Emerging Energy Technology Forum

Programs & Opportunities for Alaska
Sealaska Plaza Wood Pellet Boiler

Recipient: Sealaska Corporation
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A subsidiary of Sealaska
Project Summary

- Lead Organization: Sealaska Corporation
- Location: Downtown Juneau, AK
- Technology: Viessmann Pyrot Wood Pellet Boiler
- Project Goals:
  - Eliminate 35,000 gal heating oil annually
  - Prove wood pellet boiler technology in Alaska
  - Grow the industry
Technology Overview

- **Description:** Viessmann Brand Pyrot Model 220 kW industrial wood pellet boiler
- **Current Application(s):** Hospitals, Schools, Commercial facilities, Government, etc
Opportunities for use in Alaska: Space heating for all of Alaska’s buildings*

Challenges: Create Infrastructure

Potential Benefits: 20% savings minimum on a Btu basis, renewable, carbon neutral, energy independence, dovetails with existing heating industry

* There are other wood pellet boiler lines that together cover all buildings
Tasks & Timeline

- Viking Lumber/Sealaska MOU
- Fall 2009 EETG Grant
- Dec 4, 2009 Official News Release
- May 2010 Bulk Delivery Truck Arrives
- October 8, 2010 Boiler Set in Place
- November 19, 2010 Boiler Startup
Project Before
Project After
Sealaska Plaza’s Wood Pellet Boiler:
Annual consumption: 280 tons of pellets per year
Wood pellets and ash are moved automatically by screw augers.
No visible emissions from the Sealaska Plaza
Sealaska Plaza: Proven

- 2,000 plus hours of successful operation.
- Since boiler startup November 19, 2010 our boiler has consumed over 72 tons of wood pellets which is equivalent to 7,920 gallons of heating oil.
- At current prices of heating oil, the Sealaska wood pellet boiler has saved the corporation $5,486 in heating costs in 2 ½ months.
Wood pellets arrive by barge in shipping containers
Trans-loading wood pellets
Auger truck delivering wood pellets
The Future

- Pellet Silo Tank Farm
- Improved handling
Can it work for you?

- In Southeast Alaska, 1 ton pellets = $2.52 gal oil
- Where does your energy come from?
- How much do you currently spend to heat your building(s)?
  - What do you burn?
  - Price per million Btu?
End
Contact

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