

Legislative Commission on Global Climate Change

Clean Smokestacks Act Report on Control of CO₂ - Recommendations

February 3, 2006

NORTH CAROLINA
DIVISION OF AIR QUALITY



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Background – CSA CO₂ Reports

- Sections 13 required reports by DAQ on Sept. 1, 2003, 2004 and 2005 on CO₂
- 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*
- *CO₂ Specified in CSA, but Assumed to be Inclusive of all GHG (Basically, Adds Methane, N₂O, 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 CO₂

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 “CO₂e” State-wide Instead of “CO₂”**
- **Explore Ways to Use CO₂ 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 ₂ e	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**

NC's First Operating Scrubber – Progress Energy – Asheville November 2005





Questions?

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Legislative Commission on Global Climate Change

The Department of Environment and
Natural Resources (DENR) / Division
of Air Quality (DAQ) Stakeholder
Dialogue Process – Climate Action
Plan Advisory Group (CAPAG)

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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 (CO₂e)**
- **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





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