

Community Strategic Energy Planning 1

How does energy define who we are?

7 Generations Span The Age of Oil

Our Grand Parents

Our Parents

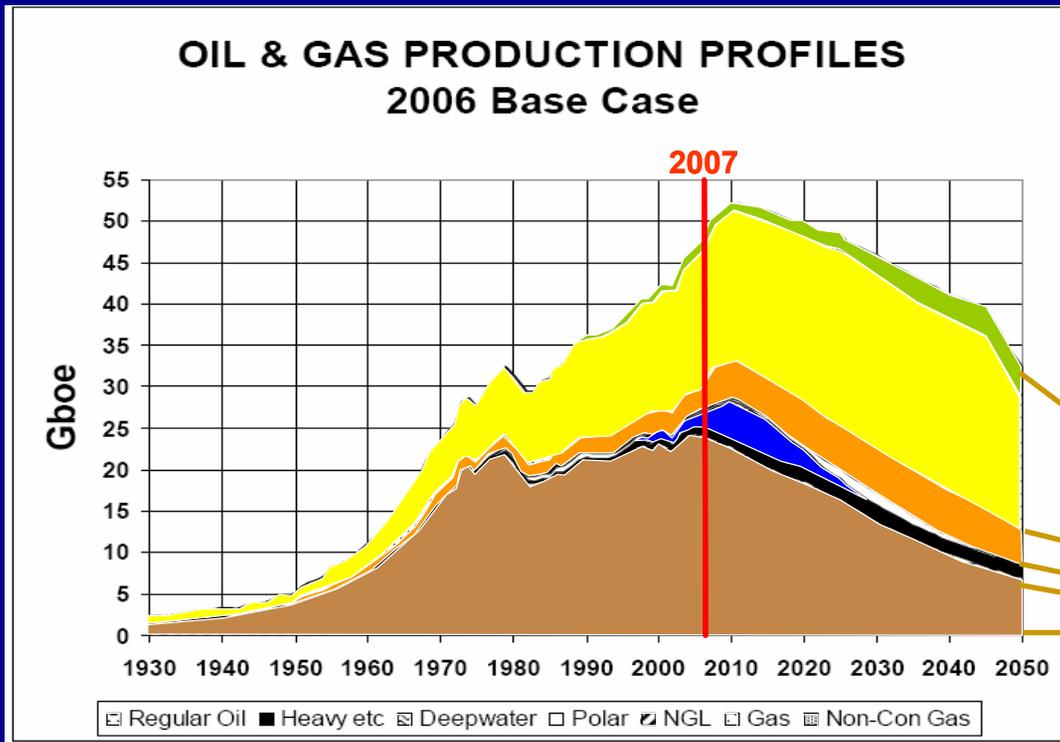
Our Generation

Our Children

Our Grand Children

Our Great Grand Children

Our Great-Great
Grand Children



2100

Peak Oil Graph from: ASPO.com - Colin Campbell 2007

Strategic Energy Planning

*Defining where you are,
Where you want to go,
What are your energy options, and
Developing a plan to get there.*

Community Strategic Energy Planning

Community Objectives

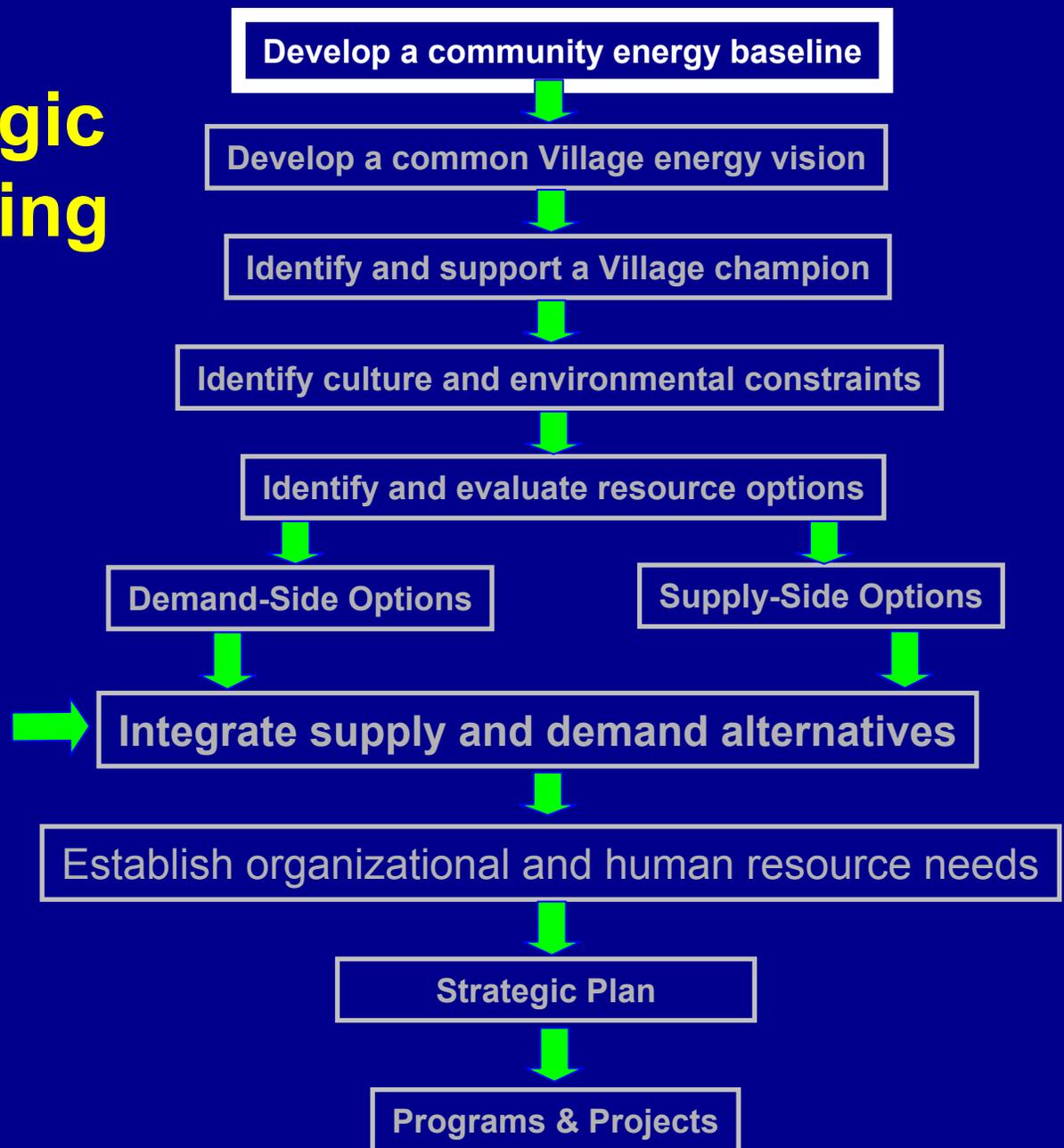
- Energy Reliability & Security
- Off-Grid Electrification
- Minimize Environmental Impacts
 - Supply Diversification
 - Use of Local Resources
 - Economic Development
 - Jobs
- Build technical expertise
 - Respect for Mother Earth
 - Others??



Village Strategic Energy Planning

Village Objectives

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Develop a community energy baseline



Community Energy Audit

- All individual energy flows, in detail
- Buildings, Transportation, Agriculture, Water

Forecast of New Loads

- Markets, Coops, Housing, Lodging, Casino, Warehouse

Details of current Service Providers

- Who, where, how much, tariffs, level of cooperation
- Electric, Gas, Propane, Wood
- Load profiles, in detail

Local Energy Supply Options

- RE and fossil fuel inventory

Add it all up, categorize by load type, quantify load growth

Draw Individual Tribal Maps

Infrastructure

- Reservation or community boundary
- Mountains/hills
- Roads (Primary, Secondary, Rail)
- Tribal industrial activities (sawmill, sand & gravel, coal, ...)
- Key community buildings (casino, hotel, C-store, school, gas stations, ...)
- Residential areas/houses
- Power lines, sewage treatment, solid waste, natural gas, water dams

Lands Usage

- Agricultural areas, farm, pasture, feed lots
- Forest lands, range lands, protected areas

Hydro

- Rivers & Lakes
- Water supply lines or wells

Arrows in Direction of Energy Flow—

- Electricity
- Natural Gas, Propane, Fuel Oil
- Gasoline & Diesel

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Develop a common Tribal energy vision



- Place a “marker” on where the tribe wants to be – in 10, 20, or 30 years
- A statement, or resolution, approved by the Tribal Council following input from broader tribal community
- The vision sets clear direction, but is not too prescriptive (where not how)

Draft a Vision Statement

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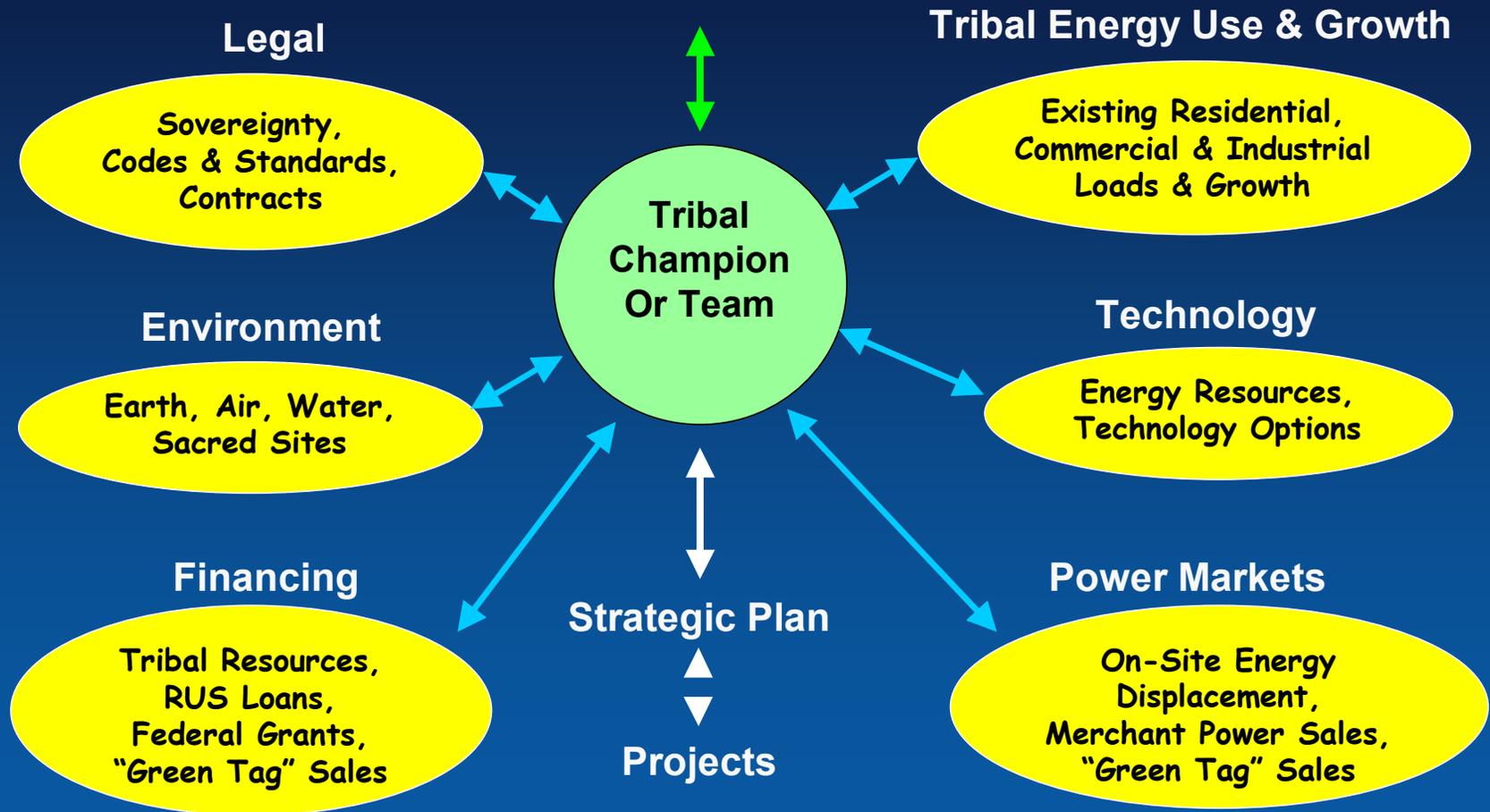


Establish organizational and human resource needs



How do you want to make it happen?

Tribal Council



Identify and support a Tribal champion



A tribal champion (or team) is key – this individual or, more likely, team must be empowered to:

- explore the range of supply & demand options,
- facilitate tribal consensus,
- lead the strategic energy planning process forward,
- make recommendations to Tribal Council, and General Council

What are the challenges you face in your community to establishing a tribal energy champion or team?

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Integrate culture and environmental constraints



- Natural Resource Valuation
 - Water and Air
 - Wildlife Habitat
 - Forests, rangelands, wetlands, other
- Technology Effects
 - Emissions, Aesthetics, Noise
- Economic Development Trade-offs
- Cultural Impacts – (Sacred Sites, Plants, Burial Grounds)
- Tribal Impact – Community & Government
- Other Considerations

Identify sensitive sites