DOE OFFICE OF INDIAN ENERGY

Introduction to Developing and Financing Renewable Energy Projects on Tribal Lands
Review of Workshop Structure

• Introduction

• Five-Step Development Process

• “Office Hours” for detailed technical assistance/Q&A on your specific projects
Agenda Walk-Through; Use of the Workbook

• Strategic Energy Planning
• Step 1: Project Potential
• Step 2: Project Options
• Step 3: Project Refinement
• Step 4: Project Implementation
• Step 5: Operations & Maintenance (O&M)
• Jeopardy!

Note: See the workbook for resources, further work, etc. at the end of each section of the agenda.
Why Complete a Renewable Energy Project?

Benefits vary based on the type and scale of projects

**Economic**
- Jobs
- Income
- Cost savings
- Cost stabilization
- Industry exposure

**Social**
- Energy reliability (diversification)
- Energy independence
- Quality of life
- Community and stakeholder participation
- Educational Benefits

**Environment**
- Air Quality
- Avoided Emissions
- Climate change
  - Mitigation
  - Adaptation
  - Resiliency
  - Demonstrated Environmental Leadership

- Considering long-term costs of finite resources will more than likely continue to increase, the opportunity to reinvest cost savings locally can be realized.

- Other examples of reinvestments (such as housing support)?*

* These will vary depending on project scale.
**Terminology: Project Scale**

**Facility: single-building system**
- Primary goals: offset building energy use, costs
- Development timeline: 1 month to 1 year

**Community: multiple buildings/campus**
- Primary goals: Offset community energy costs, promote energy self-sufficiency
- Development timeline: 6 months to 2 years

**Commercial: stand-alone project**
- Primary goals: sale of power generation, financial benefits
- Development timeline: 3 to 5 years

[Images of solar panels from NC Solar Center, Orange County Convention Center, Tucson Electric Power]
## Determining Project Scale

<table>
<thead>
<tr>
<th>Facility-Scale</th>
<th>Community-Scale</th>
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<tbody>
<tr>
<td>• Available, Tribe-controlled, appropriate location and ownership options</td>
<td>• Available, Tribe-controlled, appropriate location and ownership</td>
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<tr>
<td>• Lower capital investment and overall risk</td>
<td>• Greater impact on community (good or bad)</td>
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<tr>
<td>• Opportunity to gain experience with renewables before doing a larger-scale project</td>
<td>• Offset community electricity costs (primary use is on-site)</td>
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<td>• Increased self-sufficiency, offset utility electricity costs</td>
<td>• Minimized environmental impact</td>
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<tr>
<td>• Cost certainty</td>
<td>• Diversification of energy supply with local, renewable sources</td>
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<tr>
<td>• Visual impact</td>
<td>• Reduced energy off-taker complexities</td>
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<tr>
<td>• Reduced environmental impact</td>
<td>• Smaller capital requirements</td>
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<tr>
<td>• Diversification of energy supply with local, renewable sources</td>
<td>• Job development (construction and maintenance)</td>
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<td></td>
<td>• Self-sufficiency, pride</td>
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Attendee Introductions

• What is your name, tribal affiliation, and role in your Tribe?

• What are the primary objectives you have for being here?

• Do you have any examples of a renewable energy project your Tribe has worked on or is considering?

• Are there challenges and/or successes you can share?