



Alaska's Energy Policy

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Alaska's Energy Policy

Omnibus Energy Bills: Senate Bill 220 and House Bill 306

“It is the intent of the legislature that the state remain a leader in petroleum and natural gas production and become a leader in renewable and alternative energy development.”

- 26th Alaska Legislature, signed by Governor Parnell June 16, 2010
- Creates a statewide energy policy and an omnibus energy bill

Alaska's Energy Policy

HB 306 establishes an energy policy to guide the Alaska Legislature, administration, utilities, conservation groups and Alaskans toward the goal of providing more affordable, abundant and reliable energy.



Alaska's Energy Policy

House Bill 306

Reinforces AEA as the Lead Energy Agency

“It is the policy of the state to coordinate governmental functions by using one office or agency, as may be specified by law, to serve as a clearinghouse in managing the state’s energy-related functions to avoid fragmentation and duplication and to increase effectiveness.”

Alaska's Energy Policy in Action

AEA's Mission: "To Reduce the Cost of Energy in Alaska"

- AEA is an independent and public corporation of the State of Alaska
- Created by the Alaska Legislature in 1976
- 44.83.070: " The purpose of the Authority is to promote, develop, and advance the general prosperity and economic welfare of the people of the state by providing a means of financing and operating power projects and facilities that recover and use waste energy and by carrying out the powers and duties assigned to it under AS 42.45."

Alaska's Energy Policy in Action

AEA: Focus on Communities

- Maintain consistency with state energy policy and goals
- Technical assistance, regional planning and project management
- Provide synergy between planning, projects and funding sources
- Assist communities to move to project-ready status
- Provide statewide perspective while balancing Railbelt infrastructure development
- Engage communities in providing sustainable energy futures



Alaska's Energy Policy in Action

Bulk Fuel and Rural Power System Upgrades

- Help utilities improve efficiency, safety and reliability of power systems
 - Promote local hire and training
- Completed \$304 million in rural bulk fuel and rural power system upgrade projects since 2000, in partnership with Denali Commission
- Common to see 30 to 40% increase in fuel savings after a Rural Power Systems Upgrade is completed



Alaska's Energy Policy in Action

Power Cost Equalization

- Provide economic assistance in rural Alaska where electrical rates can be 3 to 4 times higher than in urban Alaska
- Available to community facilities and residential customers
- Regulatory Commission of Alaska (RCA) sets rates, calculations based on use, costs and efficiencies
- Approximately 80,000 people live in the 188 participating communities

Alaska's Energy Policy

House Bill 306

Encourages Renewable and Alternative Energy and Energy and Conservation

“It is the intent of the legislature that the state receive 50 percent of its electric generation from renewable and alternative sources by 2025.”

“It is the intent of the legislature that the state achieve a 15 percent increase in energy efficiency on a per capita basis between 2010 and 2020.”

- institutes a comprehensive and coordinated approach to support energy efficiency and conservation by encouraging statewide energy efficiency codes; decreasing energy consumption and initiating and supporting an education program.



Perryville: Wind



Prince Wales Island: Biomass

Alaska's Energy Policy in Action

Renewable Energy Grant Fund

- Displaces volatile-priced fossil fuels through heat recovery, hydro, wind, geothermal, biomass, solar, wind and transmission projects
- 251 projects approved totaling \$227.5 million
 - FY15 Capital Budget includes \$22,843,900
- More than 60 projects currently under construction
- In 2013 13 million gallons of diesel and natural gas equivalent were displaced
- Capitalizes on local energy resources
- Benefits businesses not eligible for PCE
- Expands Alaska's renewable energy knowledge base



Alaska's Energy Policy in Action

Energy Efficiency and Conservation

State goal to reduce per capita energy use by 15% by 2020

- AEA's focus: commercial buildings, rural public buildings, industrial facilities and electrical efficiency
- Statewide outreach and education AKEnergyEfficiency.org
- Coordination between State agencies

Results:

- \$1,534,062 and 282,938 diesel equivalent gallons in projected savings
- Average immediate savings of implemented efficiency measures: \$0.29 cents/ \$1 invested, 300% ROI after 10 years
- Alaska Commercial Energy Audit Program measures produce 30% savings with 6.2 year simple payback



Alaska's Energy Policy in Action

Village Energy Efficiency Program

- Provides grant funding for small, high-energy cost communities to implement energy efficiency and conservation measures in the public buildings and facilities.
- Eligible applicants include:
 - Municipalities, cities, school districts, unincorporated villages, Alaska Native regional and village corporations, tribal consortiums, regional housing authorities, traditional councils
- 2013: Seven projects received \$1,381,000
- Projects include retrofitting lights, replacing outdated HVAC equipment and boilers, improving insulation and building siding and replacing windows.



Kiana: Fire House Weatherization



King Cove: LED Light Fixtures

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House Bill 306

Reinforces Loans as Financing Mechanisms

“It is the intent of the legislature that the power project fund (AS 42.45.010) serve as the main source of state assistance for energy projects.”

Recognizes Diversity of State's Resources

“Therefore it is the policy of the state to work to identify and assist with development of the most cost-effective, long-term sources of energy for each community statewide.”



Cordova: Humpback Creek Hydro



Chena Hot Springs: Geothermal

Alaska's Energy Policy in Action

Power Project Fund

- Provides low-interest loans to upgrade or develop small-scale electric power facilities
- Includes bulk fuel storage, transmission and distribution, waste energy, energy conservation, energy efficiency and alternative energy facilities and equipment
- Projects more than \$5 million require Legislative approval

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House Bill 306

Encourages Training and Energy Technology Development

“Therefore it is the policy of the state to support energy research ,education and workforce development by investing in

- a) training and education programs that will help create jobs for Alaskans
- b) applied energy research and development of alternative and emerging technologies”

Alaska's Energy Policy in Action

Technical Community Assistance

Training

- Partnership with AVTEC in Seward
 - Bulk Fuel Operator Training
 - Power Plant Operator Training
 - Advanced Power Plant Operator Training
- Power Cost Equalization Training

Circuit Rider and Emergency Services

- Emergency community assistance provided to about 20 communities since Sept. 2012
- Circuit rider program assisted about 50 communities in 2013

Alaska's Energy Policy in Action

Emerging Energy Technology Fund

- Provides funds for projects that can demonstrate commercial viability within 5 years
- Includes renewable and alternative energy
- Nearly \$11 million provided to 20 projects
- Projects in Juneau, Fairbanks, Kodiak, Delta Junction, Nenana, Nikiski, Igiugig, Tuntutuliak, Kwiglingok and Kotzebue
- Program extended to 2020



Fairbanks Ground Source Heat



Altaeros Energies Helium Balloon Wind Turbine

Alaska's Energy Policy

Senate Bill 220, the Alaska Sustainable Energy Act implements a statewide energy policy that recognizes the importance of Alaska's fossil fuel resources and also identifies Alaska's vast renewable energy potential.



Alaska's Energy Policy

Senate Bill 220

- Emerging Energy Technology Fund (AEA)
 - Created in order to promote the expansion of energy sources available to Alaskans
- Alternative Energy Conservation Revolving Loan Fund (DCCED)
 - Makes funds available for alternative energy and energy efficiency conservation in commercial buildings
- Energy Efficiency Revolving Load Fund (AHFC)
 - Authorizes AHFC to capitalize the fund through the issuance of \$250 million in bonds for public buildings
- Requires an evaluation of state buildings for energy efficiency and recommend 25 percent energy updates (DOT&PF)

AKEnergyAuthority.org

