

SOUTHWEST INITIATIVE  
**FOUNDATION**  
*A Rural Minnesota Community Foundation*

# Local Energy Initiatives Summary

**Compiled by:**  
**Cheryl Glaeser, Program Specialist**  
**Southwest Initiative Foundation**

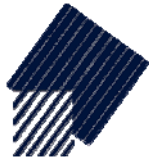


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# Morning Session – MN Dept of Commerce

- Discussed recent energy legislation
  - Next Generation Energy Act
  - Dispersed Generation Study
- Gathered feedback and input for Dispersed Generation Study
- Discussed challenges and possible ways to further support community-based energy development



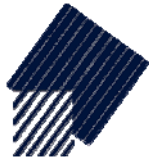


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## Morning Session – MN Dept of Commerce

Prior to the start of the Dispersed Generation study and at other key points in the process, the Minnesota Department of Commerce (DOC) is statutorily required to hold meetings in each of the five greater Minnesota transmission planning zones. The morning sessions of the Local Energy Initiatives meetings were the first of these required meetings.





# Dispersed Generation Study

- Information collected provides key input to the study
- Combined with the following to formulate the generation scenarios to be studied
  - Potential location recommendations
  - Information on existing, committed and contracted RE projects
  - Geographical information (wind maps)
  - Information on projects in MISO queue
- Next meetings to be held after the impact analysis for 1st phase is completed and when a draft final report for the first phase is available – potentially in February or March of 2008

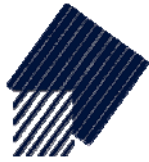


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# Afternoon Session – Local Energy Initiatives

- Discussion of opportunities to participate in community-based energy development
- Presentations on economic benefits & dispersed generation strategies
- Case study panel discussions related to wind energy
- Attendees took part in a working session about supporting local energy initiatives\*

\*The Southwest Zone did not take part in a working session



# Attendance Summary

5 Regions	450 People
Southwest	100
West Central	92
Southeast	112
Northwest	68
Northeast	81

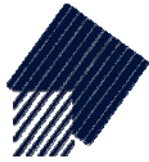
Attendees included electric utility representatives, zoning and planning officials, city officials, county commissioners, economic development professionals, renewable energy developers, large end users of electricity, and other citizens interested in community-based renewable energy.



# Statewide Areas of Interest Indicated in Comments/Data

- Technical assistance to advance projects
- Better understanding of the economics and financing
- Improved collaboration and knowledge of available resources
- Further understanding of transmission studies and needs
- More information and focus on conservation and energy efficiency
- Continued support for renewable energy and conservation in state and federal legislation
- Continued overall education and awareness

(Not ranked by order of prevalence or importance)



# Benefit of Meetings

When asked, “What was the most important or useful thing that happened today?” prevalent responses included:

- Awareness and education on topics such as
  - Transmission/Utilities
  - C-BED
  - Legislation
- Networking and Collaboration
- Connection to Resources
- Public Input





# Analyzed Data for Meetings

The following slides contain analyzed information for each of the meetings. The data was gathered from collected data sheets, working session flip charts, and recorded comments.

The categories for areas of interest were ascertained through an inductive analysis of the collected information. These categories emerged through a process of breaking down, examining, comparing, and then categorizing gathered data.

Each category listed by zone includes an example from the collected data.



# Categories

The following categories emerged through this analysis:

- Collaboration of and connection to resources
- Community-Based Energy Development and technical assistance to advance projects
- Conservation and energy efficiency
- Economics and financing related to renewable energy projects
- Education and public awareness
- Environmental considerations for energy use
- Legislation and policy to support these initiatives
- Technology and research – currently available and emerging technology as well as research for further advancement
- Transmission, Utilities and Interconnection – issues and opportunities related to these areas



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# Attendance Framework

As a framework for discussions that took place and possible inferences made through this information, it is important to understand the demographics of those in attendance.

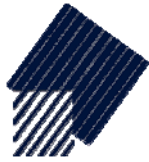
The slide prior to the information from each meeting, provides a sense of who attended each meeting and any notes for further clarification of inferences.



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# Use of Information

This information will be used by the collaborating host organizations to coordinate technical assistance resources to support the project initiatives and needs identified at the meetings and to strengthen the network of people working on projects within each transmission zone and across the state.



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# Northeast Zone

**Thursday, September 13**

Cloquet Forestry Center

175 University Road

Cloquet, MN 55720-9594

**Host Organizations:** Silver Creek Institute, Northeast CERTs, and Northeast Regional Sustainable Development Partnership

**Local Contact:**

Jamie Juenemann, Associate Director

Silver Creek Institute

Phone: 218-834-4746



# Northeast Attendees

(by percentage of type)

<b>Northeast:</b>	<b>%</b>
Organizations:	24
Electric Utility Reps:	18
Business/Industry:	14
Education:	11
Economic Dev:	8
City Officials:	7
Other:	7
County Officials:	4
State Officials:	3
Tribal Officials:	3
Finance:	1



# Northeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 1. Education and public awareness

- General education about renewable energy and conservation to increase public interest for developing and promoting renewable energy and conservation
- More education and demonstration sites in our schools and homes
- More information on the technologies of and options for renewable energy

## 2. C-BED and Technical Assistance

- Continued awareness and support for C-BED projects
- Technical assistance for assessing the feasibility of projects and for developing projects
- Help with next steps and stages of project development



# Northeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 3. Technology and research

- Increase information of available technologies
- Support further research of various emerging technologies
- Help in assessing available resources and feasibility for incorporating renewable technology

## 4. Conservation and efficiency

- Increase the focus and further develop strategies
- Increase the awareness of incentives
- Create proactive opportunities to manage resources

(Note: This topic was not a significant focus yet appeared as an area of interest in most of the meetings)

## 5. Legislation and Policy

- Further support needed to level the playing field
- Further support at Federal level
- Streamlined policy





# Northeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 6. Transmission, utilities and interconnection

- Target installations for greatest impact and best use of distributed resources
- Find resolutions for access to the grid – transmission
- Concern for competitively priced energy
- Concern for accountability to the next generation

## 7. Collaboration and connection to resources

- Better alignment between public entities
- More collaboration of organizations working in these areas
- Better coordination of meetings to ease strain on resources
- Easier and more centralized access to information



# Northeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

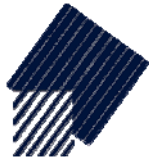
## 8. Economics and financing

- Need to level the playing field
- Investment money is hard to find/difficult to secure
- Increased funding for demonstration sites/research
- True costs of energy - consider environmental costs

## 9. Environment

- Increased consideration of the value, benefits, and impacts related to our environment
- Carbon implications/costs will change renewable energy values in future

(Note: This category was not formally addressed yet appeared in analyzed data of all five zones.)



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# Northwest Zone

**Wednesday, September 19**

Ralph Engelstad Arena

525 Brooks Ave N

Thief River Falls, MN 56701

**Host Organizations:** Northwest Regional Sustainable Development Partnership and Northwest Clean Energy Resource Team

**Local Contact:**

Linda Kingery, Executive Director

NW Regional Sustainable Development Partnership

Email: [kinge002@umn.edu](mailto:kinge002@umn.edu)

Phone: 877-854-7737



# Northwest Attendees

(by percentage of type)

<b>Northwest:</b>	<b>%</b>
Electric Utility Reps:	22
Organizations:	18
Economic Dev:	13
City Officials:	9
Other:	9
Education:	9
State Officials:	9
Business/Industry:	5
County Officials:	2
Planning/Zoning:	2
Legislative Staff:	2
Tribal Officials:	2



# Northwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence.)

## 1. Transmission, Utilities & Interconnection

- Concerns about support of utilities for C-BED projects
- Concerns about the transmission costs and possible increases in the cost of energy to coop members
- Identify transmission capacity points and engage REA's in catalyzing C-BED projects
- Interconnection studies open up some very important possibilities for doing wind projects
- Importance of how the whole process is connected to utility operations and planning at local, regional and state levels



# Northwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 2. C-BED and Technical Assistance

- Promote more C-BED projects
- Provide technical assessments for C-BED projects
- Provide step by step planning and resources guide to facilitate project development
- Address turbine availability issues
- Provide wind and solar resource evaluations

## 2. Education and Public Awareness

- Provide more knowledge on the whole spectrum of renewables
- Provide more detailed information to sell this idea to the people in the region
- Provide examples of how C-BED projects can be developed
- Promote local ownership and generate interest in private development



# Northwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 3. Legislation and Policy

- Concerns about the production tax credit - would like support for individual tax credit. Current credits more useful to large companies than ordinary owners
- Important for legislators to understand utility systems when setting legislation
- Hope for the Farm Bill to support research, development and pilot projects
- Concerns about corporate wind

## 4. Economics and Finance

- Provide more information on the economics of renewable energy projects to help those interested consider the feasibility of project development
- Concerns about the difficulty of locating financing for projects
- Provide information to help our region reap the rewards of C-BED projects



# Northwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 5. Collaboration and Resources

- Find more ways to share resources
- Provide better access to information
- Bring resources together to achieve successful C-BED projects
- Provide more information on services/resources available to help consider the economics of projects
- Help utilities connect to local community resources

## 6. Technology and Research

- Secure more wind manufacturers in Minnesota
- More focus and information on smaller generation; applications for residential, business and industry; home-scale systems
- Provide more information on other forms of renewables such as biomass, solar, etc.





# Northwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 6. Conservation and Efficiency

- Need more emphasis on conservation and energy efficiency
- Provide more information on energy star programs for buildings
- Encourage more green building

## 7. Environment

- Mention of problems with waste and need for waste-to-energy solutions

(Note: This category was not formally addressed yet appeared in analyzed data of all five zones.)



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# Southeast Zone

**Tuesday, September 11**

Holiday Inn Owatonna  
2365 NW 43rd St  
Owatonna, MN 55060

**Host Organization:** Southern Minnesota Initiative  
Foundation

**Local Contact:**

Pam Bishop, Business Success Officer  
Southern Minnesota Initiative Foundation  
Email: [pamb@smifoundation.org](mailto:pamb@smifoundation.org)  
Phone: 507-455-3215



# Southeast Attendees

(by percentage of type)

Southeast	%
City Officials:	27
Electric Utility Reps:	16
Other:	14
Organizations:	13
Economic Dev:	11
Business/Industry:	10
County Officials:	5
Education:	3
State Officials:	3
Legislative Staff:	1



# Southeast – Areas of Interest

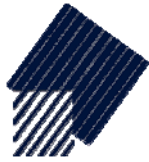
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## 1. Transmission, Utilities & Interconnection

- Concerns about MISO queue, transmission, as barriers
- Concerns about PPA process – length, difficulty
- Need to understand the complexity of transmission, interconnection and the studies
- Identify transmission capacity to move development forward
- More information about the potential to tie into local distribution or develop “behind the meter” projects

## 2. Economics and Finance

- Discuss creative financing for projects through networking and collaboration of resources
- Need specifics on funding sources and return on investment
- Concerns about the difficulty of Clean Renewable Energy Bonds, PPAs and financing options in general
- Incorporate benefits of natural resources and energy savings into economic calculations



# Southeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 3. Education and Public Awareness

- Need for overall community awareness
- Provide more case studies and panel discussions to learn from existing projects
- Provide more education about financing options, timelines and potential pitfalls of projects
- Need for more education in schools about renewables and conservation
- Educational focus on what is needed to overcome barriers

## 4. Legislation and Policy

- Concerns about lack of legislation for waste designation and waste to energy issues
- Comment on providing economic incentives to alleviate subsidy support so land can be used to grow alternative crops for energy generation



# Southeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 5. Technology and Research

- Concern about the nationwide shortage of turbines and lack of manufacturing in US
- Concern about reliability of technology; makes investments riskier
- Investigate other renewable technology options
- Specific mention of cellulosic and waste to energy research

## 6. Environment

- Promote more C-BED projects
- Provide assessments for C-BED projects and their effect on environment
- Address turbine availability issues
- Provide wind and solar resource evaluations
- Promote local ownership



# Southeast – Areas of Interest

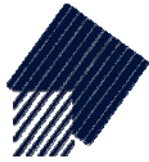
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## 7. Conservation and Efficiency

- Need more time and commitment toward conservation
- Provide more conservation and recycling incentives and establish the impacts of these incentives
- Collaborate with utilities on energy efficiency projects
- Tie conservation strategies to the potential for saving money

## 8. Collaboration and Resources

- Bring together large users to discuss how they might share resources and work together toward mutual benefits
- Use existing resources such as CERTs for making connections and encouraging collaboration
- Collaborate with utilities for education and awareness



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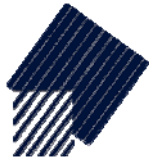
# Southeast – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 9. C-BED and Technical Assistance

- Provide a decision flow chart for communities to guide them through the process of developing a project
- Concern about the nationwide shortage of turbines and the effect this has on developing C-BED projects
- Utilities can provide assistance in developing projects





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# Southwest Zone

**Wednesday, September 5**

Southwest Minnesota State University  
Conference Center  
1501 State Street  
Marshall, Minnesota 56259

**Host Organization:** Southwest Initiative Foundation

**Local Contact:**

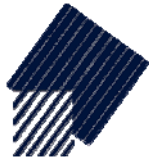
Cheryl Glaeser, Program Specialist  
Southwest Initiative Foundation  
Email: [cherylg@swifoundation.org](mailto:cherylg@swifoundation.org)  
Phone: 800-594-9480



# Southwest Attendees

(by percentage of type)

<b>Southwest:</b>	<b>%</b>
Business/Industry:	16
Organizations:	13
Economic Dev:	11
County Officials:	11
City Officials:	10
Electric Utility Reps:	9
Other:	8
Finance:	7
Education:	5
Planning/Zoning:	5
Legislative Staff:	2
State Officials:	2



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# Southwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 1. Transmission, Utilities & Interconnection

- Need for better understanding of transmission
- Interest in the potential through dispersed generation
- Positive reaction to transmission studies, but concerns about how changes in technology and behavior will affect studies
- Concerns about proposed transmission upgrades – mention of curtailment, line loss, line siting, working with existing lines
- Concerns of the challenges of MISO queue
- Important to understand the whole process to plan at local, regional and state levels
- Concern that we keep the economic development opportunities in mind when planning for transmission/dispersed generation
- Comment that meeting the renewable energy standards will need to happen before new transmission lines can be built



# Southwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 2. Economics and Financing

- Need to consider the local benefit to rural economies; want more dollars to stay in local communities
- Need more incentives for local ownership
- Talk turkey – ROI/financing models, schematic designs for costs of renewable sources from cradle to grave
- Investments should increase reliability AND lower cost and impacts

## 2. Collaboration and Resources

- Improved collaboration between local government, utilities, regional leaders, organizations and education
- Shared expertise through case studies and demonstration sites
- Provide easier connection to resources – “one-stop” shop
- Better coordination of meetings to avoid straining resources



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# Southwest – Areas of Interest

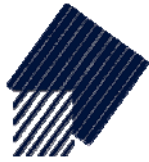
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## 3. C-BED and Technical Assistance

- Need to provide a decision flow chart for communities to guide them through c-bed project options
- Would like to see a technical committee to meet with local groups to give them hands on advice about project feasibility and process
- Concern about the nationwide shortage of turbines
- Need to develop not only wind but all alternative energy

## 3. Conservation and Efficiency

- Need to use less energy and concentrate on efficiency
- Much interest in conservation and possible incentives for people to begin to understand the benefits
- Interest in connecting this topic to transmission studies and what impact this would have
- Overall interest in much more focus on this topic



# Southwest – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 4. Education and Public Awareness

- Need education programs of all kinds
- Need more meetings of this nature to learn how to deal with growing wind energy business
- Need to put renewables into comprehensive plans
- Need education on wind rights
- Need better understanding of transmission, substations, and the effects on these from renewable energy

## 5. Environment

- Keen awareness and concern about our water supply
- Interest in the overall sustainability of our communities
- Expressed desire in making ethanol more sustainable
- Need to involve DNR when considering environmentally sensitive areas for renewable energy projects



# Southwest – Areas of Interest

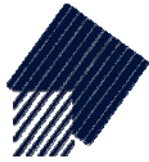
(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 6. Legislation and Policy

- Need for incentives that level the playing field – this included much discussion about the production tax credits and the need to allow for tax credits for small investors too
- Need to provide incentives/rewards for choosing green power rather than actually an increased cost

## 7. Technology and Research

- Expressed desire in providing research to make ethanol more sustainable
- Need more research and information on solar, biomass and other renewable energy technologies



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# West Central Zone

**Monday, September 10**

West Central Research and Outreach Center  
46352 State Highway 329  
Morris, MN 56267

**Host Organizations:** U of M West Central Research and Outreach Center and Southwest Initiative Foundation

**Local Contacts:**

Michael Reese, WCROC Director of Renewable Energy Center

Email: [reesem@mrs.umn.edu](mailto:reesem@mrs.umn.edu)

Phone: 320-598-1711

Cheryl Glaeser, Program Specialist, SWIF

Email: [cherylg@swifoundation.org](mailto:cherylg@swifoundation.org)

Phone: 800-594-9480





# West Central Attendees

(by percentage of type)

<b>West Central:</b>	<b>%</b>
Business/Industry:	26
Electric Utility Reps:	20
Organizations:	14
Economic Dev:	10
County Officials:	10
Education:	9
Other:	8
Finance:	7
Planning/Zoning:	2
Legislative Staff:	2
State Officials:	2
City Officials:	1



# West Central – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 1. Education and public awareness

- Need private groups to share what they've done so others can learn from their experiences
- Local government needs to be informed and share best practices for supporting and handling renewables
- Need for education of policies and zoning ordinances
- Need education for land owners
- Need overall education and awareness for the general public
- Educating our youth – has begun through the Youth Energy Summit – need more of this



# West Central – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 2. Transmission, utilities and interconnection

- Mention of the renewable energy standards and meeting those without the benefit of new transmission lines
- Interest in aggregating municipal entities to disperse projects and handle interconnection issues
- Concern about the MISO queue - process fairness and timelines

## 3. C-BED and Technical Assistance

- Projects need technical assistance from the ground up
- Need a central resource to provide information
- Need help with access to turbines and equipment; larger projects take precedence
- Need a road map of ownership structures and project development process



# West Central – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 4. Economics and Finance

- Need incentives to level the playing field so the money doesn't leave the state (many comment related to this)
- Need revolving loan funds to help fund c-bed projects
- Need to provide transparent costs, timelines for projects
- Much interest in local ownership for economic impact, jobs and sustainable communities

## 5. Legislation and Policy

- Further support needed to level the playing field – much mention of changes to the tax credits
- Concern about the time sensitivity of CREB funding
- Need to establish local policyies, zoning ordinances, etc.
- Need to provide more incentives for conservation and energy efficiency



# West Central – Areas of Interest

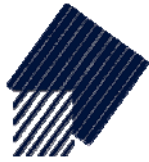
(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 6. Technology and Research

- Need more feasibility studies, research and development for all forms of alternative energy sources
- Hope for new technologies currently being studied such as biogasification, storage through hydrogen, hybrid systems
- Expand technology to synthetic natural gas
- Learn from models such as the University of MN, Morris and University of Davis, CA

## 7. Collaboration and connection to resources

- Better working relationships between state and counties in planning and supporting projects
- Need better collaboration between local government, utilities, regional organizations, and education
- More sharing of best practices and connections to resources



# West Central – Areas of Interest

(In order of prevalence as indicated in analyzed data. Alike numbers indicate a tie in prevalence)

## 7. Conservation and Efficiency

- More focus on conservation...it is our most cost effective energy resource
- More awareness of Minnesota's energy savings goals
- Connection to local utilities for promoting conservation and efficiency strategies
- Need to manage our energy verses focus on producing energy

## 8. Environment

- Connection of renewables to greenhouse gas emission goals
- Help people understand the green benefits of renewables, conservation, and recycling

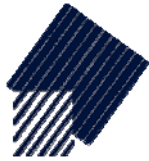
(Note: This category was not formally addressed yet appeared in analyzed data of all five zones.)



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# Resources/Further Information

- View presentations/info from LEI meetings
  - [www.cleanenergyresourceteams.org](http://www.cleanenergyresourceteams.org)
- Further feedback
  - [leifedback@swifoundation.org](mailto:leifedback@swifoundation.org)
- Other resources and web sites of partnering organizations
  - [www.cleanenergyresourceteams.org](http://www.cleanenergyresourceteams.org)
  - Click on “follow up page”, scroll down to “Resources”



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# Partnering Organizations



MINNESOTA  
DEPARTMENT OF  
COMMERCE



SOUTHWEST INITIATIVE  
FOUNDATION  
*A Rural Minnesota Community Foundation*



North American  
Water Office



*the*  
MINNESOTA  
PROJECT

working for strong local economies,  
vibrant communities, and a healthy environment



SOUTHERN MINNESOTA  
Initiative  
Foundation

**C-BED Community-Based Energy Development**



UNIVERSITY OF MINNESOTA  
REGIONAL  
SUSTAINABLE DEVELOPMENT  
PARTNERSHIPS

UNIVERSITY OF MINNESOTA  
**West Central**  
Research and Outreach Center



Center for Energy and Environment

WINDUSTRY™