

HOUSE OF REPRESENTATIVES STAFF ANALYSIS

BILL #: HB 1521 Renewable Energy
SPONSOR(S): Paul
TIED BILLS: **IDEN./SIM. BILLS:** SB 1316

REFERENCE	ACTION	ANALYST	STAFF DIRECTOR
1) <u>Natural Resources</u>	_____	<u>Perkins</u>	<u>Lotspeich</u>
2) <u>State Administration</u>	_____	_____	_____
3) <u>Transportation & Econ. Dev. Apps. (Sub)</u>	_____	_____	_____
4) <u>Appropriations</u>	_____	_____	_____
5) _____	_____	_____	_____

SUMMARY ANALYSIS

The primary effect of this bill is to transfer the Florida Energy Office and all its functions and duties from the Department of Community Affairs to the Department of Environmental Protection. The bill emphasizes and expands the Department of Environmental Protection's role in promoting the following energy related activities:

- Renewable energy sources;
- Energy efficiency;
- Use of alternative fuel vehicles (i.e., hydrogen fuel cells, solar electric vehicles, etc.)
- Energy conservation;
- Local governments to generate electricity from renewable waste facilities;
- Solar energy; and
- Research of renewable energy systems through the development of the Florida Renewable Energy Research and Development Institute.

The bill requires the State Fire Marshall to adopt statewide uniform fire safety standards for hydrogen fueling stations.

The bill does not appear to have a significant fiscal impact.

This document does not reflect the intent or official position of the bill sponsor or House of Representatives.

STORAGE NAME: h1521.nr.doc
DATE: March 15, 2004

FULL ANALYSIS

I. SUBSTANTIVE ANALYSIS

A. DOES THE BILL:

- | | | | |
|--------------------------------------|------------------------------|--|---|
| 1. Reduce government? | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | N/A <input type="checkbox"/> |
| 2. Lower taxes? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 3. Expand individual freedom? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 4. Increase personal responsibility? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |
| 5. Empower families? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input checked="" type="checkbox"/> |

For any principle that received a “no” above, please explain:

The bill transfers the Florida Energy Office and all its functions and duties from the Department of Community Affairs to the Department of Environmental Protection.

B. EFFECT OF PROPOSED CHANGES:

Issue – Energy Program

Present Situation

Section 366.80, F.S., is known as the “Florida Energy Efficiency and Conservation Act.” The Legislature declares that it is critical to utilize the most efficient and cost-effective energy conservation systems in order to protect the health, prosperity, and general welfare of the state and citizens. Currently, the Florida Energy Office (FEO) is statutorily located within the Department of Community Affairs (DCA). The Florida Public Service Commission (PSC) is responsible for adopting goals and approving plans related to the conservation of electric energy and natural gas usage.¹ The DCA will make a report, as requested by the Governor or the Legislature, reflecting its activities and making recommendations of policies for improvement of the state’s response to energy supply and demand and its effect on the health, safety, and welfare of the people of Florida. The DCA report will include a report from the PSC on electricity and natural gas, and information on energy conservation programs.²

On June 20, 2003, the FEO was administratively transferred to the Department of Environmental Protection (DEP). The FEO serves as the central place in state government for information on energy related issues in Florida. The FEO is the responsible state entity for performing or coordinating the functions of all federal energy programs delegated to the state, including energy supply, demand, conservation and allocation. The FEO is responsible for developing and coordinating implementation of energy policy within the state. The FEO also coordinates the efforts to seek federal support or other support for state energy activities, including energy conservation, energy efficiency, research, development, and deployment and commercialization of next generation technologies. Through the FEO, the State of Florida accomplishes its commitment to programs concerned with energy and hydrogen. These programs and subsequent actions will help shape “Florida’s Energy Future.”³

Pursuant to section 377.601, F.S., the Legislature identified that the ability to deal with present shortages of resources used in the production of energy is aggravated and intensified because of inadequate or nonexistent information. The response to these problems and to the development of a state energy policy demands accurate and relevant information concerning energy supply, distribution and use. A procedure for collecting this data is essential to developing an energy profile so the state may rationally deal with present energy problems and anticipate future energy problems. State

¹ s. 366.81, F.S.

² s. 377.703(3)(f), F.S. and s. 366.82(6)(a), F.S.

³ <http://www.dep.state.fl.us/energy/>

official's dealing with energy problems should have current and reliable information on the types and quantity of energy resources. It is the intent of the Legislature that statutory law provide the effective development of information necessary to provide vital information on energy resources, and it is the policy of the State of Florida to:

- a) Develop and promote the effective use of energy in the state and discourage all forms of energy waste.
- (b) Play a leading role in developing and instituting energy management programs aimed at promoting energy conservation.
- (c) Include energy considerations in all planning.
- (d) Utilize and manage effectively energy resources used within state agencies.
- (e) Encourage local governments to include energy considerations in all planning and to support their work in promoting energy management programs.
- (f) Include the full participation of citizens in the development and implementation of energy programs.
- (g) Consider in its decisions the energy needs of each economic sector, including residential, industrial, commercial, agricultural, and governmental uses.
- (h) Promote energy education and the public dissemination of information on energy and its environmental, economic, and social impact.
- (i) Encourage the research, development, demonstration, and application of alternative energy resources, particularly renewable energy resources.
- (j) Consider, in its decision making, the social, economic, and environmental impacts of energy-related activities, so that detrimental effects of these activities are understood and minimized.
- (k) Develop and maintain energy emergency preparedness plans to minimize the effects of an energy shortage within Florida.⁴

Section 377.704, F.S., provides criteria related to the appropriation of funds from the settlement of petroleum overcharge litigation brought by the U.S. Department of Energy against oil companies and refineries. It is the intent of the Legislature that these monies not be expended unless appropriated in the General Appropriations Act or other subsequent specific appropriation by law.

Effect of Proposed Changes

- The bill provides for the statutory transfer of the FEO from DCA to the DEP. The bill creates section 403.431, F.S., pertaining to definitions related to energy. Section 403.432, F.S., is created to provide the DEP the following functions related to the development of the state energy policy:

⁴ s.377.601, F.S.

1. DEP will constitute the responsible state agency for performing or coordinating the functions of any federal energy programs delegated to the state.
2. DEP will analyze existing and proposed federal energy programs and make recommendations regarding those programs to the Governor.
3. DEP is responsible to coordinate efforts to seek federal support for state energy activities, including energy conservation, research, or development, and will be the state agency responsible for the coordination or multiagency energy conservation programs and plans.
4. DEP is responsible to promote the development and use of renewable energy including, but not limited to:
 - Technologies leading to the production of or improvements in the production or use of hydrogen fuel;
 - Fuel cells;
 - Distributed generation;
 - Biodiesel and similar synthetic fuels;
 - Thermo-depolymerization process;
 - Biomass;
 - Agricultural products and byproducts;
 - Municipal solid waste including landfill injection and landfill mining;
 - Landfill gas;
 - Advanced nuclear power systems;
 - Solar thermal and solar electricity;
 - Geothermal energy;
 - Biomass, methane gas recovery, wind energy;
 - Ocean thermal gradient power;
 - Ocean currents, hydroelectric power;
 - Environmental standards such as generation portfolio standards; and
 - Conservation programs including appliance efficiency standards.
5. DEP will promote the development and use of solar energy resources to include:
 - a. Establishing goals and strategies for increasing the use of solar energy in Florida.
 - b. Aiding and promoting the commercialization of solar technology with the Florida Solar Energy Center, Enterprise Florida, Inc., and any other federal, state, or local governmental agency seeking to promote solar technology.
 - c. In cooperation with the Department of Transportation, Enterprise Florida, Inc., the Florida Solar Energy Center, and the Florida Solar Energy Industries Association, investigating opportunities, pursuant to the National Energy Policy Act of 1992 and the Housing and Community Development Act of 1992, for solar electric vehicles and other solar energy manufacturing, distribution, installation, and financing efforts which will enhance Florida's position as the leader in solar energy research, development, and use.

Note: The DEP is authorized to seek assistance from the solar industry and other parties and is authorized to enter into contracts, retain professional consulting services, and expend funds appropriated by the Legislature for such purposes.
6. DEP will promote energy conservation in all energy sectors throughout Florida and coordinate energy conservation programs of all state agencies.
7. DEP will serve as the state clearinghouse for indexing and compiling data related to energy programs from state universities, local governments, federal, state, and private industry and provide such information to the citizens of Florida. DEP will coordinate, promote, and respond to efforts by all sectors of the economy to seek financial support for energy activities. Information related to the anticipated energy-use and energy-saving characteristics of products and services is to be provided to consumers by the DEP.
8. DEP will coordinate energy-related programs of state government in order to:
 - a. Provide assistance to state agencies, counties, municipalities, and regional planning agencies to further and promote their energy planning activities.

- b. Require, in cooperation with the Department of Management Services, all state agencies to operate state-owned and state-leased buildings in accordance with energy conservation standards as adopted by the Department of Management Services.
 - c. Promote the development and use of renewable energy resources, energy efficiency technologies, and conservation measures.
 - d. Promote the recovery of energy from wastes in conjunction with the PSC where electrical generation or natural gas is involved along with any other resource recovery programs.
9. DEP will develop, coordinate, and promote a comprehensive research plan for state program consistent with the state energy policy and updated on a biennial basis.
10. DEP will study the feasibility of creating a direct support organization to facilitate funding for research, demonstrations, and commercialization of advanced energy technologies. DEP is required to submit a report on the feasibility by February 1, 2005, to the Governor, the President of the Senate, and the Speaker of the House of Representatives.

As a result of this statutory transfer of the FEO from DCA to DEP, the bill repeals the following sections of statute :

Statute Cite	Subject
Section 377.602, F.S.	Definitions
Section 377.603, F.S.	Energy data collection; powers and duties of the DCA
Section 377.604, F.S.	Required reports to DCA
Section 377.605, F.S.	Use of existing energy information.
Section 377.606, F.S.	Records of DCA; limits of confidentiality
Section 377.607, F.S.	Violations; penalties
Section 377.608, F.S.	Prosecution of cases by state attorney
Section 377.701, F.S.	Petroleum Allocation
Section 377.703, F.S.	Additional functions of the DCA; energy emergency contingency plan; federal and state conservation programs

- The bill creates section 403.45, F.S., which establishes the Florida Renewable Energy Research and Development Institute (Institute). The Institute is created to serve as the basic applied research institute for the commercialization and application of renewable energy technology. The institute is assigned to the state energy program within the DEP for administrative oversight and mission oversight and will be located at a university in the state determined by the DEP. The institute will facilitate the research of renewable energy pertaining to those sources of renewable energy discussed in item 4 of this section, coordinate the alternative energy activities of the state's research and education institutions, and identify problems and propose solutions on issues affecting renewable energy, including making public policy recommendations.
- The bill amends section 366.82(6)(a), F.S., to delete reference to provisions of section 377.703, F.S., (proposed section to be repealed in the bill), and deletes the requirement of the PCA to have the exclusive responsibility of report activities associated with electrical energy activities contained in section 377.703, F.S.
- The bill rennumbers section 377.601, F.S., to section 403.43, F.S., and amends the Legislative intent to include:
 - The proper management of current resources, the promotion of efficient use of energy resources, and the promotion of alternative energy resources will help to reduce pollution and demand on foreign fuels, enhance system reliability, and promote economic growth.

- The promotion of efficient, effective, and economical management of energy issues, centralizing energy coordination responsibilities, pinpointing responsibility for conducting energy programs, and ensuring the accountability of state agencies for the state energy policy. The Legislature recognizes that in order to achieve this goal there should be a single state office charged with managing and promoting the state's energy policy. It is the specific intent of the Legislature that nothing in this act will in any way change the powers, duties, and responsibilities assigned by the Florida Electrical Power Plant Siting Act under part II of chapter 403 or the powers, duties, and responsibilities of the PSC.

The bill deletes statutory language referencing the energy shortage resource allocation and lack of data available for the state to deal effectively with the energy problems and the policy of the state to develop and maintain energy emergency preparedness plans to minimize the effects of an energy shortage within Florida.

- The bill renumbers section 377.704, F.S., (Appropriation of funds from settlement of petroleum overcharge litigation.), as section 403.433, F.S. The bill provides for minor technical changes.

Issue – Alternative Energy Sources

Present Situation

Section 377.705, F.S., is known as the “Solar Energy Standards Act of 1976.” With the continual growth of energy consumption, new sources of energy need to be developed and applied. One such source is solar energy. The Legislature encourages the development of an alternative energy capability in the form of solar energy. Section 377.705(3)(b), F.S., defines solar energy systems to include equipment which provides for the collection and use of incident solar energy for water heating, space heating or cooling, or other applications which normally require or would require a conventional source of energy such as petroleum products, natural gas, or electricity and which performs primarily with solar energy. In such other systems in which solar energy is used in a supplemental way, only those components which collect and transfer solar energy shall be included in this definition.

Section 377.705(4), F.S., provides for the Florida Solar Energy Center to:

- (a) Develop and promulgate standards for solar energy systems manufactured or sold in this state based on the best currently available information and will consult with scientists, engineers, or persons in research centers who are engaged in the construction of, experimentation with, and research of solar energy systems to properly identify the most reliable designs and types of solar energy systems.
- (b) Establish criteria for testing performance of solar energy systems and will maintain the necessary capability for testing or evaluating performance of solar energy systems. The center may accept results of tests on solar energy systems made by other organizations, companies, or persons when such tests are conducted according to the criteria established by the center and when the testing entity has no vested interest in the manufacture, distribution or sale of solar energy systems.
- (c) Be entitled to receive a testing fee sufficient to cover the costs of such testing. All testing fees will be transmitted by the center to the Chief Financial Officer to be deposited in the Solar Energy Center Testing Trust Fund, which is hereby created in the State Treasury, and disbursed for the payment of expenses incurred in testing solar energy systems.
- (d) All solar energy systems manufactured or sold in the state must meet the standards established by the center and will display accepted results of approved performance tests in a manner prescribed by the center.

Another alternative energy source utilizes the combustion of solid waste. Within section 377.709, F.S., the Legislature declares that the combustion of refuse by solid waste facilities to supplement the electricity supply not only represents an effective conservation effort, but also represents an environmentally preferred alternative to conventional solid waste disposal in the state. The PSC is responsible to establish a funding program to encourage the development by local governments of solid waste facilities that use solid waste as a primary source of fuel for the production of electricity. Upon petition of a local government, the PSC has the authority to require an electric utility to enter into a contract with the local government to provide advanced funding to such government for the construction of the electrical component of a solid waste facility.

The Southern States Energy Compact (Compact) was enacted into law under section 377.711, F.S. The primary purpose of the Compact is for Florida and other states who are a part to the Compact to recognize that through a cooperative arrangement the proper employment and conservation of energy and employment of energy-related facilities, materials, and products, within the context of a responsible regard for the environment, can assist in the industrialization of the South and the development of a balanced economy for the region. The Southern States Energy Board consists of members from each state who are part of the Compact and as one of its powers ascertains and analyzes on a continuing basis the position of the South with respect to energy, energy-related industries, and environmental concerns.

Section 403.42, F.S., is known as the "Florida Clean Fuel Act." The purposes of this act are to establish the Clean Fuel Advisory Board under the Department of Community Affairs to study the implementation of alternative fuel vehicles and to formulate and provide the Secretary of Community Affairs recommendations on expanding the use of alternative fuel vehicles in Florida and make funding available for implementation. One alternative use of fuel for automobiles is hydrogen. Hydrogen can power cars by replacing gasoline in an internal combustion engine or as a source of power for a fuel cell. A fuel cell combines hydrogen and oxygen to produce electricity, which powers the car and emits only steam.⁵

Section 633.022, F.S., provides uniform firesafety standards governing the construction and utilization of certain buildings and structures. Currently, there is not a uniform fire standard for hydrogen fueling stations.

Effect of Proposed Changes

- The bill renumbers section 377.704, F.S., (Solar Energy Center; development of solar energy standards.), to section 403.44, F.S. The bill provides section 403.44(1), F.S., be known by the "popular name" of the "Solar Energy Standards Act of 1976." The bill provides that the Legislature recognizes that if present trends continue, Florida will increase present energy consumption dramatically by the year 2200. The use of photovoltaics is included as a solar energy application and is included in the definition of solar energy systems. Photovoltaics (PV) or solar cells as they are often referred to, are semiconductor devices that convert sunlight into direct current (DC) electricity.⁶ The bill provides for other minor technical changes associated with section 403.44, F.S.
- Section 377.709, F.S., (Funding by electric utilities of local governmental solid waste facilities that generate electricity) is renumbered as section 366.052, F.S. This amendment moves a PSC jurisdictional statute from the DCA section of statutes into a more appropriate section of statute. Minor technical changes are made for conformity.

⁵ <http://www.dep.state.fl.us/secretary/comm/2004/jan/0122.htm>

⁶ <http://www.fsec.ucf.edu/pvt/pvbasics/index.htm>

- Section 377.71, F.S., (Definitions; Southern States Energy Compact) is renumbered as section 403.46, F.S.
- The bill renumbers section 377.711, F.S., (Florida party to Southern States Energy Compact) as section 403.461, F.S. The bill changes the agency to which the Southern States Energy Board issues recommendations to the DEP (previously the Department of Commerce). The bill provides for minor technical changes.
- Section 377.712, F.S., (Florida participation) is renumbered as section 403.462, F.S.
- The bill amends section 403.42, F.S., relating to the Florida Clean Fuel Act by replacing the DEP with the DCA language references.
- The bill amends section 403.973, F.S., relating to a minor technical change to correct a statutory reference relating to comprehensive plan amendments.
- Section 288.041, F.S., (Solar energy industry; legislative findings), is amended to make agency reference to DEP (previously DCA).
- The bill transfers the Solar Energy Program and the Clean Fuel Advisory Board from DCA to DEP.
- The bill amends section 633.022, F.S., to establish uniform firesafety standards for hydrogen fueling stations. The State Fire Marshal will have rulemaking authority to adopt, the current version of National Fire Protection Association and other codes for any facility, condition, situation, or circumstance in which hydrogen is in use in order to protect the public safety and property in Florida. The State Fire Marshal is authorized to require that any equipment utilizing hydrogen be listed by a nationally recognized testing laboratory, and has the authority to develop rule procedures to ensure such compliance.

C. SECTION DIRECTORY:

- Section 1. Amends s. 366.82, F.S., to delete references to s. 377.703, F.S., (DCA functions related to energy emergency contingency plan; federal and state conservation programs), which is deleted by this bill.
- Section 2. Amends s. 377.601, F.S., to renumber as s.403.43, F.S., relating to legislative intent for energy resources.
- Section 3. Amends s. 377.704, F.S., to renumber as s.403.433, F.S., relating to the appropriation of funds from the settlement of petroleum overcharge limitation.
- Section 4. Amends s. 377.705, F.S., to renumber as s. 403.44, F.S., relating to the Solar Energy Center and the development of solar energy standards.
- Section 5. Amends s. 377.709, F.S., to renumber as s. 366.052, F.S., relating to the funding of solid waste facilities that generate electricity and transfers the PSC jurisdictional statute from DCA to a more appropriate section of statute.
- Section 6. Amends s. 377.71, F.S., to renumber as s. 403.46, F.S., relating to Southern States Energy Compact.
- Section 7. Amends s. 377.711, F.S., to renumber as s. 403.461, F.S., relating to the agency to which the Southern States Energy Board issues recommendations.

- Section 8. Amends s. 377.712, F.S., to renumber as s. 403.462, F.S., to provide a minor technical change relating to statutory reference.
- Section 9. Amends s. 403.42, F.S., to provide DEP as the agency contact relating to the Clean Fuel Florida Advisory Board.
- Section 10. Creates s. 403.431, F.S., to provide definitions relating to energy program.
- Section 11. Creates s. 403.432, F.S., to provide authorization to DEP to perform numerous functions related to the renewable energy program.
- Section 12. Creates s. 403.45, F.S., relating to the development of the Florida Renewable Energy Research and Development Institute.
- Section 13. Amends s. 403.973(19)(a), F.S., to provide a minor technical change relating to statutory reference.
- Section 14. Amends s. 288.041, F.S., to provide DEP as the agency associated with the Solar energy industry.
- Section 15. Provides the Solar Energy Program and the Clean Fuel Florida Advisory Board be transferred to DEP.
- Section 16. Amends s. 633.022, F.S., relating to the use of hydrogen as an alternative fuel source and the State Fire Marshall oversight of its use.
- Section 17. Repeals s. 377.602, s. 377.603, s. 377.604, s. 377.605, s. 377.606, s. 377.607, s.377.608, s. 377.701, and s. 377.703, F.S., relating to the statutory transfer of the FEO from DCA to DEP.
- Section 18. Provides the act will take effect upon becoming law.

II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues: None.

2. Expenditures:

The bill provides for the transfer of the FEO from the DCA to the DEP. This will require a transfer to the DEP the budget and costs for the program.

The bill authorizes the State Fire Marshal to adopt uniform statewide standards for hydrogen fueling stations and authorizes the State Fire Marshall to require any equipment utilizing hydrogen be listed by a nationally recognized testing laboratory. The State Fire Marshal (within the Department of Financial Services) will have to adopt rules applicable to hydrogen fueling stations and equipment associated with its use to be recognized by a testing laboratory. Rule-making costs will be insignificant and non-recurring. These costs include the Department of Financial Services efforts to publicize a proposed rule through mail-outs and public workshops around the state, as well as costs associated with publication and process requirements pursuant to Chapter 120, F.S.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues:

The expansion of the FEO areas of coverage may help local governments if projects or businesses come into their community as a result of a program promoted by the FEO. A local government may also benefit from the placement of the Florida Renewable Energy Research Institute within its jurisdiction.

2. Expenditures: None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

Private industry will benefit from the expansion of the FEO. More grants may become available to the private sector. Additionally, the research performed at the Florida Renewable Energy Research and Development Institute may result in technological advances available to private industry. The creation of uniform fire code siting requirements for hydrogen facilities will enable private firms in that industry to enter into Florida with more regulatory certainty, and therefore lower startup costs.

D. FISCAL COMMENTS: None.

III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable. This bill does not appear to affect municipal or county government.

2. Other: None.

B. RULE-MAKING AUTHORITY:

The State Fire Marshal (within the Department of Financial Services) will have to adopt rules applicable to hydrogen fueling stations and equipment associated with its use to be recognized by a testing laboratory.

C. DRAFTING ISSUES OR OTHER COMMENTS: None.

IV. AMENDMENTS/COMMITTEE SUBSTITUTE CHANGES