Minnesota's Next Generation Energy Act of 2007

Sheldon Strom

Center for Energy and Environment

Center for Energy and Environment

- Energy services to over 60,000 single, multifamily and commercial buildings
- Authored over 100 research projects
- Developed greenhouse gas reduction plans for:
  - 1993 – Minneapolis/St. Paul Urban CO2 Project Plan
  - 1995 – Minnesota CO2 Action Plan
  - 2006 – Updated CO2 Plan for St. Paul

Center for Energy and Environment

- Currently managing One-Stop Efficiency Shop for
  - Alliant Energy
  - Xcel Energy
  - Ottertail Power
- Recommissioning of large complex buildings
- Currently working on a Xcel Energy Funded County Governments project
- CEE Financial Resources

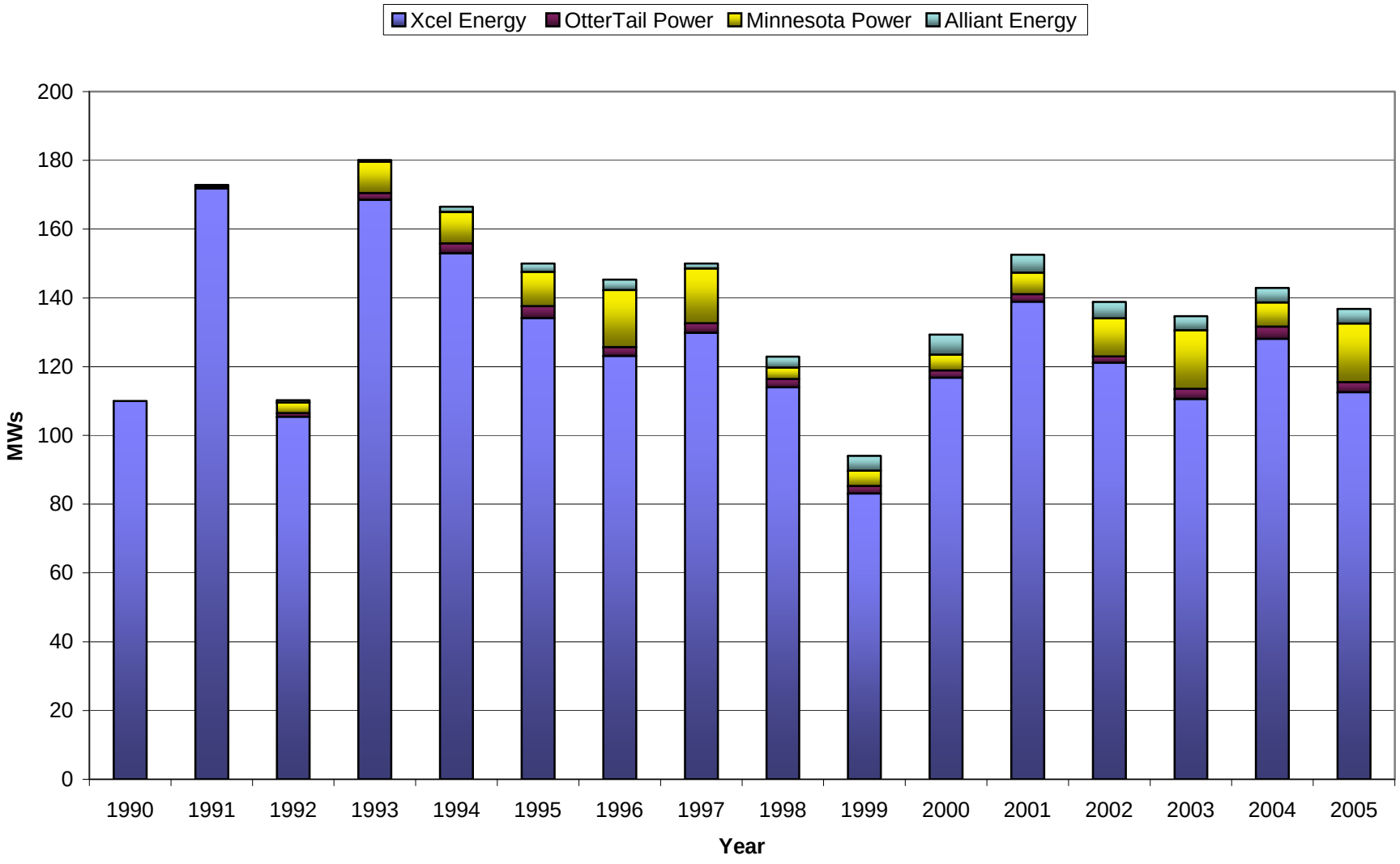
History of Energy Efficiency in Minnesota

- 1980 – legislation passed requiring at least one utility pilot program
- 1989 – regulated utilities required to spend percent of gross revenue on EE programs (natural gas = .5%; electric = 1.5%)
- 1991 – coops and munis must spend .5%
- 1994 – NSP (now Xcel) required to spend 2%, with restrictions on load management

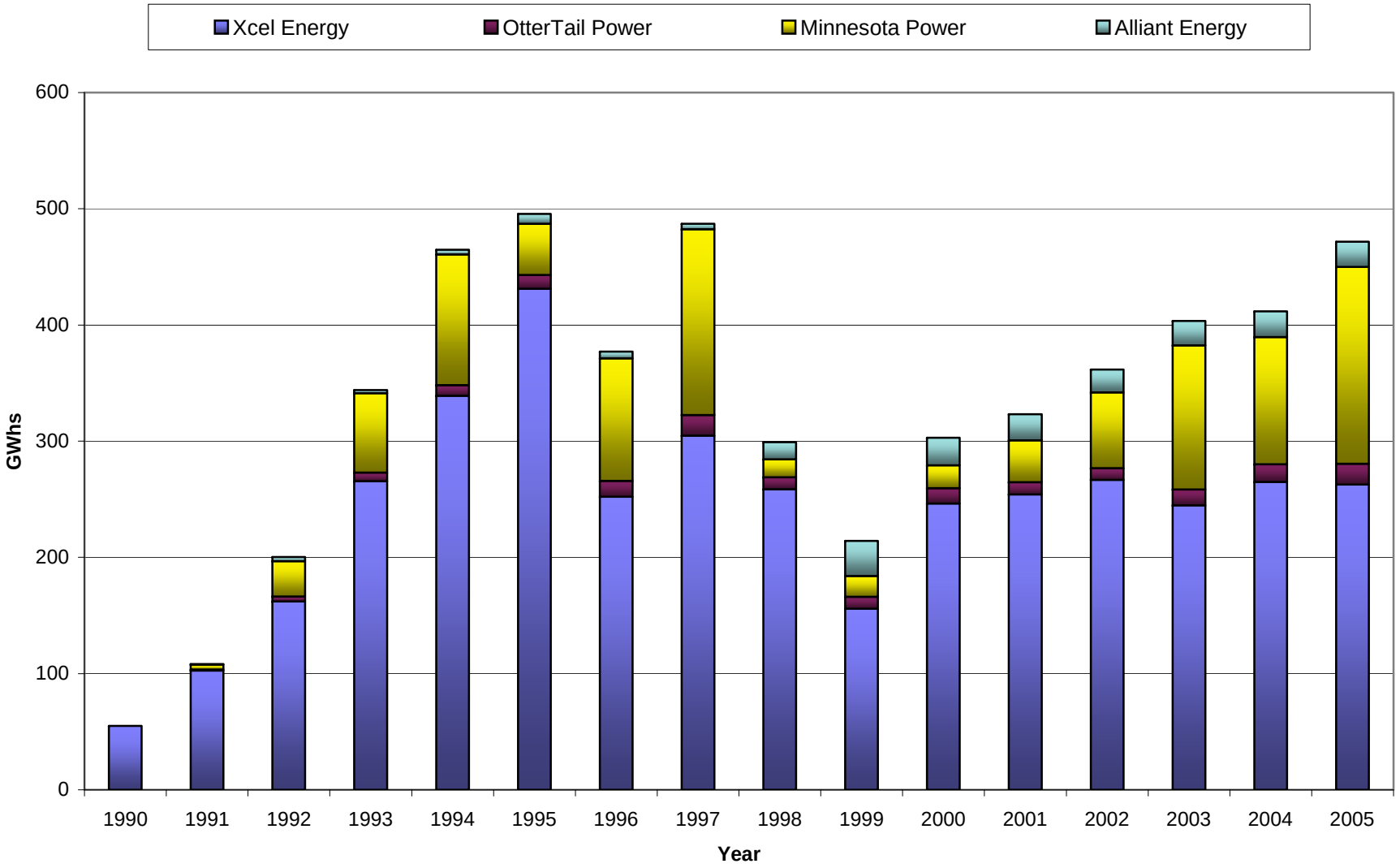
History of Energy Efficiency in Minnesota (cont.)

- 1995 – PUC adopts DSM lost revenue recovery as utility incentive
- 1998 – PUC suspends lost revenue recovery and adopts incentives based on shared savings
- 2001 – Coop/muni required spending moved to 1.5% electric, phased in thru ’05
- 2007- Next Generation Energy Act of 2007

Historic Electric CIP Demand Savings (MWs)



Historic Electric CIP Savings (GWhs)



Next Generation Act

- Energy Savings Goal
- Research Funding
- Financial Incentives
- Decoupling
- New Conservation Program Strategies

Savings Goals

- Utilities to file 3 year plans describing how they will reach 1.5% goal
- Goal may be modified to minimum of 1% if 1.5% goal can’t be met due to:
  - Historical conservation efforts
  - Load growth
  - Customer class make-up
  - Or other factors

Savings Goals (cont.)

- If goals are modified to less than 1.5%, utilities must work to achieve goal by promoting other efforts:
  - Energy codes
  - Appliance standards
  - Market transformation programs
  - Programs that change customer behavior
  - Green buildings, LEED, Energy Star
  - System efficiency improvements

Applied Research

- Directs the Department of Commerce to oversee development of research plans for all utilities, to include:
  - Identifying new technologies and strategies to maximize energy savings
  - Improving effectiveness of conservation programs
  - Documenting carbon dioxide reductions from the programs
  - Utilities assessed for research projects with statewide significance

Financial Incentives

- MN PUC to review current DSM financial incentive plans by 12/08 and modify those plans to facilitate achievement of 1.5%
- Most current plans will need adjustment to reflect much higher savings goals
- New incentive plans may be proposed

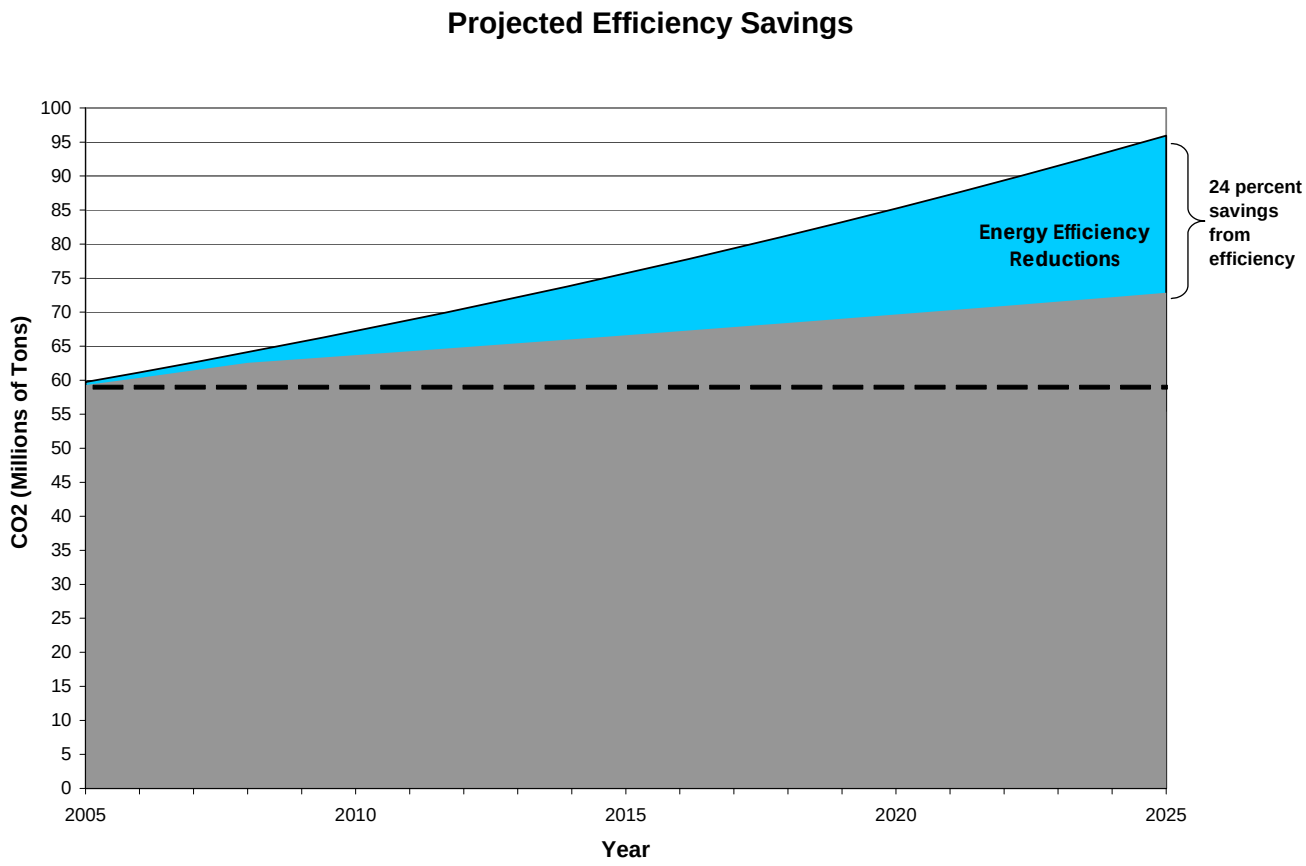
Decoupling

- MN PUC to establish criteria for decoupling pilot projects
- Gas and electric utilities may volunteer to run pilot projects consistent with criteria for up to 3 years
- Pilot projects may be extended beyond 3 years if approved in a general rate case

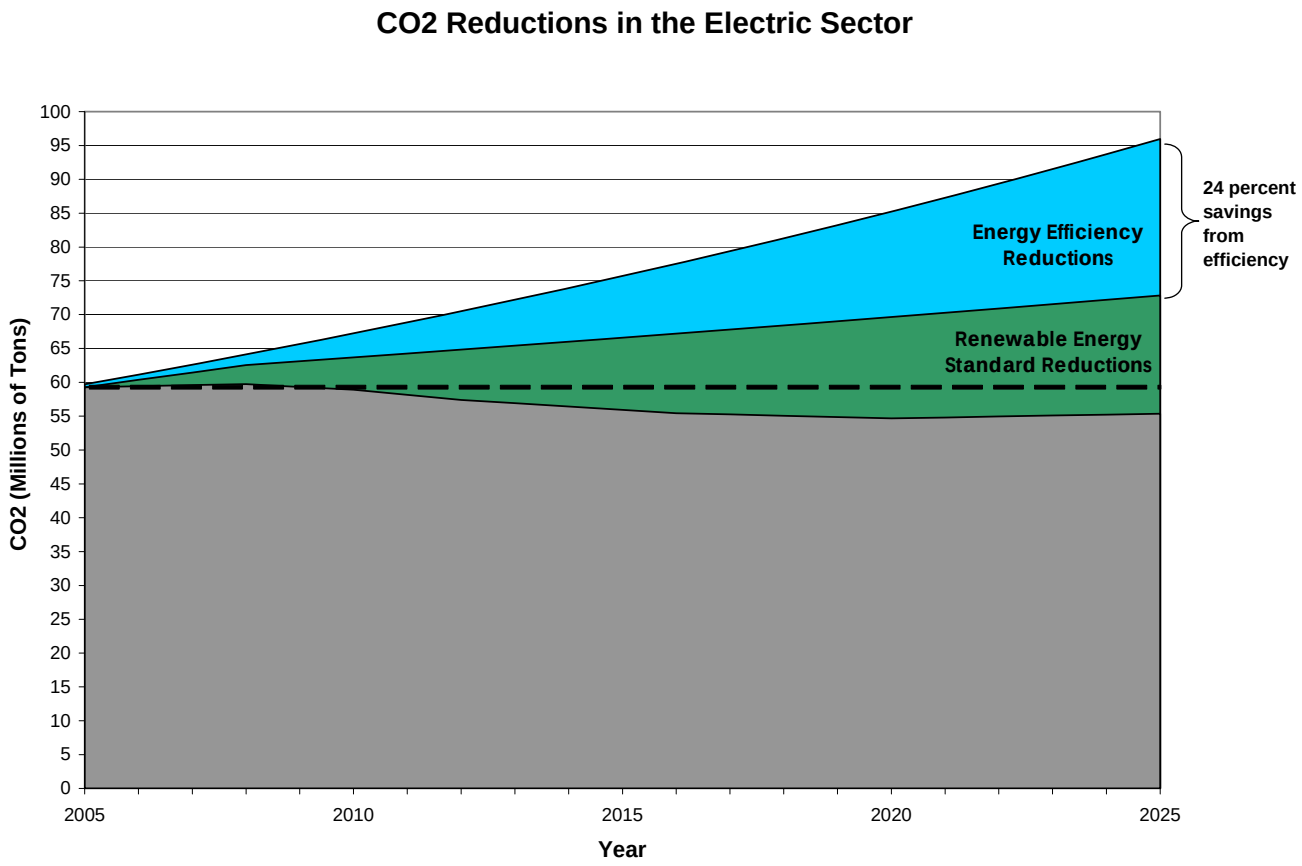
New Conservation Program Strategies

- In addition to traditional rebate programs, new DSM programs should:
  - Address root causes of energy growth, e.g. design assistance, builders programs
  - Address energy systems, not just equipment, e.g., commissioning and recommissioning
  - Offer full service or one-stop-shop programs
  - Work with manufacturers and distributors to improve efficiency
  - Address off-peak efficiency opportunities

Projected Efficiency Savings



Energy and Renewable Savings



Summary

- Paradigm shift from spending requirement to savings goal will be challenging
- Getting financial incentives and decoupling right will be crucial to achieving goals
- New law will also shift emphasis from peak savings to energy savings, leading to much greater CO_2 savings

2008 Legislative Efficiency Options

- Minnesota 2030 – Promoting Exceptional Buildings
- Appliance Efficiency Standards and Public Education
- Efficiency Financing for Government Buildings
- Compact Fluorescent Recycling and Marketing

Thank you

Sheldon Strom
(612) 335-5878
www.mncee.org