

Agriculture, Forestry & Waste Management Climate Policies: State Lessons for Federal Policy

July 8th Briefing, 385 Russell

Center for Climate Strategies

1899 L Street, NW

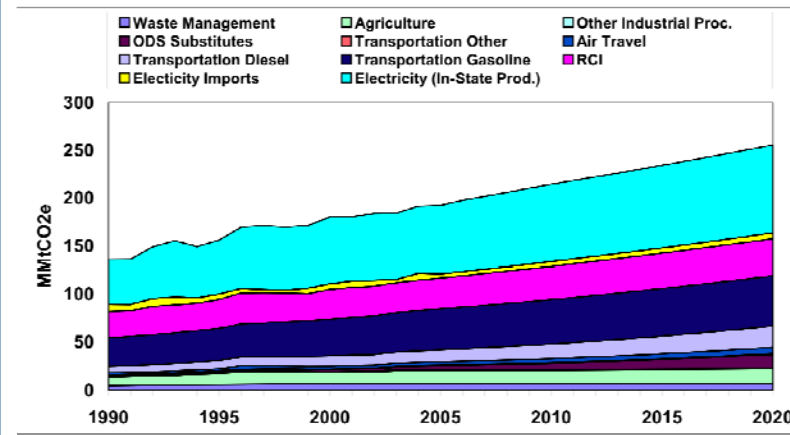
Washington, DC 20036

www.climatestrategies.us, (202) 540-9121

2

NC Emission by Sector

Figure 1-1. Gross GHG Emissions by Sector, 1990-2020: Historical and Projected (Consumption-based Approach) Business as Usual/Base Case



©CCS, Inc. 2009

www.climatestrategies.us

Background in NC at Time of CAPAG 3

- Legislative Commission on Climate Change began deliberations simultaneous with CAPAG
 - Goal of determining whether NC needed to reduce GHG impacts, and if so, how much
- NC RPS in final stages of consideration by General Assembly
 - Passed August 2007
 - Minimum of 7.5% renewables requirement by 2021

Obstacles 4

- Barriers to process created slow start
 - Lack of understanding other sectors
 - Entrenched perceptions
 - Skepticism regarding the process
 - So many options to consider
 - The time required to tackle the issues
- Eventually, determination of stakeholders and guidance from CCS plus additional help from experts resulted in an amazing level of consensus

5

Planning Process and Approach

- Collaborative among stakeholders, fact-based, and stepwise both in full CAPAG and in Technical Work Groups (TWGs) with CCS facilitation
- Agriculture, Forestry, and Waste (AFW) TWG deliberations
 - Generally considered use of price signals
 - Started with full suite of options
 - Narrowed to those with the biggest carbon return for the dollar
 - Some emphasis given to favoring options already being done successfully at some level (esp. state)

©CCS, Inc. 2009

www.climatestrategies.us

6

Turning Points

- Ag, Forestry, and Waste Technical Work Group
 - A point was reached where we knew it was time to put down the swords and help each other (esp. ag & forestry)
- Overall CAPAG
 - Point was reached when frustration (albeit mild) turned to enthusiasm
 - That point seemed to be when we had gotten far enough to see that real solutions to climate change are possible with reasonable options
 - A real sense emerged that broad-based sector solutions can contribute solutions to shared problem

©CCS, Inc. 2009

www.climatestrategies.us

NC AFW Policy Options

Option No.	Mitigation Option Name	GHG Reductions (MMtCO ₂ e)			Net Present Value 2007-2020 (Million \$)	Cost-Effectiveness (\$/tCO ₂ e)
		2010	2020	Total 2007-2020		
AFW-1	Manure Digesters & Energy Utilization	0.2	0.9	6.4	199	31
AFW-2	Biodiesel Production (Incentives for Feedstocks and Production Plants)	0.2	0.8	5.1	286	56
AFW-3	Soil Carbon Management (Including Organic Production Methods Incentives)	0.2	0.2	3.0	-16	-5
AFW-4a	Preservation of Working Land—Agricultural Land	0.2	0.3	2.6	290	114
AFW-4b	Preservation of Working Land—Forest Land (formerly AFW-7)	1.7	4.3	36	112	3
AFW-5	Agricultural Biomass Feedstocks for Electricity or Steam Production	0.009	0.02	0.2	10	54
AFW-6	Policies to Promote Ethanol Production	0.9	6.9	38	200	5
AFW-7	<i>Moved to AFW 4a</i>					
AFW-8	Afforestation and/or Restoration of Non-forested Lands	0.2	2.4	15	128	9
AFW-9&10	Expanded Use of Forest Biomass and Better Forest Management	1.5	5.9	48	-639	-13
AFW-11	Landfill Methane and Biogas Energy Programs	1.1	2.9	20	23	1
AFW-12	Increased Recycling Infrastructure and Collection	0.2	0.5	4.1	52	13
AFW-13	Urban Forestry Measures	1.4	4.3	34	-376	-11
SECTOR TOTAL AFTER ADJUSTING FOR OVERLAPS		7.8	26	212	270	1
REDUCTIONS FROM RECENT ACTIONS (none)		0	0	0	0	0
SECTOR TOTAL PLUS RECENT ACTIONS		7.8	26	212	270	1

©CCS, Inc. 2009 www.climatestrategies.us

- ## Lessons Learned
- Significant GHG reductions are possible through measures that often provide many other public benefits
 - The federal government can learn much from these state-based efforts in designing policies that will be accepted and successful. We can help!
 - Many options can return a net economic benefit over the long run (e.g. agriculture and forestry)
 - Goods and service produced or required
 - Jobs created
- ©CCS, Inc. 2009 www.climatestrategies.us

But, Success Will Require Federal Help!

9

- First, the obvious - Most states cannot fully implement potential policies without federal funds
- Design policies that allow states to customize implementation based on local conditions
- (On a note of personal interest) With respect to biomass, we need a national definition that both provides abundant feedstocks from abundantly available resources sustainably while providing some environmental

©CCS, Inc. 2009

www.climatestrategies.us

Federal Needs Continued

10

- Encourage Cap and Trade based sequestration projects to allow:
 - Smaller landowners to affordably implement projects for credit (keep it simple)
 - Credit to be given for managed timber stands vs. grow and leave

©CCS, Inc. 2009

www.climatestrategies.us