

State of Alaska FY2020 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 heating oil.

Major Component Accomplishments in 2018

Alternative Energy and Energy Efficiency: The Alaska Energy Authority (AEA) has increased statewide knowledge and capacity to install and operate effective alternative energy systems by providing technical workshops, training and technical assistance through the alternative energy program. AEA facilitates collaborative working groups on different renewable technologies and energy efficiency. In FY2018, AEA continued to work with the U.S. Office of Energy Efficiency and Renewable Energy to provide technical assistance to more than 60 communities who made a pledge during Phase I of the program to improve community-wide energy efficiency. AEA facilitated one-on-one visits with Remote Alaska Communities Energy Efficiency (RACEE) communities at the Spring 2018 Rural Energy Conference to walk through community energy profiles developed by AEA and identify opportunities for energy savings.

Renewable Energy Grant Fund Program: Over the lifetime of the program, the Renewable Energy Fund (REF) has funded 287 grants to assess, develop and/or construct renewable energy projects statewide. The 70 projects operating at the end of 2017 that received REF grants will save more than 30 million gallons of diesel fuel equivalent in calendar year 2018. As of October 2018, there are now 73 projects operating that were built with REF dollars. The annual renewable energy generation grows each year as more REF funded projects progress through the construction phase and become operational.

Wind Energy: Since 2012, Alaska's wind energy installed capacity has grown from 15.3 megawatts to 64.1 megawatts. This development has been strongly supported through AEA's wind program and the REF program. The Wind Program has also facilitated the reformation of the Alaska Wind Working Group and the formation of the Wind Advisory Group. In concert with the Wind Advisory Group, the Wind Program is developing a Feasibility and Technical Assistance Program with the goal of helping new projects get started and optimizing existing projects.

Hydroelectric Energy: AEA's hydroelectric program owns or assists approximately 70 projects throughout the State. Projects range from concepts to operational hydroelectric facilities. AEA recognizes that hydroelectric power is critical to meeting Alaska's renewable energy goal and provides long-term benefits and energy security to Alaska communities. The hydroelectric program is currently focused on improving efficiency and quality in development, lowering the cost of construction, and coordinating with other State agencies, federal agencies, municipalities, tribal entities, and private investors in analyzing, planning, and generally assisting hydroelectric development.

Biomass Program: The biomass program has provided funding for 20 operating woody biomass heating systems for schools and public buildings. These projects reduce diesel fuel use and keep the money for fuel (wood) within the community. Along with the U.S. Forest Service, the program has provided funding for over 150 pre-feasibility studies to evaluate a community's biomass potential and develop sustainable harvest plans. Biomass use in lieu of diesel is reducing diesel fuel consumption and creating local jobs.

Emerging Energy Technology Fund: The Emerging Energy Technology Fund has funded 23 projects since its inaugural year. A third solicitation for projects occurred in FY2017. The projects are attempting to commercialize energy technologies that will help advance Alaska's systems. These range from flywheel testing, to River In-Stream Energy Conversion hydrokinetic device testing, to cold climate heat pump demonstrations.

Power Project Fund (PPF) Loan Program: In FY2018, AEA closed three PPF loans totaling \$818,000 combined to complete construction funding for two diesel powerhouse improvement projects (in Koliganek and Port Alsworth) and one biomass project (in Tanacross). The Power Project Loan Fund provides loans to local utilities, local governments or independent power producers for the development or upgrade of power facilities. Total committed funds as of June 30, 2018 were \$9,787,223 with \$18,136,985 in outstanding loans. Three projects that received PPF loans completed construction in FY2018: (1) King Cove's Waterfall Creek hydro project was funded by a combination of AEA REF

grant, PPF loan and Alaska Bond Bank funds; (2) Venetie completed improvements to their diesel powerhouse; and (3) Newtok completed improvements to their diesel powerhouse. AEA staff has been in contact with several other communities that are currently considering PPF loans but have not yet submitted applications. AEA expects demand for the loan program to continue to grow.

Energy Planning: In FY2018, AEA began initiating new processes to improve the transparency of program decision making. Updated criteria for evaluating, selecting, and funding Rural Power System Upgrade (RPSU) projects were approved by AEA's board and are expected to be adopted in regulation in FY2019. AEA developed new data dashboards to improve the access and interpretation of data for stakeholders to make energy-related decisions in communities. The underlying data was used for a number of project, program, and policy-related analyses in FY2018, including the governor's climate change initiative. AEA started a pilot project to provide management assessment and assistance for rural electric utilities. Leveraging funds from the U.S. Department of Agriculture, the research performed in FY2018 is being implemented in FY2019.

Volkswagen Settlement: The Environmental Mitigation Trust (Trust) established as part of the Volkswagen (VW) Settlement is explicitly intended for funding Eligible Mitigation Actions (Appendix D-2 of Environmental Mitigation Trust Agreement) to fully mitigate the total lifetime excess NOx emissions from the 2.0L and 3.0L subject vehicles. Alaska has been allocated \$8.125 million to fund eligible actions over the next ten years. The consent decree requires the development of a Beneficiary Mitigation Plan that summarizes how the funds will be used. The plan will provide the public with insight into the State's high-level vision for use of the mitigation funds and information about the specific uses for which funding is expected to be requested.

AEA was named lead agency for the State of Alaska and submitted certification documents needed to become a beneficiary of the Trust. The Authority worked with stakeholders and experts to publish a Draft Beneficiary Mitigation Plan (DBMP) in May 2018, opening a 60-day public comment period that included statewide public meetings and conference presentations.

Project Development and Finance: In light of reduced funding for alternative energy, energy efficiency, and renewable energy projects, AEA has reoriented the focus of these program areas. The new focus is to assist with project development and finance activities, connecting communities and utilities with grant and financing alternatives, providing technical assistance and general technology-specific trouble shooting, and helping them through the process of developing a cost-effective project with financing tools such as Power Project Fund loans.

Key Component Challenges

AEA is working closely with the EPA and the Institute for Tribal Environmental Professional (ITEP) to ensure that Alaska tribes benefit from the VW Settlement tribal allocation of \$54.5 million. ITEP was named the technical assistance provider for tribes interested in accessing settlement funds. AEA has identified projects under Eligible Mitigation Action 10 (EMA 10) as having the most potential for most Alaska tribes. EMA 10 are Diesel Emissions Reduction Act (DERA) eligible projects; DERA is a program of the EPA that is primarily used in Alaska to upgrade diesel engines used for prime power in rural Alaska. EMAs 1-9 cover equipment that is generally not present in rural Alaska communities. AEA is encouraging the EPA to adjust mandatory and voluntary match requirement criteria for tribes using VW Settlement funds because EMA 10 is under the VW Settlement and must follow DERA rules. Current EPA rules exclude use of VW funds for mandatory match and increase match requirement when VW funds are used as mandatory match – essentially eliminating incentive to use and benefit from the VW Settlement fund to tribes under the EMA 10 DERA option. There is currently a court ordered stay on the tribal portion of the VW Settlement. When this stay is lifted and new rules for distribution are established, AEA will resume advocacy for EPA rulemaking that benefits Alaska tribes.

Reduced funding and staff for alternative energy, energy efficiency, renewable energy, and energy technology projects will make it difficult, if not impossible, to reduce reliance on fossil fuels and meet the state energy policy of 15 percent energy efficiency by 2020 and 50 percent renewable energy by 2025.

Since 2014, the Statewide Project Development, Alternative Energy and Efficiency component has experienced a 70% reduction in capacity for program delivery which has resulted in a challenge to change priorities including: reduction in energy technology research, reduction of on-site technical assistance and community outreach, and narrowing focus on energy technologies that are mature in Alaska (efficiency, wind, biomass, heat recovery, hydro).

AEA's Power Project Fund loan program is seeing steady demand. Additional interest in the loan program is expected as a result of reduced grants available through the Renewable Energy Fund (REF). Numerous former REF grant recipients have already inquired into the availability of loans to finish feasible REF projects. Potential changes to the Rural Power System Upgrade (RPSU) program, which would increase local match requirement is also likely to put more pressure on the loan fund. Though the PPF loan fund is adequately capitalized to meet current loans and loan requests, loans for only one larger hydro project or a couple of powerhouse replacements would nearly zero funds available. There is currently a little less than \$9 million available to lend and a total loan portfolio of more than \$40 million.

Significant Changes in Results to be Delivered in FY2020

AEA is optimizing project management support by realigning internal functional groups and processes to improve project delivery. AEA is committed to prioritizing critical functions, seeking new funding sources, and continuing to deliver critical services to Alaskans. In response to decreased funding in recent years, AEA is making operational and policy changes to emphasize efficiency in the delivery of programs and projects and stretch public dollars further and that increase transparency of the organization's work. AEA is pursuing regulatory changes to the way projects are selected and funded, with the intent of stretching dollars further while encouraging administrative and technical best practices at utilities so that infrastructure lasts its full economic life. Additionally, AEA is aggressively seeking non-state funding, expanding collaborative partnerships to leverage the limited State dollars for maximum benefit to Alaska communities.

AEA is implementing programs with a renewed focus on getting the full economic life of infrastructure investments and providing utility business management technical assistance to improve utility operations and maintenance, reporting practices and financial health. AEA has received a grant from the U.S. Department of Agriculture (USDA) to pilot a technical assistance program targeting utility business management and marrying on-site business and powerhouse operator training. Connecting the business and technical sides of the utility operations is critical to ensure proper operations and maintenance is performed, that utilities are receiving the full PCE payments their eligible customers are due, and that utility businesses are managed for sustained financial wellness. The USDA grant will allow AEA to test technical assistance methodology and material; at the close, the project AEA will make adjustments based on what we have learned and roll out an on-going program. When investments in energy infrastructure are well maintained the equipment may last its full economic life, lowering energy costs by reducing capital expenditures. When utilities are well managed they are better able to receive full benefits from PCE, pay for needed operations and maintenance, and plan for future expenditures.

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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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)

Non-Formula Component

	FY2018 Actuals	FY2019 Conference Committee	FY2019 Authorized	FY2019 Management Plan	FY2020 Governor	FY2019 Management Plan vs FY2020 Governor	
71000 Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
72000 Travel	8.8	0.0	0.0	0.0	0.0	0.0	0.0%
73000 Services	1,731.3	2,000.0	2,000.0	2,000.0	2,000.0	0.0	0.0%
74000 Commodities	3.4	0.0	0.0	0.0	0.0	0.0	0.0%
75000 Capital Outlay	0.7	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	1,744.2	2,000.0	2,000.0	2,000.0	2,000.0	0.0	0.0%
Fund Sources:							
1061 CIP Rcpts (Other)	858.1	0.0	0.0	0.0	0.0	0.0	0.0%
1210 Renew Ener (DGF)	886.1	2,000.0	2,000.0	2,000.0	2,000.0	0.0	0.0%
Unrestricted General (UGF)	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Designated General (DGF)	886.1	2,000.0	2,000.0	2,000.0	2,000.0	0.0	0.0%
Other Funds	858.1	0.0	0.0	0.0	0.0	0.0	0.0%
Federal Funds	0.0	0.0	0.0	0.0	0.0	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 FY2019 Conference Committee To FY2019 Authorized *****												
FY2019 Conference Committee												
ConfCom		2,000.0	0.0	0.0	2,000.0	0.0	0.0	0.0	0.0	0	0	0
1210 Renew Ener		2,000.0										
Subtotal		2,000.0	0.0	0.0	2,000.0	0.0	0.0	0.0	0.0	0	0	0
***** Changes From FY2019 Management Plan To FY2020 Governor *****												
Totals		2,000.0	0.0	0.0	2,000.0	0.0	0.0	0.0	0.0	0	0	0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Travel

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

Line Number	Line Name		FY2018 Actuals	FY2019 Management Plan
2000	Travel		8.8	0.0
Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
2000 Travel Detail Totals			8.8	0.0
2000	In-State Employee Travel	In-State Transportation - Transportation costs for travel relating to administration, conventions and meetings, boards and commissions.	8.8	0.0

Line Item Detail (1676)
Department of Commerce, Community, and Economic Development
Services

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

Line Number	Line Name		FY2018 Actuals	FY2019 Management Plan
3000	Services		1,731.3	2,000.0
Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
3000 Services Detail Totals			1,731.3	2,000.0
3000	Education Services	Training, educational conferences, agency memberships, tuition, books and fees for work-related courses.	0.1	1.0
3001	Financial Services	Accounting, auditing, management consulting, grantee monitoring, loan servicing and insurance related services.	18.5	20.0
3003	Information Technology	Information Technology - Training, consulting, equipment and software leases, licensing and maintenance.	0.1	1.0
3004	Telecommunications	Local, long distance, and cellular telephone charges, television, data/network, telecommunication equipment, and other wireless charges from outside vendors.	6.5	7.0
3006	Delivery Services	Freight, courier services, and postage.	0.8	1.0
3007	Advertising and Promotions	Advertising, promotions and legal notices.	1.7	2.0
3010	Equipment/Machinery	Machinery, furniture and equipment purchase, repairs, maintenance, rentals, and leases.	0.2	1.0
3011	Other Services	Other professional services.	20.3	20.0
3024	Inter-Agency Legal	Legal services.	2.4	5.0
3038	Inter-Agency Management/Consulting	Commerce - Administrative Services (1028) Core and allocated services, including Administrative Services and Commissioner's Office support.	54.1	55.0

Line Item Detail (1676)

**Department of Commerce, Community, and Economic Development
Services**

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

Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
3000 Services Detail Totals			1,731.3	2,000.0
3038 Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	Alaska Industrial Development and Export Authority support.	1,626.6	1,887.0

Line Item Detail (1676)

**Department of Commerce, Community, and Economic Development
Commodities**

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

Line Number	Line Name		FY2018 Actuals	FY2019 Management Plan
4000	Commodities		3.4	0.0
Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
4000 Commodities Detail Totals			3.4	0.0
4000	Business	Supplies for office, library, training, and instructional needs, including small equipment, tools and subscriptions.	3.0	0.0
4002	Household/Institutional	Cleaning, food, and other household supplies.	0.4	0.0

Line Item Detail (1676)

**Department of Commerce, Community, and Economic Development
Capital Outlay**

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

Line Number	Line Name		FY2018 Actuals	FY2019 Management Plan
5000	Capital Outlay		0.7	0.0
Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
5000 Capital Outlay Detail Totals			0.7	0.0
5004	Equipment	Equipment and furniture.	0.7	0.0

Revenue Detail (1681)

Department of Commerce, Community, and Economic Development

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

Revenue Type (OMB Fund Code) Revenue Source	Component	Comment	FY2018 Actuals	FY2019 Management Plan
5061 CIP Rcpts (1061 CIP Rcpts)			858.1	0.0
5351 Capital Improvement Project Inter-Agency		Capital Improvement Project Receipts.	858.1	0.0
6210 Renew Ener (1210 Renew Ener)			886.1	2,000.0
6881 Renewable Energy Grant Fund - Transfers In Other Funds		Renewable Energy grant funds.	886.1	2,000.0

Inter-Agency Services (1682)

Department of Commerce, Community, and Economic Development

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

	FY2018 Actuals	FY2019 Management Plan
Component Totals	1,680.7	1,942.0
With Department of Commerce, Community, and Economic Development	1,680.7	1,942.0

Object Class	Servicing Agency	Explanation	FY2018 Actuals	FY2019 Management Plan
3038 Inter-Agency Management/Consulting	Commerce - Administrative Services (1028)	Core and allocated services, including Administrative Services and Commissioner's Office support.	54.1	55.0
3038 Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	Alaska Industrial Development and Export Authority support.	1,626.6	1,887.0