



COLD CLIMATE HOUSING RESEARCH CENTER
CCHRC

Promoting and advancing the development of healthy, durable and sustainable shelter for Alaskans and other circumpolar people through applied research.

CCHRC REPORT

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First Quarter Project Update

NEW PROJECT: Sustainable Northern Shelter

by Aaron Cooke



Community Design Charette

The Sustainable Northern Shelter project (SNS) is a collaborative project with Anaktuvuk Pass, a small Nunamiut Inupiat community in the Brooks Range. The essence of SNS is to work with communities to develop sustainable, affordable housing designs, which reduce the cost of energy and other costs associated with the built environment.

In May the design team will meet in Anaktuvuk Pass to establish a process wherein community leaders, elders, designers, and builders can create a housing prototype specifically suited to the community. The housing prototype will be designed with an emphasis on energy-efficiency and cultural appropriateness and will have a targeted construction cost of \$100,000.

Like many rural Alaskan communities, Anaktuvuk Pass must deal with incredibly expensive heating loads, housing shortages, high transport and construction costs, and designs that are incompatible with traditional daily activities. The SNS project emphasizes the use of local resources wherever possible to bring construction costs down and make a more appropriate home, including locally available building materials, local input into community needs, and training of a local workforce.

The prototype will be constructed at a test site in September and monitored for heating efficiency, humidity, air quality, and foundation stability over the course of one year. Once the data has been collected and analyzed, any necessary changes will be implemented prior to the construction of additional units. With the use of local labor and sound environmental strategies, a practical and energy-efficient home can be produced.



Svalbard Housing



Semi-Subterranean Home
Wales, Great Britain

Energy Policy Highlights from the 2008 Legislative Session

Ryan Colgan

High energy prices have brought into sharp focus the need for durable energy policies that produce lasting positive effects. During the 2008 legislative session three new major energy policies were implemented that meaningfully address statewide energy issues.

First, the legislature appropriated \$300 million to the Alaska Housing Finance Corporation (AHFC) to spur the improvement of energy efficiency in the residential built environment. Of the \$300 million, \$200 million is appropriated to the home energy conservation and weatherization program and \$100 million is appropriated to the energy efficient home grant program. The two programs are geared toward incentivizing energy efficiency retrofits in all locations across all income levels in Alaska. The new appropriations will allow people of multiple income levels to utilize these programs. CCHRC will continue to provide updates as plans advance, to help inform the public as to how to access the programs, and as to any role we will play in the effort. More information can be found at:

http://www.ahfc.state.ak.us/energy/weatherization_rebates.cfm

Second, the legislature appropriated \$50 million to a renewable energy fund to be administered by the AEA for the purpose of catalyzing the development of renewable energy projects. The legislature intends to appropriate an additional \$200 million over the next four fiscal years. Eligible applicants include electric utilities, independent power producers, local governments, or other governmental utilities, including a tribal council and housing authority.

Third, Steve Haagenson was hired as the Executive Director of the Alaska Energy Authority (AEA) and given the task of developing an energy plan for Alaska. Mr. Haagenson joins the AEA after serving as President/CEO of the Golden Valley Electric Association (GVEA) and Chair of the Interior Issues Council Cost of Energy Committee where he was integral to the energy planning effort in Fairbanks. Mr. Haagenson's experience includes familiarity with renewable energy systems and energy efficiency issues.

Outreach Update

Danielle Jamieson

New Efforts



New Website Graphics

We are in the process of making the lessons learned from our research easily accessible as part of a focused outreach effort, including a website revision, enhanced data collection, and video production. Some our current projects are aimed at collecting information on the performance, cost, and payback of different building techniques and mechanical systems and providing that information to interested parties. Our goal is to connect Alaskans with our research in ways that maximize the benefits of the work done here.

Web Site Revisions & Data Collection

We are in the process of reconfiguring our website to display more information in an easy to navigate from. The website will contain an online tour of our building highlighting its energy efficient and sustainable technologies. Full information about our current activities, data collections, and all of our publications will also be available electronically.

Collecting and sharing data is a very important part of our work. The data being collected from projects is available on our website, but also being posted on subject specific websites like www.sunnyportal.com which displays all of our solar photovoltaic data and has descriptions of the systems. It is our goal to utilize the internet to offer easy access to information about our projects.



SunnyPortal website



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Membership: Please make sure your membership is updated. Membership level information and an application is available on our website at: <http://www.cchrc.org/membership.html>.

ENERGY FOCUS—a Fairbanks Daily News Miner Column with articles contributed by CCHRC.



Energy conservation features provided by CCHRC are run every other Thursday in the local section of the paper. Articles are focused on energy issues. The articles produced by CCHRC are also featured on our website and include:

The HRV Myth 4.16.08

Knowledge Is Power. Turn it On 4.03.08

Lighten Your Electric Bill: Install New Lights 3.13.08

For Full Articles Visit:
<http://www.cchrc.org/EnergyFocus/index.html>

The Industry Advisory Council (IAC) is comprised of CCHRC corporate members and will offer advise on industry research needs. The RAC is appointed by the Board of Directors to advise CCHRC on research. Contact a RAC committee member in your area with your input and concerns.

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The CCHRC Report is sent to members, funding agencies and to those requesting information about CCHRC. Response to this report is welcome.