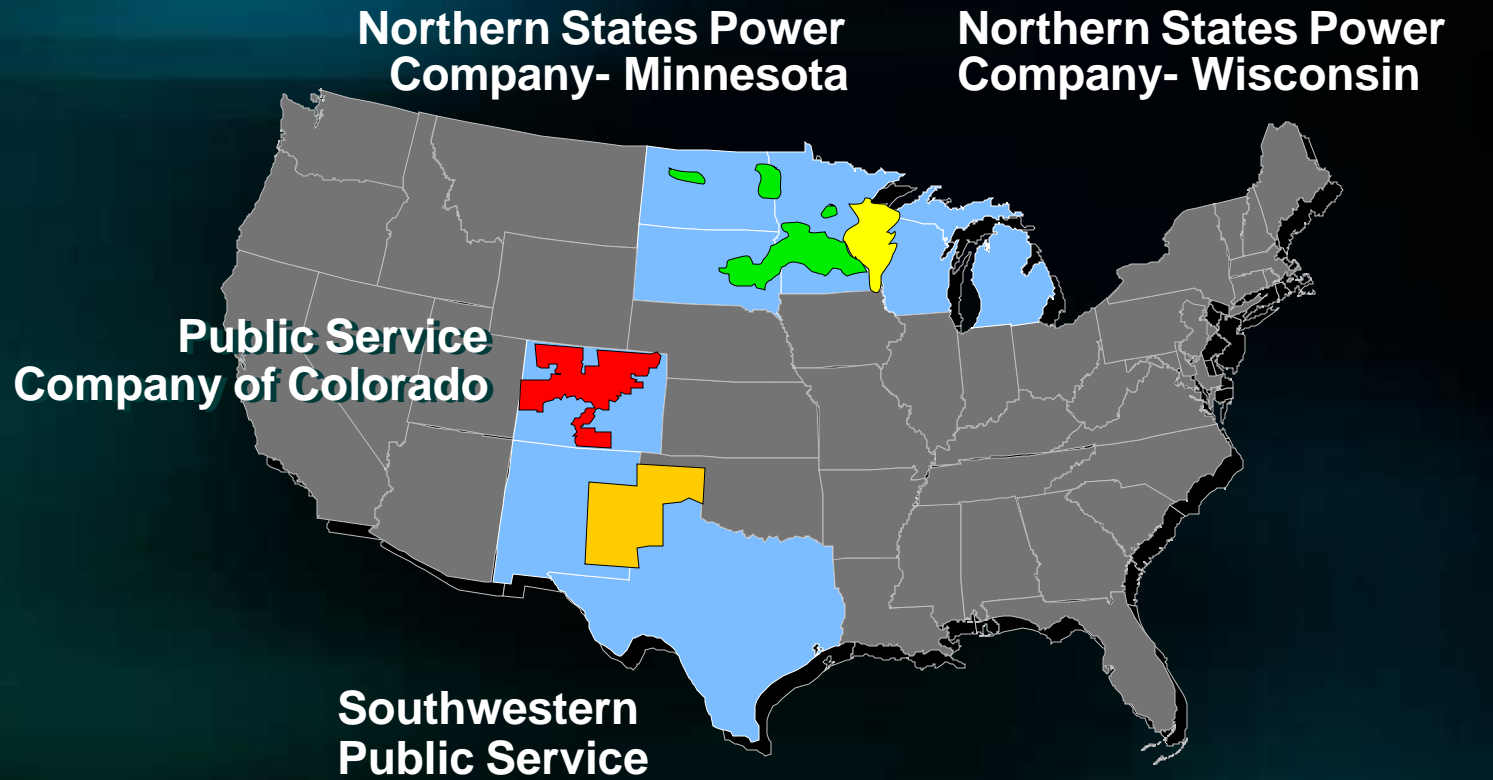




Xcel Energy's Renewable Energy Strategy

Richard C. Kelly
Chairman, President and CEO, Xcel Energy
April 7, 2008

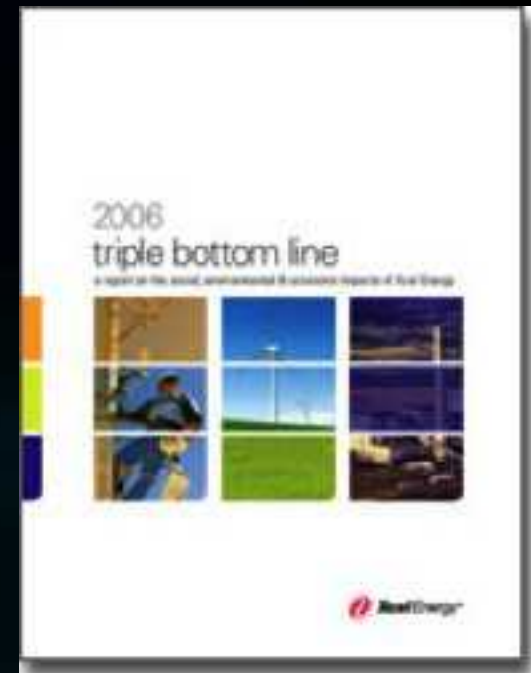
Xcel Energy Overview



Gas Customers	1.8 M
Electric Customers	3.3 M

Xcel Energy's Environmental Leadership

- No. 1 wind energy provider
- Windsource – Largest voluntary green pricing program
- Voluntary carbon management strategy
- New technologies
- Comprehensive CSR reporting
- Member of

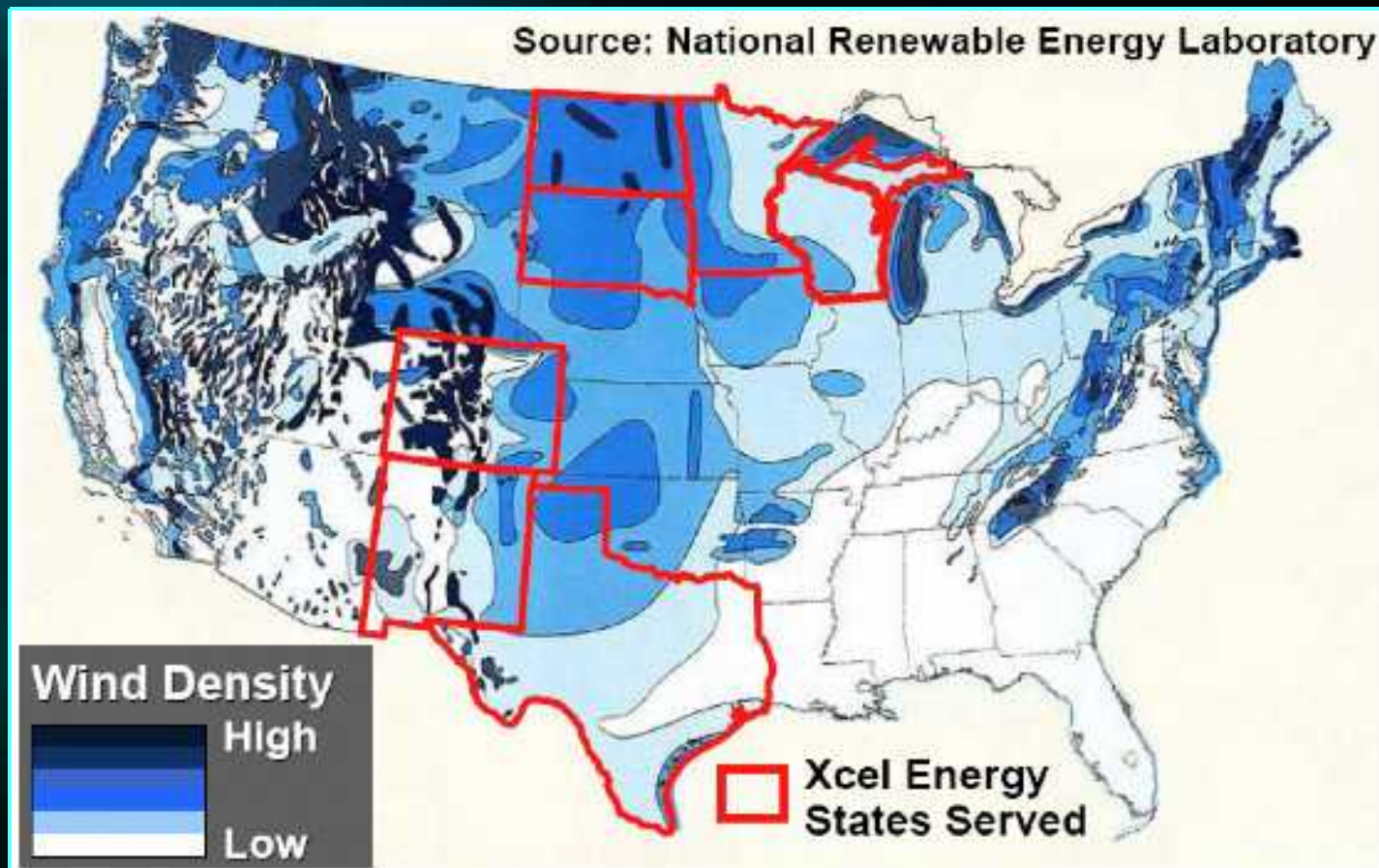


Renewable Energy Benefits

- Meets needs of customers, shareholders, environmental groups, regulators
- Significant component of CO₂ reduction strategy
- Reduces risk for future climate change regulation
- Takes advantage of our geography



Our Geographic Advantage: Wind Density



Renewable Energy Standard Legislation

<u>State</u>	<u>Renewable Portfolio Standard</u>
Minnesota	30% by 2020
Colorado*	20% by 2020
Wisconsin	12.9% by 2015
New Mexico*	20% by 2020
Texas	5% by 2015 (capacity)
North Dakota	10% objective by 2015 (voluntary)
South Dakota	10% objective by 2015 (voluntary)



* Colorado – Includes 4% solar carve-out; half is on-site

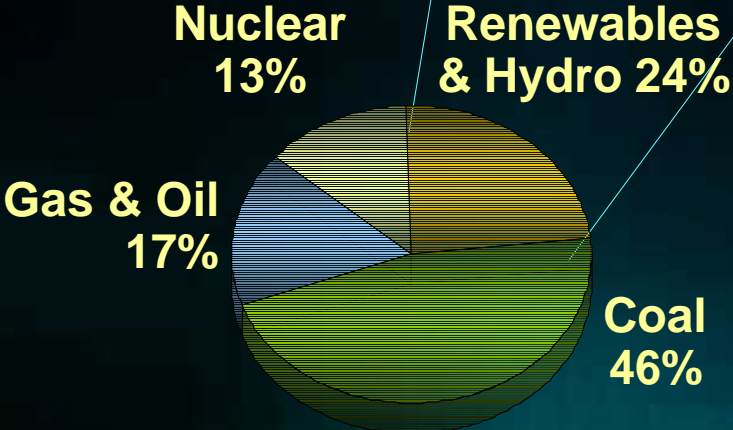
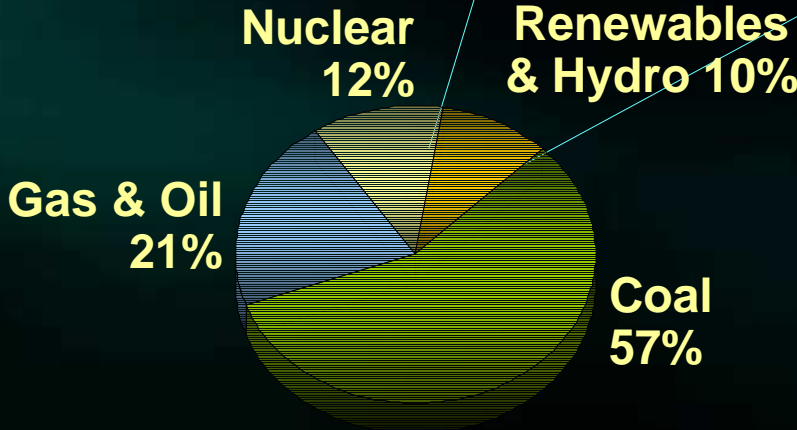
* New Mexico – Includes carve-out (20% solar, 10% biomass, 1.5-3% DG)

Xcel Energy Renewable Energy Resources

MW
Wind
Hydro
Solar
Biomass
RDF
Landfill
Geothermal

<u>2007</u>
2,694
365
17
183
100
15
0

<u>2020</u>
7,400
400
600
250
60
20
20



Recent Initiatives: Minnesota Resource Plan

- **Plan extends 2008 - 2020**
- **Achieves 22% CO₂ reduction by 2020**
- **Least cost strategy**
- **Acquisition plans:**
 - **2600 MW of new wind**
 - **Includes 500 MW of community-based wind**
- **Also includes energy efficiency, hydro power**



Recent Initiatives: Colorado Resource Plan

- Plan extends 2008 - 2015
- Achieves 10% CO₂ reduction by 2017
- Incremental costs are within 2% mandated cap
- Acquisition plans
 - 800 MW wind
 - Over 250 MW solar
- Also includes plant retirements, increased energy efficiency goals



Renewable Energy Challenges

■ Intermittency

— Potential renewable storage solutions:

- CSP with storage
- Wind to hydrogen
- Wind to battery
- Compressed air

■ Resource Acquisition

— Timing of RFP selection, construction timelines, transmission planning



Under construction near
Grenada, Spain
50 MW plus 6 hours storage

Renewable Energy Challenges

- Wind production tax credits
- Solar Investment tax credits
- Ownership



Alamosa Colorado 8.2 MW photovoltaic plant

Renewable Energy and National Climate Policy

Goal: Continue to focus on most cost-effective emissions reductions

- **Renewable energy plays a significant role in a clean energy future**
- **Climate policy should encourage renewable development**
- **Flexibility and credit for renewable leadership are key**

