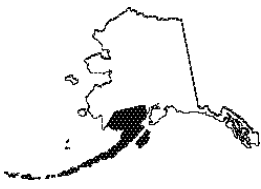




# SWAMC's Comprehensive Energy Policy

Passed by the SWAMC Energy Taskforce  
April 25, 2008

Adopted by the SWAMC Board of Directors  
June 11, 2008



## **Introduction**

Alaska has long depended on tax revenues from oil and gas production to develop its infrastructure, grow its communities, and provide services to its residents. Healthy receipts from royalty sales and petroleum taxes have even displaced the need for certain individual levies. The oil and gas industry has clearly provided many benefits for Alaskans, and with the prospect of North Slope gas development on the horizon, the petroleum sector will remain an important part of Alaska's economy. In spite of this, the recent surge in oil and gas prices has led to inflated costs for fossil fuels. This is an issue that affects all Alaskans, even along the Railbelt, but especially impacts rural residents and businesses. Ironically, the very commodity that brought billions of dollars to this state – oil and gas – has also imparted exorbitant costs for fuel for electricity, transportation and heating.

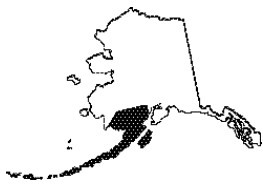
Fortunately, Alaska is rich in diverse energy sources potentially capable of producing affordable and sustainable energy, thereby allowing communities to be less dependent on expensive fossil fuels. The development of such resources in Alaska, and specifically in rural communities, could provide residents and businesses with affordable and sustainable energy for generations to come.

Alaska's Constitution (Art. VIII, § 2) states that the "legislature shall provide for the utilization, development, and conservation of all natural resources belonging to the State, including land and waters, for the maximum benefit of the people." Alaska's land and waters possess enormous amounts of energy – beyond oil and gas – and these renewable resources are ripe for development. Supplement these resources with measures of efficiency, conservation, and weatherization improvements, and the cost of energy in this state eventually becomes less of a burden and more of a benefit.

A policy may reflect a line of argument used to rationalize certain activities. It may also represent a plan or strategy by an individual or a group. This energy development policy is intended to do both, by illustrating the need for a new approach when it comes to energy management in the state of Alaska, and by setting action goals to implement this approach. While SWAMC's energy policy focuses on the current situation for Southwest Alaskans, it also bears relevance for the state as a whole.

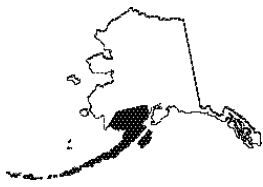
### **Current Conditions in the SWAMC Region**

Lowering the cost of energy is crucial to the economic vitality of the region, as well as for the sustainability of rural communities and the preservation of time-honored lifestyles. As a result, new solutions are imperative. In the Southwest area, like much of Alaska, abundant renewable and alternative energy resources are not only diverse in nature, but are likely more than adequate to support the existing consumer base. These resources have not been developed for a myriad of reasons, but rising fuel costs and dwindling Cook Inlet natural gas supplies may change the



paradigm for energy planning in the state of Alaska. The following list of issues is currently impacting communities, residents, and businesses throughout the SWAMC region:

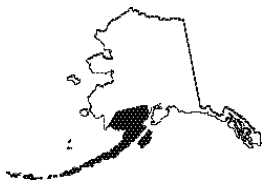
- High energy prices negatively impact the regional economies of Southwest Alaska, hinder sustainability, and are not conducive to commercial/industrial growth;
- The high cost of energy commands a significant portion of the discretionary incomes of residents and households and, as a result, places economic stress on rural and remote communities because of the greatly increasing costs for fuel and other goods;
- Expensive energy puts downward pressure on the economic vitality of the business sector;
- High energy costs may impact the social vitality of communities, resulting in a net out-migration of residents and an impediment to in-migration;
- Communities require more support than is currently available to shift from petroleum energy sources to renewable and alternative energy sources. The newly appointed Executive Director at the Alaska Energy Authority is a positive step in providing that support;
- Fuel delivery to some villages has become a challenge for many energy managers;
- Small economies of scale contribute to persistently high fuel costs;
- Many communities lack the financial resources to invest in renewable and other alternative forms of energy;
- In many communities, a greater share of local financial resources are used to purchase fuel and maintain and operate bulk fuel storage and power generation facilities, thus affecting their ability to invest in other forms of energy generation;
- Many rural utilities have difficulty recruiting qualified employees who are familiar with the basics of utility management. As a result, rates may be inadequate to support utility operations and billing and collections also suffer, impacting sustainability of the utility systems.
- There is currently inadequate financial support for renewable and alternative energy project development from the State of Alaska and the Federal Government;
- There is a lack of long-term financial incentives from the State of Alaska and the Federal Government that could encourage both for- and non-profit entities to implement renewable and alternative energy projects;
- Funding agencies need to place more emphasis on life-cycle costs of energy systems in their project selection processes;
- Traditional energy system upgrades with modest capital investments – such as bulk fuel facilities and more efficient generators – often provide small communities with positive short-term improvements, yet the price of fuel to sustain these systems is often cost-prohibitive;
- Regional out-migration due to high energy costs discourages utilities from promoting residential end-use energy efficiency and conservation because it would further decrease electric loads;
- Several regional utilities and organizations have formally identified the high cost of energy as a number one concern, and lowering energy costs as a number one priority;
- High fuel costs are adversely affecting both commercial and subsistence fishing and hunting activities in Southwest Alaska.



## **Southwest Alaska Energy Policy**

The intent of Southwest Alaska Municipal Conference's Energy Policy is to ensure reliable, affordable, and sustainable energy sources to its communities.

- SWAMC will strongly advocate for, and assist with, the establishment of a statewide energy plan that addresses the distinct energy needs of rural and urban Alaska;
- SWAMC will encourage and support an environment that provides consumers energy prices that are affordable and stable while still providing producers and suppliers a fair return on investment;
- SWAMC will actively support the development of renewable and alternative energy projects, such as geothermal, wind, hydro, nuclear, tidal, coal gasification, and biomass utilization, where feasible;
- Adequate financial support for alternative and renewable energy should be provided where the need is the highest. Project priority should be determined by feasibility, timeframe, affordability, and reliability;
- SWAMC community leaders and energy suppliers should be encouraged to work together to find local solutions to high energy costs and use the collective resources, both human and financial, to help lower the cost of energy for the community as a whole in the future;
- SWAMC will continue to advocate for full funding of Power Cost Equalization (PCE) until it is no longer needed. PCE is vital to communities as they transition toward a more sustainable energy future. PCE mitigates the high cost of energy for rural residents and is crucial to keeping rural utilities solvent while more affordable energy is explored and developed;
- Regional technical advisors should be appointed to work with communities on renewable energy, conservation, and energy efficiency projects;
- Where possible, utilities should work towards coupling renewable energy into their existing hydrocarbon-based systems to provide a higher level of fuel conservation;
- SWAMC supports the development of educational programs in rural communities that promote and demonstrate the benefits of energy conservation, heat recovery, lighting upgrades, etc., to provide residents and businesses the means of reducing their energy bills;
- Where feasible, communities and sub-regions should explore connecting existing and future electric grid systems to achieve maximum efficiency and cost effectiveness;
- Bulk fuel purchase co-ops should be created and supported where possible to leverage cheaper fuel prices;



- Long and short term financial incentives should be created and supported by the State of Alaska and the Federal Government for both for- and non-profit entities for renewable and alternative energy project development. The proposed Alaska Renewable Energy Fund is an excellent mechanism for providing those incentives;
- SWAMC encourages the local recycling of all waste fuels and residual fuel products including biomass feed-stocks;
- SWAMC supports carbon reduction efforts which will result in improved health and environmental benefits for regional residents ;
- SWAMC encourages the utilization of carbon-reduction subsidies to develop “green” projects in the region;
- SWAMC is aware of the 2005 Energy Policy Act and will work to fully implement the provisions put forth through this federal and state partnership;
- SWAMC’s Energy Policy will serve to uphold its commitment to the region as it also promotes and advocates for a statewide energy policy.

### **SWAMC Policy 2008 Benchmarks:**

In areas and communities where the gross residential retail rate (pre-PCE) is greater than \$0.40 per kWh, reduce the cost of electricity per kWh by:

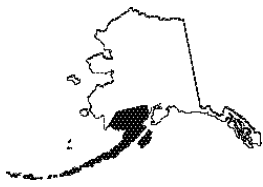
- 25 per cent (25%) below 2008 levels by 2015
- 35 per cent (35%) below 2008 levels by 2020
- 50 per cent (50%) below 2008 levels by 2025

Reduce the regional use of diesel fuel for power generation to:

- 25 per cent (25%) below 2008 levels by 2015
- 35 per cent (35%) below 2008 levels by 2020
- 50 per cent (50%) below 2008 levels by 2025

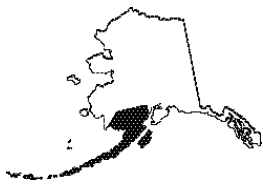
The State should seek to help meet the following goals for the generation of the region’s energy needs from renewable and alternative energy resources:

- 25 per cent (25%) by 2015
- 35 per cent (35%) by 2020
- 50 per cent (50%) by 2025



## **SWAMC Energy Policy Goals 2008**

- GOAL 1: SWAMC's foremost energy goal is to advocate for a statewide energy policy.**
- ❖ SWAMC recognizes the need to develop a guiding policy which addresses the state's energy sources, needs, and infrastructure, and offers a mechanism for prioritizing the State's energy projects.
  - ❖ SWAMC will work with the recently appointed Energy Coordinator to develop a statewide energy policy.
- GOAL 2: SWAMC will support the development of regional energy policies to be integrated into the comprehensive statewide energy policy.**
- ❖ A statewide policy will be difficult to create without recognizing that each of Alaska's regions has unique energy needs and resources. The statewide policy should be the umbrella document that incorporates regional policies.
  - ❖ The statewide policy should develop a set of criteria by which these documents will be developed and integrated.
- GOAL 3: SWAMC will advocate for the expanded utilization of energy efficiency, conservation, and weatherization programs to lower fossil fuel consumption.**
- ❖ Increasing efficiencies and conservation measures will provide immediate relief to households, communities, and regions coping with high fuel costs.
- GOAL 4: SWAMC will advocate for legislation that provides funding for alternative and renewable energy projects.**
- ❖ SWAMC supports the creation and funding of a State renewable energy fund.
- GOAL 5: SWAMC advocates for energy projects, strategies, and plans that offer the most benefit in the shortest time to be given priority funding. Project priority should be based upon the following criteria:**
- ❖ Feasibility.
  - ❖ Timeline.
  - ❖ Reliability.
  - ❖ Affordability. Does the community/utility have the financial capacity to:
    - i. Fund the project.
    - ii. Operate and maintain the project.
    - iii. Amortize the debt.
  - ❖ Sustainability.
  - ❖ Regional benefits.
- GOAL 6: SWAMC supports the full funding of Power Cost Equalization (PCE) until affordable energy is available to all Alaskan consumers.**
- ❖ PCE is a mechanism that supports communities working toward the goal of self-sufficiency. This and other energy subsidies should only serve as a bridge to assist



communities in attaining affordable energy. PCE subsidies should phase out over time as the delivered cost of electricity decreases.

- ❖ As PCE payouts decrease, the fund should ultimately be converted into a Rural Energy Development Fund to serve as “working capital” which will fund the development of sustainable rural energy projects. PCE payouts should be greatly reduced in the Southwest by 2025 as the benchmarks are met.

**GOAL 7: SWAMC supports the opportunity to meet statewide energy needs through the development of regional energy resources, such as the geothermal project in the Bristol Bay region.**

- ❖ As traditional sources of energy deplete, e.g. Cook Inlet natural gas, there should be an analysis of the potential for regional energy resources to be exported as supplemental power for the Railbelt and other regions.

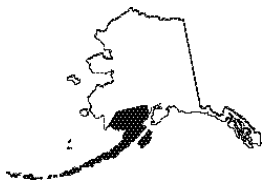
**GOAL 8: SWAMC supports expanding programs to educate people on renewable and alternative energy, energy conservation, and future energy options.**

- ❖ An adequate number of educators and circuit riders will be trained and supported.
- ❖ As the development of renewable energy increases and the need for educators grows, Alaska’s University system must be encouraged to develop curricula to train more Alaskans in energy development, production, delivery, and management.
- ❖ More educational resources should be developed to supplement the Alaska Energy Authority’s Renewable Energy Atlas of Alaska.
- ❖ Regional energy centers should be established at all of the University of Alaska’s rural campuses.
- ❖ The provisions put forth through a federal and state partnership in the 2005 Energy Policy Act will also be promoted and supported through the SWAMC Region.

**GOAL 9: SWAMC supports responsible carbon reduction efforts and encourages the utilization of carbon-reducing subsidies to develop “green” projects in the region.**

- ❖ A growing number of international agreements are already encouraging nations to reduce their carbon footprint. Such agreements may lead to national carbon caps and eventually filter down to state-imposed carbon reduction mandates. Thus, it is important to be prepared for future directives that may be issued by the US Congress and/or the Alaska State Legislature.
- ❖ Carbon emission reduction policies will foster new strategies and subsidies intended to encourage renewable energy, energy efficiency, and improved conservation measures.

**GOAL 10: SWAMC supports efforts to build the capacity of utility managers and employees in order to achieve professional utility operations, maintain the utility’s ability to purchase fuel, and locate and integrate appropriate alternative sources of energy into the utility’s portfolio.**



- ❖ Capable management not only ensures efficient operations and maintenance, but also keeps utilities in compliance with PCE regulations.

**GOAL 11: SWAMC supports the pursuit of efficiencies that are found in interties. Combining village loads creates efficiencies in generation, eliminates duplicate generation facilities and makes the capture of alternative and renewable energy sources more feasible. Over time, the development of such interties should be dependent on the cost effectiveness of their construction. Currently, transmission line construction is a costly endeavor, but until technological advances can provide a cheaper means of power distribution, physical interties should be pursued. SWAMC also supports the research and development of power generation and distribution technologies that can create networks of affordable energy across the state.**

- ❖ SWAMC’s objective is to pursue the development of affordable energy in the most cost effective and timely manner. The development of interties, on all levels, should be a priority in order to gain the efficiencies of multiple community developments. The development of interties should be pursued in the following manner:
  - Short-term: Create sub-regional and micro-interties between communities where feasible and beneficial;
  - Mid-term: Integrate these sub-regional grids into larger regional grids if excess power is generated that will provide benefits to neighboring communities and regions;
  - Long-term: Develop the extensive network of regional and sub-regional grids into a comprehensive statewide energy grid, with the potential to export excess capacity to the Lower 48 via the Canadian grid network.

**GOAL 12: SWAMC advocates for incentives that promote small-scale, utility grade renewable energy production, and opposes a statewide net-metering policy.**

- ❖ Many of Alaska’s rural utilities are locally owned non-profits such as cooperatives and municipal utilities. Programs such as net-metering require utilities to buy excess power generated by consumers at full retail while those consumers continue to rely upon the utility for the majority of their power needs. Such subsidies come at the expense of the remaining consumers. Any alternative energy development at the rural utility level should benefit all consumers equally.