

Governor's Commission on Climate Change

Cross-cutting Recommendations

Draft, October 17, 2008

- Virginia should adopt the IPCC recommendation of reducing greenhouse gas emission by 25% below the 1990 level by 2020, and 80% below the 1990 level by 2050. This will require a 35% reduction from the 2000 level by 2020. (Shukla)
- Virginia should establish a network of scientific and technological institutions which will monitor the impact of climate change on Virginia's agriculture, energy use, economy, health and ecosystems; produce Virginia specific detailed prediction of climate change at city, county and state level; and suggest optimal adaptation and mitigation strategies to the policy-makers. (Shukla)
- The Governor may wish to act in the most expedient fashion on those recommendations with which he concurs and no other approval is required. (Thomas)
- Create a new entity or empower an existing entity (such as CIT) to increase clean tech energy research and climate change related technology research through increased funding and collaboration among Virginia's research universities and private companies. (Greenleaf)
- Expand the Commonwealth's economic development marketing efforts to include "green industries" including (but not limited to) renewable energy providers, alternative fuels companies, energy audit and retrofit organizations, green building contractors, carbon sequestration entities, and research and development firms. Identify potential incentives for green business to locate in Virginia. Promote partnerships with Virginia colleges universities – including community colleges - to create education and training programs to insure that green jobs can be filled by Virginia citizens. Promote Virginia as a green industry center for excellence. Examine existing organizations' potential for taking the leadership role for this initiative. (Freudberg)
- The Virginia Energy plan proposes a goal to reduce electricity consumption by 10% by 2022. This goal should take into consideration the impact of shifting the energy consumption from the transportation industry to the electric generation industry due to the increased use of electricity as a transportation fuel. Any electricity consumption for transportation should not be included in the total consumption of electricity for the purposes of calculating progress towards the 10% reduction by 2022. (Heacock)

- Requiring or expecting GHG emissions reductions at too fast a pace will increase the cost of transitioning to a low carbon economy. Equipment depreciates over time and has to be replaced or upgraded in periodic cycles. Requiring relatively new equipment to be replaced with more GHG efficient equipment is costly. A better approach is to require the replacement of equipment with best achievable technology when it is replaced after a reasonable depreciation period. This approach will also allow for the development and deployment of new more GHG efficient technology as it becomes available. (Fledderman)
- It is more efficient to built GHG efficiency into new facilities than it is to retrofit older facilities. GHG efficiency efforts should focus on the getting new buildings, facilities and equipment to high GHG efficiency levels rather than older buildings and facilities. Over time as the older facilities are replaced, we can grow a low GHG economy at the lowest cost. (Fledderman)
- The Governor’s Commission on Climate Change recommends that Congress pass climate change legislation that includes the following key provisions: (not a complete list but a start)
 - Establishes a mandatory U.S. greenhouse gas cap-and-trade program;
 - Achieves at least an 80% reduction in U.S. emissions from current levels by 2050 nationally, with near term reductions of at least 20% by 2020;
 - Creates incentives to reduce emissions from deforestation and to absorb carbon from the atmosphere by restoring forests and other ecosystems;
 - Establishes dedicated funding of auction revenues from a cap and trade program or other mechanism to implement adaptation strategies for fish, wildlife, and natural systems impacted by climate change.
 - Ensures that adaptation efforts for the built environment take into consideration and minimize resulting impacts on natural systems, particularly in coastal areas. These efforts should make use of nature-based strategies such as natural shorelines and should be coordinated with fish and wildlife adaptation strategies. (Lipford)
- Compare effect of cap-and-trade to a carbon pricing mechanism.
 - Is there a general recommendation that the state monitor and study the operation of cap-and-trade mechanisms that are being developed? The idea here is that the state should assess the relative costs, benefits, and effectiveness of various mechanisms to place a price on carbon emissions through a cap-and-trade or a pollution tax on GHG emissions that is linked to reduction of other taxes. (Pollard)
- Climate Change will require many state agencies to change their operations and there are many questions whether they have the authority to make these changes in operational programs and regulatory authorities. Likewise, local governments are on the front lines of many climate change adaptation approaches and, in a Dillon Rule state, may not have the authorities needed to put those in place. A

- review of authorities for state and local governments, and suggestions for additional authorities, is needed as part of a state climate change strategy. (Stiles)
- The Commission finds that several of its recommended actions compliment the Commonwealth's existing goals and commitments, such as those for land conservation and water quality. Therefore, the Commission finds that, where ever appropriate, it should utilize existing state programs to implement its recommendations in lieu of creating new state programs. This will, however, require ensuring that existing state programs are appropriately staffed and funded and that their authorities include consideration of climate change impacts. (Jennings)
 - Add climate change as a component of the State Water Control Law.
 - My recommendation at the last Climate Commission meeting was offered in consideration of the impact of a changing climate on Virginia's water quality and aquatic resources, specifically the detrimental impacts of increasing water temperature, sea level rise (combined with subsidence), and altered intensity and frequency of precipitation. I suggest that the Commonwealth must begin to incorporate information about the impacts of changing climatic conditions into analyses and decision making regarding protection and restoration of our waters. A couple of quick examples that necessitate incorporating climate change into their development and/or implementation are TMDLs and VPDES permitting. My recommendation was focused on the State Water Control Board, but upon further consideration we should consider incorporating similar language in the statutory authorities of the Virginia Marine Resources Commission and the Soil and Water Conservation Board. (Jennings)
 - Create an infrastructure for enhancing and updating GHG emissions inventories and forecasts, monitoring the impacts of climate change, and tracking efforts to reduce GHG emissions. The state should assess progress toward achieving any GHG reduction goal that is set at least once every five years and report the results of this assessment to the public. There should also be a mechanism to evaluate current and projected emission levels, and assess the need to readjust GHG reduction goals that have been set and to adopt additional goals. (Pollard)
 - The Commonwealth should establish the Governor's Office of Climate Change Response. The Director of the Office would serve as a member of the Governor's cabinet. The mission of this office would be disseminate critical information and data on climate change to elected officials, policy makers, and the general public and to coordinate the Commonwealth's response to all aspects of climate change in Virginia, using the Virginia Climate Action Plan as its initial work plan. Tasks of Office of Climate Change Response should include:
 - Develop an MOU between relevant state agencies responsible for key aspects of Virginia's climate change response.

- Develop effective communication materials on key aspects of the climate change challenge.
- Develop and maintain a dedicated website as key delivery platform for those materials and as clearinghouse on information for resource managers, policy makers and the general public.
- Assess progress toward recommendations within Virginia's Climate Action Plan and provide annual report on progress to Governor and General Assembly.
- Recommend revised planning targets and guidance as more information becomes available
- Serve as liaison between state and local governments on implementation and planning issues associated with climate change.
- Develop and maintain dedicated website, with emphasis on resource materials for policy makers.
- Develop an Outreach and Education Plan for for elected officials and others involved with developing policies at the state and local levels. Education effort would focus on explaining the predicted climate change impacts to Virginia and how recommendations contained within Climate Action Plan (and Energy Plan?) address key aspects of climate change challenge. (Lipford)

Recommendations for which more than one comment was received:

- Outreach and education. Build public support for legislative actions through these efforts.
 - In collaboration with other public and private sector partners, develop an outreach and education campaign directed toward citizens and businesses in the Commonwealth on the Commission's Climate Change report and recommendations. Focus on no-cost/low-cost greenhouse gas reduction strategies as well as strategies that are the most cost-effective. Promote strategies with co-benefits. Insure the public and businesses understand the consequences of climate change for Virginia and the leadership taken by Governor Kaine. Involve legislative members of the Commission as spokespeople for the outreach and education efforts as well as legislative champions for Commission legislative initiatives. (Freudberg)
 - Outreach and education to increase understanding of the sources, impacts, and measures to address climate change is critical to inform the public and to build support for individual, corporate, and governmental actions needed to mitigate and to adapt to climate change. The state should develop an outreach and education plan, fund outreach and education, and appoint a coordinator to promote and implement such activities. (Pollard)
 - We need to build public support for the inconvenient and perhaps costly changes any CC mitigation plan will entail, particularly a price for CO₂ emissions showing up in gasoline and electrical energy prices. We should

enlist the press (in fact we should have been doing so at all our meetings) so that they can report on what is in store for the public and why. The legislature will not move without public support, and the public will not move until it is informed and concerned. Members of the Commission can help if encouraged to do so. (Smart)

- Provide credits to landowners for reforestation and maintenance of forestland to provide carbon sinks. (Allowing harvest of long-lived species.)
 - The program would use a formula similar to land use taxes in ag and forestal districts. Every five years a landowner would sign up for the program and agree not to harvest timber on the property. For this, they would receive a small tax credit on state income taxes. If timber is harvested during this period, the landowner would owe money back to the state. At the end of the five year period, the landowner could opt out if they so desire. (Rordam)
 - Reward landowners who afforest or maintain their lands in forests and encourage them to manage for and harvest long-lived forest products. (Fledderman)
 - Overall, we think that including farmland and working forests along with no-touch forests in this basic recommendation is OK, provided that in its implementation, we are using sound science to determine the true extent of the sequestration benefits. There is a general misconception that old forests are not very effective at sequestering carbon and that is not correct. Thus, we don't want to provide perverse incentives of harvest, if the true carbon benefits do not justify that sort of management. (Lipford)

Recommendations for which no additional explanation was received:

- Add climate change-related technology, research and development as a technology cluster investment area for the Center for Innovative Technology.
- (Rue proposal—multimodal.)
- State tax incentives to purchase residential solar energy.
- Support of nuclear power and engineering education. (Electricity Generation workgroup.)
- Establish a public benefits fund to aid in the installation of energy conservation and efficiency practices.
- Give local govts statutory authority to address climate change in comp plans, land use, infrastructure

- Formalize use of PDCs in interactions with local governments. Require them to develop regional plans. (Will cost \$)
- Formalize climate change in local comp plan processes.
- Interim goals for 2015 so progress can be measured and revisited so that new goals can be set if appropriate.
- Focus on efforts that will have co-benefits such as land conservation and energy conservation that can be measured on a Virginia-specific level.
- Give particular consideration and recognition to those items that will create new jobs and will promote economic development in the Commonwealth.

New cross-cutting recommendations raised after the September 10th meeting:

- GHG Reporting
 - In order to have the most accurate information possible on GHG emissions and to be able to track Virginia's progress towards emission reduction goals, the Commonwealth should enact mandatory GHG emissions reporting for all major emitting sectors in Virginia. (Lipford)
 - Establish a GHG reporting system, requiring all stationary sources of air pollution already required to report air emissions to include GHG emissions in these reports, requiring VDOT to report on transportation emissions, and requiring DEQ to prepare an annual report of emissions in Virginia. (Pollard)
- Virginia should explore the feasibility of working with neighboring states, especially in the southeast, on a regional GHG emissions reductions strategies. (Lipford)
- The Commonwealth should develop an action plan for reducing other GHGs beyond CO₂ (e.g. methane). (Pollard)
- Increase the state requirement that localities recycle or divert at least 25% of their solid waste to at least 35%. Landfills generate significant amounts of methane, a potent GHG. (Pollard)
- The Commonwealth should work with retailers to eliminate the distribution of free plastic and paper bags in stores, provide programs for recycling plastic bags implement a public education program. (Pollard)