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Memo

To: North Carolina Climate Action Plan Advisory Group
From: The Center For Climate Strategies
CC: North Carolina Department of Environment and Natural Resources
Date: February 16, 2006

Background

DENR/DAQ Activities

In September 2005, under the Clean Smokestacks Act of 2002 (CSA), the North Carolina Department of Environment and Natural Resources (DENR) and Division of Air Quality (DAQ) delivered a required report to the Environmental Management Commission (EMC) and the Environmental Review Commission (ERC) (of the General Assembly) pursuant to legislative requirements in the CSA, including:

- 1) Identification and evaluation of carbon dioxide reduction strategies for coal fired utilities and other major stationary sources, and
- 2) Alternative potential greenhouse gas (GHG) reduction strategies (a limited set of measures beyond carbon dioxide reduction strategies for coal fired utilities and other major stationary sources (identified in step #1), including measures related to other GHG's and sectors)

The final DAQ CSA report included a series of recommendations for state actions on carbon dioxide in the stationary source sector, as well as recommended alternative reduction strategies for other sectors and greenhouse gases. Some actions recommended in the CSA report can be implemented by the state in the near term, while others require further development. Yet other potential mitigation actions are likely applicable to North Carolina that are not identified in this report. The 2005 DAQ CSA report also includes an updated, comprehensive inventory and forecast of North Carolina GHG emissions from 1990-2020. This assessment was developed using default methodologies from the US EPA State Greenhouse Gas Inventory Tool (SGIT) with substantial technical augmentation and modification to address North Carolina specific issues and information needs. These technical support tasks were assisted by the Center for Climate Strategies (CCS), working in concert with DENR/DAQ.

The CSA report contains a recommendation to continue state GHG mitigation planning through formation of a DENR/DAQ stakeholder process to further identify and develop policy actions (recommendation #1) in the form of a Climate Action Plan. The purpose of this process will be to develop public recommendations to DENR/DAQ for a state level climate action plan, focusing in particular on economic opportunities and co-benefits associated with potential climate mitigation actions.

Legislative Activities

During 2005, the General Assembly continued consideration of further legislation on climate change, and ultimately established the North Carolina Legislative Commission on Global Climate Change (Commission) by statute. Section 5 of Session Law 2005-442 identifies a number of fact-finding requirements that relate to state level GHG planning, including determination of the need for a GHG reduction goal and, if so, what level of reduction that might be.

Information needs of the Commission may appear to overlap work conducted already under the CSA. However, the goals and process are complementary in many key areas and expected to interface closely with future GHG planning and assessments by DENR/DAQ that are the subject of this memo. The North Carolina GHG planning process (hereafter referred to as the North Carolina Climate Action Plan Advisory Group (CAPAG) supported by this continuing DAQ/DENR effort is expected to address a number information gathering needs of the Commission as they relate to climate mitigation policy and work already done or pertinent to North Carolina and other states.

Technical Requirements of the CAPAG and Commission Processes

Requested information for the CAPAG and Commission includes a number of overlapping and complementary findings to be developed from both processes:

- (1) GHG emissions inventories and forecasts (CAPAG and Commission)
- (2) Inventories and assessments of existing and future policy actions (CAPAG and Commission)
- (3) Identification of a range of alternative potential GHG reduction strategies (CAPAG and Commission)
- (4) Assessment of potential benefits and costs (CAPAG and Commission)
- (5) Assessment of distribution of costs and benefits of potential mitigation policy actions (CAPAG and Commission)
- (6) Identification of economic opportunities and impacts of potential mitigation policy actions (CAPAG and Commission)
- (7) GHG reporting measures (CAPAG)
- (8) Statewide goals determination (Commission)

The CAPAG process will be conducted concurrently and in regular communication with the Commission, potentially including regular placement on its meeting agenda. While the two processes are separate, they share some overlapping participants and will communicate through regular briefings (to be scheduled). Findings from the CAPAG process will thus be available for consideration by the Commission at its meetings, and feedback will be available for consideration by members of the CAPAG planning process.

Description of the CAPAG Process

Purpose And Goals

The purpose of the CAPAG will be to develop public recommendations to DENR/DAQ for a state level climate action plan, focusing in particular on economic opportunities and co-benefits associated with potential climate mitigation actions. The goal of the CAPAG will be to seek consensus on a comprehensive series of individual, proposed actions to reduce GHG's in North Carolina. This process also will provide complementary information to the Commission related to several information needs noted under Section 5 of Session Law 2005-442. The level of support for specific actions and the full range of CAPAG views will be documented. Statewide targets and or goals, to the extent that they are developed, will be based on results of the Commission's deliberation on this issue.

CCS will provide CAPAG recommendations to DENR/DAQ in a final report to cover the following:

- 1) Executive Summary
- 2) Background, Purpose and Goals
 - a. Description of the CAPAG Process
 - b. History and Status of State Actions, Including a Description of State Efforts Underway
 - c. Inventory and Forecast of State Emissions
- 3) Policy Recommendations
 - a. Agriculture and Forestry (also including carbon storage and biomass energy)
 - b. Energy Supply (including electricity generation)
 - c. Residential, Commercial and Industry (also including industrial process)
 - d. Transportation and Land Use (also including biofuels)
 - e. Cross Cutting Issues (including reporting, registries and education)

Process Design

Activities of the CAPAG process will be:

- Stepwise: The process will follow a set master schedule of discussion and decision items and iterate to consensus. As such it will require continuity among

- participants. CAPAG and technical work groups (TWGs) participants expected to regularly attend meetings. Alternates should attend only as needed due to schedule conflicts.
- Fact based: Technical analysis and policy design will be achieved through preliminary and joint fact-finding and, ultimately, joint policy development by CAPAG members. The CAPAG will be assisted by technical work groups (TWGs) and facilitation and technical consulting team provided by CCS.
 - Consensus driven: The state will seek but not mandate consensus through this process, and final decisions by the CAPAG will be made through decision criteria and voting procedures that allow a full expression of viewpoints. Four voting categories will be used, including: *unanimous consent* (all agree), *super majority* (80 percent agree), *majority* (51 percent agree), and *minority view* (less than 50 percent agree).
 - Self-determined: The process starts with no pre-commitments to particular policies. Priorities for analysis and final recommendations will be self-determined through informed judgments by the CAPAG and TWGs. CAPAG members will be free to review and suggest revisions to DAQ's September 1, 2005 recommendations under the CSA, including addition of new options to the list of potential options and revisions to the design and implementation of specific options in the CSA report.
 - Informal and nonbinding: The process will be advisory and nonbinding to the state and provide public input for potential future policy decisions. It is structured as an informal consensus building effort to provide a full opportunity for CAPAG members to make voluntary decisions on recommended policies.
 - Transparent: The processes will be transparent. Policy options will include clear design parameters (such as levels, timing, coverage and implementation mechanisms) as well as technical analyses with clear data, methods, sources and assumptions. All proceedings will be posted to the project website by CCS after review for accuracy by DAQ.
 - Inclusive: The process will include CAPAG and TWG members, and opportunities for public input.
 - Flexible: Throughout the process the facilitation team will check with participants and the state on progress and any potential need for revision. Proposed changes will be shared openly with the group.

Key steps and parameters of the process include the following:

- The CAPAG and TWGs will explore solutions in all sectors, covering: energy supply; commercial, industrial and residential energy use and process related emissions (energy efficiency and conservation); transportation and land use; agriculture and forestry; waste management, and cross cutting issues.
- Mitigation of all GHG's will be examined, including carbon dioxide, methane, nitrous oxide, synthetic gases and, potentially, black carbon. Units will be expressed in metric tons (MT) carbon dioxide equivalents (CO₂e).

- The process will start with examination of a compendium of related policy actions undertaken in North Carolina as well as other states and regions, including CSA recommendations and actions in the State Energy Plan and through other ongoing state efforts. The CAPAG and TWGs will provide new potential options to this list, as needed, as well as adaptation of measures on the list to North Carolina circumstances. Prioritization of the list for further analysis will be based on TWG recommendations and CAPAG decisions.
- Historical emissions inventories and reference case projections will be provided in review draft format for years 1990-2020.
- Recommendations for action will include the present to year 2020, with estimated direct benefit and cost impacts being reported for 2010 and 2020. Benefits will be defined as direct GHG reduction potential. Costs will be defined as direct financial cost per ton of GHG reduced through emissions reductions or increased carbon storage.
- Recommendations may include state level and multi-state actions (regional and national), as well as voluntary and mandatory approaches.
- Recommendations will include both quantified and non-quantified actions, with emphasis on numerical analysis of GHG reduction potential and cost effectiveness for as possible under available funding and project timetables. Additional issues that affect the design and priority of potential actions will be evaluated on a case-by-case basis pending TWG and CAPAG input.
- CAPAG discussions will explore alternative policy designs and additional analysis, as needed, to address barriers to consensus that may exist. Assistance will be provided to the CAPAG regarding potential alternatives from the CCS team and TWGs.
- The final report will document CAPAG recommendations, fact-finding results, and CAPAG views on each policy option, including alternative views as needed.

At the conclusion of the processes, CAPAG recommendations will be presented in a CCS report to DENR/DAQ.

Roles and Responsibilities

State Leadership And Management

DENR Secretary Bill Ross will convene the CAPAG. DENR/DAQ will organize and coordinate the process with support and assistance by CCS. CCS will report to DENR/DAQ on behalf of CAPAG members and provide facilitation and technical analysis to the CAPAG and TWGs. CCS will provide DENR/DAQ documents for review and approval prior to website posting for CAPAG meetings, and will coordinate with staff on technical assistance, logistical support, and other issues as needed.

State agency representatives will serve as voting members and/or nonvoting technical advisors of the CAPAG and TWGs. DAQ will oversee the CAPAG process in coordination with CCS, assist CCS with planning and implementation of the process and

provide input on policies and issues identified by CAPAG members, the public and TWGs as needed. The state will provide logistical support for meetings, facilities, public notice and posting of materials as needed, with assistance and coordination by CCS as needed.

CAPAG Members

A group of public participants representing a variety of North Carolina organizations and companies will be selected by the DENR/DAQ and invited to be members of the CAPAG. The TWGs and CCS team will task them with making formal recommendations on potential North Carolina climate policy actions with assistance.

TWG Members

TWG members will be comprised primarily of CAPAG members assigned to specific sectors of interest. These TWGs will be augmented with additional technical experts and interested parties as needed. They will be selected by the state with assistance from CCS. TWGs will be organized at the first CAPAG meeting. The TWGs will advise the CAPAG and complete tasks designated by the CAPAG as priorities. TWGs will cover all sectors, including: 1) energy supply (including electricity and natural gas), 2) commercial, industrial and residential (including energy efficiency and conservation), 3) transportation and land use, 4) agriculture and forestry, and 5) cross cutting issues (such as reporting, registries, and education).

TWGs will be tasked with providing guidance to CAPAG members on priorities for analysis, technical analysis and design of options, alternative approaches, and final recommendations.

The Public

The meetings of the CAPAG will be conducted in accordance with open meetings and public information requirements and policies of the state. Meeting notices, advance materials and minutes of previous proceedings will be made available to the public through the project Web site and other means. Public input and announcements may be provided as a routine designated part of CAPAG meetings.

Participant Guidelines

CAPAG and TWG members are expected to follow certain codes of conduct during the process, as follows:

- Attendance is strongly requested at all meetings to provide continuity to the stepwise process. Alternates may be named when absolutely necessary.
- Active involvement in proposals and evaluations is needed from each member to fully support the process of joint policy development.

- Good faith participation and full support of the process are required.
- In exchanging information and views, CAPAG members should make fact based offers and statements, and refrain from personal criticisms.
- CAPAG and TWG members should not represent the state or CAPAG in contacts with the media.

Facilitation

CCS will serve as facilitator of the CAPAG and TWGs. Facilitation responsibilities include:

- Reporting to DENR/DAQ on behalf of CAPAG members and providing coordination and management support for the CAPAG process
- Direction and coordination of technical consultants and TWG leaders, including meetings and calls
- Planning and supervision of CAPAG meetings, calls, reports and documents
- Facilitation and management of CAPAG meetings
- Coordination of CCS activities with DENR/DAQ and other state agency technical and support staff as needed
- Conducting public meetings as needed

To support facilitation and project management, CCS will provide a project website (www.ncclimatechange.us) for use by participants. DAQ will approve the design of the site and documents for posting by CCS. CCS will be responsible for posting documents and managing the site following DAQ approval. At the conclusion of the process, public materials from the website will be transferred to DENR/DAQ for ongoing management and use by the state.

As a part of its role as evaluative facilitator, CCS voluntarily abides by the model standards of conduct by the American Arbitration Association, American Bar Association and the Association for Conflict Resolution as applicable to the advisory process as an informal, consensus building initiative. To avoid any potential conflicts, CCS does not accept any donor funding for its work on the DENR/DAQ process that is contingent on outcomes of the CAPAG process. CCS also does not exchange funds with CAPAG members or their organizations.

Technical Team

The CCS technical team will serve as a neutral and expert group to support the development of technical and policy consensus by the CAPAG. Technical staff will perform analyses and provide support based on CAPAG and TWG decisions. The team will be composed of the process facilitator and five TWG leaders. Other consultants will be deployed as needed for specialized analysis or additional capacity. State agency staff and TWG members will be asked to assist CCS in formulation and analysis of options.

Fact Finding

Preliminary fact finding prior to the first CAPAG meeting will include:

- Development of a draft emissions inventory and reference case forecast for years 1990-2020 (completed under the DENR/DAQ CSA report)
- Identification of a list of conceivable mitigation options for CAPAG consideration (completed under the 2005 DAQ CSA report), including potential actions identified under the 2005 DAQ CSA report and State Energy Plan
- Initial assessment of a set of potential policy measures identified by DENR/DAQ in the CSA report

Joint fact finding after the first CAPAG meeting will include:

- Finalization of GHG emissions inventories and reference case forecasts for all sectors and GHGs
- Identification of a comprehensive “long list” compendium of conceivable policy options in North Carolina
- Identification and characterization of actions already underway in North Carolina, including those under the State Energy Plan
- Ranking and identification of initial policy priorities for analysis
- Development of a range of initial policy design parameters and evaluation methods for individual options
- Identification and analysis of alternative policy design and implementation mechanisms for individual options, as needed
- Final benefit and cost analysis, and related analysis of additional issues on a case by case basis, as needed
- Identification of cross cutting issues and integrated policy analyses as needed, including statewide and sector based economic modeling

Timing and Milestones

The first meeting of the CAPAG is scheduled for launch February 16, 2006, with up to five additional CAPAG meetings to be held through late winter of 2007. We plan for one or two TWG conference calls to be held between CAPAG meetings as needed, along with interim briefings and reports to DENR, EMC, ERC and the Legislative Commission, according to a schedule to be determined by the DENR/DAQ. A final report with CAPAG recommendations will be provided to DENR/DAQ by June 30, 2007, and earlier if possible, following a period of review by the CAPAG and the public.

Draft Project Calendar

February 2006	1 st CAPAG meeting
April 2006	2 nd CAPAG meeting
June 2006	3 rd CAPAG meeting
August 2006	4 th CAPAG meeting
October 2006	5 th CAPAG meeting
February 2007	6 th CAPAG meeting
May, 2007	Report review
June 2007	Final DENR/DAQ Report Due
Between CAPAG Meetings	TWG conference calls, briefings and reports as needed.

Draft CAPAG And Technical Work Group Meeting Agendas

MEETING ONE

- Introductions
- Purpose and goals
- Review of the CAPAG process and its relation to CSA and the Commission
- Review of CSA recommendations by DENR
- Identification and recognition of existing actions being taken in North Carolina and other states
- North Carolina emissions inventory & forecast
- Key policy opportunities & issues
- Formation of TWGs, next meeting agenda

Interim TWG calls (to be scheduled by CCS) will cover: 1) suggested revisions to the draft inventory and forecast, 2) review and suggested modifications to the list of potential North Carolina policy actions, 3) early ranking of options and suggested initial policy priorities for analysis

MEETING TWO

- Recommended updates to inventories and forecasts
- Discussion of list of potential North Carolina policy actions
- Review and discussion of initial policy priorities for TWG analysis
- Review of TWG plans, including quantification
- Identification of cross-cutting issues

Interim TWG calls to cover: 1) suggested final revisions to the emissions inventory and forecast, 2) suggested modifications to the list of initial policy priorities for analysis for CAPAG review, 3) suggested policy designs for specific policy actions for CAPAG review, 4) next steps on design and analysis of initial policy options

MEETING THREE

- Final agreement on emissions inventories and forecasts for individual sectors
- Review and approval of TWG suggested policy priorities for analysis, with modification as needed
- Discussion of policy design and implementation mechanisms, as well as the process for developing straw proposals for policy actions
- Briefing on cross cutting issues and policy options

Interim TWG calls to cover: 1) development of straw proposals for individual options, 2) next steps for analysis of options, 3) identification of crosscutting policy needs

MEETING FOUR

- Review of potential policy priorities for analysis, straw proposals for policy design, and early results of analysis
- Guidance to TWGs on additions, deletions and modifications of options
- Identification of alternative policy designs and implementation mechanisms for TWGs, as needed
- Review and revision of cross cutting policy options

Interim TWG calls to cover: 1) revisions to draft final policy priorities and design parameters, including implementation mechanisms, 2) next steps for draft analysis of options and design alternatives, and 3) next steps on formulation of cross cutting policy options and mechanisms

MEETING FIVE

- Review of the draft proposed policy options list, with results of analysis and cumulative emissions reductions potential as available
- Identification of consensus and non consensus options

- Identification of barriers and alternatives for non consensus options, with guidance for additional work on options to TWGs
- Review of final report progress and plans

Interim TWG calls to cover: 1) final revisions to policy design and implementation mechanisms, 2) final analysis of options, alternatives, and 3) final steps on formulation of cross cutting policy options and mechanisms

MEETING SIX

- Progress report on non-consensus policy options, and cumulative emissions reductions potential of proposed actions
- Identification of consensus and non consensus options from remaining list of options under development
- Identification of barriers and alternatives for non consensus options, with proposals for resolution by the CAPAG
- Discussion and final resolution of final barriers to consensus for remaining policy options under consideration, and final determination of CAPAG consensus for options
- Summary of the process, review of next steps for review and transmittal of the final report

CCS team completes CAPAG updates to policy options and draft final report language.

PUBLIC REVIEW OF THE DENR/DAQ REPORT

FINAL DENR/DAQ REPORT