Greater MN CERTS Meeting Feedback for 2025 Energy Planning Project

High Level Takeaways from Greater MN CERTs Meetings

Mobility and Transportation

- Use of technology, Uber like app, for ride sharing.
    - Could focus on larger employers (state agencies)
    - Mentioned at all three meetings (data mobile transit app)
- Transit
    - Drop the use of mass before transit
    - Describe as coordinated or just use public or transit
    - Transit plus movement of goods. Transit doesn't just mean moving people.
    - Need to include low income, elderly, veterans – make sure it is inclusive
- Telecommuting
    - Targeted at larger employers or state agencies.
    - Facilitate increased use of telecommuting (coordinate schedules)
- Electrification strategies
    - Benefit for tourism – to appeal to cabin crowd or people traveling from metro to greater MN
    - Fleet electrification for moving goods

Energy Supply and Grid Modernization

- Focused on supply side opportunities instead of grid modernization. Building up supply side more of an opportunity – emphasize distributed generation.
- Major difference between IOUs and Coops. Don't have a good solution set of DG in coop territory
- Emphasis on assets – land to develop solar, access to biomass. Should be developed here instead of anywhere else.
- Improving utility green power options and evolving tariffs/pricing mechanisms, rules and contracts are very similar. Should be combined if not already.
- For business model discussions, make sure to include treatment of cooperatives. Also applies to power purchase contracts.
    - Toolkit for cities and DG customers to have information on what to consider when updating PPA or franchise agreement.
- Need better education from non-utility resources. Utility cannot be the only source for education on these issues.
- Utility service territories butt up against one another. An IOU will be on side of the street and then a coop or a muni on the other. Not as neatly separated as the metro.

Energy Efficient Buildings and Thermal Energy

- Scaling up EE in existing buildings was important in all three meetings
    - Old building stock in greater MN that should be targeted

    - Low property rental values
    - Jobs and economic development opportunities – new construction market is depressed
- If you have no NG utility, there is not opportunity for thermal efficiency (no CIP).
    - Targeted thermal incentives for delivered fuels
- Code adoption is important
- Higher cost of energy and more low income citizens
- Pilot behavioral strategies (Mankato and Grand Rapids)
- Solar thermal/ground source heat pumps are important for delivered fuel customers
- Incentives should be simplified and available regional wide
- More need to address low income populations – across several strategies

Industry and agriculture

- On-farm use of renewable fuels, specifically biodiesel
- CHP
    - Market opportunity studies/inventories on a regional basis
    - Case studies of successful projects that correspond with assets that exist in the various regions (e.g. successful CHP at biofuel plant)
- Lots of organic matter in Greater MN is a resource
    - Anaerobic digestion
    - Mapping of available resources for anaerobic digestion
- Industrial efficiency
    - Different solution sets for different industries
    - Perception that we've gotten a lot of the opportunity in industry already. Is that true? Is it true across industries?
    - Assessing energy opportunities in industrial sector needs tailored sector-by-sector approach
        - Incorporate: efficiency, DG, CHP, waste product utilization

Energy and Climate Planning and Action

- Reforming utility model did come up, but the frustration is with coops.
    - What will E21 do for the distribution level?
    - Power purchase contracts limit utilities flexibility to buy renewable power and DG; business want more options.
    - Coops and munis are not subject to PUC regulation. People want to see more RE, but feel constrained.
- Regional development commissions as a resource (Region 5 Resilient Region plan)
    - RDC could be a resource for local planning, businesses and citizens
- Tribal governments should be included in the various strategies discussion
- Region has low population and gets little attention and resources
- State level doesn't respect and protect resources here.

Dot Voting on Technologies and Strategies

Mankato

Mobility, Transportation and Fuels

Technology/Strategy	**Round 1**
Electrification of mass transit	
Fleet electrification or low-emission alternative fuel vehicles (city, state, corporate fleets)	
Increase adoption of electric vehicles/alternative fuel vehicles	
Modernizing parking infrastructure to reduce vehicle miles traveled (VMT)	
Regionally coordinated **(rural)** ~~mass~~ transit **– buses to dial a public transit**	2 dots
Open transportation data and mobile transit app development **(added)**	3 dots
Alternative transportation strategies such as carpooling and vanpooling **(added)**	1 dot

Energy Supply and Grid Modernization

Technology/Strategy	**Round 1**	**Round 2**
Encourage evolution of integrated/smart grid		2 dots
Expand/improve utility green power options	2 dots	
Address metering infrastructure and smart inverters		
Expand distributed generation **(solar)** and management of grid resources	1 dot	4 dots
Evolving tariffs/pricing mechanisms	1 dot	3 dots
Distributed solar (**added:2)**		1 dot
Deploy energy storage (battery, hot water, pumped hydro, etc.) **(added:2)**		1 dot

Efficient Buildings and Thermal Energy

Technology/Strategy	**Round 1**	**Round 2**
Scale energy efficiency in existing buildings	2 dots	1 dot
Pilot behavioral strategies	2 dots	
Support distributed generation and Combined Heat & Power (CHP)	1 dot	
Analysis of current programs that are working well or to improve (persistence in savings)	1 dot	
Zero energy or low-energy goals for new buildings (projections needed)		

Advanced grid and thermal grids		1 dot
Increase building energy efficiency standards **(added:1)**	1 dot	
Deploy solar thermal technology **(added:1)**	1 dot	
Increase building energy efficiency standards **(added:2)**		1 dot
Deploy ground source heat **(added:2)**		1 dot

Industry and Agriculture

Technology/Strategy	**Round 1**	**Round 2**
Deploy **(evaluate)** CHP		
Commercialize advanced biofuels and biobased chemicals	2 dots	3 dots
Capture organic feedstocks through anaerobic digestion	3 dots	3 dots
Promote industrial **and agricultural** efficiency practices	2 dots	
Increase use of biomass for thermal energy **(added:1)**	1 dot	
Promote advanced manufacturing for efficiency improvements **(added:1)**		
Ag industry as energy self-sufficient		2 dots

Energy and Climate Planning and Action

Technology/Strategy	**Round 1**	**Round 2**
Reform the utility regulatory model	1 dot	4 dots
Start advanced energy cluster organization	3 dots	1 dot
Local government sustainability and climate action planning	2 dots	
Regular state level planning to support/encourage local action	2 dots	2 dots

Staples

Mobility Transportation and Fuels

Technology/Strategy	**Round 1**	**Round 2**
Electrification of mass transit **(+goods)**	2 dots	
Fleet electrification or low-emission alternative fuel vehicles (city, state, corporate fleets)		3 dots
Increase adoption of electric vehicles/alternative fuel vehicles	2 dots	2 dots
Modernizing parking infrastructure to reduce vehicle miles traveled (VMT)		

Regionally coordinated mass transit	2 dots	1 dot
Increased availability of higher biofuel blends to consumers **(added:1)**	1 dot	
Increased production of advanced and cellulosic biofuels **(added:1)**	1 dot	
Open transportation data and mobile transit app development **(added: 2)**		

Energy Supply and Grid Modernization

Technology/Strategy	**Round 1**	**Round 2**
Encourage evolution of integrated/smart grid		1 dot
~~Expand/improve utility green power options~~ **Increase customer choice and access to own or to buy (reworded for group 1)**	2 dots	
Address metering infrastructure and smart inverters		
Expand distributed generation and management of grid resources/**Extend CIP to delivered fuel providers (reworded for group 1)**	4 dots	2 dots
Evolving tariffs/pricing mechanisms	1 dot	
Deploy energy storage (battery, hot water, pumped hydro, etc.) **(added:1)**	2 dots	
Distributed solar **(added:2)**		2 dots
Deploy microgrids **(added:2)**		2 dots

Efficient Buildings and Thermal Energy

Technology/Strategy	**Round 1**	**Round 2**
Scale energy efficiency in existing buildings	4 dots	5 dots
Pilot behavioral strategies	3 dots	3 dots
Support distributed generation and Combined Heat & Power (CHP)		1 dot
Analysis of current programs that are working well or to improve (persistence in savings)		
Zero energy or low-energy goals for new buildings (projections needed)	2 dots	6 dots
Advanced grid and thermal grids		1 dot
Deploy solar thermal technology **(added:1)**	1 dot	
Deploy ground source heat **(added:1)**		
Promote tracking and reporting of building energy use **(added:1)**		

Industry and Agriculture

Technology/Strategy	**Round 1**
Deploy CHP	4 dots

Commercialize advanced biofuels and biobased chemicals	4 dots
Capture organic feedstocks through anaerobic digestion	3 dots
Promote industrial efficiency practices	1 dot

Energy and Climate Planning and Action

Technology/Strategy	**Round 1**	**Round 2**
Reform the utility regulatory model	5 dots	4 dots
Start advanced energy cluster organization		3 dots
Local government sustainability and climate action planning	2 dots	7 dots
Regular state level planning to support/encourage local action	5 dots	4 dots
Corporate commitments on climate and energy **(added:2)`**		

Grand Rapids

Mobility Transportation and Fuels

Technology/Strategy	**Round 1**
Electrification of mass transit	
Fleet electrification or low-emission alternative fuel vehicles (city, state, corporate fleets)	
Increase adoption of electric vehicles/alternative fuel vehicles	
Modernizing parking infrastructure to reduce vehicle miles traveled (VMT)	
Regionally coordinated mass transit	2 dots
Bike commuting strategies such as enhanced infrastructure, safety measures, parking, incentives **(added)**	3 dots
Increased production of advanced and cellulosic biofuels **(added)**	2 dots
Support/ Incentives for telecommuting programs **(added)**	3 dots
Alternative transportation strategies such as carpooling and vanpooling **(added)**	2 dots
Car/bike/ride share programs **(added)**	
Increased adoption of propane vehicles **(added)**	2 dots

Energy Supply and Grid Modernization

Technology/Strategy	**Round 1**	**Round 2**
Encourage evolution of integrated/smart grid	3 dots	1 dot
Expand/improve utility green power options	2 dots	1 dot
Address metering infrastructure and smart inverters	1 dot	
Expand distributed generation and management of grid resources	1 dot	
Evolving tariffs/pricing mechanisms	1 dot	
Modernize existing infrastructure (added:1)	4 dots	
Integration of energy sectors (added:1)		
Deploy energy storage (battery, hot water, pumped hydro, etc.) **(added:2)**		2 dots
Seat at the table for PUC decisions		2 dots

Efficient Buildings and Thermal Energy

Technology/Strategy	**Round 1**	**Round 2**
Scale energy efficiency in existing buildings	6 dots	
Pilot behavioral strategies	2 dots	3 dots
Support distributed generation and Combined Heat & Power (CHP)	2 dots	1 dot
Analysis of current programs that are working well or to improve (persistence in savings)		2 dots
Zero energy or low-energy goals for new buildings (projections needed)		2 dots
Advanced grid and thermal grids		
Promote tracking and reporting of building energy use **(added:1,2)**	2 dots	2 dots
Deploy biomass thermal energy **(added:1)**	2 dots	
Energy storage (added:1)	4 dots	
Green infrastructure (trees, shrubs) (added:1)		2 dots
Increase building energy efficiency standards **(added:1)**		1 dot

Industry and Agriculture

Technology/Strategy	**Round 2**
Deploy CHP	
Commercialize advanced biofuels and biobased chemicals	3 dots
Capture organic feedstocks through anaerobic digestion	

Promote industrial efficiency practices	3 dots
Biomass for thermal energy **(added:2)**	2 dots

Energy and Climate Planning and Action

Technology/Strategy	**Round 1**	**Round 2**
Reform the utility regulatory model	4 dots	8 dots
Start advanced energy cluster organization	1 dot	3 dots
Local government sustainability and climate action planning	5 dots	5 dots
Regular state level planning to support/encourage local action	2 dots	