**HOUSE OF REPRESENTATIVES STAFF ANALYSIS**

**BILL #:** HB 933 Renewable Energy
**SPONSOR(S):** Mealor
**TIED BILLS:** **IDEN./SIM. BILLS:** SB 494

| REFERENCE | ACTION | ANALYST | STAFF DIRECTOR |
|---|---|---|---|
| 1) Environmental Regulation Committee | | Perkins | Kliner |
| 2) Utilities & Telecommunications Committee | | | |
| 3) Agriculture & Environment Appropriations Committee | | | |
| 4) State Resources Council | | | |
| 5) | | | |

**SUMMARY ANALYSIS**

The bill creates statutory language related to renewable energy and defines “biomass” and “renewable energy.” The bill provides for the purchase criteria of such energy by public utilities, municipal electric utilities and rural electric cooperatives.

The bill amends the criteria in section 403.7061, F.S., conditioning the approval by the Department of Environmental Protection for the construction of a new waste-to-energy facility (WTE), or the expansion of a WTE, to require that the county where the facility is located has a solid waste management/recycling program designed to achieve a waste reduction goal of 30 percent. This amendment mirrors a similar provision in an earlier section of law, providing consistency, and is designed to account for fluctuations in recyclable commodities.

For purposes of establishing or expanding a WTE, the bill deletes language excluding counties with populations of 75,000 or less having to achieve the waste reduction goal of 30 percent within the county and municipalities boundaries. This deletion appears to not have an effect because it is unlikely that a county having a population of 75,000 or less would find it economically feasible to construct a multi-million dollar WTE facility.

The bill encourages local governments who are considering to construct or expand a Class I landfill to consider the construction of a WTE as an alternative to additional landfill space.

The bill does not appear to have a significant impact on state or local governments.

## FULL ANALYSIS

## I. SUBSTANTIVE ANALYSIS

A. HOUSE PRINCIPLES ANALYSIS:

Provide Limited Government: A county's recycling rate may fluctuate due to factors that are beyond the county's control. The bill may allow communities to move forward with establishing or expanding an existing WTE facility if the county develops a program designed to achieve the 30 percent waste reduction goal. The bill provides criteria for renewable energy to be purchased by public utilities, municipal electric utilities, and rural electric cooperatives.

Promote Personal Responsibility: The bill provides criteria for renewable energy to be purchased by public utilities, municipal electric utilities, and rural electric cooperatives. Prudent and reasonable costs associated with renewable energy contracts will be recovered from the ratepayers of the contracting utility, without differentiation among customer classes, through the appropriate cost-recovery clause mechanism administered by the Florida Public Service Commission.

The bill does not appear to implicate any other House Principles.

B. EFFECT OF PROPOSED CHANGES:

❖ **Issue – Renewable Energy**

**Present Situation**

Energy is fundamental to our society, powering our homes, businesses, and industries; however, the production of energy often comes with some cost to the environment. The energy decisions society makes every day encourages the development of new power sources, each with a different impact on our environment. Today, more than ever, electricity consumers have the ability and the interest to choose clean, low-impact energy options, including renewable energy.

Currently in Florida, utilities are not required to contract with producers of renewable energy within their service territories; however, section 360.051, F.S., does require utilities to purchase electricity produced by co-generating or small power producers at "avoided cost." Avoid cost is the difference between purchasing power vs. expanding facilities in order to generate what is needed.

**Effect of Proposed Change**

The bill creates section 366.91, F.S., entitled renewable energy. The bill provides legislative findings that it is in the public interest to promote the development of renewable energy resources because they have the potential to help diversify fuel types to meet the state's growing dependency on natural gas for electric production, they minimize the volatility of fuel costs, encourage investment within the state, improve environmental conditions, and make Florida a leader in new and innovative technologies.

The bill provides definitions for the following terms:

- **Biomass** is defined to mean a power source that is comprised of, but not limited to, combustible residues or gases from forest-products manufacturing, agricultural and orchard crops, waste products from livestock and poultry operations and food processing, urban wood waste, municipal solid waste, municipal liquid waste treatment operations, and landfill gas.
- **Renewable energy** is defined to mean electrical energy produced from a method that uses one or more of the following fuels or energy sources: biomass, solar energy, geothermal energy, wind energy, ocean energy, hydroelectric power, municipal solid waste, material from municipal liquid waste treatment operations, landfill gas, or hydrogen produced from sources other than fossil fuels.

The bill requires each public utility on or before January 1, 2006, to continuously offer a 10 year purchase contract to producers of renewable energy basing payment on the utility's avoided cost.

The bill requires that each municipal electric utility and rural electric cooperative, on or before January 1, 2006, whose annual sales as of July 1, 1993, to retail customers were greater than 2,000 gigawatt hours, continuously offer a 10 year purchase contract to producers of renewable energy basing payment on the utility's avoided cost.

The bill requires a contracting producer of renewable energy to pay the actual costs of its interconnection with the transmission grid or distribution system.

❖ **Issue – Waste–to-Energy Facility**

**General Background**

For more than twenty years, WTE has been recognized as a source of renewable energy. WTE facilities produce relatively clean, renewable energy through the combustion of municipal solid waste in specially designed power plants equipped with pollution control equipment to clean emissions. A WTE facility uses an enclosed device using controlled combustion to thermally break down solid, liquid, or gaseous combustible solid waste to an ash residue that contains little or no combustible material.

Combustion is an intricate treatment process. During burning, organic wastes are converted from solids and liquids into gases. These gases pass through the flame, are heated further, and eventually become so hot that their organic compounds break down into the constituent atoms. These atoms combine with oxygen and form stable gases that are released to the atmosphere after passing through air pollution control devices. The management or disposal of metals and ash, other by-products of the combustion process, is an environmental concern. Ash is an inert solid material composed primarily of carbon, salts, and metals.[1]

Solid waste is regulated by two major programs under the federal Resource Conservation and Recovery Act (RCRA).[2] The RCRA Subtitle C program regulates the disposal of solid waste that is hazardous, while the RCRA Subtitle D program regulates nonhazardous solid waste. WTE facilities must determine if their ash is a hazardous waste; accomplished by testing. Ash classified as hazardous must be handled under RCRA Subtitle C regulations as a hazardous waste. Ash not classified as hazardous must be disposed of in accordance with Subtitle D and state regulations.[3]

According to the Integrated Waste Services Association (IWSA), an interest group formed in 1991 to promote integrated solutions to municipal solid waste management problems, trash volume is reportedly reduced by approximately 90 percent and the remaining 10 percent (ash residue) must be regularly tested to meet strict U. S. Environmental Protection Agency standards allowing reuse or disposal in landfills. According to the IWSA, ash residue makes good cover in landfills because it exhibits concrete-like properties causing it to harden once it is placed and compacted in a landfill, reducing the potential for rainwater to leach contaminants from trash landfills into the ground.[4] A WTE facility typically produces electricity, steam, or other energy that is used to power the facility and excess energy is usually sold to a power company.

The Florida Statutes limit the definition of a WTE facility to exclude facilities that primarily burn fuels other than solid waste even if such facilities also burn some solid waste as a fuel supplement. The defined term also does not include facilities that burn vegetative, agricultural, or silvicultural wastes, bagasse, clean dry wood, methane or other landfill gas, wood fuel derived from construction or demolition debris, or waste tires, alone or in combination with fossil fuels.[5]

[1] http://www.epa.gov/epaoswer/general/orientat/rom37.pdf, pages 1,2
[2] 42 U.S.C. s/s 6901 et seq. (1976)
[3] http://www.epa.gov/epaoswer/non-hw/muncpl/dmg2/chapter8.pdf, pages 35-36
[4] http://www.wte.org/waste.html
[5] s. 403.7061(4), F.S.

In Florida, it is estimated that approximately half of the population is served by waste management systems that include 12 WTE facilities.[6]

The following table depicts the current WTE facilities in Florida along with the most current recycling rates:

**Florida WTE Facilities**

| County | Facility | Ownership Type | Start Year | Recycle Rate 1999 | Recycle Rate 2000 | Recycle Rate 2001 | Recycle Rate 2002 |
|---|---|---|---|---|---|---|---|
| Bay | Bay County Resource Recovery Facility | Public | 1987 | 13% | 16% | 18% | 21% |
| Broward | North & South Broward County Resource Recovery Center | Private | 1991 | 25% | 26% | 25% | 23% |
| Miami-Dade | Dade County Resource Recovery Center | Public | 1982/89 | 19% | 20% | 21% | 18% |
| Hillsborough | Hillsborough County Solid Waste Energy Recovery Facility/McKay Bay Refuse to Energy Project | Public | 1987/85 | 30% | 32% | 30% | 32% |
| Lake | Lake County Resource Recovery Facility | Private | 1991 | 31% | 26% | 14% | 24% |
| Lee | Lee County Solid Waste Resource Recovery Center | Public | 1994 | 33% | 30% | 30% | 33% |
| Palm Beach | North County Regional Resource Recovery Center | Public | 1989 | 36% | 31% | 39% | 36% |
| Pasco | Pasco County Solid Waste Resource Recovery Facility | Public | 1991 | 16% | 19% | 16% | 26% |
| Pinellas | Pinellas County Resource Recovery Facility | Public | 1983/85 | 24% | 23% | 30% | 35% |
| Polk | Ridge Generating Station | Private | 1994 | 32% | 30% | 22% | 25% |

## Present Situation

The Legislature recognizes the need to use an integrated approach to municipal solid waste management with policies intended to foster integrated solid waste management by using waste reduction, recycling, WTE facilities, and landfills. Progress is being made using this integrated approach to municipal solid waste management, and WTE facilities continue to be an integral part of the state's solid waste management practices.[7]

Under current law, each county is required to implement a recyclable materials recycling program and counties and municipalities are encouraged to form cooperative arrangements for implementing recycling programs.[8]

Section 403.706(4)(a), F.S., provides that a county's solid waste management and recycling programs be designed to provide for sufficient reduction of the amount of solid waste generated within the county and the municipalities within its boundaries in order to meet goals for the reduction of solid waste prior to the final disposal or the incineration of such waste at a solid waste disposal facility. The goal provides that the amount of solid waste that would be disposed of within the county and municipalities

6 http://www.usmayors.org/uscm/us_mayor_newspaper/documents/11_03_03/mwma_compatibility.asp and the Florida Department of Environmental Protection

7 s. 403.7061(1), F.S.

8 s. 403.706(2)(a), F.S.

within its boundaries be reduced by at least 30 percent. Pursuant to section 403.706(4)(c), F.S., a county with a population of 100,000 or less may provide its residents with the opportunity to recycle in lieu of achieving the 30 percent reduction goal.

By comparison, section 403.7061(2), F.S., provides that notwithstanding any other provisions of state law, the Department of Environmental Protection will not issue a construction permit or certification to build a WTE facility or expand an existing WTE facility unless the facility achieves the requirements set forth in section 403.7061(3)(c), F.S. The language in section 403.706(3)(c), F.S., requires the county in which the facility is located must achieve the 30 percent waste reduction goal set forth in section 403.706(4), F.S., by the time the facility begins operation. Counties with a population of 75,000 or less are not given the option of merely providing the opportunity of recycling for its residents but must achieve the 30 percent goal.

As a result of section 403.7061(2), F.S., a WTE facility which achieves a 29 percent waste reduction goal would not be allowed to expand, receive a construction permit or certification to build a WTE facility, even if the county has an excellent recycling program. A county's recycling rate may decline due to factors that are beyond the county's control. This achievement criteria appears to be in conflict with section 403.706(4)(a), F.S., which only requires that the facility be designed to provide for reduction of the amount of solid waste in order to meet the waste reduction goal prior to the final disposition or the incineration of waste at a solid waste disposal facility.

**Effect of Proposed Change**

The bill amends the criteria in section 403.7061, F.S., conditioning the approval by the Department of Environmental Protection for the construction of a new WTE, or the expansion of a WTE, to require that the county where the facility is located has a solid waste management/recycling program designed to achieve a waste reduction goal of 30 percent. This amendment mirrors a similar provision in an earlier section of law, providing consistency, and is designed to account for fluctuations in recyclable commodities.

The bill deletes the exclusion of counties with populations of 75,000 or less having to meet criteria contained within 403.706(4)(c), F.S. This deletion appears to not have an effect because it is unlikely that a county having a population of 75,000 or less would find it economically feasible to construct a multi-million dollar waste-to-energy facility.

The bill encourages local governments who are considering to construct or expand a Class I landfill to consider the construction of a WTE as an alternative to additional landfill space.

C. SECTION DIRECTORY:

Section 1. Creates s. 366.91, F.S., relating to renewable energy, definitions, and the purchase criteria of such energy.

Section 2. Amends s. 366.11(1), F.S., to reference s. 366.91, F.S.

Section 3. Amends s. 403.7061(3), F.S., to revise a permit requirement for a WTE facility.

Section 4. Encourages local governments who are considering to construct or expand a Class I landfill to consider the construction of a WTE as an alternative to additional landfill space.

Section 5. Provides the act will take effect on October 1, 2005.

## II. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT

A. FISCAL IMPACT ON STATE GOVERNMENT:

1. Revenues: None.

2. Expenditures: None.

B. FISCAL IMPACT ON LOCAL GOVERNMENTS:

1. Revenues: None.

2. Expenditures:

The bill provides criteria for renewable energy to be purchased by public utilities, municipal electric utilities, and rural electric cooperatives. The cost to purchase such energy is indeterminate due to the uniqueness of each public utility demand. Pursuant to a representative of municipal utilities and rural electric cooperatives, the only municipal utilities that currently meet the criteria for application of the contract requirements in the bill are Orlando and Jacksonville, and no cooperative meets these criteria.

The bill may allow communities to move forward with establishing or expanding an existing WTE facility if the county develops a program designed to achieve the 30 percent waste reduction goal. The expenditure is unknown and is linked to the size of the facility and technology desired.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

The bill provides criteria for renewable energy to be purchased by public utilities, municipal electric utilities, and rural electric cooperatives. Prudent and reasonable costs associated with renewable energy contracts will be recovered from the ratepayers of the contracting utility, without differentiation among customer classes, through the appropriate cost-recovery clause mechanism administered by the Florida Public Service Commission.

D. FISCAL COMMENTS: None.

## III. COMMENTS

A. CONSTITUTIONAL ISSUES:

1. Applicability of Municipality/County Mandates Provision:

Not applicable because this bill does not appear to: require cities or counties to spend funds or take actions requiring the expenditure of funds; reduce the authority that cities or counties have to raise revenues in the aggregate; or reduce the percentage of a state tax shared with cities or counties.

2. Other: None.

B. RULE-MAKING AUTHORITY:

No additional rulemaking authority is required to implement the provisions of this bill.

C. DRAFTING ISSUES OR OTHER COMMENTS:

According to the Department of Environmental Protection, only two counties, Hillsborough and Pasco, are currently anticipating expansion of existing county-owned WTE facilities.

## IV. AMENDMENTS/COMMITTEE SUBSTITUTE & COMBINED BILL CHANGES