy Audit and Renewable Energy Development Assistance (EA/REDA) Program	US	Financial Incentive	Grant Program	02/18/2015	02/19/2015
Low Income Home Energy Assistance Program (LIHEAP)	US	Financial Incentive	Grant Program	03/16/2015	03/16/2015
Weatherization Assistance Program (WAP)	US	Financial Incentive	Grant Program	03/31/2015	03/31/2015

[www.dsireusa.org](http://www.dsireusa.org)



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# Grants: Federal Government Sponsored

Program	Details
Rural Energy for America Grant Program (USDA)	<ul style="list-style-type: none"><li>• \$2,500–\$500,000 or 25% of project costs, whichever is less</li><li>• Requirements: Borrower must be rural small business or agricultural producer</li></ul>
High Energy Cost Grant Program (USDA)	<ul style="list-style-type: none"><li>• \$75,000–\$5,000,000</li><li>• Requirements: Community's average home energy costs must exceed 275% of national average</li></ul>
Tribal Energy Program Grant (DOE)	<ul style="list-style-type: none"><li>• Amount varies</li><li>• Requirements: Varies by solicitation</li></ul>
Energy and Mineral Development Program (BIA)	<ul style="list-style-type: none"><li>• Amount varies</li><li>• Applications: Evaluation of energy and mineral resources on tribal lands.</li></ul>

# DSIRE Tool: Incentives and Rebates

Category: Financial Incentive ✕ State/Territory: Oklahoma ✕ Program Type: Rebate Program ✕

Search... Subscribe Show 50 entries Apply Filter

Name	State/Territory	Category	Policy/Incentive Type	Created	Last Updated
Edmond Electric - Residential Heat Pump Rebate Program	OK	Financial Incentive	Rebate Program	08/22/2006	02/17/2015
Oklahoma Electric Cooperative - Energy Efficiency Rebate Program	OK	Financial Incentive	Rebate Program	08/10/2009	02/25/2015
Verdigris Valley Electric Cooperative - Residential Energy Efficiency Rebate Program	OK	Financial Incentive	Rebate Program	08/10/2009	06/08/2012
OG&E - Commercial Energy Efficiency Rebate Programs	OK	Financial Incentive	Rebate Program	08/27/2009	02/14/2013
AEP Public Service Company of Oklahoma - Non-Residential Efficiency Rebate Program	OK	Financial Incentive	Rebate Program	09/14/2009	05/22/2013
AEP Public Service Company of Oklahoma - Residential Efficiency Rebate Program	OK	Financial Incentive	Rebate Program	12/11/2009	06/28/2013
Residential Energy Efficiency Rebate (Offered by Several Cooperative Utilities)	OK	Financial Incentive	Rebate Program	03/16/2010	06/06/2012
Oklahoma Municipal Power Authority - WISE Energy Efficiency Rebate Program	OK	Financial Incentive	Rebate Program	01/03/2011	08/08/2012
Oklahoma Municipal Power Authority - Commercial and Industrial Energy Efficiency Program	OK	Financial Incentive	Rebate Program	01/03/2011	07/26/2012

[www.dsireusa.org](http://www.dsireusa.org)

# Federal Energy Development Assistance Tool

Search:

SEARCH RESULTS

Showing 1 to 10 of 48 entries

**TYPE OF ASSISTANCE**

- Education and capacity building
- Grants
- Information resources
- Loan and loan guarantee programs
- Tax credits
- Technical assistance

**ELIGIBILITY**

- Alaska Native and tribal corporations
- Alaska Native villages
- Federally recognized Tribes and tribal governments
- State-recognized-only Tribes
- Tribal energy resource development organizations
- Tribal nonprofit organizations (503-(C)(3))
- Tribal universities, utilities, and other organized tribal groups

PROGRAM	AGENCY	DESCRIPTION	TYPE OF ASSISTANCE	ELIGIBILITY	PHASE
<a href="#">504 Loan Program</a>	Small Business Administration	Provides growing businesses with long-term, fixed-rate financing for major fixed assets, such as land and buildings.	Loan and loan guarantee programs	Federally recognized Tribes and tribal governments; Alaska Native and tribal corporations; Alaska Native villages; Tribal universities, utilities, and other organized tribal groups; State-recognized-only Tribes; Tribal universities, utilities, and other organized tribal groups; Tribal nonprofit organizations (503-(C)(3)); Tribal energy resource development organizations	Phase 1; Phase 4
<a href="#">Advanced Biofuel Payment Program</a>	Department of Agriculture: Rural Development	Provides payments to eligible producers to support and expand production of advanced biofuels refined from sources other than corn kernel starch.	Loan and loan guarantee programs	Tribal universities, utilities, and other organized tribal groups; State-recognized-only Tribes	Phase 4
<a href="#">Advanced Research Projects Agency-Energy (ARPA-E)</a>	Department of Energy: ARPA-E	Empowers America's energy researchers with funding, technical assistance, and market readiness to accelerate the pace of energy	Grants	Federally recognized Tribes and tribal governments; Alaska Native and tribal corporations; Alaska Native villages; Tribal	Phase 4

[www.energy.gov/indianenergy/fedprograms](http://www.energy.gov/indianenergy/fedprograms)



# Debt: Government-Sponsored Loan Programs

Program	Type	Details
Indian Affairs Loan Guaranty, Insurance, and Interest Subsidy Program (BIA)	Guarantee	<ul style="list-style-type: none"><li>• Max 90%; Interest subsidy covers the difference between the lender's rate and the Indian Financing Act rate</li><li>• Requirements: Borrower must have 20% tangible equity in the project. This is for business development.</li></ul>
Rural Energy for America Loan Guarantee Program (USDA)	Guarantee	<ul style="list-style-type: none"><li>• Up to 85% of loan amount</li><li>• Requirements: Borrower must be rural small business or agricultural producer</li><li>• Technology: Biomass, solar, wind, hydro, hydrogen, geothermal</li><li>• Applications: equipment, construction, permitting, professional service fees, feasibility studies, business plans, land acquisition</li></ul>

Find more with the Federal Energy Development Assistance Tool:

[www.energy.gov/indianenergy/fedprograms](http://www.energy.gov/indianenergy/fedprograms)

# Other Potential Sources of Debt/Loans

- Tribal Economic Development Bonds (TED)
- Clean Renewable Energy Bonds (CREBs)
- Qualified Energy Conservation Bonds (QECBS)
- Commercial bank loans
- Other

# Debt/Loan

## Advantages

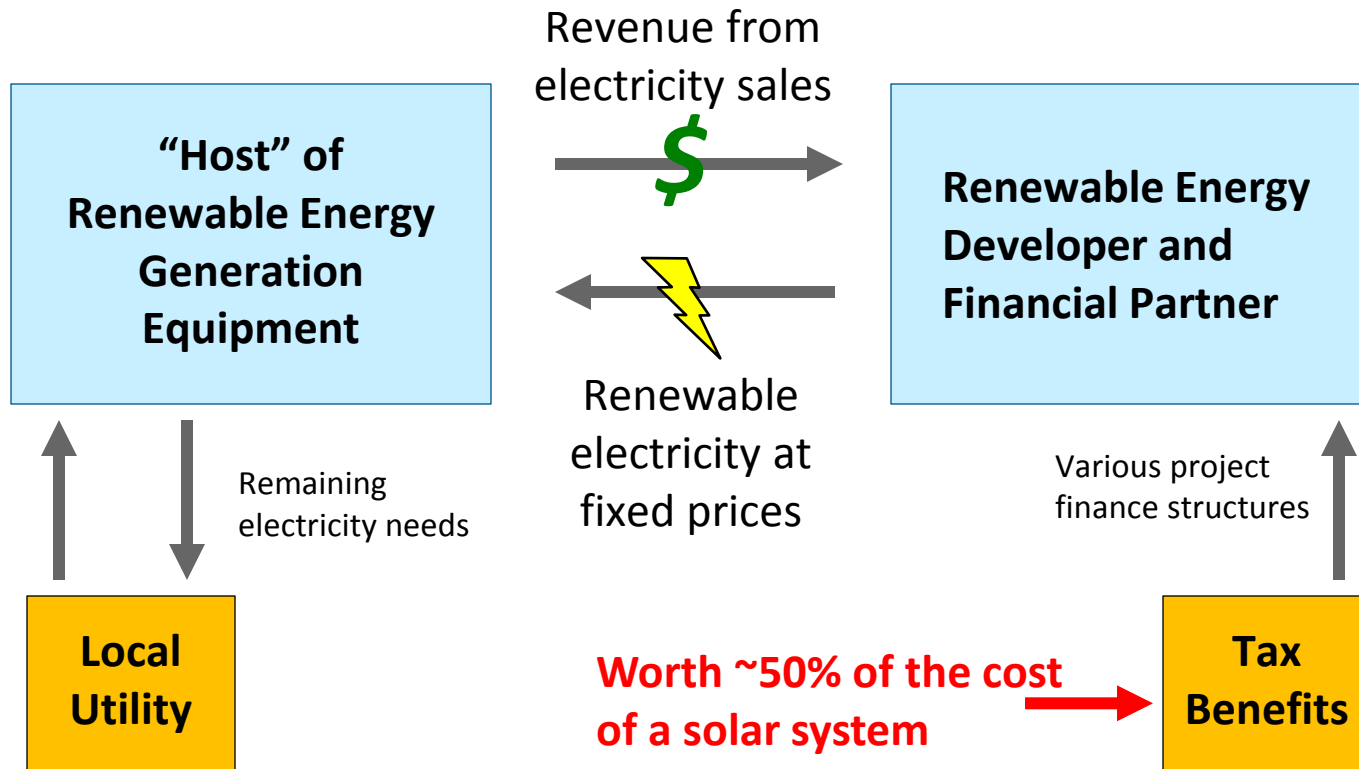
- Typically lower cost of capital than what equity investment requires
- Can provide most of the financing for a project, reducing the amount of the Tribe's invested capital
- Available in a various forms from different types of issuers: bonds (investors), private loans (banks, finance companies, etc.), public loans (government agencies), etc.

## Disadvantages

- Requires repayment with interest
- Terms (maturity, interest rate, etc.) can vary, and may not be economically feasible for a particular project
- Default penalties can be punitive
- May require the Tribe to offer a limited sovereignty waiver
- May require the borrower to demonstrate a strong financial position itself (in addition to the financial profile of the underlying project)

# Third-Party Power Purchase Agreement

The customer agrees to host the system and purchase the electricity



# Federal Tax Incentives

- Production Tax Credit (PTC)
- Investment Tax Credit (ITC)
- Modified Accelerated Cost Recovery System (MACRS)

# Comparison of Tax Incentives

	PTC	ITC	Accelerated Depreciation
Value	Tax credit of 2.3¢/kWh or 1.1¢/kWh, depending on tech	Tax credit of 10% or 30% of project costs, depending on tech	Depreciation of eligible costs (not all project costs qualify)
Select Qualifying Technologies	<ul style="list-style-type: none"> <li>• Wind</li> <li>• Geothermal</li> <li>• Biomass</li> <li>• Hydro</li> </ul>	<ul style="list-style-type: none"> <li>• Solar</li> <li>• Fuel cells</li> <li>• Small wind</li> <li>• Geothermal</li> </ul>	Depreciation can be taken with either PTC or ITC
Basis	Energy produced over 10-year period. Can be combined with depreciation.	Eligible project cost. Credit taken at the time the project is placed in service. Can be combined with depreciation.	<u>MACRS</u> : 5-year depreciation schedule
Expiration/ Step Down	Start construction before 12/31/2014	Placed in service before 1/1/2017*	<u>MACRS</u> : None

# Federal Renewable Energy Tax Incentives

## Advantages

- Can stimulate markets that may not otherwise be economically attractive
- Offers an additional source of economic value to the project. Can be worth up to approximately half of the project's costs
- Not competitively issued – awarded when project is built and producing energy
- No federal cap on amount of incentives that can be received

## Disadvantages

- When tax-based (e.g. tax credits and depreciation), they are not easily usable by tribal entities with special tax status
- May require a Tribe to partner with outside investors which involves complex negotiations and relinquishing a certain level of control and economic return during the early years of the project
- Some of the current tax incentives are due to expire or be lowered, reducing their value for projects.

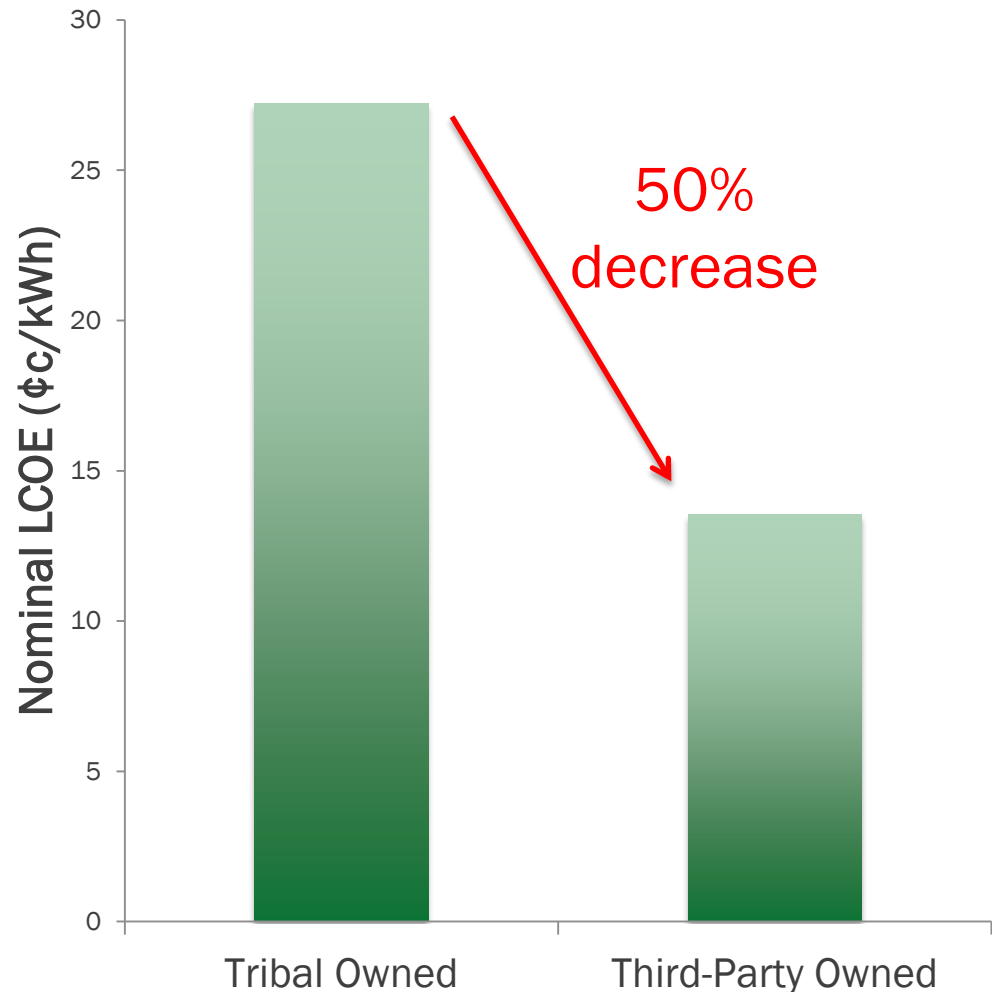
# Third-Party (i.e., Tax Equity) vs. Tribal Ownership

## Tribal Owned (Without Incentives)

Metric	Base
Annual Energy	37,230,428
PPA price	25.36 ¢/kWh
LCOE Nominal	27.22 ¢/kWh
LCOE Real	22.11 ¢/kWh
Internal rate of return (%)	12.00 %
Minimum DSCR	3.36
Net present value (\$)	\$ 2,386,955
Calculated ppa escalation (%)	1.00 %
Calculated debt fraction (%)	50.00 %
Capacity Factor	21.3 %
First year kWhac/kWdc	1,862
System performance factor (%)	0.82

## Third-Party Owned (With Incentives)

Metric	Base
Annual Energy	37,230,428
PPA price	12.62 ¢/kWh
LCOE Nominal	13.55 ¢/kWh
LCOE Real	11.00 ¢/kWh
Internal rate of return (%)	21.11 %
Minimum DSCR	1.57
Net present value (\$)	\$ 6,525,698
Calculated ppa escalation (%)	1.00 %
Calculated debt fraction (%)	50.00 %
Capacity Factor	21.3 %
First year kWhac/kWdc	1,862
System performance factor (%)	0.82





# Power Purchase Agreement (PPA) Considerations to Weigh



## 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



# PPA Example Denver International Airport Case Study

Denver International Airport (DIA) installed a 2-MW solar array to provide up to half of the electricity to power the transit system.

**Market Barriers:** Cost of electricity, price stability, construction risks

**Government Role:** Sponsor, off-taker

**Transaction Summary:** MMA Renewable Ventures financed and owns the project and sells the electricity it produces to the airport under a long-term PPA.

## Outcome:

- DIA reduced electricity costs
- MMA Renewable Ventures sells the RECs to Xcel
- Xcel Energy uses the RECs to fulfill its state renewable energy obligation by 2020
- Receives rebate from Xcel, a large tax federal break, and generates guaranteed revenue from the electricity the array produces.

	DIA Solar Project
Size (DC)	2,000 kw
Type	Ground-mount, single axis tracking
Developer	World Water & Solar Technologies
Owner	MMA Renewable Ventures
PPA Terms	25 years, fixed-price 6¢/kWh for first 5 years, buyout option at beginning of year 6 or price increases to 10.5¢/kWh

Sources: "Power Purchase Agreement Checklist for State and Local Governments." (October 2009). Published by NREL. <http://www.nrel.gov/docs/fy10osti/46668.pdf>. "Green Wombat". (October 2007).

# Community Project PPA: Eventual Tribal Ownership Example

Developer and investor form a project company (LLC) to develop a wind or solar project

- Tribe signs a PPA with the LLC to purchase the electricity
  - Ideally at a discount to current retail cost of electricity
- At end of 6 years (ITC) or 10 years (PTC)
  - Investor ownership “flips” from 99% down to 5%
  - Developer buys investor 5% ownership at “fair market value”
  - Developer now owns 100% of the project
- Developer can then sell project to Tribe
  - Project price is substantially reduced compared to Tribe project development from year 1

# March 8, 2013 IRS Private Letter Ruling – 111532-11

- An Indian tribal government is not considered a “governmental unit” or “tax-exempt organization” for purposes of solar energy tax subsidies
- This presumably could permit tribal governments to enter into an inverted lease structure *without* jeopardizing access and use of federal tax incentives (*potentially big change*)
- Yet to be executed in the market; perhaps only applicable to the Tribe that applied; it would be wise to seek legal counsel

**IRS Private Letter Ruling (PLR):** <http://www.irs.gov/pub/irs-wd/1310001.pdf>

**Potential tribal implications:**

<http://www.renewableenergyworld.com/rea/news/article/2013/05/solar-tax-credit-opportunity-for-indian-Tribes>

# Energy Savings Performance Contract (ESPC)

An ESPC is a no up-front cost contracting mechanism between a site customer and an energy service company (ESCO). Energy conservation measures and on-site generation are financed and implemented by an ESCO, which is repaid through energy savings.



Over 90 DOE-Qualified ESCOs, including:



Human Energy

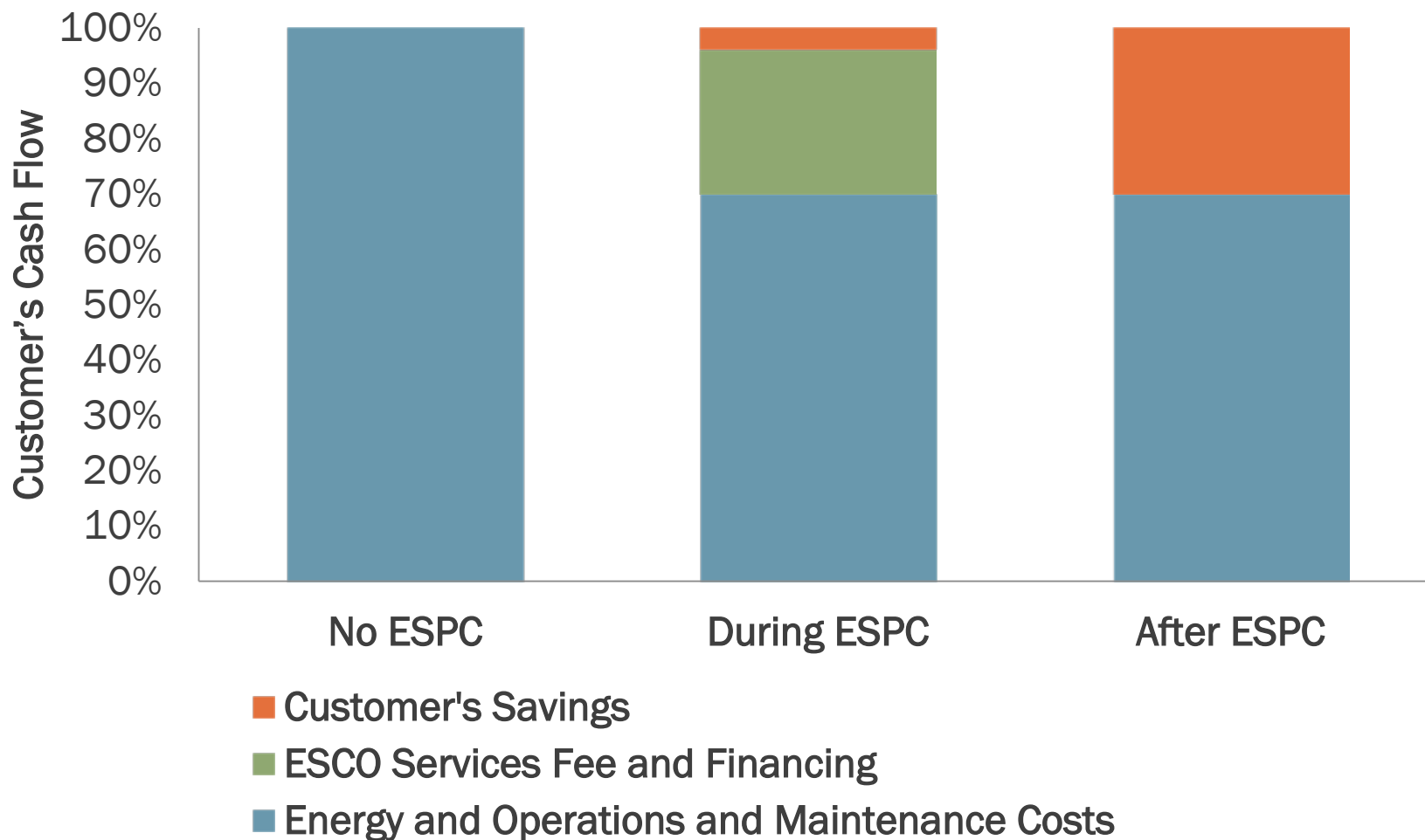
SIEMENS

Honeywell



View the full DOE ESPCs list at: [energy.gov/eere/femp/doe-qualified-energy-service-companies](https://energy.gov/eere/femp/doe-qualified-energy-service-companies)

# ESPCs Reallocate Current and Future Energy Spending



# Typical ESPC Measures

- Lighting: indoor, outdoor, street lights
- Heating, ventilating, and air conditioning (HVAC)
- Energy management systems
- Motors and variable speed drives
- Building envelope measures
- Water conservation measures
- Distributed generation and combined heat and power—renewable or fossil fuel
- Other systems (kitchen, security, etc.)



Photo from Kathie Brosemer, Sault Ste. Marie Tribe of Chippewa Indians

# Utility Energy Services Contract (UESC)

- A contract that allows utilities to provide their federal customers with energy and water efficiency improvements and demand-reduction services
- The utility provides a comprehensive service including analysis, design, and installation and may include financing when requested



1 megawatt of solar PV at NREL's National Wind Technology Site. NREL 19794



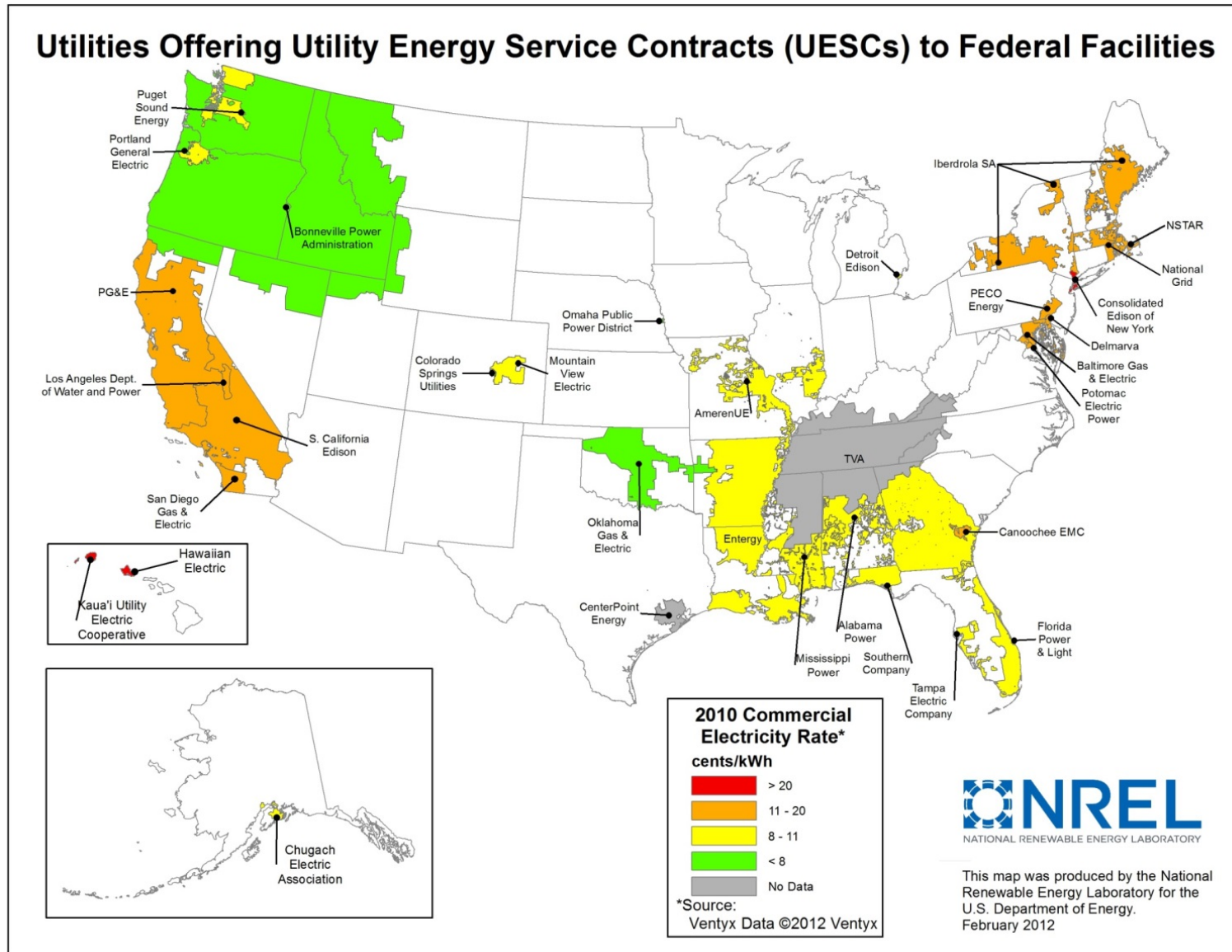
# Why Utilities Offer UESCs

- Manage load by lowering demand
- Delay or eliminate need for new generation
- Meet state energy and renewable energy portfolio standards
- Help customers meet their energy goals



1.10 megawatt solar PV array at the San Jose International Airport. Meets 20% of the facility's energy needs.

# Electric Utilities Actively Offering UESC Programs



# ESPC and UESC Advantages and Disadvantages

## Advantages

- Typically, little to no upfront cost for the Tribe
- Pays for the project via energy savings of new equipment
- Can cover a bundle of upgrades in one financing, from energy efficiency to renewable energy installations
- May offer some modest cost savings including monthly payment from the onset

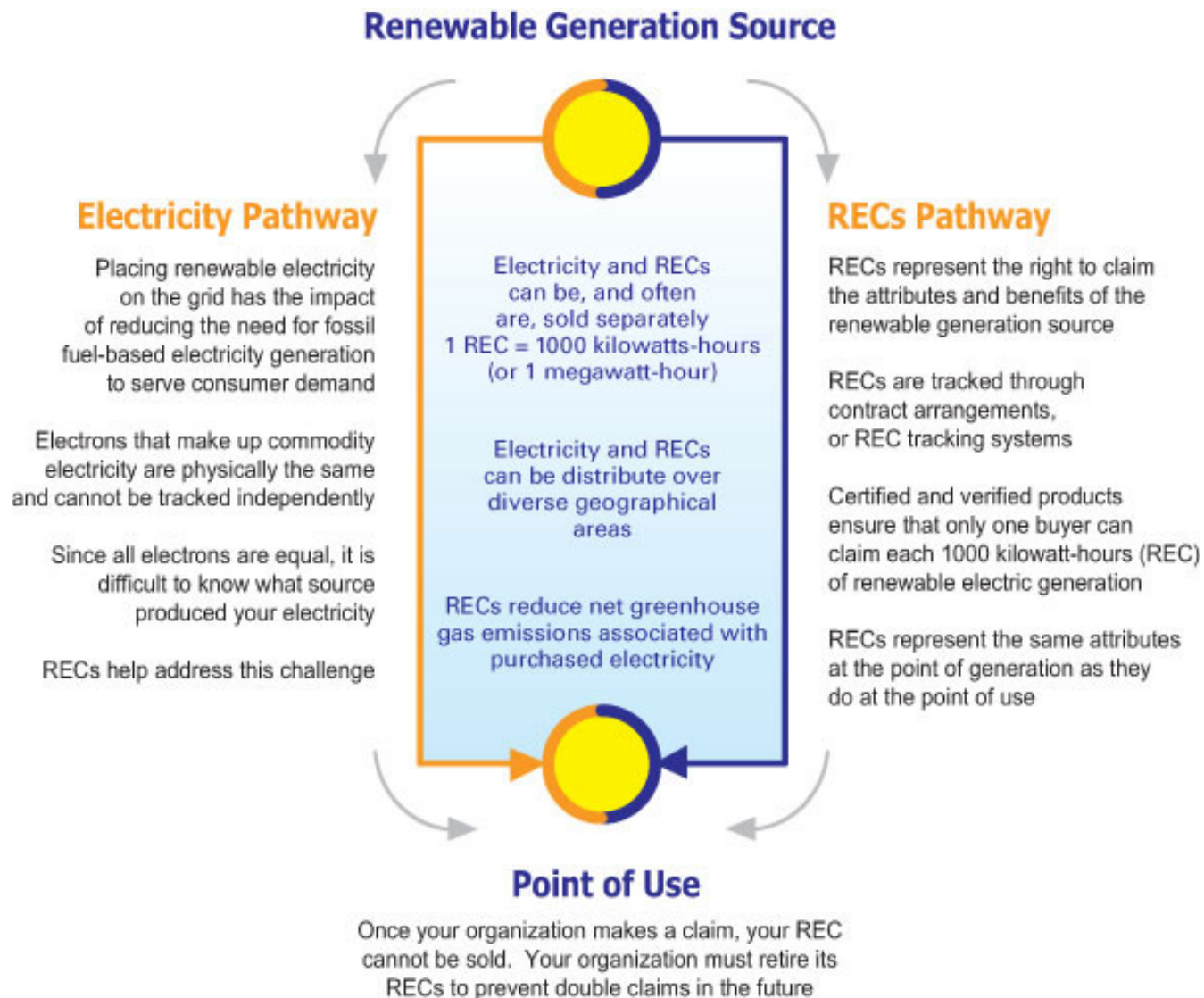
## Disadvantages

- Energy savings calculations depend on initial assumptions, and may not accurately reflect actual savings
- Typically requires a minimum expenditure threshold (around \$1 million of projects bundled)
- Tribe receives the majority of the economic savings only after the contract is fully paid off

# Monetizing Green Attributes: Renewable Energy Certificates

- Used to track renewable energy production for state renewable portfolio standards (RPS)
- Utilities may purchase RECs to fulfill state requirements
- Producer usually owns REC, but varies by state
- Transactions regulated by state
  - State may require contract with minimum length (e.g., 20 years)
  - Some states sponsor/facilitate market
  - Some states allow private/direct transactions

# Renewable Energy Certificates (REC)



# REC Advantages and Disadvantages

## Advantages

- Creates an additional source of revenue for renewable projects, based on the projects' "green attributes"
- If prices are high enough, RECs can help spur the development of a local renewable energy markets often where the cost of competing electricity is low.

## Disadvantages

- Not available everywhere
- Compensation depends on a market price which may sometimes be too low to make a difference in whether or not a project makes financial sense.
- Finding a buyer in marketplace can be difficult without a broker, or without selling to a third-party at a discount
- Project lenders may value these at a low price (even zero) without a long term contract in place which is often unavailable

# REC Video



<https://www.youtube.com/watch?v=opJMrzNauFQ>

# Community (or Shared) Solar

- Usually an off-site solar project
- Taps into new markets of customers
- Various ownership options (e.g., utility-owned, third-party owned)
- Participants make a one-time up-front payment or monthly payments
- Participants receive a bill credit



## Example pricing:

- \$780 per solar panel
- \$3.15/Watt
- \$3 per 150 kWh per month



# On-Request Technical Assistance

Apply for up to 40 hours of in-depth technical assistance to:

- Address a specific challenge
- Fulfill a need that is essential to a current project's successful implementation

Two categories of technical assistance:

1. **Strategic Energy Planning**—an on-site workshop that walks tribal leaders and staff through a nine-step planning process
2. **Project Development Support**—Expert guidance and analysis that helps address specific project barriers. Examples include:
  - Third-party independent reviews of transmission studies, financing structures, lease agreements, project reports
  - Modeling and analysis (or assistance using modeling/analysis tools)
  - Pre-feasibility transmission Studies
  - Interconnection agreement facilitation
  - Economic evaluations
  - System design reviews

## Apply for Technical Assistance

Use this online form to request technical assistance from the Tribal Energy Program for planning and implementing renewable energy and energy efficiency projects.

To help us determine whether your request fits within the program's scope and can be addressed with available resources, please provide the information below and then click on "Submit Request."

Only requests from federally recognized Indian tribes, bands, nations, tribal energy resource development organizations, and other organized groups and communities—including Alaska Native villages or regional and village corporations—will be considered.

### \*Required

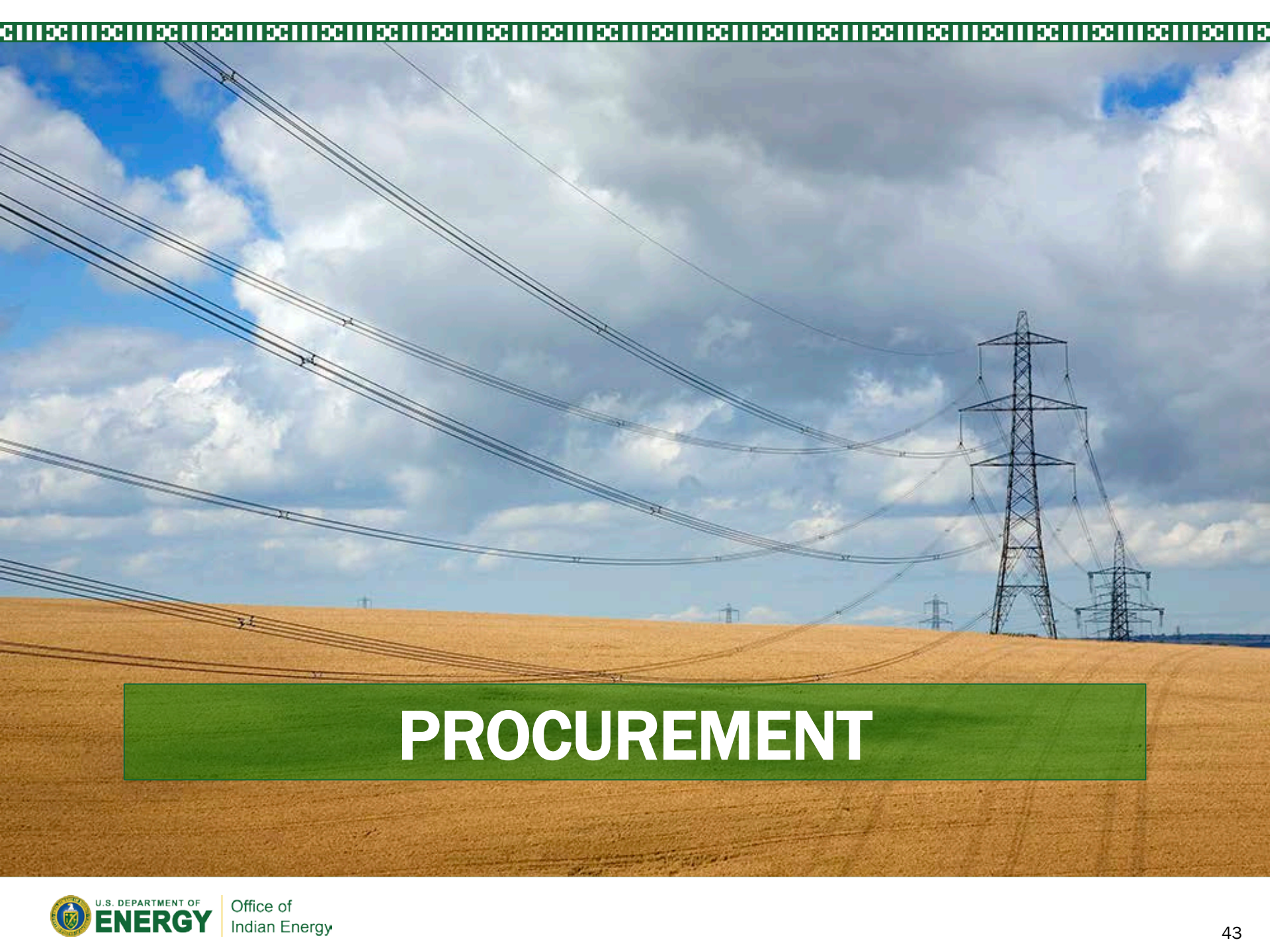
Salutation*	<input type="text"/>
First Name*	<input type="text"/>
Last Name*	<input type="text"/>
Title/Position*	<input type="text"/>
Are you a designated tribal representative with the authority to request technical assistance on behalf of the tribe/Alaska Native village/regional or Native village corporation?*	<input type="radio"/> Yes <input type="radio"/> No
Type of Affiliation*	<input type="text"/>
Name of Affiliation*	<input type="text"/>
Reservation Name or Location*	<input type="text"/>
Address*	<input type="text"/>
Address 2	<input type="text"/>
City*	<input type="text"/>
State*	<input type="text"/>
ZIP Code*	<input type="text"/>
Phone*	<input type="text"/>
Email*	<input type="text"/>
Confirm Email*	<input type="text"/>

Learn more and apply online:

[energy.gov/indianenergy/technical-assistance](https://energy.gov/indianenergy/technical-assistance)

# Activity

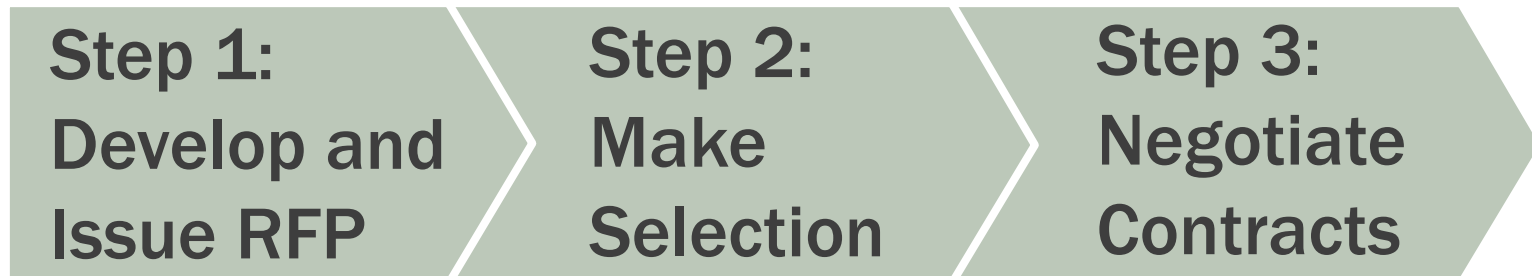
## Finance Advantages and Disadvantages



# PROCUREMENT



# Procurement Process for Facility- and Community-Scale Projects



## Potential Project Partners to Procure

- Consider GSA as a resource for procurement: <http://www.gsa.gov/portal/category/20998>
- Project developer
- Engineering, procurement, and construction (EPC) contractor
- Environmental permits contractor
  - May apply to some community projects, but not to others

# Request for Proposals (RFP) Process Outline

## 1. Develop RFP

- Timeline: 1 month to 1 year (depends on project scale and site complexity)
- Who creates the RFP: project leader, contract officer/lawyer, site manager(s), energy manager and technology expert. RFP writers will receive input from utility, tribal leaders, and stakeholders
- RFP content

## 2. Issue RFP

Tribal, federal, and industry networks

## 3. Administer the RFP

- Proposal meeting(s)
- Site tour(s) – can be concurrent with proposal meeting
- Q&A process – ensure all developers get same information

## 4. Evaluate Criteria

- Should be a clear process with well defined criteria
- Evaluation panel recommended to consist of an odd number of members (typically 3 to 7)

## 5. Award Contract

Four approaches

# Develop RFP

## Key Elements of the RFP

- Type of procurement:
  - Purchase
  - Power purchase agreement (PPA)
  - ESCCs
  - Other finance structure
- Technical specification (scope of work)
- Criteria for evaluating proposals: 3–5 of most important project aspects
  - Proposed project solution that meets specified criteria
  - System performance guarantee
  - Developer experience, track record, and customer satisfaction
  - Developer financial health/longevity
  - Maintenance plan
  - Reasonable timelines
  - Other

# Develop RFP cont.

## Key Elements of the RFP

- Description of RFP administration process
  - Typically 2–5 months
  - Key dates: proposal meeting(s), sites visit(s), proposal due date
  - Description of how questions will be handled and answered
- Defining responsible parties
  - Who is responsible for permits
  - Who is responsible for interconnection agreements
  - Who is responsible for applying for incentives
- Any preferences on parties allowed to submit proposals
  - Small business
  - Minority-owned
  - Other
- Land use agreements
  - Address site access and land use issues as relevant to ownership model

# RFP Technical Specifications

## Define Scope of Work

- What is the project scale
- Type of renewable energy technology
- Site information:
  - Location
  - Interconnection requirements as known
  - Applicable codes and standards
  - Roof structure, soils, other (as applicable and available)
  - Site prep: fencing, roads, grading limitations, etc.
  - Installation requirements: min/max heights of equipment, vegetation mitigation, design standards for structural/electrical
- Equipment minimum standards and warranties
- Expected minimum performance (recommended) or capacity
- Strategy for training maintenance and operations staff
- Commissioning plan



# RFP Evaluation Criteria

## Two Typical Approaches

- Best value:
  - Typically 3–5 criteria with weighting based on importance
  - Score proposal on each criteria
  - Somewhat subjective and can lead to contentious, time-consuming evaluations but good method to capture best value
- Low price, technically acceptable
  - Proposals initially stripped of pricing/cost information
  - First evaluation determines proposals that meet technical hurdle
  - Technically acceptable proposal with lowest cost gets award
  - More transparent process but may not capture best value

# RFP Award Contract

## Choose One of These Four Typical Approaches

1. Award based on proposal: awarded solely on merits of proposal
2. Award with discussion: awarded on proposal but contingent on clarifying discussions
3. Award with discussion and negotiation: awarded on proposal but contingent on further negotiation
4. Award with best proposal:
  - Best proposals are short-listed
  - Short-listed proposals asked for best final proposal revision
  - Award based on final proposal revision

# Summary: Project Procurement and Implementation

- Procurement strategy will vary depending on the project scale and financing solution selected
- Increasingly more complex for larger projects
- Post procurement issues are critical as these are very long term assets and relationships
- Save time and money by considering GSA pricing

# Project Risk: Community- and Facility-Scale

Phases	Risks	Risk Assessment Post Step 3	✓
Development	• Poor or no renewable energy resource assessment	Low; site picked	✓
	• Not identifying all possible costs	Low; detailed model	✓
	• Incorrect estimation of long-term “community” energy use (energy efficiency first)	Low; final projection	✓
	• Utility rules and ability to offset use with centralized production	Reduced	✓
Site	• Structural (e.g. rooftop solar, wind loading, soil conditions)	Assumed low; assessed	✓
	• Installation safety (e.g., wind tower, hazard for adjacent sites)	EPC assumes risk	✓
	• Site control for safety/security purposes	Low; site secure	✓
Permitting	• Tribe-adopted codes and permitting requirements	Low; complete	✓
	• Utility interconnection requirements	Low; complete	✓
Finance	• Capital availability	Low; PPA complete	✓
	• Incentive availability risk	Low; risk on developer	✓
Construction/ Completion	• EPC difficulties	Low; allocate to EPC or developer	
	• Cost overruns		
	• Schedule		
Operating	• Output shortfall from expected	Assumed low, mitigable or allocatable	
	• Technology O&M		

\*NOTE: Underlining signifies that the risk assessment outcome changes during the step at hand.

Sources: Adapted from Holland & Hart, RE Project Development & Finance & Infocast, Advanced RE Project Finance & Analysis

# On-Request Technical Assistance

Apply for up to 40 hours of in-depth technical assistance to:

- Address a specific challenge
- Fulfill a need that is essential to a current project's successful implementation

Two categories of technical assistance:

1. **Strategic Energy Planning**—an on-site workshop that walks tribal leaders and staff through a nine-step planning process
2. **Project Development Support**—Expert guidance and analysis that helps address specific project barriers. Examples include:
  - Third-party independent reviews of transmission studies, financing structures, lease agreements, project reports
  - Modeling and analysis (or assistance using modeling/analysis tools)
  - Pre-feasibility transmission Studies
  - Interconnection agreement facilitation
  - Economic evaluations
  - System design reviews

## Apply for Technical Assistance

Use this online form to request technical assistance from the Tribal Energy Program for planning and implementing renewable energy and energy efficiency projects.

To help us determine whether your request fits within the program's scope and can be addressed with available resources, please provide the information below and then click on "Submit Request."

Only requests from federally recognized Indian tribes, bands, nations, tribal energy resource development organizations, and other organized groups and communities—including Alaska Native villages or regional and village corporations—will be considered.

### \*Required

Salutation*	<input type="text"/>
First Name*	<input type="text"/>
Last Name*	<input type="text"/>
Title/Position*	<input type="text"/>
Are you a designated tribal representative with the authority to request technical assistance on behalf of the tribe/Alaska Native village/regional or Native village corporation?*	<input type="radio"/> Yes <input type="radio"/> No
Type of Affiliation*	<input type="text"/>
Name of Affiliation*	<input type="text"/>
Reservation Name or Location*	<input type="text"/>
Address*	<input type="text"/>
Address 2	<input type="text"/>
City*	<input type="text"/>
State*	<input type="text"/>
ZIP Code*	<input type="text"/>
Phone*	<input type="text"/>
Email*	<input type="text"/>
Confirm Email*	<input type="text"/>

Learn more and apply online:

[energy.gov/indianenergy/technical-assistance](https://energy.gov/indianenergy/technical-assistance)

# Tribal Case in Point: Refine the Project

## Campo Band of the Kumeyaay Nation, CA

- **Challenges**
  - Requested technical assistance in reviewing developer-generated plans for a wind farm on its reservation
  - With an existing wind farm already on-site and some experience with wind development, Campo was interested in potential ownership options in the proposed new project and sought assistance with evaluating them
- **DOE Technical Assistance**
  - Validated data collected through anemometer testing
  - Provided tribal leadership with background information on partnerships and ownership options
  - Briefed tribal leaders and staff on various project ownership configurations



*“The Tribe was pleased with the sale-leaseback ownership option and determined that it was a more realistic path to ownership for them.”*

*—Colton Heaps, NREL*

# Activity

- RFP Ranking

# Types of GSA Support

- Global Supply
- Multiple Award Schedule Contracts
- Airline CityPairs Program
- Travel Program
- Excess Personal Property\*
- Vehicle Leasing\* and Acquisition
- SmartPay2 Purchase Card Program

\*Not available to Tribes or Tribal Designated Housing Entities using Native American Housing Assistance and Self Determination Act of 1996 authority/funding



# GSA Multiple Award Schedules

- GSA establishes long-term, government-wide contracts with commercial firms to provide access to millions of commercial products and services at volume-discount pricing
- Why use them?
  - Competition requirements have been met
  - Indian preference still applies
  - Best-value determination required
- Compliant with environmental requirements
- Discounts negotiated for you