

Appendix B- *Strategic Energy Planning Guide for Rural Alaska Communities*

Community Energy Plan Template (September 14, 2015 Revision)

Strategic Energy Plan Template

Stakeholders			STEP 1: Organize
List stakeholders and their contact information. Modify the stakeholder titles in the table and add lines as needed Include those who generate, control the sale of, sell, or use electricity, gas, and heating fuel within the community or region.			
Stakeholder	Name/Title	Organization	Contact Information
Tribal Government			
City Government			
ANCSA Village Corporation			
ANCSA Regional Corporation			
Electric Utility			
Water & Wastewater Utility			
School District			
Community Members			
Private Business or Commercial Enterprise			
Outside Agencies or Organizations With An Energy Focus			

Leadership Team			STEP 1: Organize
List champions, sponsors, coordinator, advisors, etc.			
Team Member	Title	Organization	Contact Information

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Stakeholder Involvement Plan	STEP 1: Organize
Describe activities that will encourage participation from various stakeholder groups. Keep a record of events with a list of participants and notes on key discussion points and decisions.	

Energy Profile	STEP 2: Gather Information			
Obtain your community energy profile from Alaska Energy Authority and review it with your technical advisor.				
Who is the Technical Advisor helping with your Community Energy Profile?				
Complete the inventory of community buildings including the following information for each building that serves an important community need:				
Complete the inventory of energy audit reports for public buildings and housing.				
Building	Who owns the building?	Who owns the land?	Who operates and maintains the building?	Audit completed?
What is your plan for energy audits? List which buildings need further analysis and what level of audit is needed for each building identified.				
Identify problems or challenges with existing power generation, transmission, and bulk fuel storage systems. Interview maintenance personnel and describe any issues.				
Describe your community's financial and administrative capacity . Have any issues been identified through Local Government Specialist or Rural Business Advisor reports?				
List current Community Plans and any Energy Goals established in those plans.				

List any energy projects currently underway or completed.
Field conditions - Describe relevant conditions noted from a walking survey of the community.
Housing surveys
Have any housing surveys been done? If yes, summarize the findings.

Data Summary	Step 3: Interpret Data
What changes are anticipated in your community that will affect energy use? Is the population growing or shrinking? Are development projects being planned? Are energy projects underway?	
How does your community fit into the regional energy picture?	
With the help of your technical advisor, complete the summary table below using the information from your energy profile	

POWER PLANT

What we are Measuring	Measurement	Comparison Standards
Efficiency	kWh per gallon of diesel burned	14 kWh/gal
How much energy is lost in the transmission lines	Percent line loss	12% or less (Power Cost Equalization standard)
Waste heat recovery	Is there a working waste heat recovery system? Yes/No Is there additional capacity? Yes/No	Waste heat recovery fully utilized
Alternative energy produced	Total kWh produced annually	

	Percent of total generation Gallons of diesel displaced	
Operator capacity	Number of operators fully certified and trained	All operators fully certified and trained
What do historical trends show?		
What issues have been identified?		

Data sources: Alaska Energy Data Gateway, Local utility, Regional utility cooperative

WATER & SEWER SYSTEM

What we are Measuring	Measurement	Comparison Benchmark
Efficiency	Heat: Gallons fuel burned/year; Electricity: kWh/year consumed	Depends on the type of system. ANTHC has cold weather averages for fuel and electricity use.
Waste heat recovery	Is there a working waste heat recovery system that serves the sanitation system? Yes/No	
Alternative energy utilized	Gallons of diesel displaced	
Operator capacity	Number of operators fully certified and trained	All operators fully certified and trained
What do historical trends show?		
What issues have been identified?		

Data sources: ANTHC, ARUC, Local utility manager

HOUSING

What we are Measuring	Measurement	Comparison Benchmark
Efficiency	Heat: Gallons fuel burned per year;	

	Electricity: kW/year divided by square feet Percent homes weatherized Percent low energy lighting	
Alternative energy utilized	Percent homes using alternative energy	
Energy Awareness	Percent students exposed to education about wise energy use	
What do historical trends show?		
What issues have been identified?		

Data sources: Regional Housing Authority, Alaska Housing Finance Corporation ARIS database, local survey

COMMUNITY BUILDINGS & SCHOOLS

What we are Measuring	Measurement	Comparison Benchmark
Efficiency	Heat: BTU per square foot/year Electricity: kW/year divided by square feet Percent buildings weatherized Percent low energy lighting	79,199 BTU/sq ft/year (AHFC standard) 9.95 kWh/sq ft/year (AHFC standard)
Waste heat recovery	Is there a working waste heat recovery system? Yes/No	
Alternative energy utilized		
Operator capacity	Number of operators fully certified and trained	All operators fully certified and trained
What do historical trends show?		
What issues have been identified?		

Data sources: Alaska Housing Finance Corporation ARIS database, School District

Community Vision		Step 4: Community Dialogue
Summarize community strengths and challenges . Record perspectives on both positive and negative aspects of people, processes, and technology throughout the planning process		
Positives- Strengths and Opportunities	Negatives-Weaknesses and Threats	
What is your community's Energy vision ?		
What are your community's Energy goals ?		

Strategies	Step 5: Consider Strategies
List strategies your community has considered in the following areas:	
<ul style="list-style-type: none"> • Energy conservation • Energy Efficiency • Renewable Energy • Education and Awareness • Workforce Development • Administrative Capacity • Processes and Policies • Infrastructure and Technology 	

Describe the ranking system you used to prioritize strategies or proposed projects.
List your community's priority projects:
What is your plan for on-going tracking community energy use - who, what, when, how?
What is your plan for reviewing your strategic energy plan on a regular basis or as things change?