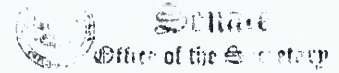


NINETEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



'22 JUL -7 P4 :21

SENATE
S. No. 177

RECEIVED BY 

Introduced by SENATOR FRANCIS "TOL" N. TOLENTINO

AN ACT
ALLOWING THE USE OF WASTE-TO-ENERGY TECHNOLOGY FOR
ELECTRICITY, FUEL AND HEAT GENERATION, AND FOR OTHER PURPOSES

EXPLANATORY NOTE

One of the major environmental problems of the Philippines is the improper disposal of waste. Currently, all municipal solid waste of local government units are disposed to a sanitary landfill, usually unsegregated and untreated.

According to a study conducted by the Japan International Cooperation Agency, the percentage of local government units that fully followed the sanitary landfill method, as mandated by Republic Act No. 9003, or the "Ecological Solid Waste Management Act," did not reach ten percent (10%). Furthermore, around eighty percent (80%) to ninety percent (90%) of the capacity of the constructed sanitary landfills has been utilized and is projected to be at full capacity in less than five (5) years.

Concurrent with the garbage disposal problem, the Philippines is also facing a forthcoming crisis in the field of energy supply. As of now, rotational brownout is being implemented by electric suppliers in some areas of the country. During the dry season, the production of energy supply drastically drops since we rely on several hydroelectric power plants. The price of electricity is also increasing due to the shortage of supply and the increasing demand, coupled with the rising prices of

petroleum products in the world market which is the primary raw material for the operation of our fossil fuel power plants.

To address both the disposal of solid waste and shortage of energy supply, this bill proposes to fully allow the use of waste-to-energy technologies, in harmony with the Supreme Court ruling in the case of *Metropolitan Manila Development Authority v. Jancom Environmental Corporation*,¹ where it was ruled that the Republic Act No. 8749, or otherwise known as the "Clean Air Act of 1999," does not absolutely prohibit incineration as a mode of waste disposal; rather, only those burning processes which emit poisonous and toxic fumes are banned.

There have been several attempts to establish waste-to-energy facilities and even backed by the national government and local government units. However, because of legal impossibilities, these proposed projects never pushed through.

Republic Act No. 9513, or otherwise known as the "Renewable Energy Act of 2008," already allows the use of waste-to-energy technology, but only in a limited sense. This bill proposes to allow the use of waste-to-energy technology, using any process; provided, that it is environmentally sound and operationally efficient.

In the light of the foregoing, the passage of this bill is earnestly sought.

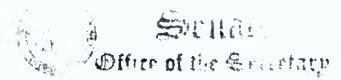


FRANCIS "TOL" N. TOLENTINO

¹ G.R. No. 147465, 30 January 2002.

**NINETEENTH CONGRESS OF THE
REPUBLIC OF THE PHILIPPINES**
First Regular Session

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'22 JUL -7 P 4 :20

SENATE
S. No. 177

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Introduced by SENATOR FRANCIS "TOL" N. TOLENTINO

AN ACT
**ALLOWING THE USE OF WASTE-TO-ENERGY TECHNOLOGY IN
ELECTRICITY, FUEL AND HEAT GENERATION, AND FOR OTHER PURPOSES**

*Be it enacted by the Senate and the House of Representatives of the Philippines in
Congress assembled:*

1 **Section 1. *Short Title.*** – This Act shall be known as the "Waste-to-Energy
2 Act of 2022."

3 **Sec. 2. *Declaration of Policy.*** – It is hereby declared the policy of the State
4 to adopt a systematic and comprehensive solid waste management program which
5 ensures the protection of public health and environment, and encourage the
6 development of environmentally sustainable waste-to-energy facilities to address the
7 solid waste disposal and energy shortage.

8 It is also the policy of the State to allow the process of incineration in waste-
9 to-energy facilities provided that the burning process does not emit poisonous and
10 toxic fumes.

11 **Sec. 3. *Objectives.*** - The objectives of this Act are:

12 (a) To allow the operation of waste-to-energy facilities to aid in the
13 reduction of solid waste disposal and in the increase of energy production;

1 (b) To provide guidelines on the evaluation, establishment, and operation
2 of waste-to-energy facilities for the integrated management of municipal solid
3 wastes which ensure the protection of public health and environment;

4 (c) To increase the efficiency of collection and transport of solid wastes;

5 (d) To ensure the proper segregation, collection, transport, storage,
6 treatment and disposal of solid waste through the formulation and adoption of the
7 best environmental practices in ecological waste management, including incineration
8 in a waste-to-energy facility;

9 (e) To encourage private sector participation in solid waste management
10 and waste-to-energy conversion;

11 (f) To strengthen the cooperation of local government units in solid waste
12 management and materials recovery facilities to make an efficient collection and
13 transport of municipal solid wastes from source and until it reaches the waste-to-
14 energy facilities;

15 (g) To strengthen the integration of solid waste management into the
16 academic curricula in order to promote environmental awareness and action among
17 the citizenry and to minimize the disposal of solid wastes and expedite the
18 segregation process;

19 (h) To encourage the development and use of local technology; and

20 (i) To improve, ensure and protect the health of the public by reducing
21 the wastes that are to be thrown directly to the sanitary landfills through proper
22 operation of the materials recovery facilities and the operation of waste-to-energy
23 facilities.

24 **Sec 3. Definition of Terms.** - For purposes of this Act, the following terms
25 shall mean:

1 (a) Clustering is a strategy of pooling available resources of neighborhood
2 cities, municipalities or barangays for the establishment of a common solid waste
3 management facility or service;

4 (b) Emission shall refer to any air contaminant, pollutant, gas or unwanted
5 sound from a known source which is passed into the atmosphere;

6 (c) Hazardous Wastes shall refer to by-products, side-products, process
7 residues, spent reaction media, contaminated plant or equipment or other
8 substances from manufacturing operations and as customer discards of
9 manufactured products which present unreasonable risk and/or injury to health and
10 safety and to the environment;

11 (d) Host LGU shall refer to the local government unit where the waste-to-
12 energy facility is located;

13 (e) Materials Recovery Facility (MRF) shall include solid waste transfer
14 station or sorting station, drop off center, a composting facility and a recycling
15 facility;

16 (f) Municipal Solid Waste shall refer to wastes produced from activities
17 which include a combination of domestic wastes from residential, commercial,
18 institutional and industrial wastes;

19 (g) Recyclable Materials shall refer to any waste material that can be
20 converted into suitable beneficial use or for other purposes;

21 (h) Sanitary Landfill shall refer to waste disposal site designed,
22 constructed, operated and maintained in a manner that exerts engineering control
23 over significant potential environmental impacts arising from the development and
24 operation of the facility;

25 (i) Segregation shall refer to solid waste management practice of
26 separating different materials found in solid waste in order to promote recycling and
27 re-use of resources and to reduce the volume of waste for collection and disposal;

1 (j) Waste-to-Energy shall refer to the process of converting wastes with
2 various technologies, usually the conversion of non-recyclable waste materials into
3 usable heat, electricity, or fuel through a variety of processes; and

4 (k) Waste-to-Energy Facility shall refer to the facility where the waste-to-
5 energy operations are conducted.

6 **Sec. 4. *Waste-to-Energy Technology.*** – The use of waste-to-energy
7 technologies which converts non-recyclable solid waste materials, through any mode
8 or process, including incineration, into usable heat, electricity, or fuel shall be
9 allowed.

10 **Sec. 5. *Guidelines.*** – The Department of Science and Technology, in
11 coordination with the Department of Energy and the Department of Environment
12 and Natural Resources, shall provide guidelines regarding the operation of waste-to-
13 energy technology which must include:

14 (1) Compliance of environmental permits, clearances and other legal
15 requirements from concerned agencies prior to construction, set-up and operation of
16 a waste-to-energy facility;

17 (2) Solid waste management plan of the host Local Government Unit
18 consistent with Republic Act No. 9003;

19 (3) Clustering of Local Government Units and/or forming partnerships with
20 the private sector in the establishment, construction and operation of waste-to-
21 energy facility;

22 (4) Compliance with the Euro Emission Standards;

23 (5) Operational guidelines for waste-to-energy facility, such as, but not
24 limited to:

25 (a) kind of waste that may be accepted by the facility for processing;

- 1 (b) implementation of MRFs, Residual Containment Areas, Sanitary landfills
2 and other disposal facilities;
- 3 (c) quality and sustainability of wastes; and
- 4 (d) documentation indicating the quantity in weight, source and type of
5 source-segregated wastes to be processed including the date and time
6 received.
- 7 (6) Guidelines for appropriate storage facilities for segregated wastes,
8 materials and by-product from the operation, providing proper measures to address
9 risks of explosion, combustion, corrosion, contamination, infection, and odor
10 emission;
- 11 (7) Manual of operation and quality assurance and control and standards
12 for quality control/assurance system;
- 13 (8) A detailed emergency response plan to ensure effective and rapid
14 containment and clean-up in the event of an emergency incident;
- 15 (9) Personal protective equipment and medical care in compliance with
16 existing laws, rules, and regulations to all personnel of the facility directly handling
17 or exposed to waste materials, in-process materials and finished products;
- 18 (10) Pollution control and abatement facilities to ensure that all emissions
19 and effluents comply with environmental standards;
- 20 (11) Requirements for treatment, storage and disposal facilities for any
21 hazardous waste resulting from the operations of the waste-to-energy facility;
- 22 (12) Allowable locations for waste-to-energy facilities, which must be far
23 from urban areas;
- 24 (13) And such other guidelines as may be necessary for the furtherance of
25 the purpose and objectives of this Act.

1 **Sec. 6. *Environmental Monitoring.*** – The Environmental Management
2 Bureau of the Department of Environment and Natural Resources shall regularly and
3 periodically monitor the environmental compliance of the waste-to-energy facility,
4 including its emissions, and shall promulgate guidelines on the periodic reports and
5 documentations required to be submitted to the Bureau.

6 The Bureau shall have the power to issue a cease and desist order or
7 temporary closure orders for non-compliant facilities.

8 **Sec. 7. *Acceptable Waste Materials.*** – The Department of Environment
9 and Natural Resources shall provide a list of acceptable waste that may be
10 processed in the waste-to-energy facility. It shall ensure that only materials that
11 pass the international environmental standards with high calorific values are allowed
12 to be processed in waste-to-energy facilities.

13 The following shall not be acceptable materials:

- 14 1. Recyclable wastes;
- 15 2. Health care wastes;
- 16 3. Explosives;
- 17 4. Batteries;
- 18 5. Radioactive wastes;
- 19 6. Electronic wastes;
- 20 7. Cyanide wastes;
- 21 8. Unsegregated municipal solid wastes; and
- 22 9. Other wastes that are not safe or efficient for processing in the waste-
23 to-energy facility, as determined by the DENR.

24 **Sec. 8. *Prohibition on Importation of Wastes; exception.*** –
25 Importation of waste materials that are to be used by waste-to-energy facilities shall

1 not be allowed, unless, the EMB certifies that the supply of acceptable wastes in the
2 Philippines are insufficient to meet the demands for the efficient production of the
3 waste-to-energy facilities, and unless the other requirements on importation of
4 waste under Republic Act No. 6969 and the Basel Convention are also complied with.

5 **Sec. 9. Clustering.** – Neighboring Local Government Units are mandated to
6 establish a common solid waste management and materials recovery facility, in
7 accordance with Section 33 of the Local Government Code, and shall jointly develop
8 an efficient collection and transport operation of municipal solid wastes.

9 Local Government Units are authorized to sell segregated municipal solid
10 wastes to privately-owned or operated waste-to-energy facilities.

11 **Sec. 10. Tax Incentives.** – Operators of waste-to-energy facilities shall
12 enjoy a five (5) year tax holiday from the start of its commercial operations, tax and
13 duty free importation of raw materials, capital equipment, machineries, and spare
14 parts subject to the conditions under Section 8 of this Act, and VAT zero-rating of all
15 local purchases of raw materials.

16 **Sec. 11. Implementing Rules and Regulations.** – The Department of
17 Science and Technology, in coordination with the Department of Energy and the
18 Department of Environment and Natural Resources, shall promulgate within thirty
19 (30) days from the date of the effectivity of this Act, the Implementing Rules and
20 Regulations of this Act.

21 **Sec. 12. Fines and Penalties.** – Any person who violates any of the
22 provisions of this Act, including the rules and regulations thereof, shall be imposed
23 with a penalty of imprisonment of six (6) months and one day to six (6) years or a
24 fine of at least one hundred thousand pesos (Php100,000) but not more than one
25 million pesos (Php1,000,000), or both.

26 If the offender is a juridical person, the president, manager, directors,
27 trustees, or the officials directly in charge of the operations shall suffer the penalty
28 provided. Permits and licenses issued to such juridical entities shall automatically be
29 revoked and canceled.

1 If the offender is a public official, the penalties imposed by this Act shall be in
2 addition to and without prejudice to Republic Act No. 3019 or the "Anti-Graft and
3 Corrupt Practices Act."

4 **Sec. 13. *Separability Clause.*** - If any provision of this Act shall be held
5 unconstitutional or invalid, the other provisions not otherwise affected shall remain
6 in full force and effect.

7 **Sec. 14. *Repealing Clause.*** - Provisions of Republic Act No. 8749, Republic
8 Act No. 9003, Republic Act No. 6969, Republic Act No. 9513, and all other laws,
9 decrees, executive orders, proclamations, and other executive issuances which are
10 inconsistent with or contrary to the provisions of this Act are hereby repealed or
11 amended accordingly.

12 **Sec. 15. *Effectivity Clause.*** - This Act shall take effect fifteen (15) days
13 following its publication in the *Official Gazette* or in a newspaper of general
14 circulation.

Approved,