



Governor's Action Team on Energy and Climate Change
State of Florida

Governor's Action Team on Energy and
Climate Change
Phase II Process

*Energy Supply and Demand
Technical Work Group (TWG)
Meeting #14
July 29, 2008*

Welcome and Introductions

- Action Team TWG Members
- Florida Department of Environmental Protection
- Members of the Public
- Center for Climate Strategies

Agenda

1. Introductions
2. Meeting Purpose and Goals
3. Approval of Prior Call Summaries
4. Review and Approval of Tier Assignments & Option Updates
5. Discussion & Decisions on Policy Option Quantification
6. Review of Next Steps
7. Agenda, Date, and Time for Next Meetings
8. Public Comments
9. Announcements

Approval of Call Summaries

- Review and approval of draft meeting summary for ESD TWG Call #11 & Call #13

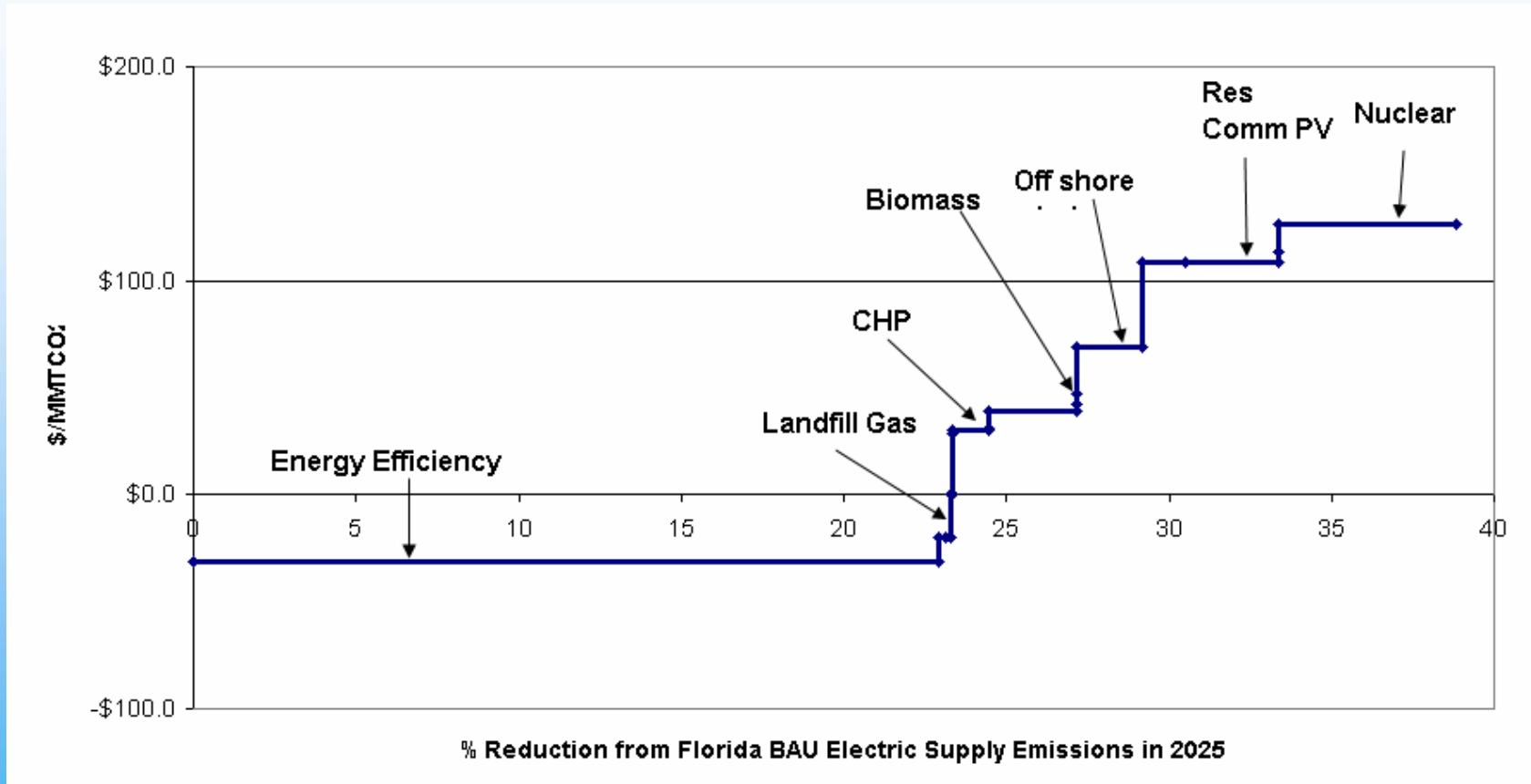
Summary List of Pending Priority Policy Options for Analysis – Tier 1

Policy No.	Policy Option	GHG Reductions (MMtCO ₂ e)			Net Present Value 2009–2025 (Million \$)	Cost- Effective- ness (\$/tCO ₂ e)	Status of Option
		2015	2025	Total 2009- 2025			
Tier 1							
ESD-3	Renewable Energy Incentives and Barrier Removal						Pending
ESD-5	Renewable Portfolio Standard (RPS)						Pending
ESD-6	Nuclear Power						Pending
ESD-8	Combined Heat and Power (CHP) Systems						Pending
ESD-11	Waste-To-Energy (WTE)						Pending
ESD-12	Demand-Side Management (DSM)/Energy Efficiency Programs, Funds, or Goals for Electricity						Pending
ESD-13	Energy Efficiency for Existing Residential (new title)						Pending
ESD-14	Improved Building Codes for Energy Efficiency (new title)						Pending
ESD-15	Training and Education for Building Operators and Community Association Managers	<i>Not to be quantified</i>					Pending
ESD-17	Consumer Education Programs	<i>Not to be quantified</i>					Pending
ESD-23	Decoupling	<i>Not to be quantified</i>					Pending

Summary List of Pending Priority Policy Options for Analysis – Tier 2

Policy No.	Policy Option	GHG Reductions (MMtCO ₂ e)			Net Present Value 2009–2025 (Million \$)	Cost- Effective- ness (\$/tCO ₂ e)	Status of Option
		2015	2025	Total 2009- 2025			
Tier 2							
ESD-1	Technology Research and Development (R&D) with Commercial Opportunities						Pending
ESD-4	Electricity Transmission and Distribution Improvements						Pending
ESD-7	Integrated Resource Planning (IRP)	<i>Not to be quantified</i>					Pending
ESD-9	Power Plant Efficiency Improvements						Pending
ESD-16	More Stringent Appliance/Equipment Efficiency Standards						Pending
ESD-18	Incentives to Promote Implementation of Customer-Sited Renewable Energy Systems						Pending
ESD-21	Rate Structures and Technologies to Promote Reduced Greenhouse Gas (GHG) Emissions						Pending
ESD-22	Demand-Side Management/Energy Efficiency Programs, Funds, or Goals for Natural Gas						Pending

Notional Cost Curves



Key Assumptions

Avoided cost estimate: \$58/MWH – placeholder value, needs review

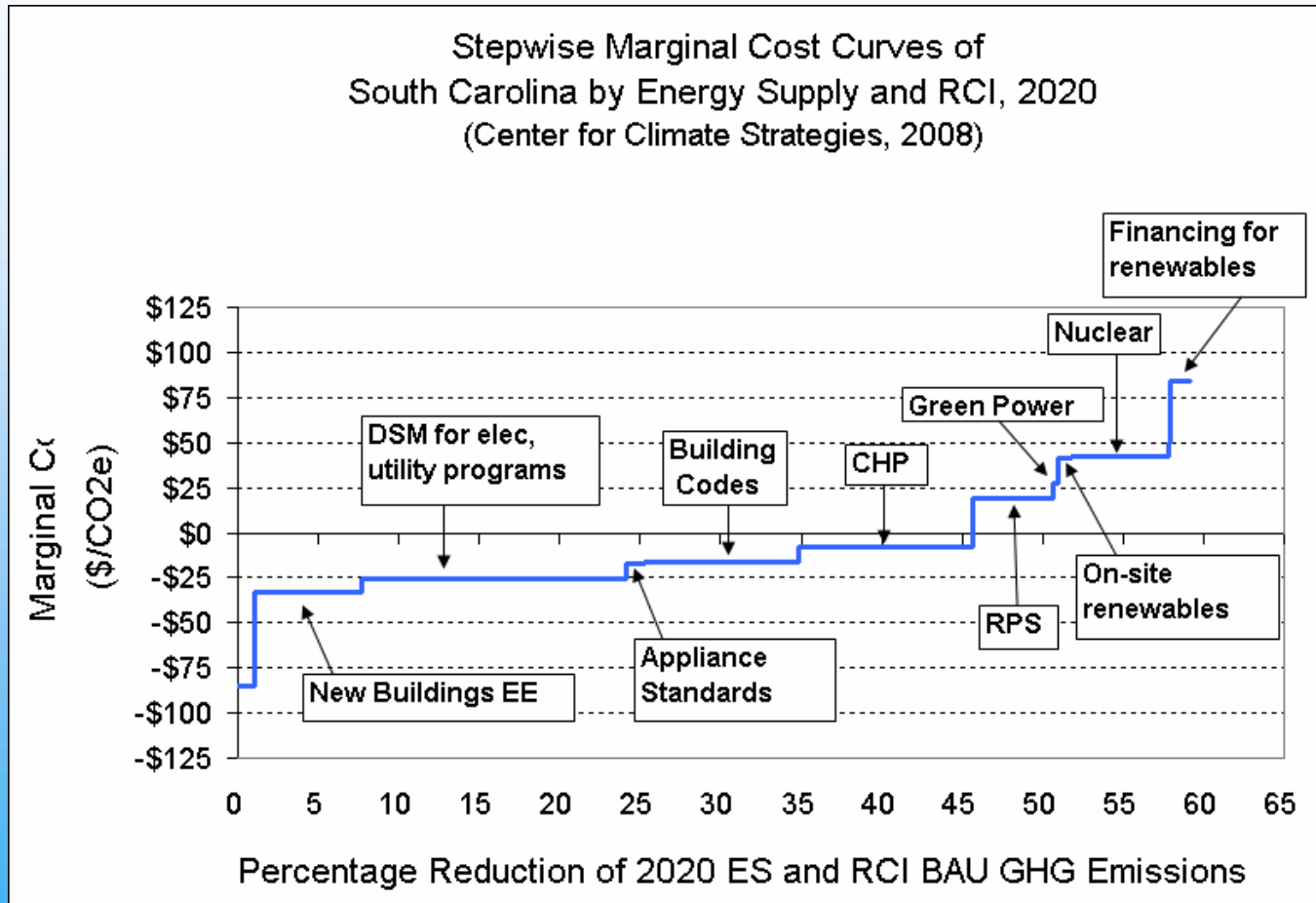
Avoided emissions from reduced electricity demand: 0.73 tons/MWh

Sources for Notional Cost Curve

Sources

- Energy efficiency: ACEEE 2007. *Potential for Energy Efficiency and Renewable Energy to meet Florida's Growing Energy Demands*
- Landfill Gas: EPA Landfill Methane Outreach Program + NC estimate of costs
- CHP: ACEEE 2007. *Potential for Energy Efficiency and Renewable Energy to meet Florida's Growing Energy Demands*
- Biomass: Biomass potential from M Welsch. *Biomass Feedstock Availability in the United States: 1999 State Level Analysis*.
<http://bioenergy.ornl.gov/resourcedata/index.html>
- Nuclear: From South Carolina estimates based on Moody's Investors Service. *New Nuclear Generation in the United States: Keeping Options Open vs. Addressing An Inevitable Necessity*, Moody's Corporate Finance, October 2007.
- Off-Shore Wind: from South Carolina estimates based on GDS Associates, Inc. and La Capra Associates, Inc 2007. *Analysis of Renewable Energy Potential in South Carolina*, prepared for Central Electric Power Cooperative Inc.
- Residential Commercial PV: ACEEE 2007. *Potential for Energy Efficiency and Renewable Energy to meet Florida's Growing Energy Demands*

SC Marginal Cost Curves



Stepwise Planning Process

1. Get organized
2. Review and refine inventory & forecast of emissions
3. Identify a full range of possible actions
4. Identify initial priorities for analysis
5. Develop straw policy design proposals
6. *Quantify initial GHG reductions and costs/savings*
7. Fully develop policy option templates, including externalities, feasibility issues
8. Develop alternatives to address barriers as needed
9. Aggregate and integrate results
10. Finalize and report recommendations

Development of Policy Options

- Design Template / Matrix
 - Policy description
 - Policy design (goals, timing, parties involved)
 - Potential implementation mechanisms
 - Related policies/programs in place
 - Type(s) of GHG reductions
 - Estimated GHG reductions and costs or cost savings
 - Key uncertainties
 - Types of additional (non-GHG) benefits and or costs
 - Feasibility issues, if needed

TWG Goals for Action Team Meeting #5

- Review and Approval of ESD Policy Options
- Ensure ESD TWG input to ESD I&F
- Evaluate quantification of ESD options

Timing – Action Team Meetings

Date	Location	Action
February 1, 2008	Tallahassee	1 st Action Team meeting
March 17, 2008	Tallahassee	2 nd Action Team meeting
May 29-30, 2008	Tallahassee	3 rd Action Team meeting
July 9-10, 2008	Tallahassee	4 th Action Team meeting
August 6-7, 2008	Orlando	5 th Action Team meeting
August 22, 2008	St. Petersburg	6 th Action Team meeting
September 17-18, 2008	Tallahassee	7 th Action Team Meeting
September 26, 2008	Tallahassee	8 th Action Team Meeting
October 1, 2008		Phase II Final Report due
Between Action Team Meetings		TWG conference calls and meetings

Next TWG Meeting

- Agenda:
 - Complete Policy Options (including types of GHG and GHG reduction estimates and cost/savings)
 - Continue review, revisions to ESD I&F
 - Evaluate quantification of options
- Next ESD TWG Meeting:
 - August 13 (Wed) from 1:30-3:30 p.m. EDT



Complete TWG Schedule

Call #15: August 13 (Wed) from 1:30-3:30 p.m.

Call #16: September 2 (Tues) 1:30-3:30 p.m.

Call #17: September 9 (Tues) 1:30-3:30 p.m.

Public Input, Announcements