

Catalog of State Actions Cross-Cutting (CC) Issues Subcommittee (SC)

A catalog of state-level, GHG-reducing actions and policy options prepared by the Center for Climate Strategies (CCS), Iowa Department of Natural Resources, and others based on actions undertaken or considered by Iowa 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.

Note: 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 Iowa.

Note: Subcommittee members were asked to rank each sub-option as High (H), Medium (M) or Low (L) in the Priority for Consideration columns below.

Option No.	GHG Reduction Policy Option	Priority for Consideration	Feasibility Considerations	Notes
1	INVENTORIES, FORECASTING, GHG REPORTING, AND REGISTRY			
	Iowa DNR is establishing a greenhouse gas (GHG) emission inventory system pursuant to state legislation. Senate File (S.F.) 485. It will include an annual report by September 1 of each year.*	H		
	Establish and maintain GHG emission forecasting function.	L to H		Consider whether other forecasting entities/functions will work.
1.3	Iowa DNR is establishing a mandatory GHG emission reporting system for collection of data from producers of GHGs pursuant to state legislation SF 485. It will be included in an annual report by September 1 of each year.*	H		

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1.4	Iowa DNR is establishing a voluntary GHG registry for the purpose of cooperating with other states in tracking, managing, and crediting entities in the state that reduce their generation of GHGs. Iowa is achieving this legislative charge by having joined <i>The Climate Registry</i> , which is being developed through the collaborative efforts of 39 states (as of November 2007). Senate File 485 .*	H		Agreement that a mandatory registry is needed but we want to deal with the mandatory/voluntary issue in the scope and policy design phase.
1.5	Provide assistance in reporting and registering GHG emissions*	H		
1.6	Recruit members for <i>Registry</i> statewide	H		Agreement that a mandatory registry is needed but we want to deal with the mandatory/voluntary issue in the scope and policy design phase.
2.	STATEWIDE GHG REDUCTION GOALS AND TARGETS			
2.1	Establish goals or targets for statewide GHG emission reductions. Senate File 485 states that the Council should establish short-, medium-, and long-term goals AND a 50% reduction of GHG emissions by 2050, at a minimum. The ICCAC Interim Report was approved on 12/17/07 and it establishes the following	H		

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	<p>baselines and goals:</p> <p>“1. The Council recommends multiple scenarios for statewide reductions in GHGs with targeted goals of 50% and 90% by 2050.</p> <p>2. The Council recommends adopting a baseline year of 2005 for the purposes of calculating statewide GHG emission reductions in future years.</p> <p>3. The Council recommends adopting other baseline years for the purposes of economic opportunities and incentives as needed.</p> <p>4. The Council recommends GHG reductions for interim years including 2012, 2020, and finally 2050.”</p> <p>Without our full analysis, it is clear to the Council that it is necessary to develop scenarios that slow, stop, and reverse the growth of Iowa’s GHG</p>			

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	emissions soon.			
2.2	Institute an accountability program to measure and report progress in reducing GHG emissions.	M to H		
2.3	Participate in development of accountability programs in other states	L		
3	STATE AND LOCAL GOVERNMENT GHG EMISSIONS (LEAD-BY-EXAMPLE)			
3.1	Lead by example by establishing targets for reductions in State. *Executive Order 41 (2005)—In April 2005, Iowa’s governor issued Executive Order 41, directing state agencies to reduce energy use in buildings by an average of 15% by 2010, relative to their energy use in 2000. For all equipment for which life cycle cost calculations can be completed, all agencies must purchase lowest life cycle cost equipment. The order directs state agencies to obtain at least 10% of their electricity from renewable energy sources by 2010. To satisfy this requirement, agencies may generate their own renewable energy or may participate in an	H		

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	<p>Iowa utility's green power program. All state agency non-law-enforcement, light-duty vehicles procured by 2010 must be alternative fuel vehicles (AFVs) or hybrid-electric vehicles (HEVs) when an equivalent AFV or HEV model is available. Agencies must ensure that their flexible fuel vehicles operate on E85 whenever an E85 refueling facility is available. All state agencies must ensure that all bulk diesel fuel procured contains at least 5% renewable content by 2007, 10% renewable content by 2008, and 20% renewable content by 2010. Agencies must ensure that diesel vehicles operate on biodiesel blends whenever the blends are available. Executive Order Number 41 (2005)</p> <p>Also relates to Executive Order 3 on Transportation fuels. It should be taken up by one of the SCs, if not CC. Potential overlap with TLU SC state GHG emissions</p>			

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3.2	Create a multiagency body to oversee ongoing state climate efforts. Iowa Legislature passed legislation in 2007 to establish the Iowa Climate Change Advisory Council (ICCAC). The Council consists of 23 members appointed by the Governor and four nonvoting members from the Iowa Legislature.	M-H		There is a need to clarify the role of ICCAC beyond the final report.
3.3	Disaggregate the State's own GHG emissions to the agency level and require annual agency-specific reports on GHG reduction progress.	L to M		
3.4	Institute an accountability program to measure and report progress in reducing GHG emissions.	H		Institute a program to measure and report progress. More discussion is needed on the question of accountability.
3.5	Climate-neutral bonding	M to H		Get more information on this policy.
3.5	Require evaluation of GHG emissions in Environmental Impact Statements (EISs) and similar environmental studies.	L to H		Currently Iowa conducts EISs only for federally funded projects. TWG to recommend expanding EIS to state funded projects?
3.6	Review and Implement Sources of Renewable Energy	H		

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3.7	Create technical and/or financial assistance for cities, counties and/or schools to reduce energy use and perhaps even become power producers.	L to H		
3.8	COMPREHENSIVE LOCAL GOVERNMENT CLIMATE ACTION PLANS (COUNTIES, CITIES, ETC.)			
	Encourage and assist in the development of local government planning efforts to reduce GHG emissions, establish targets, etc.	H		
4	PUBLIC EDUCATION AND OUTREACH – See Appendix A for Details for Each Audience Category			
4.1	State Government Education and Outreach Actions The State should lead by example (i.e., walk the talk) regarding education and outreach.			
4.2	Target Audience: Policy Makers (legislators, regulators, executive branch, agencies) Implementation of climate actions hinges on policy makers' approval.			
4.3	Target Audience: Future Generations Integrate climate change into educational curricula, post-secondary degree programs, and professional licensing.			
4.4	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, outreach to low income communities .			
4.5	Target Audience: General Public Increase awareness and engage in climate actions in personal and professional lives.			
4.6	Target Audience: Industrial and Economic Sectors Sector-specific climate change education and outreach.			
4.7	Coordinate a statewide series of town meetings engaging the sectors in 4.1 to 4.6 to convey the critical nature of climate change and climate change solutions to mobilize them to action.			

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5	CAP-AND-TAX POLICIES—combined with 15 and 16.- <u>Lead Transferred to CRE SC.</u>			
5.1	Institute tax incentives and disincentives to encourage GHG reductions.	H		Midwestern Greenhouse Gas Accord—In November 2007, Governor Culver signed on to the Midwestern Greenhouse Gas Accord, along with five other Midwestern governors and the Premier of Manitoba, Canada. The goal of the Accord is to establish GHG reduction targets and time frames consistent with member states' own targets, develop a market-based and multi-sector cap-and-trade mechanism, and develop other mechanisms and policies to achieve the GHG reduction targets. Midwestern Greenhouse Gas Reduction Accord.
5.2	Other market-based programs including cap-and-trade	H		
5.3	Explore other regional opportunities, both public and private	H		Coordinate with Midwest Governors GHG Reduction Accord noted above. Also, note the need to address international contributions to GHG levels.
FACILITATE THE DEVELOPMENT OF AN EFFECTIVE CARBON CREDIT SYSTEM FOR IA				
5.4	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.	L to H		Need to check if there are any other non-structural demand-side initiatives, such as wind energy at night.
5.5	CREATE A MARKET ADVISORY GROUP			

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	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 other systems as potential models.	H		
6	SEEK FUNDING FOR IMPLEMENTATION OF ICCAC CLIMATE RECOMMENDATIONS			
6.1	Seek and stimulate funding and investment in climate solutions.	H		
6.2	Explore funding from the Iowa Power Fund Board.			
6.3	Identify more specific funding options for legislature.			
7	ADAPTATION AND VULNERABILITY			
7.1	Undertake a comprehensive planning effort to assess and address the state’s vulnerability to climate change and adaptation opportunities.	H		Note: Seek funding from the Power Board to engage university students in this work.
7.2	Consider formation of a state climate data and analysis center to develop and provide objective, state-specific information regarding climate data.	H		14 combined with 10.
8	PARTICIPATE IN REGIONAL AND MULTISTATE GHG REDUCTION EFFORTS			
8.1	*Midwestern Greenhouse Gas	H		

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	Reduction Accord—In November 2007, Governor Culver signed on to the Midwestern Greenhouse Gas Reduction Accord, along with five other Midwestern governors and the Premier of Manitoba, Canada. The goal of the Accord is to establish GHG reduction targets and time frames consistent with member states' own targets, develop a market-based and multi-sector cap-and-trade mechanism, and develop other mechanisms and policies to achieve the GHG reduction targets. Midwestern Greenhouse Gas Reduction Accord			
8.2	Implement regional climate reduction initiatives.	M		SC intent to seek consistency with the regional Midwest Governor's Accord in the Notes column.
8.3	Consider joining Chicago Climate Exchange	M		SC intent to seek consistency with the regional Midwest Governor's accord in the Notes column. {Move this to #5?} ICCAC member suggested 12/17/07.
9	CREATE A CLEARINGHOUSE TO FACILITATE INVESTMENT IN CLIMATE-RELATED BUSINESS OPPORTUNITIES			
9.1	Create an entity to promote business development opportunities in climate protection.	H		Combined CC-12 and CC-13. Now CC-9.1 and CC-9.2. Note: SC to research mission of Power Board to see its relationship to these policies.

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9.2	Encourage the creation of a business-oriented organization to share information and strategies, recognize successes, and support aggressive GHG reduction goals			
9.3	Promote development of a business-oriented entity to help promote and recognize business efforts to reduce GHG emissions.	M		*Option No. 13 will support the Energy Security and Climate Stewardship Platform, signed by Governor Culver in November 2007. The Platform's stated goal is to "maximize the energy resources and economic advantages and opportunities of Midwestern states while reducing emissions of atmospheric CO ₂ and other greenhouse gases." One of the Platform's major objectives in reaching this goal is to "add economic value and high-paying jobs to the Midwest's energy, agriculture, manufacturing, and technology sectors through the development and deployment of lower-carbon energy production and technologies."

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
4	PUBLIC EDUCATION AND OUTREACH			
4.1	State Government Education and Outreach Actions The State should lead by example (i.e., walk the talk) regarding education and outreach.			
		H		Emphasize solution-oriented approaches.
	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 ongoing basis.			
	Institute annual Governor’s Awards to recognize climate action of several types/categories.			
4.2	Target Audience: Policy Makers (legislators, regulators, executive branch, agencies) Implementation of climate actions hinges on policy makers’ approval.			

		H		Emphasize solution-oriented approaches.
	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.			
4.3	Target Audience: Future Generations Integrate climate change challenges and solutions into educational curricula, post-secondary degree programs, and professional licensing.			
		H		Emphasize solution-oriented approaches.
	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.			

	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.)			
4.4	Target Audience: Community Leaders and Community-Based Organizations (e.g., institutions, municipalities, faith-based organizations, service clubs, social and affinity groups, and NGOs) Recognize leadership, share success stories and role models, and expand involvement and participation within civic society.			

		H		NOTE: examples of faith-based institutions, faith centers (churches, synagogues, etc.), Iowa Power and Light, and such social justice programs as Catholic Social Services, Lutheran Social Services, etc.
	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.			
	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.			
4.5	Target Audience: General Public Increase awareness and engage in climate actions in personal and professional lives.			
		H		

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

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

	Educate broadcasters, reporters, and editorial boards about climate change, the risks it imposes, and solutions.			
	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.			

	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.			
4.6	Target Audience: Industrial and Economic Sectors Sector-specific climate change education and outreach about climate challenges and solutions.			
		L to H		Emphasize solution oriented approaches.
	Energy Efficiency and Conservation			
	Transportation and Land Use			
	Clean and Renewable Energy			
	Agriculture, Forestry, and Waste Management			
	Implement a state program of voluntary business actions to reduce GHGs.			
	Institute a “business incubator” program to attract and support new business development relating to the new energy economy.			
	Audiences outside the state, too.			Consider international governments, i.e. Canada.

4.7	<u>Coordinate a statewide series of town meetings engaging the sectors in 4.1 to 4.6 to convey the critical nature of climate change and climate change solutions to mobilize them to action.</u>			
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