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Catalog of State GHG Reduction Policy Actions Cross-Cutting Issues (CCI)

A catalog of state-level, greenhouse gas (GHG)–reducing actions and policy options prepared by the Center for Climate Strategies (CCS) and the Kentucky Climate Action Plan Council, based on actions undertaken or considered in state-wide climate change action plans by multi-stakeholder groups in a wide cross-section of U.S. states and by state, local, and private participants.

Key to Future Rankings of Options in the Tables That Follow:

Potential GHG Emission Reductions ¹	Potential Cost or Cost Savings ^{1, 2}
High (H): At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO ₂ e) per year by 2020	High (H): \$50 per metric ton CO ₂ e (tCO ₂ e) or above
Medium (M): From 0.1 to 1.0 MMtCO ₂ e per year by 2020	Medium (M): \$5 to \$50/tCO ₂ e
Low (L): Less than 0.1 MMtCO ₂ e per year by 2020, or 1 MMtCO ₂ e by 2050	Low (L): Less than \$5/tCO ₂ e
Uncertain (U): Not able to estimate at this time	Uncertain (U): Not able to estimate at this time

¹ Several measures may overlap in terms of emission reductions and/or cost impacts. Estimates assume measures would be implemented independently of other measures.
² Costs are denoted by a positive number. Cost savings (i.e., “negative costs”) are denoted by a negative number.

Note: Cross-Cutting policies are not analyzed for GHG reduction potential or costs per ton.

Definition of “Priorities for Analysis”:

- **High:** High-priority options will be analyzed first.
- **Medium:** Medium-priority options will be analyzed next, time and resources permitting.
- **Low:** Low-priority options will be analyzed last, time and resources permitting.

Important Note: The state actions are numbered in this catalog solely for convenience in referencing them. Their numbers do NOT reflect a ranking or prioritization of the actions.

Cross-Cutting Issues (CCI)

Note that this listing will be developed more fully during the CCI Technical Work Group (TWG) process. TWG members are encouraged to provide input on policies and programs in place in Kentucky to assist in defining baselines. The “Notes” column should be used to record recently enacted policies and programs in Kentucky relevant to state actions in the catalog.

Option No.	Greenhouse Gas (GHG) Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in Kentucky
CCI-1	GREENHOUSE GAS INVENTORIES AND FORECASTS					
1.1	Establish GHG emissions inventory function			Usually run by state, e.g., covering 20-year period, in 5-year increments.		Some local governments (e.g., Lexington and Louisville) have developed or are planning to develop GHG inventories. Lexington is following the ICLEI (Local Governments for Sustainability) protocol for GHG inventories, which is expected to be completed in the late spring of 2010.
1.2	Establish GHG emissions forecasting function			Same as above.		
CCI-2	GREENHOUSE GAS REPORTING					
2.1	Establish or adopt a GHG emissions reporting program			Cover all emissions or specific sectors of GHGs. Coordinate with federal efforts.		
2.2	Utilize data collected by the federal government under the mandatory reporting rule					

Option No.	Greenhouse Gas (GHG) Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in Kentucky
2.3	Utilize local inventories where they are developed in coordination with federal and state activities					
CCI-3	GREENHOUSE GAS REGISTRY					
3.1	Establish or participate in a GHG emissions reduction registry			Majority of U.S. states are in a climate registry. Useful for cap-and-trade accounting.		Kentucky is a member of The Climate Registry.
CCI-4	PUBLIC EDUCATION AND OUTREACH					
4.1	Efforts targeting state employees and activities			See CCI-7, below, State Lead by Example.		
4.2	Efforts targeting policymakers (e.g., legislators, regulators, executive branch, agencies)					
4.3	Efforts targeting future generations (primary, secondary, and post-secondary curricula; professional licensing programs, etc.)			Focus on sustainability & reducing consumption. Emulate "best practices" in schools.		
4.4	Efforts targeting community leaders and community-based organizations			Focus on reducing consumption and encouraging sustainability.		
4.5	Efforts targeting the general public			Citizen voluntary efforts to reduce emissions by participation in organized programs.		

Option No.	Greenhouse Gas (GHG) Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Externalities, Feasibility Considerations	Priority for Analysis	Notes / Related Actions in Kentucky
4.6	Efforts targeting industrial and economic sectors			Focus on sustainability & reducing consumption.		
4.7	Create outreach coordinator(s) position(s)					
4.8	Encourage climate change and solution research at academic institutions					
4.9	Commission study of implications of market-based systems to manage GHG emissions			Effects on state of cap-and-trade, carbon taxes, cap-and-dividend.		
4.10	Efforts targeting carbon capture, transport, and geological storage					
4.11	Encourage energy and environmental education and solution research					
CCI-5	ADAPTATION AND VULNERABILITY					
5.1	Develop a state climate change adaptation plan			Water concerns a key driver.		
5.2	Conduct a state climate change vulnerability assessment			(11 categories are recommended for assessment.)		

5.3	Conduct a state vulnerability assessment for carbon constraints from federal actions			Fed'l legislation to reduce GHG emissions could adversely affect coal production and the state or regional economy. Need to fully assess the nature and duration of this potential vulnerability.		
5.4	Develop a state mitigation adaptation plan in response to federal carbon constraints.					
CCI-6	STATEWIDE GHG EMISSION REDUCTION, ENERGY INTENSITY, AND ENERGY EFFICIENCY GOALS OR TARGETS					
6.1	Establish goals or targets for statewide GHG emission reductions					
6.2	Establish goals or targets for statewide GHG energy intensity and energy efficiency			Take into account short and long-term GHG goals established by local governments.		
6.3	Conduct a broad stakeholder and public process to develop state GHG emission reduction, energy intensity, and energy efficiency goals			This policy needs to consider what causes GHG emissions and climate change.		
CCI-7	STATE, LOCAL, AND TRIBAL GOVERNMENT GHG EMISSION REDUCTION, ENERGY INTENSITY, AND ENERGY EFFICIENCY ACTIVITIES (LEAD BY EXAMPLE)¹					
7.1	Establish goals or targets for reducing GHGs from state-owned or -operated sources					

¹ All of the policy options under CCI-7 are intended to consider energy intensity and energy efficiency targets, as well as GHG emission reduction targets.

7.2	Assign or create a multi-agency body to oversee ongoing state climate efforts			(Local government can replicate state approaches.)		
7.3	Monitor state's own GHG emissions at agency level and require annual agency-specific reports on GHG reduction progress					
7.4	Require inclusion of GHG emission impacts in Environmental Impact Assessments					
7.5	Require programs funded with state bonding to meet energy efficiency and energy intensity targets					
7.6	Require projects funded with state bonding to be climate-neutral			(Can be part of RCI.)		
7.7	Join the Chicago Climate Exchange (CCX) (committing to reducing the state's own GHG emissions)					
7.8	Join a regional climate action group (such as WCI, RGGI, MGA)					

7.9	Consider forming a consortium of like and/or neighboring states to pool resources and interests in meeting regulations for GHG emission reduction, energy intensity, and energy efficiency					
7.10	Encourage and incentivize energy-saving actions in state operations and facilities			Energy audits; energy efficiencies; solicit employee involvement and ideas.		
7.11	Encourage transportation options that reduce GHG emissions in state fleets			State fleet of LCVs; reduce VMT; extensive commuter options and incentives; tele-conferencing.		
7.12	Develop environmentally friendly purchasing programs					
7.13	Assign or establish an entity to coordinate state efforts to address climate change					
CCI-8	LOCAL GHG REDUCTION, ENERGY INTENSITY, AND ENERGY EFFICIENCY ACTIONS²					
8.1	Encourage local governments and regional associations to develop their own comprehensive climate action plans and strategies			Set goals; encourage participation; include adaptation strategies.		
8.2	Implement statewide program to encourage and structure voluntary individual actions to reduce GHGs					

² All of the policy options under CCI-8 are intended to consider energy intensity and energy efficiency targets, as well as GH.

8.3	Establish a proactive public-private partnership to seek investment capital and philanthropic funding for reducing GHG emissions and supporting development of the new energy economy					
8.4	Encourage local governments and regional associations to develop their own comprehensive efficiency and carbon intensity targets and strategies					
8.5	Implement a statewide program to encourage and structure voluntary individual actions to improve efficiency and carbon intensity					
8.6	Establish public-private partnerships to seek (investment capital and philanthropic) funding for improving energy efficiency and carbon intensity to minimize impacts on Kentucky's economy					
CCI-9	FINANCIAL POLICIES					
9.1	Develop funding approaches to help pay for climate strategies.					
CCI-10	CLIMATE-RELATED INVESTMENT AND BUSINESS-TO-BUSINESS ENGAGEMENT					
10.1	Encourage formulation of a business-oriented entity to promote private-sector climate protection					

CCI-11	DEDICATE GREATER PUBLIC INVESTMENT IN CLIMATE DATA AND ANALYSIS					
11.1	Identify resources for climate-related data collection and analysis					

CCI = Cross-Cutting Issues; CCX = Chicago Climate Exchange; GHG = greenhouse gas; LCVs = low-carbon vehicles; MGA = Midwestern Governors Accord; RCI = Residential, Commercial, and Industrial; RGGI = Regional Greenhouse Gas Initiative; TWG = Technical Work Group; VMT = vehicle miles traveled; WCI = Western Climate Initiative.