



Champion Report Template

Theme Area: Energy

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Complete and submit to Champion Facilitator (Dan Frank) to be compiled, cover highlights in two-minute report at Champion Meeting.

1. Update on progress on your Theme Priorities since our July meeting;

Goal #	Description of priority, activity and progress
EI Energy In our Region	<p>Small Energy Production – Recommendation 3</p> <ol style="list-style-type: none"> 1. Small Wind Turbines, LLC Brainerd, Mn – qualified as a semi-finalist in the Cleantech Open (CTO) a global business accelerator for startup companies. Developing second generation small wind turbines with greater reliability and performance. 2. Biofuels – Central Lakes College expanding Straight Vegetable Oil (SVO) utilization and research through NextGen Renewable Energy grant funding. 3. Biodiesel – Green Range Energy reactivating biodiesel production on a limited basis to support renewed opportunity in this industry. 4. Biomass – FibroMn electric power generation plant in Benson Mn repaired and resuming delivery of woodchips from Brainerd area logging companies.
EI Energy In our Region	<p>Economic Development</p> <ol style="list-style-type: none"> 1. Central Mn Ethanol signed letter of intent with Green Biologics, Inc a technology developer and emerging bio-based chemicals producer, to sell them all their assets. This ethanol plant may be switched to butanol production and produce higher value bio-based industrial chemical.
EI Energy in our Region	<p>Recommendation I, II and III: PACE (Property Assessed Clean Energy) Financing</p> <p>PACE Financing legislation passed the MN Legislature during the last session which allows all municipal and counties with bonding authority the right to issue 20 year notes to finance energy efficiency and renewable energy projects for commercial properties within their jurisdiction through a special tax assessment. This is a game-changing, paradigm shifting piece of legislation that will make it possible for any business owner interested in clean energy and energy efficiency to deploy such improvements. The savings from the improvement must exceed the tax assessment, and that assessment travels with the property not with the business. In short, PACE</p>

	<p>financing eliminates the upfront expense of deploying renewable energy installations and facilitates a rapid positive cash flow. Any City within the State of MN can participate. All bonds are secured through the St. Paul Port Authority.</p>
<p>EI Energy in our Region</p>	<p>Recommendation I, II and III: RePoCC (Renewable Energy Proof of Concept Center) Region Five and MN DEED continue work on the Renewable Energy Proof of Concept Center Project which will create multiple centers where entrepreneurs in the clean energy sphere can seek assistance with: access to capital; commercialization process; policy changes; market analysis and other aspects of clean tech business development. Reporting on the grant expected in February and shared with renewable energy state leadership statewide. Also, Region Five's planning grant is beginning to dovetail with a larger, 25 million grant designed to provide the aforementioned services to both the clean tech and life science/medical device community.</p>
<p>EI Energy in our Region</p>	<p>Recommendation I, II and III: MN Clean Energy Jobs Act Recently passed legislation is making renewable energy much easier to deploy statewide from both a financial and technical perspective. This bill is so substantive in the way in which it is changing the solar economic landscape in Minnesota that many of the huge solar contractors from the east and west coast have recently set up offices in Minnesota to position themselves to be able to capture much of the market. In addition to the previously reference PACE piece of the legislation, highlights of the bill include: 1) Production based incentive system for all PV systems installed on investor owned utilities (Minnesota Power, Xcel, Ottertail), 2) Community shared solar gardens so ratepayers can own energy production from community based solar electric installations, 3) solar thermal rebate for Minnesota made product of which there are four, 4) valuation of solar electrical energy production and the ability to market and Solar Renewable Energy Credits on the climate commodities exchange, and 5) a solar heat for low-income families fund based on a tariff that is placed upon oil imported into Minnesota.</p>

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, and 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.