

Alaska Housing Finance Corporation Programs

Funding Resources

Energy Efficiency Revolving Loan Fund (AEERLP) for Public Facilities

The Alaska Energy Efficiency Revolving Loan Program provides financing for permanent energy-efficient improvements to buildings owned by regional educational attendance areas, the University of Alaska, the state or municipalities in the state. Borrowers obtain an Investment Grade Audit as the basis for making cost-effective energy improvements, selecting from the list of energy efficiency measures identified. All of the improvements must be completed within 365 days of loan closing. Energy savings from energy efficiency improvements are used to repay the loan.

Educational Resources

Energy Efficiency Education

AHFC has developed tools and education to help non-residential building owners understand the financial implications of energy efficiency retrofits. These include a cash-flow calculator, a chapter in a manual on energy efficient retrofits, and several classes on the economics of energy efficiency.

The Economics of Energy Efficiency – Financial Costs and Benefits – Level 300 Course Description/Abstract

The Economics of Energy Efficiency – Financial Costs and Benefits, Level 300, introduces the participant to the economics of energy efficiency that addresses the question of why we wish to reduce energy, and introduces financial incentives, and the various methods of comparative analysis of energy upgrades and improvements to buildings. Case studies are introduced in each section to exemplify the economic impacts of performing energy upgrades, and the use of economic evaluation tools.

This module presents background information, including overviews of U.S. and Alaska Energy use in buildings, and the challenges of reducing energy use, due to climate, reduced winter daylight, and the impacts of climate change. The participant is also introduced to State of Alaska energy policies, and incentive programs.

The benefits and barriers to initiating energy savings upgrades and improvements are described, including on one hand, improved property value, decreasing energy and O & M costs, and improving occupancy comfort, and on the other hand, the impact of upfront investment, differentiation of capital vs. operating budgets, and barriers imposed by business owners occupying leased space.

Financial analyses, including the Time Value of Money, Cost of Delay, Life Cycle Cost Analysis (LCCA), Prioritizing Investment Options, and Project Considerations, are developed, detailed, and exemplified by case studies.

Cash Flow Calculator

The Cash Flow Calculator allows the user to develop a preliminary analysis of the cost effectiveness of an energy efficiency retrofit by comparing cash flows of various funding scenarios. The cost of inaction is illustrated to help building owners identify the impact to their budget if a project is delayed.

Four scenarios are provided:

1. Appropriation awarded on year five,
2. Loan taken immediately,

3. Loan taken after a five year delay, and
4. No action.

The cash flows are based on user inputs, noted by light blue cells on the Inputs worksheet, and a series of assumptions. Where significant to the user, the assumptions are either incorporated as a note visible when the user hovers over the cell or as a note in a separate cell. The tool is intended as a starting point in the analysis of various funding options.

The Calculator is to be used by project developers, facility managers, and others who will assist facility owners decide whether to pursue an energy retrofit project or not, and define what funding source will be cost effective.

The Calculator is intended to also be used after the facility or facilities receive an energy audit, so the user can refer to the audit for the annual energy expenditure, and credible estimates for project cost and annual energy savings.

<https://www.ahfc.us/efficiency/non-residential-buildings/cash-flow-calculator/>

Strategic Energy Management Practices

The guide introduces public facility owners and managers to tools and resources that can be used to complete successful energy efficiency retrofit projects. The processes of procuring and implementing energy efficiency retrofit projects are complex; however, when properly structured they can drive down costs and reduce inefficiencies for public entities. This guide will assist public facility owners and managers through the multidisciplinary nature of each step of the process, from energy auditing to public contracting to project financing.

An entire chapter in this manual is dedicated to financing EE projects.

<https://www.ahfc.us/efficiency/non-residential-buildings/reports-publications-resources/#practices>

Other Resources

Building Monitoring Program

While not strictly financing based, the AHFC Building Monitoring program offers building owners an insight into real time performance of their buildings, and can help analyze energy use of particular systems, troubleshoot, problems, offer dramatic cost savings for properly designed system replacement and more.

The AHFC [Building Monitoring System](#) is a free open source building monitoring system that measure real-time energy use and provides a complete summary of operating performance. The system is able to track building occupancy, temperature, electricity, and fuel use as well as access data from multiple sources, including established weather stations, building automation systems, databases, and other points.