

Minneapolis Climate Action Plan



Buildings and Energy Working Group

May 8, 2012 | Meeting 3

Agenda

- | | |
|-------------|--|
| 1:30 – 1:40 | Introductions & Welcome |
| 1:40 – 2:00 | Strategy Examples & Ideas for Minneapolis |
| 2:00 – 3:20 | Discussion |
| 3:20 – 3:30 | Next Steps |



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INTRODUCTIONS



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STRATEGY EXAMPLES

Strategies from Other Cities

Common themes in buildings:

- Audit & retrofit existing buildings
- Update the energy code
- Asset rating & energy use disclosure
- Accelerate low-carbon construction practices
- Expand renewable & district energy systems
- Cool with trees & green roofs
- Public education/individual actions
- Funding resources

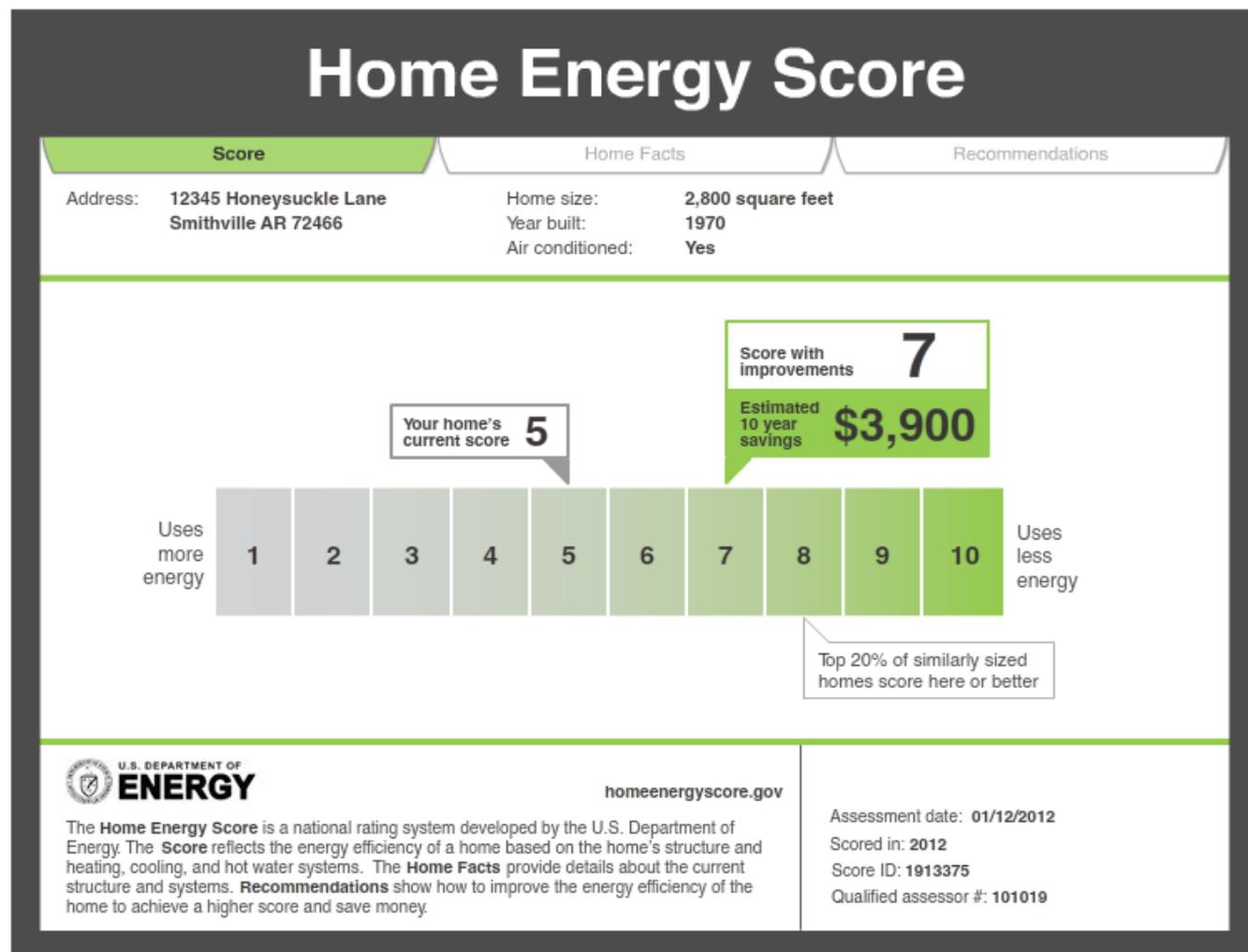
Building audits & retrofits

- Kansas City, MO will explore **greater energy efficiency for city-funded projects.**
- Chicago plans to **retrofit 9,000 commercial and industrial buildings** through partnerships by 2020 to reduce energy use by 30% on average
- Boston will require buildings to meet a **minimum level of energy performance at the time of sale** (retrofit ordinance)

Updating the energy code

- Chicago's Climate Action Plan (2008) recommends **aligning the city's Energy Conservation Code with international standards.**
- Seattle increased energy efficiency standards for buildings 30 percent in 2009.

Asset Rating



Commercial Building Energy Disclosure



Expand district heating and cooling

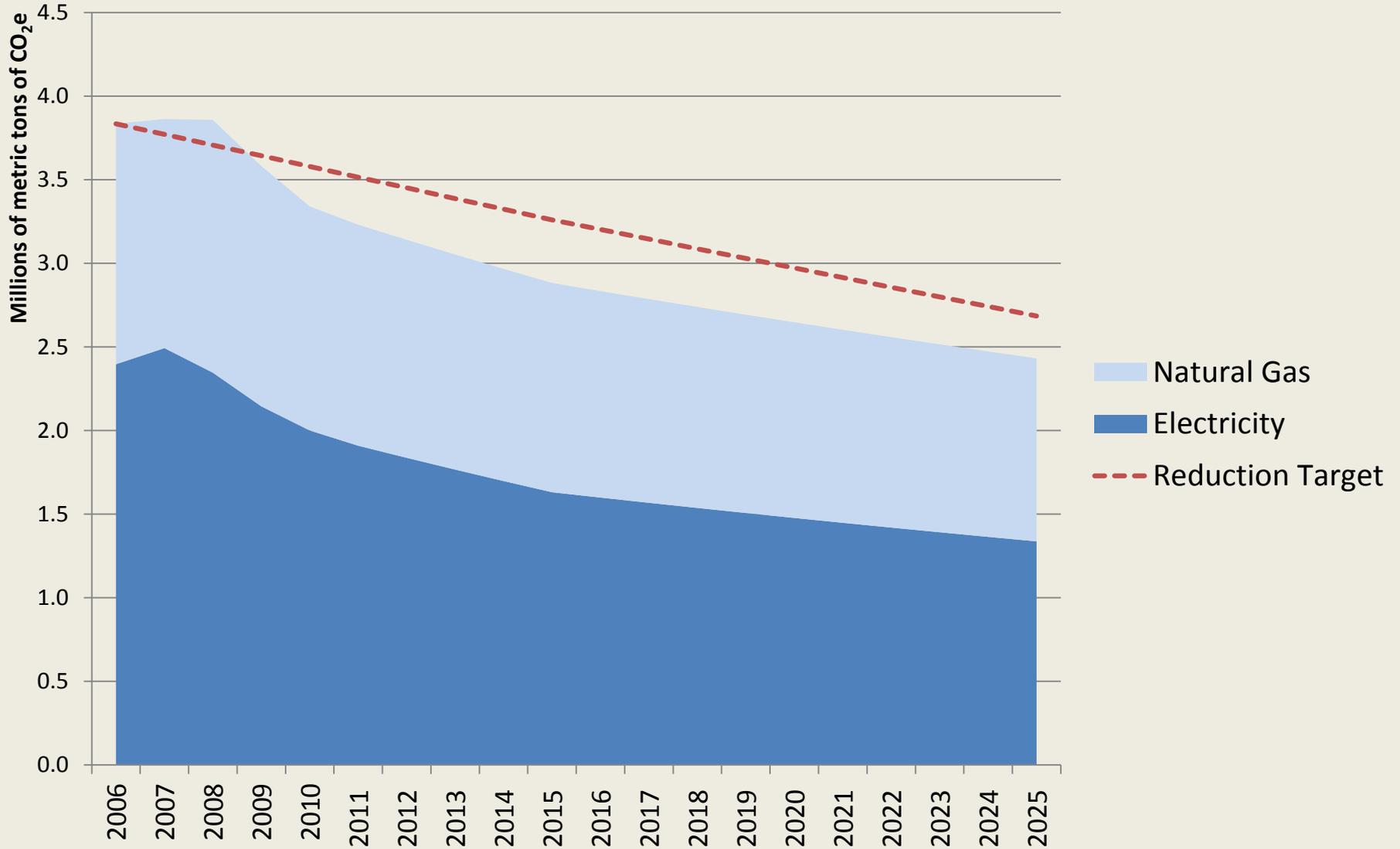
- Portland's Climate Action Plan (2010) recommends establishing a **\$50 million public/private investment fund** for energy performance upgrades.
- The fund could be used to help establish one new district heating & cooling system **within 2 years of plan adoption.**

Renewable energy systems

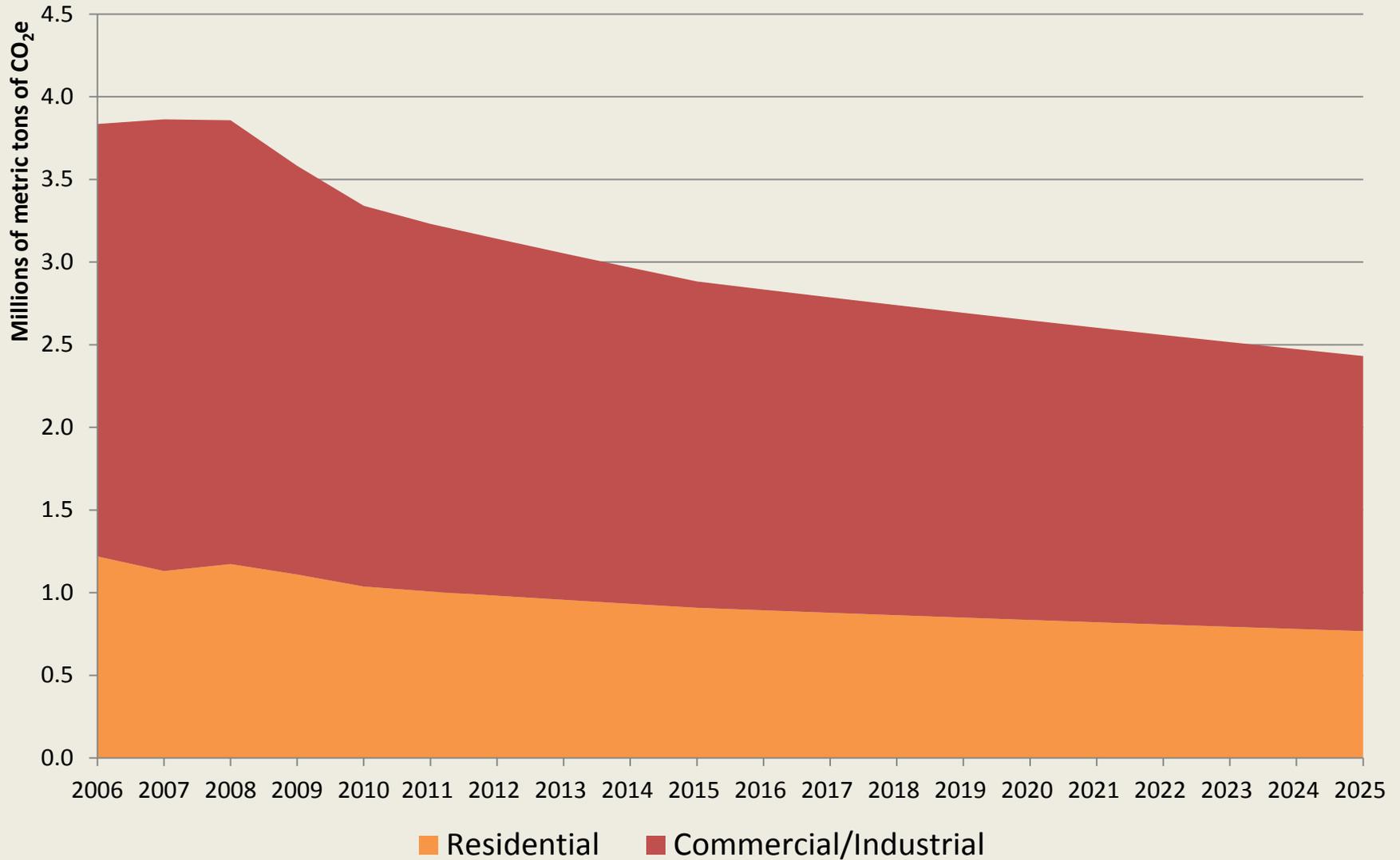
- San Luis Obispo will establish a **revolving low-interest loan** renewable energy fund
- MCCAG recommends **expanding distributed renewables** through subsidies, tax credits, feed-in tariffs.
- Chicago plans to procure **large-scale renewables** to reduce electricity emissions by 20 percent.



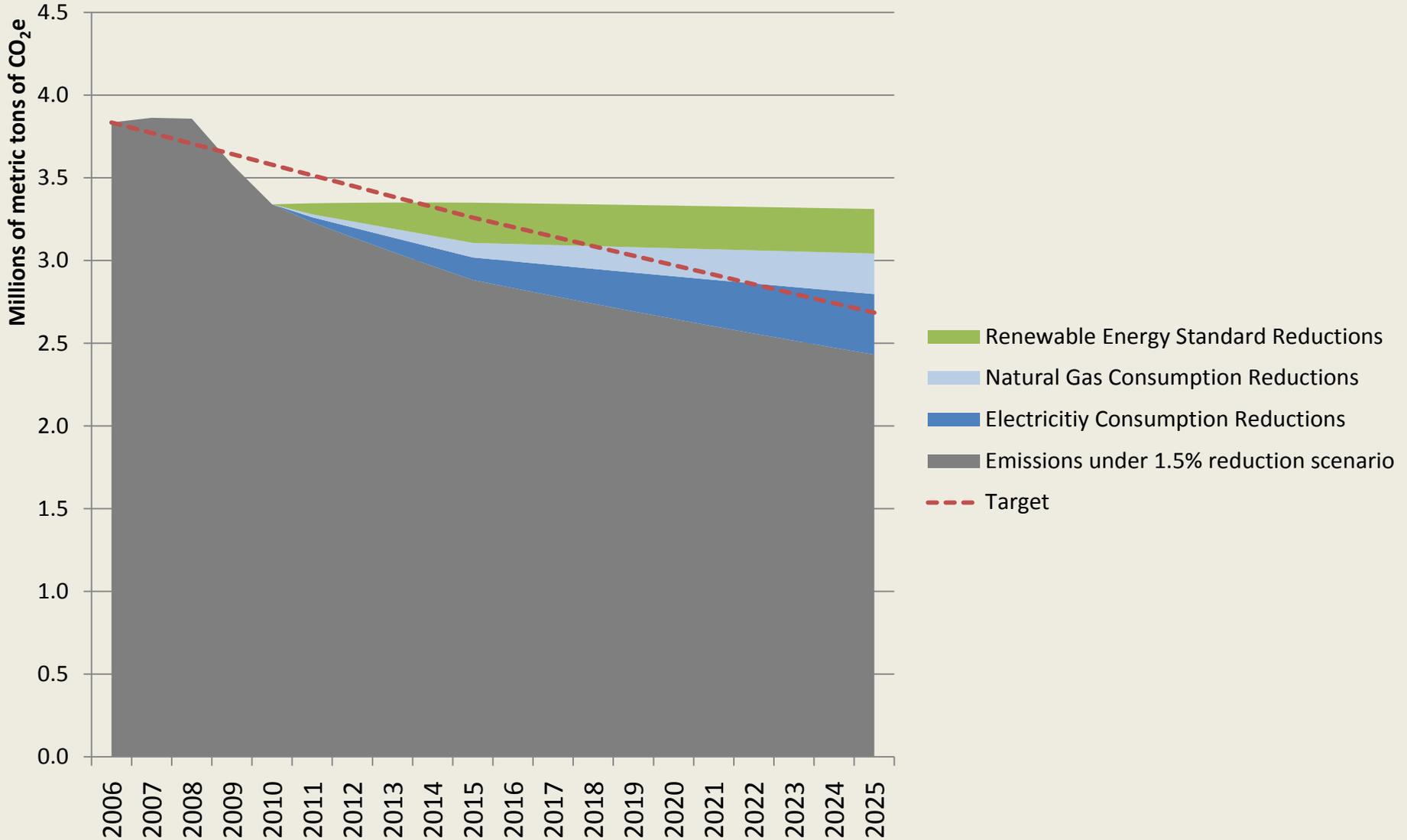
Buildings Emissions Totals with 1.5% Annual Reduction Goal by Fuel Source



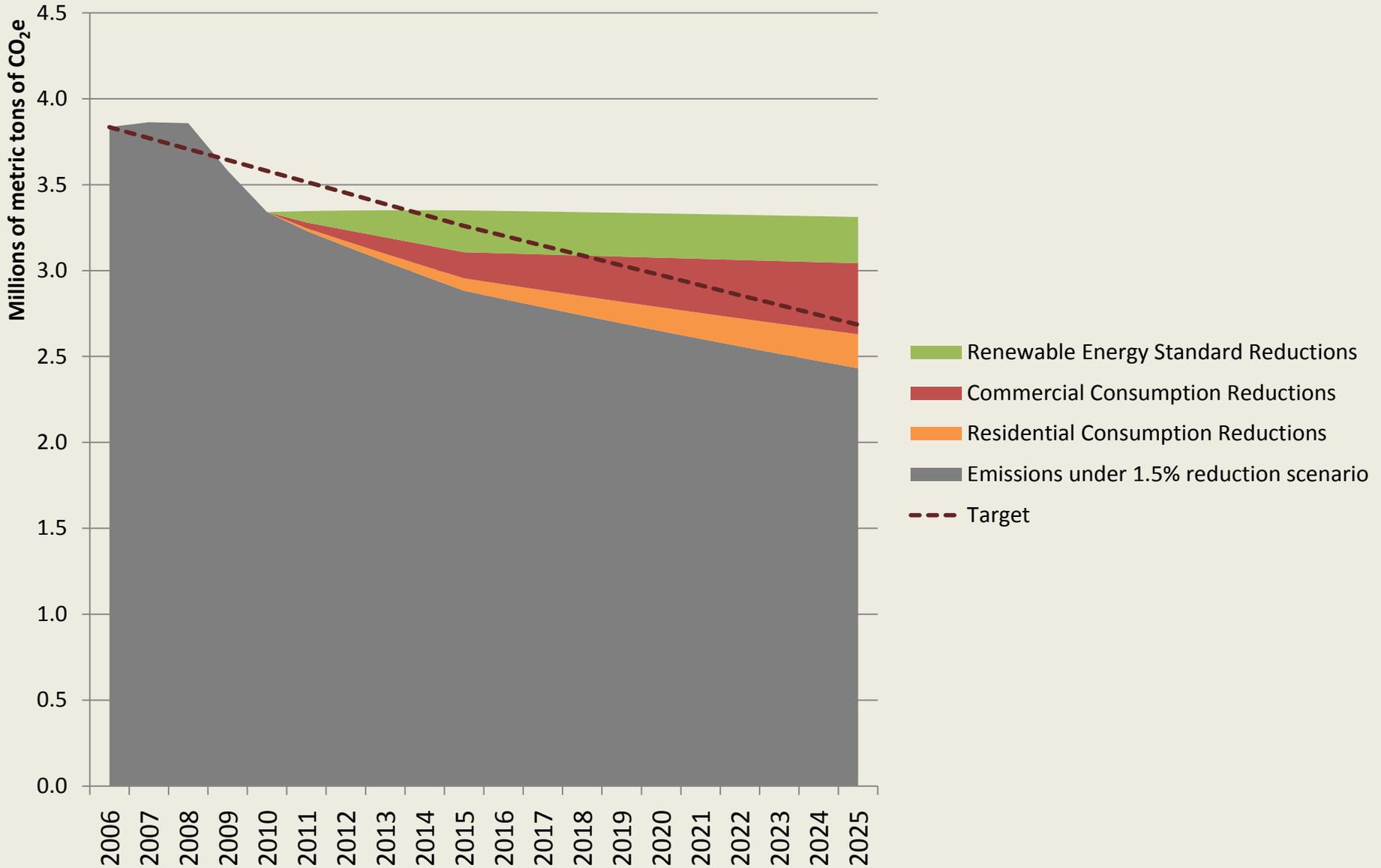
Buildings Emissions Totals with 1.5% Annual Reduction Goal by Sector



Emissions Reduction Sources with 1.5% Annual Reduction Goal by Fuel Source



Emissions Reduction Sources with 1.5% Annual Reduction Goal by Sector



1.5% annual reduction in 2025

- **Commercial/Industrial:**
 - 18% energy use reduction
 - 400,000 metric ton annual reduction
 - 47% of total annual reduction
- **Residential:**
 - 20% energy use reduction
 - 200,000 metric ton annual reduction
 - 22% of total annual reduction
- **Renewable Energy Standard:**
 - 270,000 metric ton annual reduction
 - 31% of total annual reduction

Additional strategy areas to consider

- Multi-family strategies
- Significant distributed generation strategies
- Greening & cooling – white/green roofs and tree planting
- Commercial audits & retrofits
- Everyday actions/easy steps



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DISCUSSION

Next Steps

- Revise strategy list based on work group comments
- Develop more detailed forecasts with strategy impacts through 2025
- Additional discussion in June

Thank You



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www.minneapolismn.gov/sustainability/climate/



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