

## 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, the Legislature passed Florida's first comprehensive energy plan, 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 interrelated 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 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 and two international partnership agreements 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 reduction targets for utility sector GHG emissions in Florida. Specifically, the Executive Order established the following emission reduction targets: by 2017, reduce GHG emissions to 2000 levels; by 2025, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 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 percent increase in energy efficiency performance as well as a 15 percent 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 percent 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 2 report in October 2008.

The Governor signed partnership agreements with Germany and the United Kingdom focused on climate policies and mutual economic benefits. Pursuant to these agreements, the State of Florida is exchanging delegations with Germany and with the United Kingdom to create a forum for sharing public policy experience and exchanging science and technology, placing a particular emphasis on the sharing of ideas and policies related to energy efficiency and renewable energy sources. The individual partnership agreements also will increase climate-friendly trade.

On August 13, 2007, Governor Crist appointed the first 21 members to the Action Team and appointed 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 continuing existing incentives for research and development of new fuels, as well as promoting life cycle analyses for fuels in order to comprehend the 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 Phase 1 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 in Phase 2 develop the detailed emission reduction strategies that would provide the blueprint for development of actions contained in the final Florida's Energy and Climate Change Action Plan. The Action Team recognized that the stakeholder process must be guided by rigorous analyses 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 recommendations for its Phase 2 Report. Meantime, 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 the House of Representatives also embarked on their own respective inquiries into energy and climate change issues, holding committee workshops with experts chosen by the committees.

*2008 Energy Legislation*—During the 2008 Regular 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 percent 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 percent in each triennial review and achieve a 50 percent increase by 2019, and increased efficiency requirements for certain appliances;
- Created the Florida Energy Systems Consortium 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 additional hearings for local residents.

On June 25 and 26, 2008, Governor Crist convened the second Annual "Serve to Preserve: A Global Summit on Climate Change." The Governor was joined by members of the Florida Legislature for the signing of House Bill 7135, the landmark 2008 energy legislation. The 2008 summit focused not only on the need to pursue alternative fuels for environmental reasons, but also for the economic benefits brought about by the infusion of green technologies. At the conclusion of the summit, Governor Crist signed a new public-private partnership making Florida among the first states to join the Alliance for Sustainable Air Transportation, which places a premium on energy conservation and air travel safety.

*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. Governor Crist expanded the membership of the Action Team from 21 to 27 voting members and retained a 28<sup>th</sup> ex officio member. Additionally, the Center for Climate Strategies (CCS) was asked to help facilitate and provide technical support. 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 Working 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 Working 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 Working Groups were:

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

- Government Policy and Coordination; and
- Adaptation Strategies.

The Action Team and Technical Working Groups worked diligently to meet the October 2008 deadline for completion of the Phase 2 Report. The 28 Action Team members met a total of eight times, representing more than 60 hours of deliberation. The 122 members of the six Technical Working 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 appendices.

## **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, the State of Florida can point to a significant number of early achievements. Similarly, a number of private sector entities, local governments, community-based organizations, and academic institutions have launched 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. DMS 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. The PSC is continuing its rule development process in support of the establishment of a statewide Renewable Portfolio Standard.

A number of Florida utilities have taken the initiative to expand renewable energy production. For example, one Florida-based utility 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. Similarly, several utilities are aggressively pursuing additional biomass and co-firing opportunities. A number of Florida's municipal and cooperative utilities have launched their own solar and biomass generation initiatives.

*Energy Efficiency*—As previously noted, Florida agencies are implementing a wide range of programs designed to increase energy efficiency and reduce carbon emissions within state government operations. 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.

Numerous utilities and local governments have established financial incentives and related programs to encourage the adoption of energy efficiency improvements by consumers. Through a myriad of grant, loan, and rebate programs, these entities are making a variety of energy efficiency measures (increased insulation, solar hot water heating, high-efficiency appliances and HVAC, building envelope improvements, etc.) more affordable to home and building owners.

*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 office staffs and supports the Florida Energy and Climate Commission, the nine-member long-term panel created by HB 7135 and appointed by the Governor (7), Chief Financial Officer (1), and Commissioner of Agriculture and Consumer Services (1).

*Investment Policies* – In recognition of the emerging risks associated with climate change, Florida became the first state in the nation to institute a process to formally analyze investments for the financial impacts of climate change. This initiative, coordinated through Chief Financial Officer Alex Sink, will assess how public fund managers incorporate climate risk in portfolio holdings as part of prudent investment management. Similarly, Florida has joined with a dozen other states representing more than \$1.5 trillion in assets under management to create an action plan to boost fund investments in energy efficiency and clean energy technologies as well as require tougher scrutiny of carbon-intensive investments that may pose long-term financial risks.

*Energy-related Research*—The recently created Florida Energy Systems Consortium is focusing on a range of 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, but are not limited to, development of an integrated bioenergy industry; solar thermal power for bulk power and distributed generation; development of Florida's vast ocean energy potential; 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 is necessary in the coming years. This report is intended to provide specific strategies that put Florida on the path toward further significant emissions reductions meet the state's overall goals.