

Catalog of State Actions Cross-Cutting (CC) Issues Working Group

A catalog of state-level, GHG-reducing actions and policy options prepared by the Center for Climate Strategies (CCS), Michigan Department of Environmental Quality, and others based on actions undertaken or considered by Michigan and other states, including regional, state, local and private actions.

Important Note: The GHG Reduction Policy Options below are numbered solely for convenience in referencing them. Their numbers do NOT reflect a ranking or prioritization of the policy options.

Notation regarding options:

Options marked with an asterisk (*) indicate options that are at least partially “base case” policies, i.e., that have been considered or undertaken at some level in Michigan.

Option No.	GHG Reduction Policy Option	Priority for Consideration	Feasibility Considerations	Notes
1	Inventories and Forecasting			
1.1.	Establish and fund mandatory GHG emission inventory function at state agency*			
1.2.	Establish and maintain GHG emission forecasting function			
2	GHG Reporting			
2.1.	Establish or adopt a GHG emissions reporting program*			
3	GHG Registry			
3.1.	Participate in the development of a multi-state GHG emissions reduction registry*			Participation by the Department of Environmental Quality on the Steering Committee for the development of <i>The Climate Registry</i> , a multistate program designed to be an essential piece of infrastructure for the development of state and federal climate change programs. Over 30 U.S. and Mexican States and several Canadian provinces have already signed on to join <i>The Climate Registry</i> . For more information about <i>The Climate Registry</i> go to http://www.theclimateregistry.org/
3.2.	Provide assistance in reporting and registering GHG emissions *			
3.3.	Recruit members for Registry statewide			

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4	Statewide GHG Reduction Goals and Targets			
4.1.	Establish goals or targets for statewide GHG emission reductions			
4.2.	Institute an accountability program to measure and report progress in reducing GHG emissions.			
4.3.	Participate in development of accountability programs in other states			
5	State and Local Government GHG Emissions (Lead-By-Example)			
5.1.	Lead by example by establishing targets for reductions in State GHG emissions			
5.2.	Create a multi-agency body to oversee on-going state climate efforts.			
5.3.	Disaggregate the State's own GHG emissions to the agency level and require annual agency-specific reports on GHG reduction progress.			
5.4.	Institute an accountability program to measure and report progress in reducing GHG emissions.			
5.5.	Climate-neutral bonding			
5.6.	Require evaluation of GHG emissions in Environmental Impact Statements and similar environmental studies.			

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5.7.	Review sources of renewable energy			Michigan Renewable Energy Program (MREP) was established under Section 10r(6) of 2000 PA 141. The MREP, is charged with informing customers of the availability and value of using renewable energy generation, the potential for reduced pollution, promoting the use of existing renewable energy sources, and encouraging the development of new renewable energy facilities.
5.8.	Apply pollution prevention principles to GHG emission reductions			The Michigan Department of Environmental Quality manages a number of pollution prevention and compliance assistance programs to assist companies reduce their environmental impact or exceed their regulatory obligations. For more information go to http://www.michigan.gov/deq/0,1607,7-135-3585---,00.html
5.9.	Promote Carpooling by State Employees			The Michigan Department of Transportation (MDOT) offers commuters a Vanpool Program, which is open to individual members of the public. MDOT also helps employers develop vanpools and ridesharing programs for their employees. MDOT also maintains car pool parking lots for individuals wishing to car pool on their own. For more information on either of these two programs go to http://www.michigan.gov/mdot/
6	Comprehensive Local Government Climate Action Plans (Counties, Cities, Etc.)			
6.1.	Encourage and assist in the development of local government planning efforts to reduce greenhouse gas emissions, establish targets, etc.			

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7	Public Education and Outreach—See Appendix A For Details for Each Audience Category			
7.1.	State Government Education and Outreach Actions The State should lead by example (i.e., walk the talk) regarding education and outreach.			
7.2.	Target Audience: Policymakers (legislators, regulators, executive branch, agencies) Implementation of climate actions hinges on policymakers' approval.			
7.3.	Target Audience: Future Generations Integrate climate change into educational curricula, post-secondary degree programs, and professional licensing.			
7.4.	Target Audience: Community Leaders and Community-Based Organizations (e.g., institutions, municipalities, service clubs, social and affinity groups, NGOs, etc.) Recognize leadership; share success stories and role models; expand involvement and participation within civic society.			
7.5.	Target Audience: General Public Increase awareness and engage in climate actions in personal and professional lives.			
7.6.	Target Audience: Industrial and Economic Sectors Sector-specific climate change education and outreach.			
8	Tax and Cap Policies			
8.1.	Institute tax incentives and disincentives to encourage GHG reductions.			
8.2.	Other market-based programs including cap and trade			*Michigan will investigate and/or join the Chicago Climate Exchange (CCX). Becoming a member of the CCX includes achieving by 2010 a minimum 6% reduction in GHG emissions from 2000 levels. For more information about the CCX go to http://www.chicagoclimatex.com/
8.3.	Explore other regional opportunities, both public and private			

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9	Seek Funding For Implementation Of Climate Action Panel Recommendations			
9.1.	Seek and stimulate funding and investment in climate solutions.			
10	Adaptation And Vulnerability			
10.1	Undertake a comprehensive planning effort to assess and address the state's vulnerability to climate change and adaptation opportunities.			
11	Participate in Regional and Multistate GHG Reduction Efforts			
11.1	Identify opportunities for the state to join with other state or regional GHG reduction efforts.			
11.2	Implement regional climate reduction initiatives.			
12	Create a Clearinghouse to Facilitate Investment in Climate-Related Business Opportunities			

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12.1	Create an entity to promote business development opportunities in climate protection.			<p>Executive Directive 2006-06 “Promotion of Green Chemistry” became effective October 17, 2006. This Executive Directive tasks the DEQ with establishing a Green Chemistry Support Roundtable and developing and promoting a Green Chemistry Support Program for sustainable economic development and protection of public health.</p> <p>Michigan’s Small Business Pollution Prevention Loan Program provides low interest loans to existing small businesses for qualifying source reduction, reuse, recycling or conservation projects. For more information go to http://www.michigan.gov/deq/0,1607,7-135-3307_3515_4144---,00.html</p>
13	Encourage the Creation of a Business-Oriented Organization To Share Information and Strategies, Recognize Successes, and Support Aggressive GHG Reduction Goals			
13.1	Promote development of a business-oriented entity to help promote and recognize business efforts to reduce GHG emissions.			
14	Dedicate Greater Public Investment to Climate Data and Analysis			
14.1	Consider formation of a state climate data and analysis center to develop and provide objective, state-specific information regarding climate data.			
15	Facilitate the Development of an Effective Carbon Credit System for Michigan			

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15.1	The state could purchase carbon credits associated with its own activities, function as a purveyor of credits to others, or act as a certification entity of others carbon exchanges.			<p>The Michigan Department of Natural Resources, in conjunction with the Delta Institute has launched a pilot project titled, "Michigan Forest Carbon Offset and Trading Program." This program allows Michigan forest landowners to document their creation of greenhouse gas emission reduction credits and earn revenue from their sale on the Chicago Climate Exchange.</p> <p>The Michigan Department of Agriculture, in conjunction with the Delta Institute has launched a pilot project titled, "Michigan Conservation and Climate Change Program." This program allows Michigan agricultural landowners to document their creation of greenhouse gas emission reduction credits and earn revenue from their sale on the Chicago Climate Exchange. For more information on the MCCC Program go to http://www.michiganclimate.org/</p>
16 Create a Market Advisory Group				
16.1	Consider establishing a "Market Advisory Group" consisting of experts to provide guidance to the state on the design of market-based compliance programs to manage GHG emissions. Look at the California system as a potential model.			

Appendix A. Public Education and Outreach Third-Level Sub-Options by Audience for Option 7 of Catalog

Option No.	GHG Reduction Policy Option	Priority for Consideration	Feasibility Considerations	Notes
7	Public Education and Outreach			
7.1	State Government Education and Outreach Actions The State should lead by example (i.e., walk the talk) regarding education and outreach.			
	Establish an education and outreach committee to educate audiences regarding climate plan policies and to oversee those relating to education.			
	Include state public education and higher education officials in the committee established above			
	Create and maintain one or more “outreach coordinator” positions specifically tasked with climate outreach and coordination among state agencies and outside entities.			
	Educate state employees across-the-board, and assign “point persons” to do so on an on-going basis.			
	Institute annual Governor’s Awards to recognize climate action of several types/categories.			

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7.2	Target Audience: Policymakers (legislators, regulators, executive branch, agencies) Implementation of climate actions hinges on policymakers' approval.			
	Educate policy makers on CAP policy recommendations, climate change in general, scientific and technological advances, and progress toward state goals through regular briefings in order to promote acceptance and implementation of mitigation and adaptation policies.			
	Provide continuing outreach and assistance to Governor's office, legislature, and implementing agencies on a regular basis.			
7.3	Target Audience: Future Generations Integrate climate change into educational curricula, post-secondary degree programs, and professional licensing.			
	Add climate change to public education performance standards for science and social studies; identify (a) gaps in climate change education, and (b) specific curricula to fill any gaps.			
	Organize groups of educators to identify, assemble, and employ climate change curricula appropriate to age groups			

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	Integrate “best practices” into public school design and construction to educate students (and parents) first-hand in their communities and colleges (i.e., walk the talk).			
	Integrate climate change into core college curricula.			
	Promote research into climate change and solutions at state universities; develop university “Centers of Excellence” on climate issues, new approaches, and technologies.			
	Integrate climate change into existing and/or new educational competition programs.			
	Work with science centers, zoos, and museums to include a climate science focus appropriate to their core mission			
	Introduce core competencies on climate change into professional licensing programs (e.g., energy efficiency in building design and construction, use of recycled materials, etc.)			
7.4	Target Audience: Community Leaders and Community-Based Organizations (e.g., institutions, municipalities, service clubs, social and affinity groups, NGOs, etc.) Recognize leadership; share success stories and role models; expand involvement and participation within civic society.			

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	Educate community planning and zoning officials about climate change, impacts, and opportunities.			
	Identify individual community leaders who are acting effectively on climate change; showcase and share their successes.			
	Identify individual community leaders who are not yet acting on climate change and make a special effort to educate and encourage them to act.			
	Engage associations and attend their periodic meetings to reach out on climate change, impacts, sector-specific mitigation actions, and adaptation opportunities.			
	Identify, assist, and leverage community-based organizations that have expertise or interest in climate-related issues			
	Work with community-based organizations to identify and build upon climate issues related to their core mission			
	Develop and coordinate a network of community-based organizations acting on climate change so they can link up, organize joint events, etc.			

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	Support and facilitate outreach and education within community-based organization regarding climate change issues and actions			
	Develop and provide concrete information on co-benefits to entities to use in boosting their climate efforts			
	Organize and host events that focus on leading by example, sharing “how-to,” illuminating financial risks and opportunities, co-benefits, etc.			
	Encourage municipal leaders to join ICLEI’s ¹ Cities for Climate Protection program and/or the Mayors Climate Protection Agreement ²			
	Help communities statewide implement local Climate Wise programs.			
7.5	Target Audience: General Public Increase awareness and engage in climate actions in personal and professional lives.			
	Educate broadcasters, reporters, editorial boards, etc. about climate change, the risks it imposes, and solutions.			

¹ ICLEI is the International Council for Local Environmental Initiatives. See www.iclei.org.

² See <http://www.ci.seattle.wa.us/mayor/climate/>.

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	Work with state broadcasters and print media associations to develop and run climate change public service announcements.			
	Conduct public polling to benchmark strength and depth of climate understanding.			
	Keep a high profile on climate change issues and actions through regular public mention by Governor and other public leaders			
	Develop and use a state-based "brand" on climate awareness and action			
	Develop and maintain a state climate change Web site for the public including a clearinghouse of climate change information and resources.			
	Work with existing company outreach efforts to customers to enhance awareness of climate change issues and opportunities			
	Undertake a concerted planning effort to identify and address climate adaptation issues and needs in the state			

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	Work to educate consumers—and home designers, builders, and contractors—to ensure that they are aware of the different choices they have for space heating and cooling (e.g., evaporative vs. refrigerative) and the impacts of those choices.			
	Develop a statewide voluntary program to structure and assist individuals in undertaking actions to reduce GHG emissions.			
7.6	Target Audience: Industrial and Economic Sectors Sector-specific climate change education and outreach.			
	Residential, Commercial, and Industrial			
	Transportation and Land Use			
	Energy Supply and Use			
	Agriculture and Forestry			
	Implement a state program of voluntary business actions to reduce GHGs			

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	Institute a “business incubator” program to attract and support new business development relating to the new energy economy.			
	Audiences outside the state too			