

Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

TWENTIETH CONGRESS

First Regular Session

HOUSE BILL NO. 5637



Introduced by the **Honorable ANIELA BIANCA D. TOLENTINO**

EXPLANATORY NOTE

The proposed bill herein was filed by this representation in the 19th Congress. This bill proposes to full allow the utilization of waste to energy technologies, in harmony with the Supreme Court ruling in the case of Metropolitan Manila Development Authority vs. Jancom Environmental Corporation, et al., where it was ruled that 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.

The improper disposal and management of waste is one of the major environment problems in the Philippines. All municipal solid waste in the country are disposed in a sanitary landfills, usually unsegregated and untreated.

A study conducted by the National Solid Waste Management Commission Secretariat and the Environmental Management Bureau, showed that there is an estimated per capita waste production daily of 0.5 kg. This means that for every person living in the capital generate half a kilo of waste a day. With an estimated population of 13.4 million, total waste generated in Metro Manila alone could run up to 6,700 metric tons per day, 201,000 metric tons per month, and 2.4 million metric tons per year.

The same study shows that, only about 73% of the 6,700 metric tons of waste generated daily are collected by dump trucks hired by their respective local authorities. The remaining 27% of their daily waste end up in canals, vacant spaces, street corners, market places, rivers and other places where proper waste management and disposal is clearly not observed.

According to a study conducted by the Japan International Cooperation Agency, less than 10% of local government units fully followed the sanitary landfill method as

mandated by Republic Act 9003 or the Ecological Solid Waste Management Act. Furthermore, around 80% to 90% of sanitary landfills have already been utilized and is projected to be at full capacity within the next five years.

Along with the problem of garbage disposal, the Philippines also faces a forthcoming crisis regarding energy supply. As of now, more rotational brownouts are being implemented by electric suppliers all over the country due to low power reserves. Additionally, this shortage is intensified during the hot and dry seasons as most of the electric supply in the country comes from hydroelectric power plants.

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 any waste to energy technology, using any process given that is environmentally sound and operationally efficient.

This bill aims to provide a system for waste to energy technologies and waste to energy conversion to further improve the solid waste management in the Philippines, ensuring and improving the welfare of the public.

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

A handwritten signature in black ink, consisting of a large, stylized 'A' followed by a vertical line and a horizontal crossbar, with a small flourish at the end.

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HOUSE BILL NO. 5637

Introduced by the Honorable ANIELA BIANCA D. 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 House of Representatives of the Philippines in
Congress assembled:*

Section 1. *Short Title.* – This Act shall be known as the “Waste to Energy Act of 2022.”

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

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

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

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

- (b) To provide guidelines on the evaluation, establishment, and operation of waste to energy facilities for the integrated management of municipal solid wastes which ensure the protection of public health and environment;
- (c) To increase the efficiency of collection and transport of solid wastes;
- (d) To ensure the proper segregation, collection, transport, storage, treatment and disposal of solid waste through the formulation and adoption of the best environmental practices in ecological waste management, including incineration in a waste to energy facility;
- (e) To encourage private sector participation in solid waste management and waste to energy conversion;
- (f) To strengthen the cooperation of local government units in solid waste management and materials recovery facilities to make an efficient collection and transport of municipal solid wastes from source and until it reaches the waste to energy facilities;
- (g) To strengthen the integration of solid waste management into the academic curricula in order to promote environmental awareness and action among the citizenry and to minimize the disposal of solid wastes and expedite the segregation process;
- (h) To encourage the development and use of local technology; and
- (i) To improve, ensure and protect the health of the public by reducing the wastes that are to be thrown directly to the sanitary landfills through proper operation of the materials recovery facilities and the operation of waste to energy facilities.

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

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

- (b) Emission shall refer to any air contaminant, pollutant, gas or unwanted sound from a known source which is passed into the atmosphere;
- (c) Hazardous Wastes shall refer to by-products, side-products, process residues, spent reaction media, contaminated plant or equipment or other substances from manufacturing operations and as customer discards of manufactured products which present unreasonable risk and/or injury to health and safety and to the environment;
- (d) Host LGU shall refer to the local government unit where the waste to energy facility is located;
- (e) Materials Recovery Facility (MRF) shall include solid waste transfer station or sorting station, drop off center, a composting facility and a recycling facility;
- (f) Municipal Solid Waste shall refer to wastes produced from activities which include a combination of domestic wastes from residential, commercial, institutional and industrial wastes;
- (g) Recyclable Materials shall refer to any waste material that can be converted into suitable beneficial use or for other purposes;
- (h) Sanitary Landfill shall refer to waste disposal site designed, constructed, operated and maintained in a manner that exerts engineering control over significant potential environmental impacts arising from the development and operation of the facility;
- (i) Segregation shall refer to solid waste management practice of separating different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal;
- (j) Waste to Energy shall refer to the process of converting wastes with various technologies, usually the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes; and

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

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

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

- (1) Compliance of environmental permits, clearances and other legal requirements from concerned agencies prior to construction, set-up and operation of a waste to energy facility;
- (2) Solid waste management plan of the host Local Government Unit consistent with Republic Act No. 9003;
- (3) Clustering of Local Government Units and/or forming partnerships with the private sector in the establishment, construction and operation of waste to energy facility;
- (4) Compliance with the Euro Emission Standards;
- (5) Operational guidelines for waste to energy facility, such as, but not limited to:
 - (a) kind of waste that may be accepted by the facility for processing;
 - (b) implementation of MRFs, Residual Containment Areas, Sanitary landfills and other disposal facilities;
 - (c) quality and sustainability of wastes; and
 - (d) documentation indicating the quantity in weight, source and type of source-segregated wastes to be processed including the date and time received.
- (6) Guidelines for appropriate storage facilities for segregated wastes, materials and by-product from the operation, providing proper measures to address

risks of explosion, combustion, corrosion, contamination, infection, and odor emission;

- (7) Manual of operation and quality assurance and control and standards for quality control/assurance system;
- (8) A detailed emergency response plan to ensure effective and rapid containment and clean-up in the event of an emergency incident;
- (9) Personal protective equipment and medical care in compliance with existing laws, rules, and regulations to all personnel of the facility directly handling or exposed to waste materials, in-process materials and finished products;
- (10) Pollution control and abatement facilities to ensure that all emissions and effluents comply with environmental standards;
- (11) Requirements for treatment, storage and disposal facilities for any hazardous waste resulting from the operations of the waste to energy facility;
- (12) Allowable locations for waste to energy facilities, which must be far from urban areas;
- (13) And such other guidelines as may be necessary for the furtherance of the purpose and objectives of this Act.

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

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

Section 7. *Acceptable Waste Materials.* – the Department of Environment and Natural Resources shall provide a list of acceptable waste that may be processed in the waste to energy facility. It shall ensure that only materials that pass the international

environmental standards with high calorific values are allowed to be processed in waste to energy facilities.

The following shall not be acceptable materials:

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

Section 8. *Prohibition on Importation of Wastes; exception.* – Importation of waste materials that are to be used by waste to energy facilities shall not be allowed, unless, the EMB certifies that the supply of acceptable wastes in the Philippines are insufficient to meet the demands for the efficient production of the waste to energy facilities, and unless the other requirements on importation of waste under Republic Act No. 6969 and the Basel Convention are also complied with.

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

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

Section 10. *Tax Incentives.* – Operators of waste to energy facilities shall enjoy a five (5) year tax holiday from the start of its commercial operations, tax and duty free

importation of raw materials, capital equipment, machineries, and spare parts subject to the conditions under Section 8 of this Act, and VAT zero-rating of all local purchases of raw materials.

Section 11. *Implementing Rules and Regulations.* – The Department of Science and Technology, in coordination with the Department of Energy and the Department of Environment and Natural Resources shall collectively craft, and issue, within thirty (30) days from the date of the effectivity of this Act, the Implementing Rules and Regulations for the effective implementation of this Act.

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

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

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

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

Section 14. *Repealing Clause.* - Provisions of Republic Act No. 8749, Republic Act No. 9003, Republic Act No. 6969, Republic Act No. 9513 and all other laws, decrees,

executive orders, proclamations and other executive issuances which are inconsistent with or contrary to the provisions of this Act are hereby amended accordingly.

Section 15. *Effectivity Clause.* - This Act shall take effect fifteen (15) days following its complete publication in the Official Gazette or in two (2) national newspapers of general circulation.

Approved,