

State of Alaska FY2021 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 2019

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 and/or technical support for 51 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 United States Forest Service, the program has provided funding for over 170 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. It is estimated that biomass heating projects are displacing over 500,000 gallons of diesel annually.

Power Project Fund Loan Program: As of June 30, 2019, AEA's Power Project Loan program included 20 outstanding loans for hydro, wind, biomass, diesel, solar, and energy conservation. The outstanding loan balance was \$27.1 million. Pending applications totaled \$1.1 million. There were no delinquent loans. The uncommitted cash balance at June 30, 2019 was \$10.7 million.

Village Energy Efficiency Program (VEEP): In FY2019, AEA was awarded a \$1 million grant from the Wells Fargo Foundation for outdoor lighting retrofits, using \$200,000 of Alternative Energy Efficiency state capital funds as a match. While the award was completed in May, receipt authority was not received until July. On August 1, 2019, AEA released a request for applications using VEEP regulations. Applicants are required to provide a 20 percent cash or in-kind match. Approximately 66 applications were received during September. AEA anticipates making about 50 awards. Projects will be complete by August 2020.

Volkswagen (VW) Diesel Settlement Grants: The Environmental Mitigation Trusts (Trust) established as part of the VW Settlement are 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. Through the Trust, Alaska has been allocated \$8.125 million to fund eligible actions to be completed by 2027. AEA was named lead agency for the State of Alaska. As required by the agreement, AEA developed a Beneficiary Mitigation Plan through a public process that describes how the funds will be disbursed. The Trust funds will be used to replace school buses (50 percent), replace public transit buses (10 percent), replace diesel engines used for prime power (15 percent), repower commercial marine vessels (10 percent), and purchase and install an electric vehicle (EV) charging infrastructure (15 percent).

In FY2019, AEA committed approximately \$3 million for eligible projects. AEA awarded 11 school bus replacements in Anchorage School District (6), Kenai Peninsula Borough School District (4), and Alaska Gateway School District (1). The City and Borough of Juneau was awarded \$233,960 for the purchase of an all-electric transit bus. Nearly \$500,000 of VW Trust funds were used as mandatory cost-share for EPA Diesel Emissions Reduction Act (DERA) projects to replace gensets in Circle (2), Chignik Lake (2), Takotna (3) and Tuluksak (1). AEA staff have also met with stakeholders (utilities, state and local agencies, EV owners) to determine how to most effectively distribute the Trust funds for EV infrastructure in FY2020. AEA assisted the Village of Chefnak and the Loudon Tribe of Galena in successfully accessing VW Tribal Trust funds and EPA Tribal DERA funds for genset replacement in their powerhouses.

Commercial Property Assessed Clean Energy (C-PACE): In February 2019, AEA was awarded a \$300,000 Department of Energy, State Energy Program grant to assist with the development of a C-PACE finance program. The grant funds are dedicated to paying for staff time to work on building the program, and to provide funding for professional technical assistance, including a specialized technical advisor, a survey company to better understand the needs and preferences of commercial building owners, marketing, and legal counsel. Contracts for specialized services to support program development are subject to the request for proposal process. Since awarded, a C-PACE Stakeholder Advisory Group has been formed and is gaining momentum with program development. Since March 2019, there have been six meetings.

Renewable Energy Fund (REF): Since inception, the REF has funded 287 grants to assess, develop and/or construct renewable energy projects statewide. More than 80 projects operating at the end of 2018 that received REF grants will contribute to saving more than 30 million gallons of diesel fuel equivalent in calendar year 2019. The annual renewable energy generation grows each year as more REF funded projects progress through the construction phase and become operational. AEA expects the next application cycle for the REF to take place in March 2020.

Energy Planning: AEA has initiated new processes to improve the transparency of program decision making. AEA continues to improve data dashboards to improve the access and interpretation of data for stakeholders to make energy-related decisions in communities. AEA has provided management assessment and assistance for a number of rural electric utilities by leveraging funds from the United States Department of Agriculture. A management guidebook for Power Cost Equalization (PCE) eligible utilities will be available through AEA's website.

Project Development and Finance: In light of reduced funding for alternative energy, energy efficiency, and renewable energy projects, AEA provides assistance 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 communities through the process of developing a cost-effective project with financing tools such as Power Project Fund loans.

Wind Energy: Since 2012, Alaska's wind energy installed capacity has grown from 15.3 megawatts to more than 70 megawatts. The 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.

Emerging Energy Technology Fund (EETF): The EETF has funded 23 projects since its inaugural year. The projects attempt to commercialize energy technologies that will help advance Alaska's systems, and range from flywheel testing, to River In-Stream Energy Conversion hydrokinetic device testing, to cold climate heat pump demonstrations.

Alternative Energy and Energy Efficiency: 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 various renewable technologies and energy efficiency.

Key Component Challenges

Power Project Fund (PPF) Capitalization: The PPF loan fund is adequately capitalized to meet current loans and loan requests. However, as fewer grant funds are available for energy infrastructure the increase in local match requirement is likely to put even more pressure on this loan fund. There is currently \$10.7 million (September 30) available to lend. One larger hydro project or a couple of powerhouse replacements could reduce funds available to nearly nothing. Fund capitalization may be needed in future budget years to meet demands. AEA is evaluating the capitalization needs of the PPF.

VW Diesel Settlement Grants: AEA has worked closely with the EPA, the Trustee, 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 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 has advocated for the EPA to adjust mandatory and voluntary match requirement criteria for tribes using VW Settlement funds because EMA 10 must follow DERA rules. Current EPA rules exclude use of VW funds for mandatory match and increase the mandatory match requirement when VW funds are used as voluntary match – essentially eliminating incentive to use and benefit from the VW Tribal Trust under the EMA 10 DERA option. Upon request from several Alaska tribes, AEA attempted to assist Tribal VW beneficiaries complete EMA 10 projects to replace powerhouse gensets by allocating state DERA funds towards VW Tribal Trust projects. However, the EPA and the Trustee disallowed AEA to combine state DERA funds with VW Tribal Funds, which is not explicitly a restriction of the Trust agreements. AEA will continue to advocate for EPA rulemaking that benefits Alaska Tribes and rural communities.

Declining Funding and Staff Resources: Reduced funding and staff for alternative energy, energy efficiency, renewable energy, and energy technology projects will make it difficult to reduce reliance on fossil fuels.

Significant Changes in Results to be Delivered in FY2021

AEA is optimizing project management support by realigning internal functional groups and processes to improve project and program 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 seeking non-state funding, expanding collaborative partnerships to leverage the limited State dollars for maximum benefit to Alaska communities.

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
<p>Contact: Curtis W. Thayer, Executive Director Phone: (907) 771-3000 E-mail: cthayer@akenergyauthority.org</p>

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

	FY2019 Actuals	FY2020 Conference Committee	FY2020 Authorized	FY2020 Management Plan	FY2021 Governor	FY2020 Management Plan vs FY2021 Governor	
71000 Personal Services	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
72000 Travel	6.6	0.0	0.0	0.0	0.0	0.0	0.0%
73000 Services	1,745.3	2,000.0	2,000.0	2,000.0	2,200.0	200.0	10.0%
74000 Commodities	7.4	0.0	0.0	0.0	0.0	0.0	0.0%
75000 Capital Outlay	1.8	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	1,761.1	2,000.0	2,000.0	2,000.0	2,200.0	200.0	10.0%
Fund Sources:							
1061 CIP Rcpts (Other)	702.9	0.0	0.0	0.0	800.0	800.0	100.0%
1210 Renew Ener (DGF)	1,058.2	2,000.0	2,000.0	2,000.0	1,400.0	-600.0	-30.0%
Unrestricted General (UGF)	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Designated General (DGF)	1,058.2	2,000.0	2,000.0	2,000.0	1,400.0	-600.0	-30.0%
Other Funds	702.9	0.0	0.0	0.0	800.0	800.0	100.0%
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 FY2020 Conference Committee To FY2020 Authorized *****												
FY2020 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 FY2020 Management Plan To FY2021 Governor *****												
Reduce Authority No Longer Needed for Administering Renewable Energy Fund Grant Program												
	Dec	-600.0	0.0	0.0	-600.0	0.0	0.0	0.0	0.0	0	0	0
1210 Renew Ener		-600.0										
Reduce authority that is no longer needed for administering the Renewable Energy Fund grant program due to the completion of projects. The Renewable Energy Fund grant program provides benefits to Alaskans by reducing and stabilizing the cost of energy through development of renewable energy projects. The program is designed to produce cost-effective renewable energy for heat and power to benefit Alaskans statewide. The costs of managing the program has declined over the past several years from a high of \$2.1 million to an average of \$1.4 million over the past 4 years. More projects are in completion and grants are being closed as projects are operational.												
Transfer from AEA Rural Energy Assistance for Reimbursable Services Agreements												
	Trin	800.0	0.0	0.0	800.0	0.0	0.0	0.0	0.0	0	0	0
1061 CIP Rcpts		800.0										
Transfer capital improvement project (CIP) receipt authority from Alaska Energy Authority (AEA) Rural Energy Assistance to Statewide Project Development, Alternative Energy and Efficiency to align with anticipated reimbursable services agreements (RSAs) in support of capital projects. This alleviates the need for an unbudgeted RSA in Statewide Project Development, Alternative Energy and Efficiency. The remaining CIP receipt authority in AEA Rural Energy Assistance is sufficient to cover anticipated RSAs.												
AEA administers several capital programs such as the rural power systems upgrades and bulk fuel upgrades programs, as well as alternative energy programs for biomass, wind, hydro, energy efficiency and energy planning. The direct and indirect payroll costs are funded through the operating budget with CIP receipts.												
	Totals	2,200.0	0.0	0.0	2,200.0	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		FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
2000	Travel		6.6	0.0	0.0
Object Class	Servicing Agency	Explanation	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
2000 Travel Detail Totals			6.6	0.0	0.0
2000	In-State Employee Travel	In-State Transportation - Transportation costs for travel relating to administration, conventions and meetings, boards and commissions.	6.6	0.0	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		FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
3000	Services		1,745.3	2,000.0	2,200.0
Object Class	Servicing Agency	Explanation	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
3000 Services Detail Totals			1,745.3	2,000.0	2,200.0
3000	Education Services	Training, educational conferences, agency memberships, tuition, books and fees for work-related courses.	1.0	1.0	1.0
3001	Financial Services	Accounting, auditing, management consulting, grantee monitoring, loan servicing and insurance related services.	26.0	20.0	20.0
3002	Legal and Judicial Services	Legal and judicial services, including costs to conduct hearings and transcription fees.	0.6	0.0	0.0
3003	Information Technology	Information Technology - Training, consulting, equipment and software leases, licensing and maintenance.	0.2	1.0	1.0
3004	Telecommunications	Local, long distance, and cellular telephone charges, television, data/network, telecommunication equipment, and other wireless charges from outside vendors.	14.1	7.0	7.0
3006	Delivery Services	Freight, courier services, and postage.	0.5	1.0	1.0
3007	Advertising and Promotions	Advertising, promotions and legal notices.	3.6	2.0	2.0
3010	Equipment/Machinery	Machinery, furniture and equipment purchase, repairs, maintenance, rentals, and leases.	0.2	1.0	1.0
3011	Other Services	Other professional services.	35.3	20.0	20.0
3024	Inter-Agency Legal	Legal services.	9.4	5.0	5.0

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	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor	
3000 Services Detail Totals			1,745.3	2,000.0	2,200.0	
3038	Inter-Agency Management/Consulting	Commerce - Administrative Services (1028)	Core and allocated services, including Administrative Services and Commissioner's Office support.	69.7	55.0	55.0
3038	Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	Alaska Industrial Development and Export Authority support.	1,584.7	1,887.0	2,087.0

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		FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
4000	Commodities		7.4	0.0	0.0
Object Class	Servicing Agency	Explanation	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
4000 Commodities Detail Totals			7.4	0.0	0.0
4000	Business	Supplies for office, library, training, and instructional needs, including small equipment, tools and subscriptions.	6.4	0.0	0.0
4002	Household/Institutional	Cleaning, food, and other household supplies.	1.0	0.0	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		FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
5000	Capital Outlay		1.8	0.0	0.0
Object Class	Servicing Agency	Explanation	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
5000 Capital Outlay Detail Totals			1.8	0.0	0.0
5004	Equipment	Equipment and furniture.	1.8	0.0	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	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
5061 CIP Rcpts (1061 CIP Rcpts)			702.9	0.0	800.0
5351 Capital Improvement Project Inter-Agency		Capital Improvement Project Receipts.	702.9	0.0	800.0
6210 Renew Ener (1210 Renew Ener)			1,058.2	2,000.0	1,400.0
6881 Renewable Energy Grant Fund - Transfers In Other Funds		Renewable Energy grant funds.	1,058.2	2,000.0	1,400.0

Inter-Agency Services (1682)

Department of Commerce, Community, and Economic Development

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

	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
Component Totals	1,654.4	1,942.0	2,142.0
With Department of Commerce, Community, and Economic Development	1,654.4	1,942.0	2,142.0

Object Class	Servicing Agency	Explanation	FY2019 Actuals	FY2020 Management Plan	FY2021 Governor
3038 Inter-Agency Management/Consulting	Commerce - Administrative Services (1028)	Core and allocated services, including Administrative Services and Commissioner's Office support.	69.7	55.0	55.0
3038 Inter-Agency Management/Consulting	Commerce - AIDEA (1234)	Alaska Industrial Development and Export Authority support.	1,584.7	1,887.0	2,087.0