



Revised December 5, 2011

Alaska Energy Authority Program Fact Sheet: Alternative Energy and Energy Efficiency Programs

Current Status:

Renewable Energy Fund: (See the Program Project Sheet for the Renewable Energy Fund for details.)

Energy Efficiency: AEA is providing 97 communities with grants totaling \$5.1 million for energy audits and efficiency measures through the ARRA-funded Alaska Small Cities Energy Efficiency and Conservation Block Grant (EECBG) program. An additional \$3.3 million is being provided to 21 communities through the Village Energy Efficiency Program (VEEP) and Whole Village Retrofits. A commercial building energy audit program was initiated in 2011 providing energy audits to 132 commercial buildings statewide this year. A second round of funding is expected in early 2012. AEA also provides industrial energy audits to seafood processing plants. Four projects will be completed by February 2012 that both create a baseline for the 15% energy efficiency and conservation by 2020 goal established by the Legislature and Governor, and provide critical research to support effectively achieving the stated goal. The section will provide the Alaska Energy Efficiency Map in early 2012 to publicly display energy efficiency initiatives around the state.

Overview:

Alaska Energy Authority's (AEA's) Alternative Energy and Energy Efficiency (AEEE) program currently manages several projects and initiatives with state and federal funding.

Program Descriptions:

The AEEE program promotes the use of renewable resources as alternatives to fossil fuel-based power and heat, and measures to improve energy production and end use efficiency. In rural areas the program may support developing local sources of coal and natural gas as diesel alternatives. The AEEE program is divided into eight separate program areas:

[Alaska Energy Inventory](#) The Alaska Energy Data Inventory, a collaborative project between AEA, the Alaska Department of Natural Resources, and the University of Alaska's Geographic Information Network of Alaska, is compiling renewable and fossil resource data, energy supply and usage, and other information useful for energy planning and development. Data can be visualized in online maps or downloaded from the project web site.

[Biomass Energy Program](#) develops projects using wood, sawmill residue and municipal wastes for energy; assesses the viability of recovering fish oil from fish processing wastes; and evaluates emerging biomass technologies for commercialization in Alaska.

Program Descriptions, continued:

[Combined Heat and Power \(CHP\) Program](#) focuses on technology and project development to utilize

heat generated during electrical generation—using either fossil fuels or renewables—for a secondary purpose. AEA's largest sub-program under CHP is a [Heat Recovery Program](#) that focuses on capturing 'waste heat' from rural power plants to heat nearby community buildings.

[Energy Efficiency & Conservation Program](#) is focused on achieving the State 15% energy efficiency goal through public education and whole-building scale energy audits and improvements in public buildings and facilities, commercial buildings, and small industrial buildings. Current initiatives include Energy Efficiency and Conservation Block Grants, the Village Energy Efficiency Program, Whole Village Retrofits, industrial energy audits, a statewide public education and outreach program, and assistance with regional energy efficiency planning and implementation. 2011 has been a year of research to set a baseline of energy use against which to measure the 15% goal and to identify the programs and methods that will achieve the greatest energy savings to fill the greatest needs. AEA is also developing an Alaska Energy Efficiency Map, which will identify and share energy efficiency projects and impacts from around the state. AEA manages a central hub of energy efficiency information on the web at www.akenergyefficiency.org.

[Geothermal Program](#) supports projects for geothermal development; organizes workshops and training sessions; coordinates state assistance in developing other potential projects such as Mt. Spurr on the Railbelt and Makushin in Unalaska.

[Hydroelectric Program](#) provides technical assistance through staff and contractors for hydro feasibility assessment; manages public funding for developing conventional hydropower sites, including funding for studies, permitting, final design and project construction. A GIS website is currently under development to provide access to published hydropower studies and reports in Alaska.

[Ocean and River Energy Program](#) evaluates technology and feasibility of converting wave motion, tidal and river flow into power in partnership with Alaska utilities and Electric Power Research Institute.

[Wind Program](#) assists utilities and communities in resource evaluation, training, environmental assessment, regional development, design and economic feasibility, and integration of rural wind-diesel systems; assists with Railbelt wind integration studies.