CHAPTER SIX

Building a Federal-State Partnership
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Commission on Climate Change

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Building a Federal-State Partnership to Address Climate Change

Top 10 Things We Need From a Federal Program

1. A comprehensive national program that demonstrates leadership and allows the United States to be a strong, committed, pro-active voice in the international debate over global warming.
2. A strong effective national cap-and-trade program that creates a level playing field and directs allowance or auction proceeds to achieve greenhouse gas (GHG) reductions as expeditiously as possible.
3. A system, like the one now being piloted by the Regional Greenhouse Gas Initiative (RGGI), that insures that allowance or auction proceeds from a national cap-and-trade program are converted into maximum reductions in GHGs as quickly and efficiently as possible. Because the fastest path to GHG emission reductions is through energy efficiency and conservation, State and Local governments, working in partnership with citizens and the business community, are uniquely positioned to develop and implement programs to maximize energy efficiency, energy conservation and GHG reduction for each dollar spent.
4. Recognition of the strong connection between transportation choices and reducing GHGs in a process like the Clean Air Act’s Transportation Conformity requirements to insure that GHG reduction efforts and transportation planning work hand-in-hand.
5. A process for coordinating with coastal states on adaptation policies.
6. A national program to implement the GHG reduction requirements of the California Low Emission Vehicle Program (CA LEV).
7. More and stronger national standards for energy efficiency (lighting, appliances, etc.).
8. Recognition that there is more a to comprehensive, national GHG reduction program than just cap-and-trade and that there is a critical role for State and Local governments in reducing GHG emissions from other critical areas like smart growth, transportation, energy efficiency, agriculture and programs to reduce Vehicle Miles Traveled (VMT) and adaptation.
9. Recognition and support for the comprehensive, cutting edge work, now being undertaken in many states to incubate and develop economy-wide climate action plans to address GHG reductions on all fronts.
10. A well funded, national research and development program to kick-start technological development, like clean-coal technologies, zero emission vehicles and new technologies for energy efficiency, that is needed to achieve very deep reductions in GHG emissions.

CLIMATE CHANGE MITIGATION

Spurred by the growing momentum of state leadership in climate protection, the U.S. Congress is now seriously engaged in shaping a federal climate policy centered around an economy-wide GHG cap-and-trade program. Seven cap-and-trade bills are currently working their way through the 110th Congress; one of them, the Lieberman-Warner Climate Security Act of 2008 (S.3036), was debated by the full Senate in June 2008. Although the bill was pulled from floor debate without moving to a final vote, it made history by being the first cap-and-trade bill to make it out of committee to the Senate floor. Seasoned observers see this as a “dress rehearsal” for a full debate and vote on comprehensive federal cap-and-trade legislation in 2009 under a new Administration and Congress.

The intervening months give Maryland and other leadership states and regional consortiums such as RGGI the opportunity to help shape the debate and architecture of the approaching federal regulatory regime. The Congressional cap-and-trade proposals would regulate GHG emissions primarily in the electric power generating, large manufacturing, and transportation fuels sectors. This is a good and necessary start. However, climate protection requires a comprehensive portfolio of GHG reduction strategies in all economic sectors and levels of government. In sectors not amenable to cap and trade (e.g. unregulated markets with many participants, such as small manufacturers and residential and commercial heating and power), the most cost-
effective reductions are achieved through more decentralized policies, including regional standards and state-specific actions. Congress should actively engage the states and regional consortiums in shaping a federal climate policy built upon a federal-state partnership.

The Commission recommends that U.S. climate mitigation policy be structured according to the following principles:

- Ongoing federal-state consultation, collaboration, and information-sharing.
- National science-based mandatory GHG reduction goals.
- National cap-and-trade legislation covering GHG emissions from power plants, large industrial sources, and producers of transportation fuels and natural gas, with a meaningful role for states in allocations of allowances, use of auction revenues, and offset rules.
- National technical and performance standards and research and development (R&D) funding for technological advancement and improved energy efficiency in sectors not amenable to cap-and-trade, such as appliances, lighting, low carbon fuels and vehicle emissions.
- Amendment of the Clean Air Act and Surface Transportation Authorization Act to create a regulatory and funding framework for reducing GHG emissions in the transportation sector through State Implementation Plans (SIPs) and the Transportation Conformity Process. This must incorporate the synchronization of transportation, land use, housing, environment, social, and energy policies.
- No preemption of state governments that take more stringent actions than the federal government to reduce GHG emissions within their jurisdictions, with incentives for “first mover” states.

**National Programs**

**Recommendation:** The Commission urges Maryland to advocate for the Administration and Congress to adopt comprehensive climate protection legislation in the 111th Congress that establishes mandatory science-based GHG emission reduction goals for the United States necessary to avoid dangerous anthropogenic climate change, in accordance with the findings of the Intergovernmental Panel on Climate Change (IPCC). The goals should include short-term, medium-term (2020) and long-term (2050) reduction targets and should be updated periodically to reflect the best-available science.

**Recommendation:** The Administration and Congress should adopt comprehensive climate protection legislation in the 111th Congress that establishes a cap-and-trade program regulating GHG emissions from fossil fuel burning power plants, large stationary sources such as steel and cement manufacturers (downstream points of regulation), and oil and natural gas producers, importers and processors (upstream points of regulation).

Notably absent from most of the current Congressional bills is a role for states in decisions about critical components of a cap-and-trade program. Congressional legislation should provide states a meaningful role in deciding:

- How GHG emission allowances will be allocated (i.e. auctioned versus freely given to emitting sources);
- How auction revenues will be distributed and how states may use the revenues; and
- What percent of a source’s reduction obligation can be met by offset credits, what types of offsets will qualify, and how will their validity be determined (i.e. are they “real, surplus, verifiable and permanent”).

**Recommendation:** For certain economic sectors not amenable to cap-and-trade controls, the federal government should adopt national technical and performance standards for energy efficiency, and to fund research and development (R&D) for technological advancement. Standards for lighting, appliances, low carbon fuels, and vehicle emissions (using California’s CA LEV standards), would be included in this category. State or regional standards that are more stringent than federal standards should not be preempted if the regulating jurisdiction(s) capture a certain percentage of the national market.

“There is a long and proud history of federal leadership on environmental issues in this country ... together we can develop national programs to tackle greenhouse gas emissions ... we can transform our carbon based economy into a green sustainable economy.”

Governor Martin O’Malley
September 2007


**Recommendation:** The Administration and Congress should amend the Clean Air Act (CAA) in the 111th Congress to create a regulatory and funding framework for states to reduce GHG emissions in the transportation sector, modeled after the Transportation Conformity Process and State Implementation Plans (SIPs) used for other criteria air pollutants under the CAA. Federal transportation funding to states should be re-aligned to favor mass transit projects over the construction and expansion of highway capacity, with financial incentives and disincentives for compliance or non-compliance.

**Recommendation:** The Administration and Congress should amend the Surface Transportation Authorization Act in the 111th Congress to establish appropriate and clear performance standards to minimize impacts from passenger and freight transportation systems and system improvements on GHG emissions while enhancing community and environmental quality. At the same time the amendments should reduce, and not increase, federal requirements on states or other transportation fund recipients to improve, not burden, program delivery.

Reforms relative to climate change should include provisions for each state to:

- Continue systematic and climate change sensitive planning to guide all investment to where it is most needed and useful;
- Certify that it has established performance-based, outcome-driven programming of funding in pursuit of climate change issues;
- Provide accountability for achieving results;
- Establish reforms in environmental reviews and permitting to speed project delivery. Federal planning requirements should also be simplified;
- Provide additional funding in the form of a “block grant” style approach to maximize flexibility for states to respond to climate change issues.

**Recommendation:** The Administration and Congress should provide research, technical assistance and guidance on linking transportation and land use planning to maximize the leverage on climate change and other transportation and environmental benefits from coordinated planning. The federal government should consider providing appropriate performance measures to help efforts to reduce GHG emissions and sequester carbon.

**Non-Preemption of State Programs**

**Recommendation:** The Administration and Congress should enact a savings clause in all federal climate legislation expressly not preempting state governments from taking more stringent actions than the federal government to reduce GHG emissions within their jurisdictions.

More than half of the U.S. states already have climate action plans and energy efficiency programs in effect or underway. This is the fastest and most cost-effective path to energy efficiency and GHG reductions. Despite this, federal policy is still in flux over states’ authority to go beyond federal programs. The importance of express non-preemption language in federal statutes is underscored by EPA’s recent denial of California’s waiver petition to implement vehicle emissions standards (CA LEV) that result in greater fuel efficiency than the federal CAFE standards.

Express non-preemption would give Maryland and other states the autonomy to implement mitigation programs in areas within their traditional purview, such as land use and transportation (Smart Growth), building codes, roads, water, sewer and other infrastructure, agriculture, school curricula, and energy conservation.

Other non-traditional programs better suited to state implementation include Renewable Portfolio Standards (RPS) tailored to capitalize on the state’s natural resources and economy, utilities’ demand-side management programs, integrated resource planning by state public service commissions, and removing siting and regulatory obstacles to clean distributed generation.

**Recommendation:** The Administration and Congress should provide incentives for “first movers” – i.e. early action states that adopt goals and mandatory climate action plans by a specified date, with accountability requirements such as annual reporting and demonstration of adequate progress toward goals. (Incentives in current Congressional bills go to regulated entities rather than to states and thus do not directly promote state programs.)

Incentives to states could include:

- Authority to determine the appropriation and allowable uses of cap-and-trade auction funds in the state’s jurisdiction (rather than the federal government);
- Authority to establish the state’s own emission offset rules; and
- Priority for federal funds for research or other implementation programs.
The Supreme Court recognized the stake that states have in regulating GHG emissions in its seminal decision in *Massachusetts v. EPA* that GHGs are air pollutants subject to regulation under the CAA. The Court rebuffed the EPA's challenge to the State of Massachusetts' standing to bring the lawsuit. It found that as a state vulnerable to sea level rise, Massachusetts had important state interests to protect. Maryland of course is also vulnerable, but each of the fifty states faces its own set of global warming challenges and is in the best position to assess the risks and implement solutions. The Administration and Congress should recognize the primacy of states as “first responders” in protecting the health, safety and welfare of their citizens, economies, natural resources, and built environments, and to leave them the autonomy to continue their leadership and be the “laboratories for innovation” in climate protection.

The recommendations below, specifically as they relate to the coordination of programs, policies, research, and information and the need for additional funding, are as relevant to Mitigation as they are Adaptation and should be considered for each.

**CLIMATE CHANGE ADAPTATION**

In the 110th Congress, Members have introduced numerous bills that would directly or indirectly address climate change. However, only a few of these bills address the issue of adaptation to climate change. Currently, there are no stand-alone adaptation bills; adaptation provisions are contained in broader legislation on climate action or research.

While mitigation of GHGs is necessary to help minimize future impacts, Maryland must prepare now to adapt and respond to existing and future impacts with the support of the next Administration and Congress. Because of earlier GHG emissions, some level of warming will occur regardless of mitigation activity. Maryland believes that the nation should strategically focus on preparing communities and natural systems to adapt to the effects of a changing climate.

With regard to adaptation, proposed federal legislation calls for research on the causes and effects of climate change and on methods to measure and predict climate change; and the authorization of grants or other incentives to affected communities (e.g., coastal communities) to prepare for the potential effects of climate change. Examples of pending legislation include the Lieberman-Warner Climate Security Act of 2008 (S.3036), the National Climate Program Act (S 2355), and the Global Change Research Improvement Act of 2007 (S. 2307).

Maryland has been collaborating with the Coastal States Organization* to document the nature and status of the coastal states' efforts related to climate change and has identified principles upon which any national adaptation legislation should be based. To facilitate effective coastal adaptation, the nation needs:

- A clear federal strategy for intergovernmental coordination on coastal adaptation to climate change;
- A coordinated research and information system implemented through observation systems and other tools;
- Federal funding to protect coastal communities and the national interest from the impacts of climate change; and
- To recognize the critical role of coastal states in adapting to climate change.

*The Coastal States Organization (CSO) was established in 1970 to represent the Governors of the nation's thirty-five coastal states, commonwealths and territories on legislative and policy issues relating to the sound management of coastal, Great Lakes and ocean resources.

**Coordination of Federal Programs and Policies**

**Recommendation:** The Administration and Congress should develop a national coastal adaptation strategy to ensure intergovernmental coordination on coastal adaptation to climate change; to clearly define the roles of various agencies; and to identify the mechanisms by which federal programs will coordinate with state partners on coastal adaptation issues.

During the development of the Maryland *Climate Action Plan*, it became evident that a climate change adaptation strategy must address and proactively plan for a multitude of impacts on natural resources and resources-based industries, coastal communities, the economy, public and private infrastructure, as well human health and safety. Not only are the impacts broad, but the mechanisms to address the impacts are wide-ranging and involve research, data acquisition and management, mapping, modeling, monitoring, integrated planning, public awareness, outreach,
training, capacity building, economic development and many others.
Adequate federal intergovernmental coordination is needed to ensure the most effective implementation and efficient use of funds, and to provide opportunities for complementary efforts among local, state, regional or national programs. A coordinated strategy would improve awareness and understanding of the resources available to states and local governments. A key component of this federal strategy for coastal adaptation should be a new and stronger focus on interagency cooperation between the National Oceanic and Atmospheric Administration (NOAA), state coastal management programs, the Federal Emergency Management Administration (FEMA), and state floodplain managers. In addition, because the impacts of climate change will vary regionally, an opportunity exists to develop a regional framework for federal-state coordination on climate change adaptation.

PROTECTING STATES’ RIGHTS

In February of 2008, the National Association of Clean Air Agencies (NACAA) convened an innovative two-day conference for local, state and federal government air pollution officials to discuss the role states and localities can and should play in federal climate change legislation and programs to combat global warming. The three key findings that emerged from this preliminary meeting are listed below. NACAA is continuing to discuss this issue.

- Most participants agree that a program of national emissions limits is necessary to ensure continuing progress in lowering GHGs and to demonstrate to the rest of the world that the U.S. is serious about reducing emissions. Moreover, most are familiar with cap-and-trade as a mechanism and support its application to GHG reduction.

- However, most participants also expressed the belief that a national cap-and-trade program, by itself, would not result in the GHG reductions that are needed or likely to be called for in national legislation. There was broad agreement that additional state and local policies and implementation activities would be needed to meet national goals. Those policies include building codes, land use and transportation planning, end-use energy efficiency programs and agriculture and forestry policies, among others.

- For this reason, most participants concluded that active participation by states is essential. A related common theme in many sessions was that any apportionment value or auction proceeds should be made available to states for the purpose of implementing those essential, complementary programs. Participants concluded that a national cap-and-trade program that does not support these techniques will be too expensive and likely ineffective in securing deep reductions.

More than once during the conference the comment was made that climate change regulation is a “brave new world” for state and local air officials, and that there is much we do not know and cannot anticipate right now. We face not just an “air” issue, but a multi-disciplinary, multi-agency, multi-venue set of challenges and opportunities. State and local air officials will be at the forefront in meeting climate challenges, and federal laws and agencies will need to forge creative and effective partnerships with them as part of any national program to meet GHG reduction goals.
Coordination with Coastal States

**Recommendation:** Congress and the Administration should recognize the critical role of coastal states in adapting to climate change, by:
- Reauthorizing the Coastal Zone Management Act with strengthened authorization for climate change-related activities; including funding to voluntarily develop and implement a coastal adaptation plan that recognizes the individual needs of each state while building into a proactive national strategy;
- Ensuring consultation with coastal states, in any new climate change legislation, programs, or research;
- Developing a strategy to identify the information needs of coastal states to effectively respond to natural hazards and ecosystem changes resulting from climate change;
- Coordinating federal agency activities, research, and data collection efforts related to coastal impacts of climate change with coastal states; and
- Clarifying the roles and responsibilities of coastal states and federal agencies in climate change adaptation activities. State authority and sovereignty should be strongly maintained in a national strategy to adapt to climate change.

Additional Financial Support

**Recommendation:** The Administration and Congress should provide funds over and above existing appropriations to meet the increasingly complex and unmet needs of the coastal states and their coastal communities to address the existing and emerging climate change adaptation challenges.

Maryland has used federal, state and local program funds to support climate change-related activities for research and data acquisition, as well as to expand technical, planning, and education activities needed to address key climate change adaptation issues and to build capacity. Over the years, the State has benefited from a variety of federal funding sources, including NOAA, the Environmental Protection Agency, U.S. Army Corps of Engineers, FEMA, and the U.S. Geological Survey. Existing and additional federal funds will be needed to address the adaptation recommendations contained in the Climate Action Plan. Maryland is not alone in this need for federal funds. Many of the coastal states have significant mapping, monitoring, and research needs and need to strengthen state and local capacities for adaptation planning. This will require an unprecedented national investment and effort that will not succeed without the full engagement and support of the next Administration and Congress.

Monitoring, Assessment And Forecasting

**Recommendation:** The Administration and Congress should ensure that the nation has a coordinated climate change monitoring, assessment and forecast system implemented through appropriate observation systems and other tools. This will require advancing federal investments and programs for integrated observing systems and climate services. This should be done in partnership with the states, which will bear the primary responsibilities for mitigating the effects of climate change.

In general, there is insufficient monitoring of Maryland’s climate, environmental conditions and resources to characterize their present state and variability. Because these will change more rapidly in the future, a better system of observations is required—one that is reliably continuous, strategically targeted, and thoroughly integrated. Reliable observations, interpreted with scientific understanding and innovative models, can dramatically reduce uncertainty about
the path of climate change in Maryland and its consequences, allowing us to make better informed and wise decisions about the State’s future. It is clear that traditional approaches to adaptation will not suffice in a future that no longer resembles the past. Climate models can be downscaled to incorporate locally important phenomena, such as urban heat island and forest cover effects, and resolve important differences across our slice of the mid-Atlantic landscape.

In recognition of the State’s vulnerability to sea level rise and its ensuing coastal hazards, Maryland’s state agencies have been aggressively acquiring and analyzing various data and technological resources both to gain a better understanding of sea level rise vulnerability and to increase the state and local government capacity to adapt and respond. To date, the State has amassed a significant amount of data and undertaken state-of-the-art research, making Maryland a national leader in sea level rise modeling, research and response planning. However, more work is needed and the State is seeking ways to support, enhance and integrate observation systems already in place in Maryland. The output of this effort will be a series of recommendations regarding how current observation networks could be reinforced and/or new components added to better address changing conditions regarding sea level rise.

In addition, the State also plans to review its institutional and organizational data management practices and make recommendations to enhance efficiency and cost effectiveness of data gathering, sharing, maintenance and processing efforts and to minimize duplication of effort and data and modeling redundancies. Effective federal, state, regional and local interagency integration and coordination of observation systems for sea level and other inundation threats will be critical to accomplishing these objectives.

**CLIMATE CHANGE SCIENCE AND TECHNOLOGY**

**Recommendation:** Maryland should develop a strategy to become a national and international center of excellence in climate change science and technology, based on targeted investments in its universities, strong partnerships with federal agencies and laboratories, and effective engagement of the private sector.

Maryland and the world will depend on increased and sustained investments and advances in science and technology to in order to understand how our climate is changing, predict future conditions in ways that allow adaptation to these new conditions, and provide the innovations required to mitigate greenhouse gas emissions while ensuring our economic and social well being.

Fortunately, Maryland is in a exceptionally strong position to be a national and international leader in regional-to-global climate change analysis and in technologies to mitigate emissions and allow prudent adaptation. There is already considerable, world-recognized expertise within our public and private universities on which to build. And, Maryland has the unmatched advantage of the location of the Goddard Space Flight Center, which leads the National Aeronautics and Space Administration’s earth science program, at Greenbelt; the headquarters of the National Oceanic and Atmospheric Administration’s line offices at Silver Spring and NOAA’s Climate Prediction Center soon to be relocated to College Park; the National Institutes of Health in Bethesda; and the National Institute of Standards and Technology in Gaithersburg; among other federal agencies. In addition, Maryland has a robust private sector to support technology innovation and application, one that is also very experienced in providing services to the federal government.

Marshalling and enhancing this university-federal-private sector capacity to continually improve climate change forecasting and impact assessment and finding effective means to mitigate and adapt to climate change would greatly benefit not only our state, but our planet, Earth.
Guiding Principles:

- Take action now to establish strong, science-based emissions reduction requirements. A federal program should embody mid-term as well as long-term greenhouse gas emissions reduction requirements, with appropriate monitoring and a built-in mid-course review to ensure that necessary emissions are achieved.
- Periodically review climate science and adjust emissions reduction limits as needed.
- Pursue a portfolio of cost-effective policies and programs to reduce greenhouse gas emissions. A cap-and-trade program is an important tool for reducing emissions in some sectors (e.g., electric generating facilities and other large stationary sources), but may not be appropriate for all sectors.
- Respect state authority to implement state programs that are in addition to federal requirements. States that have undertaken early action have made considerable political and economic investments to achieve success in reducing greenhouse gas emissions. These efforts should be encouraged and rewarded. Federal programs should not punish early action by states, and should not reward states for failing to take early action.
- Investment in energy efficiency, clean energy technologies, and renewable energy should be a cornerstone of our national greenhouse gas emissions reduction and energy policies, as greater societal benefit is achieved when environmental and energy policies are aligned. These investments would reduce greenhouse gas emissions, promote energy independence and, in the case of energy efficiency, reduce costs to consumers. Sale of allowances could provide revenues to support, in part, such policies and investments.

Design Principles:

- In the electric power sector, allowances should be sold, in recognition that the majority of national electricity load is served in regions that have instituted competitive wholesale electricity markets. Resulting sales revenue should be used for cost-effective measures that both reduce our carbon footprint and enhance our economic competitiveness, such as end-use energy efficiency.
- Allow states to distribute sales revenue. States have a unique capacity to implement a portfolio of polices and measures that improve electric end-use energy efficiency and reduce electricity demand.
- New conventional coal-fired power plants constructed from this day forward should not be grandfathered under a federal cap-and-trade system, and should be required to purchase their allowances on the open market.
- Incorporate the use of emissions offsets as flexibility mechanism that is designed to be supplemental to emissions reductions achieved within the capped sector or sectors.
- Design program provisions to ensure that emissions offsets are of high quality. Offset provisions should incorporate robust additionality criteria to ensure that eligible offsets represent incremental emissions reductions beyond those that would have otherwise occurred. Quantification and verification protocols should be rigorous and detailed, and apply conservative assumptions where appropriate. The process for accrediting the independent verifiers of offset projects should incorporate rigorous standards.
- Ensure that flexibility mechanisms that are incorporated into program design maintain the integrity of the cap and do not cause price distortions. Avoid the use of safety valves or price caps that functionally undermine the cap by allowing regulated facilities to submit an alternative compliance payment at a set price in lieu of the submission of allowances. Flexibility mechanisms employed should not distort long-term carbon price signals that are required to ensure that capital investments under consideration today are properly evaluated based on their long-term emissions potential. Price distortions could actually increase the long-term costs to society of achieving significant greenhouse gas emissions reductions.
- Establish sound greenhouse gas reporting protocols to ensure that "a ton equals a ton," and to the extent practicable, utilize already existing reporting platforms such as The Climate Registry to avoid unnecessary duplication.
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