

*North Carolina*

**Climate Action Plan Advisory Group**

Energy Supply  
Technical Work Group  
Teleconference Meeting #9

January 11, 2007



# Today's Agenda

- Call to order
- Roll Call of TWG members and public
- Review and approval of summary of TWG call #8 (December 19, 2006) (on web)
- Review draft results of ES-1, ES-2, ES-3&ES-9, ES-6, ES-7, ES-8, and ES-10
- Review of approach to ES-4 and ES-5
- Call to the public, announcements
- Next proposed activities

# Draft analyses completed thus far

- See explanation of energy supply analyses entitled: “01-11-07 Explanation of analysis of NC ES options” (on web)
  - ES-1: incentives for centralized renewables
  - ES-2: Environmental Portfolio Standard
  - ES-3: and ES-9 analyzed together (combined heat and power)
  - ES-6: coal IGCC with/without carbon capture and storage
  - ES-7: Public Benefits Charge on Electric Bills To Support Energy Efficiency Programs
  - ES-8: Waste to Energy
  - ES-10: GreenPower Renewable Resources Program

# ES-1: Renewable Energy Incentives

- See pages 2-5 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 0.8 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = \$39 million
  - Cost of saved carbon = \$46.7 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-2: EPS

- See pages 6-8 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 245 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = -\$2.4 billion
  - Cost of saved carbon = -\$9.6 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-3&9: CHP

- See pages 9-10 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 14.5 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = \$83 million
  - Cost of saved carbon = \$5.7 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-6: IGCC with carbon capture and storage

- See pages 13-14 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 66.7 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = \$2.1 billion
  - Cost of saved carbon = \$32.7 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-7: PBF

- See page 15 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 28.4 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = -\$685 million
  - Cost of saved carbon = -\$24.1 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-8: Waste to Energy

- See pages 16-17 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 0.08 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = -\$4 million
  - Cost of saved carbon = -\$49.9 per tonne of CO<sub>2</sub>-equivalent reduced

# ES-10: GreenPower program

- See page 18 on “01-11-07 Explanation of analysis of NC ES options”
- Quantification Method
- Key assumptions and results
  - 1.0 million tonnes CO<sub>2</sub>-equivalent reduced (cumulative)
  - NPV = \$12 million
  - Cost of saved carbon = \$11.5 per tonne of CO<sub>2</sub>-equivalent reduced

# Proposed Approach to Remaining Options

- ES-4
- ES-5

# Public Input, Announcements

# Next Proposed Activities

- Finalize analyses by 17 January (i.e., 1 week before the next CAPAG meeting on 24 January)
- TWG members to provide input to CCS prior to 17 January via email/phone contact
- Date and time for next TWG meeting: TBD