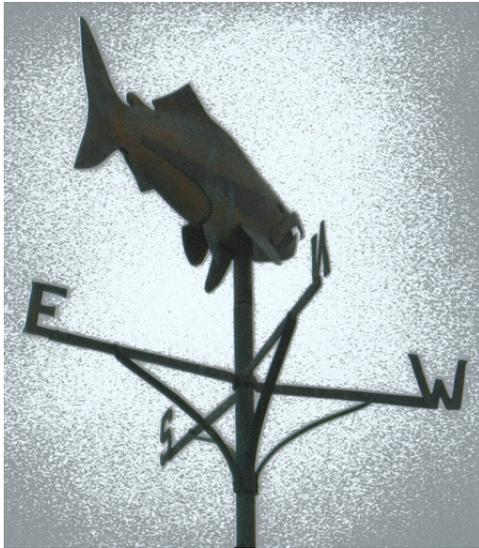


ENERGY AUDITS AND WEATHERIZATION



ENERGY CONSERVATION AND EFFICIENCY IN SITKA

In this brochure:

What is an energy audit?

What are the benefits of doing an energy audit?

Five simple ways to reduce energy consumption and improve the energy efficiency of your home

How to finance weatherization

Other resources:

USDA Rural Development, Keith Perkins,
<http://www.rurdev.usda.gov/rhs>

Alaska Housing Finance Corporation, <http://www.ahfc.state.ak.us>

Alaska Community Development Corporation, <http://www.alaskacdc.org/WxInformation.htm>

Certified Energy Auditor: One Island Energy, Chris Duguay, (907)747-4507, webfoot@alaska.net

http://www.energystar.gov/index.cfm?c=products.pr_tax_credits

Home Energy Calculator, <http://www.cooscurryelectric.com/>

Home Energy Saver, <http://hes.lbl.gov/>

Rocky Mountain Institute, <http://www.rmi.org/sitepages/pid119.php>



FOR MORE
INFORMATION,
CONTACT THE CITY AND BOROUGH
OF SITKA ELECTRIC
DEPARTMENT
OR
THE SITKA
CONSERVATION
SOCIETY

[HTTP://WWW.CITYOFSITKA.COM](http://www.cityofsitka.com)

[HTTP://WWW.SITKAWILD.ORG](http://www.sitkawild.org)

ENERGY AUDITS AND WEATHERIZATION

WHAT IS AN ENERGY AUDIT?

Energy audits identify areas in homes where energy losses are occurring. They aim to increase the comfort of the home, reduce energy consumption, and identify potential health and safety concerns.

An audit will look at movements of heat, air, and moisture through buildings.

Energy audits cost between \$300-400. Over time, these costs will be recovered in energy savings. The home improvement recommendations made by an energy audit are based on a comparison of dollars spent on improvements to dollars saved on energy and are cost effective if they will be paid back in 10 years or less. Recommendations with shorter payback times or with health and safety implications will be prioritized. You can also do a rough home energy audit yourself by closing windows and exterior doors, turning on ventilation fans, and feeling where there is cool air coming in from the exterior of the house.

An Energy Star Qualified Home must be 15% more energy efficient than what is required by the 2004 International Residential Code.

WHAT ARE THE BENEFITS OF DOING AN ENERGY AUDIT?

- 67% of respondents to the 2007 Sitka Residential Energy Survey indicated they were interested in improving the energy efficiency of their home. Energy audits identify areas to improve.
- You can target the areas in your home that are contributing to energy losses.
- You can save money on electricity and heating bills by following the recommendations of the auditor.
- By improving the energy efficiency of your home, you will also increase the comfort of your home.
- You can also identify and correct health and safety hazards found by the audit such as backdrafts.
- If your home is certified by Energy Star or you invest in certain replacement appliances, you may be eligible for federal tax credits for energy efficiency improvements.

HOW TO FINANCE WEATHERIZATION

USDA Rural Development and the Alaska Housing Finance Corporation have low-interest loans available to low-income families and senior citizens. Their 504 loan and grant program prioritizes health and safety concerns, but some money may also be used for energy efficiency improvements.

The USDA Renewable Energy and Energy Efficiency Program has grants and loans that can finance up to 50% of project costs for energy efficiency and are available to businesses.

Check the Federal Register Notices for USDA Rural Business - Cooperative Services funding opportunities. The grants and loans for renewable energy and energy efficiency improvements are published here.

Through the Alaska Community Development Corporation, AHFC administers weatherization programs that can provide home weatherization for free to low-income homes.

FIVE SIMPLE WAYS TO REDUCE ENERGY CONSUMPTION AND IMPROVE THE ENERGY EFFICIENCY OF YOUR HOME

1. Maintain weatherstripping around doors and windows. The bottoms of outside doors should be weatherstripped, as well as around windows and doors so that a seal is formed. Caulk around ducts, cracks, and openings that allow cold air into the home.
2. Do not leave doors and windows open while the heat is on. This will just cause your heating unit to burn more fuel or use more electricity.
3. Ensure that your insulation is sufficient for the climate of this region. Exterior walls must be at least R-21, ceilings must be at least R-38, and the floor must be at least R-30. When insulating, start from the top of your house and move down.
4. Make sure your windows have curtains and close the curtains at night to keep heat in and cold out. Windows located on the north side of your home contribute to heat losses so they should be covered with insulating window treatments (like curtains made from quilted fabrics). Windows, doors, and skylights affect heat loss in a home more than any other elements.
5. Make sure filters on appliances and heating units are clean.