North Carolina Climate Action Plan

STAPPA / ALAPCO
SPRING Meeting

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NORTH CAROLINA
DIVISION OF AIR QUALITY

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Background – CSA CO_2 Reports

- Sections 13 required reports by DAQ on Sept. 1, 2003, 2004 and 2005 on CO_2
- 2003 Report was “State of Science”
- 2004 Report was “Range of Options”
- 2005 Report was “Recommendations”

CO2 – Assumptions & "Extrapolations"

- ***Acceptance of Global Warming Implied in CSA – Not an Issue to Decide***
- ***CO_2 Specified in CSA, but Assumed to be Inclusive of all GHG (Basically, Adds Methane, N_2O, and Other but "Less Common" Gases)***
- ***CSA Basically Directed Toward Coal-fired Power Plants, but Effort was Viewed in Context of all Sources of GHG, Stationary and Mobile***

DAQ Recommendations *for* CO_2

DAQ to do (Action Plans)	Administrative & Regulatory	Longer Term Studies/Plans
8 Listed Plans of Action that DAQ is committing to do.	7 Recommendations for the DAQ and other agencies to act upon under existing authorities and level of knowledge.	7 Long Term general Recommendations to be studied and further developed as part of the stakeholder developed Climate Action Plan.

DAQ To Do (Action Plans)

- **Develop / facilitate a NC Climate Action Plan Effort**
  - **Facilitated Stakeholder Process**
  - **Technical working groups – government, consultants, etc.**

DAQ To Do (Action Plans) cont.

- Coordinate Development of plan for Southeast Region
- Baseline Point Source GHG Reporting within 3 Years
- Explore Ways to Facilitate Higher Power Plant Efficiency
- Include Consideration of Measures in State Air Plan
- Adopt / Recommend Use of GHG Term "CO_2e" State-wide Instead of "CO_2"
- Explore Ways to Use CO_2 Emission Credits to Fund Program
- Assist Legislative Commission on Climate Change

Administrative & Regulatory Recommendations

A-1: NC should increase state government efforts to reduce its own CO_2e	**A-2:** Encourage use of clean coal technologies such as Integrated Gasification Combined Cycle (IGCC)
A-3: 5 years – Re-assess CO_2 removal and sequestration technology status	**A-4:** Initiate a NC GHG Registry w/verification
A-5: Establish major NC GHG tech centers for education, consulting and manufacturing	**A-6:** NC General Assembly and Executive Branch Influence National/World Climate Policy
A-7: NC education system incorporate GHG science	

Longer Term CAP Study, Assessment & Actions

LT-1: Endorse, continue to expand and refine State Energy Plan	**LT-2: Establish Leadership Center in University for Ag & Forestry Roles**
LT-3: Maximize use of animal waste for energy	**LT-4: Establish RPS and EPS Standards ASAP**
LT-5: Establish Public Benefits Fund	**LT-6: Transportation use Reductions and Efficiency Increases**
LT-7: Plan or Commission for Long Range Global Warming Disaster Recovery	

Next Steps

- Establish CAP Membership and Groups
- Begin Implementation of EI Details
- Work with Global Climate Change Commission
- Develop Climate Action Plan – CAPAG Process
- Report to Commission, General Assembly, Governor and Implement

How Does The CAPAG Effort Relate to the Legislative Climate Change Commission?

- Complements and Supports the Efforts of the Legislative Commission
- Provides Technical Support and Knowledge on GHG Reductions to Include Costs and Benefits
- Benefits Include Economic Boost to the State Economy – Including Estimates of Job Gains
- Ongoing Coordination with and Reporting to Commission
- Several Stakeholders Groups Including: Industry, Environmentalists, Academia, …

Purpose & Goals

- ***Develop Climate Action Plan Recommendations***
  - *Range of individual policy actions*
  - *Benefits and Costs Analysis*
    - *Economic Benefit Determined*
  - *Consensus of Stakeholders*
  - *Support Commission on Global Climate Change*

Mitigation Sectors

- Agriculture
- Forestry
- Electricity and Fuel Production
- Residential, Commercial, Industrial Energy Use and Process
- Transportation and Land Use
- Waste Management – Bio-waste

Policy Mechanisms

- Voluntary Agreements
- Technical Assistance
- Information and Education
- Financial Incentives
- Codes and Standards
- Market Based Approaches
- Reporting and Registries
- Others In Development…

Selection of State Policies

- **Consensus Based Processes**
- **Decision Criteria Include**
  - GHG reduction potential
  - Cost effectiveness
  - Co-benefits and costs
  - Feasibility issues
- **Economic Analysis Is Crucial**

Ten Step Work Plan

1. Develop initial GHG inventories and forecasts
2. Identify possible GHG mitigation options
3. Identify initial priorities for evaluation
4. Evaluate supply potential, cost effectiveness, other key issues
5. Identify barriers to consensus, alternative policy design
6. Modify, add or subtract options as needed
7. Evaluate cumulative results of options
8. Iterate to consensus, with votes as needed
9. Aggregate options into implementation scenarios
10. Finalize recommendations and report language

CAPAG Schedule

- **CAPAG meetings through Spring 2007**
  - Technical work group discussions in between CAPAG meetings
- **Work Products**
  - GHG inventory & forecast
  - Report with proposals to the Secretary

Process Design

- Comprehensive
- Stepwise
- Fact based
- Self determined
- Consensus driven
- Informal
- Nonbinding
- Transparent
- Inclusive
- Flexible

Decision Criteria

- GHG reduction potential (CO_2e)
- Cost per ton GHG removed
- Additional issues (co-benefits/costs, etc.)
- Feasibility issues

Stakeholder Decisions

Voting

- Informal consensus initially
- Votes as needed
- Identify early consensus actions and barriers
- Identify final consensus actions, resolve final barriers

Levels of support

- Unanimous, Super Majority, Simple Majority
- Characterize alternate views

Questions?

Contact

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