

EIGHTH MEETING OF THE GOVERNOR'S COMMISSION ON CLIMATE CHANGE

October 23, 2008

House Room D, General Assembly Building
Richmond, Virginia



I. Call to Order

The Honorable L. Preston Bryant, Jr., Chairman, called the eighth meeting of the Governor's Commission on Climate Change to order at 10:12 a.m.

II. Attendance

The following Commission members were present: The Honorable L. Preston Bryant, Jr., Mr. Ralph Davis, Ms. LuAnn L. Bennett, The Honorable Donald S. Beyer, Jr., The Honorable David L. Bulova, Mr. R. Daniel Carson, Jr., The Honorable Paul Ferguson, Mr. Stuart A. Freudberg, Mr. Felix Garcia, Mr. Dale A. Gardner, The Honorable John H. (Jack) Gibbons, Mr. William S. Greenleaf, The Honorable Penelope A. Gross, Mr. David A. Heacock, Mr. Robert F. Hemphill, Jr., Ms. Ann F. Jennings, Mr. Michael L. Lipford, Roger Mann, Ph.D., The Honorable Robert E. Martínez, Mr. Tyrone W. Murray, Mr. R. Paul Orentas, The Honorable Kenneth R. Plum, Mr. Oliver A. Pollard, III, Mr. Michael J. Quillen, Mr. Harrison B. Rue, The Honorable Bruce Smart, The Honorable Frank W. Wagner, and Mr. Stephen A. Walz.

Those not in attendance were: The Honorable Joseph F. Bouchard, Ms. Christine Chmura, Ph.D., The Reverend Richard Cizik, The Honorable John W. Daniel, II, The Honorable R. Creigh Deeds, Mr. Robert J. Fledderman, Ms. Jodi Gidley, The Honorable Patrick O. Gottschalk, The Honorable Joe T. May, The Honorable Ralph S. Northam, The Honorable Ron Rordam, Jagadish Shukla, Ph.D., Mr. William A. "Skip" Stiles, Dr. Lydia W. Thomas, and Mr. Michael S. Townes.

III. Welcome and Opening Remarks

Chairman Bryant alerted Commission members that they had a great deal to do during the day, and there were three primary tasks he wanted to accomplish: (i) work through the findings and adopt them; (ii) work through the cross-cutting measures presented at the Commission's last meeting, and consider additional comments received; and (iii) provide highlights from the workgroups and discuss workgroup draft recommendations.

Chairman Bryant referred to the Miller Center's Virginia Climate Change Survey, which had been released on October 21, 2008, providing the results of the first survey of public attitudes toward climate change among Virginia residents. The 19-page report, part of a larger national survey initiative, was included in the Commissioner's meeting materials and is available through the Miller Center's website at http://webstorage3.mcpa.virginia.edu/panels/pdf/panel_2008_1021_borick.pdf as well as on the Climate Change Commission's website under the October 23 meeting materials section. Chairman Bryant mentioned key elements of the report, which summarized data collected in a telephone survey of Virginia

residents between September 8 and 24, 2008. There were 660 residents surveyed with a resulting margin of error of $\pm 4\%$ at the 95% confidence level. Seventy-five percent of respondents felt that there was “solid evidence” that average global temperatures have been rising over the past four decades. Ninety percent of respondents believed that global warming had a very serious to somewhat serious level of severity. Among Virginians, seven out of ten those surveyed believed that government action was needed. The report further broke down that response by the federal, state, and local levels. Seventy-seven percent felt that local governments should bear some degree of responsibility.

IV. Approval of Minutes

Minutes for the August 27 and the September 10 meetings were submitted electronically to Commission members for their review. Chairman Bryant entertained a motion to approve the August 27, 2008 minutes; the motion was moved and seconded. The August 27 minutes were approved unanimously. Chairman Bryant then called for a motion to adopt the September 10 minutes. The motion was moved and seconded. The September 10 minutes were adopted unanimously.

V. Discussion: Findings

Chairman Bryant turned the Commissioners' attention to the document *Governor's Commission on Climate Change Proposed Findings – Discussion Document – Draft, October 17, 2008*. Chairman Bryant indicated to members that there were sections highlighted in yellow; those sections represented new material or material submitted by Commission members after the last meeting. Chairman Bryant explained that he would not read every bullet that previously had been discussed, but rather would focus on new material, being mindful of the difference between findings and recommendations. A discussion of new and existing findings ensued.

- With regard to Dr. Shukla's material on page 1, Mr. Pollard proposed edits that were included in members' packets. Surveying the Commission members, Chairman Bryant announced that there was a consensus to adopt Mr. Pollard's edits.
- Among changes offered under “Effects on the Built Environment and Insurance” on page 2, members agreed that “OECD” should be spelled out; the fourth bullet was modified to reflect omission of the second sentence; and the word “discourage” replaced the phrase “are not encouraging” in the last sentence of the fifth bullet.
- Regarding “Effects on Natural Systems” on pages 2-3, the first bullet included insertion of “pathogens” after “invasive species” in the last sentence; minor grammatical edits were made to the second bullet; the third, fourth, and fifth bullets were approved without changes. In the last paragraph of the section; Mr. Gardner suggested including the number of agricultural acres; the section was then adopted.
- With regard to the first bullet under “Effects on Human Health” on pages 3-4 and pointing to the second parenthetical expression in the highlighted material, Mr. Martínez suggested eliminating references to malaria and dengue. This change, along with stylistic edits, was accepted with broad consensus. Bullet two was struck. Although several Commission members questioned the appropriateness of keeping the third bullet, the consensus remained to leave the paragraph in place, with staff to provide a more inclusive paragraph, perhaps just a matter of two or three more sentences. A broad

consensus existed to retain the fourth bullet. Commission members agreed to delete the fifth bullet.

- Regarding the first bullet (highlighted) under “General Principles Regarding Strategies” on pages 4-6, after considerable discussion, Chairman Bryant suggested that staff go back and look at page 1 and “beef up” the IPCC portion from a factual perspective, and amend this bullet by moving the IPCC language to the first page, delete editorializing, and add some quantifications to present the scale of magnitude on what needs to be done. Addressing the content of the second and third bullets, Mr. Freudberg suggested moving the first sentence into the next bullet. A consensus was reached. The fourth bullet was adopted after reworking of the first sentence. Bullet 10 was to include a statement reflecting the trend that natural gas is increasingly being used for electric generation. The remaining bullets were adopted with minor edits.

VI. Adoption of Findings

The Chairman then requested a motion on accepting the findings as amended. A motion was moved and seconded. Findings were adopted unanimously.

VII. Discussion: Cross-Cutting Recommendations

Referencing the document, *Governor's Commission on Climate Change – Cross-cutting Recommendations, Draft, October 17, 2008*, Chairman Bryant requested Commission members to read ahead and re-examine his/her own recommendation(s), and where applicable, convert comments to declarative recommendations. Chairman Bryant remarked that several statements might parallel recommendations contained in workgroup draft reports, and to flag those statements accordingly. Commission members proceeded to discuss and evaluate the tone and content of each recommendation and analyze the document content line by line. Discussion of cross-cutting recommendations was suspended by the public comment period, which began at 1:00 p.m.; discussion resumed at 1:40 p.m.

Suggested modifications to the language of the draft cross-cutting recommendations document included:

- Page 1. Amend the reference to the IPCC by stating it is recommended that the Governor and the General Assembly give consideration for a stronger GHG reduction goal that is more reflective of IPCC observations in its fourth assessment report (bullet 1); deleting the reference to producing Virginia-specific detailed prediction of climate change at city, county, and state level (bullet 2); amending the statement referring to a 10 percent electricity conservation goal to clarify that the figure did not take into account electricity that might be used to fuel transportation (such as would be the case with plug-in hybrids) (bullet 6).
- Page 2. Bullet 1 to be held for discussion when the Built Environment workgroup recommendations are discussed; bullet 2 eliminated; bullet 3 to be set aside in its entirety for the moment; bullet 4 to be held and revisited; the last sentence of bullet 5 was re-phrased so as to state that the General Assembly should pass any enabling authority that is needed.
- Page 3. Bullet 1, second sentence reworded to say “The Commonwealth should strive to utilize . . .”; text under bullet 2 was to be segregated into three sub-bullets, including

references to the *Code of Virginia* with respect to the Fisheries and Habitat of the Tidal Waters Title, Soil and Water Conservation Board, Chesapeake Bay Preservation Act, and to include the Marine Resources Commission; bullet 3 was to be considered along with bullet 4. Considerable discussion ensued with respect to the mechanics of establishing of the Governor's Office of Climate Change and whether the office should be a cabinet-level position.

- Page 4-5. Under "Recommendations for which more than one comment was received," Chairman Bryant requested Commission members to grant staff the authority to view the sub-bullets under outreach and education, and in spirit adopt an outreach and education efforts recommendation.
- Page 5-6. Bullet 1, Chairman Bryant again asked the Commission to grant staff the authority to review the three sub-bullets under "Provide credits to landowners for reforestation . . ." to combine where applicable, and draft coherent recommendations. Deputy Secretary Rovner noted that the landowner credits were being addressed by the Adaptation Workgroup. Under "Recommendations for which no additional explanation was received," Mr. Rue explained that his multimodal proposal would be finalized for the Transportation and Land Use Workgroup. Operating on Mr. Heacock's suggestion, Chairman Bryant suggested that Commission discard bullets that were largely undefined and keep bullets for which the Commission wished to salvage; it was later determined in the discussion that the bullet "Formalize use of PDCs . . ." would be the one bullet which would be retained.
- Page 6. Under "New cross-cutting recommendations raised after the September 10th meeting," bullet 1 (GHG Reporting), sub-bullet 1 is to be re-worked by staff; bullet 2 was adopted; bullet 3 will be re-worked so that report would explicitly acknowledge all greenhouse gases; bullet 4 was adopted, with the refinement, as suggested by Mr. Walz, that localities should explore co-generation; bullet 5, dealing with plastic bags, was adopted as well. Chairman Bryant asked about quantifying the magnitude of the problem caused by plastic bags. Mr. Pollard indicated he did not have the data with him but that numbers had been presented by the commission by a group of students; and he felt it was an important issue. The recommendation was retained.

Chairman Bryant stated that staff would work on the set of recommendations and re-submit them to Commission members for review.

VIII. Public Comment

Chairman Bryant noted that ten individuals had signed up to speak during the public comment period, and he requested speakers to limit their presentations to two minutes.

- Glen Besa, of the Sierra Club, Virginia Chapter. Mr. Besa referenced an email he had sent to Commission members on behalf of the environmental community. The email spoke of four recommendations for the Governor's Commission on Climate Change to consider. The recommendations include actions: setting goals to reflect IPCC size of 80% reduction by 2050 and interim reductions of 25% by 2020, establishing annual emissions targets, underscoring the importance of energy efficiency, defining renewable energy and excluding nuclear energy as a renewable, highlighting economic opportunities with green jobs, and providing a scorecard on cross-cutting recommendations.

- Suzanne Ankrum, of the Virginia Conservation Network. Ms. Ankrum targeted her remarks on the draft report of the Adaptation and Sequestration Workgroup. She commended the Workgroup for its strong definitions of adaptations and encouraged the definition of sequestration to remain focused on natural systems. Ms. Ankrum addressed several points in the report: planning for lower levels of sea rise – 2.3 feet – may constitute a mistake; Virginia should protect agricultural best practices programs; Virginia should facilitate the carbon credits for landowners for small parcels of land, and that such programs should have a time requirement.
- Dan Holmes of Piedmont Environmental Council. Mr. Holmes targeted his comments on the Electrical Generation Workgroup. Mr. Holmes' group would support a more aggressive cap-and-trade system designed to meet a science-based goal more representative of what is being discussed currently in the IPCC report. Credits should be made available through auction where funds could be dedicated through actual reductions or adaptation strategies. Looking at the language of nuclear generation and of uranium mining, the Piedmont Environmental Council did not believe that nuclear generation should be included in the definition of renewables and that they felt that the Commission should consider language recognizing that there are significant environmental barriers to uranium mining in Virginia. Mr. Holmes said he would forward written comments to the Commission at a later time.
- Charles Battig, M.D., M.S. Dr. Battig began by referencing the Commission's September 10 discussion document in which Governor Kaine was quoted as stating it is "a fact that global climate change is happening." Dr. Battig completed the statement by adding his own words, "as it has done so for eons." Dr. Battig asserted that the present climate change is one of global cooling, and cited reports that claimed we can experience two to three years of global cooling, and the cooling trend was not predicted by the IPCC computer models. Dr. Battig stated there was no correlation between man-made emissions of greenhouse gases and global temperatures and concluded his remarks by suggesting that the Commission delete all references to carbon dioxide and the IPCC in its document and concentrate instead on energy efficiency.
- Sarah Rispin, of the Southern Environmental Law Center. She indicated she spoke on behalf of the environmental community of Virginia. Ms. Rispin urged members of this Commission to take a good look at investing in energy efficiency. She applauded many of the goals and recommendations that the Built Environment Workgroup had put forth, but what she saw as critically missing was any sort of hard target for achieving energy efficiency gains. Ms. Rispin urged the Commission to read the ACEEE (American Council for Energy Efficiency Economy) report, which showed that we can achieve 20 percent energy savings over the course of the next decade or so and grow the economy of Virginia at the same time. This would be the cheapest source of energy, with zero net carbon emissions, Ms. Rispin asserted. She further urged the Built Environment Workgroup to make sure there was an emphasis on implementing the recommendations and to look at energy audits and funding. Secretary Bryant noted that the ACEEE report is available online on the Commission's website.
- Charles Strickler, a Virginia resident. Mr. Strickler used the analogy of comparing his personal experience in automobile accident that took place 35 years ago with actions addressing global climate change. Mr. Strickler stated we need to bring this "car" back

on the road, get rid of carbon, do what's right, do your R&D, and "get things moving in the right direction."

- Joe Croce of the Virginia Manufacturers Association. Mr. Croce called attention to information he had distributed to Commission members, and, in the interest of adhering to the public comment time restraints, Mr. Croce read a statement reflecting the Association's position on climate change: "It is the position of the Virginia Manufacturers Association adopted by our Board of Directors on June 19, 2008, and the Virginia Climate Change Council that they support environmental policies and recognize the Commonwealth's responsibility in maintaining efficient, lean, and cost-effective and responsive state environmental agencies in efforts that result in state administration of federally-delegated programs." Mr. Croce continued by saying that the Association supports exemplary science, economic development through the regulatory process, and private and public energy investment. The Council would be developing a final report and educational materials and looked forward to sharing these with the Commission. In response to Commission questions, Mr. Croce said he would be glad to email a list of what he thought were the most important [regulatory] barriers which his group had identified.
- Robert Grainger of Axiom Methods. Mr. Grainger explained that his company was a carbon offset project, and as such, supported cap-and-trade systems. Mr. Grainger stated that he was surprised that cap-and-trade systems referenced in documents accompanying the day's meeting described a regional effort focused on the south rather than joining the existing cap-and-trade program in the northeast states, RGGI. His question was "why go south rather than north?" Mr. Walz responded by saying that there were many commonalities in the southeastern states, as to whence our energy generation comes. More than 50 percent of refining capacity exists, and more than 50 percent of petroleum and natural gas production happens, in those states. The generation mix between nuclear and coal is similar across southern states.
- Matt Zogby of Virginia League of Conservation Voters. Mr. Zogby briefly addressed the Transportation and Land Use Workgroup recommendations, which, he stated, were vitally important. The League was generally pleased with the Workgroup's recommendations and applauded the recognition of VMTs as an indicator of progress. The League, however, suggested that the Commission adopt a VMT reduction goal as a recommendation and a re-evaluate Virginia's long-range transportation plan.
- Kirsten Collings of Chesapeake Climate Action Network. Ms. Collings indicated to Commission members that she would like to make two points. Her first point was to say that the time to act boldly was now and suggested to Commission members that they look at the Florida plan, which called for carbon cuts well above the already ambitious goals set by Governor Charlie Crist. Secondly, Ms. Collings spoke of re-examining the goals for reducing carbon emissions, to establish stronger goals of 80 percent reduction by 2050, with a short-term goal of 25 percent by 2020. Given Virginia's coal-based economy and its energy consumption, Virginia will be called upon to reach ambitious reduction goals.

IX. Highlights of Workgroup Reports and Initial Discussion of Workgroup Recommendations

Chairman Bryant called for Commission members to move quickly through the highlights of the draft recommendations of the Workgroups and to flag any recommendations that might be controversial.

A. Transportation and Land Use

The Honorable Donald S. Beyer, Jr.

Referencing "Governor's Commission on Climate Change *Transportation and Land Use Workgroup Draft Recommendations*, 10/17/08," Mr. Beyer informed the Commission that his workgroup was putting forth 46 recommendations that fell within three major recommendations: initiatives that reduce greenhouse gas (GHG) emissions through improved fuel economy; initiatives that reduce GHG emissions through low-carbon (alternative) fuels; and initiatives that reduce GHG emissions through transportation, land use, and operational measures. Mr. Beyer proceeded to "give a flavor" of seven of the recommendations.

According to the Transportation and Land Use Workgroup, Virginia should: (i) create state incentives for the purchase of fuel-efficient vehicles; (ii) become a leader in promoting low-carbon fuel options through incentives and research and market itself as "hybrid friendly;" (iii) explore ways to send consumers better, more accurate signals on the costs of transportation and move toward greater use of pricing mechanisms; (iv) extend the regional revenue source for transit that exists in Northern Virginia throughout the Commonwealth; (v) direct the Commonwealth Transportation Board to establish simple criteria to make roundabouts easier to build; (vi) increase funding for the Virginia Rail Enhancement Fund; and (vii) target available transportation funds towards walkable, transit-oriented development areas. Mr. Beyer identified three proposals that were not submitted for recommendations but would be deserving of discussion by the full Commission. These rejected items were detailed in the report's appendix. During the question period, Ms. Gross indicated that recommendation number 33 was a problematic issue for local governments. Mr. Beyer responded that his Workgroup would be amenable to modifying the recommendation. Mr. Smart suggested more emphasis on utilizing the marketplace to put a price on people using automobiles.

B. Electricity Generation/Other Sources

The Honorable L. Preston Bryant, Jr.

Chairman Bryant highlighted the six recommendations on which his Workgroup had reached general consensus: interaction with federal action regarding a national cap-and-trade program; a broad policy statement supporting nuclear energy; conservation pricing, with demand-side incentives; research and development, with public funding to be expanded for renewable sources of energy as well as carbon capture and sequestration; a renewable

portfolio standard, with debate over whether a mandatory RPS is a correct policy for Virginia; and renewable distributed generation/combined heat and power. The renewable portfolio standard (RPS) was the most controversial of the recommendations, Chairman Bryant pointed out, and the Workgroup will submit this to the full Commission for additional discussion, particularly on whether the Commonwealth should have a mandatory or voluntary RPS. During the question period, the issue of off-shore solar and wind generation was discussed; at the present time these initiatives are too cost prohibitive. Mr. Ferguson suggested that the Commission recommend the same incentive for solar as for nuclear energy. Chairman Bryant responded that the recommendation would be brought up in the next meeting.

C. Built Environment

Steve Walz

Mr. Walz began his segment by saying there had been overall consensus among his Workgroup members with regard to recommendations. The Workgroup's recommendations reflected the need to advance energy and conservation and reduce Virginia's GHG emissions and fell in nine categories: investments in energy efficiency; smart metering to manage energy use; educating Virginia's energy consumers; renewable power sources; increased funding for weatherization programs to address consistent and stable funding from year to year; utility rate schedules; use of public funds for energy efficiency investments; building standard codes; and standards for appliances. Power companies providing real-time rate charges met with some controversy among Workgroup members. With respect to building standards, there was consensus that Virginia should phase in requirements that all commercial buildings would meet LEED or equivalent standards. The Workgroup also felt as a whole that efficiency requirements for appliances should be an important part of a consumer education program. During the discussion segment, it was noted that the Workgroup's recommendations did not include references about accounting for potential effects of climate change. There was not a consensus on setting specific annual reductions in energy use.

D. Adaptation and Sequestration

Paula Jasinski for The Honorable Joseph F. Bouchard

Ms. Jasinski explained that one of the first things that the Workgroup set out to do was to define adaptation, and from early on the Workgroup set planning targets and an overall strategy that called for Virginia to plan for increases in air temperature, sea level rises, and increasing instability of weather patterns. Ms. Jasinski pointed out that most recommendations fell into one of several categories: natural resources, which included establishing a no net loss policy for natural carbon sequestration areas based on a 2010 baseline; economic impact and challenges posed to Virginia's infrastructure; public health and emergency preparedness, social and cultural impacts; and cross-cutting measures. The Workgroup received assistance from the Virginia Department of Health in drafting the health and society portion of its recommendations. Cross-cutting measures addressed the concerns

of coordinating climate change response, securing high resolution topographic data to aid localities to plan for specific sea level rise scenarios, statutory authorities of local governments, and federal climate change legislation and policies. The recommendations were broadly adopted by the Workgroup.

X. Closing Remarks

Secretary Bryant congratulated the Commission on three key accomplishments: the Commission had unanimously adopted findings; the Commission had given staff very good recommendations and provided staff with substantive material to prepare the Commission's final report; and Commission Workgroup chairpersons had provided insightful highlights of Workgroup draft recommendations, from which the Commission would try to isolate and focus on some issues that would require more in-depth discussion. Chairman Bryant accepted a suggestion put forth by Mr. Smart that the Commission should capture the breadth of public comment, including the input from university students. Additionally it was suggested that the Built Environment Workgroup might incorporate recommendations from the ACEEE report in its recommendation paper.

XI. Adjournment

Chairman Bryant adjourned the meeting at 3:55 p.m.