# The Florida Senate BILL ANALYSIS AND FISCAL IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

	Prepared	By: The Pr	ofessional Staff	of the Committee or	n Regulated Indu	stries	
BILL:	SB 1764						
INTRODUCER:	Senator Albritton						
SUBJECT:	Municipal Solid Waste-to-Energy Program						
DATE:	January 24	1, 2022	REVISED:				
ANAL	YST	STAF	F DIRECTOR	REFERENCE		ACTION	
1. Sharon		Imhof		RI	Favorable		
2.				AEG			
3.				AP			

## I. Summary:

SB 1764, creates s. 377.814, F.S., to establish the Municipal Solid Waste-to-Energy Program, within the Department of Agriculture and Consumer Services, (DACS) comprised of a financial assistance grant program and an incentive grant program.

The stated purpose of the program is to provide financial assistance grants and incentive grants to municipal solid waste-to-energy (MSWE) facilities in order to incentivize the production and sale of energy and reduce waste disposed of in landfills.

The bill defines "municipal solid waste-to-energy facility" as a publicly owned or government affiliate-owned facility using an enclosed device with controlled combustion to thermally break down solid waste to an ash residue containing little or no combustible material, producing electricity, steam, or other energy. It does not include facilities primarily burning fuels other than solid waste; nor facilities primarily burning 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.

The Financial Assistance Grant will provide the MSWE facilities funding at a rate of 2 cents per kilowatt-hour of electricity purchased by an electric utility during the preceding state fiscal year, not to exceed the difference between the electric utility's avoided cost and the commercial retail rate. If funds are insufficient to cover every qualifying kilowatt-hour from all qualifying applicants, the DACS must prorate the available funds on an equitable basis, taking into consideration the commercial retail rate within the applicable service territory.

To qualify, the facility must have previously entered into a power purchase agreement with an electric utility that included capacity payments which the facility will no longer receive under the agreement. The facility owner must submit an application to the DACS, including the MSWE

facility's name and the amount of energy purchased from the facility by an electric utility during the preceding state fiscal year.

The bill requires the DACS to establish a process in coordination with the PSC to verify eligibility and the amount of energy purchased from the facility.

The incentive grant will provide facilities with matching funds on a dollar-for-dollar basis to assist with planning and design for constructing, upgrading, or expanding the MSWE facilities, including necessary legal or administrative expenses.

To qualify, the facility owner must apply to the DACS and demonstrate that the project is cost-effective, permittable, and implementable and complies with s. 403.7061, F.S., which establishes the requirements for review of new waste-to-energy (WTE) facility capacity by the Department of Environmental Protection (DEP).

The bill requires the DEP to assist the DACS with determining eligibility and with establishing requirements to ensure long-term and efficient operation and maintenance of such facilities.

The Department of Agriculture and Consumer Services must perform adequate overview of applications and awards, including technical review, regular inspections, disbursement approvals, and auditing. If the DACS determines that program requirements are not being met, the bill requires termination or repayment of incentive grant funds.

The bill requires appropriated funds to be used first for financial assistance grants and then remaining funds may be used for incentive grants.

The bill requires the DACS to adopt rules to implement and administer the program. The rules must:

- Establish an application processes for both grant types;
- Include application deadlines; and
- Establish supporting documentation to be provided to the DACS.

Rules for the financial assistance grant program must be developed by the DACS in consultation with the Public Service Commission (PSC).

Rules for the incentive grant program must be developed by the DACS in consultation with the DEP.

The bill appropriates \$100 million in recurring funds from the General Revenue Fund to the DACS for the 2022-2023 fiscal year.

The bill is effective July 1, 2022.

## **II.** Present Situation:

## **Municipal Solid Waste-to-Energy**

Energy recovery from waste is the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through processes, including combustion, gasification, pyrolization, anaerobic digestion and landfill gas recovery. This process is often called waste-to-energy.

Municipal solid waste (MSW), simply garbage or trash, can be used to produce energy at WTE plants and landfills.<sup>2</sup> WTE plants burn MSW to produce steam in a boiler and generate electricity.<sup>3</sup> MSW can contain:

- Biomass, or biogenic (plant or animal products), materials such as paper, cardboard, food waste, grass clippings, leaves, wood, and leather products;
- Nonbiomass combustible materials such as plastics and other synthetic materials made from petroleum; and
- Noncombustible materials such as glass and metals.<sup>4</sup>

In 2018, about 12 percent of the 292 million tons of MSW produced in the United States was burned in WTE plants.<sup>5</sup> The remaining MSW was managed as follows:

- 50 percent was landfilled;
- 23.6 percent was recycled;
- 8.5 percent was composted; and
- 6.1 percent is listed as "other."

MSW is usually burned at WTE plants, using heat to make steam for generating electricity. In 2020, 65 U.S. power plants generated around 13.5 billion kilowatt-hours of electricity from 25 million tons of MSW. 8

In addition to producing electricity, WTE is a waste management option, reducing the amount of material otherwise buried in landfills by about 87 percent. A WTE plant can reduce 2,000 pounds of MSW down to around 300 to 600 pounds of ash. 10

Energy recovery from waste is important in the development of sustainable energy policies and is encouraged by the U.S. Environmental Protection Agency.<sup>11</sup> Recognized as a renewable

<sup>&</sup>lt;sup>1</sup> U.S. Environmental Protection Agency, *Energy Recovery from the Combustion of Municipal Solid Waste (MSW)*, <a href="https://www.epa.gov/smm/energy-recovery-combustion-municipal-solid-waste-msw">https://www.epa.gov/smm/energy-recovery-combustion-municipal-solid-waste-msw</a> (last visited Jan 24, 2022).

<sup>&</sup>lt;sup>2</sup> U.S. Energy Information Admin., *Biomass explained, Waste-to-energy (Municipal Solid Waste), Basics*, <a href="https://www.eia.gov/energyexplained/biomass/waste-to-energy.php">https://www.eia.gov/energyexplained/biomass/waste-to-energy.php</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>3</sup> U.S. Energy Information Admin., *Biomass explained, Waste-to-energy (Municipal Solid Waste), In Depth, How waste-to-energy plants work*, <a href="https://www.eia.gov/energyexplained/biomass/waste-to-energy-in-depth.php">https://www.eia.gov/energyexplained/biomass/waste-to-energy-in-depth.php</a> (last visited Jan. 24, 2022).

<sup>4</sup> U.S. EIA, *supra* note 2.

<sup>&</sup>lt;sup>5</sup> *Id*.

<sup>&</sup>lt;sup>6</sup> *Id*.

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>&</sup>lt;sup>8</sup> *Id*.

<sup>&</sup>lt;sup>9</sup> *Id*.

<sup>10</sup> Id

<sup>&</sup>lt;sup>11</sup> U.S. EPA, *supra* note 1.

energy source, 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.

#### Municipal Solid Waste-to-Energy in Florida

For over thirty years, WTE has been an integral component of Florida's solid waste management program. <sup>12</sup> In the 1993 revisions to the 1988 Solid Waste Management Act, the Legislature recognized the need to use an integrated approach to municipal solid waste management by using waste reduction, recycling, WTE facilities, and landfills. <sup>13</sup>

Section 403.7061, F.S., relating to the requirements for review of new WTE facility capacity by the DEP, defines the term "waste-to-energy facility" as:

[A] facility that 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 and that produces electricity, steam, or other energy as a result. The term does not include facilities that primarily burn fuels other than solid waste even if such facilities also burn some solid waste as a fuel supplement. The 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.

Florida has the largest MSW burn capacity in the country. <sup>14</sup> The state went from having one small WTE plant in 1982 to operating twelve facilities. <sup>15</sup> The following counties have at least one facility:

- Bay;
- Broward;
- Miami-Dade;
- Hillsborough;
- Lake;
- Palm Beach;
- Pasco: and
- Pinellas.<sup>16</sup>

These counties are among Florida's most populous, accounting for 48 percent of Florida's population.<sup>17</sup>

<sup>&</sup>lt;sup>12</sup> See s. 403.7061(1), F.S.

<sup>13</sup> Id

<sup>&</sup>lt;sup>14</sup> Florida Department of Environmental Protection, *Waste-to-Energy*, <a href="https://floridadep.gov/waste/permitting-compliance-assistance/content/waste-energy">https://floridadep.gov/waste/permitting-compliance-assistance/content/waste-energy</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>15</sup> *Id*.

<sup>&</sup>lt;sup>16</sup> Florida Department of Environmental Protection, *Florida Waste-to-Energy Facilities*, https://floridadep.gov/sites/default/files/WTE\_Contacts-2016.pdf (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>17</sup> Florida Waste-to-Energy Coalition, *Fact Sheet*, (on file with the Senate Committee on Regulated Industries).

#### Florida Public Service Commission

The Florida Public Service Commission (PSC) is an arm of the legislative branch of government. The role of the PSC is to ensure that Florida's consumers receive utility services, including electric, natural gas, telephone, water, and wastewater, in a safe, reasonable, and reliable manner. In order to do so, the PSC exercises authority over public utilities in one or more of the following areas: (1) Rate or economic regulation; (2) Market competition oversight; and/or (3) Monitoring of safety, reliability, and service issues. In the legislative branch of the

#### **Public Utilities**

A public utility includes any person or legal entity supplying electricity or gas, including natural, manufactured, or similar gaseous substance, to or for the public within the state.<sup>21</sup> The term does not include municipal electric utilities and rural electric cooperatives.<sup>22</sup> Therefore, the PSC does not regulate the rates of publicly owned municipal or cooperative electric utilities.<sup>23</sup>

There are five investor-owned electric utility companies (IOU) in Florida: Florida Power & Light Company (FPL), Duke Energy Florida (Duke), Tampa Electric Company (TECO), Gulf Power Company (Gulf), and Florida Public Utilities Corporation. <sup>24</sup> IOU rates and revenues are regulated by the PSC. <sup>25</sup> These utilities must file periodic earnings reports, which allow the PSC to monitor earnings levels on an ongoing basis and adjust customer rates quickly if a company appears to be overearning. <sup>26</sup>

## **Public Utility Regulatory Policies Act (PURPA)**

In 1978, the federal government enacted the Public Utility Regulatory Policies Act (PURPA),<sup>27</sup> which required promotion of energy efficiency and use of renewables. The act requires utilities to purchase power, at the utility's full avoided cost, from "qualifying facilities," (QF) <sup>28</sup> which fall into two categories: qualifying small power production facilities and qualifying cogeneration facilities.<sup>29</sup> The PURPA directed the Federal Energy Regulatory Commission to implement the provisions, which in turn directed the states to implement the provisions. In response, the Florida

<sup>&</sup>lt;sup>18</sup> Section 350.001, F.S.

<sup>&</sup>lt;sup>19</sup> See Florida Public Service Commission, The PSC's Role, http://www.psc.state.fl.us (last visited Jan. 24, 2022).

 $<sup>^{20}</sup>$  Id.

<sup>&</sup>lt;sup>21</sup> Section 366.02(1), F.S.

<sup>&</sup>lt;sup>22</sup> *Id*.

<sup>&</sup>lt;sup>23</sup> See PSC, Florida PSC 2020 Annual Report, p. 13,

http://www.psc.state.fl.us/Files/PDF/Publications/Reports/General/Annualreports/2020.pdf (last visited Jan.24, 2022).

<sup>&</sup>lt;sup>24</sup> *Id.* FPL acquired Gulf in 2019 and merged as of January 3, 2022.

<sup>&</sup>lt;sup>25</sup> Florida Department of Agriculture and Consumer Services, *Electric Utilities*, <a href="https://www.fdacs.gov/Energy/Florida-Energy-Clearinghouse/Electric-Utilities">https://www.fdacs.gov/Energy/Florida-Energy-Clearinghouse/Electric-Utilities</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>26</sup> PSC, *supra* note 23, at p. 6.

<sup>&</sup>lt;sup>27</sup> 16 U.S.C. s. 2601 et seq.

<sup>&</sup>lt;sup>28</sup> Federal Energy Regulatory Commission, *PURPA Qualifying Facilities*, <a href="https://www.ferc.gov/qf">https://www.ferc.gov/qf</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>29</sup> *Id*.

Legislature created s. 366.051, F.S.,<sup>30</sup> directing utilities to purchase power from cogenerators or small power producers.<sup>31</sup>

#### Full Avoided Costs

A utility's full avoided cost is the incremental costs of electric energy or capacity, which, but for the purchase from cogenerators or small power producers, the utility would have to generate itself or purchase from another source.<sup>32</sup> Traditionally, the PSC has approved electric utility power purchase contracts that include provisions for payment, capacity, and energy based upon either the utility's cost to construct and operate its next planned generating unit or the cost of purchasing capacity and energy from generating units owned by other utilities in the interchange market.<sup>33</sup>

## **Power Purchase Agreements**

## Standard Offer Contract

IOUs must annually establish and file with the PSC a standard offer contract<sup>34</sup> with terms, conditions, and payments based on projected costs for each fossil-fueled generating unit type identified in the IOU's ten-year site plan.<sup>35</sup> Payment terms and conditions for QFs are based on the projected cost to construct and operate the IOU's next planned generation unit.<sup>36</sup> Essentially, the next planned unit becomes an avoided unit and the basis for the avoided costs.

## **Negotiated Contracts**

The standard offer contract provides a basis for developing negotiated contracts.<sup>37</sup> Rule 25-17.240 of the Florida Administrative Code encourages IOUs and generating facilities to negotiate contracts for firm capacity and energy to provide fuel diversity, fuel price stability, and energy security.

<sup>&</sup>lt;sup>30</sup> Chapter 89-292, s. 4, Laws of Fla.

<sup>&</sup>lt;sup>31</sup> Rule 25-17.082 of the Florida Administrative Code, is the PSC's rule on the utility's obligation to purchase.

<sup>&</sup>lt;sup>32</sup> Section 366.051, F.S.

<sup>&</sup>lt;sup>33</sup> Florida Public Service Commission, *States' Electric Restructuring Activities Update: Wholesale Sales* http://www.psc.state.fl.us/Publications/ElectricRestructuringDetails#4 (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>34</sup> The following are the most recent PSC orders approving the standard offer contracts for the following IOUs:

<sup>•</sup> FPL: http://www.floridapsc.com/library/filings/2021/07682-2021/07682-2021.pdf;

<sup>•</sup> Duke: <a href="http://www.floridapsc.com/library/filings/2021/08111-2021/08111-2021.pdf">http://www.floridapsc.com/library/filings/2021/08111-2021/08111-2021.pdf</a>:

TECO: http://www.floridapsc.com/library/filings/2021/08419-2021/08419-2021.pdf; and

<sup>•</sup> Gulf: <a href="http://www.floridapsc.com/library/filings/2021/07681-2021/07681-2021.pdf">http://www.floridapsc.com/library/filings/2021/07681-2021/07681-2021.pdf</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>35</sup> Fla. Admin. Code R. 25-17.250. Each electric utility must submit a ten-year site plan to the PSC, estimating the utility's power generating needs and general locations for proposed power plant sites over a ten-year planning horizon. Section 186.801, F.S.; Fla. Public Service Commission, *Review of The 2021 Ten-Year Site Plan of Florida's Electric Utilities*, p. 9, <a href="http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2021/Review.pdf">http://www.psc.state.fl.us/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2021/Review.pdf</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>36</sup> See Florida Public Service Commission, 2022 Legislative Bill Analysis for SB 1764, p. 1 (Jan. 20, 2022) (on file with the Senate Committee on Regulated Industries).

<sup>37</sup> Id.

The PSC addresses petitions by IOUs for approval of cost recovery of negotiated contracts between the IOU and the QFs.<sup>38</sup> The PSC's review considers various matters including whether the contract is at or below the IOU's avoided cost and will be considered prudent if it can be reasonably expected to defer or avoid an additional generation unit.<sup>39</sup>

#### As-available contract

"As-available" energy contracts are an option for QFs, including MSWE facilities. <sup>40</sup> These contracts are not subject to the PSC's approval but must be filed with the PSC within ten working days of being signed. <sup>41</sup> As-available energy is energy produced and sold on an hour-by-hour basis for which contractual commitments regarding the quantity and time of delivery are not required. <sup>42</sup> As-available energy is purchased at a rate equal to the utility's hourly incremental system fuel cost, which reflects the highest fuel cost of generation each hour. <sup>43</sup>

According to the PSC, the following four facilities receive as-available energy cost payments from FPL:

- Broward County Resource Recovery South AA QF;
- Brevard County;
- Miami Dade Resource Recovery; and
- Lee County Solid Waste.

## Firm Capacity Payments

If a QF can meet certain contractual provisions as to the quantity, time, and electricity delivery reliability, it is eligible for both capacity payments and energy payments under a firm contract.<sup>44</sup> Capacity is the maximum electric output, in megawatts, that an electricity generator can produce under ideal conditions.<sup>45</sup>

To promote alternative and renewable energy generation, the PSC requires IOUs to offer multiple capacity payment options, including early payments or levelized payments.<sup>46</sup> The different payment options allow QFs flexibility to best meet their financial needs.<sup>47</sup> If an early capacity payment option is selected, then the QF will begin receiving capacity payments earlier than the in-service date of the avoided unit and payments will generally be lower in the later years of the contract.<sup>48</sup>

<sup>&</sup>lt;sup>38</sup> *Id*.

<sup>&</sup>lt;sup>39</sup> Fla. Admin. Code R. 25-17.240; PSC, *supra* note 36, at p. 2.

<sup>&</sup>lt;sup>40</sup> PSC, *supra* note 36, at p. 1.

<sup>&</sup>lt;sup>41</sup> Fla. Admin. Code R. 25-17.0825(1)(b); PSC, *supra* note 36, at p. 2.

<sup>&</sup>lt;sup>42</sup> Fla. Admin. Code R. 25-17.0825.

<sup>&</sup>lt;sup>43</sup> Fla. Admin. Code R. 25-17.0825(2)(a); PSC, *supra* note 36, at p. 2.

<sup>&</sup>lt;sup>44</sup> Fla. Admin. Code R. 25-17.0832(1); PSC, *supra* note 36, at p. 1.

<sup>&</sup>lt;sup>45</sup> See U.S. Energy Information Administration, *What is the difference between electricity generation capacity and electricity generation?*, <a href="https://www.eia.gov/tools/faqs/faq.php?id=101&t=3">https://www.eia.gov/tools/faqs/faq.php?id=101&t=3</a> (last visited Jan. 24, 2022).

<sup>&</sup>lt;sup>46</sup> PSC, *supra* note 36, at p. 1.

<sup>47</sup> Id.

<sup>&</sup>lt;sup>48</sup> *See* Notice of Proposed Agency Action Order Approving Revised Standard Offer Contract, p. 2, <a href="http://www.floridapsc.com/library/filings/2021/07682-2021/07682-2021.pdf">http://www.floridapsc.com/library/filings/2021/07682-2021/07682-2021.pdf</a> (last visited Jan. 24, 2022).

According to the PSC, the following six facilities are operating under active firm contracts with their host IOU:

- Pinellas County Resource Recovery, with Duke, ending December 2024;
- Pasco County Resource Recovery, with Duke, ending December 2024;
- Broward County Resource Recovery South QF, with FPL, ending December 2026;
- Palm Beach County Solid Waste Authority 1, with FPL, ending March 2034;
- Palm Beach County Solid Waste Authority 2, with FPL, ending March 2034; and
- Bay County/Engen LLC, with FPL/Gulf, ending July 2023.<sup>49</sup>

#### **Commercial Retail Rate**

Commercial retail rates vary across utilities. Each IOU has various rate levels pursuant to tariffs approved by the PSC. The retail rate depends on the kilowatt demand that a commercial customer places on an IOU's system. Demand provides an indication of the customer's load size. Demand is based on the highest usage over a specified time interval. Demand is intended to allow a utility to recover the fixed cost of maintaining its facilities, including generation, transmission, and distribution, which must be able to meet a customer's highest electricity needs.<sup>50</sup>

The following table, published in the PSC's Comparative Rate Statistics,<sup>51</sup> reflects the commercial retail rates among the IOUs, as of December 31, 2020, and how rates change for specific commercial customers based on demand, which is measured in kilowatts, and actual energy used, which is measured in kilowatt hours.<sup>52</sup>

Investor-Owned Electric Utilities

Typical Electric Bill Comparisons \* - Commercial / Industrial

December 31, 2020

	KW Demand						
			75	150	500	1,000	2,000
Utility	KWH						
	750	1,500	15,000	45,000	150,000	400,000	800,000
Florida Power & Light Company	\$76	\$142	\$1,553	\$3,766	\$13,025	\$30,077	\$59,498
Duke Energy Florida, LLC	\$106	\$199	\$1,847	\$4,692	\$15,606	\$37,938	\$75,862
Tampa Electric Company	\$83	\$148	\$1,588	\$3,816	\$12,650	\$29,740	\$59,450
Gulf Power Company	\$116	\$207	\$1,747	\$4,618	\$15,267	\$36,172	\$72,081
Florida Public Utilities Company							
Northwest	\$108	\$187	\$1,611	\$4,326	\$14,501	\$36,241	\$72,323
Northeast	\$108	\$187	\$1,611	\$4,326	\$14,501	\$36,241	\$72,323

<sup>\*</sup> Excludes local taxes, franchise fees, and gross receipts taxes that are billed as a separate line item. Includes cost recovery clause factors effective December 2020.

<sup>&</sup>lt;sup>49</sup> PSC, *supra* n. 36, p. 2.

<sup>&</sup>lt;sup>50</sup> Id.

<sup>&</sup>lt;sup>51</sup> Florida Public Service Commission, *Comparative Rate Statistics*, Dec. 31, 2020, A-4, <a href="http://www.floridapsc.com/Files/PDF/Publications/Reports/General/Comparative/December%2031,%202020.pdf">http://www.floridapsc.com/Files/PDF/Publications/Reports/General/Comparative/December%2031,%202020.pdf</a> (last visited Ian 24, 2022)

<sup>&</sup>lt;sup>52</sup> See PSC, supra note 36, at p. 3. Although Gulf merged with FPL, the retail rates for the Florida panhandle service area were not consolidated with FPL's peninsula service area until 2022.

## III. Effect of Proposed Changes:

The bill provides a preamble stating:

• It is in the public interest to promote the development of renewable energy resources in Florida, under s. 366.91, F.S.;

- MSWE facilities using biomass as fuel or an energy source are deemed to be producing renewable energy, under 366.91, F.S.;
- MSWE facilities provide a practical and sustainable solution to reducing landfill waste, reducing volume by about 87 percent;
- The Legislature recognizes the benefits that MSWE facilities contribute to Florida and its local communities; and
- The Legislature intends to incentivize the production and sale of energy from MSWE facilities through grant programs.

**Section 1** creates s. 377.814, F.S., establishing the MSWE Program, within the Department of Agriculture and Consumer Services (DACS), comprised of a financial assistance grant program and an incentive grant program.

The stated purpose of the program is to provide financial assistance grants and incentive grants to MSWE facilities in order to incentivize the production and sale of energy and reduce waste disposed of in landfills.

The bill defines the following:

- "Department" means the Department of Agriculture and Consumer Services.
- "Municipal solid waste-to-energy facility" means publicly owned or government affiliate-owned facilities using an enclosed device with controlled combustion to thermally break down solid waste to an ash residue containing little or no combustible material, producing electricity, steam, or other energy. It does not include facilities primarily burning fuels other than solid waste; nor facilities primarily burning 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.

The Financial Assistance Grant will provide municipal solid waste-to-energy (MSWE) facilities funding at a rate of 2 cents per kilowatt-hour of electricity purchased by an electric utility during the preceding state fiscal year, not to exceed the difference between the electric utility's avoided cost and the commercial retail rate. If funds are insufficient to cover every qualifying kilowatt-hour from all qualifying applicants, the DACS must prorate the available funds on an equitable basis, taking into consideration the commercial retail rate within the applicable service territory.

To qualify, the facility must have previously entered into a power purchase agreement with an electric utility that included capacity payments which the facility will no longer receive under the agreement. The facility owner must submit an application to the DACS, including the MSWE facility's name and the amount of energy purchased from the facility by an electric utility during the preceding state fiscal year.

The bill requires the DACS to establish a process in coordination with the PSC to verify eligibility and the amount of energy purchased from the facility.

The incentive grant will provide facilities with matching funds on a dollar-for-dollar basis to assist with planning and design for constructing, upgrading, or expanding MSWE facilities, including necessary legal or administrative expenses.

To qualify, the facility owner must apply to the DACS and demonstrate that the project is cost-effective, permittable, and implementable and complies with s. 403.7061, F.S., which establishes the requirements for review of new WTE facility capacity by the DEP.

The bill requires the DEP to assist the DACS with determining eligibility and with establishing requirements to ensure long-term and efficient operation and maintenance of such facilities.

The DACS must perform adequate overview of applications and awards, including technical review, regular inspections, disbursement approvals, and auditing. If the DACS determines that program requirements are not being met, the bill requires termination or repayment of incentive grant funds.

The bill requires appropriated funds to be used first for financial assistance grants and then remaining funds may be used for incentive grants.

The bill requires the DACS to adopt rules to implement and administer the program. The rules must:

- Establish an application processes for both grant types;
- Include application deadlines; and
- Establish supporting documentation to be provided to the DACS.

Rules for the financial assistance grant program, must be developed by the DACS in consultation with the PSC.

Rules for the incentive grant program, must be developed by the DACS in consultation with the DEP.

**Section 2** appropriates \$100 million in recurring funds from the General Revenue Fund to the DACS for the 2022-2023 fiscal year.

**Section 3** provides that the bill is effective July 1, 2022.

#### IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

None.

B. Public Records/Open Meetings Issues:

None.

C. Trust Funds Restrictions:

None.

D. State Tax or Fee Increases:

None.

E. Other Constitutional Issues:

None.

## V. Fiscal Impact Statement:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill may result in a positive impact to private companies that own a government affiliated WTE facility and qualify for a grant.

C. Government Sector Impact:

The bill may result in a positive impact to county's which own a MSWE facility that qualify for funds under the grant program.

The bill will likely result in an increased workload for staff of the DACS, the PSC, and the DEP in administering the grant program. The PSC anticipates that its added workload can be handled by existing staff.<sup>53</sup>

#### VI. Technical Deficiencies:

None.

## VII. Related Issues:

According to the PSC, the bill is unclear regarding the determination of a utility's avoided cost. While the IOU's payments to municipal solid waste facilities are reported to the PSC, the IOU's avoided costs are not revisited during the term of a contract after it has been approved. The bill is unclear regarding the applicable commercial retail rate. There is more than one commercial retail rate approved for each IOU.<sup>54</sup>

<sup>&</sup>lt;sup>53</sup> PSC, *supra* note 36, at p. 4.

<sup>&</sup>lt;sup>54</sup> *Id.* at p. 5.

#### VIII. **Statutes Affected:**

This bill creates section 377.814 of the Florida Statutes.

#### IX. **Additional Information:**

A.

Committee Substitute – Statement of Changes: (Summarizing differences between the Committee Substitute and the prior version of the bill.)

None.

B. Amendments:

None.

This Senate Bill Analysis does not reflect the intent or official position of the bill's introducer or the Florida Senate.

Florida Senate - 2022 SB 1764

By Senator Albritton

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26-01462A-22 20221764

A bill to be entitled An act relating to the Municipal Solid Waste-to-Energy Program; creating s. 377.814, F.S.; creating the Municipal Solid Waste-to-Energy Program within the Department of Agriculture and Consumer Services for a specified purpose; defining terms; requiring the department, subject to appropriation, to provide financial assistance grants to municipal solid wasteto-energy facilities that meet certain requirements; 10 requiring the department to distribute funds to 11 qualifying applicants based on certain criteria; 12 requiring the department to establish a process to 13 verify the amount of certain electric power purchases; 14 directing the Public Service Commission to provide 15 assistance in verifying grant eligibility; requiring 16 the department, subject to appropriation, to provide 17 incentive grants to municipal solid waste-to-energy 18 facilities to assist with certain costs; specifying 19 requirements for applying for the funding; requiring 20 the Department of Environmental Protection to provide 21 assistance in determining grant eligibility and 22 establishing requirements; requiring the department to 23 perform grant overview; establishing priority for 24 funding for the grants; requiring the Department of 25 Agriculture and Consumer Services to adopt rules; 26 providing an appropriation; providing an effective 27 date. 28

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WHEREAS, as provided in s. 366.91(1), Florida Statutes, the

 ${f CODING:}$  Words  ${f stricken}$  are deletions; words  ${f underlined}$  are additions.

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30	Legislature has determined that it is in the public interest to
31	promote the development of renewable energy resources in this
32	state, and
33	WHEREAS, under s. 366.91, Florida Statutes, municipal solid
34	waste-to-energy facilities that use biomass as a fuel or energy
35	source are deemed to be producing renewable energy, and
36	WHEREAS, municipal solid waste-to-energy facilities provide
37	a practical and sustainable solution to reducing landfill waste,
38	reducing volume by about 87 percent, and
39	WHEREAS, the Legislature recognizes the benefits that
40	municipal solid waste-to-energy facilities contribute to the
41	state and its local communities, and
42	WHEREAS, the Legislature intends to incentivize the
43	production and sale of energy from municipal solid waste-to-
44	energy facilities through grant programs, NOW, THEREFORE,
45	
46	Be It Enacted by the Legislature of the State of Florida:
47	
48	Section 1. Section 377.814, Florida Statutes, is created to
49	read:
50	377.814 Municipal Solid Waste-to-Energy Program
51	(1) CREATION AND PURPOSE OF THE PROGRAM.—The Municipal
52	Solid Waste-to-Energy Program is created within the department.
53	The purpose of the program is to provide financial assistance
54	grants and incentive grants to municipal solid waste-to-energy
55	facilities to incentivize the production and sale of energy from
56	municipal solid waste-to-energy facilities while also reducing
57	the amount of waste that would otherwise be disposed of in a
58	<pre>landfill.</pre>
,	

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- (2) DEFINITIONS.-For purposes of this section, the term:
- $\underline{\mbox{(a) "Department" means the Department of Agriculture and}}$  Consumer Services.

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- (b) "Municipal solid waste-to-energy facility" means a publicly owned or government affiliate-owned facility that uses an enclosed device using controlled combustion to thermally break down solid waste to an ash residue that contains little or no combustible material and that produces electricity, steam, or other energy as a result. The term does not include facilities that primarily burn fuels other than solid waste even if such facilities also burn some solid waste as a fuel supplement. The term does not include facilities that primarily 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.
- (3) FINANCIAL ASSISTANCE GRANT PROGRAM.—The department, subject to appropriation, shall provide financial assistance grants to municipal solid waste-to-energy facilities that have entered into a power purchase agreement with an electric utility which includes capacity payments and the municipal solid waste-to-energy facility will no longer receive capacity payments under the agreement.
- (a) To receive a financial assistance grant, the owner of a municipal solid waste-to-energy facility must submit an application to the department. The application must include the name of the applicant's municipal solid waste-to-energy facility and how much energy has been purchased from the facility by an electric utility during the preceding state fiscal year.

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Florida Senate - 2022 SB 1764

88 (b) The department shall distribute funds, subject to
89 appropriation, to each qualifying applicant at a rate of 2 cents
90 per kilowatt-hour of electric power purchased by an electric

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91 <u>utility during the preceding state fiscal year, not to exceed</u>
92 the difference between the electric utility's avoided cost and

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93 the commercial retail rate. To the extent that funds are not 94 available to provide financial assistance to each qualifying

95 applicant for every qualifying kilowatt-hour purchased, the
96 department shall prorate the funds on an equitable basis, taking

97 <u>into consideration the commercial retail rate within the</u> 98 applicable service territory.

(c) The department shall establish a process to verify the amount of electric power purchased from a municipal solid waste-to-energy facility by an electric utility during each preceding state fiscal year. The Public Service Commission shall provide assistance to the department to help verify grant eligibility and award amounts and to ensure that the sum, per kilowatt-hour, of the award plus the electric utility's purchase at the avoided cost, do not exceed the applicable commercial retail rate within

107 the service territory.

108 (4) INCENTIVE GRANT PROGRAM.—The department, subject to
109 appropriation, shall provide incentive grants to municipal solid

waste-to-energy facilities to assist with the planning and designing for constructing, upgrading, or expanding a municipal solid waste-to-energy facility, including necessary legal or

solid waste-to-energy facility, including necessary legal o administrative expenses.

(a) To qualify for an incentive grant, the owner of a
municipal solid waste-to-energy facility must apply to the
department for funding; provide matching funds on a dollar-for-

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dollar basis; and demonstrate that the project is costeffective, permittable, and implementable and complies with s. 403.7061.

- (b) The Department of Environmental Protection shall provide assistance to the department in determining the eligibility of grant applications and establishing requirements to ensure the long-term and efficient operation and maintenance of facilities constructed or expanded under an incentive grant.
- (c) The department shall perform adequate overview of each grant application and grant award, including technical review, regular inspections, disbursement approvals, and auditing, to implement this section.
- (d) The department shall require the termination or repayment of incentive grant funds if the department determines that program requirements are not being met.
- (5) FUNDING.—Funds appropriated for the Municipal Solid Waste-to-Energy Program must first be used for financial assistance grants. Any funds remaining in a state fiscal year after disbursement to all qualifying applicants may be used to fund the incentive grant program.
- (6) RULES.—The department shall adopt rules to implement and administer this section, including establishing grant application processes for financial assistance grants and incentive grants. The rules shall include application deadlines and establish the supporting documentation necessary to be provided to the department. In adopting rules relating to the financial assistance grant program, the department shall consult the Public Service Commission. In adopting rules for the incentive grant program, the department shall consult the

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Florida Senate - 2022 SB 1764

146	Department of Environmental Protection.
147	Section 2. For the 2022-2023 fiscal year, the sum of \$100
148	million in recurring funds is appropriated from the General
149	Revenue Fund to the Department of Agriculture and Consumer
150	Services for the Municipal Solid Waste-to-Energy Program, as
151	provided in s. 377.814, Florida Statutes.
152	Section 3. This act shall take effect July 1, 2022.

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# WASTE-TO-ENERGY IS CRITICAL INFRASTRUCTURE FOR FLORIDA

HILLSBOROUGH COUNTY LEE COUNTY
SOLID WASTE AUTHORITY OF PALM BEACH COUNTY
PASCO COUNTY PINELLAS COUNTY CITY OF TAMPA MIAMI-DADE COUNTY

## **Fact Sheet**

#### **Florida**

- Per Florida Statute Ch. 403.706, counties in Florida are charged with "the operation of solid waste facilities that meet the needs of all incorporated and unincorporated areas of the county."
- Florida has 10 WTE facilities, more than any other state.
- The counties in which WTE provides the primary method of solid waste disposal are Florida's most populous and economically vibrant communities. These counties account for <u>48 percent of the Florida's population</u> and <u>more than half of Florida's economy</u>.

#### **Environmental**

- Florida's 10 WTE facilities annually:
  - Avoid the landfilling of 6.5 million tons of solid waste. (Imagine a building with a foundation the size of a football field. It would take a 1,300-story building – more than 12 Empire State buildings – to accommodate 6.5 million tons of waste.
  - o Reduce greenhouse gas emissions by 6.5 million tons of CO<sub>2</sub>.
  - o Recycle 212,000 tons of metal, enough to build 156,000 cars.
- Although landfills are the primary alternative to Waste-to-Energy, methane emitted by landfills is the second largest contributor to global climate change. New data show methane is even more damaging than previously thought. (Source: Scientific Truth about Waste-to-Energy, Castaldi, City College of New York, May 2021)
- Every ton of waste processed in a WTE facility avoids a ton of CO2 equivalent emissions, when the Greenhouse Gas savings from recycling recovered metals are included. Nationally, 700,000 tons of metal are recovered and recycled annually in WTE facilities. (Source: Castaldi)

#### **Economic**

- Financially, Florida's WTE facilities are supported by three streams of revenue: Tipping fees, electricity sales and the sale of recyclable metals.
- Federal law (PURPA) requires utilities to purchase power from "qualified independent power producers, (i.e., WTE facilities), but allows states to determine the pricing formula, also known as the "standard offer."
- Over the past 20 years, changes in how the Florida calculates the basis of the standard offer have dramatically reduced what utilities are willing to pay for WTE-generated electricity.
- The future ability of Florida most populous counties to serve solid-waste ratepayers with WTE depends on the incentives utilities can count on to purchase WTE-generated power.

Date: January 19, 2022

Agency Affected:Public Service CommissionTelephone: (850)413-6524Program Manager:Kaley SlatteryTelephone: (850)413-6125Agency Contact:Kaley SlatteryTelephone: (850)413-6125Respondent:Katherine PenningtonTelephone: (850)413-6596

RE: SB 1764

#### I. SUMMARY

SB 1764, filed by Senator Albritton, creates the Municipal Solid Waste-to-Energy Program within the Department of Agriculture and Consumer Services (DACS). The program requires DACS, subject to appropriation, to provide financial assistance grants to Municipal Solid Waste-to-Energy facilities that meet certain requirements. The program also requires DACS to establish a process to verify the amount of certain electric power purchases. The Florida Public Service Commission (PSC or Commission) is to provide assistance to DACS to help verify grant eligibility and award amounts. The bill would take effect July 1, 2022.

#### II. PRESENT SITUATION

In 1978, the U.S. Congress enacted the Public Utility Regulatory Policies Act (PURPA). PURPA requires utilities to purchase electricity from cogeneration facilities and renewable energy power plants with a capacity no greater than 80 MW (collectively referred to as Qualifying Facilities or QFs). PURPA required the electric investor-owned utilities (IOUs) to buy electricity from QFs at the IOU's full avoided cost. These costs are defined in Section 366.051, Florida Statutes (F.S.), which provides in part that:

A utility's "full avoided costs" are the incremental costs to the utility of the electric energy or capacity, or both, which, but for the purchase from cogenerators or small power producers, such utility would generate itself or purchase from another source.

If a QF can meet certain contractual provisions as to the quantity, time, and reliability of the delivery of electricity, it is eligible for capacity and energy payments under a firm contract. Rule 25-17.250, Florida Administrative Code (F.A.C.), requires each IOU to establish a standard offer contract with terms, conditions, and payments based on the projected cost of each fossil-fueled generating unit type identified in the utility's annual Ten-Year Site Plan¹ that is filed with the Commission. The projected costs to construct and operate the next planned unit becomes the basis for payment terms and conditions for new or renegotiated QF contracts. In this way, the next planned unit becomes the IOU's avoided unit and basis of avoided cost. The annual Ten-Year Site Plan process allows for recognition of technology, environmental, cost, and other changes over time that affect the timing of new generating capacity to maintain reliable service.

In order to promote alternative and renewable energy generation, the Commission requires the IOUs to offer multiple options for capacity payments, including the options to receive early (prior to the in-service date of the avoided-unit) or levelized payments. The different payment options allow QFs, such as municipal solid waste facilities, the ability to select the payment option that best fits its financing requirements. The standard offer contract provides a basis from which negotiated contracts can be developed, should they elect to enter into such a contract. The Commission addresses IOU petitions for

<sup>&</sup>lt;sup>1</sup> http://www.floridapsc.com/Files/PDF/Utilities/Electricgas/TenYearSitePlans/2021/Review.pdf

approval for cost recovery of negotiated contract agreements between the IOU and QFs. Commission review considers various matters including whether the contract is at or below the IOU's avoided cost.

A QF may sell energy to an IOU when the QF chooses to operate under an "as-available" energy contract. As-available energy is energy produced and sold on an hour-by-hour basis for which contractual commitments regarding the quantity and time of delivery are not required. As-available energy is purchased at a rate equal to the utility's hourly incremental system fuel cost, which reflects the highest fuel cost of generation each hour. As-available energy sales is an option that QFs, including municipal solid waste facilities may elect to pursue and these contracts are not brought to the Commission for approval.

Currently, six municipal solid waste facilities have payments based on firm contract terms and four receive payments based on the host IOU's as-available energy cost. The following table provides a listing of the municipal solid waste facilities providing renewable energy, contract expiration dates for those with firm contracts, and links to key Commission documents. Each IOU's payments for capacity and energy are reported to the Commission as part of the Commission's annual Fuel and purchased power cost recovery clause. An IOU may request that a given amount may be treated as confidential under Section 366.093(3), F.S.

IOU	Purchased From	Gross Capacity	MWH Purchased	End	Commission Document Nos.		
100	T dremased T Tom	(MW) Capacity Turchased (2020) Date		Date	Order	Contract	
DEF	Pinellas County Resource	45	441 211	12/2024	<u>05904-2010.pdf</u>	11048-2009.pdf	
DEF	Recovery	43	441,211	12/2024	03829-2005.PDF	13227-2004.PDF	
DEF	Pasco County Resource Recovery	26	192,363	12/2024	<u>09080-1989.pdf</u>	04233-1989.pdf	
FPL	Broward County Resource Recovery - South QF	68	54,129	12/2026	<u>02426-1992.pdf</u>	12087-1991.pdf	
FPL	Palm Beach County Solid Waste Authority 1	55	350,303	3/2034	<u>04629-2011.pdf</u>	<u>00185-2011.pdf</u>	
FPL	Palm Beach County Solid Waste Authority 2	90	546,546	3/2034	<u>04629-2011.pdf</u>	<u>00185-2011.pdf</u>	
FPL (Gulf)	Bay County/Engen, LLC	13	51,683	7/2023	<u>09948-2017.pdf</u>	<u>06468-2017.pdf</u>	
FPL	Broward County Resource Recovery - South AA QF*	68	50,358	N/A	N/A	N/A	
FPL	Brevard County*	6	45,763	N/A	N/A	N/A	
FPL	Miami Dade Resource Recovery*	77	55,917	N/A	N/A	N/A	
FPL	Lee County Solid Waste*	59	40,119	N/A	N/A	N/A	

Notes: FPL: Florida Power & Light Company

DEF: Duke Energy Florida, LLC

Gulf: Gulf Power Company has been has been merged with FPL. N/A: These four facilities receive only as-available energy payments.

MW: 1 Megawatt = 1,000 kilowatts (KW)

MWH: Megawatt hour

\*: As-available energy contract

Each of the IOUs have various levels of retail rates offered to commercial customers pursuant to Commission approved tariffs. The amount of demand (kilowatt or KW) a commercial customer places on an IOU's system is an indicator of the size of the customer load and energy usage. This data is also an indicator of the level of costs that an IOU must recover from a commercial customer to address the IOU's expenses for the maintenance of a reasonable level of generation resources, transmission and distribution facilities, as well as ensuring an adequate supply of energy to address a commercial customer's needs. The following table<sup>2</sup> is indicative of the IOU's commercial retail rates and shows how the rates change for specific commercial customer demand and energy usage levels. Even though Gulf Power Company has been merged with Florida Power & Light Company (FPL) the retail rates for the Florida panhandle service area were not consolidated with the retail rates of FPL's peninsula service area until 2022.<sup>3</sup>

Investor-Owned Electric Utilities

Typical Electric Bill Comparisons \* - Commercial / Industrial

December 31, 2020

	KW Demand						
			75	150	500	1,000	2,000
Utility	кwн						
	750	1,500	15,000	45,000	150,000	400,000	800,000
Florida Power & Light Company	\$76	\$142	\$1,553	\$3,766	\$13,025	\$30,077	\$59,498
Duke Energy Florida, LLC	\$106	\$199	\$1,847	\$4,692	\$15,606	\$37,938	\$75,862
Tampa Electric Company	\$83	\$148	\$1,588	\$3,816	\$12,650	\$29,740	\$59,450
Gulf Power Company	\$116	\$207	\$1,747	\$4,618	\$15,267	\$36,172	\$72,081
Florida Public Utilities Company							
Northwest	\$108	\$187	\$1,611	\$4,326	\$14,501	\$36,241	\$72,323
Northeast	\$108	\$187	\$1,611	\$4,326	\$14,501	\$36,241	\$72,323

<sup>\*</sup> Excludes local taxes, franchise fees, and gross receipts taxes that are billed as a separate line item. Includes cost recovery clause factors effective December 2020.

<sup>&</sup>lt;sup>2</sup> http://www.floridapsc.com/Files/PDF/Publications/Reports/General/Comparative/December%2031,%202020.pdf

<sup>&</sup>lt;sup>3</sup> Order Nos. PSC-2021-0466-S-EI and PSC-2021-0466A-S-EI, Docket No. 20210015-EI, <u>In re: Petition for rate increase by Florida Power & Light Company</u>

#### III. EFFECT OF PROPOSED CHANGES

The bill would establish the Financial Assistance Grant Program within DACS to provide funding to municipal solid waste facilities. The bill requires the Commission to provide assistance to DACS to help verify grant eligibility for municipal solid waste-to-energy facility applications. The bill also requires the Commission to provide assistance to DACS by annually verifying award amounts and ensuring that the sum per kilowatt-hour of the award plus the electric utility's purchase at the avoided cost do not exceed the applicable commercial retail rate within the service territory.

The bill also requires DACS to use an IOU's commercial rate. As previously discussed, each IOU offers various commercial rates as represented by their tariffs. The use of different commercial rates would result in differences in grant funding. Additionally, the IOU's rates may collect applicable local taxes, franchise fees, and gross receipt taxes. The bill does not specify whether these additional charges are to be included in determining and verifying DACS's award amounts.

The bill takes effect July 1, 2022.

#### IV. ESTIMATED FISCAL IMPACTS ON STATE AGENCIES:

The only increased workload from this bill is its requirement that the Commission provide assistance to DACS to help verify grant eligibility and award amounts. The increased workload is expected to be handled by existing staff.

	(FY 22-23) Amount / FTE	(FY 23-24) <u>Amount / FTE</u>	(FY 24-25) Amount / FTE
A. Revenues			
1. Recurring	\$0/0 FTE	\$0/0 FTE	\$0/0 FTE
2. Non-Recurring	\$0/0 FTE	\$0/0 FTE	\$0/0 FTE
B. Expenditures			
1. Recurring	\$0/0 FTE	\$0/0 FTE	\$0/0 FTE
2. Non-Recurring	\$0/0 FTE	\$0/0 FTE	\$0/0 FTE

#### V. ESTIMATED FISCAL IMPACTS ON LOCAL GOVERNMENTS:

The annual DACS grants to a municipal solid waste facility owner/operator could make operation of the municipal solid waste facility owner/operator more profitable if the facility is owned and/or operated by a governmental entity.

#### VI. ESTIMATED IMPACTS ON PRIVATE SECTOR:

The annual DACS grants to a municipal solid waste facility owner/operator could make operation of the municipal solid waste facility owner/operator more profitable if the facility is owned and/or operated by a private entity.

#### VII. LEGAL ISSUES

A. Does the proposed legislation conflict with existing federal law or regulations? If so, what laws and/or regulations?

No.

B. Does the proposed legislation raise significant constitutional concerns under the U.S. or Florida Constitutions (e.g. separation of powers, access to the courts, equal protection, free speech, establishment clause, and impairment of contracts)?

No.

C. Is the proposed legislation likely to generate litigation and, if so, from what interest groups or parties?

No.

D. Other

None.

#### VIII. COMMENTS

Section (3) of bill is unclear as to the status of capacity payments pursuant to a purchased power agreement. If a municipal solid waste facility enters into a firm contract for capacity and energy, then the facility will receive capacity payments pursuant to the terms of the contract and for the duration of the contract. If the contract expires, the facility may choose to enter into an as-available contract with an IOU that does not include a capacity payment.

Section (3)(b) of the bill is unclear regarding the determination of a utility's avoided cost. While the IOU's payments to municipal solid waste facilities are reported to the Commission, the IOU's avoided costs are not revisited during the term of a contract after it has been approved.

Sections (3)(b) and (c) of the bill are unclear regarding the applicable commercial retail rate. There is more than one commercial retail rate approved for each IOU.

Prepared by: Alex Massiah and Matthew Jones



## The Florida Senate

## **Committee Agenda Request**

То:	Senator Travis Hutson, Chair Committee on Regulated Industries					
Subject:	Committee Agenda Request					
Date:	January 13, 2022					
I respectfully request that <b>Senate Bill #1764</b> , relating to Municipal Solid Waste-to-Energy Program, be placed on the:						
	committee agenda at your earliest possible convenience.					
	next committee agenda.					

Senator Ben Albritton Florida Senate, District 26



# FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES COMMISSIONER NICOLE "NIKKI" FRIED

January 24, 2022

Agency Affected: Dept. of Agriculture and Consumer Services

Telephone: 850-617-7000

Agency Contact: Carlos Nathan, Legislative Affairs Director

Senate Bill Number: 1764

Senate Bill Sponsor: Sen. Albritton

Bill Title: Municipal Solid Waste-to-Energy Program

Effective Date: July 1, 2022

Similar Bill(s): Yes \( \) No \( \)

Similar Bill(s):

#### 1. SUMMARY

The bill establishes the Municipal Solid Waste-to-Energy Program within the Florida Department of Agriculture and Consumer Services (FDACS), composed of two grants to be made available to qualifying municipal solid waste-to-energy (WTE) facilities. The bill provides for funding of \$100 Million, recurring, from General Revenue.

#### 2. PRESENT SITUATION

Identical Bill: Yes ⊠ No ☐ Identical Bill: 1419 by Mariano

Part III of Chapter 377, F.S., relates to renewable energy and green government programs, and includes the following statement of purpose:

"This Act is intended to provide incentives for Florida's citizens, businesses, school districts, and local governments to take action to diversify the state's energy supplies, reduce dependence on foreign oil, and mitigate the effects of climate change by providing funding for activities designed to achieve these goals. The grant programs in this act are intended to stimulate capital investment in and enhance the market for renewable energy technologies and technologies intended to diversify Florida's energy supplies, reduce dependence on foreign oil, and combat or limit climate change impacts."

Subsection 366.91(2), F.S., provides that "renewable energy" means electrical energy produced from specified sources, including biomass from municipal solid waste (MSW).

Subsection 403.703(36), F.S., defines "Solid waste disposal facility" as a "facility that is the final resting place for solid waste, including landfills and incineration facilities that produce ash from the process of incinerating municipal solid waste."

#### Waste to Energy

WTE technology can be traced back to late 19<sup>th</sup> century furnace incinerators, called "destructors," developed primarily for public sanitation purposes by municipal engineers in the United Kingdom. Waste incineration's continued industrial usage has helped achieve reduction of mass and volume of waste, the destruction of dangerous organic compounds and pathogens, and increasingly, as a method for generating utility-scale power production. Technological advancements to WTE facilities have been made over the past few decades, related to the equipment used for waste combustion on a moving grate, and improved methods of flue gas cleaning. It remains necessary, in the regular operation of a WTE facility, to add other fuels, such as natural gas, coal and wooden biomass to the waste in order to increase the heating value to the point of combustion.<sup>2</sup>

There are 77 WTE facilities in the United States, with eleven located in Florida. WTE presents the opportunity to turn MSW disposal problems into potentially valuable resources. However, assessing the economic viability of a project can be complicated by feedstock fluctuations and challenges related to:<sup>3</sup>

- diverse elemental composition requiring intermediate clean-up and separation steps;
- relatively low energy content;
- high moisture content; and
- distributed availability.

## Palm Beach County Incinerator

In 2015, Palm Beach County built the nation's first MSW incinerator in 20 years, using advanced combustion and pollution control measures. With a total construction cost of \$672,000,000, this WTE facility represents a very expensive investment relative to other power generation facility types, when positive externalities related to waste disposal are not factored.<sup>4</sup>

<sup>&</sup>lt;sup>1</sup>Herbert, Lewis, "Centenary History of Waste and Waste Managers in London and South East England." Chartered Institution of Wastes Management (2007).

<sup>&</sup>lt;sup>2</sup> Schneider, D.R., et. al., Cost Analysis of Waste-to-Energy Plant, Croatian Journal of Mechanical Engineering, Strojarstvo, 52 (3) 369-378 (2010).

<sup>&</sup>lt;sup>3</sup> US Dep't of Energy, Waste-to-Energy from Municipal Solid Wastes (Aug. 2019), available at https://www.energy.gov/sites/prod/files/2019/08/f66/BETO--Waste-to-Energy-Report-August--2019.pdf <sup>4</sup> *Id.* To generate nominal capacity of 100 megawatts (MW), this incinerator had capital costs of \$6,720 per kilowatt (kW). Generation of 100 MW nominal capacity from a natural gas combustion turbine, is reported to have a capital cost of \$1,101 per kW.

#### 3. EFFECT OF PROPOSED CHANGES

Section 1 of the bill creates <u>s. 377.814, F.S.</u>, establishing the Municipal Solid Waste-to-Energy Program within FDACS composed of two grants to be made available to qualifying municipal solid waste-to-energy facilities.

The bill creates subsection <u>377.814(1)</u>, F.S., to establish the program, and its purpose of creating an incentive for "the production and sale of energy from municipal solid waste-to-energy facilities while also reducing the amount of waste that would otherwise be disposed of in a landfill."

The bill creates subsection <u>377.814(2)</u>, F.S., to provide definitions of "Department" and "Municipal solid waste-to-energy facility."

Line 63 of the bill provides that the definition of "municipal solid waste-to energy facility" would include a "government affiliate-owned facility" in addition to publicly owned facilities. The term "government affiliate-owned facility" is not defined in the bill or existing law.

Lines 67- 69 of the bill excludes from the definition of "municipal solid waste-to energy facility," facilities that "primarily burn fuels other than solid waste even if such facilities also burn some solid waste as a fuel supplement." Lines 70- 74 of the bill excludes from the definition of "municipal solid waste-to energy facility," facilities that "primarily 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." The terms "primarily" and "some" in this section relate to a threshold for exclusion from program qualification. This threshold would allow for facilities that may use fuel sources other than MSW, so long as these fuel sources are used in some portion less than "primarily."

The bill creates subsection <u>377.814(3)</u>, F.S., which establishes the financial assistance grant program, specifies application criteria, sets a rate by which funds can be distributed to qualifying applicants, provides for prorating of funds if funds are not fully available, and establishes a verification process in which Florida Public Service Commission would provide assistance to FDACS.

Lines 77-81 of the bill provide qualifying language related to the contractual relationship between municipal solid WTE facilities and electric utilities, such that they must "have entered into a power purchase agreement [PPA] with an electric utility which includes capacity payments and the municipal solid waste-to-energy facility will no longer receive capacity payments under the agreement."

Lines 88-93 of the bill provide a formula for the distribution of funds. Subject to appropriation, each qualifying applicant could receive funding up to an amount equivalent to "2 cents per kilowatt-hour of electric power purchased by an electric utility during the

preceding state fiscal year, not to exceed the difference between the electric utility's avoided cost and the commercial retail rate."

Lines 93-98 of the bill provide that, if funds are unavailable for every qualifying kilowatt-hour, funds shall be prorated "on an equitable basis, taking into consideration the commercial retail rate within the applicable service territory."

The bill creates subsection 377.814(4), F.S., which establishes the incentive grant program, establishes program requirements, establishes Florida Department of Environmental Protection's (FDEP) role in assisting in the determination of eligibility and certain program requirements, establishes FDACS' responsibility to perform adequate overview of each grant application and grant award, and provides for termination or repayment of incentive grant funds if FDACS determines program requirements are not being met.

Lines 110-113 of the bill provide for the use of incentive grants in order "to assist with the planning and designing for constructing, upgrading, or expanding a municipal solid waste-to-energy facility, including necessary legal or administrative expenses."

Lines 114-119 of the bill, relating to the program requirements, providing for a dollar-for-dollar match of funds, and demonstration that "the project is cost-effective, permittable, and implementable" and complies with FDEP's existing review process for WTE facilities.

The bill creates subsection <u>377.814(5)</u>, F.S., describing the priority of funding between the two grant programs.

The bill creates subsection <u>377.814(6)</u>, F.S., granting departmental rulemaking authority.

Section 2 provides for a \$100 million appropriation of recurring funds from the General Revenue Fund to FDACS, for the 2022-2023 fiscal year.

Section 3 provides an effective date of July 1, 2022.

#### 4. FISCAL IMPACT ON FDACS

	(FY 22-23) Amount/ FTE	(FY 23-24) Amount/ FTE	(FY24-25) Amount/ FTE
A. Revenues			
Recurring			
Non-Recurring			

TOTAL REVENUES			
B. Expenditures			
Recurring	\$100,149,832	\$100,149,832	\$100,149,832
Non-Recurring	\$9,984	\$0	\$0
TOTAL EXPENDITURES	\$100,159,816	\$100,149,832	\$100,149,832
C. NET TOTAL	\$100,159,816	\$100,149,832	\$100,149,832

**COMMENTS:** Recurring cost include the appropriated funds mentioned in the bill, 2 FTE & expense packages (Government Analyst I), plus travel to perform site visits to ensure adequate overview. Non-Recurring costs are related to rulemaking and the nonrecurring portion of the expense packages.

## 5. IS THERE AN ESTIMATED FISCAL IMPACT ON LOCAL GOVERNMENT(s)?

WTE-generated electricity already helps offset municipal costs of waste disposal, and this legislation could provide further positive fiscal impacts for local governments. Additionally, supply diversification from WTE may offer improved grid resiliency against supply disruptions and price volatility.

#### 6. IS THERE AN ESTIMATED FISCAL IMPACT ON THE PRIVATE SECTOR?

To the extent the legislation leads to additional WTE generation, economic benefits are expected to include an increase in jobs, and profits for construction, manufacturing, and services companies that support or use renewable energy.

- 7. ARE THERE ESTIMATED TAXES, FEES, OR FINES ASSOCIATED WITH THE PROPOSED BILL? (If yes, please explain the impact in A and/or B below)
  - A. Does the proposed bill create new or increase existing taxes, fees, or fines? If so, please explain.

No

B. Does the proposed bill repeal or decrease existing taxes, fees, or fines? If so, please explain.

No.

C.	DOES THE BILL DIRECT OR ALLOW THE DEPARTMENT TO DEVELOP, ADOPT
	OR ELIMINATE RULES, REGULATIONS, POLICIES, OR PROCEDURES?

a.	Yes:	No	: 🔲
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b. If yes please explain:
 Subsection 6 of the bill requires FDACS to adopt rules to implement and administer
 the grant programs, specifically including the application process, application

deadlines, and necessary support documentation. The bill requires FDACS to consult with the FPSC and FDEP on the rulemaking adoption process.

8.	DOES THE PROPOSED BILL REQUIRE THE DEPARTMENT TO PARTICIPATE IN OR PRODUCE ANY REPORTS OR STUDIES?  a. Yes: \( \subseteq \text{No:} \subseteq \)  b. If yes please explain:
9.	ARE THERE ANY APPOINTMENTS, CREATION OF, OR CHANGES TO ANY BOARDS, TASK FORCES, COUNCILS, COMMISSIONS, ETC. THAT WILL IMPACT THE DEPARTMENT?  a. Yes: \( \subseteq \text{No:} \subseteq \)  b. If yes please explain:
LE	GAL ISSUES
10.	Does the proposed bill conflict with existing federal law or regulations that impact the department? If so, what laws and/or regulations? No.
11.	Does the proposed bill raise significant constitutional concerns under the U.S. or Florida Constitutions (e.g. separation of powers, access to the courts, equal protection, free speech, establishment clause, impairment of contracts) that impacts the department?  No.
12.	Is the proposed bill likely to generate litigation for the department and, if so, from what interest groups or parties?  Unknown.
CC	MMENTS:

## The Florida Senate

	THE HOHAA S	criace	1. F. F.		
-25-97	APPEARANCE	RECORD	1764		
D Meeting Date			Bill Number or Topic		
Committee 17445	THES		Amendment Barcode (if applicable)		
De Kibhen	var	Phone	407-719-6686		
Florely waste	te. Energy Coalitie				
Street 37 V, Orang	Ave, Suite 500	Email			
Orkudo	FL 3260				
City	State Zip				
Speaking: For Aga	ainst Information OR	Waive Speaking:	☐ In Support ☐ Against		
PLEASE CHECK ONE OF THE FOLLOWING:					
m appearing without mpensation or sponsorship.	l am a registered lobbyis representing:	st,	something of value for my appearance (travel, meals, lodging, etc.), sponsored by:		
	Regulated Indus  Shorth wastes  Street  Orkudo  City  For Aga  Aga  The appearing without	APPEARANCE  Meeting Date  Deliver both copies of Senate professional staff conductives  Senate professional staff conductives  Senate professional staff conductives  Street  Or known FL  Street  Street  Against Information  PLEASE CHECK ONE OF T	APPEARANCE RECORD  Meeting Date  Deliver both copies of this form to Senate professional staff conducting the meeting  Committee  Phone  Flory waste to Energy Coal of the Senate professional staff conducting the meeting  Email  Street  Speaking:  For Against Information  PLEASE CHECK ONE OF THE FOLLOWING:  mappearing without  I am a registered lobbyist,		

While it is a tradition to encourage public testimony, time may not permit all persons wishing to speak to be heard at this hearing. Those who do speak may be asked to limit their remarks so that as many persons as possible can be heard. If you have questions about registering to lobby please see Fla. Stat. §11.045 and Joint Rule 1. 2020-2022 Joint Rules, pdf (fisenate gov)

This form is part of the public record for this meeting.

S-001 (08/10/2021)