

**Notes from
Central Region CERT Meeting
Wednesday, January 6th, 2010
9:00 am to Noon
Hunt Utilities Group (HUG) Research Campus
2331 Dancing Wind Rd SW, Pine River, MN 56474**

Contents:

- I. Weatherization
- II. Residential Energy Efficiency
- III. GreenStep Cities (state level)
- IV. Pine River GreenStep
- V. Links

I. Weatherization

Did you know? Just as you ‘tune up’ your car, you can ‘tune up’ your home!

Weatherization is tuning up a home to seal attic bypasses, add insulation, seal other air leaks, and upgrade the heating system. Often the term is thought to refer to low-income weatherization, but any home that is not efficient should be weatherized, regardless of its inhabitants’ income.

There are entities that help weatherize *low-income* homes. These are typically the Community Action Agencies – such as BiCAP and TriCAP. These groups recently received additional funding from American Recovery and Reinvestment Act (ARRA) (a.k.a. the federal stimulus package) to weatherize more homes.

BiCAP: <http://www.bicap.org/>

TriCAP: <http://www.tricap.org/>

To qualify for this funding, one must also be eligible for Low Income Home Energy Assistance Program (LIHEAP).

LIHEAP in Minnesota: <http://www.liheap.ncat.org/profiles/Minn.htm>

Weatherization needs to be framed as a *broader community issue*.

For our communities, weatherization is:

- a way to create jobs (newly trained auditors and contractors to do work)
- a pathway out of poverty (lowering energy costs reduces the risk of foreclosure on homes since low-income households spend a large portion of their income on energy costs)
- a way to keep energy dollars in our community
- decrease dependence on foreign oil
- a way to make our communities more sustainable
- a way to make a healthier environment by using fewer fossil fuels.

II. Broader Home Energy Efficiency

Workshops promoting home energy efficiency could engage and build community. We need to identify incentives and programs for “market rate” improvements.

RESOURCES:

- **DSIRE** is a source for **utility incentives** and **tax incentives** (DSIRE= Database of State Incentives for Renewables & Efficiency)

Click on the link below for a list of Residential Energy Efficiency Rebate Programs in Minnesota from DSIRE’s website:

<http://www.dsireusa.org/incentives/homeowner.cfm?state=MN&re=0&ee=1>

Incentives/Policies for Renewables & Efficiency:

<http://www.dsireusa.org/incentives/index.cfm?re=1&ee=1&spv=0&st=0&srp=1&state=MN>

- **Minnesota Housing Finance Agency (MHFA)**

Click on the link below for information on Energy Save Rebates and low-interest home improvement loans for Minnesota home owners:

<http://www.mnhousing.gov/consumers/home-owners/HomeImprovementLoans/index.aspx>

- **CERTs**

Click on the link below to learn about **CERTs’** action campaigns.

<http://www.cleanenergyresourceteams.org/community-projects/campaigns>

III. Update on GreenSteps Cities at the State Level—Philipp Muessig, Sustainable Communities Coordinator, Minnesota Pollution Control Agency (MPCA)

GreenStep Cities is an action-oriented voluntary program offering a cost-effective, simple pathway to implementation of sustainable development best practices that focus on greenhouse gas reduction. Technical assistance will be available from state agencies, utilities, nonprofit organizations, and others. Cities will be recognized for past steps taken and new action.

GreenStep Cities is currently working with a handful of cities to test and get feedback on GreenStep best practices. GreenStep Cities will officially launch in June 2010. The program will evolve based on the feedback of cities large and small across Minnesota, but the purpose and intent will remain the same.

Right now the program targets the city as the body for a resolution, but we hope to learn from the experiences of smaller communities such as Pine River. In the future, we can also look at townships and counties.

Background on GreenStep Cities

GreenStep Cities started out of the Department of Employment and Economic Development (DEED)’s Minnesota Star Cities program. Minnesota Star Cities was an economic development program. It’s no longer going on. But it worked—it got cities competing, and thinking about keeping dollars local. It included only 200 cities.

GreenStep Cities follows the same model as the former Minnesota Star Cities, but **GreenSteps' focus is on sustainability and self-reliance.**

Specifics of GreenStep Cities

GreenStep Cities will:

- Provide a “Pathway to Sustainability” that is cost-effective, pragmatic, and achievable for all cities
- Achieve meaningful reductions in greenhouse gases and other positive environmental outcomes
- Provide assistance and peer learning for local governments to achieve best practices in energy use reduction and sustainable development
- Identify specific existing state agency staff and others who are committed to and technically able to help cities implement each specific best practice
- Promote innovation
- Inspire and assist residents, businesses, and community institutions to take action
- Recognize local governments for their past accomplishments and their new efforts spurred by the program.

GreenStep Cities recommends **best practices** for:

1. **Buildings & Facilities:** focuses on energy- and cost-saving strategies addressing city buildings, public housing, other city facilities such as drinking water plants, street and building lighting.
2. **Land Use Planning:** urges best practices to reduce vehicle miles traveled, promote green infrastructure and carbon sequestration, and promote sustainable construction
3. **Transportation:** encourages city vehicle fleet transformation and incorporation of street improvements that reduce transportation-related greenhouse gas emissions.
4. **Environmental Management:** tackles actions ranging from environmentally preferable purchasing and urban forests to water quality and solid waste.
5. **Economic & Community Development:** targets best practices that engage local community members with their City to improve local quality of life.

For details on GreenSteps program, including requirements and programmatic standards, visit: <http://www.mngreensteps.org>

GreenSteps is about **DOing** things. It's about **action** and **implementing** best practices, and less about contemplative thinking. The question is: have you done it? Or haven't you?

The idea behind GreenSteps was to put all the pieces together, **holistically**. Currently, some towns have numerous plans, but none of the plans have been implemented and the goals aren't in one place. We want action, not more plans.

The objective of Green Steps is to recognize progress, not to rank or certify.

The objective is to have cities working with citizens, institutions, Community Action Program (CAPs), and others to implement positive changes.

Right now the program targets the city as the body for a resolution, but we hope to learn from the experiences of smaller communities such as Pine River. In the future, we can also look at townships and counties.

IV. Pine River Green Step meeting

Citizens in Pine River have been working closely with the Initiative Foundation's Healthy Communities Partnership Program and the Minnesota Pollution Control Agency to pilot Green Step. The Initiative Foundation was funded by the McKnight Foundation.

The Initiative Foundation's Healthy Community Programs have been a real resource on the local level. Working with a team that already has experience has been very helpful.

Pine River community members are establishing task forces along each of the five best practices, to establish a timeline for implementation. The task forces also plan to establish ways to measure who is involved, what is involved, and who is leading.

The GreenStep website will list resources in Minnesota, including members of other communities whom you may contact to help you on specific projects.

V. Central CERT meeting and HUG Research Campus Tour

We took a walking tour of the Hunt Utilities Group (HUG) Research Campus, including a visit to our friends at the Rural Renewable Energy Alliance (RREAL). To learn more, check out the links below!

Hunt Utilities Group (HUG) Mission:

Hunt Utilities Group (HUG) pursues research, development and application of technologies and methods that support sustainable living and environmental stewardship. We foster entrepreneurship and community as we pursue the above goals.

HUG's goal is to build **affordable housing** that can:

- Heat and cool itself *without* fossil fuels
- Process its own water and waste
- Help feed the occupants

The HUG campus is using a variety of old and new technologies in our current research and development projects, which include: compact solar panels, heat storage, air handling, HUGNet, water reclamation, greenhouses, and composting toilet systems.

The meeting took place in the “**Old Main**” building—the first attempt at a sustainable building that now serves as an office, complete with a kitchen. Constructed out of straw bales and cob (an earthen plaster made of sand, clay and straw), “Old Main” combines some of the oldest natural building techniques with current technology. Building design, orientation, super insulation and allow maximum use of passive solar to help maintain comfortable temperatures year round.

Our tour continued to HUG's **2008 Research Building, ARC '08**. ARCs emphasize healthy foods, local economies and knowing your neighbors.

ARC Systems:

- **Feed Occupants-** greenhouses; permaculture gardens
- **Zero Effluent-** water redemption; composting toilet
- **Heating and Cooling Systems (without fossil fuels):** passive solar and solar hot water panel; heat storage; air handling; HUGnet sensors (gather knowledge)

We then continued to the **HUG Manifesting Shop**-- a workshop (and the second sustainable building) where Hunt Utilities Group Research & Design engineers turn concepts into functional realities. The "Manifesting Building" features 76 solar panels which provide the building's heat through winter; a greenhouse, which serves a key role in the heating, cooling and water reclamation of the building as well as providing fresh produce year round; a living roof and a heat storage system that incorporates 10 miles of 4-inch corrugated pipe.

Our tour concluded with a visit to **Rural Renewable Energy Alliance (RREAL)**. RREAL is striving to address rural poverty with solar heat, foster energy security, reduce greenhouse gas emissions and break down the financial and informational barriers to the widespread use of solar energy. RREAL was excited to announce its launch of the Solar Powered Furnace—a line of solar thermal panels now available to the public and RREAL's Solar Assistance clients.

For more information and photos, click on the links below!

Hunt Utilities Group (HUG) Research Campus

Site: <http://www.hugllc.com/>

Photos: <http://ow.ly/1emC9>

HUG "Old Main" building:

<http://www.hugllc.com/index.php/research-campus-mainmenu-8/research-buildings/2563-old-main.html>

Photos: <http://ow.ly/1emC9>

2008 Research Building, ARC '08

Blog : <http://hugcampus.blogspot.com/>

Site: <http://www.hugllc.com/index.php/research-campus-mainmenu-8/research-buildings/2555-arc-08.html>

Photos: <http://ow.ly/1emC9>

HUG Manifesting Shop:

Blog: <http://manishop.blogspot.com/>

Site: <http://www.hugllc.com/index.php/research-campus-mainmenu-8/research-buildings/2559-manifesting-building-2006.html>

Photos: <http://ow.ly/1emC9>

Rural Renewable Energy Alliance (RREAL)

<http://www.rreal.org/>

Photos: <http://ow.ly/1emC9>

To learn more about **GreenSteps**, visit:

<http://www.mngreensteps.org>

(This site will be current by mid-March.)

To learn more about the **Pine River Green Step Program**, please visit:

<http://www.pinerivergreensteps.org/>

To learn more about the **Minnesota Green Step Cities**, please visit:

<http://www.cleanenergyresourceteams.org/greensteps>

To learn more about **Central Initiative Foundation's Healthy Communities Partnership Program**, please visit: http://www.ifound.org/community_health.php