

State of Alaska FY2011 Governor's Operating Budget

Department of Commerce, Community, and Economic Development Statewide Project Development, Alternative Energy and Efficiency Component Budget Summary

Component: Statewide Project Development, Alternative Energy and Efficiency

Contribution to Department's Mission

Assist in developing projects in Alaska that reduce and stabilize the cost of energy and decrease dependency on diesel and Cook Inlet natural gas for power, heating, and transportation.

Major Activities to Advance Strategies

- Issue competitive funding solicitations for preconstruction and construction activities.
- Issue and administer grants and contracts.
- Apply for grant funds.
- Conduct project feasibility assessment.
- Assist in and conduct statewide energy planning activities.
- Provide information and training through conferences and workshops.

Key Component Challenges

The principal challenge is to address fuel issues throughout Alaska and the shortage of natural gas in southcentral Alaska.

Significant Changes in Results to be Delivered in FY2011

No significant changes to component.

Major Component Accomplishments in 2009

During FY09 Alaska Energy Authority's (AEA) statewide project development activities focused on:

- Continuing inventory, assessment and public involvement activities associated with the statewide energy plan,
- Developing alternative energy and energy efficiency projects, and
- Implementing the Renewable Energy Fund legislation and managing projects selected through the program.

Statewide Energy Planning

AEA and its partners released *Alaska Energy, a First Step Toward Energy Independence / A Guide for Alaskan Communities to Utilize Local Energy Resources* in January 2009. Based on the Guide, AEA and partners began preparation of the statewide energy plan to be released in late 2009. AEA and sister agencies held or participated in public meetings in numerous communities to listen to ideas and concerns and refine the list of potential energy development paths identified for each community in the Guide. In partnership with Alaska Department of Natural Resources (DNR), AEA substantially completed web design and metadata establishment for initial datasets posted under the new Alaska Energy Inventory website <http://akenergyinventory.org/>.

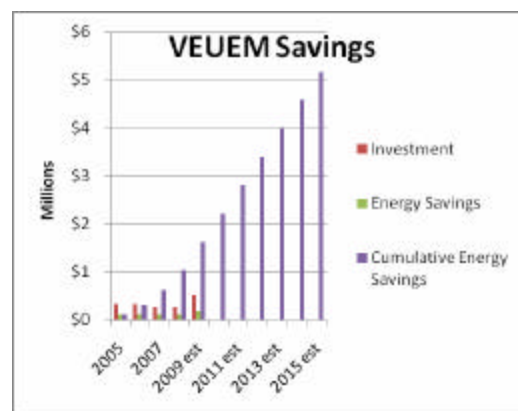
Alternative Energy and Energy Efficiency Project Development

AEA staff and contractors worked with utility, industry and agency partners to provide training, technical assistance, and funding to advance projects that decrease reliance on diesel for heat, power, and transportation. Work was accomplished through the following programs:

Biofuels and Biomass Energy. AEA staff evaluated 54 round 1 and 2 Renewable Energy Fund biomass and biofuels proposals and provided technical oversight on 17 projects funded in round 1, chiefly in the area of wood-fired facility heating.

Combined Heat and Power. AEA continues to develop "waste heat" recovery systems as a part of its rural power system upgrade program and maintains a database of potential heat recovery projects in 170 communities. AEA staff evaluated 14 round 1 and 2 Renewable Energy Fund combined heat and power proposals and provided technical oversight on three projects funded in round 1.

Energy Efficiency. In FY09 AEA expanded its end use efficiency program that addresses schools, public buildings, and commercial facilities. AEA contractors completed energy efficiency retrofits in 31 villages and have initiated projects in 16 additional villages as part of AEA's Village End-Use Efficiency Measures (VEUEM) Program. This project has saved villages at least \$1.6 million in energy savings to date, and will continue to save at least \$590,000 per year into the future, with this number increasing with each completed village. AEA projects that total energy cost savings in 2015 based upon work completed to date will exceed \$5 million, with an investment of only \$1.6 million. AEA produced and distributed approximately 15,000 "Energy Savers Tips for Rural Alaska" booklets. The booklet contains quality information about how to save energy at home with a rural Alaska focus. An energy bike was loaned to school districts for energy educational purposes. Staff made several presentations at key energy events throughout the year to promote and advance energy efficiency programs and initiatives. Staff initiated an Energy Use Index of state buildings to identify the best and worst performing buildings. AEA hired a program manager for Energy Efficiency and Conservation, focusing on short and long-term strategies to significantly improve energy efficiency at commercial, institutional and industrial facilities state-wide. Significant investment has also been made in planning for and managing stimulus funds related to energy efficiency.



Geothermal. AEA gave a presentation on geothermal potential in Alaska at the February 2009 Alaska Forum on the Environment. In April 2009 AEA partnered with the Alaska Center for Energy and Power, USDOE and Chena Hot Springs Resort to sponsor a two-day geothermal conference at the resort, which is also the site of the only geothermal powerplant in Alaska. Attendance, at over 90 people, far exceeded expectations and included several state legislators, the Mayor of Fairbanks and a former Governor of Alaska. In the summer of 2009, Geothermal exploration in Alaska attained levels not seen since the early 1980s, with surface exploration at Mt. Spurr, Manley Hot Springs and Akutan's Hot Springs Valley, and deep drilling at Naknek. AEA hosted another Bureau of Land Management (BLM) workshop in June 2009 on geothermal leasing on federal lands, this time for industry, agency representatives, and the public. AEA staff evaluated 18 round 1 and 2 Renewable Energy Fund geothermal proposals and provided technical oversight on three projects funded in round 1.

Hydropower. AEA began work with the US Army Corps of Engineers under a cooperatively funded program that provides up to \$600,000 in state and federal funds on a 1:1 match basis—organizing and scanning hydropower studies for over 2000 sites statewide. These will be posted to the Alaska Energy Inventory Data System website (see above) for general access by interested users. Later phases will utilize remaining funds to perform site specific hydro studies. AEA has provided technical support for ongoing Susitna Hydroelectric Study and the Railbelt Integrated Resource Plan. AEA has made field trips to existing hydropower installations in King Cove and Iliamna to provide support for expansion and repairs to the existing systems. AEA staff evaluated 49 round 1 and 2 Renewable Energy Fund proposals in the area of hydro development and provided technical oversight on 25 projects funded in round 1, with main focus on studies, permitting, design and construction at specific sites in the southeast, southcentral and southwest Alaska.

Ocean and River Energy. In October 2008, Electric Power Research Institute completed a report sponsored by AEA, AEL&P, Chugach Electric, and the Village of Igiugig entitled *System Level Design, Performance, Cost and Economic Assessment- Alaska River In-stream Power Plants*. This is a study to investigate the feasibility of a power generation technology known as river in-stream energy conversion for Alaska river applications. Conceptual level feasibility studies were completed for sites at Whitestone on the Tanana River, Eagle on the Yukon River, and Igiugig on the Kvichak River. These studies contributed to the start of new in-stream projects at Whitestone and Igiugig, and the ongoing project at Eagle. AEA organized a meeting in May 2009 with the Federal Energy Regulatory Commission (FERC) Director of the Division of Hydropower Licensing in Anchorage to discuss permitting challenges encountered by Alaskan hydrokinetic project developers, and a proposal for an agreement between the State of Alaska and FERC to address permitting, coordination, and data sharing issues. In July AEA organized a presentation by a European wave and tidal energy developer for project developers and utilities. AEA staff evaluated 11 round 1 and 2 Renewable Energy Fund ocean and river energy proposals and provided technical oversight on two projects funded in round 1.

Wind Energy. AEA provided permitting assistance and state and USDOE funding for continued development of TDX Power Corp's 1 MW wind power plant in Sand Point and AVEC's 400 kW wind power plant in Chevak. AEA initiated and supported the development of a Best Practices Guide for permitting wind energy projects in the state. The guide will be useful for project developers to streamline their environmental permitting process. AEA's meteorological tower loan program continues to evaluate wind resources in communities across the state. In September of 2008, AEA's Wind

Energy Program participated in the Rural Energy Conference and gave a presentation on the benefits and opportunities for regional wind development. AEA facilitated the development of the Wind Diesel Applications Center - WiDAC - a collaboration between the University of Alaska, AEA, the National Renewable Energy Laboratory and others. WiDAC will serve as a center of technical expertise for the study and development of Wind-Diesel technologies and projects. AEA staff evaluated 53 round 1 and 2 Renewable Energy Fund wind energy proposals and provided technical oversight on 21 projects funded in round 1.

General. AEA revised and reprinted the Renewable Energy Atlas of Alaska. AEA and University of Alaska organized the 2008 Rural Energy Conference in Girdwood. The conference drew approximately 350 attendees from throughout the state and country. AEA staff provided expert speakers for numerous conferences and meetings throughout the state.

Renewable Energy Fund

In order to implement HB 152, AEA grant, procurement and technical staff prepared two request for applications, evaluated 235 proposals, and worked in consultation with the Renewable Energy Fund Advisory Committee to recommend \$125 million and 107 grants to the Legislature. AEA grant staff also led the preparation of regulations guiding the Renewable Energy Fund.

Statutory and Regulatory Authority

AS 42.45 Rural and Statewide Energy Programs
AS 44.83 Alaska Energy Authority
3 AAC 107 Grant Programs

Contact Information
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**Statewide Project Development, Alternative Energy and Efficiency
Component Financial Summary**

All dollars shown in thousands

	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
Non-Formula Program:			
Component Expenditures:			
71000 Personal Services	0.0	0.0	0.0
72000 Travel	31.3	30.0	30.0
73000 Services	585.3	1,029.4	1,029.4
74000 Commodities	5.0	0.0	0.0
75000 Capital Outlay	3.5	0.0	0.0
77000 Grants, Benefits	0.0	0.0	0.0
78000 Miscellaneous	0.0	0.0	0.0
Expenditure Totals	625.1	1,059.4	1,059.4
Funding Sources:			
1002 Federal Receipts	0.0	41.9	41.9
1004 General Fund Receipts	293.6	550.4	550.4
1007 Inter-Agency Receipts	0.0	50.0	50.0
1061 Capital Improvement Project Receipts	275.0	300.0	300.0
1062 Power Project Loan Fund	56.5	56.5	56.5
1108 Statutory Designated Program Receipts	0.0	60.6	60.6
Funding Totals	625.1	1,059.4	1,059.4

Estimated Revenue Collections

Description	Master Revenue Account	FY2009 Actuals	FY2010 Conference Committee	FY2010 Authorized	FY2010 Authorized	FY2011 Governor
Unrestricted Revenues						
Unrestricted Fund	68515	293.6	0.0	0.0	550.4	550.4
Unrestricted Total		293.6	0.0	0.0	550.4	550.4
Restricted Revenues						
Federal Receipts	51010	0.0	0.0	0.0	41.9	41.9
Interagency Receipts	51015	0.0	0.0	0.0	50.0	50.0
Statutory Designated Program Receipts	51063	0.0	0.0	0.0	60.6	60.6
Capital Improvement Project Receipts	51200	275.0	0.0	0.0	300.0	300.0
Power Project Loan Fund	51350	56.5	0.0	0.0	56.5	56.5
Restricted Total		331.5	0.0	0.0	509.0	509.0
Total Estimated Revenues		625.1	0.0	0.0	1,059.4	1,059.4

**Summary of Component Budget Changes
From FY2010 Management Plan to FY2011 Governor**

All dollars shown in thousands

	<u>General Funds</u>	<u>Federal Funds</u>	<u>Other Funds</u>	<u>Total Funds</u>
FY2010 Management Plan	550.4	41.9	467.1	1,059.4
FY2011 Governor	550.4	41.9	467.1	1,059.4

Component Detail All Funds
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

	FY2009 Actuals	FY2010 Conference Committee	FY2010 Authorized	FY2010 Management Plan	FY2011 Governor	FY2010 Management Plan vs FY2011 Governor	
71000 Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
72000 Travel	31.3	30.0	30.0	30.0	30.0	0.0	0.0%
73000 Services	585.3	1,029.4	1,029.4	1,029.4	1,029.4	0.0	0.0%
74000 Commodities	5.0	0.0	0.0	0.0	0.0	0.0	0.0%
75000 Capital Outlay	3.5	0.0	0.0	0.0	0.0	0.0	0.0%
77000 Grants, Benefits	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
78000 Miscellaneous	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Totals	625.1	1,059.4	1,059.4	1,059.4	1,059.4	0.0	0.0%
Fund Sources:							
1002 Fed Rcpts	0.0	41.9	41.9	41.9	41.9	0.0	0.0%
1004 Gen Fund	293.6	550.4	550.4	550.4	550.4	0.0	0.0%
1007 I/A Rcpts	0.0	50.0	50.0	50.0	50.0	0.0	0.0%
1061 CIP Rcpts	275.0	300.0	300.0	300.0	300.0	0.0	0.0%
1062 Power Proj	56.5	56.5	56.5	56.5	56.5	0.0	0.0%
1108 Stat Desig	0.0	60.6	60.6	60.6	60.6	0.0	0.0%
General Funds	293.6	550.4	550.4	550.4	550.4	0.0	0.0%
Federal Funds	0.0	41.9	41.9	41.9	41.9	0.0	0.0%
Other Funds	331.5	467.1	467.1	467.1	467.1	0.0	0.0%
Positions:							
Permanent Full Time	0	0	0	0	0	0	0.0%
Permanent Part Time	0	0	0	0	0	0	0.0%
Non Permanent	0	0	0	0	0	0	0.0%

**Change Record Detail - Multiple Scenarios With Descriptions
Department of Commerce, Community, and Economic Development**

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)

RDU: Alaska Energy Authority (453)

Scenario/Change Record Title	Trans Type	Totals	Personal Services	Travel	Services	Commodities	Capital Outlay	Grants, Benefits	Miscellaneous	Positions		NP
										PFT	PPT	
***** Changes From FY2010 Conference Committee To FY2010 Authorized *****												
FY2010 Conference Committee												
ConfCom		1,059.4	0.0	30.0	1,029.4	0.0	0.0	0.0	0.0	0	0	0
1002 Fed Rcpts		41.9										
1004 Gen Fund		550.4										
1007 I/A Rcpts		50.0										
1061 CIP Rcpts		300.0										
1062 Power Proj		56.5										
1108 Stat Desig		60.6										
Subtotal		1,059.4	0.0	30.0	1,029.4	0.0	0.0	0.0	0.0	0	0	0
***** Changes From FY2010 Authorized To FY2010 Management Plan *****												
Subtotal		1,059.4	0.0	30.0	1,029.4	0.0	0.0	0.0	0.0	0	0	0
***** Changes From FY2010 Management Plan To FY2011 Governor *****												
Totals		1,059.4	0.0	30.0	1,029.4	0.0	0.0	0.0	0.0	0	0	0

Line Item Detail
Department of Commerce, Community, and Economic Development
Travel

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Line Number	Line Name		FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
72000	Travel		31.3	30.0	30.0
Expenditure Account	Servicing Agency	Explanation	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
72000 Travel Detail Totals			31.3	30.0	30.0
72100	Instate Travel	In-State Transportation - Transportation costs for travel relating to field work, administration, conventions and meetings.	3.8	3.8	3.8
72410	Employee Travel (Out of state)	Out-of-State Transportation - Transportation costs for travel relating to field work, administration, conventions and meetings.	27.5	26.2	26.2

Line Item Detail
Department of Commerce, Community, and Economic Development
Services

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)

RDU: Alaska Energy Authority (453)

Line Number	Line Name		FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
73000	Services		585.3	1,029.4	1,029.4
Expenditure Account	Servicing Agency	Explanation	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
73000 Services Detail Totals			585.3	1,029.4	1,029.4
73025	Education Services	Training, educational conferences, agency memberships, tuition, books and fees for work-related courses.	13.8	13.8	13.8
73150	Information Technlgy	Information Technology training, consulting, equipment leases, software maintenance and licensing.	11.6	11.6	11.6
73156	Telecommunication	Local, long-distance, and cellular telephone charges, television, data/network, telecommunication equipment, and other wireless charges from outside vendors.	2.8	2.8	2.8
73225	Delivery Services	Freight, courier service, and postage.	0.1	0.1	0.1
73450	Advertising & Promos	Advertising, promotions and legal notices.	11.6	11.6	11.6
73750	Other Services (Non IA Svcs)	Program management/consulting, economic/development, safety-related services, printing, copying, and other services.	0.0	444.1	444.1
73812	Legal	Law			
		RSA with Department of Law for legal services.	61.5	61.5	61.5
73979	Mgmt/Consulting (IA Svcs)	AIDEA			
		RSA with AIDEA for personal services.	483.9	483.9	483.9

Line Item Detail
Department of Commerce, Community, and Economic Development
Commodities

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)

RDU: Alaska Energy Authority (453)

Line Number	Line Name		FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
74000	Commodities		5.0	0.0	0.0
Expenditure Account	Servicing Agency	Explanation	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
74000 Commodities Detail Totals			5.0	0.0	0.0
74200	Business	Supplies for office, library, training, and instructional needs, including small equipment, tools and subscriptions.	5.0	0.0	0.0

Line Item Detail
Department of Commerce, Community, and Economic Development
Capital Outlay

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Line Number	Line Name		FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
75000	Capital Outlay		3.5	0.0	0.0
Expenditure Account	Servicing Agency	Explanation	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
75000 Capital Outlay Detail Totals			3.5	0.0	0.0
75700	Equipment	Information technology, communication, electronic, safety, industrial, and transportation equipment.	3.5	0.0	0.0

Unrestricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
68515	Unrestricted Fund	293.6	550.4	550.4

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
68515	Unrestrict Fu Source Unrestricted Fund Source				293.6	550.4	550.4

Restricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51010	Federal Receipts	0.0	41.9	41.9

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51010	Federal Receipts Federal program receipts.				0.0	41.9	41.9

Restricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51015	Interagency Receipts	0.0	50.0	50.0

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51015	Interagency Receipts	Statewide			0.0	50.0	50.0
Misc. interagency receipts received annually from various departments. Specific details are not available at this time, however the authority is needed to allow the division to provide services and assistance to communities when projects are requested from other departments.							

Restricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51063	Statutory Designated Program Receipts	0.0	60.6	60.6

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51063	Stat Desig Prog Rec Miscellaneous receipts from the private sector.				0.0	60.6	60.6

Restricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51200	Capital Improvement Project Receipts	275.0	300.0	300.0

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51200	Cap Improv Proj Rec Capital project receipts.				275.0	300.0	300.0

Restricted Revenue Detail
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Master Account	Revenue Description	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51350	Power Project Loan Fund	56.5	56.5	56.5

Detail Information

Revenue Amount	Revenue Description	Component	Collocation Code	AKSAS Fund	FY2009 Actuals	FY2010 Management Plan	FY2011 Governor
51350	Power Project Ln Fund				56.5	56.5	56.5
	Power Project Fund AS 42.45.010						

Inter-Agency Services
Department of Commerce, Community, and Economic Development

Component: Statewide Project Development, Alternative Energy and Efficiency (2888)
RDU: Alaska Energy Authority (453)

Expenditure Account	Service Description	Service Type	Servicing Agency	FY2009 Actuals	FY2010		FY2011 Governor
					Management Plan		
73812	Legal	RSA with Department of Law for legal services.	Inter-dept	Law	61.5	61.5	61.5
				73812 Legal subtotal:	61.5	61.5	61.5
73979	Mgmt/Consulting (IA Svcs)	RSA with AIDEA for personal services.	Intra-dept	AIDEA	483.9	483.9	483.9
				73979 Mgmt/Consulting (IA Svcs) subtotal:	483.9	483.9	483.9
				Statewide Project Development, Alternative Energy and Efficiency total:	545.4	545.4	545.4
				Grand Total:	545.4	545.4	545.4