Reducing the Cost of Energy

- Energy Planning and Policy
- Technical and Community Assistance
- Investing in Alaska’s Energy Infrastructure
- Diversifying Alaska’s Energy Portfolio
Energy Costs Vary

Alaska Electricity Prices by Community

Heating Costs

Dollars per Gallon of Heating Fuel

Dollars per Mcf of Natural Gas

- Anchorage
- Fairbanks
- Rest of Alaska
Efficiency and Conservation

Efficiency in Southeast Overview

- State Goal: improve efficiency 15% by 2020
- AEA’s focus is on commercial buildings, rural public buildings, industrial facilities and electrical efficiency
- Statewide outreach and education
- Support for multi-stakeholder group, Alaska Energy Efficiency Partnership [AKEnergyEfficiency.org](http://AKEnergyEfficiency.org)
- Coordination between State agencies
- Alaska Commercial Energy Audit Program
- Village Energy Efficiency Program
Recent Activity in Southeast

- 13 Communities ARRA funded, $759,800
- EECBG Allocations based on population
  - Coffman Cove
  - Craig
  - Gustavus
  - Hoonah
  - Hydaburg
  - Klawock
  - Pelican
  - Petersburg
  - Saxman
  - Skagway
  - Tenakee Springs
  - Thorne Bay
  - Wrangell

- Commercial Energy Audits 2010-2011
  - Angoon
  - Gustavus
  - Haines
  - Hoonah
  - Hydaburg
  - Juneau
  - Kake
  - Petersburg
  - Sitka
  - Wrangell
  - Yakutat
Efficiency and Conservation

Efficiency Impacts

- VEEP & EECBG
- 109 Communities
- >300 buildings touched
- Average building energy savings found: ~33%
- Will save 2.8M diesel equivalent gallons in 10 years
- Average efficiency measure has immediate return of $0.33 for every dollar invested
- Local job creation
- Greater efficiency awareness in communities

Emmonak City Hall boiler before and after efficiency improvements
Biomass Energy

Alaska Wood Energy Development Task Group

- Coalition of 18 organizations
- Exploring opportunities to increase utilization of wood for heating projects
- Annually seeks statements of interest for feasibility
- SE communities completed pre-feasibility studies:
  - Craig
  - Thorne Bay
  - Klawock
  - Coffman Cove
  - Hoonah
  - Sitka
  - Haines
  - Kake
  - Ketchikan
  - Klukwan

- Operational Systems:
  - Craig
  - Thorne Bay
  - Coffman Cove
  - Haines
  - Ketchikan
Biomass Energy

2013 Pre-Feasibility Studies

- Craig
- Kake
- Hollis
- Thorne Bay
- Whale Pass
- Hoonah
Biomass Energy

Thorne Bay School

• Prototype cordwood system designed specifically for rural Alaska with funding through Renewable Energy Fund
• Boiler and equipment mounted in a container
• Minimizes construction and cost

Southeast Alaska Wood-To-Energy Work Group

• Sponsored by U.S. Forest Service
• Roadmap to achieve biomass
Renewable Energy Fund in Southeast

- Round 6 Recommendations provided to Legislature
- 11 total SE projects recommended
- In top $25M tier, SE projects total $13.7M, 54% of total!
  - Indian River (Construction)
  - Gartina Falls (Construction)
  - Blue Lake Expansion (Construction)
- Next tier: 3 more projects
  - Wood Heat Feasibility Study and Conceptual Design for Kake (Feasibility)
  - Hydaburg Schools Wood Fired Boiler Project (Design)
  - Haines Borough Pellet Heating Project (Design & Construction)
- All 5 years: Southeast has received largest portion of funding
  - $38.5M, 20% of total allocations.
- Round 7 expected to start in July. Start planning!