



Michigan Climate Action Council
Department of Environmental Quality

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Michigan Climate Action Council (MCAC)

Transportation and Land Use Technical
Work Group (TWG) Meeting #8
July 24, 2008

Michigan Department of Environmental Quality
The Center for Climate Strategies

Agenda

- Introductions
- Approval of Summary of Prior Call/ Meeting
- Discussion of MI GHG Inventory and Forecast
- Review Results of June 27th MCAC meeting
- Discuss and Develop Policy Options
- Discuss Quantification Process Memo and Slides
- Review of Next Steps
- Agenda, Date and Time for Next Meetings
- Public Comments / Announcements

Approval of Prior Call Summary

Stepwise Planning Process

1. Develop inventory and forecast of emissions
2. Identify a full range of possible actions
3. Identify initial priorities for analysis
4. **Develop straw proposals**
5. Quantify GHG reductions and costs/savings
6. Evaluate externalities, feasibility issues
7. Develop alternatives to address barriers
8. Aggregate results
9. Iterate to final agreements
10. Finalize and report recommendations

MI GHG Inventory and Forecast

- Revisions to Date
 - Inclusion of the new café analysis.
 - Use of the MI registration data for age distribution.
 - Extension of out year emission estimates to 2025.

Michigan CAFE Analysis

- The Energy Independence and Security Act of 2007 increased the corporate average fuel economy (CAFE) standards.
- The new goal is to reach an average fuel economy of 35 mpg by 2020.
- Fuel economy data by model year was obtained from the 2008 Annual Energy Outlook and the National Highway Traffic Safety Administration proposed CAFE standards.

Tested MPG figures

Model	New Passenger Cars		New Light Trucks		New Commercial Trucks	
	Year	Baseline	New CAFE	Baseline	New CAFE	Baseline
2009	30.1	30.1	23.0	23.0	15.3	15.6
2010	30.4	30.4	23.4	23.4	15.5	15.7
2011	30.8	31.2	23.9	25.0	15.9	16.2
2012	30.9	32.8	24.0	26.4	15.9	16.6
2013	31.0	34.0	24.1	27.8	16.0	17.1
2014	31.1	34.8	24.2	28.2	16.0	17.5
2015	31.3	35.7	24.4	28.6	16.1	18.1
2016	31.5	36.9	24.5	29.1	16.2	18.3
2017	31.7	38.1	24.7	29.7	16.3	18.7
2018	32.0	39.4	24.9	30.2	16.4	19.1
2019	32.3	40.7	25.1	30.8	16.5	19.3
2020	32.5	42.0	25.3	31.4	16.6	19.8
2021	32.8	42.0	25.4	31.4	16.7	19.8
2022	33.0	42.0	25.6	31.4	16.8	19.8
2023	33.4	42.0	25.8	31.4	16.9	19.8
2024	33.7	42.0	26.0	31.4	17.1	19.8
2025	34.0	42.0	26.3	31.4	17.2	19.8

- The average MPG figures were then adjusted for on-road performance, which typically reduced MPG between 18 and 23 percent.

- Vehicle registration data is then used to divide VMT estimates for each year across vehicle type.
- VMT by vehicle type is then adjusted according to average mileage driven by vehicle age.
- VMT by vehicle age and type is then multiplied by on-road fuel economy to get total gallons of fuel consumed.
- The percentage reduction in gallons of fuel used is then converted into the percentage of emissions reductions through CAFE.

Results of CAFE Analysis

Baseline Michigan Transportation Inventory

Emission Totals (MMtCO₂e)	1990	1995	2000	2005	2010	2015	2020	2025
Onroad Gas and Diesel	42.60	48.48	52.62	53.50	57.15	60.26	63.94	68.08
Total	49.72	55.85	59.39	58.17	61.71	65.03	68.91	73.25

Michigan Transportation Inventory with New CAFE

Onroad Gas and Diesel	42.60	48.48	52.62	53.50	56.97	56.58	57.21	60.25
Total	49.72	55.85	59.39	58.17	61.53	61.35	62.18	65.41

Percentage Reductions in MMtCO₂e	1990	1995	2000	2005	2010	2015	2020	2025
Onroad Gas and Diesel	0.00%	0.00%	0.00%	0.00%	0.32%	6.11%	10.52%	11.50%
Total Transportation Inventory	0.00%	0.00%	0.00%	0.00%	0.30%	5.66%	9.77%	10.69%

Further information on the CAFE analysis can be found at:

<http://www.miclimatchange.us/TLU.cfm>

Results of MCAC Meeting

- Approved the Initial Straw Policy Option Proposals for the 55 Selected Priorities [Policy Descriptions and Policy Design Elements]
- Reviewed MI Emissions Inventory and Forecast, and Quantification Process
- Approved Start-up of new Market-Based Solutions TWG

MCAC June 27th Meeting #4

Comments

- TLU-1: Promote Low-Carbon Fuel Use in Transportation
- TLU-2. Eco Driver Program
 - Quantify speed reduction benefits
 - Consider links to RCI-5 Consumer Education
- TLU-3. Truck Idling Policies
 - Consider train idling also (freight engines)
- TLU-4. Advanced Vehicle Technology
 - Consider other "advanced vehicle technologies."

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Comments (cont.)

- TLU-5. Congestion Mitigation
- TLU-6. Land Use Planning and Incentives
- TLU-7. Transit and Travel Options
 - It was suggested that the POD add more information on background and mechanisms
 - See recent ridership figures—the initial goal may have already been met.
 - Consider passenger light rail
- TLU-8. Increase Rail Capacity and Address Rail Freight System Bottlenecks
- TLU-9. Great Lakes Shipping
 - Consider ferry use for people and cars.

TWG Next Steps

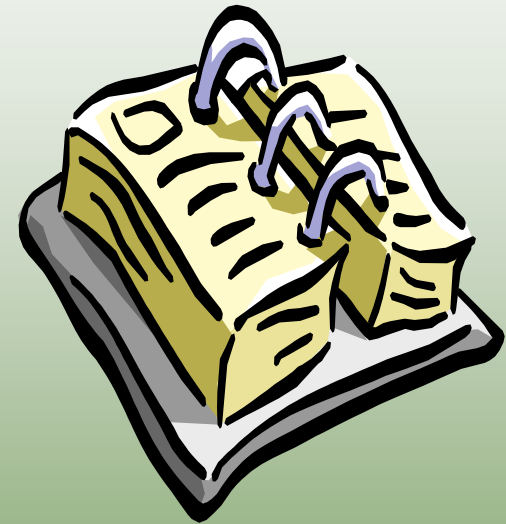
- TWG refines policy options for quantification
 - Implementation Methods
 - Related Policies and Programs Already in Place
 - Valuable Data Sources
- Prepare for next MCAC meeting, September 12, 2008

Timing

Date	Action
December 12, 2007	1 st MCAC meeting
February 14, 2008	2 nd MCAC meeting
April 25, 2008	3 rd MCAC meeting and Interim Report
June 27, 2008	4 th MCAC meeting
September 12, 2008	5th MCAC meeting
November 21, 2008	6 th MCAC meeting
December 19, 2008	MCAC Final Report due
Between MCAC Meetings	TWG conference calls and meetings

Next TWG Meeting

- Date and Time
 - Meeting # 9 is tentatively set for the third week in August.
- Agenda:
 - Continue working on policy option
 - Implementation Methods
 - Related Policies and Programs Already in Place
 - Valuable Data Sources
 - Review draft quantification
 - Discuss methodology / possible sources



Public Input, Announcements