

**Florida State University**  
***Promoting Energy and Land Use Through Land Use, Transportation and Green  
Infrastructure Policies***

**PI:** Tim Chapin; **Co-PIs:** Ivonne Audirac, Chris Coutts, and Greg Thompson (Department of Urban & Regional Planning), and Mark Horner (Department of Geography)

**Students** 3 graduate students

**Description:** In response to the many issues related to energy provision, energy sustainability, and GHGs, in 2007 Governor Crist created an Action Team on Energy and Climate Change. This group was tasked with investigating and recommending strategies for reducing GHG emissions, creating more sustainable energy systems in Florida, and for establishing Florida as an international leader in innovative energy provision. Related to this, the 2008 session saw the Florida Legislature pass HB 697 which, among many things, requires every local government in the state to address energy systems and GHG emissions explicitly within their comprehensive plans. Currently, the linkages between energy planning, environmental and economic sustainability, land use and transportation planning, and GHG reductions have never been stronger in Florida. This project is aimed at continuing the momentum in Florida for developing broad-based solutions to these problems by helping to develop a knowledge base for informing state policy in the areas of energy, sustainability, and land use and transportation planning.

We continue to work on generating a report similar to the *Tough Choices: Shaping Florida's Future and Facing Florida's Revenue Shortfall* document prepared by the Collins Institute. This report summarizes the literature on the links between urban development patterns and energy sustainability/ climate change and makes recommendations for state policies and programs to address these issues. The intention is to author a report that is easy-to-read, including graphics, and will highlight the key policies and programs the state should pursue to achieve its energy sustainability and climate change goals.

**Budget:** \$168,185

**Universities:** Griffith University (Bisbane, Australia), University of Florida

## **Progress Summary**

### **Progress to Date:**

The project began in May 2009 and will continue through the end of the 2010 calendar year. During the spring and summer 2010 terms the research team finalized its review of the current state of knowledge in the issue areas, as well as completed our review of state and local energy and climate change policies and outlined the report. We have also completed interviews with key informants at key state agencies and with planners in local governments that have taken the lead on this issue in the state, and discussed our findings with key informants in non-profit agencies and within the land development industry. We also continue to identify potential outside funding sources for continued work on this initiative.

### **Linkage to IESES Priorities and Core Mission:**

The IESES mission statement reads that the “primary mission is to provide Florida and the country with up-to-date and pragmatic tools and analysis to assist in meeting challenges, and to forge new opportunities for an unprecedented energy and climate constrained era.” This research project directly serves this mission in that the project report will inform public officials and elected officials about the breadth and form of the policy options available to them. In terms of the objectives and thrusts of the IESES initiative, this project specifically targets Objective 2 (Assisting Florida’s Governing Bodies) and

Thrusts #5 and #6 (Enhancing Energy Efficiency and Energy System Environmental and Economic Impacts). This research project contributes directly to the IESES objective to “assist Florida’s governing bodies in the successful development and implementation of a comprehensive, long-term, environmentally compatible, sustainable, and efficient energy strategic plan for the state”.

## 2010 Annual Report

### Key Accomplishments to Date:

- Project team populated our Blackboard website with project materials
  - Houses relevant reports, articles, and chapters
  - Houses summaries of key literatures
  - Summary interview notes with stakeholders
- Project team finalized our review of the substantial literatures revolving around transportation, land use, and green infrastructure
- Chapin worked with IESES staff to help organize the IESES Smart Mobility I symposium; Identified and secured two nationally-recognized transportation-land use planning faculty for the event; Participated in symposium events
- Project team completed interviews with key informants at FDCA, FDOT, FDEP, FDOH, FDEA
- Project team completed interviews with local planners in Tallahassee-Leon County, Gainesville-Alachua County, Sarasota city and county, and Miami-Dade County
- Horner, Zhao, and Chapin paper have submitted a paper to the *Annals of the Association of American Geographers*
- Chapin authored a short newsletter piece for IESES on siting issues for biomass power plants
- Project team developed a draft report layout and table of contents
- Coutts and Audirac authored a Green Infrastructure “white paper”, portions of which will be included in the Final Report
- Project team wrote draft sections of Final Report (to be out in December 2010)
- Chapin secured funding to travel to Griffith University in Brisbane, Australia during summer 2010 to work on a comparative study of Florida and Queensland planning responses to climate change and sea level rise. This grant was valued at \$15,000.
  - Presentation: *Adaptive Response to Sea Level Rise on Florida's Gold Coast*
- Chapin contributed as a sub-consultant on the UF Southeast Coastal Region Biofuels Consortium proposal (with Feiock and Brower)