



## Champion Report Template

Theme Area: Energy

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**REPORTING PERIOD: March 17, 2015 - June 16, 2015**

Goals/Strategies or Action Steps:	What NEW success have you had in moving your theme goals forward over the reporting period?
EI Energy in our Region	<p>Moving renewable energy ideation toward commercialization</p> <ul style="list-style-type: none"> <li>- Continuing conversations with The Energy Foundation into 2015</li> <li>- Look for upcoming meeting invites where YOU will be encouraged to share your ideas of next best steps</li> </ul> <p>Community Solar for Community Action: A new model of low-income energy assistance project is proceeding very well and receiving some national attention. Interested parties (utilities, developers, community action agencies, financiers, advocates, low-income households) are encouraged to attend a stakeholder meeting on the 16th of June at the Initiative Foundation in Little Falls, August 6th in Duluth at Minnesota Power and August 20th in Minneapolis at the McKnight Foundation.</p> <p>Central Lakes College presented "Protecting Water Quality/Preventing Soil Erosion after Land Conversion (Utilizing Energy Crops)" at the Mn. Assoc. of Soil and Water Conservation Districts North Central meeting in Bemidji on March 6th.</p> <ul style="list-style-type: none"> <li>- The College's work featuring its' biomass crops of Prairie Grasses and Miscanthus were of particular interest because of their potential to provide permanent cover buffer zones for streams and bodies of water. The college demonstrated all the harvesting and processing steps needed to convert these crops into fuel, and then utilizing this fuel for heating their buildings and greenhouse.</li> <li>- Also presented the use of oilseed crops like Camelina, Pennycress and Canola that were managed to provide continual land cover. Specialized equipment such as the College's no-till oilseed drill were featured to show how this was accomplished through all the processing steps required to convert the crop into fuel, and that fuel utilized in tractor and truck engines.</li> </ul>
Increase energy efficiency	<p>CERTs hosting a Community Solar Garden Tour and Information Session (101 and Tour)</p> <ul style="list-style-type: none"> <li>- Goal: help people feel more knowledgeable about what community solar gardens and where this is an opportunity.</li> <li>- Target audience: people interested in CSGs likely from within about an hour's drive of Pelican Rapids.</li> </ul> <p>CERTs is working on 2 LED lighting campaigns</p> <ul style="list-style-type: none"> <li>- help service stations update their canopy lights to LEDs, and</li> <li>- helping Turkey Farmers update their livestock housing to LED lighting.</li> </ul>

- These are both heavy lighting users, and provide substantial savings opportunities by upgrading. We help by helping prospective service station owners and farmers identify all of the rebates and incentives available to them, connect with the different appropriate LED lighting vendors, and help with the technical aspects of upgrade

CERTs conference was a huge success!

- Regional breakout session to identify priorities (see below)
- RREAL presented at the CERTs conference on their solar water heating systems research into offsetting emissions associated with outdoor wood boilers when such systems are designed in combination with one another. This research is valuable in terms of evaluating the role that solar thermal can play in reducing such emissions while also stabilizing cost.

Made in Minnesota Solar Thermal Rebate is statewide and can be harvested in any utility. 25% of total project costs (up to \$2500 for residential projects and up to \$25,000 for commercial projects).

Renewable Energy Equipment Grant Program (REEGP) has been reauthorized pending passage of energy bill in special session which provided \$150,000 for Community Action Agencies to install solar air heat, biomass and potentially PV now. We rec'd a verbal that the fund could be used for low-income PV projects at our request, but I don't have that in writing.

### What future activities has your theme prioritized for the coming year?

CERTs conference regional session planning identified regional priorities (March 2015):

Lots of interest in community solar.

- Two groups on CSG. One was in BPU territory. One was in MN Power Territory.
- Low income access common theme.
- Getting projects going in different utility territories.

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Other events this year: YES! Showcase in the fall? Will talk with YES! folks

CRSDP energy work group priorities (Jan 2015):

- 1) Public education about made in Minnesota solar incentive: PSA, community events, outreach.
- 2) Outreach around community solar projects – low-income solar project, Pelican Rapids in central region, potentially partner with CERTS event at that site.
- 3) Solar for STEM, YES! teams, education.
- 4) EV charging station in central region – lodging facilities – tourism connection.
- 5) Being open to projects that are innovative/new, smaller, CODE UL compliant.

# Energy

## Energy Issue I (EI)

**Energy in our region:** Not all of the jobs that were lost in the past ten years were to developing countries with lax regulatory oversight and low wages, many jobs were lost to advancements in technology and related productivity gains. Because the region has many companies that are working within energy related fields, developing breakthrough technology in energy production will be critical for advancing the industry cluster and the region.

## Energy Issue I Goal

**Increase energy efficiency:** Create a more energy efficient region through working with utilities and emphasizing energy efficiency. Employ education and outreach to capitalize on technological advancements in energy including smart grid technologies and renewable energy conducive to our region such as geothermal, solar, wind, biomass, energy storage and hydro power.

## Recommendation 1

**Public/private collaboration:** Increase collaboration between public and private sectors to implement new energy technologies, including state and federal financing for private/public partnerships.

### Action Step A

**Partnerships:** Work with Habitat for Humanity to build additional energy efficient homes and work with Community Action Partnership (CAP) agencies to weatherize homes.

### Action Step B

**Priorities:** Target group homes and programs serving the low-income, senior, and disabled populations.

### Action Step C

**Information sharing:** Add utilities to email notification for agendas of city/county/Region 5 Development Commission's EDA/HRA/Planning Commissions, etc. so the utilities can review for possible projects. EDA to send email to utilities with prospects/commercial building projects.

### Action Step D

**Seek out information:** Utilities regularly ask EDAs for information about possible commercial building opportunities.

### Action Step E

**Identify contacts:** Create a contact list of utility personnel that all the utilities can refer to regionally.

### Action Step F

**Rebate information:** Post utility rebates on the new Resilient Region website and link to utility websites.

### Action Step G

**Coordinate between utilities:** Set up a regular schedule for utilities to meet on the issues of energy efficiency and low-income programs.

### Action Step H

**Utility contact information:** Inventory regional utilities and post a regional utility map and contacts on the Resilient Region website.

### Action Step I

**Policy change:** Collectively address the policy issue of inequity between credits for BTUs and/or KWHs saved. Ask for support from energy advocate agencies and local governments.

### Action Step J

**Educating farmers:** Support energy efficiency in agriculture. Plan a statewide conference for the agriculture industry and farmers focusing on energy efficiency. Support the Minnesota Project's Dairy Initiative on energy efficiency.

### Action Step K

**Educate commercial and industrial:** Campaign for commercial and industrial efficiency.

## Recommendation 2

### **Support renewable energy requirements: Energy users support utility companies in meeting renewable energy requirements**

#### **Action Step A**

**Standardize rebates:** Standardize rebates across utilities.

#### **Action Step B**

**Neighborhood energy use:** Work with Center for Energy and the Environment (CEE) to conduct neighborhood energy challenges. Educate residential consumers.

#### **Action Step C**

**Consumer energy use:** Use existing software (MyMeter) to encourage customers to manage usage.

#### **Action Step D**

**Case studies:** Publicize case studies of families that have utilized programs that save energy.

#### **Action Step E**

**Publicize programs:** Encourage utilities to list programs available for low-income residents

#### **Action Step F**

**Low-income focus:** Encourage utilities to lead discussions around low-income gaps.

#### **Action Step G**

**Coordination and promotion:** Coordinate and promote existing efficiency programs

## Recommendation 3

### **Conservation and renewable technologies: Encourage and teach conservation and advance practical renewable energy technologies that have a reasonable return on investment. Teach people how to conserve energy, manage energy demand & about new technologies – without bias as to type of energy source. Focus on conservation. Discuss/teach how energy sources contribute to pollution.**

#### **Action Step A**

**Economic development:** Create an energy incubator campus, leverage existing expertise, and create target incentives to advance the commercialization of clean, green, sustainable enterprises

#### **Action Step B**

**Solar access:** Ensure access to solar energy for all housing.

#### **Action Step C**

**Equipment:** Help finance energy efficient business equipment for commercial, industrial and agricultural enterprises.

#### **Action Step D**

**Policy:** Incentivize energy conservation through such actions as tax incentives for home owners and businesses that utilize solar, wind, etc. Reduce regulations that impede renewable energy production. Promote policy that supports decentralized energy production. Provide incentives such as cost share incentives and rebates to help energy users adopt renewable energy technologies.

#### **Action Step E**

**Energy production:** Focus on small scale energy production. Cultivate the hazardous energy sources like nuclear. Focus on research not production.

#### **Action Step F**

**Research:** Support research on conservation and renewable technologies.

#### **Action Step G**

**Waste to energy:** Support opportunities to turn waste into energy.

#### **Action Step H**

**Service delivery planning:** Engage in planning for brown-out/black-out times when utility companies are not able to operate.

#### **Action Step I**

**Infrastructure:** Pursue solutions to building local renewable energy infrastructure (i.e. electric car stations).

#### **Action Step J**

**Education:** Utility companies should partner with schools to provide classroom-based education on renewable energy.