



Michigan Climate Action Council
Department of Environmental Quality

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Michigan Climate Action Council

Interim Report to the Governor Executive Order 2007-42

April 30, 2008

Introduction

The Michigan Climate Action Council (MCAC) was convened in December 2007 to identify opportunities in Michigan to respond to the challenge of global climate change while encouraging energy efficiency, becoming more energy independent, and spurring economic growth. There are opportunities for reducing greenhouse gas (GHG) emissions throughout each sector of the economy. Serious efforts to implement action to address climate change will impact a broad section of society and will require concerted effort from individuals, industry, and government. Recognizing these effects, the MCAC has identified five tenets for developing the final strategy:

- All sectors (government, industry, services, agriculture, consumers, higher education, etc.) must be involved. The actions must be broad-based and inclusive.
- The geography, natural resources, energy sources, and economic base of Michigan, as well as the Midwest, must drive the decisions. In addition, consideration will be given to actions and decisions made by other Midwest states and regions.
- Preference should be given to actions that have multiple benefits, such as reducing energy consumption or improving air quality, as well as reducing GHG emissions.
- The strategy must include short-term, mid-term, and long-term actions that can realize reductions in a relatively short period of time while also providing more lead time for the development and efficient implementation of other reduction measures.
- The strategy development process must evaluate and consider economic and environmental impacts, including the implementation costs or cost savings for individuals, communities, businesses, and jobs in Michigan. In developing the climate change strategy, the MCAC will take into account and make its recommendations based on what is best for Michigan.

The MCAC also recognizes that collaboration and education are key strategies to a successful implementation of the state's climate change strategy. Reducing GHG emissions requires a cooperative effort of the general public, local and regional governments, and the state's business and industry.

Background

On November 14, 2007, Governor Jennifer M. Granholm signed Executive Order 2007-42 establishing the MCAC (see Appendix A). The purpose of the MCAC is to assist Michigan in identifying the best opportunities to mitigate and

adapt to climate change, reduce costs associated with climate change activities, and foster economic growth in Michigan. Governor Granholm charged the advisory group to:

- Produce an inventory and forecast of GHG sources and emissions from 1990-2020;
- Consider potential state and multi-state actions to mitigate and adapt to climate change in various sectors including energy supply, residential, commercial and industrial, transportation, land use, agriculture, forestry, and waste management.
- Compile a comprehensive climate action plan with specific recommendations for reducing GHG emissions in Michigan by state and local units of government, businesses, and Michigan residents to minimize climate change and better prepare for the effects of climate change in Michigan.
- Advise state and local government on measures to address climate change.

The Executive Order also divided the work of the MCAC into two phases:

1. The development of a comprehensive list of policy recommendations to reduce GHG emissions including preliminary short-term, mid-term, and long-term GHG emissions reduction goals or targets for submission as part of an interim report to the Governor by April 30, 2008.
2. Presentation of a final report, along with any recommended legislation, to the Governor by December 31, 2008. The final report will include:
 - i. Further development of the policy recommendations included in the interim report with analysis of the GHG reduction potential, the estimated costs and savings, the other environmental benefits, and the feasibility of the recommendations;
 - ii. Recommendations for appropriate short-term, mid-term, and long-term GHG emissions reduction goals and targets for Michigan;
 - iii. An assessment of the climate change impacts to Michigan, the likelihood of occurrence, and recommendations for potential adaptive measures; and
 - iv. A comprehensive climate action plan for Michigan.

This interim report fulfills the requirements of Phase 1.

MCAC Members

The MCAC is comprised of 35 members representing academia, a broad base of industry, utilities, state and local government, environmental interest groups, organized labor, and tribal governments. The MCAC is responsible for the final recommendations on specific climate policy actions for Michigan. Appendix B contains a list of the MCAC members.

Technical Workgroups (TWGs)

There are five TWGs established to provide guidance and assistance to the MCAC. The TWGs include members of the MCAC as well individuals with technical expertise and/or interest in the sector. The five sector-based TWGs are (1) Agriculture/Forestry/Waste Management, (2) Energy Supply, (3) Transportation/Land Use, (4) Residential/Commercial/Industrial, and (5) Cross Cutting Issues. Appendix C contains a list of the TWG members.

Process

The MCAC is using an open systematic and step-wise decision-making process to develop the comprehensive plan for Michigan.

Meetings of the MCAC are scheduled at approximately eight-week intervals. The MCAC met on December 12, 2007 and February 14, 2008 at the Michigan State University Union in East Lansing, Michigan. The third MCAC meeting was held on April 25, 2008 at the Southeast Michigan Council of Governments (SEMCOG) office in Detroit, Michigan.

The individual TWGs meet as needed, typically two or more times between each of the MCAC meetings. Each TWG meeting takes place via conference call. The public is invited to participate at all MCAC and TWG meetings either in person or via conference call. All meeting agendas and associated work products for both the MCAC and the TWGs are available on the Internet at www.miclimatchange.us. Each meeting agenda includes an opportunity for public comment.

Current Status

The MCAC and TWGs have identified and discussed over 330 potential options for mitigation of GHG emissions assembled as a catalog (see Appendix D). The catalog of options consists of actions considered in other states and over 80 actions suggested by the MCAC and TWG members. Through the workgroup process, each TWG vetted the options within their sector and selected their top priorities. These lists were compiled and submitted to the MCAC for their

consideration. At its April 25, 2008 meeting, the MCAC confirmed a list of 55 policy options to receive initial priority for further analysis.

Policy Options for Further Consideration

The following is the list of policy options for further analysis approved by the MCAC:

Agriculture, Forestry, and Waste Management (AFW) TWG

Option #	Proposed Option Name	Catalog of State Actions #
AFW-1	Expanded use of biomass feedstocks for electricity, heat, or steam production	1.1 Expanded Use of Biomass Feedstocks for Electricity, Heat and Steam Production 6.1 Expanded Use of Forest Biomass Feedstocks for Electricity, Heat and Steam Production
AFW-2	In-state liquid biofuels production	1.2 In-State Liquid Biofuels and Feedstock Production 6.2 In-State Liquid Biofuels Production (Forestry) 11.6 Algae and Bio-Oils
AFW-3	Methane capture and utilization from manure and other biological waste	1.3 Manure Digesters/Other Waste Energy Utilization 2.1.2 Manure Management: Methane Capture 11.3 Methane and Biogas Energy Programs
AFW-4	Expanded use of bio-based materials	1.5 Expanded Use of Bio-based Materials 6.5 Expanded Use of New, Used, & Recycled Wood Products for Building Materials
AFW-5	Land use management that promotes permanent cover	4.1 Land Use Management that Promotes Permanent Cover
AFW-6	Forestry and agricultural land protection	4.2 Preserve Open Space/Agricultural Land 7.1 Forest Protection – Reduced Clearing and Conversion to Non-forest Cover

Option #	Proposed Option Name	Catalog of State Actions #
AFW-7	Promotion of farming practices that achieve GHG benefits	5.2 Promotion of Farming Practices that Achieve GHG Benefits 3.1 Soil Carbon Management 5.4 Programs to Promote Organic Farming Practices that Achieve GHG Benefits 3.2 Nutrient Management 5.1 Increase On-Farm Energy Efficiency 5.3 Programs to Support Local Farming/Buy Local
AFW-8	Forest management for carbon sequestration and biodiversity	7.4 Forest Management for Carbon Sequestration and Biodiversity
AFW-9	Source reduction, advanced recycling, and organics management	9.1 Advanced Recycling, Source Reduction, and Composting
AFW-10	Landfill methane energy programs	10.2 Landfill Methane Energy Programs

Cross-Cutting Issues Technical Work Group

Option #	Proposed Option Name	Catalog of State Actions #
CCI-1	GHG inventories, forecasting, reporting, and registry	1.1 State Inventory capacity 1.2 Forecasting 1.3 GHG Reporting 1.6 Multi-state Registry
CCI-2	Statewide GHG reduction goals and targets	2.1 GHG Reduction Goals and Targets 2.2 Accountability program 2.3 Regional accountability programs
CCI-3	State and local government GHG emission reductions (lead-by-example)	3.1 State Agency GHG emission targets 3.4 State agency accountability program 3.6 Evaluate GHG emissions in EIS/EA processes 3.7 Promote renewable energy 3.10 Energy efficiency requirements for government building 3.11 Post-secondary institutions 3.12 Evaluate GHG emission impacts resulting from state policies and in capital funding programs (from TLU 2.1.2).
CCI-4	Comprehensive local government climate action plans (counties, cities, etc.)	4.1 Local government GHG planning 4.2 Promote regional cooperation 4.3 Incentives for LEED type standards

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Option #	Proposed Option Name	Catalog of State Actions #
CCI-5	Public education and outreach	5.1 Target Audience: State Government Agencies 5.2 Target Audience: Policymakers 5.3 Target Audience: Future Generations 5.4 Target Audience: Community Leaders and Community-Based Organizations 5.5 Target Audience: General Public 5.6 Target Audience: Industrial and Economic Sectors 5.7 Target Audience: Tribal Governments
CCI-6	Tax and cap/cap and trade [Recommend establishment of new TWG to address these options] MCAC approved creation of new Market Based Policies TWG, which will address these options.	6.1 Tax incentives and disincentives 6.2 Cap and trade 6.2.1 Chicago Climate Exchange (CCX) 6.3 Fiscal policies 6.4 Integration of cap and trade and/or tax initiatives 6.5 Carbon credit system 6.6 Market advisory group 6.7 Cost analysis
CCI-7	Seek funding for implementation of MCAC recommendations	7.1 Funding Options 7.2 Federal/national funding
CCI-8	Adaptation and Vulnerability	8.1 Preliminary Planning for Adaptation 8.2 Preliminary Planning on Great Lakes and other Natural Resources
CCI-9	Participate in regional, multi-state and national GHG reduction efforts	9.1 Regional GHG Reduction Opportunities 9.2 MWG GHG Accord MWG and security platform
CCI-10	Enhance and encourage economic growth and job creation opportunities through climate change mitigation	10.1 Promote Green Economic Opportunities 10.2 Promote Green Jobs 10.3 Regional Infrastructure development
CCI-11	Enhance and encourage community development through climate change mitigation; address environmental justice	11.1 Address Environmental Justice Concerns in Climate Programs 11.2 Promote Green Job Opportunities in Underserved Communities 11.3 Direct Carbon revenues to Underserved Communities 11.4 Dedicate revenues to address climate impacts in Underserved Communities

Energy Supply (ES) TWG

Option #	Proposed Option Name	Catalog of State Actions #
ES-1	Renewable portfolio standard	2.1 Renewable Portfolio Standard
ES-2	Greenhouse gas cap and trade	1.1 Greenhouse gas cap and trade
ES-3	Energy efficiency portfolio standard	1.1.1 Energy Efficiency Portfolio Standard
ES-4	Carbon tax	1.2 Carbon tax
ES-5	Advanced fossil fuel technology (e.g. IGCC, CCSR) incentives, support, or requirements	3.1 Advanced fossil fuel technology (e.g. IGCC, CCSR) incentives, support, or requirements
ES-6	New nuclear power	3.2 New nuclear power
ES-7	Integrated resource planning (IRP) including CHP	1.4 Integrated resource planning (IRP)
ES-8	Smart grid including advanced metering	6.7 Smart grid 5.4 Advanced metering
ES-9	CCSR incentives, requirements, R&D and/or enabling policies	5.1 CCSR incentives, requirements and/or enabling policies (administration, regulation, liability, incentives) 4.7 Recovery of stranded oil 5.2 R&D for CCSR
ES-10	Technology-focused initiatives (biomass co-firing, energy storage, fuel cells, etc.) including research, development & demonstration	2.8 Technology-focused initiatives (biomass co-firing, energy storage, fuel cells, etc.) 3.5 Technology-focused initiatives 1.6 Technology Research & Development
ES-11	Power plant replacement, EE and repowering	3.6 Power plant replacement 3.4 Efficiency improvements and re-powering existing plants
ES-12	Distributed renewable energy incentives, barrier removal, and development issues including grid access	2.3 Distributed renewable energy incentives 2.3.1 Distributed Renewable Energy Barrier Removal 2.7 Renewable energy development issues (zoning, siting, etc.) 2.2 Grid based renewable energy incentives (includes feed-in tariff) 2.6 Pricing strategies to promote renewable energy and/or CHP distributed generation (e.g. net metering)
ES-13	Combined Heat and Power (CHP) standards, incentives and/or barrier removal	2.5 Combined Heat and Power (CHP) standards, incentives and/or barrier removal

Option #	Proposed Option Name	Catalog of State Actions #
ES-14	State lead by example – green power purchasing	2.10 State lead by example – green power purchasing
ES-15	Transmission access and upgrades	6.1 Transmission system upgrading and access improvements

Residential, Commercial and Industrial (RCI) Technical Working Group

Option #	Proposed Option Name	Catalog of State Actions #
RCI-1	Utility Demand-side management (DSM) for electricity, natural gas, propane, and fuel oil	1.1 Utility Demand-Side Management (DSM) for Electricity 1.2 Utility Demand-Side Management (DSM) for Natural Gas, Propane, and Fuel Oil
RCI-2	Existing building energy efficiency incentives, assistance, certification and financing	2.1.2 Incentives for Energy Efficiency – Renovation 3.4 Lighting efficiency 2.11 Certification or Energy Efficiency Rating for Existing Buildings 9.5 Statewide effort to retrofit existing buildings (residential, commercial, public, and industrial) for energy efficiency 1.7 State-funded reduced cost energy audits for businesses 1.8 State-funded low-cost Loans and Rebates for Energy Efficiency improvements 2.8 Incentives for retrofit of existing residential buildings 9.7 Energy efficiency reinvestment funds
RCI-3	Regulatory (PSC) changes to remove disincentives and encourage EE investments by IOUs	1.12 Regulatory (PSC) changes to remove disincentives and encourage EE investments by IOUs [NOTE: MCAC requests TWG consideration of merger with RCI-7]
RCI-4	Adopt more stringent building codes for energy efficiency	2.1.1 (3.4) Improved Building Codes for Energy Efficiency
RCI-5	Michigan Climate Change Challenge and related consumer education programs	4.5 Consumer Education Programs 4.1 Governor's energy conservation campaign; Launch the Michigan Climate Change Challenge
RCI-6	Incentives to promote implementation of renewable energy systems	6.1 Incentives to Promote Implementation of Renewable Energy Systems 5.6 International feed-in tariff

Option #	Proposed Option Name	Catalog of State Actions #
RCI-7	Enact a public benefits charge to fund energy efficiency programs	1.4 Energy Efficiency Funds [NOTE: MCAC requests TWG consideration of merger with RCI-3]
RCI-8	Promotion and incentives for improved design and construction in the private sector	2.6 Promotion and Incentives for Improved Design and Construction in the Private Sector
RCI-9	Net-metering for distributed generation	5.2 Net-metering for Distributed Generation
RCI-10	Training and education for building design, construction and operation	2.2 Training of building code and other officials in energy code enforcement 2.9 Training and Education for Builders and Contractors (e.g. HVAC sizing, duct sealing) 2.10 Energy Management Training/Training of Building Operators
RCI-11	Programs to reduce energy consumption for pumping, delivering, and managing water	

Transportation and Land Use (TLU) TWG

Option #	Proposed Option Name	Catalog of State Actions #
TLU-1	Transit and travel options	<p>2.2.23 Improve Transit Service (frequency, convenience, quality)</p> <p>2.2.34 Transit Marketing and Promotion,(including individualized transit marketing)</p> <p>2.2.45 Invest additional funds in Bike and Pedestrian Infrastructure</p> <p>2.2.5 Expand Transit Infrastructure (rail, bus, BRT)</p> <p>2.2.7 Subsidize and promote car pooling and van pooling</p> <p>2.2.10 Invest in/provide parking for car-sharing</p> <p>2.2.15 Build park-and-ride facilities</p> <p>2.2.17 Authorize alternative revenue sources for public transit, to be approved by voters regionally.</p> <p>2.3.9 Introduce Transit Pricing Incentives</p> <p>4.1 Invest in Commuter and High-speed Rail. Explore adding passenger rail on existing freight rail tracks.</p> <p>4.2 Improve Integrated Aviation, Rail, Bus Networks (planning, governance, and investment)</p>
TLU-2	Eco Driver Program	<p>1.1.4 Encourage and incentivize an aftermarket technologies program (e.g. Low Friction Oil, Low-Rolling Resistance Tires)</p> <p>1.1.6 Require GHG emission stickers for automobile sales</p> <p>1.2.2 Encourage Vehicle Maintenance, Tire Pressure Maintenance, Driver Training</p> <p>1.2.4 Require tune-up services to include tire pressure and/or oil changes.</p> <p>1.2.5 Passenger vehicle anti-idling program</p> <p>1.2.6 School education programs</p> <p>1.2.9 Encourage or require improved recovery/efficiency of highway vehicle air conditioning fluid</p>

Option #	Proposed Option Name	Catalog of State Actions #
TLU-3	Promote low-carbon fuel use in transportation	1.4.1 Pass Low-GHG Fuel Standard (e.g., renewable) and/or advocate for a federal standard 1.4.4 Fund Alternative Fuel Infrastructure Development 1.4.5 Implement state government E85 use plan 1.4.7 Move forward with the recommendations of the MI Renewable Fuels Commission 1.4.7a MI RFC 3. Establish the Next Generation Renewable Fuels Feedstock Program 1.4.7b MI RFC 4. Renaissance zones for production of cellulosic biofuels 1.4.7c MI RFC 10. Incentives for early stage next generation fuel production facilities and processing centers 1.4.7d MI RFC 29-30. Retain State renewable fuel purchase preferences and promotion 1.4.7e MI RFC 31-38. Develop Statewide marketing campaign to promote renewable fuels to consumers, distributors, and fleet managers 1.4.7f MI RFC 40, 42. Incentives for the purchase of renewable fuel vehicles (targeting consumers, fleets, and schools) 1.4.7g Promote green fuel retailing program 1.4.3 Subsidize Biofuel expansion (biodiesel, CNG, LPG, cellulosic ethanol) and support development of appropriate fuel testing protocols
TLU-4	Increase rail capacity, and address rail freight system bottlenecks	3.3.3 Maintain and Increase Rail Capacity, and Address Rail Freight System Bottlenecks
TLU-5	Truck idling policies	3.2.7 Truck Stop Electrification to reduce idling 3.2.8 Enforce/Enact Anti-Idling ordinances 3.2.9 Encourage or fund truck generators to reduce idling

Option #	Proposed Option Name	Catalog of State Actions #
TLU-6	Land USE PLANNING AND INCENTIVES	<p>2.1.1 Adopt statewide growth management plan & guiding conforming regional land use plans/programs that meet state-determined GHG budgets.</p> <p>2.1.3 Shape public and private investment to maximize GHG reductions and growth management, including Indirect Source Rule to hold development accountable for GHGs, Transfer of Development Rights, Open Space Protection, Coastal Zone Management, Adequate Public Facilities initiatives</p> <p>2.1.4 Provide technical/financial support to local/regional agencies, enhancing technical tools, capacity, and fund Blueprint Planning Grant program</p> <p>2.1.7 Connect State economic development incentives to land use, by giving priority to companies that use them to locate in densely populated/urban places.</p> <p>2.1.8 Inventory all available discretionary funds in such areas as housing, economic development, infrastructure, schools transportation, and state facilities, and allocate these funds to communities that adopt best practices in land use planning and meet performance standards related to climate and VMT reduction goals.</p> <p>2.1.9 Focus economic development incentives and public infrastructure funding around public transit nodes. (2.1.10 Authorize multi-jurisdictional TIF districts around transit nodes that will receive state grants for planning and implementation and will be given priority status by the State and metropolitan planning organization for future grants and 2.2.18 Allow TIF to be used for public transit infrastructure and operations are sub-sets of this option.)</p>
TLU-7	Congestion mitigation	<p>1.2.3 Transportation System Management (Intelligent Transportation Systems) – signal synchronization, variable message signs, real-time driver information and feedback</p> <p>2.1.14 Maintain and expand the courtesy patrol program to help on break down clearance</p> <p>2.2.20 Construct roundabouts instead of standard intersections where appropriate</p> <p>3.3.1 Fund Intermodal Freight Initiatives</p> <p>3.2.3 Improve Traffic Flow through bottleneck improvements</p>

Option #	Proposed Option Name	Catalog of State Actions #
TLU-8	Advanced vehicle technology	1.1.7 Establish incentives to promote high energy density battery manufacturing and promote plug-in hybrids 1.1.8 Encourage or require development of hybrid technology for garbage and recycling trucks 3.1.1 Subsidize/provide loans for Vehicle Technology Improvements for all types of vehicles, not just freight. 3.1.2 Fund R&D on low-GHG vehicle technology for all types of vehicles, not just freight.

Preliminary GHG Reduction Goals

For many states, the foundation of their climate action plan is the establishment of an emission baseline year and emission reduction goals for future target years. The baseline, goals, and targets establish the magnitude of emission reductions required from across the state’s sectors. As a state selects its baseline, goals, and targets, it is critical they recognize their unique circumstances. It is also important to recognize the interplay between the baseline year and future GHG reduction goals. For example, it may appear that a high growth state will have greater emission reductions due to the larger reduction goals and a recent baseline year; however, its emission reduction commitment may be less than that of a smaller growth state selecting a lower percentage reduction and earlier base year.

At its April 25, 2008 meeting, the MCAC set preliminary baseline and target years and GHG emission reduction goals as requested by the Governor. These preliminary targets years and emission reduction goals reflect a high level of uncertainty. The preliminary baseline target years and GHG reduction goals will be reassessed in the second phase of the process when the 55 policy options selected will be modeled and evaluated.

For discussion purposes, the MCAC identified a preliminary baseline year of 2002, the year with the best historical GHG emission data available. During the course of the MCAC process, an updated inventory and forecast of Michigan GHG emissions will be developed. The MCAC also identified preliminary target years of 2015, 2025, and 2050, and associated preliminary emission reduction ranges for those years. The following preliminary targets and goals will be used as guidelines as the MCAC considers the policy options:

Year	% Reduction from 2002 Levels
2002	Baseline
2015	10 to 20%
2025	25 to 35%
2050	80%

Additional information on the viability, effectiveness, and costs associated with each of the policy options under consideration will be developed in the next months. The final baseline and target years and associated emission reduction goals will be based on this analysis.

Recommendations for Immediate Action

Establishment of the Market-Based Policies Technical Workgroup

Establish a new TWG to evaluate market-based policies (Cap and Trade, Carbon Tax, etc.) that reduce GHG emissions. Both the Energy Supply and the Cross Cutting Issues TWGs proposed that Michigan consider a GHG cap and trade system and other market-based policies. Given the complexity of the issues, the need for broad representation, the time necessary to fully evaluate the policy options, and the linkage to other initiatives, the MCAC supported DEQ Director Steven E. Chester's recommendation to establish a separate Cap and Trade TWG. The Cap and Trade TWG will proceed in the same manner as the other TWGs.

Michigan Climate Challenge (MCCP) Program

Establish the MCCP to encourage Michigan businesses, institutions, local and regional governments, and the general public to make a voluntary public commitment to undertake actions to reduce GHG emissions in their communities. The Department of Environmental Quality, working in conjunction and consultation with other state agencies, will develop and launch the MCCP and include a web-based "Online Pledge" to encourage voluntary GHG reductions throughout Michigan.

The MCCP will provide web-based resources and information in the form of a "Climate Action Toolkit" for individuals and organizations to consider implementing as part of their voluntary pledge to reduce GHG emissions. The "Climate Action Toolkit" will contain specific recommendations for reducing GHG emissions and will also identify measures that can be undertaken to minimize the impacts of climate change so Michigan can be better prepared to adapt to its effects.

Next Steps

The MCAC and TWG members will further evaluate each of the 55 priority options selected. This will include:

- Developing a detailed design for each action.
- Quantifying anticipated reductions and costs.
- Analyzing the feasibility of implementation in Michigan.
- Completing other activities necessary to fully analyze the options.

The MCAC and TWGs will also continue to refine the Michigan's GHG Emission Inventory and Forecast through updates, corrections, or the addition of new data. Once the GHG Emission Inventory and Forecast is updated, the MCAC will finalize its recommendations on GHG reduction goals and targets for Michigan.

A comprehensive climate action plan will be mapped out in the final report of the MCAC, which is due December 31, 2008.

Other Initiatives with Linkage

Midwestern Regional GHG Reduction Accord

On November 15, 2007, ten Midwestern leaders signed the Midwestern Greenhouse Gas Reduction Accord. This accord will serve as a regional strategy to achieve energy security and reduce GHG emissions. It will also establish GHG reduction targets and time frames for the region; develop a market-based and multisector cap-and-trade mechanism to help achieve those reduction targets; establish a reduction tracking, management, and crediting system; and develop and implement additional steps, as needed, to achieve the reduction targets. Outcomes from this group will be factored into the work products of the MCAC. Work continues on the goals of this accord.

What Michigan is Currently Doing to Reduce GHG Emissions

There are many policy and program actions already underway that have a beneficial impact with regard to climate change. Appendix E provides a brief description of the various actions currently undertaken by state, regional and local governments.

Federal Government Activities

There are climate change bills now being considered by Congress for reducing GHGs to protect public health and welfare. It is anticipated that any federal legislation will contain a robust policy role for states and that this role in regulation and implementation will be clearly stated.

Appendices

- A. Executive Order 2007-42.
- B. Michigan Climate Action Council (MCAC) Member List.
- C. Technical Workgroup (TWG) Member List.
- D. Complete Catalog of State Actions.
- E. "What Michigan is Currently Doing to Address Climate Change" Document.