

History and Status of State Actions

In recent years, the State of Florida has undertaken a number of actions to address the issues of energy and climate change. For example, in 2006, Florida developed its first comprehensive energy plan. The 2006 energy plan was prompted by a series of events, including very active 2004 and 2005 hurricane seasons that heightened concern over energy reliability, energy security, and energy supply. More recently, the growing body of evidence in support of the threat posed by greenhouse gas (GHG) emissions and climate change led Florida Governor Charlie Crist to intensify the state's efforts to address these complex and inter-related challenges. The following provides a brief overview of these and other efforts to date.

2007 Energy and Climate Change Initiatives

On July 12 and 13, 2007, Governor Charlie Crist hosted "Serve to Preserve: A Florida Summit on Global Climate Change." The first-ever summit of its kind in Florida brought together leaders of business, government, science, environmental stakeholders and advocacy groups to examine the risks to Florida and the nation posed by global climate change. At the conclusion of the summit in Miami, Governor Crist signed three Executive Orders that propelled Florida to the forefront of states actively working to address climate change.

Executive Order 07-126 directed state government to "lead by example" by quantifying operational emissions and meeting specific reduction targets by implementing a range of GHG emission reduction efforts that impact state government facilities and vehicle fleets, and by using the purchasing power of state government to promote energy efficiency and reduced emissions.

Executive Order 07-127 established the following reduction targets for GHG emissions in Florida:

- By 2017 – reduce GHG emissions to 2000 levels,
- By 2025 – reduce GHG emissions to 1990 levels, and
- By 2050 – reduce GHG emissions to 80% of 1990 levels.

As first steps toward meeting these targets, the Executive Order directed the Florida Department of Environmental Protection (DEP) to set maximum allowable GHG emissions levels for electric utilities, adopt the California motor vehicle emission standards upon the U.S. Environmental Protection Agency's approval of the pending waiver, and adopt a statewide diesel engine-idling reduction standard.

The Executive Order further directed that modifications to the 2007 Florida Energy Code for Building Construction include a 15% increase in energy efficiency performance as well as a 15% increase in the energy efficiency of certain appliances sold in Florida by 2009. Finally, it requested that the Florida Public Service Commission (PSC) adopt a 20% Renewable Portfolio

Standard with a strong focus on solar and wind energy, adopt the Institute of Electrical and Electronics Engineers Standard 1547 for Interconnecting Distributed Resources with Electric Power Systems, and require net metering for on-site renewable technologies of up to one megawatt (MW) in capacity.

Executive Order 07-128 established the Governor’s Action Team on Energy and Climate Change and tasked it with creating a comprehensive Florida Energy and Climate Change Action Plan to achieve or surpass the statewide targets for GHG reduction specified in Executive Order 07-127. Executive Order 07-128 provided the Action Team with a two-phase process for submitting recommendations. The Action Team was directed to submit its Phase 1 Report to the Governor by November 1, 2007, and its Phase II report in October 2008.

On August 13, 2007, Governor Crist appointed the first 21 members to the Action Team and selected DEP Secretary Michael Sole as Chairman and Mayor Rick Baker of the City of St. Petersburg as Vice Chairman. Membership included a diverse cross-section of stakeholders, including representatives of business, utilities, academia, and environmental organizations. To meet the first deadline set by Executive Order 07-128, the Action Team conducted more than 36 hours of hearings. The Action Team listened to presentations from international, national, and Florida-based experts, dozens of members of the public, and other interested parties.

Phase 1 Report—Florida’s Energy and Climate Change Action Plan: On November 1, 2007, the Governor’s Action Team on Energy and Climate Change issued its first report. The report’s 35 findings and 30 recommendations addressed the requirements outlined in Executive Order 07-128, and were organized into the following key categories:

1. The power generation sector,
2. The transportation sector,
3. The government sector,
4. Organizing state government for Florida’s energy future, and
5. A blueprint for development of actions.

The report recommended policies to:

- increase energy efficiency and conservation;
- examine the potential for capture, sequestration, and storage of carbon;
- expand the production of renewable energy; and
- further examine the role of nuclear energy in Florida.

The Action Team deferred until the Phase 2 Report a recommendation on the precise mechanism for regulating carbon emissions in the state but did recommend pursuing the design of a market-based policy of cap-and-trade for tradable emissions credits, establishing linkages with ongoing emissions trading markets, and reporting emissions to The Climate Registry by the state's electric utilities. The Action Team also recommended that DEP examine and propose additional industry sectors for inclusion in mandatory emissions reporting.

The Action Team acknowledged the importance of transportation in reducing overall GHG emissions. The report contained a series of transportation-related recommendations, including the incorporation of emission reduction strategies into local, state, and regional growth and transportation planning; incentives for reducing vehicle miles traveled; and promotion of efficient public transit systems and low-carbon vehicles. The Action Team also recommended continued provision of existing incentives for research and development of new fuels as well as promoting life cycle analyses for fuels in order to comprehend their full impact on the state's resources and environment.

Building on the requirements of Executive Order 07-126, the Action Team identified additional energy and emissions savings opportunities in state government operations and facilities. The report included recommendations to extend, by statute, the Executive Branch actions contained in the Governor's Executive Order to all other state government operations. The Action Team also recommended removing any barriers to the use of energy performance savings contracts for state government facilities and providing incentives to assist local governments in achieving green building or similar standards.

The Action Team examined the state's roles in policy, energy regulation, program implementation, and research and market development and recommended that the state foster greater public-private cooperation with universities and other research centers to develop a low-carbon and alternative energy/technology market in Florida.

Finally, the Action Team recommended the use of a facilitated stakeholder process to develop the detailed emission reduction strategies that would provide the blueprint for development of actions contained in the final Energy and Climate Action Plan. The Action Team recognized that the stakeholder process must be guided by rigorous analysis of the costs and benefits of various policy options.

2008 Energy and Climate Change Initiatives

At the outset of 2008, the State of Florida had a number of energy- and climate change-related initiatives under way. The Governor's Action Team resumed deliberations and intensified its examination of policy options to include in the Phase 2 Report. The Florida Energy Commission (created by the 2006 Legislature) submitted its final report about this same time, which contained a wide range of recommendations relating to energy affordability, security, efficiency, reliability, and climate change. The Florida Senate and House of Representatives

embarked on their own respective inquiries into energy and climate change issues, holding committee workshops with experts chosen by the committees.

Phase 2 Report—Florida’s Energy and Climate Change Action Plan: Pursuant to Executive Order 07-128, the Action Team reconvened in February 2008 to begin Phase 2 of the Florida Energy and Climate Action Plan process. Governor Crist expanded the membership of the Action Team from 21 to 27 voting members. Additionally, the Center for Climate Strategies (CCS) was asked to help facilitate and provide technical support for this phase of the Action Team process. CCS worked with DEP in the development of a stakeholder-based consensus-building process.

As part of this effort, the Action Team designated six Technical Work Groups to focus on specific issues and sectors of the economy and tasked them with responsibility for providing technical analysis and designing policy options for consideration by the full Action Team. The Technical Work Groups consisted of Action Team members (as the minority) as well as other individuals with interest and expertise in issues being addressed (as the majority). The six Technical Work Groups were:

- Adaptation;
- Agriculture, Forestry, and Waste Management;
- Cap-and-trade;
- Energy Supply and Demand;
- Government Policy; and
- Transportation and Land Use.

The Action Team and Technical Work Groups worked diligently to meet the October 2008 deadline for completion of the Phase 2 Report. The 27 Action Team members met a total of eight times, representing more than 60 hours of deliberation. The 122 members of the six Technical Work Groups met 71 times, representing more than 155 hours of combined meeting time. Their respective recommendations are the substance of this report and are discussed at length in subsequent Chapters and Appendixes.

*2008 Energy Legislation—*During the 2008 Session, the Legislature enacted several bills that significantly impacted energy and climate change issues. The most notable legislation was House Bill 7135 (“The Energy, Climate Change, and Economic Security Act of 2008”). This comprehensive energy bill codified many of the provisions contained in Governor Crist’s 2007 Executive Orders. By drawing on the efforts of the Governor’s Action Team on Energy and Climate Change, the Florida Energy Commission, and the extensive deliberations of the Senate and House of Representatives, the bill:

- Created the Florida Energy and Climate Commission within the Executive Office of the Governor to centralize energy and climate change policy development and program implementation;

- Authorized the DEP to develop cap-and-trade regulations for GHG emissions for sources in Florida, subject to legislative ratification in the 2010 Regular Session;
- Expanded key economic development programs to attract specific investments in the renewable energy sector to Florida;
- Adopted a “10 by 10” Renewable Fuel Standard requiring that all gasoline sold for motor vehicles in Florida contain 10% ethanol by 2010;
- Required the PSC to develop rules for a renewable portfolio standard subject to legislative ratification in the 2009 regular session and provided cost recovery guidance to the PSC for renewable energy projects developed in advance of the final rule;
- Required major emitters to report GHG emissions via The Climate Registry;
- Required the reduction of energy consumption and associated GHG emissions from local and state government operations by requiring that public buildings be constructed to meet recognized green building standards; by considering energy and climate performance in vehicle, commodity, and meeting space procurement; by promoting active energy management among state agencies; and by increasing energy and water efficiencies from government facilities by streamlining existing statutes governing guaranteed performance savings contracts;
- Increased the role of energy efficiency in Florida’s energy policy through revisions to the Florida Energy Efficiency and Conservation Act, provided goals for the Florida Building Commission to increase efficiency standards by 10% in each triennial review and achieve a 50% increase by 2019, and increased efficiency requirements for certain appliances;
- Created the Florida Energy Systems Consortium as a “center of excellence” within the State University System to better coordinate energy-related research in support of Florida’s energy and climate change policy objectives; and
- Balanced the need for expanded electric transmission infrastructure within Florida with the need for conservation land protection and informed public participation in the siting process by providing the terms and conditions for use of state lands, clarifying timelines in the transmission line siting process, and increasing public participation through new mail notice requirements and provisions for additional hearings for local residents.

Current Status of Energy and Climate Change Initiatives

While many of the recently enacted policies and programs still might be considered to be in the developmental stage, Florida can point to a significant number of early achievements. Similarly, a number of private sector entities have elected to launch their own energy- and climate change-related initiatives. As a result, Florida is increasingly recognized as a leader in addressing the challenges and opportunities associated with energy and climate change. The following are examples of these accomplishments:

Leading by Example—Through the establishment of the Florida State Greenhouse Gas Reduction Scorecard, the state has generated the first comprehensive assessment of GHG emissions from state government-owned vehicles and facilities. The Department of Management Services has implemented Environmentally Preferred Purchasing to assist state entities in the purchase of climate-friendly products. The Department also has established programs to support energy performance contracting in state facilities, and increased fuel efficiency in the state’s motor vehicle fleet.

GHG Emission Reductions—The Florida DEP has issued its proposed rule for reducing emissions resulting from long-duration on-road diesel engine idling and is in the process of rule development for adoption of the California motor vehicle emissions standards. The DEP continues the rule development process in support of a cap-and-trade program to reduce GHG emissions from electric utilities.

Renewable Energy—The PSC has adopted new rules to promote the development and interconnection of customer-owned renewable generation and minimize costs for customers attempting to interconnect to their utility service. The rules encourage the development of renewable generation by expanding the size of eligible systems, expanding the type of eligible systems from solely photovoltaic to all renewable technologies, expediting the interconnection of customer-owned renewable generation, and allowing customers to offset consumption through net metering.

Florida Power and Light has received approval to begin construction of three solar energy centers that will make Florida the second largest supplier of utility-generated solar power in the nation. The DeSoto Next Generation Solar Energy Center will provide 25 MW of photovoltaic solar capacity, making it the world’s largest photovoltaic solar facility. The Martin Next Generation Solar Energy Center will provide up to 75 MW of solar thermal capacity in an innovative hybrid design that will connect to an existing combined-cycle power plant. It is the world’s first project to integrate solar thermal steam generation into a combined-cycle steam turbine.

Energy Efficiency—The Florida Building Commission is finalizing revisions to the Florida Building Code that will significantly enhance the energy efficiency of new buildings constructed in Florida. Almost 300 hotels and motels around the state have been designated and recognized in the DEP’s Florida Green Lodging Program, a public-private partnership that encourages the lodging industry to adopt energy efficient and sustainable practices.

Energy Policy Governance—Effective July 1, 2008, the Governor’s Energy Office was established within the Executive Office of the Governor to centralize and strengthen Florida’s energy policy development capabilities. This new office will staff and support the Florida Energy and Climate Commission, the nine-member long-term panel created by HB 7135 and appointed for terms by the Governor, Chief Financial Officer, and Commissioner of Agriculture and Consumer Services.

Energy-related Research—The recently created Florida Energy Systems Consortium has identified 13 initial tasks, or projects, that have the highest potential of generating near-term impact given the cumulative expertise and infrastructure of all 11 state universities. Areas of focus include development of an integrated bioenergy industry; solar thermal power for bulk power and distributed generation; Florida-based low-cost manufacturing of photovoltaic systems; integration of photovoltaic storage/lighting systems; energy-efficient building technologies and zero-energy homes; and efficient and reliable energy delivery infrastructure.

Conclusion

During the past two years under Governor Crist, Florida has established a solid foundation of policies and programs in response to the increasingly clear dangers associated with climate change. Through the leadership of Governor Crist and the Legislature, the state has acted not only to address the challenges but also to create an atmosphere where Floridians can benefit economically from emerging alternative energy technologies and processes. While the early indications are promising, more work will be necessary in the coming years. This report is intended to provide specific strategies that will put Florida on the path toward further significant emissions reductions to help in meeting the state's overall goals.

Acronyms and Abbreviations

CCS Center for Climate Strategies
DEP Florida Department of Environmental Protection
GHG greenhouse gas
PSC Florida Public Service Commission

Units of Measure

MW megawatt

[AU: These acronyms are being stored here for convenience---until all additions and deletions have been made and the document is final.]