

# Outline of the Energy Development Process

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# Same Process, New Context: Current Energy Policy Trends

- Concerns about climate change are escalating pressure to develop alternatives to fossil fuel
- Economic recovery efforts creating focus on energy efficiency, job creation and solutions for long-term economic prosperity
- Increased emphasis on collaboration and development between and among states, tribes, local communities and organizations
- Developing vision for the future: energy generated from renewable resources, carried over transmission systems maximized with “smart-grid” technology

# The American Recovery & Reinvestment Act of 2009

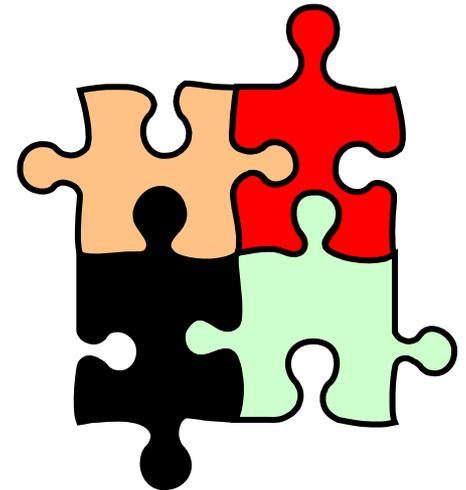
- Significant emphasis on new energy infrastructure
- Investment tax credits extended to wind, geothermal & biomass energy projects
- Financial incentives aimed specifically at Tribes
- Billions earmarked for smart grid initiatives
- Federal western power authorities (WAPA and BPA) given authority to borrow an additional \$6.5 billion from the federal treasury for infrastructure projects; private partners OK.

# What does all this mean to tribes?

Most tribes share all or some of the following long-term goals:

- **Financial Independence**
- **Energy Independence**
- **Sustainability**
- **Sovereignty**

Energy development can - and probably will - influence all four.



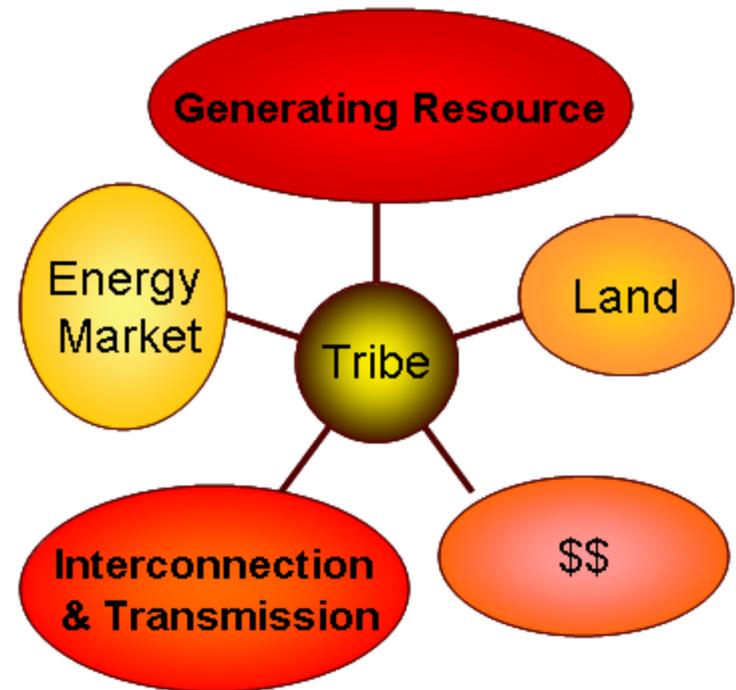
# Assess, Strategize & Act

This presentation is intended to provide a timely perspective on:

- (1) how to assess your tribe's energy resources; and
- (2) the energy development process.

# Assessing Your Tribe's Energy Resources

- Assessing your Tribe's potential for energy develop begins with a careful look at each of the five issues in this illustration.



# #1: Assess the Energy Market: Why develop?

- Is there a **market need** for additional capacity and energy?
- Is the market primarily for power to be used by the tribe, or by nontribal parties?
- In most cases, a large energy project is justified by nontribal market demand; tribe develops project to produce energy for sale off-reservation.

## #2: Assess potential generating resources

- Biomass, Wind, Solar, Hydro, Geothermal, (or Fossil Fuels).
- Renewable resource availability is highly localized and the source varies with geography.
- Cost-effectiveness depends on comparison between (1) cost of conventional energy solution and (2) the cost of technology to develop renewable power source.
- Most renewable power has higher capital cost, but potentially lower operating costs.

## #3: Evaluate land resources & issues

- Tribes control 5% of land in US and, according to DOE, up to 10% of energy resources
- Nature of a tribe's control varies: on-reservation trust land, off-reservation trust land, fee simple.
- Recognize that an energy project on tribal land probably involves a long-term partnership with a non-tribal party.
- Development of energy projects does impact the environment. Identify issues, e.g, wind (visual, large footprint, avian migration); geothermal (air quality and water rights).

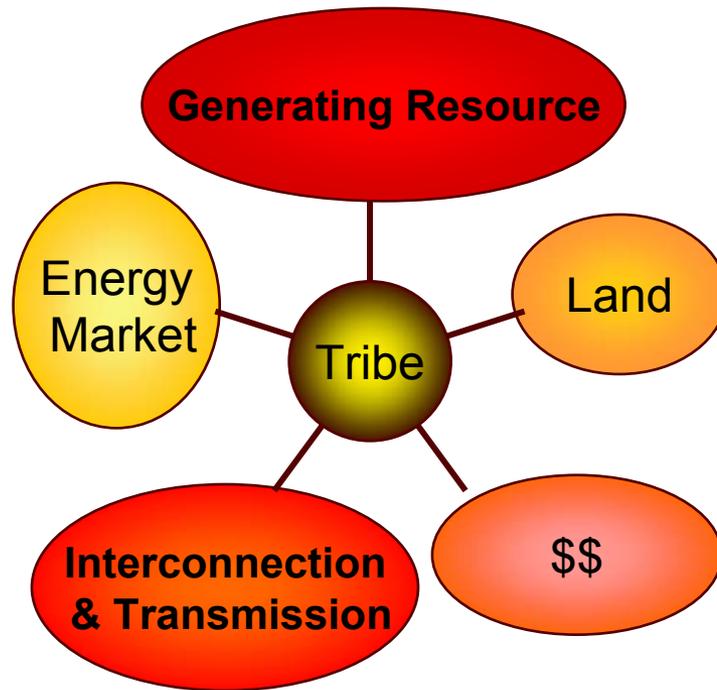
## #4: Evaluate transmission & interconnection potential

- Challenge is to find good sites where transmission can be accessed with limited additional expense (capacity/distance).
- Identify key legal agreements that might be required, such as rights-of-way and easements.
- May have separate environmental issues.

## #5: Evaluate expertise & financial resources.

- Every energy project requires a team to support the tribe with engineering, financial, legal, political, and PR experience.
- Project development requires substantial financial commitment even at early stages (site selection, resource analysis, preliminary designs, negotiating critical agreements).
- Energy development is long-term.

# Identify Options



- Based on these assessments, Tribe will likely identify one or more potential projects
- At this early stage, critical to begin thinking about organizational structure – what tribal organization should be at center?

# Why Create a Separate Tribal Entity for an Energy Project?

- Long-term, complicated project (raising money, managing construction, managing long-term operations).
- Needs a dedicated team with expertise and authority to make decisions.
- Many options, discussed in greater detail by both Kathleen Nilles later today and in my presentation tomorrow.
- Options include a separate unit of tribal government, a corporation, a joint venture.

# Project Management: Should the Tribe be a Passive or Active Player?

## **Passive =**

Entire project contracted out to firm or developer.

**Pros:** Experienced management, faster moving project.

**Cons:** Tribe loses opportunity to develop experience internally and direct control.

## **Active =**

Tribe acts as developer or general contractor and manages subcontracts.

**Pros:** Strong commitment to tribal sovereignty and keeps money & experience within tribe.

**Cons:** Assumption of greater risk, lack of experience.

# Business Structure Must Be In Place to Facilitate Pre-Construction Development Activities

- Tribal Business Entity in place
- Tribal Energy Team in place
- Letter of Intent
- Term Sheet
- Development or Joint Venture Agreement
- Land Agreements
- Shareholder or equity agreements

# Three Phases Of Development

- Early Phase:
  - Prepare permit applications
  - Preliminary design
  - Evaluate PPA RFP processes
  - Prepare and submit transmission interconnection agreement
  - Begin System Impact Study
  - File permit applications

# Development Phases

- Mid-Phase
  - Environmental and regulatory processes
  - EPC specifications and contract negotiations
  - Negotiate PPA
  - Execute EPC contract

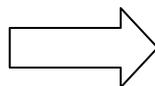
# Development Phases

- Late Phase:
  - Final Permits
  - Long lead equipment procurement
  - Financial Closing

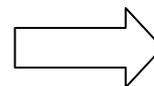
# The Road to Financing: Three Concurrent Paths



**Permit, EPC, Design**



**Interconnection**



**Buyer**

In order to move forward with a project and secure financing, certain key pieces need to fall into place: permitting, designs, EPC contracts, agreements for interconnection and transmission, and a long-term power purchase agreement (PPA).

# Private Equity View

- Private equity investors view the project and key milestones in a very different way:
  - Transaction sourcing
  - Due diligence
  - Investment selection
  - Value creation
  - Exit opportunities

# Development Process continued...

## Sources of Project Financing:

- Tribe-issued bonds
- Private Investors: Strategic, Institutional, Early Stage, Late/Construction Stage
- Funding for Renewable Energy Projects is largely driven by INCENTIVES

# Development Process continued...

- Sources of Project Funding is subject of today's and tomorrow's presentation.
- Identifying sources of funding early in project development process is critical, as it may inform decisions regarding organizational structure selected by tribe, and whether tribe chooses to take an active or passive role.

# Conclusion

- The energy project development process can be both complex and lengthy.
- Because of that, how your tribe chooses to execute development of a tribal energy project can have either a positive or negative impact on your tribe's long-term goals (such as financial independence, energy independence, sustainability, and sovereignty).
- It is therefore worthwhile for tribes to consider energy development options carefully.

***“If we don't change the direction we are headed, we will end up where we are going.” Chinese Proverb***