

Minnesota's Next Generation Energy Act of 2007

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Center for Energy and Environment



Center for Energy and Environment

- Nonprofit with over 25 years of experience
- Provided energy services to over 60,000 single family, multifamily and commercial buildings
- Completed over 100 energy research projects
- Active in all Minnesota's utility and efficiency legislation since 1980.

History of Energy Efficiency in Minnesota

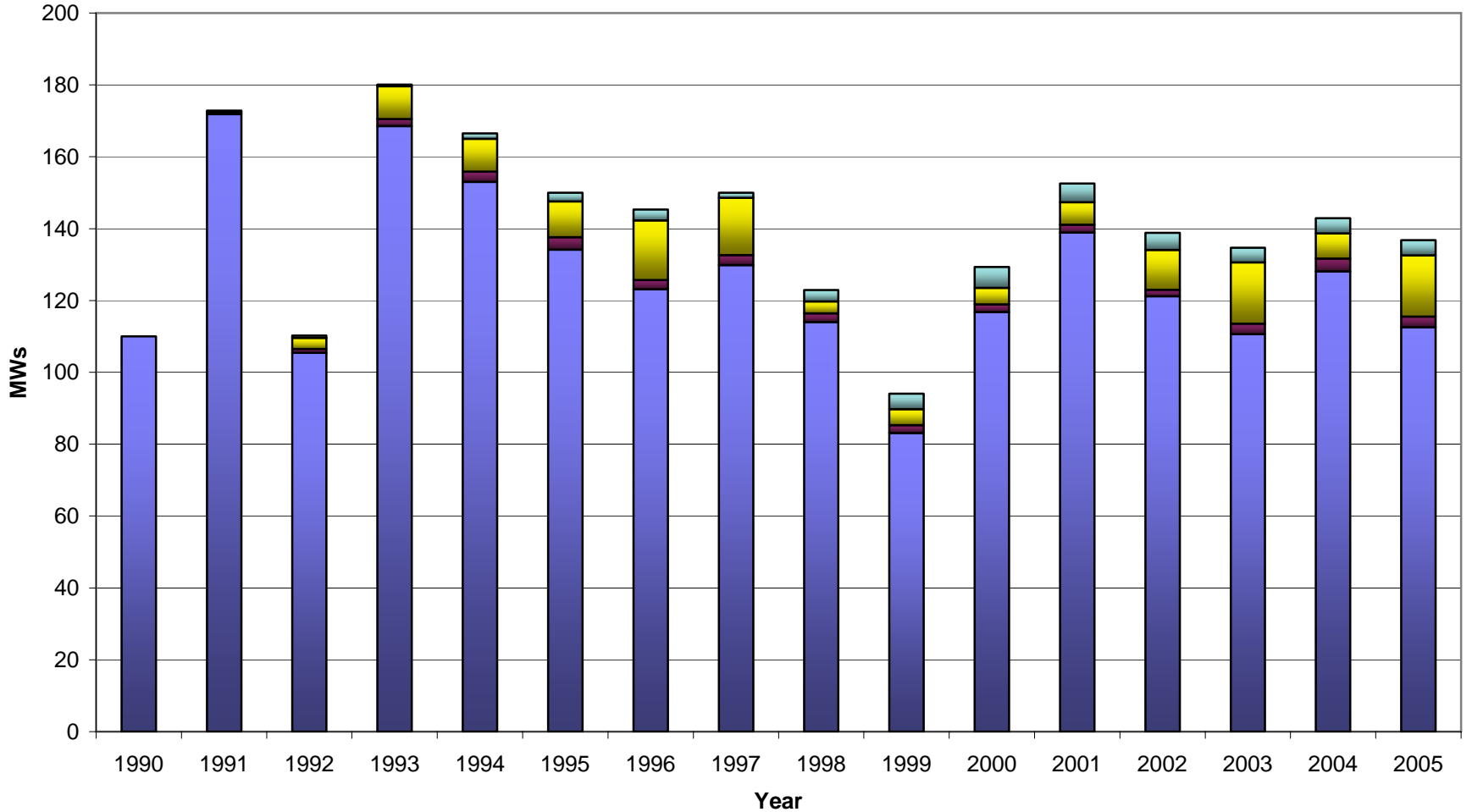
- 1980 – legislation passed requiring at least one utility pilot program
- 1989 – regulated utilities required to spend percent of gross revenue on EE programs (natural gas = .5%; electric = 1.5%)
- 1991 – coops and munis must spend .5%
- 1994 – NSP (now Xcel) required to spend 2%, with restrictions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

History of Energy Efficiency in Minnesota (cont.)

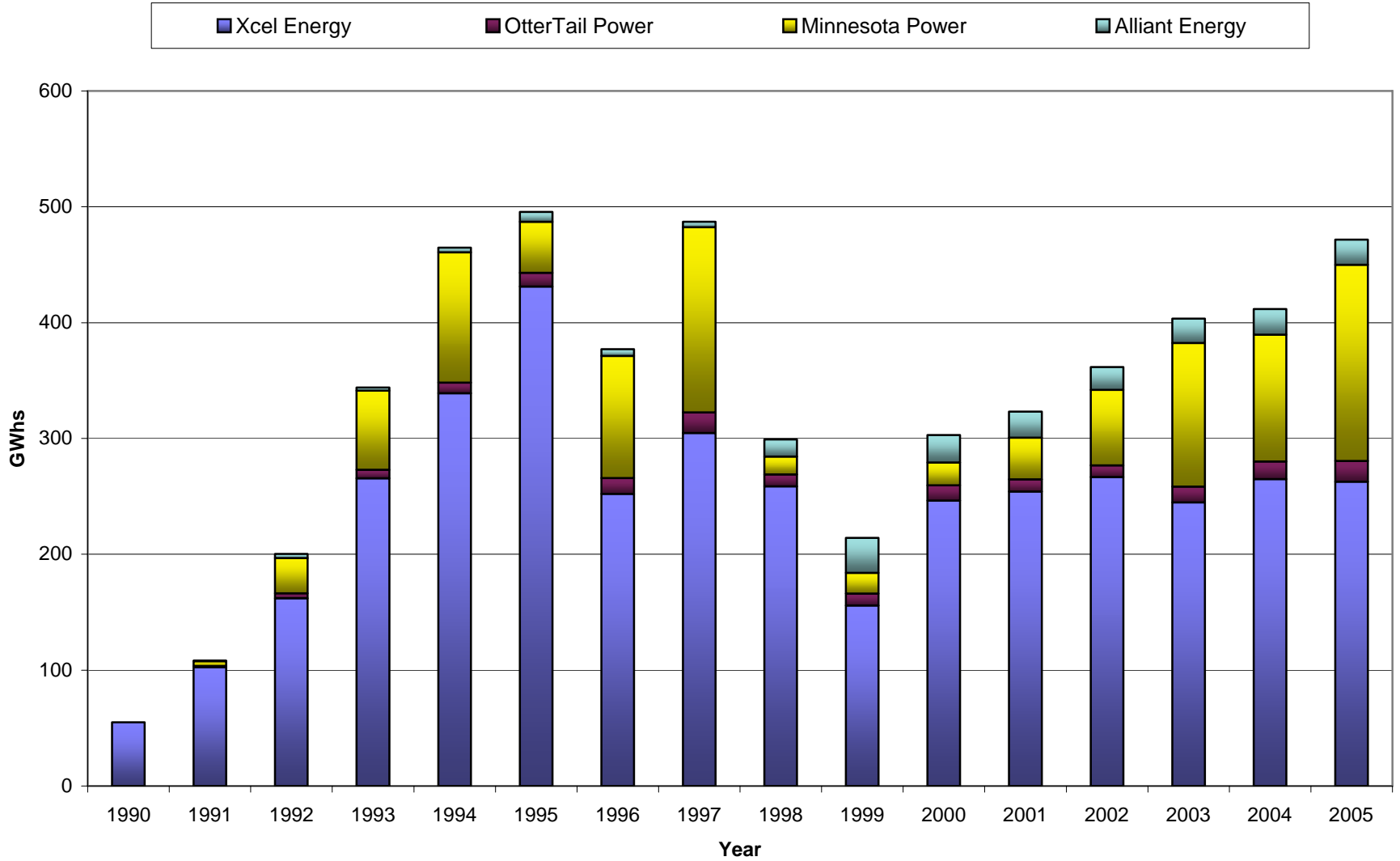
- 1995 – PUC adopts DSM lost revenue recovery as utility incentive
- 1998 – PUC suspends lost revenue recovery and adopts incentives based on shared savings
- 2001 – Coop/muni required spending moved to 1.5% electric, phased in thru '05
- 2007- Next Generation Energy Act of 2007

Historic Electric CIP Demand Savings (MWs)

Xcel Energy OtterTail Power Minnesota Power Alliant Energy



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 Dept. 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

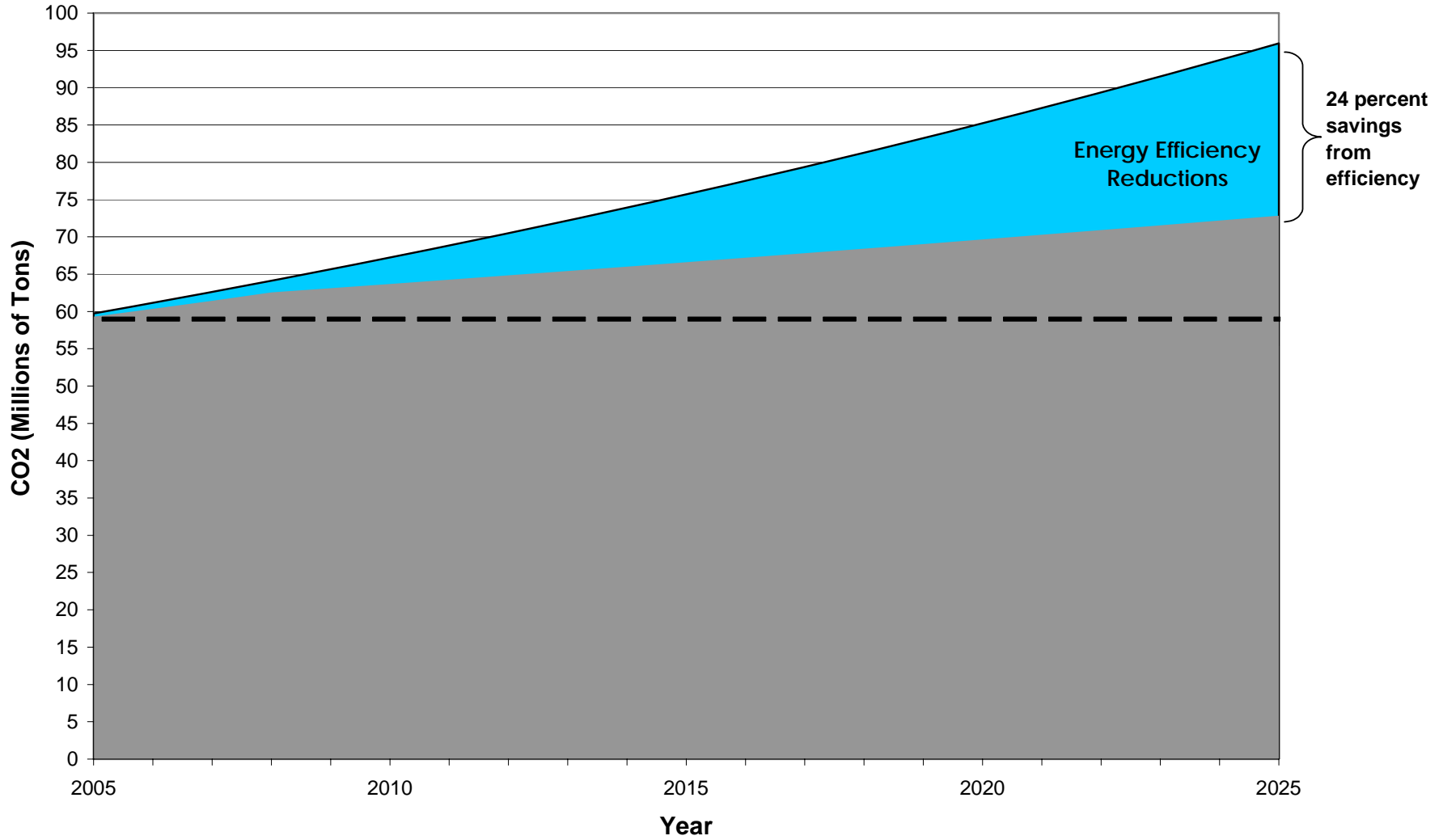
Decoupling

- 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

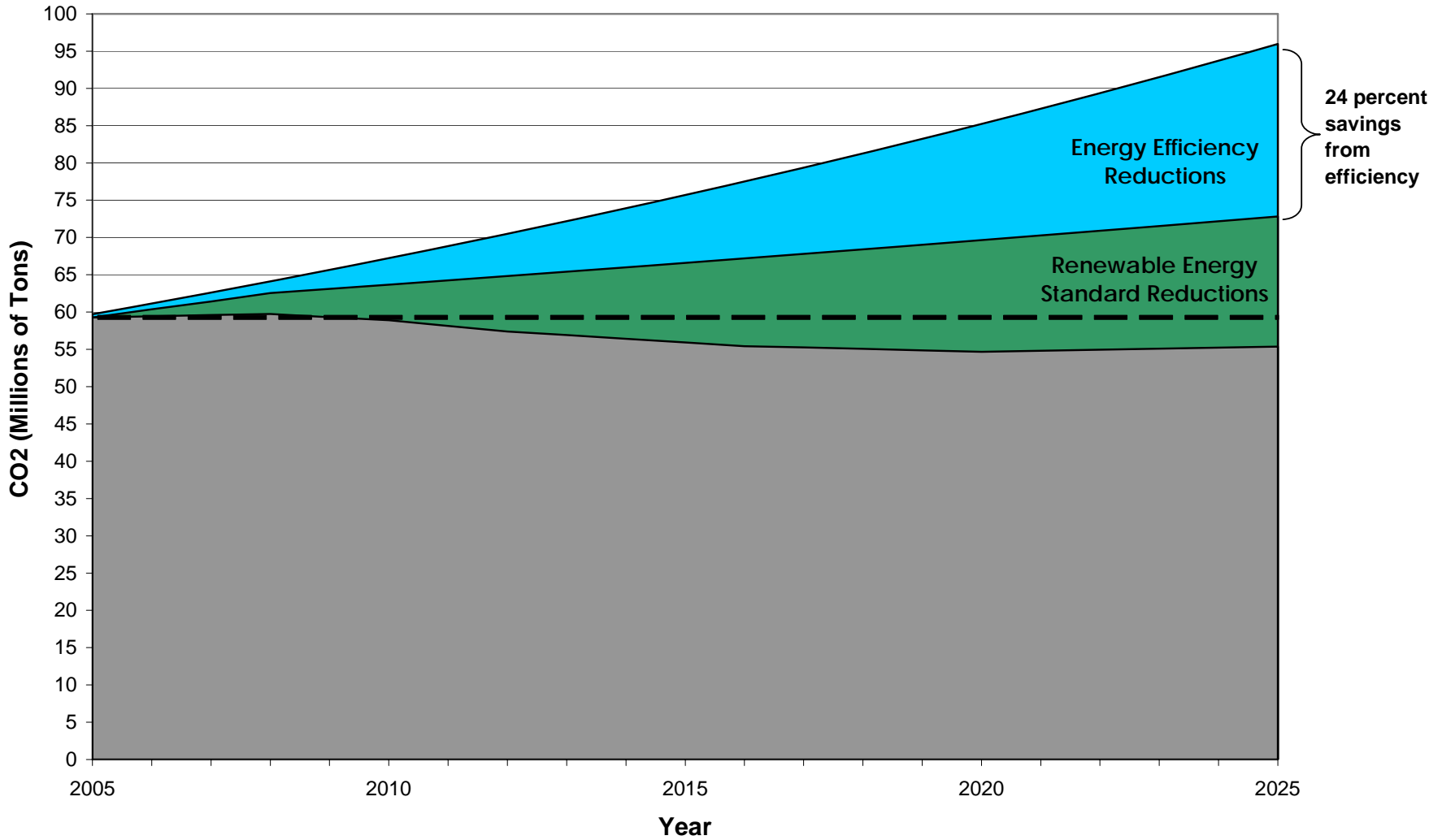
New Conservation Program Strategies

- 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



CO2 Reductions in the Electric Sector



Concluding Thoughts

- 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 CO₂ savings



Thank you

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