

ANTHC Rural Energy Initiative

Our Path: A Comprehensive and Collaborative Approach











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Energy Audit

Analysis

Implement Recommendations

Savings

Onsite Assessment

Collect Data

Evaluate Operating Practices

Assess Facility Energy
Use

Develop Energy Model

Identify Potential Improvements

Identify Cost to Implement **Develop Training Plan**

Purchase Materials

Implement Efficiency Retrofits

Provide Operator Training

Construct Renewable Energy Systems **Monitor Energy Usage**

Evaluate Retrofit
Effectiveness



Improved Energy and Operational Efficiency

Through energy efficiency projects in partnership with ANTHC's Rural Energy Initiative, ARUC continues to see a decline in energy expenses, such as fuel and electricity. Energy costs are the second highest expense for water and wastewater facilities. Energy projects include heat recovery, wind-to-heat, and biomass systems. These projects utilize local energy sources to offset fuel and electricity consumption.

Cost of Purchased Heating Fuel by Year

FY 2014

FY 2015

FY 2016

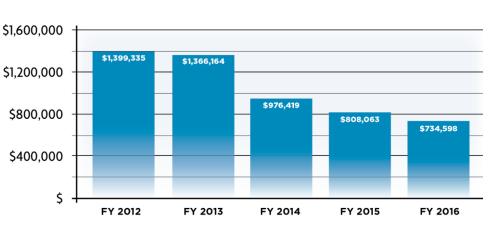
\$1,000,000 \$800,000 \$600,000 \$400,000 \$200,000 \$307,580 \$313,518

FY 2013

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FY 2012

ARUC Energy Costs by Year





ARUC Energy Efficiency Projects

Chevak

- Utilize dispatchable wind electricity to provide heat to the sanitation system
- Wind-to-heat savings of \$50,000 annually

Noorvik

- Utilize excess heat from diesel power plant to heat the community sanitation system
- Heat recovery savings of \$45,000 annually

Quinhagak

Heat recovery savings of \$64,000 annually





Questions?

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