

# Michigan Climate Action Council (MCAC)

RCI Technical Work Group (TWG)  
Meeting #12  
November 11, 2008

Michigan Department of Environmental Quality  
The Center for Climate Strategies

## Agenda

- Welcome & Roll Call
- Meeting Purpose and Goals
- Approval of Summary of Prior Teleconference Meeting
- Review revisions to Policy Options Document (POD)
  - Changes from September 25, 2008 TWG teleconference
  - Overlaps / consolidations with ES TWG options
  - Quantification results of policy options
- Changes to the draft MI GHG Inventory & Forecast, if any
  - Iron & Steel industry
- Next Steps, Agenda, Date and Time for Next Teleconference Meeting (if any)
- Public Comments & Announcements

# Approval of Prior Call Summary

## Review & Approve Summary of RCI Call #11

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# Policy Option Template

- Policy Description (Concept)
- Policy Design (Goals, Timing, Coverage)
- Implementation Methods
- Related Programs and Policies (BAU)
- Estimated GHG Savings and Costs Per MMTCO<sub>2e</sub>
  - Data Sources, Methods and Assumptions
  - Key Uncertainties
- Additional (non-GHG) Benefits and Costs, as Needed
- Feasibility Issues, if Needed
- Status Of Group Approval
- Level of Group Support
- Barriers to Consensus, if any

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## RCI TWG Policy Options Document

- Refer to RCI TWG POD
- Revisions from
  - October 14, 2008 TWG teleconference, and
  - October 22, 2008 Joint RCI-ES TWG teleconference
- Review & revise quantification results, as needed
- Remaining POD template elements
  - Additional Benefits & Costs
  - Feasibility Issues
- Prepare recommendations for MCAC meeting  
November 20-21, 2008

## Draft MI GHG Emissions Inventory and Forecast (I&F)

- Iron and Steel industry: Proposed changes to Michigan GHG Inventory & Forecast are reflected in the following six slides
- Any other changes to the Inventory and Forecast that should be recommended to the MCAC?

## I&F: Proposed Change to Michigan Industrial Processes

- Received new production data for McLouth Steel Products (shut down in 1998)
  - 1990-1992 data for Basic Oxygen Furnace and Electric Arc Furnace
  - 1995-1996 data for Electric Arc Furnace
- Received new data for Severstal North America
  - 1990-2007 iron processing production data

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## I&F: Proposed Change in Michigan Emissions

	1990	2005	2025
<b>Iron and Steel</b>			
Previous (MMtCO <sub>2</sub> e)	8.46	8.61	6.88
Revised (MMtCO <sub>2</sub> e)	11.15	10.20	7.95
Percent Change	31.8%	18.5%	15.6%
<b>Industrial Processes Total</b>			
Previous (MMtCO <sub>2</sub> e)	12.56	16.80	25.30
Revised (MMtCO <sub>2</sub> e)	15.25	18.39	26.37
Percent Change	21.4%	9.5%	4.2%
<b>Gross MI GHG Emissions</b>			
Previous (MMtCO <sub>2</sub> e)	216.1	243.3	288.1
Revised (MMtCO <sub>2</sub> e)	218.8	244.9	289.1
Percent Change	1.2%	0.7%	0.4%

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## I&F: Proposed Revised Michigan Industrial Processes Estimates (MMtCO<sub>2</sub>e)

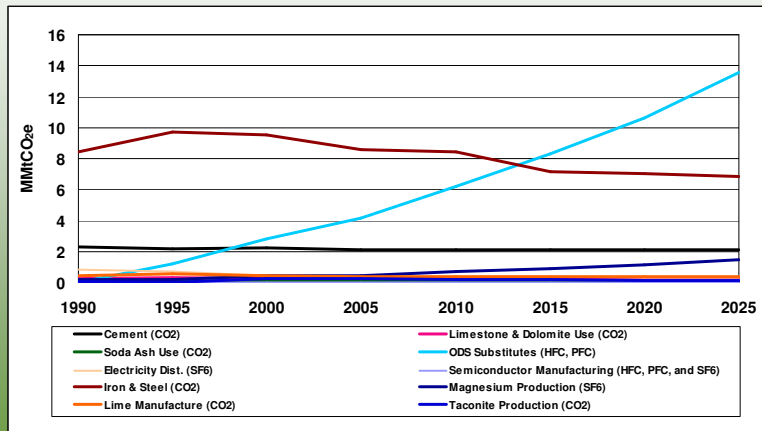
	1990	2005	2025
Cement (CO <sub>2</sub> )	2.27	2.13	2.09
Lime Manufacture (CO <sub>2</sub> )	0.43	0.41	0.41
Limestone & Dolomite Use (CO <sub>2</sub> )	0.24	0.31	0.31
Soda Ash Use (CO <sub>2</sub> )	0.10	0.09	0.07
Iron & Steel (CO <sub>2</sub> )	11.15	10.20	7.95
Taconite Production (CO <sub>2</sub> )	0.04	0.25	0.11
Magnesium Production (SF <sub>6</sub> )	0.18	0.45	1.50
ODS Substitutes (HFC, PFC)	0.01	4.16	13.58
Electricity Dist. (SF <sub>6</sub> )	0.82	0.40	0.33
Semiconductor Mfg (HFC, PFC, and SF <sub>6</sub> )	0.001	0.004	0.003
<b>Total</b>	<b>15.25</b>	<b>18.39</b>	<b>26.37</b>

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## I&F: Previous Michigan Industrial Processes

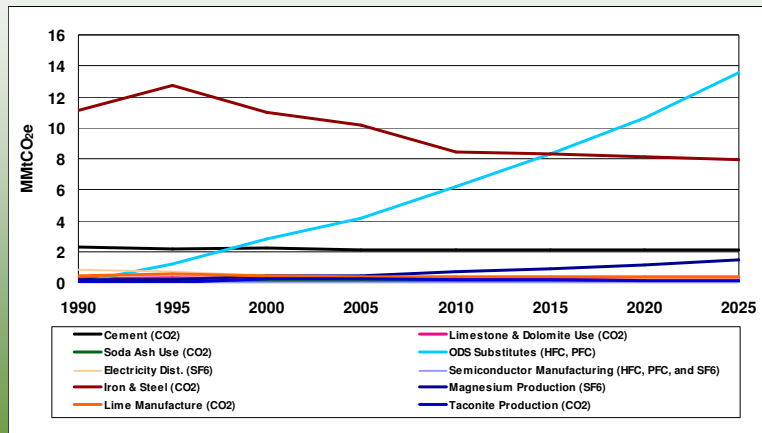


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## I&F: Proposed Revised Michigan Industrial Processes



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## I&F: Note

- Data on natural gas consumption by steel slab reheat furnace also provided for McLouth Steel Products for 1990-1996 (no activity after 1996)
- Emissions from natural gas consumption should already be included in RCI sector I&F
- Emissions are 2.2 MMtCO<sub>2</sub>e in 1990, 1.9 MMtCO<sub>2</sub>e in 1995 and 1996, and 0.0 MMtCO<sub>2</sub>e thereafter

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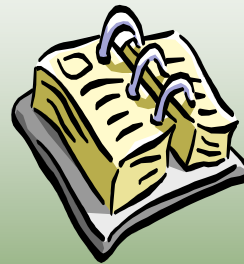
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## RCI Next Steps

- Finalize quantification RCI policy options – individually and in aggregate – for MCAC
- Finalize remaining POD template elements for each TWG policy option
- Additional changes, if any, to the draft Michigan GHG Inventory & Forecast

## Next RCI TWG Meeting

- No further meetings planned
- [Agenda:]
  - Review revised quantification results for RCI policy options; provide input as needed
  - Finalize remaining POD template sections for each RCI policy option
  - Recommend changes, if any, to the draft MI GHG Emissions Inventory & Forecast
- Time and Date:
  - TBD, if needed



# Public Input & Announcements

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