

# Energy Efficiency Program Implementation



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**Center for Energy and Environment**

# Center for Energy and Environment



- 501 (c) 3 non-profit with over 30 years of experience
- Over 60,000 homes and businesses served since 1989
- Audited over 13,000 small businesses for Xcel Energy's One-Stop Shop Lighting Efficiency Program
- Recommissioning program for large complex buildings
- Recently selected as provider for Public Buildings Enhanced Energy Efficiency Program (PBEEEP)
- Financed 18,000 home improvement loans resulting in \$130 million worth of home improvements
- Completed over 100 research projects on energy efficiency.

# Energy Efficiency Programs

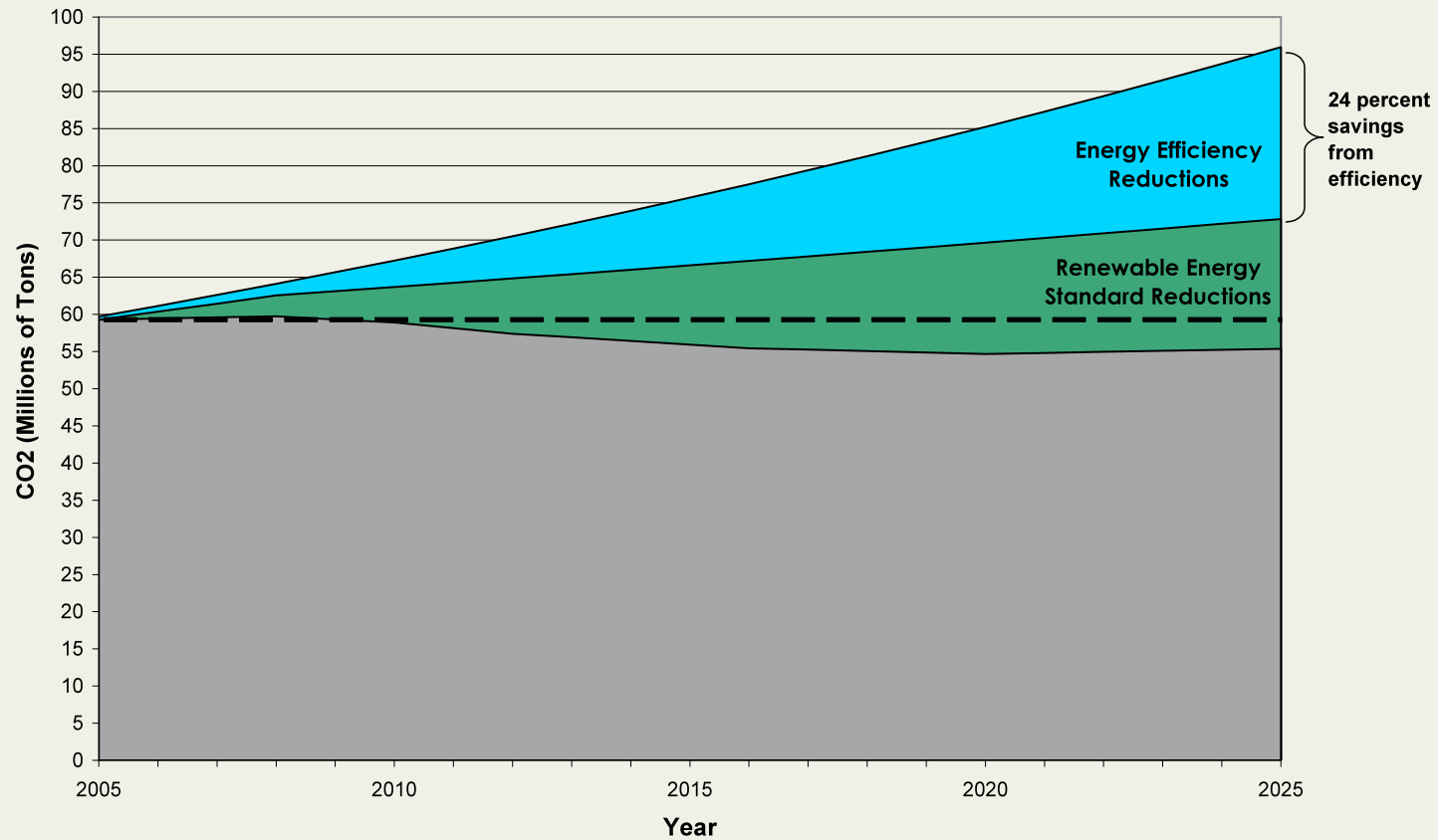


- Why implement energy efficiency?
  - Lowers bills
  - Avoids infrastructure investments
  - Avoids emissions
  - Creates jobs

# Energy Efficiency Can Create Huge Savings



**CO2 Reductions in the Electric Sector**



# Energy Efficiency is a Proven Success



- Utilities in Minnesota and throughout the country have 30 years experience working on utility programs such as:
  - Large commercial lighting
  - Custom rebates for industry
  - Equipment rebates
  - Design assistance

# More Innovative Programs are Being Developed



- One-Stop Small Business Lighting Program
- Recommissioning
- PBEEEP
- Trillion BTU
- One-Stop Community Energy Services - Residential program

# Xcel Energy's One-Stop Small Business Lighting Program



## Program Services & Benefits

- Free, no-obligation audit
- Rebate \$475 per kW saved up to 60% of installation cost
- Below market rate financing
- Monthly loan payments match monthly energy savings

# Xcel Energy's One-Stop Small Business Lighting Program



## Program Statistics

- 13,000 audits
- 3,371 businesses retrofitted
- 39 MW in savings
- 148,600,000 kWh savings
- \$15.5 million in rebates
- Average customer payback of 3 years

# Recommissioning



- A comprehensive review of all of a buildings systems yielding high energy savings at low cost
- Addresses
  - High energy costs
  - Indoor air quality and ventilation issues
  - Persistent operational problems

# Recommissioning



- With an initial investment of \$185,960, Thrivent is currently saving \$190,000 on their annual energy bill, which means the project paid for itself in under a year.



# Public Building Enhanced Energy Efficiency Program



- New full service program for State and Local government buildings
- In addition to direct savings PBEEEP is intended to strengthen the capabilities of engineers and other providers throughout Minnesota

# Public Building Enhanced Energy Efficiency Program



## Process

- Application and Screening
- Investigation and Analysis
- Implementation
- Financing – primarily tax exempt lease purchase
- Measurement & Verification

# Trillion BTU



- A new program designed to complement Xcel Energy's existing programs for industry and other large customers
- Provides additional marketing of Xcel Energy's programs
- Provides additional technical and demonstration assistance to customers
- Most importantly, it provides low cost easy-to-use financing in partnership with the St. Paul Port Authority and other economic development authorities

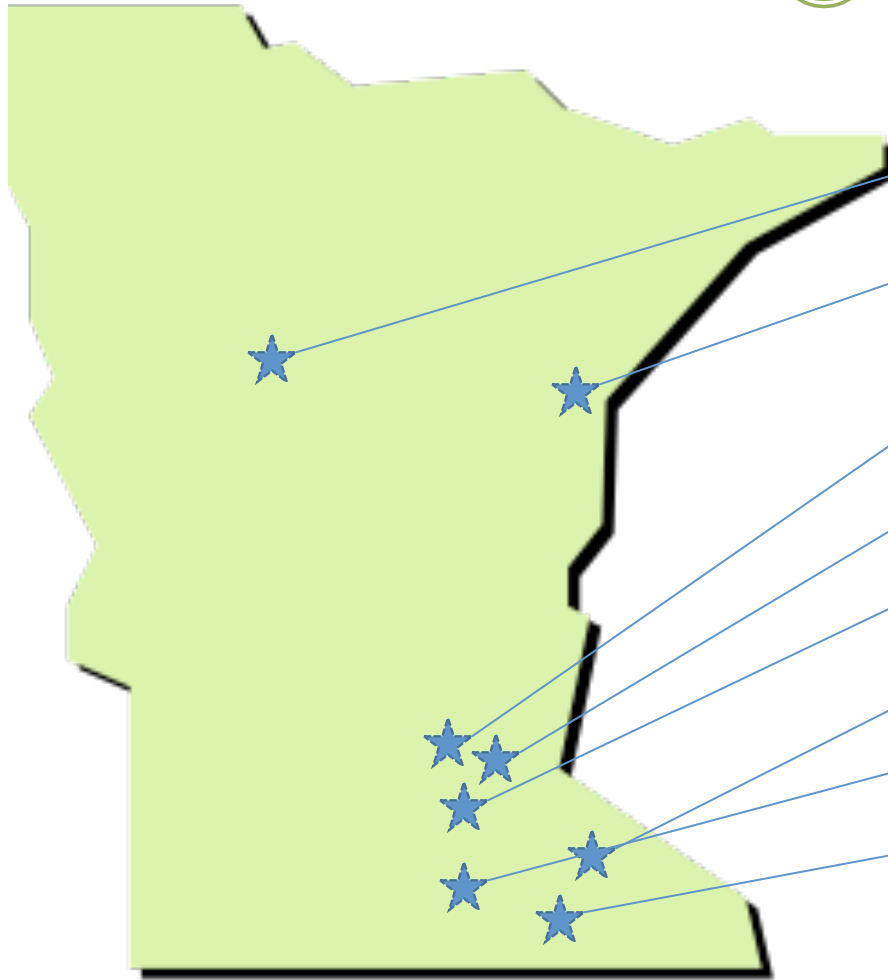
# One-Stop Community Energy Services



## Program Goals

- Develop new low cost model for residential sector that can be replicated throughout Minnesota
- Work to develop a unique program delivery for each city of the 8 cities in the program
- Serve 6,000 households in the first 2 years
- Install major mechanical, air sealing and/or insulation upgrades in 1,600 households

# Participating Cities



- Park Rapids
- Duluth
- Minneapolis
- St. Paul
- Apple Valley
- Owatonna
- Rochester
- Austin

# One-Stop Community Energy Services



## Program Design

- Community engagement
- Targeted workshops
- Low cost materials/no cost measures
- Energy feedback reports
- Home visit
- Incentives, financing and rebates
- On-going energy feedback reports

Thank you!



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