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THE GEORGE WASHINGTON UNIVERSITY
LAW SCHOOL

Changing Utility Business and Regulatory Models

To Support An Environmentally and Financially Sustainable Electric System

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May 2015

Source: NREL Photo Gallery – SunPower Corp., Siemens Press Picture; Warren Gretz/NREL, Federal Energy Mgmt Program – and A123 Energy Storage Systems.

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Minnesota’s e21 Initiative

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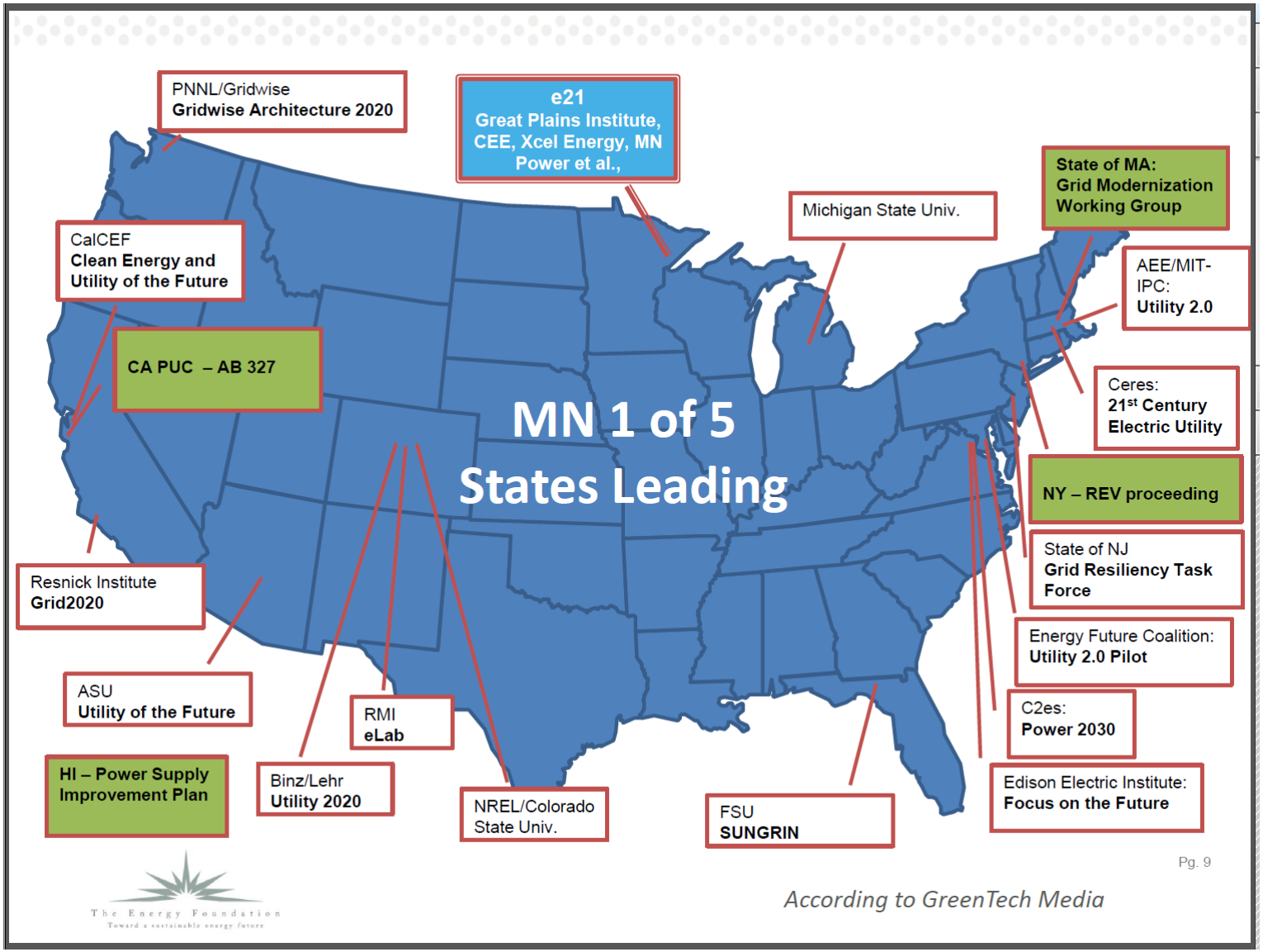
Wide Interest



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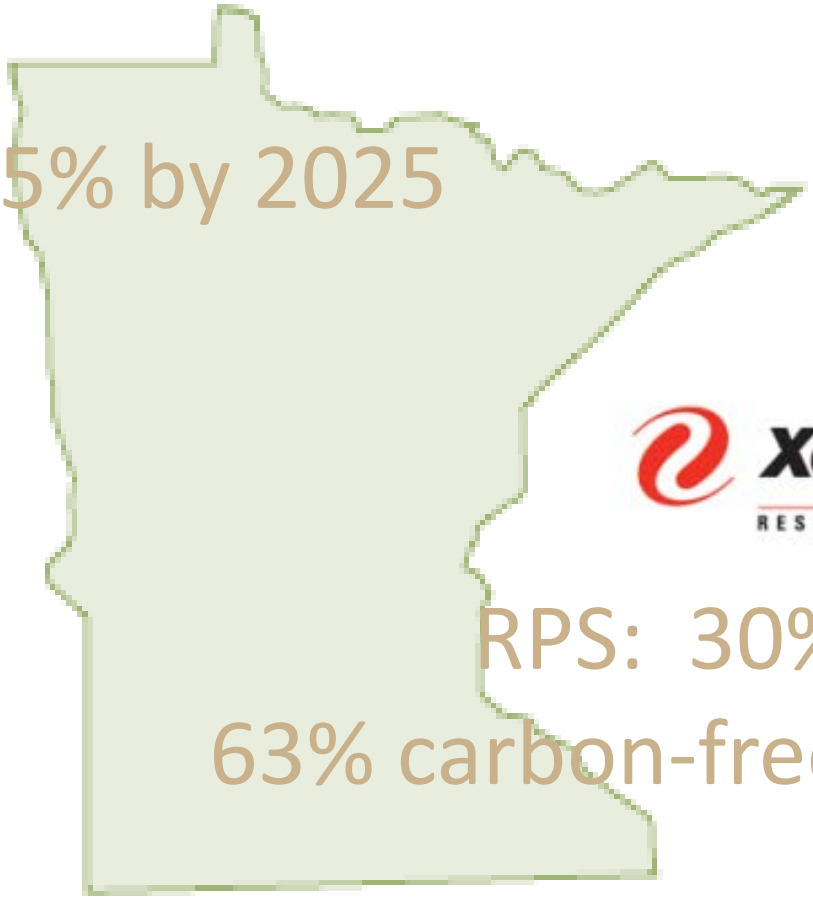
Why?

RPS: 25% by 2025



Xcel Energy®
RESPONSIBLE BY NATURE®

RPS: 30% by 2025

63% carbon-free by 2030

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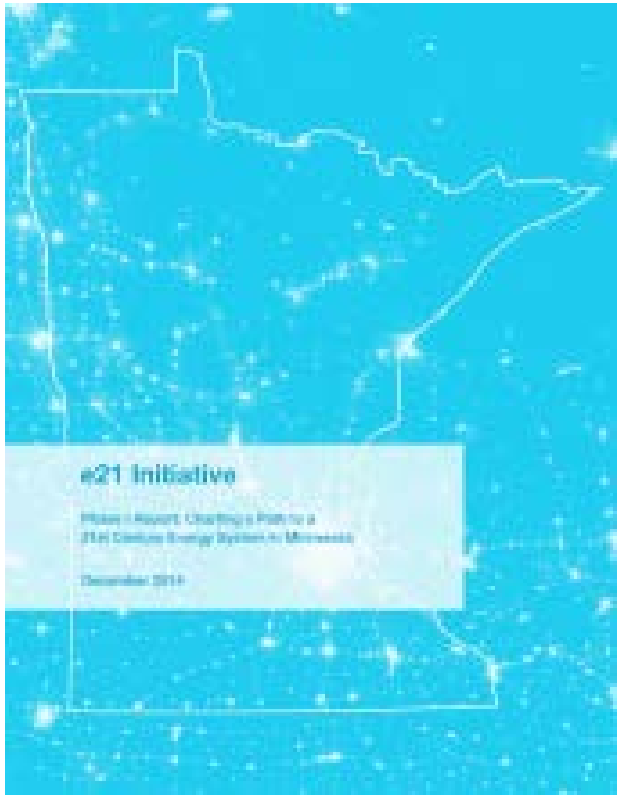
e21 Initiative



- Launched in February 2014
- Phase I report issued December 2014
- Report filed with Minnesota Public Utility Commission December 2014

Available at: http://www.betterenergy.org/e21-Phase1-Report

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Collaboration

Xcel Energy® RESPONSIBLE BY NATURE®

GREAT PLAINS INSTITUTE
Better Energy. Better World.

cee
Center for Energy and Environment

Core Team

minnesota power
AN ALLETE COMPANY

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Law in Action in the Nation's Capital

ENERGY SYSTEMS CONSULTING SERVICES, LLC

Broad Participation

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Principles

1. Align an economically viable utility model with state and federal public policy goals.
2. Provide universal access to electricity services, including affordable services to low-income customers.
3. Provide for just, reasonable, and competitive rates.
4. Enable delivery of services and options that customers value.
5. Recognize and fairly value grid services and DER services.

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Principles

6. Assure system reliability, and enhance resilience and security, while addressing customer privacy concerns.
7. Foster investment that optimizes economic and operational efficiency of the system as a whole.
8. Reduce regulatory administration costs and resources (e.g., result in fewer rate cases or otherwise reduce the burden of the regulatory process).
9. Facilitate innovation and implementation of new technologies.

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e21Issue Areas

- Utility Business Model
- Customer Access, Options & Engagement
- Public Policy (regulatory framework)
- Cost Allocation & Recognition of Value
- System Reliability, Resilience & Security
- Customer Costs
- Innovation

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Recommendations

- Consensus recommendations in four areas:
  - Performance-based ratemaking
  - Customer options and rate design reforms / utility roles
  - Planning reforms
  - Regulatory process reforms

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Next Steps

- "Framework" filed with the Minnesota Commission
- Phase II: continue work to flesh out the recommendations
- Reach out, communicate and learn

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Lessons Learned

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What Do We Want?

e21 Principles	Maryland Consumers	New York REV
Assure system reliability, and enhance resiliency and security, …	Reliability Safety	System Reliability and Resiliency Fuel and resource diversity
Provide universal access to electricity services, … affordable services to low-income customers. Provide for just, reasonable and competitive rates. Reduce regulatory administrative costs where possible ….	Affordability Accessibility	Enhanced customer knowledge and tools that will support effective management of the total energy bill
Align an economically viable utility model with state and federal public policy goals. Foster investment that optimizes economic and operational efficiency of the system as a whole.	Environmental Responsiveness	Reduction of carbon emissions System wide efficiency
		Enhanced customer knowledge and tools that will support effective management of the total energy bill
Facilitate innovation and implementation of new technologies.		Market animation and leverage of customer contributions
Provide for just, reasonable and competitive rates. Recognize and fairly value grid services and "distributed energy resource" services.	Equity	
Enable delivery of services and options that customers value.	Consumer options and control	Market animation and leverage of customer contributions
Assure system reliability … while addressing customer privacy concerns.	Accountability	
Align an economically viable utility model with state and federal public policy goals.		

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Common Goals

- Reliability, resiliency, security, safety
- Minimum environmental footprint
- More customer options; ability to integrate new technologies (DG, microgrids, battery storage)
- Fair value for services provided by customers (e.g., rooftop solar generation); rate equity
- Affordable, universal service
- Financially stable utilities; financeability
- Accountability and data privacy
- Streamlined regulatory process, transparency

Holistic - Collaborative

- Same tools can solve multiple problems
  - DER for grid hardening, customer options
  - Resource planning for economic efficiency, grid security and environmental goals
- Trade offs are more apparent
  - Impact of fixed charges on energy efficiency
  - Customer options vs. data privacy and cyber security
- Everyone has skin in the game

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Challenges Ahead

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Challenges Ahead

- Reaching consensus on grid architecture and standards
- Determining business models
  - Rate recovery mechanisms and metrics
  - Competition vs franchise
- Maintaining investor confidence as rate structures and utility roles change
- Rate of technological change uncertain
- Maintaining affordability, accessibility and consumer equity

Legal Challenges Ahead

- Consumer welfare structures
- PUC authority to innovate
- Inter-agency coordination: authority and boundaries
- Better coordination of legislative and administrative actions
- Planning processes

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Your questions?