

Community Strategic Energy Planning 1

How does energy define who we are?

7 Generations Span The Age of Oil

Our Grand Parents

Our Parents

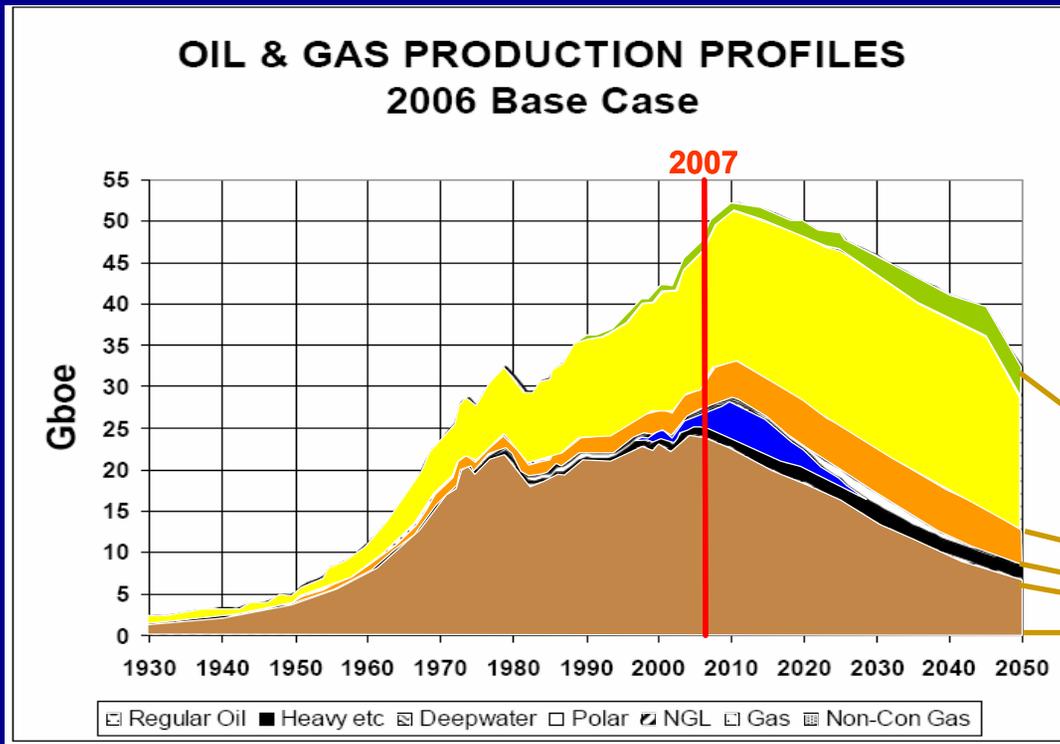
Our Generation

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

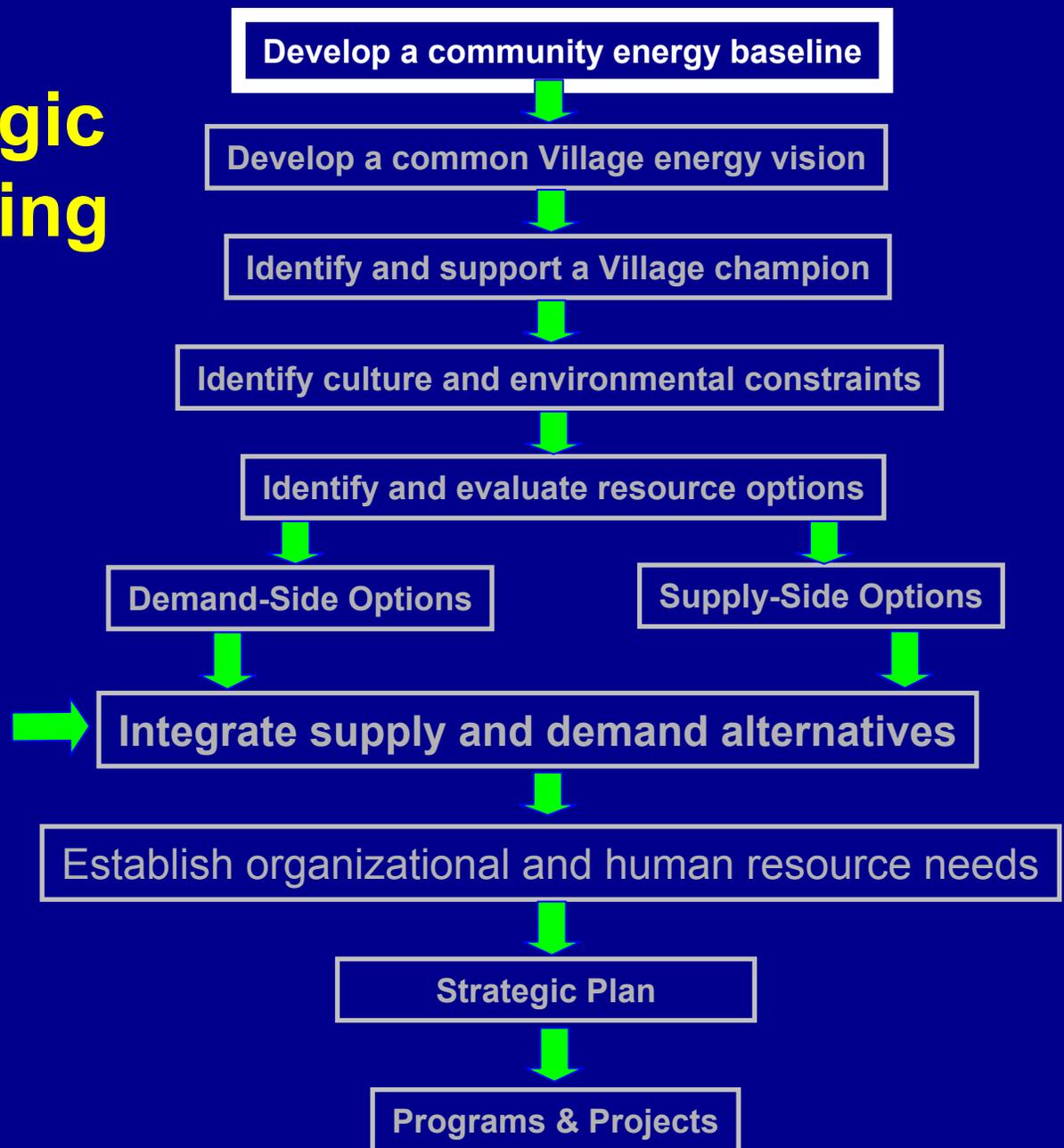
- Energy Reliability & Security
- Off-Grid Electrification
- Minimize Environmental Impacts
 - Supply Diversification
 - Use of Local Resources
 - Economic Development
 - Jobs
- Build technical expertise
 - Respect for Mother Earth
 - Others??



Village Strategic Energy Planning

Village Objectives

- 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??



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

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Village Energy Inventory													
2		Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
3	Electricity (kWh)													
4	Each Home													
5														
6														
7														
8	Community Center													
9	Washateria													
10	Store													
11	School													
12														
13	Other Buildings													
14														
15	Heating Oil (Gallons)													
16	Each Home													
17														
18														
19														
20	Community Center													
21	Washateria													
22	Store													
23	School													
24														
25	Other Buildings													
26														
27	Propane (Gallons or pounds)													
28														
29														
30	Wood (Cords)													
31														
32														
33														
34														
35														

Village Strategic Energy Planning

Village 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??



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

Village Strategic Energy Planning

Village 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??

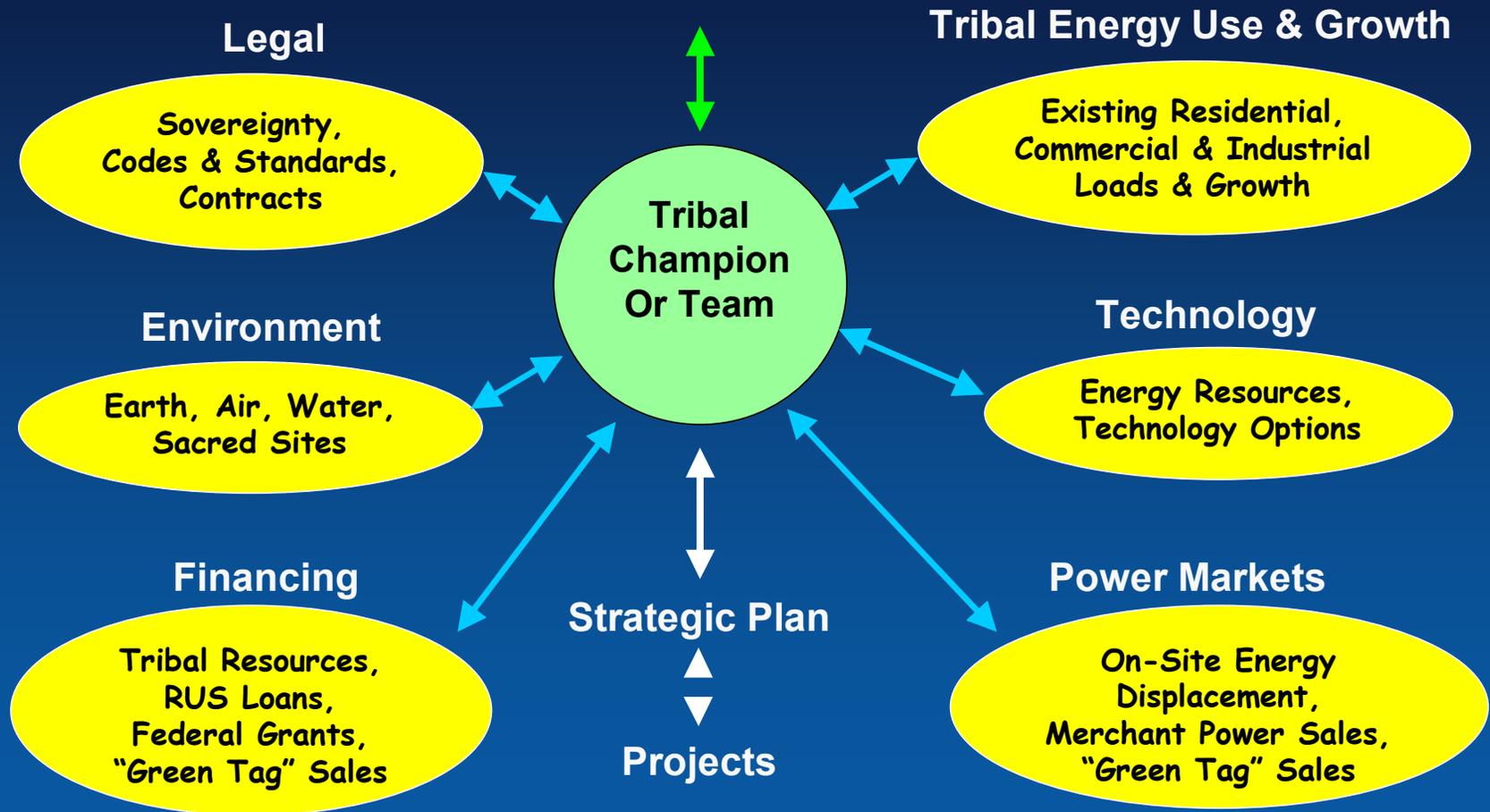


Establish organizational and human resource needs



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?

Village Strategic Energy Planning

Village 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??



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