

# **STATE ENERGY STRATEGY FOR ALABAMA**



**February 3, 2009**

Permanent Joint Legislative Committee On Energy Policy

Senator Wendell Mitchell-Co-Chairman  
Representative Greg Wren-Co-Chairman

## INTRODUCTION

During the 2007 Regular Session, the Legislature passed HJR 152 (Act 2007-150) establishing a 14-member Permanent Joint Legislative Committee on Energy Policy (hereinafter referred to as the Energy Committee) to develop a state policy on energy which will support dependable, efficient, economical and sustainable energy systems capable of meeting the energy needs of the citizens of Alabama. The policy will be continually developed based on strategies recommended by the Energy Committee's various working subcommittees to accomplish its key goals of (1) diversifying Alabama's energy supply; (2) developing efficiency and conservation programs; and (3) encouraging producers of clean energy technologies and producers of energy efficient products to locate their businesses in Alabama.

At its initial meeting on August 21, 2007, the Energy Committee established eight subcommittees to focus on various aspects of the energy policy. Seven of the subcommittees include members of the Energy Committee as well as other interested persons from the public and private sector. The subcommittees are: (1) Biofuels and Alternative Fuels; (2) Renewable Power and Electric Generation; (3) Efficiency and Conservation; (4) Technology and Communications; (5) Infrastructure and Expansion; (6) Environmental Issues; (7) Research and Development; and (8) Incentives. The Incentives subcommittee is composed of the legislators who were members of the Energy Committee.

The subcommittees met from August through December 2007 and developed a comprehensive energy package which contained 13 bills and two resolutions covering a wide range of topics including biofuels/alternative fuels, research and development, life-cycle costing, and broadband initiatives. At the conclusion of the 2008 Regular Session two bills had passed both the Alabama House of Representative and the Alabama Senate. The Alternative and Renewable Energy Act of 2008 (Act 2008-275, formerly HB 234) was signed by Governor Bob Riley on May 8, 2008. The Research and Development Bill (HB 236), sponsored by Rep. Betty Carol Graham also passed both the House and the Senate but was thereafter vetoed by the Governor.

The Permanent Joint Legislative Committee on Energy reconvened on August 4, 2008 to begin redrafting a **2009 State Energy Strategy for Alabama**. The format of seven subcommittees (as listed above) was retained. The Energy Committee and its subcommittees continued to meet through December 2008.

This document represents the culmination of all the work carried out during this process to develop a comprehensive energy strategy for Alabama. It is the **2009 State Energy Strategy for Alabama**. A summary of each bill to be included in the 2009 State Energy Strategy for Alabama is contained in this report. There are a total of eleven (11) bills and five (5) resolutions contained in the package.

# Permanent Joint Legislative Committee on Energy Policy

---

Senator Wendell Mitchell, Chairman  
Representative Greg Wren, Vice-Chairman  
Representative Betty Carol Graham  
Representative Mike Hill  
Representative Thomas E. Jackson  
Representative Frank McDaniel  
Representative William E. Thigpen  
Representative Pebblin W. Warren  
Senator Kim S. Benefield  
Senator Larry Dixon  
Senator Hinton Mitchem  
Senator Quinton T. Ross

## TABLE OF CONTENTS

---

---

<b>Introduction</b>	3
<b>Table of Contents</b>	5
<b>Executive Summary</b>	6
<b>Outline of the 2009 State Energy Strategy for Alabama</b>	9

## EXECUTIVE SUMMARY

The Permanent Joint Legislative Committee on Energy Policy is proud to present to the Legislature the *2009 State Energy Strategy for Alabama*. This Strategy embodies the vision, experience and hard work of the Members of the Committee, as well as over 200 members of the public and private sector who provided input by participating in the subcommittees established by the Committee, and the staff of several state agencies that helped craft this document.

Over the last 30 years, the State of Alabama has experienced remarkable growth in population, economic activity and energy demand. During this period of sustained demand growth, Alabama's energy markets have performed reliably and the state's energy supplies have suffered few disruptions. This has been an important factor in Alabama's prosperity, and it is a level of success that must be sustained to support Alabama's high quality of life into the future.

During the same time frame, however, Alabama has dealt with a number of growth and energy dilemmas including substandard air quality, water quality issues and water supply constraints. Additionally, Alabama and the nation have endured substantial energy price increases and price volatility, elevating the issue of energy in the minds of the state's residents.

Alabama has become the 23<sup>rd</sup> most populous state in the country, with expectations that its population will experience continued population growth. Current estimates predict Alabama's population will increase by over 6% in the next 20 years, with concurrent and comparable increases in energy demand. Now is the right time for Alabama to examine energy production and consumption and enact the beginning of a comprehensive energy plan to serve all Alabamians.

The *2009 State Energy Strategy for Alabama* contains detailed policy objectives and implementation strategies which address many of Alabama's current and future energy concerns. Through its deliberations, the Permanent Joint Legislative Committee on Energy Policy has identified five key themes which embody the overall direction of the *Energy Strategy*. The purpose of this Executive Summary is to present those five key themes and highlight important elements which underscore the *Energy Strategy*.

***Key Theme 1: Prioritize Energy Resource Development in the State*** – In order to meet Alabama's growing energy needs, Alabama should consider prioritizing the various energy resource options available to meet the state's growing energy demand. The Committee recommends at its highest priority that Alabama should aggressively pursue all cost-effective energy efficiency opportunities. In order to focus this effort, the Governor should consider an expanded energy efficiency goal for state departments and agencies to significantly reduce wasteful, inefficient or uneconomical uses of resources.

In Executive Order 33, the Governor ordered all state departments and agencies to reduce energy consumption by ten percent in all conditioned facilities owned by that agency by the end of Fiscal Year 2008, and twenty percent by Fiscal Year 2010 relative to Fiscal Year 2005 levels. For purposes of scope only, other states have set goals from twenty percent to thirty percent. The second priority should be renewable energy resources, particularly the utilization of Alabama's significant biomass resources. The third priority should be advanced coal gasification and combined cycle technology.

The *State Energy Strategy* includes numerous strategies which support this theme as highlighted below:

**Aggressive energy efficiency**

- Remove hurdles delaying the adoption of efficient building technologies and practices.
- Strongly promote energy efficiency in state-owned buildings and the use of life-cycle cost analysis to support the construction of high performance buildings.
- Create incentives to increase the adoption of fuel efficient vehicles.
- Deploy idle reduction technologies to improve the efficiency of the transportation system.

**Renewable energy**

- Use State purchasing power, where appropriate, to stimulate demand for biomass-based transportation fuels and clean energy.

**Advanced fossil fuel and bioenergy technologies**

- Implement policies to encourage highly efficient distributed generation.
- Support the deployment of integrated gasification and combined cycle coal technology.
- Develop and implement a research and development program to provide funding for projects which help develop, and bring to market, energy technologies that enhance Alabama's unique portfolio of energy resources and potential energy sources, particularly the significant fossil fuel and bioenergy resources of the State.

***Key Theme 2: Take a Leadership Role in the Development of Alternative Fuels*** – To enhance Alabama's economic development and reduce Alabama's reliance on imported fuels, Alabama should become a leader in the production and consumption of bio-based fuels such as biodiesel and cellulosic ethanol, particularly those produced from feedstocks that are already grown or available within the state.

The *State Energy Strategy* includes several recommendations which support this theme as follows:

- Support the development of biomass fuel industry.
- Support research and development for both current fuel sources and potential sources.
- Conduct an assessment of biofuel delivery infrastructure needs to focus efforts on enhancing the delivery infrastructure.
- Develop an industrial recruitment strategy to attract businesses producing renewable transportation fuel and clean energy.
- Ensure the availability of high quality alternative fuels through the support of ASTM standards in the state.

***Key Theme 3: Encourage State Government to Lead by Example*** – The government of the State of Alabama should lead by example. State government can improve its building and vehicle energy efficiency and, at the same time, substantially reduce costs. Additionally, as a large energy buyer, the State can boost the markets for advanced technologies and clean energy sources. The State should adopt and implement energy management practices and utilize renewable fuel and resources where doing so has a life cycle cost benefit or can assist in transforming the market for these practices and technologies.

The *State Energy Strategy* includes several recommendations that support this theme as follows:

- Establish energy reduction goals for public facilities based on life cycle cost analysis.
- Develop purchasing criteria for the State of Alabama to increase overall fuel efficiency of the vehicles in its fleet.
- Establish minimum energy performance criteria for appliance and equipment purchases.
- Use State purchasing power, where appropriate, to stimulate demand for bio-based fuels and clean energy.

***Key Theme 4: Educate the Public About Energy Issues and Provide Appropriate Incentives to Guide Individual Consumers and Market Participants Toward Wise Energy Choices*** – To ensure that Alabamians continue to make energy use decisions that benefit themselves and the state, the State should provide resources including education to promote the wise use of increasingly valuable energy resources.

The *State Energy Strategy* includes several recommendations that support this theme as follows:

- Enhance current public awareness efforts to educate Alabamians on how to improve energy efficiency.
- Develop an energy information website or “portal” for easy access to energy information about Alabama.
- Provide resources to support the *State Energy Strategy*.

***Key Theme 5: Continue Prudent Energy Planning for the State*** – Alabama should maintain and improve its high quality of life and reputation as a desirable place to do business by annually updating the *State Energy Strategy* to report on ongoing implementation strategies developed through this public and stakeholder-driven consensus-based process.

The *State Energy Strategy* includes several recommendations that support this theme as follows:

- Establish a formalized process for the annual update and revision of the *State Energy Strategy*.
- Provide a focus on energy information, planning and security by compiling a statewide energy supply and demand assessment for all fuels, and updating the assessment on a regular basis.
- Conduct a thorough analysis of energy efficiency and renewable energy potential in Alabama and update the analysis on a regular basis.
- Statutorily establish the Joint Legislative Committee on Energy Policy to ensure continuation of the planning process and the discussion of State energy policy and planning issues.

This document completes the initial step towards the development of a comprehensive *Energy Strategy* for Alabama. The *State Energy Strategy* addresses a significant number of legislative and non-legislative issues. The success of this *State Energy Strategy* has been measured by its comprehensive approach to energy issues utilizing a vast array of public and private sector resources from every corner of the State of Alabama.

In conclusion, the submission of the *State Energy Strategy* engages energy planning and review in Alabama subject to an ongoing process of continued improvement. This comprehensive set of policy objectives and implementation strategies begins to orient Alabama toward an energy future characterized by environmentally responsible energy thereby reducing the state’s dependence on foreign oil, and creating reliable and affordable sources of energy.

## Outline of the 2009 State Energy Strategy for the State of Alabama

The following is a final list of the legislation that will be introduced during the 2009 Regular Session of the Alabama Legislature with regards to energy policy.

### **(1) Transportation of Ethyl Alcohol-HB186/SB**

- This bill is a reintroduction of HB245 of the 2008 Regular Session.
- The manufacture, sale, and transportation of ethyl alcohol used for transportation fuel are exempted from Title 28 (the ABC Code).
- The terms “industrial alcohol” and “industrial alcohol plant” are also expanded to provide for the exemption.

### **(2) Life Cycle Costing for the Procurement of State Vehicles-HB192/SB**

- Provides for the use of life cycle costing in the procurement of state motor vehicles.
- Amends Section 41-16-27 on awarding publicly bid contracts for purchases made after January 1, 2009.
- Lowest responsible bid may include life cycle costing.
- Industry recognized standards are provided by rule promulgated by Green Fleet Review Committee, if the bill is passed, otherwise by the Permanent Energy Committee.
- Has no impact on the operation of the Contract Review Permanent Legislative Oversight Committee

### **(3) Sales Tax Holiday for Energy Star Products-HB193/SB**

- This bill provides for a sales tax holiday for energy star products.
- First weekend in August, same time as annual back-to-school sales tax holiday.

**(4) Life Cycle Costing for the Procurement of State Property-HB191/SB**

- This bill provides for the procurement of state property using life cycle costing as part of the procedure.
- Amends Section 41-16-27 of competitive bidding process to allow purchases made after January 1, 2009, to include considerations of life cycle costing in determining lowest responsible bidder.
- Industry recognized standards adopted by rule promulgated by Green Fleet Review Committee, if the bill is adopted, otherwise by the Permanent Energy Committee.
- Contract Review Permanent Legislative Oversight Committee's functions are not affected.

**(5) Green Fleet Legislation-HB185/SB**

- This bill provides for Green Fleet legislation, and was recommended by the Energy and Conservation Subcommittee.
- Green Fleet Review Committee (GFRC) created to implement and oversee a program of procuring state motor vehicles that are energy efficient and reduce emissions into the environment.
- State departments submit information on existing vehicles in their inventories, and the designation of light, medium, and heavy duty vehicles, with average fuel economics of the fleets.
- Vehicle's fuel efficiencies are increased from 2 percent to 4 percent, depending on size, unless the GFRC sets a lower percentage of improvement.
- State departments and agencies are required to adopt policies to reach the fuel efficiency requirements and to submit annual projected plans to reach efficiency requirements.
- Life cycle costing is used in determining the most cost efficient vehicles for future procurement.
- GFRC provides specific suggestions for technologies to reduce emissions, including anti-idling policies for state vehicles.
- Carpooling encouraged by allowing commuter fees to be paid with pretax income withholding accounts as allowed by the IRS.

- GFRC authorized to create and appoint up to two advisory subcommittees.

**(6) 400lbs Exemption for Idler Arm Technology-HB190/SB**

- This bill provides for an auxiliary engine idler technology, and was recommended by the Energy and Conservation Subcommittee.
- Large truck weight restrictions under Section 32–9–20 are expanded up to 400 pounds per vehicle for vehicle using approved auxiliary power or engine idle reduction technology.

**(7) Codification of the Permanent Joint Legislative Committee on Energy-HB189/SB**

- This bill creates by statute the Permanent Joint Legislative Committee on Energy Policy as currently constituted by Act 2007–150, HJR152, 2007 Regular Session.
- Additional language to allow the committee to receive federal and private grants or gifts.
- Places permissive language to allow the committee to operate an Energy Office and provide staff to administer the work of the committee.
- Specifies that legislative members of any subcommittee may receive their legislative per diem, expenses, and compensation to the same extent as members of the Energy Committee.

**(8) Summary of Research and Development Bill-HB194/SB**

- This bill establishes the Alabama Public Interest Energy Research and Development Grants Program to provide funding for energy related public interest energy research and development. The program would include a full range of research and development activities that are not adequately provided for in the competitive and regulated markets.
- The general goals of the program would be to develop, and help bring to market, technologies that enhance Alabama’s unique portfolio of energy resources and potential energy sources, particularly the significant fossil fuel and bioenergy resources of the state.
- Establishes a 6-member Commission on Public Interest Energy Research and Development Grants to be a grant-making agency to receive and, by majority vote of the members voting, to distribute any funds available in the Public Interest Energy Research and Development Grant Fund. (*This*

*commission is similar to the Commission established for Community Service Grants, except for its membership.)*

- The commission would be composed of the State Oil and Gas Supervisor, the Director of the Department of Economic and Community Affairs, President of the Public Service Commission, State Climatologist and the Commissioner of Agriculture and Industries. The chairman of the commission would be the Lieutenant Governor, who would vote only in the case of a tie.
- The Permanent Joint Legislative Committee on Energy Policy would review applications and recommend to the commission for approval any public interest energy research and development grants made from funds available in the Public Interest Energy Research and Development Grants Fund. The committee would act in an advisory role only. All grants recommended for approval or rejection by the committee would be forwarded to the Commission on Public Interest Energy Research and Development Grants which would review each grant for compliance and approve or disapprove each grant.
- The commission would submit a report to the Legislature not later than March 31 of each year on the grants made pursuant to this program and the progress toward achieving the goals set forth for the program.
- Creates the Public Interest Energy Research and Development Grants Fund to receive state appropriations, gifts, grants, federal funds and any other funds both private and public. The funds would be used for the purposes set forth in the bill. The un-obligated balance would be invested by the State Treasurer for the benefit of the fund. Any unallocated appropriations made by the Legislature would not revert at the end of any state fiscal year.
- Makes an appropriation in the amount of \$100,000 from the State General Fund to the Public Interest Energy Research and Development Grants Fund for the fiscal year ending September 30, 2008 and also for the fiscal year ending September 30, 2009.

**(9) Summary of Alternative Motor Fuels Security Act of 2009-HB/SB**

- This bill, which is still under development, will increase energy security and independence by reducing the state and the country's dependence on foreign oil. New technologies are emerging that will increase the available products that alternative fuels can be produced from. Alabama companies and universities are involved in researching and developing several of the new technologies. The Alabama economy will be enhanced by a new alternative fuel industry, because companies

will spend dollars on structures, machinery, equipment, and supplies to construct the facilities.

- Provide payments to Alabama producers of biofuels.
- Provide payments to alternative fuel suppliers selling these fuels to public school systems in the state
- Provide payments for use of alternative fuels by farmers in the production of renewable feedstocks used to manufacture biofuels.
- This bill will provide the foundation upon which a new industry can be created in Alabama, an industry that will bring new jobs, a cleaner environment, and move our state towards energy independence.

**(10) Energy Efficiency Incentives-HB188/SB-**

- This bill would establish income tax credits for the installation of energy efficiency equipment in residences or commercial property up to a maximum of \$500 for residences and \$1,000 for commercial property for an individual taxpayer

**(11) Alabama Wireless Telecommunications Siting Act-HB187/SB-**

- Enhances the industry's ability to provide necessary wireless technology to ALL parts of the state while preserving local government's zoning regulations and standardizing the siting process (providing uniformity)
- The proposed legislation promotes Collocation, which will ultimately mean less towers
- Sets reasonable fees to be charted by 3<sup>rd</sup> party/non-governmental consultants
- Allows for quicker reviews of applications for cell towers-does not require that such applications be approved, only reviewed.
- Regains federal regulation over radio signal strength of the cell phone antennas-3<sup>rd</sup> party/non-governmental consultants have usurped this control and try to determine the level of coverage that is appropriate
- Insures faster deployment of the latest technology to ALL parts of the State by limiting moratoria to less than 90 days and limiting moratoria to no more than 2 per every 6 months.

In addition to the bills listed, the committee is working on the following resolutions:

**(1) Resolution-IECC CODES-**

- A resolution requesting that when Alabama adopts the Alabama State Building Code for commercial and residential structures as named by proposed legislation for a statewide building code, that an energy code based on the 2006 International Energy Conservation Code (IECC), or a more recent version or more stringent code, be included as a component of the building code that Alabama adopts.

**(2) Resolution-B20-**

- A resolution encouraging schools to use biodiesel B20 in at least 20 percent of school buses when refueling at bulk refueling facilities.

**(3) Resolution-B5-**

- A resolution encouraging the use of 5 biodiesel (B5) in at least 5 percent of governmental motor vehicles.

**(4) Resolution-Interagency Alternative Fuels Working Group-**

- A resolution inviting all State agencies, commissions, boards, counties, and municipalities to join an interagency alternative fuels working group to promote education, research and development, production, and consumption of alternative fuels.
- Requires the Department of Finance and the Alabama Department of Economic and Community Affairs to annually report to the Permanent Joint Legislative Committee on Energy the State government's use of motor vehicles powered by alternative fuels, flex fuels, or hybrid technologies, as well as on the State's use of alternative fuels to power such alternative or flex fueled vehicles.

**(5) Resolution-Federal Renewable Portfolio Standards**

- A resolution where the Alabama Legislature calls upon federal policy makers to provide credit in any renewable portfolio legislation for electricity generated through existing hydro generation, existing nuclear generation, new nuclear generation, and clean coal technologies.