



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

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

*Energy Supply & Demand (ESD)
Technical Working Group (TWG)
Meeting #1
February 27, 2008*

Welcome and Introductions

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

Agenda

- Purpose and Goals
- Review of Florida Sunshine Laws
- Review of the Action Team and Technical Work Group (TWG) process
- Development of Florida Emissions Inventory & Forecast
- Development of the FL Catalog of States' Actions
- Review of Next Steps
- Agenda, Date and Time for Next Meetings
- Public Comments
- Announcements

Florida Open Government and Sunshine Law Briefing

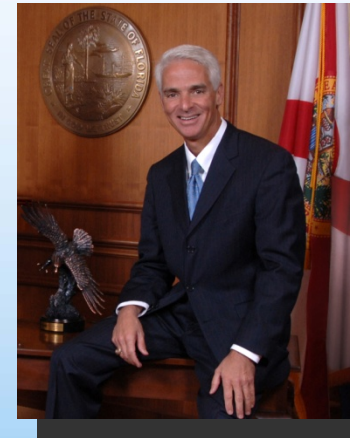
- All meetings open to the public
- Discussions between TWG members
- Documents
 - Emails
 - Meeting notes
 - Committee work product
- Other

Purpose and Goals

- To develop a comprehensive Energy and Climate Change Action Plan that will fully achieve or surpass Executive Order targets for statewide greenhouse gas reductions specified in Executive Order 07-127, including:
 - guidance on the design of a market-based emissions allowance trading program,
 - design of programs to further enable energy conservation
 - closer examination of emissions reduction opportunities offered by new technologies
 - an examination of revenue impacts of emissions reduction policies within the transportation sector
 - consideration of a low-carbon fuel standard
 - further consideration of the organization of Florida's state government to foster the development of a low-carbon energy market in Florida, and
 - other emissions reductions actions

Florida Executive Orders

- EO 07-126 Establishes immediate actions to reduce GHG emissions from Florida State Government
- EO 07-127 Establishes immediate actions to reduce greenhouse gas emissions and emissions reduction targets and timelines
- EO 07-128 Establishes the Florida Governor's Action Team on Energy and Climate Change charged with addressing Florida's climate challenge on all fronts
- Phase I Report by November 1, 2007
- Phase II Report by October 1, 2008



Florida Climate Change Initiatives

- Executive Order 07-127
- Sets Emission reduction targets
 - By 2017 – Meet 2000 Levels
 - By 2025 – Meet 1990 Levels
 - By 2050 – 80% Below 1990 levels

Action Team Phase I Recommendations Pursuant to EO 07-128

- Mandatory reporting through The Climate Registry
- Cap-and-Trade market-based GHG reduction program
- Explore potential for sale of FL offset credits to RGGI
- Early emission reduction incentives
- PSC incentives for renewable energy installations
- Additional building efficiency measures
- Additional appliance efficiency measures
- Partnerships promoting CCSR

Action Team Phase I Recommendations Pursuant to EO 07-128 (cont'd)

- Integrated land use planning to promote GHG reductions
- Low carbon vehicles
- Research and development for renewable fuels
- Investigate regional low carbon fuel standard
- State to use energy performance savings contracts
- Alternative fuels technology development
- Public-private cooperation for low-carbon energy market
- Facilitated stakeholder process for Phase II

Roles & Responsibilities

- Process convened by Governor Crist
- Governor's Office and FL DEP oversee and coordinate process
- Action Team makes recommendations to the Governor
- Technical Work Groups (TWGs) provide guidance to Action Team
- DEP ensures timely and full completion of Action Team duties, etc.
- Public input and review for stakeholders
- CCS provides facilitation, technical support, final report

Technical Work Group Roles

- Assist Climate Action Team
 - Identify full range of potential state actions
 - Identify suggested priorities for analysis
 - Suggest straw policy designs
 - Assist with analysis, development and review of options
 - Assist with development of policy alternatives
 - Assist with input to and review of Action Team reports
 - Review and assist with the state GHG inventory and forecast

Technical Work Groups

- Energy Supply and Demand
 - Heat and power generation; locus for cap-and-trade or carbon tax policy
 - Energy efficiency & conservation, industrial process, waste management
- Cap-and-Trade
- Transportation and Land Use
 - Vehicle efficiency, alternative fuels & demand reduction programs
- Agriculture, Forestry, and Waste
 - Land protection, forest restoration, sustainable forest management, bioenergy, sustainable wood products, waste reduction, recycling
- Government Policy Coordination
 - Greening Florida's economy, energy/climate policy coordination, lead by example, reporting and registries
- Adaptation

Ground Rules

- Supportive of the process
- Best effort, good faith
- Attendance at meetings
- Equal footing
- Stay current with information
- No backsliding
- Do not represent the Action Team or TWG
- Make objective and timely contributions

Timing – Action Team Meetings

Date	Action
February 1, 2008	1 st Action Team meeting
March 17, 2008	2 nd Action Team meeting
May 29, 2008	3 rd Action Team meeting
July 9, 2008	4 th Action Team meeting
August 6, 2008	5 th Action Team meeting
September 5, 2008	6 th Action Team meeting
October 1, 2008	Phase II Final Report due
...between Action Team meetings...	TWG conference calls and meetings

Timing – TWG Meetings

TWG (all times Eastern)	Energy Supply and Demand	Agriculture, Forestry, and Waste	Transportation and Land Use	Cap-and-Trade	Government Policy	Adaptation
Call#1	FEB 27, Wed 1:30pm-3:30pm	FEB 21, Thurs 1:00pm-3:00pm	FEB 27, Wed 1:00pm-3:00pm	FEB 29, Friday, 2:00pm-4:00pm	FEB 28, Thurs, 9:00am-11:00am	FEB 29, Friday 10:00am-12:00pm
Call#2	MAR 5, Wed 1:30pm-3:30pm	MAR 5, Wed 1:00pm-3:00pm	MAR 5, Wed 1:00pm-3:00pm	MAR 7, Friday, 2:00pm-4:00pm	MAR 6, Thurs, 9:00am-11:00am	MAR 6, Thurs, 10:00am-12:00pm
Call#3	APR 2, Wed 1:30pm-3:30pm	MAR 26, Wed 1:00pm-3:00pm	APR 3, Thurs 1:00pm-3:00pm	MAR 28, Friday, 2:00pm-4:00pm	MAR 27, Thurs, 9:00am-11:00am	TBD
Call#4	APR 23, Wed 1:30pm-3:30pm	APR 30, Wed 1:00pm-3:00pm	APR 23, Wed, 1:00pm-3:00pm	APR 25, Friday, 2:00pm-4:00pm	MAY 1, Thurs, 9:00am-11:00am	TBD

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

Building Consensus

- Deliberative democracy applied to governance
 - Comprehensive
 - Stepwise
 - Fact based
 - Transparent
 - Inclusive
 - Collaborative
 - Consensus driven



Transparency



- Policy Design
 - Timing, goals, coverage, implementation methods
- Economic analysis
 - Data sources
 - Quantification methods
 - Key assumptions
 - Key uncertainties

Coverage Of Issues



- All GHG's
- All sectors
- All potential implementation mechanisms
- State and multi-state actions
- Short and long term actions
- Key externalities

Decision Criteria

- Mitigation:
 - GHG Reduction Potential (MMtCO₂e)
 - Cost or Cost Saved Per Ton GHG Removed
 - Externalities (Co-benefits, etc.)
 - Feasibility Issues
- Adaptation:
 - Risk reduction potential
 - Cost or Cost Saved per risk reduced
 - Externalities (Co-benefits, etc.)
 - Feasibility Issues


Basis of Decisions

- TWGs and Action Team will be challenged to refine proposals to achieve unanimous consent
- Action Team recommendations fall into 3 classes:
 - Unanimous consent (no objections)
 - Super majority (five or fewer object)
 - Simple majority (more than five but fewer than half object)
- The exact number of objections will be reported and all “barriers to consensus” summarized and reported

Catalog of States Actions

- Over 300 actions taken by US states
 - Existing, planned and proposed state level actions
 - Wide variety of US states
 - All sectors
 - Wide variety of implementation mechanisms
 - Will include key FL actions
- Action Team will add new potential actions
 - Starting place for identification of Action Team priorities for analysis

A “Portfolio” of Policy Options...

	Codes & Standards	Market Mechanisms	Funding Mechanisms	Voluntary Agreements	Technical & Financial Assistance	Information & Education	Pilots & Demo Projects	Reporting & Disclosure
Agriculture, Forestry, & Waste								
Energy Supply & Demand								
Cap-and-Trade								
Transportation & Land Use								
Adaptation								
Government Policy								

Screening of Potential Actions (Agriculture Example)

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Other Considerations: Jobs, Fuel Imports, Externalities, Feasibility	Priority for Analysis	Notes / Related Actions in FL
AFW-1	AGRICULTURE – PRODUCTION OF ENERGY AND MATERIALS					
1.1	Expanded Use of Biomass Feedstocks for Electricity, Heat, or Steam Production					
1.2	In-state Liquid Biofuels Production					
1.3	Manure Digesters/Other Waste Energy Utilization					
1.4	Improving Energy Capture from Biomass Heat					
1.5	Expand Use of Bio-based Materials					

- Action Team identifies about 50 initial potential options for further analysis and development.

Policy Design Proposals

- TWGs start with Catalog, screen options and recommend priorities for FL
- Action Team identifies about 50 draft potential priority options for further development, including Phase I recommendations needing further development and analysis
- TWGs propose initial policy option design (“straw proposals”) including
 - Timing
 - Goals
 - Coverage
- CCS works with TWGs to set up quantification
- Options are quantified and fleshed out for review and revision by the Action Team
- Action Team revisits list of potential priorities, as needed

Policy Option Template

- Policy Description (Concept)
- Policy Design (Goals, Timing, Coverage)
- Potential Implementation Methods
- Related Programs and Policies (BAU)
- Quantification of costs, results
 - Data Sources, Methods and Assumptions
 - Key Uncertainties
- Externalities, as Needed
- Feasibility Issues, as Needed
- Status of Group Approval
- Level of Group Support
- Barriers to Consensus, if any

Final Report

- Executive Summary
- Background, Purpose, And Goals
- FL Emissions Inventory & Forecast
- Action Team Recommendations & Results
 - Agriculture, Forestry, and Waste Management
 - Energy Supply & Demand
 - Cap-and-Trade
 - Transportation & Land Use
 - Government Policy
 - Adaptation
- Appendixes



Inventory and Forecast; Preliminary Results of Recent Actions

Inventory Approach

- Standard US EPA and UN methodologies, guidelines and tools
- Emphasis on transparency, consistency and significance
- Preference for FL or regional data, where available
- Consumption and production-based emissions from electricity generation
 - Very simplified approach for initial analysis

Projection Approach

- Reference case assumes no major changes from business-as-usual (BAU)
 - Includes approved policies and actions (e.g., Phase I recommendations, Executive Orders)
- Growth assumptions from existing sources
 - State population and employment forecasts
 - US Census and Bureau of Labor Statistics
 - US Energy Information Administration

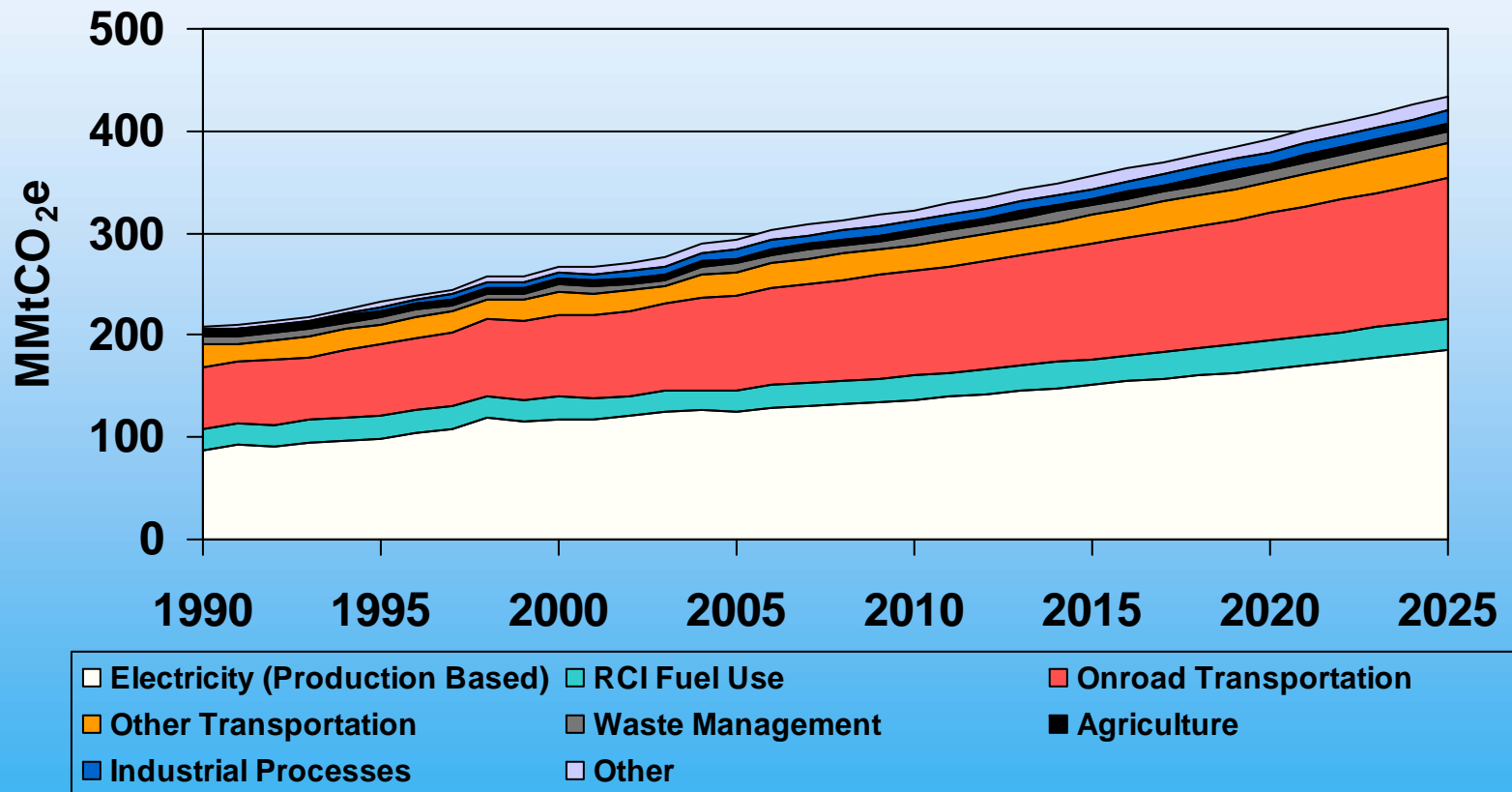
Coverage

- Six gases per US EPA and UNFCCC guidelines
 - Carbon Dioxide (CO₂), Methane (CH₄), Nitrous Oxide (N₂O), Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulfur Hexafluoride (SF₆)
- All major emitting sectors
 - Electricity supply and demand
 - Residential, commercial and industrial fuel use and non-fuel use processes
 - Transportation
 - Natural gas pipeline transmission & distribution
 - Agriculture, Forestry and Waste
- Emissions expressed as CO₂ equivalent
 - 100-year global warming potentials
 - CO₂=1; CH₄=21; N₂O=310; HFC-23=11,700; SF₆=23,900

Key Points

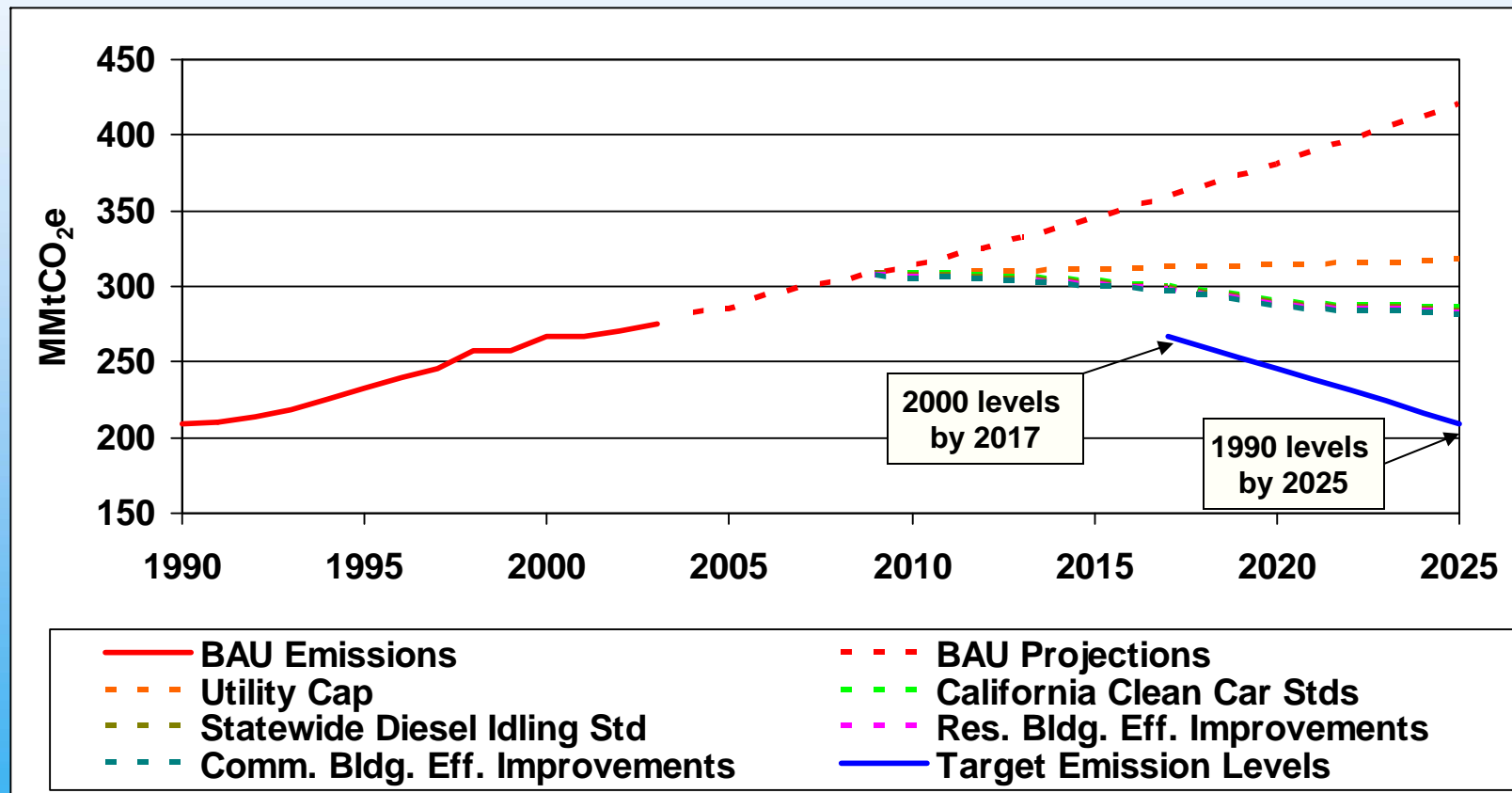
- Preliminary draft for Action Team and TWG review and revision, as needed
- Helpful for diagnosis of GHG emissions, but not as a baseline for modeling or compliance
- Consumption and production methods
- Gross and net methods

Florida Gross GHG Emissions by Sector (Preliminary)



Recent Florida Actions

– Preliminary GHG Reductions



Inventory Improvements

- Business-as-Usual (BAU) Inventory Improvements
- BAU Reference Case Forecast Improvements
- Recent Actions Quantification Improvements

Catalog of State's Actions

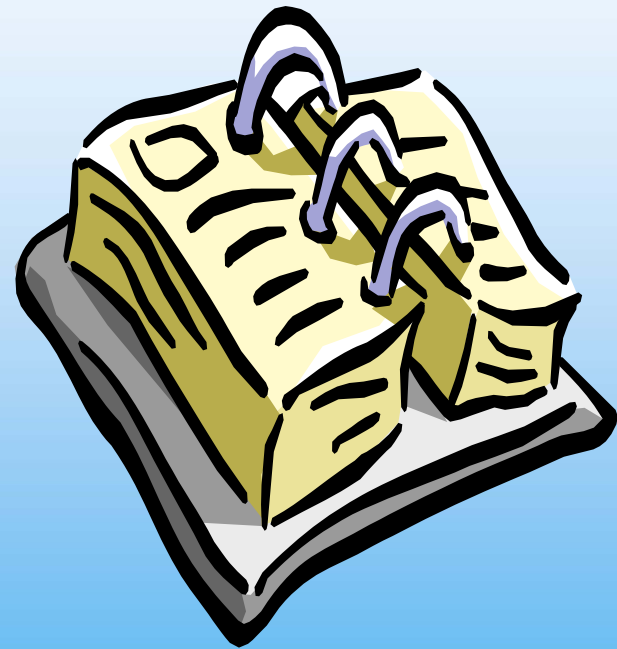
- Please refer to separate catalog documents
 - Catalog (table)
 - Short descriptions of policy options
- Excerpted from larger all-sector catalog

Next Steps

- Review and expand catalogs of potential state actions
- Review and comment on inventory and forecast
- Review and comment on analysis of existing actions

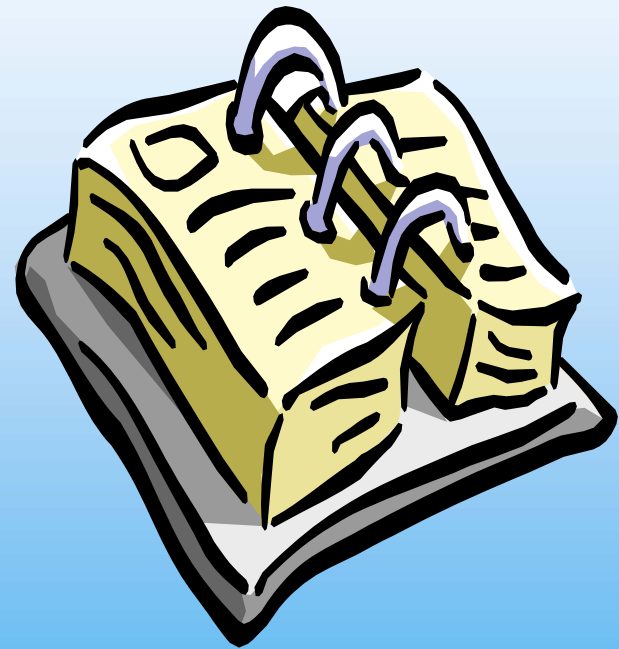
Next Action Team Meeting

- Agenda:
 - Review and approve potential additions to the catalog of state actions
 - Review and approve TWG suggested updates to the FL emissions inventory and projection
 - Review progress on cap-and-trade design issues
- March 17, 2008, Tallahassee



Next TWG Meeting

- Agenda:
 - Review catalog of state actions and propose potential additions
 - Suggest updates and improvements to the FL emissions inventory and projection
- Next call:
Wednesday, March 5th
1:30 to 3:30 pm EST



Public Input, Announcements