

**Summary of Northeast CERT Meeting**  
**Residential Energy Efficiency Programs in Duluth and**  
**Clean Energy Projects Undertaken by St. Louis County**  
**Thursday, February 4<sup>th</sup>, 2010, 1:00-3:00pm**  
**Duluth Public Library (Green Room) - 520 W. Superior St. Duluth, MN 55802**

- I. Residential Energy Efficiency Programs
  - A. Duluth Energy Efficiency Program (DEEP)
  - B. Green Duluth (summer youth canvas project)
- II. Clean Energy Projects by St. Louis County
- III. Funding opportunities
- IV. Attendees

**I. RESIDENTIAL ENERGY EFFICIENCY PROGRAMS**

**Duluth Energy Efficiency Program (DEEP) & Green Duluth (summer youth canvas project)**

**Panel of speakers:**

Jodi Slick – Common Ground Construction, LLC, Executive Director  
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Eric Schlacks – Comfort Systems, Gas and Energy Coordinator  
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Angie Miller – Community Action Duluth, Executive Director  
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The best way to get a snapshot of these projects is to review their Power Point presentations.

For **Duluth Energy Efficiency Program (DEEP)**'s presentation, visit:

<http://www.cleanenergyresourceteams.org/regions/northeast>

For **Green Duluth (summer youth canvas project)**'s presentation, visit:

<http://www.cleanenergyresourceteams.org/regions/northeast>

**A. DULUTH ENERGY EFFICIENCY PROGRAM (DEEP)**

**Program Description**

Duluth Energy Efficiency Program (DEEP) weatherizes homes to Green Community standards, well beyond Energy Star guidelines, for families living in Duluth who face challenges meeting their energy and heating costs. DEEP was formed through an innovative partnership including city government, gas and power utilities, construction associations, trade schools, and non-profit organizations.

## **Origin**

DEEP was created to meet the following economic and environmental objectives.

Economic:

- Create local green jobs
- Reduce energy affordability gap
- Retain energy dollars in community
- Maximize impact of investment over time

Environmental:

- Reduce community energy use
- Reduce carbon footprint
- Engage residents to take action

The Duluth Energy Efficiency Program (DEEP) originated in 2008 when ideas began to percolate as the presidential race and stimulus discussions progressed. Contemplating the question “If you had \$5billion, how would you spend it?” catalyzed discussions about what sorts of approaches might work best. Simultaneously, many families living in older homes in Duluth were on such tight budgets that they were faced with the decision to “heat *or* eat”, underlying the high cost of energy and heating for families that live just above the poverty line and may not qualify for programs designed for low-income.

## **Background**

In January 2009, a team was developed and started a working group called Duluth Energy Efficiency Program (DEEP). It was a broad partnership, consisting of gas and power utilities, Local Initiatives Support Corporations (LISC) from five core communities, construction associations, trade schools, and non-profit organizations.

The objective was to make energy costs more affordable for working families by weatherizing homes over 80 years old. The goals were both economic and environmental, as outlined below, but the key thread was to develop a program that could target the base of the energy efficiency (see Pyramid of Conservation below).

**Link to interactive Pyramid of Conservation:**

[http://www.mnpower.com/powerofone/one\\_home/](http://www.mnpower.com/powerofone/one_home/)

## **Goals**

**Economic:**

- Create local green jobs
- Reduce energy affordability gap (from approximately 50% to 6%)
- Retain energy dollars in community
- Maximize impact of investment over time

**Environmental:**

- Reduce community energy use
- Reduce carbon footprint (currently 26.4 tons/person; target is 4 tons/person)
- Engage residents to take action

**What makes DEEP different:**

1. It's performance based.
  - A. Community Education & Action
  - B. Performance Based Improvements
    - 45% of energy used by buildings

- 20-30% reduction by air sealing
- Focus on measurable results

C. Above & Beyond: Demonstration of deep energy retrofits

2. DEEP provides a framework to measure performance.

One of the challenges is to ensure that performance is documented and measured.

As presenters describe, “If you can’t measure it, you can’t manage it.”

A Home Energy Rating (HERS) Report was derived for each home to establish a baseline and provide a benchmark against which improvements could be measured.

3. Revolving loan fund—created a community fund to help pay for these major improvements.

As customers save money and repay their loan, they recycle the money to provide capital to additional improvements.

4. DEEP demonstrates collaboration amongst a local electricity utility and gas utility.

- Minnesota Power and Comfort Systems have developed a strong working relationship and process for collaboration and information sharing.
- They have focused on service to the customer to implement this program.
- They share the costs of the program.

Work groups met to discuss **lessons learned** and common themes have emerged.

- One Size Doesn’t Fit All
- Relocalization of Economy
- Need Central Nexus
- Communication
- Must Focus on Whole Value Chain

**Possible next steps:**

- 30% reduction – Not enough
- Demonstration of deep energy retrofits

For more information on **Duluth Energy Efficiency Program (DEEP)**, contact Jodi Slick at [jodi@commongrnd.org](mailto:jodi@commongrnd.org) or Tel. 218-727-5372.

**B. GREEN DULUTH (summer youth canvas project)**

**Project description**

Green Duluth is sponsored by the City of Duluth Youth Employment Service and Community Action Duluth and provides green jobs for low-income youth ages 18-24. These summer positions allow workers to get great workforce development training as well as an excellent opportunity to make a difference in our community.

**Background**

Angie Miller is the Executive Director of Community Action Duluth, whose mission is to get people out of poverty. In Duluth, 20% of people are at or below federal poverty guidelines. Forty percent are at 200% of federal poverty guideline. Community Action Duluth is interested in effect of energy prices on low- income people.

The Green Duluth project was driven by the notion of work force development and skill building, to do “energy outreach” door-to-door, and get young people an entry position in the green economy.

Community Action Duluth partnered with Duluth's work force center-- Youth Employment Service (YES)-- which hires several youth every summer, to form Green Duluth. With federal stimulus money, YES was able to recruit additional youth.

Green Duluth recruited 12 low-income youth, ages 18 – 24. Their interest in environmental work varied. CAP paid for their meals and for canvas organizing (partially with stimulus funding). The youth canvassers received training on work force development, public speaking, and financial education. Every Friday, they participated in an environmental field project, including listening to presentations and working on storm water mitigation, trout habitat development, and community garden maintenance.

The youth workers were a diverse population, both culturally and personally. Through the Green Duluth project, the canvassers' "people skills" improved and all became enthusiastic about the project.

### **Community Outreach and a Community Energy Baseline**

- A **press conference** was held.
  - The mayor kicked off the event by knocking on the first door.
- **Postcard:** Information was consolidated to fit on a postcard
- **Simple question/"rap"**
  - Kept it simple. Didn't want to use buzz words. So said "reduce pollution" (vs. "carbon footprint")
  - Youth canvassers used simple, easy-to-use language
  - In materials and information, pointed out residents could "keep money in their pocket" instead of giving it to the local utility
  - Easy to participate: Residents needed only to report how many people lived in the home, how they heat it, and sign the release of utility information document.
- **Energy yard stick**
  - Assessors performed the home energy audit.
- Establishment of **database**
  - Residents signed waivers giving permission for utilities to release information on their usage.
  - It was key to have a database that tracked energy usage and provided square footage.
  - It was very helpful to be able to access the square footage and age of the house on-line.
  - Energy Star lent its algorithms on how it calculates home information and entered this information into the database, which was very helpful. This really simplified how many questions canvassers needed to ask.

### **Summer results/Successes:**

- 797 residents mailed in their postcards (left on their doorstep when they weren't home)
- The project received calls from the public who loved the project; they received no complaints

### **Next steps:**

- This summer the project plans to run 2 crews, for a total of 20 canvassers
- Green Duluth received some funding from CERTs

### **Replicability:**

- The whole idea was conceived in 4 weeks. Estimates were pretty low. Got 10 times the response.
- Many communities have work force centers, and could explore this as an option.
- This was a 10% outreach in Duluth. Could do 20 – 30 % with future rounds.

If you'd like to see the post card, visit: <http://www.cleanenergyresourceteams.org/regions/northeast>

To practice the “rap”, visit: <http://www.cleanenergyresourceteams.org/regions/northeast>

## II. CLEAN ENERGY PROJECTS by St. Louis County – Tony Mancuso

**St. Louis County has** St. Louis County has done a wide range of both energy efficiency and renewable energy projects. We’ve included a snapshot of a few of those projects below:

- Energy efficiency basics: Lighting retro fits, low flow water fixtures
- County courthouse- Changed heating, ventilating, and air conditioning (HVAC) system. These changes were added during remodeling that had been previously slated. The new HVAC system has cut energy costs by 2/3.
- Government Services Center- Water-free urinals have been installed. Saves \$40K/year. Went to Rocky Mountain Institute to get info.
- White high efficiency lighting- just by painting the walls and ceiling white they saved on lighting costs by 50%!
- Green roof – Half of the roof is sedum to control storm water runoff. They received a grant from to do a community garden on other half of the roof. Duluth Community Garden club is getting active participants involved. A lockable enclosure has been built. A rainwater collection system is going to be put in place this winter with a pump to bring it up to water garden. Have high performance windows, solar panel.
- Hibbing courtyard, former Masabi clinic. Displacement ventilation. Convection currents make heat go in, fumes go out. Insulated it well. Did a solar wall. Bring in fresh air. 25 degrees. Works very well. Employees have given positive feedback on these changes. Has PV panels, solar supplement. Put a white roof on it, which they think will lower energy costs by deflecting heat.
- Parking lot in Hibbing. Have plans to install motion sensors (instant on and off). May add LED lights.
- The Depot- Added a cooling tower. Have significant savings from retro lighting.
- Hibbing Annex- PV on roof. Has 25 year life cycle, easy to understand, no parts. Solar hot water system.
- Wind turbines have been installed on the GSE building. There have been problems with it related to cold weather and a strong east wind. But there is a 10 year warranty and they are working to try develop a 365 degree swivel to capture wind from all angles, throughout the year. They’re adding pedestals to roofs in case they want to add wind turbines later.

## III. FUNDING OPPORTUNITIES

### **Arrowhead Regional Development Commission (ARDC)**

The Northland Foundation and the Arrowhead Regional Development Commission (ARDC) have partnered to announce a 2010 low-interest loan program for energy related projects in the region. The loan program is designed to promote the development and demonstration of renewable energy technology, including solar, wind, biomass, geothermal and other technologies that will decrease dependence on fossil fuels or contribute to reducing energy costs, and/or to promote energy conservation and efficiency projects. Information on the loan program is available at [www.ardc.org](http://www.ardc.org). For more information, click here:

<http://www.cleanenergyresourceteams.org/regions/northeast>

#### **IV. ATTENDEES**

Below is a list of meeting attendees. If you'd like more specific contact information to follow up with folks, please contact Lissa, Joel, or Maggie ([makozak@umn.edu](mailto:makozak@umn.edu)). Apologies in advance for any errors, misspellings, or omissions.

**Attendees included:**

David Abazs, Hellmut Baumler-Schmidt, Jeff Borling, Per Carlsson, Brad Clifford, Billy DeMars, John Eacobacci, Wendy Grethen, Peter Harris, Chuck Hartley, Chuck Gagner, Dale Hedtke, Bonnie Hundrieser, Andrew Imig, Lauri and Judy Isaacson, Larry Killien, Tom Koehler, Maggie Kozak, Terence Larson, Mike Mageau, Angie Miller, Bill Mittlefehldt, Casey Modich, Tim Ollhoff, Lissa Pawlisch, Jim Plummer, Diane Rauschenfels, Eric Schlacks, Jodi Slick, Mary Somnis, Rebecca Spenger, Dean Talbott, Mark Thell, Aaron Thibert, Richard Walsh, Terry White, Leo Wilenius, David Williams, Scott Youngdahl