

Minneapolis Climate Action Plan



Buildings and Energy Working Group

March 9, 2012 | Meeting 1

Agenda

- Introductions (10m)
- Process (30m)
 - Your role
 - Meeting times/days
 - Steering Committee representation
 - Group Chair
- Buildings sector emissions (10m)
- Overview of options for reducing emissions (5m)
- Next steps (5m)



Minneapolis Climate Action Plan

INTRODUCTIONS

Working Group's Role

1. Understand emissions from the Buildings sector
2. Develop potential emissions reduction strategies
3. *Apply evaluation criteria*
4. Communicate with your organization/constituents
5. Recommend a strategy package to the Steering Committee

Evaluation Criteria

Criteria:	Measurements:
GHG emissions reduction	Carbon dioxide equivalent
Costs and savings	Public and private \$ or relative cost (high, medium, low)
Implementation timeframe	Months, years
Feasibility	Political, social, or institutional obstacles
Social Equity	Disparate impacts (positive or negative)
Co-benefits	Health, economic development, job creation, energy conservation, mobility, quality of life, etc.

Meeting Schedule

- | | |
|---------------------------|--|
| Meeting #2 – April | <ul style="list-style-type: none">• Finalize Chair & Steering Committee Reps• Overview of existing policies/potential changes• Scan of other cities' policies/programs |
| Meeting #3 – May | Overview of potential strategies for Mpls |
| Meeting #4 – June | Strategy discussion/prioritization |
| Meeting #5 – July | Synthesis and recommendations |

Next Meeting

Based on availability survey, suggestion is:

Tuesday, April 10th, 1 pm – 3 pm???

City Hall, Room 139

Steering Committee Representatives

- Each Working Group is being asked to identify 1-2 representatives for the Steering Committee (2-3 meetings July – September)
- We will finalize this at the April meeting

Buildings & Energy Working Group Chair

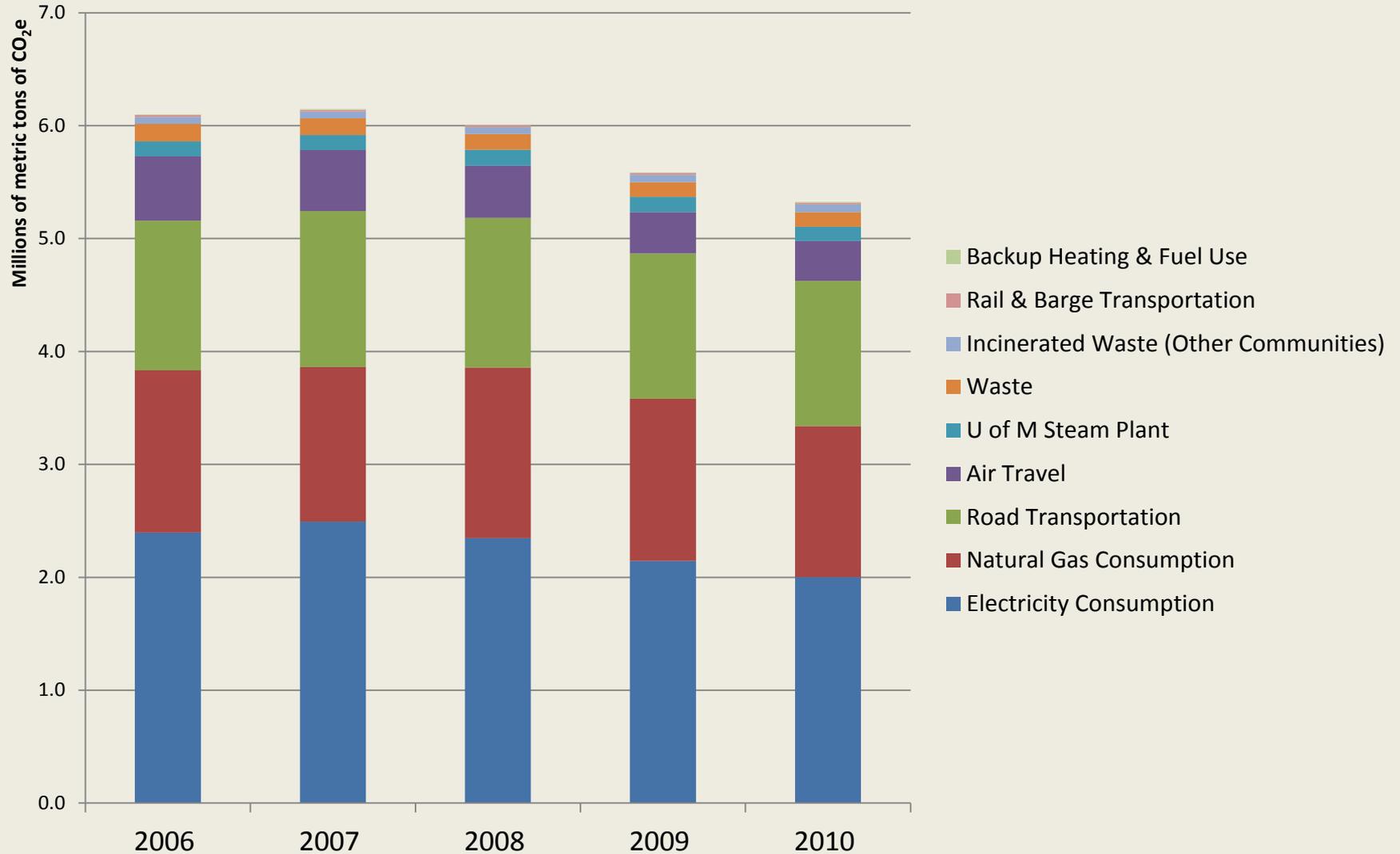
- To facilitate meetings running smoothly, we are asking each Working Group to nominate a chair
- Duties include:
 - Start and end the meeting
 - Help the group stay on schedule
 - Communication point for staff



A Community Greenhouse Gas Inventory for Minneapolis

GEOGRAPHIC-PLUS INVENTORY (2006-2010)

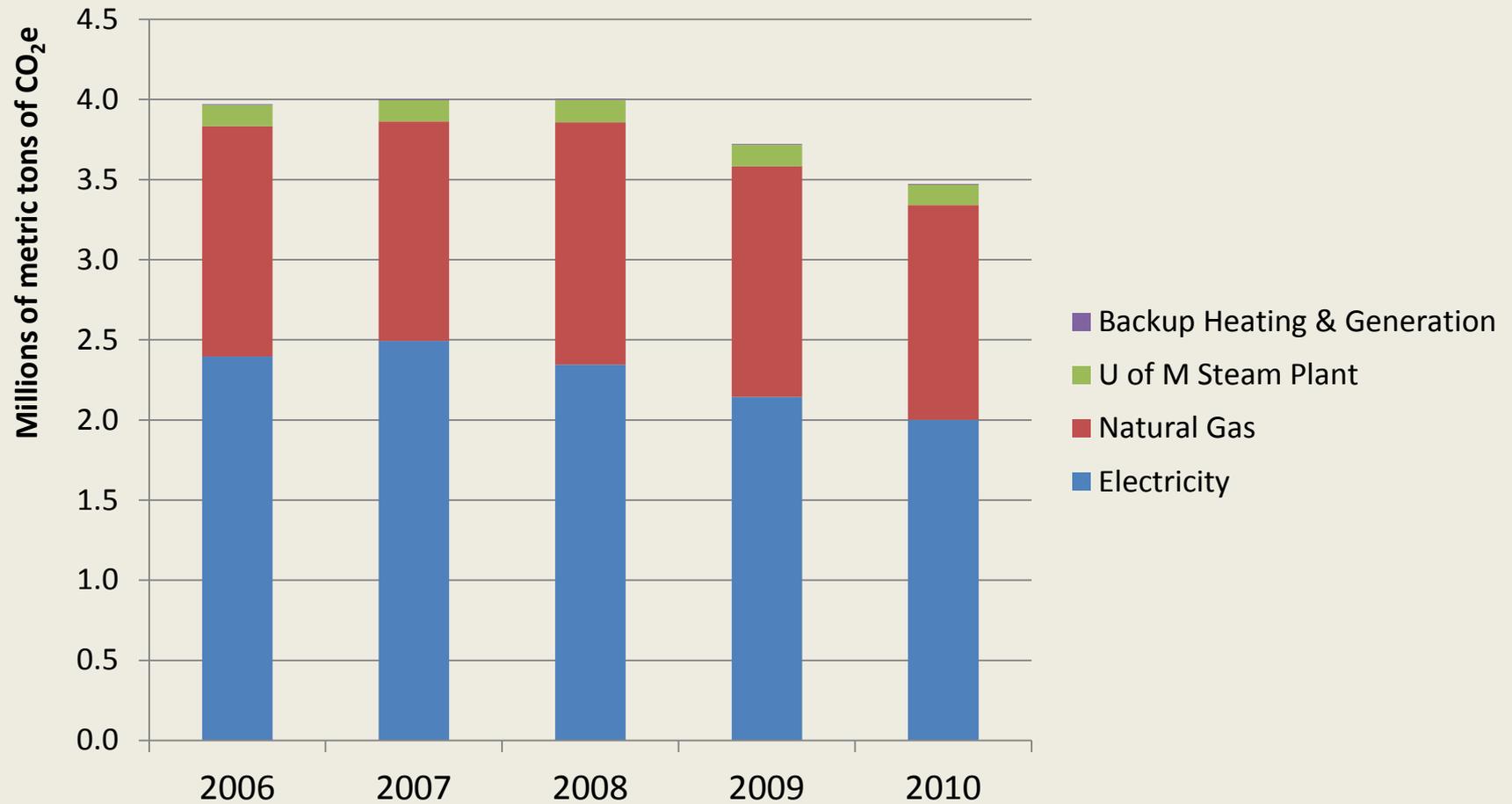
Minneapolis Community GHG Inventory by Source



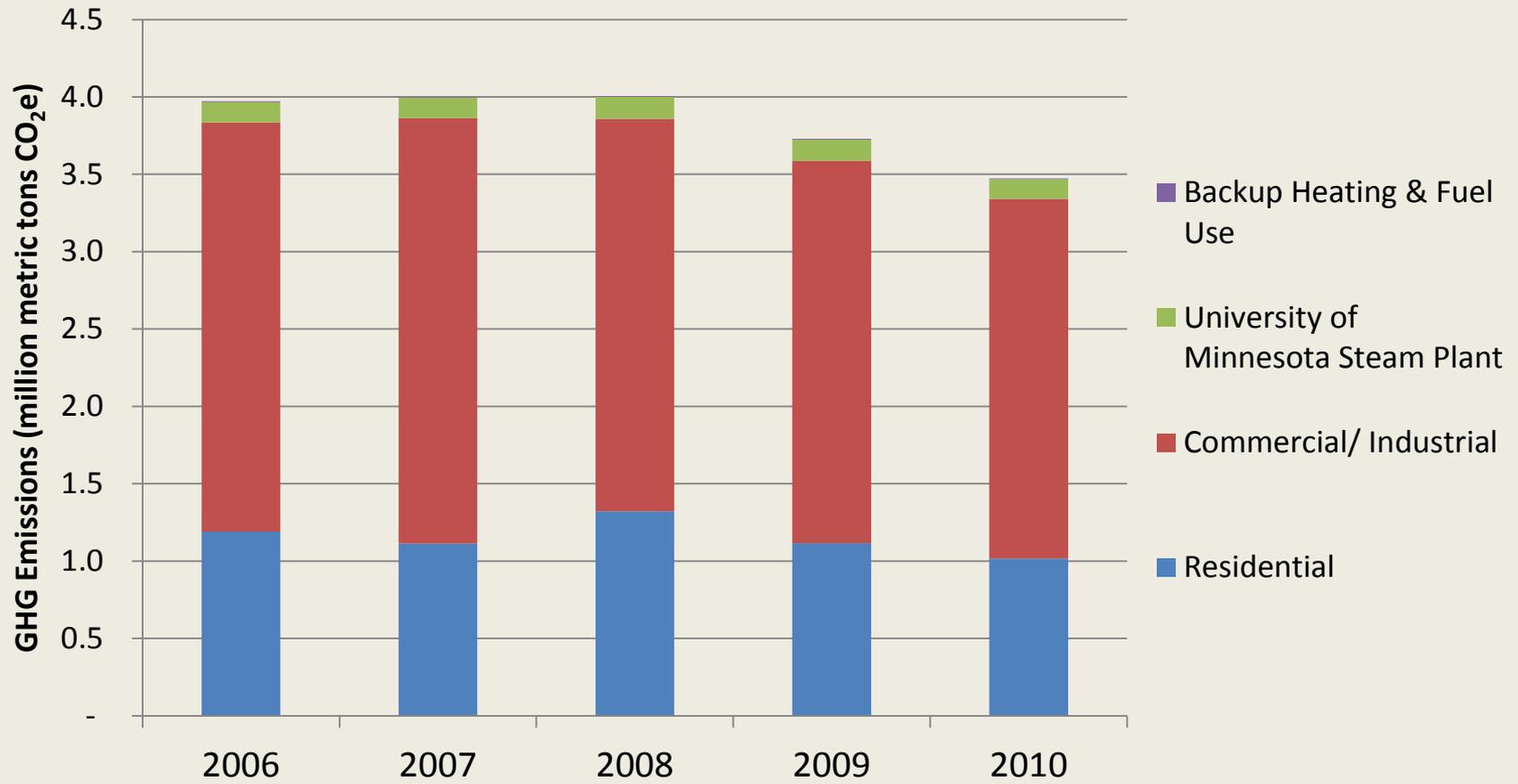
Key Findings - Buildings

- **The greenhouse gas intensity of electricity from Xcel Energy decreased 14.8% between 2006 and 2010.** Without changes to the greenhouse gas intensity of electricity, the community's GHG emissions would have dropped 6.9 percent since 2006, rather than 12.6 percent.
- **Overall community electricity consumption decreased 1.4% between 2006 and 2010.**
- **Natural gas consumption decreased by 6.9 percent between 2006 and 2010.** Winter temperatures have a significant impact on the amount of natural gas consumed. Energy efficiency initiatives may also have contributed to the reduction since building square footage increased by 1.8 percent between 2006 and 2010.

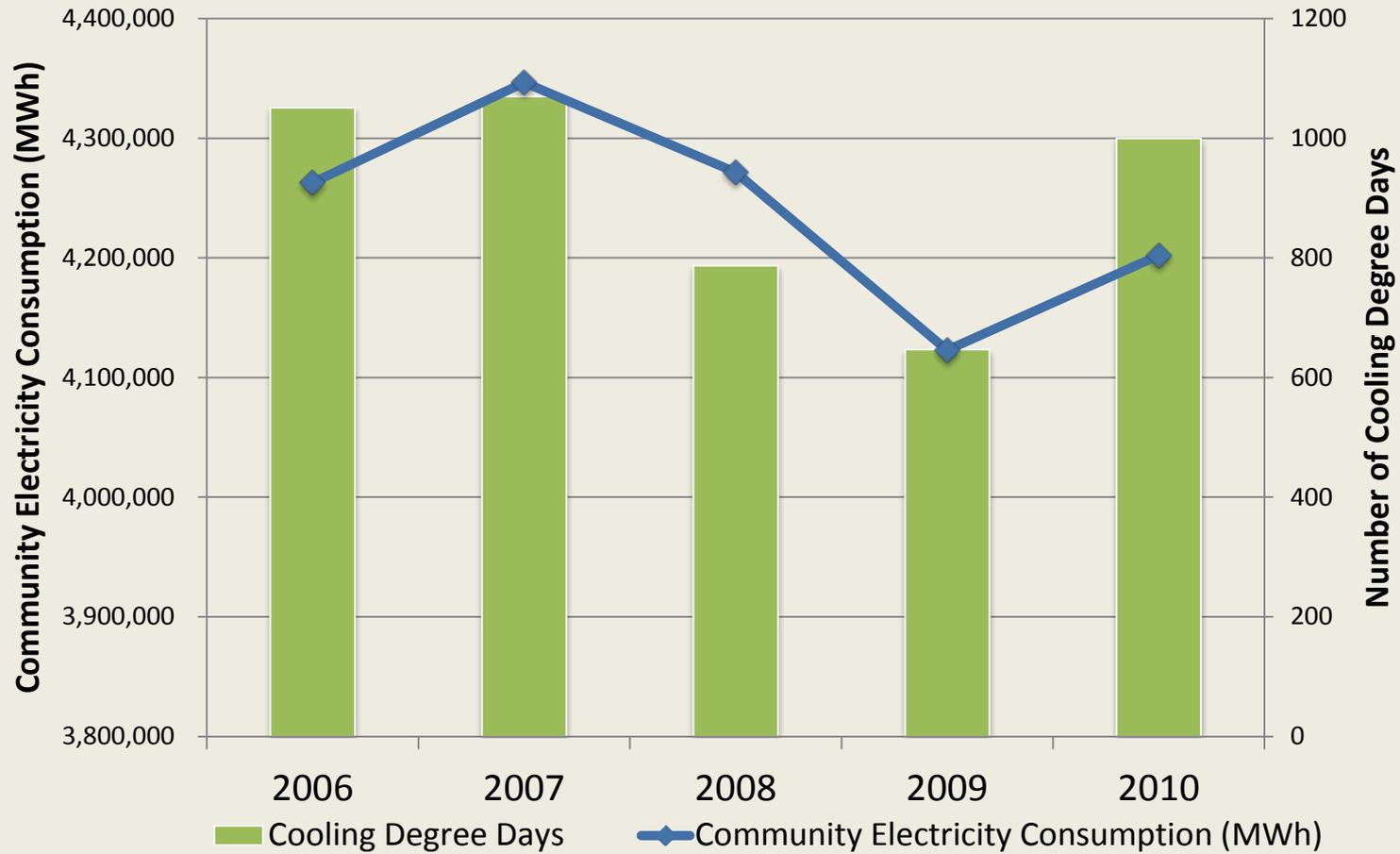
Building Emissions (by Fuel)



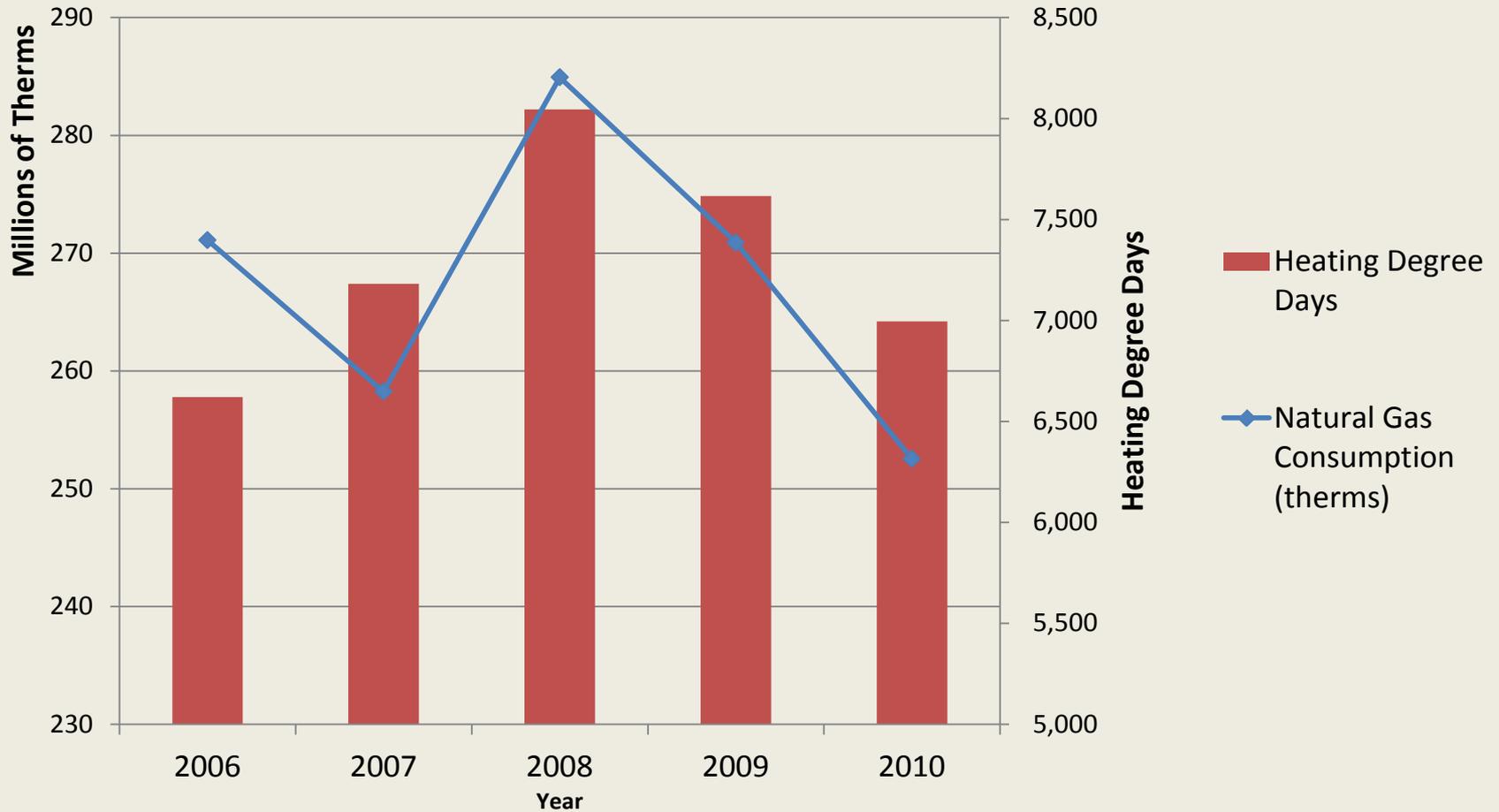
Building Emissions (by Type)



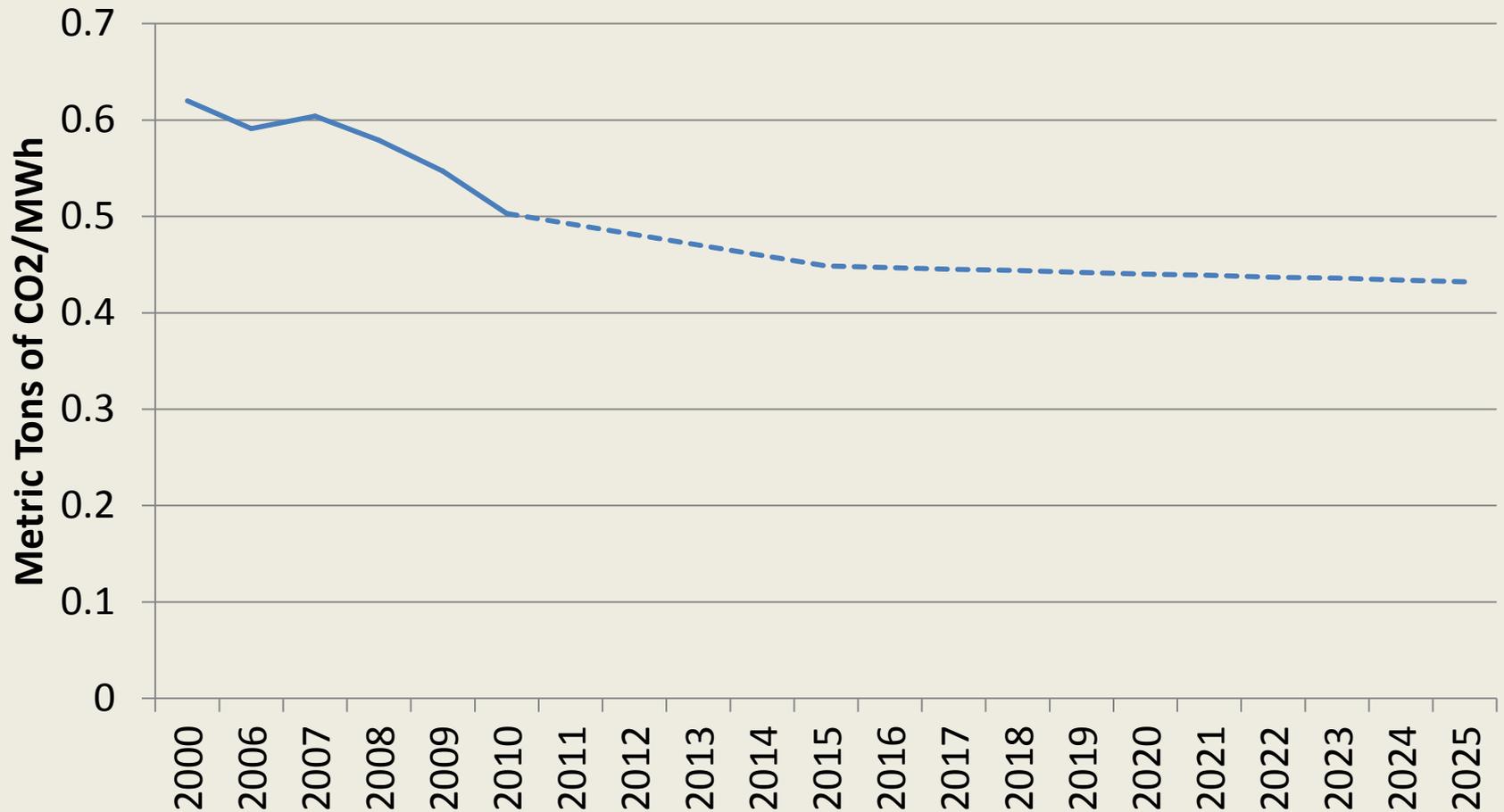
Cooling Degree Days



Heating Degree Days

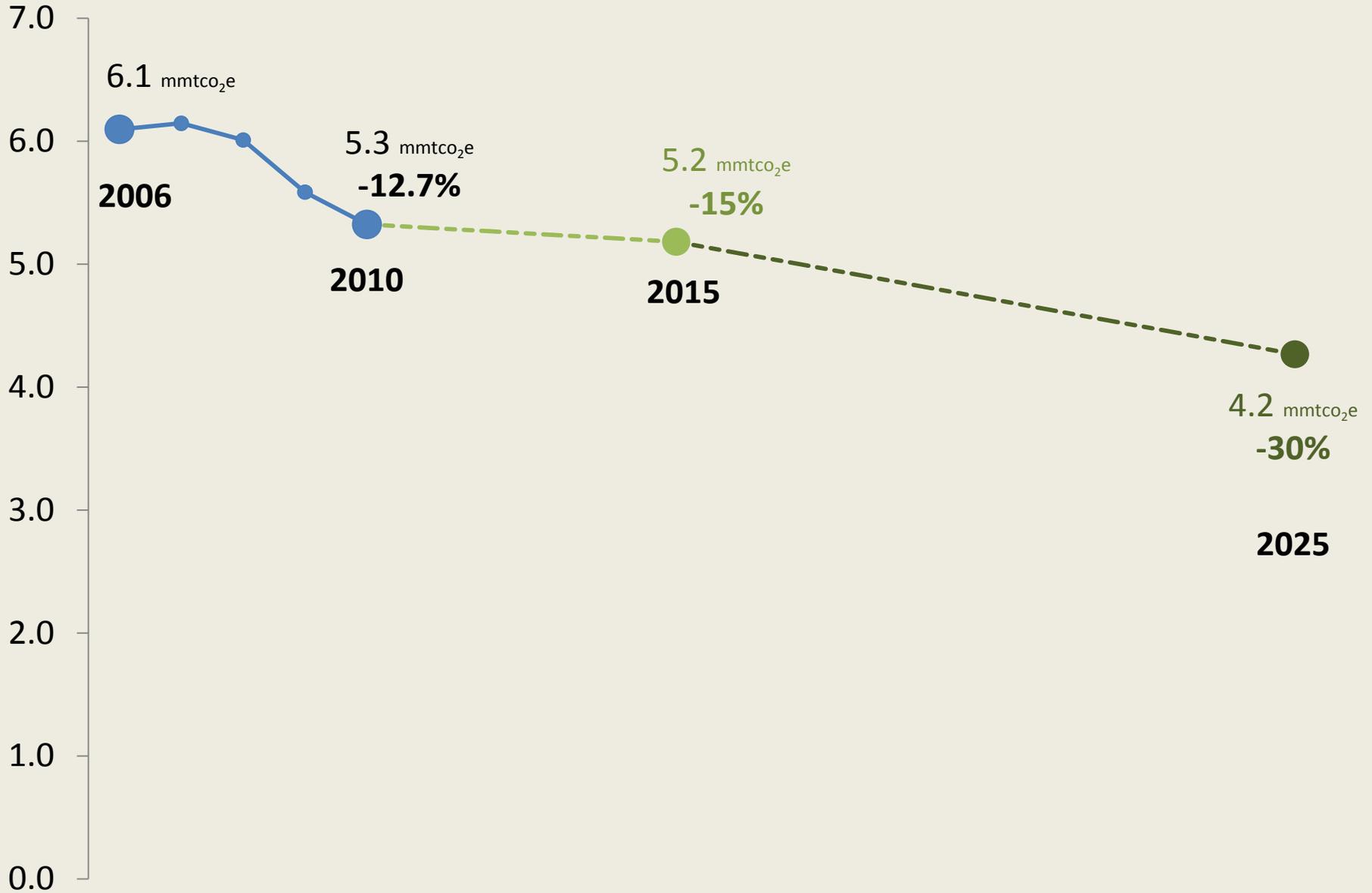


Electricity GHG Intensity

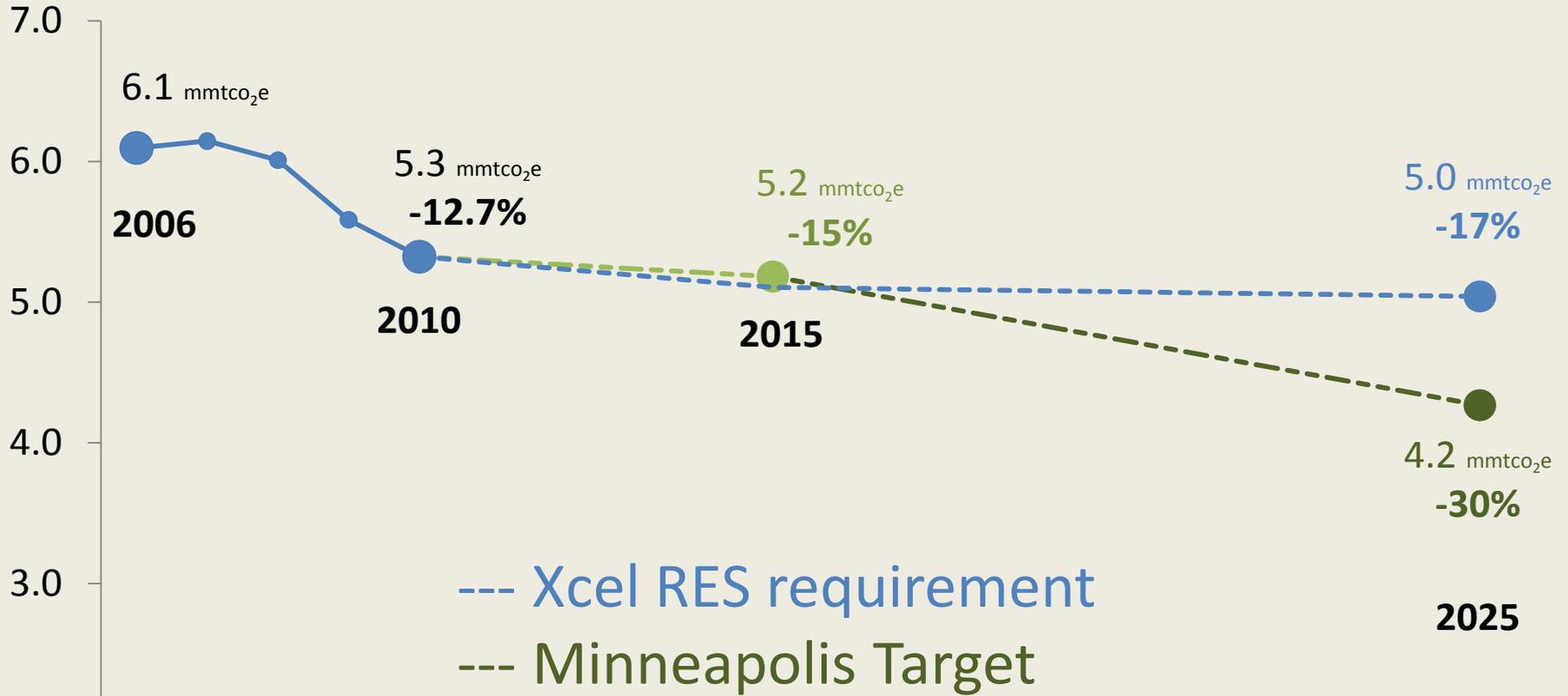


Source: Xcel Energy, 2011 IRP filing

Minneapolis Community GHG Reduction Targets



Minneapolis Community GHG Reduction Targets





Minneapolis Climate Action Plan

STRATEGY OVERVIEW

Options for emissions reduction

In order to:	We must:
Reduce the total amount of electricity and natural gas consumed	Make new buildings more energy-efficient
	Increase the energy efficiency of existing buildings
Reduce the amount of electricity sourced from GHG emitting facilities and practices	Purchase electricity from a cleaner, renewable source
	Use on-site power generation where feasible
	Better utilize technology

Options for emissions reduction

Programs that:	May look like:
Make new buildings more energy-efficient	Regulatory standards for new construction and remodeling that require higher levels of energy efficiency (Chicago, IL)
Increase the energy efficiency of existing buildings	Required disclosure of energy performance of commercial buildings so that owners, tenants and prospective buyers can make informed decisions (New York, NY)
Purchase electricity from a cleaner, renewable source	Expanded participation in Windsource (Boulder, CO)
Use on-site power generation where feasible	An effort to increase efficient power generated on-site using distributed generation and combined heat/power (Chicago, IL)
Better utilize technology	Technical assistance program for advanced building improvements (e.g. regenerative braking elevators)

Next Steps

- At next meeting:
 - Select a Chair
 - Select Steering Committee representatives
 - Overview of existing policies/programs
 - Schedule future meetings
- Recommended reading:
 - Other Climate Action Plans (see handout)
- Contact us:
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