



Minnesota Pollution Control Agency

MCCAG Update

David Thornton, Assistant Commissioner

Feb. 19, 2008



216H.02 GREENHOUSE GAS EMISSIONS CONTROL.

Subdivision 1. Greenhouse gas emissions reduction goal.

It is the goal of the state to reduce statewide greenhouse gas emissions across all sectors producing those emissions to a level at least 15 percent below 2005 levels by 2015, to a level at least 30 percent below 2005 levels by 2025, and to a level at least 80 percent below 2005 levels by 2050. The levels shall be reviewed based on the climate change action plan study.





Subd. 2. **Climate change action plan.** By February 1, 2008, the commissioner of commerce....shall submit to the legislature a climate change action plan that meets the requirements of this section.

Subd. 3. **Stakeholder process.** The plan required by subdivision 2 must be developed through a structured, broadly inclusive stakeholder-based review of potential policies and initiatives that will reduce statewide greenhouse gas emissions from a broad range of sources and activities. The commissioner shall engage a nationally recognized independent expert entity to conduct the stakeholder process. The report of the stakeholder process must form the basis for the plan submitted by the commissioner under subdivision 2.



Principles for the 2/1/08 preliminary plan:

- ▶ *Achieve the reduction goals*
- ▶ *Fulfill the law's reporting requirement*
- ▶ *Based on MCCAG work*
- ▶ *Implement existing actions*
- ▶ *Recommend thoughtful, deliberative and incremental actions*
- ▶ *Tailor actions for Minnesota*
- ▶ *Provide opportunities for all peoples and communities*
- ▶ *Compatible with regional, national and global actions*



MCCAG Report Process—

- First draft on website 2/14/08; MCCAG/TWG comments due by 2/27/08*
- Second draft available by 3/5/08; MCCAG/TEG comments due by 3/12/08*
- MCCAG conference call week of 3/17/08*
- Draft available for public comment between 3/24/08 and 4/11/08*
- Final MCCAG Report by 4/25/08*



MCCAG Report Table of Contents

Cover

Table of Contents

Acknowledgments

Members of the MCCAG

Acronyms

Executive Summary

Chapter 1 – Background and Overview

Chapter 2 – Inventory and Forecast of GHG Emissions

Chapter 3 – Residential, Commercial, and Industrial Sectors

Chapter 4 – Energy Supply

Chapter 5 – Transportation and Land Use

Chapter 6 – Agriculture, Forestry, and Waste Management

Chapter 7 – Cross-Cutting Issues

Chapter 8 – Cap-and-Trade

Appendixes

A. Governor Pawlenty's letter initiating the MCCAG Process

B. Description of MCCAG Process

C. Members of Technical Work Groups

D. GHG Emissions Inventory and Reference Case Projections

E. Methods for Quantification

F. Residential, Commercial, and Industrial Sectors – Policy Recommendations

G. Energy Supply – Policy Recommendations

H. Transportation and Land Use – Policy Recommendations

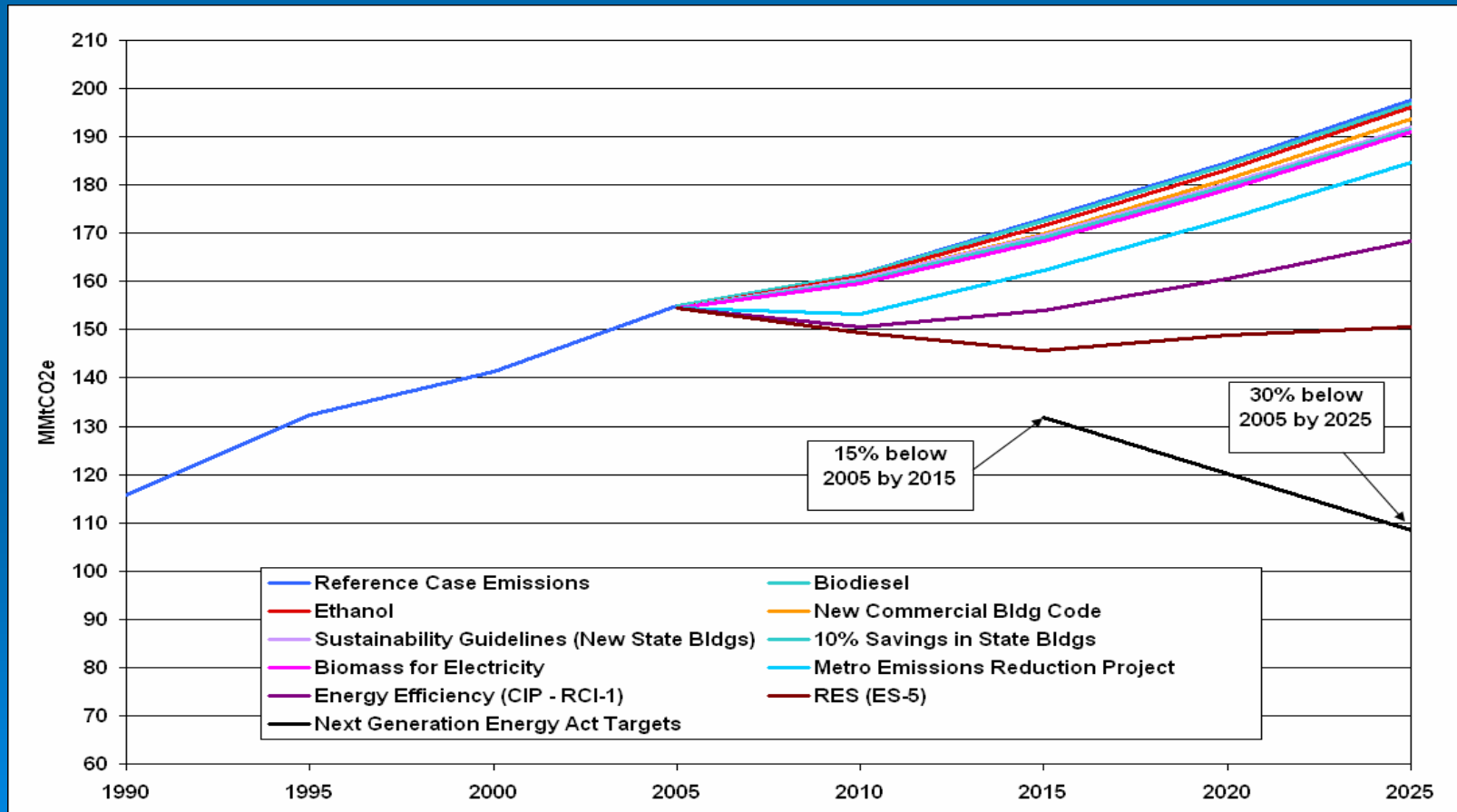
I. Agriculture, Forestry, and Waste Management – Policy Recommendations

J. Cross-Cutting Issues – Policy Recommendations

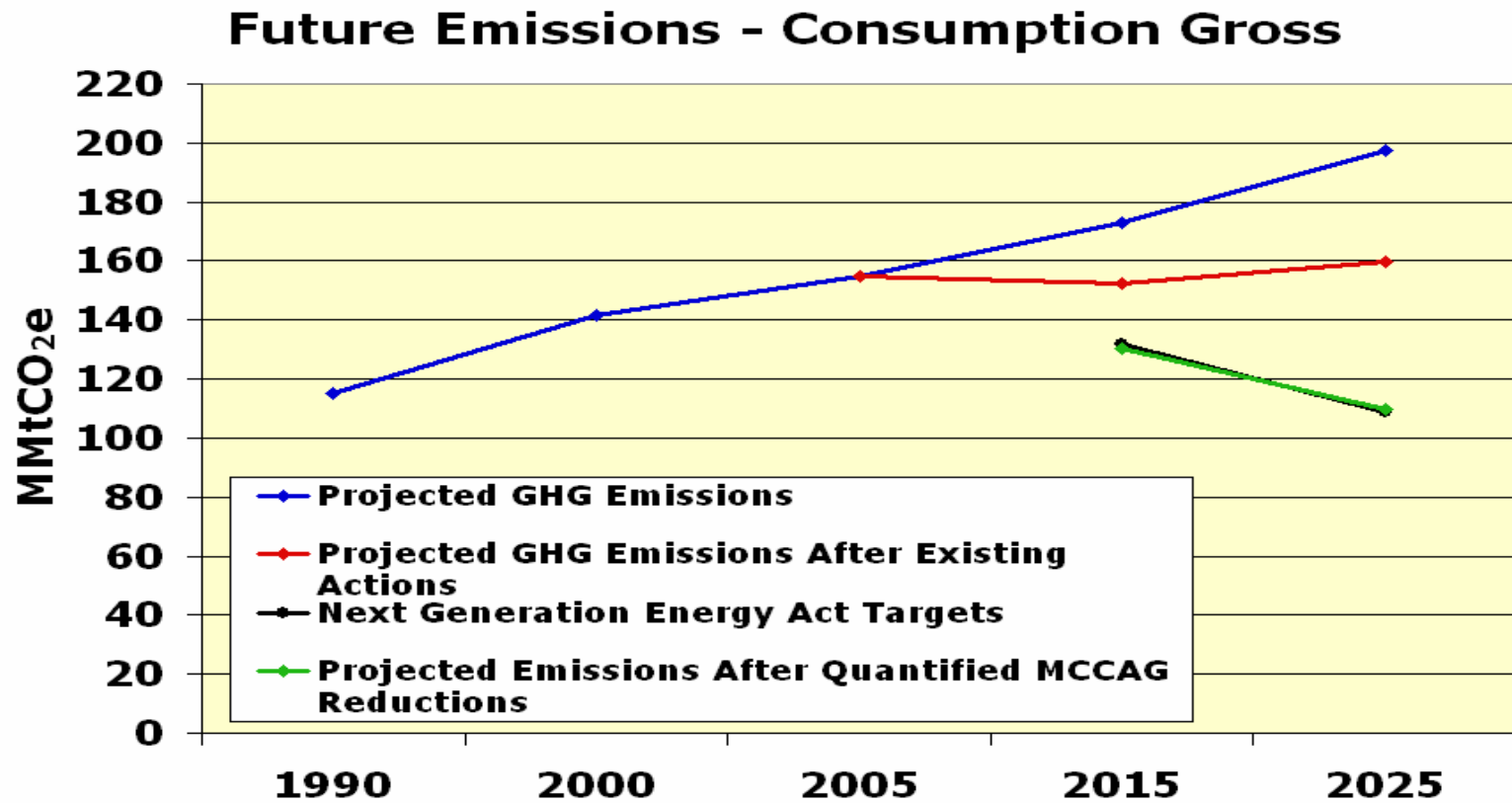
K. Cap-and-Trade – Policy Recommendations



GHG Reductions – Existing Actions



Summary of Draft MCCAG Analysis



Summary of Draft MCCAG Analysis

Consumption Basis - Gross / Net Emissions					
	1990	2000	2005	2015	2025
Projected GHG Emissions	115.3	141.6	155.0	173.0	197.6
Reductions from Existing Actions	0.0	0.4	0.4	20.8	37.8
Projected GHG Emissions After Existing Actions			154.6	152.3	159.8
Next Generation Energy Act Targets (NGEA)				131.8	108.5
Total GHG Reductions from MCCAG				22.2	50.3
Difference Between MCCAG Reductions & NGEA Targets				-1.7	1.0
Projected Emissions After Quantified MCCAG Reductions				130.1	109.6
Production Basis Gross / Net Emissions					
	1990	2000	2005	2015	2025
Projected GHG Emissions	110.3	133.2	138.2	151.9	161.7
Reductions from Existing Actions	0.0	0.4	0.4	20.8	37.8
Projected GHG Emissions After Existing Actions			137.8	131.1	123.9
Next Generation Energy Act Targets (NGEA)				117.5	96.7
Total GHG Reductions from MCCAG				22.2	50.3
Difference Between MCCAG Reductions & NGEA Targets				-8.5	-23.1
Projected Emissions After Quantified MCCAG Reductions				108.9	73.7

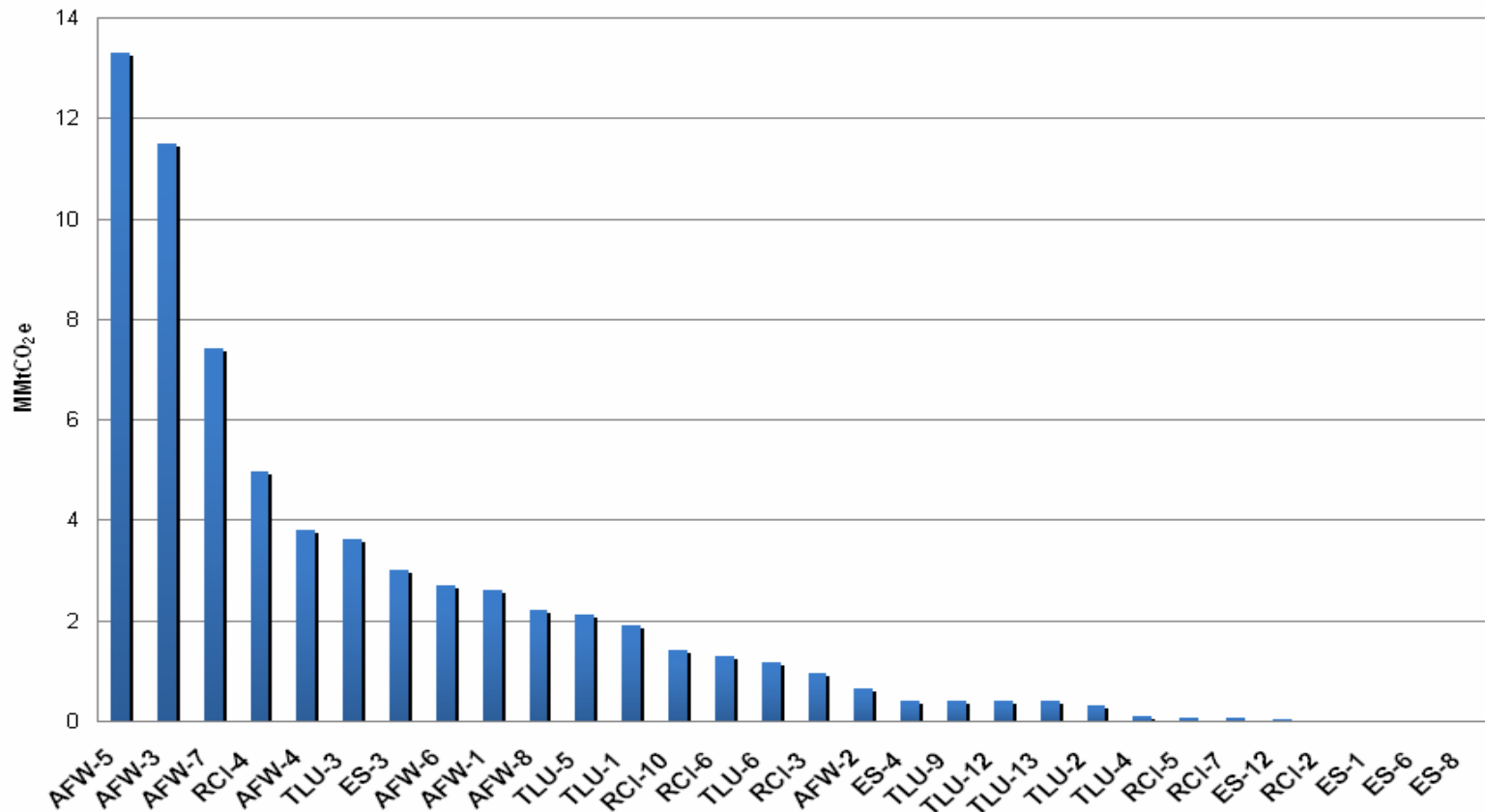


MCCAG Actions: Cumulative Results (Draft)

Planned Actions	2015 MMtCO₂e	2025 MMtCO₂e	2008-2025 MMtCO₂e	Million\$ NPV 2008-2025	\$/MTCO₂e
RCI (Fuels; Non-electricity)	0.76	0.69	10.4	-\$464	-\$44.6
RCI/ES (Adjusted Overlaps)	1.56	7.34	51.1	-\$1,098	-\$21.5
ES	1.97	3.43	37.5	\$462	\$12.3
TLU	4.70	9.30	91.2	-\$264	Not Available
AFW	13.20	29.50	279.0	\$2,090	
CC	Not Quantified				
Subtotal	22.2	50.3	469	\$726	\$1.5



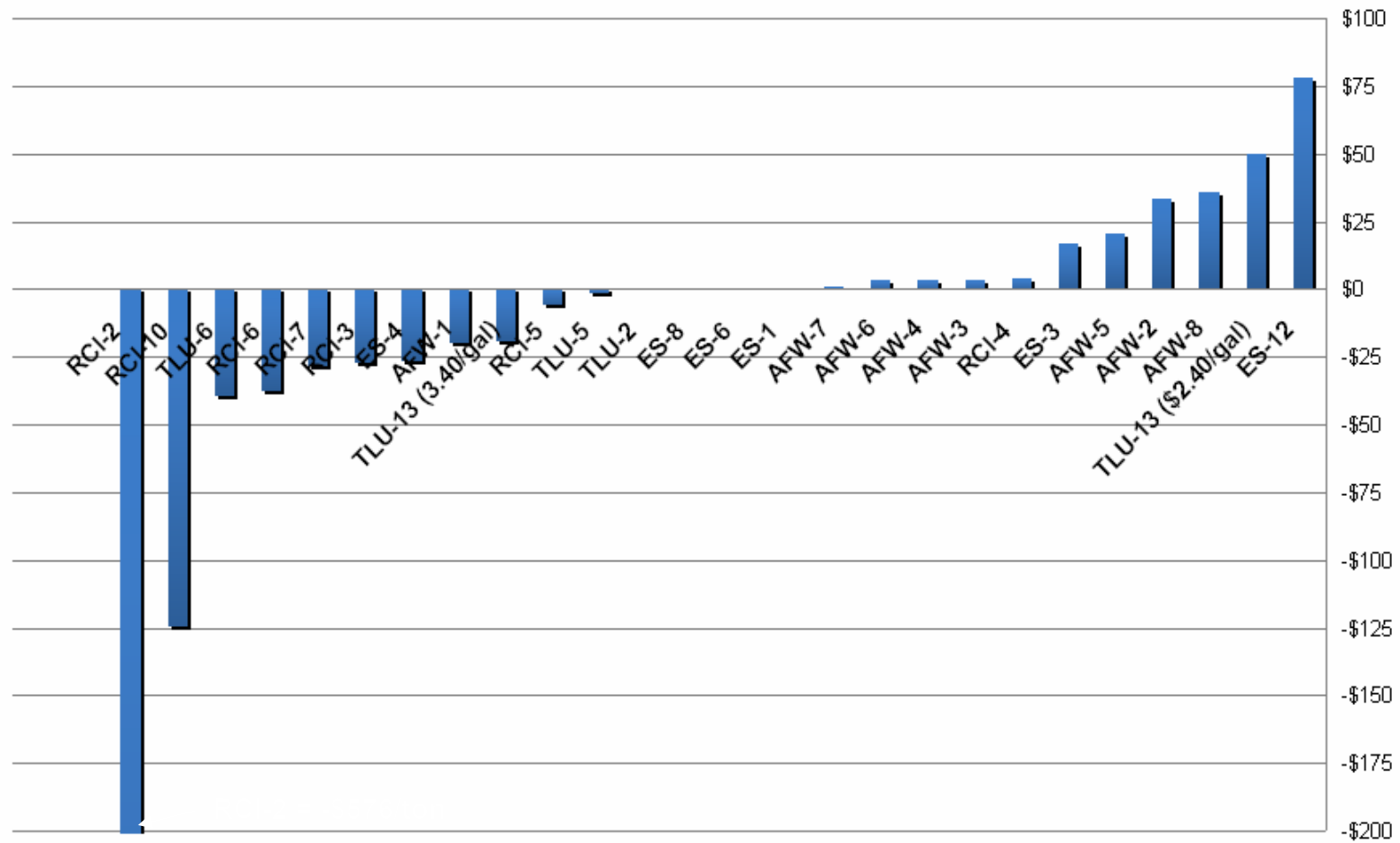
MN Options Ranked by 2025 Annual GHG Reduction Potential



AFW-5 Forestry Management
AFW-3 Biofuels
AFW-7 Waste management



MN Options Ranked by Cost/ Cost Savings Per Ton GHG Removed





► *NEXT STEPS—*

- *Finish MCCAG Process*
- *Implement existing actions*
- *Work to get regional and national efforts going*
- *Next areas of reductions:*
 - *Enhance forestry management (AFW-5)*
 - *Expand biofuels (AFW-3)*
 - *Better waste management (AFW-7)*
- *Take thoughtful, incremental & deliberative actions to reduce greenhouse gas emissions*

