

Energy Efficiency & Renewable Energy for Tribal Community Development

Tribal EECBG Strategic Planning Outline

Tuesday Morning

Opening & Introductions

The Global and U.S. Energy Picture. Why an increased focus on community energy development is increasingly important at this time.

Community Energy vs. Commercial Energy. What do we mean by Community Energy? The value of local energy self-reliance. The elements of community energy development and community energy planning. Merchant power and the electric utility industry. Building from your EECBG activities. The EECBG portfolio (13 eligible activities).

Discussion: Where are you in your EECBG implementation? Projects currently in the pipeline or completed. New project opportunities. Implementation challenges.

Community Energy Strategic Planning (Activity 1 – Developing an EECS)

A working session focused on self-identification of an energy vision, energy needs (demand), energy supply options, and approaches to implementation.

Community Energy Baseline. (Activity 3 – Energy Audits; Activity 5 – EE Retrofits; Activity 6 – EE & Conservation for Buildings & Facilities) Residential and commercial building energy audits. Current energy providers. Local energy supply options. Forecasts—How is your community energy demand going to change in the future?

Afternoon

Terminology. The language of energy. What is the difference between a kilowatt and a kilowatt-hour? What is a BTU? What is a therm? And more.

Energy Efficiency and Building Options. (Activity 8 – Building Codes)

New construction versus retrofits to existing facilities. Building design: reducing the need for energy is often the most cost-effective energy solution. The importance of building codes and quality construction.

Energy & Transportation (Activity 7 – Transportation Programs; Activity 12 – Traffic Signals & Street Lighting)

Mapping Your Tribal Energy Baseline

Wednesday Morning

Renewable Energy Options. (Activity 9 – Distributed Energy; Activity 13 – RE on Government Buildings)

Community-Scale Solar Options: Solar resource assessment. Low and mid-temperature solar thermal. Solar electric systems for stand-alone or uninterruptible power. Solar electric system connected to the local utility grid. Solar electric economics.

Community-Scale Geothermal. Community heating, Geothermal heat pumps. Power.

Community Wind Options. Wind resource assessment. Small application-specific wind power. Community grid-connected wind power opportunities.

Afternoon

Biomass for Community Energy. Biomass resource assessment. Biomass for Heat. Biomass for Power. Landfill methane reduction (Activity 11). Material Conservation/Recycling (Activity 10)

Community Hydro Power.

Analytic Tools. Individual RE technologies (RETScreen)

Project Development & Financing (Activity 4 – Financial Incentive Programs) Revolving loans, performance contracting, utility financing.

Thursday Morning

Community Strategic Energy Planning – II. This session will focus on tying together the pieces of the puzzle into a more coherent picture. Every community and region is unique and has a different starting point. Getting outside help. (Activity 2 – Technical Consulting Services)

What are the opportunities? What are the priorities? What are the next steps? Who's going to do what? By when? Who's going to pull the pieces together? Who's your Tribal Energy Champion?

What is your vision, given what you now know, and what will be your next steps?

Afternoon

Final Group Discussion

Key Policy Challenges: e.g., working with Regional electric utilities; developing tribal businesses and programs. New business options. Jobs creation.

Generating a Strategic Energy Plan