

AHFC and Public Facilities Energy Use

House Bill NO. 343 March 13, 2014

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AHFC, Energy & Public Facilities

Alaska Senate Bill 220 in 2010



Established \$250 million revolving loan fund for energy efficiency improvements on public facilities

AHFC utilized ARRA funds to begin to assess public facility energy use



ARIS

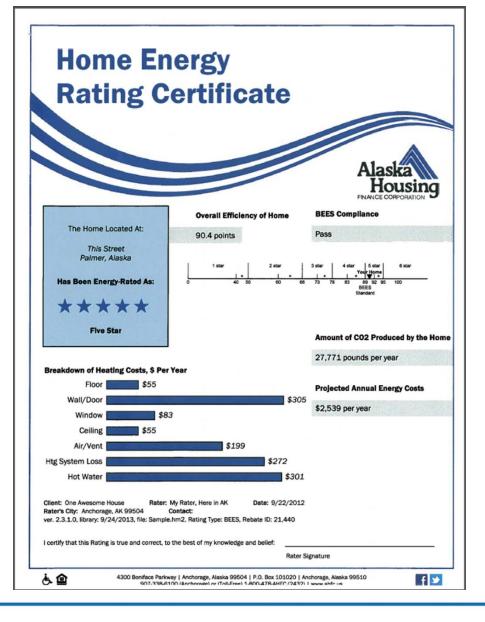
Alaska Retrofit Information System

- AHFC's ARIS database has become the clearinghouse for information on Alaska buildings
- More than 75,000 unique records
- Information from the database is used for policy decisions, research, program measurement, studies and reports, and much more





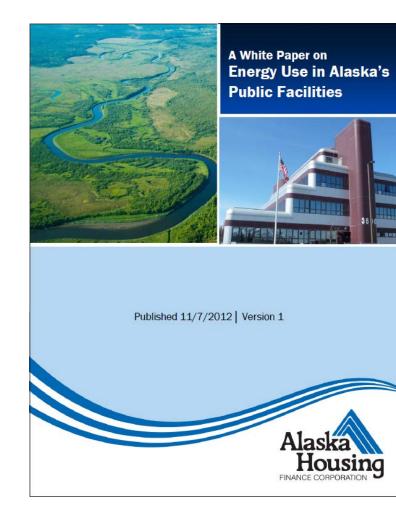
HERS Home Energy Rating System



BEES Building Energy Efficiency Standard



Assessment Process



Benchmarking more than 1,200 buildings

Identify highest energy use buildings

Perform Investment Grade Audits of 327 identified buildings

Data gathered and analyzed

Report of findings



Energy Audit Results



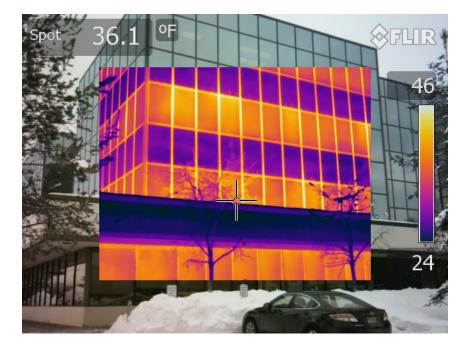
Audits provide basic knowledge not previously known

Significant savings potential, \$14.7m for 327 buildings

Age of building had little correlation to energy use – new doesn't mean efficient



AHFC Energy Improvements



Purchased headquarters in 2011 following 14 year lease

Immediately starting implementing efficiency measures including HVAC, lighting, and roof insulation

Continue to monitor the buildings performance to ensure energy savings are achieved



Overall Energy Audit Recommendations

Appropriately size new buildings

Establish a level of accountability

Meter and track energy use data

Consolidate facility use where possible





Recommendations for Building Design



Consider life-cycle cost of building components and equipment, especially in areas with high energy costs (Codes are just a minimum)

Designers should consider building use, system sizes, controlled ventilation, and lighting to maximize efficiency

Reduce excessive glass and maximize daylight harvesting



Questions



AHFC Stock Photo