

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



HOUSE OF REPRESENTATIVES

House Bill No. 5639

Introduced by Hon. Antonio B. Legarda Jr.

AN ACT
ESTABLISHING A REGULATORY FRAMEWORK FOR FACILITIES UTILIZING
WASTE-TO-ENERGY TECHNOLOGIES, AND AMENDING FOR THIS PURPOSE
REPUBLIC ACT NO. 8749, OTHERWISE KNOWN AS THE PHILIPPINE CLEAN AIR
ACT OF 1999

EXPLANATORY NOTE

The rapid growth of urban populations, industrialization, and consumer demand has led to the increasing generation of solid waste in the country. Despite the enactment of Republic Act No. 9003, otherwise known as the Ecological Solid Waste Management Act of 2000, and Republic Act No. 8749, or the Philippine Clean Air Act of 1999, local government units (LGUs) and communities continue to face significant challenges in the effective management, treatment, and disposal of waste. Landfills are quickly reaching their capacity, while open dumping and improper waste handling remain prevalent, contributing to pollution, health risks, and environmental degradation.

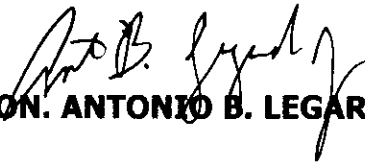
At the same time, the Philippines is confronted with growing energy demand and the urgent call to diversify and secure its energy supply. The promotion of renewable and sustainable energy technologies is vital to reducing dependence on imported fossil fuels, mitigating greenhouse gas emissions, and addressing climate change.

Waste-to-energy (WTE) technologies provide a viable solution that addresses both the persistent solid waste crisis and the country's energy security needs. By converting non-recyclable waste materials into usable heat, electricity, or fuel, WTE facilities not only reduce the volume of waste requiring final disposal but also contribute to renewable energy production. However, the absence of a clear regulatory framework for such technologies has resulted in policy ambiguities and implementation gaps, discouraging investment and hindering the scale-up of WTE initiatives nationwide.

This measure seeks to establish a comprehensive regulatory framework for the development, operation, and monitoring of WTE facilities. It provides for the roles and responsibilities of key government agencies such as the Department of Energy (DOE), Department of Environment and Natural Resources (DENR), Department of Health (DOH), and the National Solid Waste Management Commission (NSWMC), as well as the responsibilities of LGUs. It ensures compliance with stringent environmental and health standards while also recognizing WTE as a renewable energy resource entitled to incentives under existing laws.

Furthermore, the bill amends Republic Act No. 8749 to allow the use of incineration technologies in WTE facilities under strict conditions, ensuring that such processes do not emit toxic or poisonous fumes. It also strengthens research, monitoring, and the continuous development of air quality standards in relation to WTE operations.

In view of the foregoing, the immediate passage of this measure is earnestly sought.


HON. ANTONIO B. LEGARDA, JR.

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ESTABLISHING A REGULATORY FRAMEWORK FOR FACILITIES UTILIZING WASTE-TO-ENERGY TECHNOLOGIES, AND AMENDING FOR THIS PURPOSE REPUBLIC ACT NO. 8749, OTHERWISE KNOWN AS THE PHILIPPINE CLEAN AIR ACT OF 1999

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

1 **SECTION 1. *Short Title.*** – This Act shall be known as the “Waste-to-Energy Promotion
2 Act.”

3 **SECTION 2. *Declaration of Policy.*** – It is hereby declared the policy of the State to
4 protect public health and the environment by implementing a comprehensive ecological
5 solid waste management program and promoting sustainable treatment technologies
6 such as waste-to-energy; and to promote innovation, energy security, and broad multi-
7 sector collaboration by integrating solid waste management with environmental
8 protection and national development goals. Towards this end, measures that ensure the
9 achievement of this stated policy shall be pursued.

10 **SECTION 3. *Definition of Terms.*** - for purposes of this Act, the following terms shall be
11 defined as stated below:

12 (a) Clustering is a strategy of pooling available resources of local government units
13 (LGUs) for the establishment of a common solid waste management treatment
14 facility or service;

- 1 (b) Incineration in a waste-to-energy facility refers to a waste treatment and resource
2 recovery technology that involves the controlled combustion of waste materials
3 for the purpose of recovering energy from it, and whose emissions and effluents
4 are compliant with the guidelines pursuant to this Act and other relevant laws,
5 rules, and regulations;
- 6 (c) National Solid Waste Management Commission (NSWMC) refers to the body
7 created and primarily tasked with overseeing the implementation of solid waste
8 management plans and prescribing policies to achieve the objectives of Republic
9 Act No. 9003;
- 10 (d) Provincial Solid Waste Management Board (PSWMB) refers to the entity
11 established by each province pursuant to Section 11 of Republic Act No. 9003;
- 12 (e) Residue refers to substances that remain after a process in a waste-to-energy
13 facility such as preparation, separation, purification, evaporation, combustion,
14 distillation, or filtration;
- 15 (f) Sanitary landfill refers to a waste disposal site designed, constructed, operated,
16 and maintained in a manner that exerts engineering control over significant
17 potential environment impacts arising from the development and operation of the
18 facility;
- 19 (g) Segregation refers to a solid waste management practice of separating different
20 materials found in solid waste in order to promote recycling and re-use of
21 resources, facilitate waste treatment processes, and to reduce the volume of
22 waste for collection and disposal;
- 23 (h) Solid waste refers to all discarded household waste, commercial waste,
24 non-hazardous institutional and industrial waste, street sweepings, construction
25 debris, agricultural waste, and other non-hazardous or non-toxic solid waste.
- 26 (i) Solid waste management treatment facility refers to any resource recovery
27 system or component thereof; any system, program or facility for resource
28 conservation; or any facility for the collection, source separation, storage,
29 transportation, transfer, processing, treatment, or disposal of solid waste;

- (j) Solid waste management refers to the discipline associated with the control of generation, storage, collection, transfer and transport, processing, and disposal of solid wastes in a manner that is in accord with the best principal of public health, economics, engineering, conservation, aesthetics, and other environmental considerations, and that is also responsive to the public attitudes;
- (k) Waste-to-Energy (WTE) refers to an energy system with a process of converting WTE feedstock with various technologies, usually the conversion of non-recyclable waste materials into usable heat, electricity, or fuel through a variety of processes;
- (l) WTE facility refers to the facility where the WTE operations are conducted;
- (m) WTE feedstock refers to the waste materials with calorific-value that are taken in for WTE processing in a WTE facility;
- (n) Waste generation refers to the act or process of producing solid waste; and
- (o) WTE strategy refers to a plan of action with measurable targets for the utilization of WTE facilities for solid waste management treatment and energy production.

SECTION 4. *Waste-to-Energy Facilities.* - WTE facilities that use thermal and other treatment technologies for the disposal of municipal and hazardous wastes, or for the processing of any waste material for fuel, whether for commercial use or not, shall be designed and operated to meet the standards established pursuant to this Act and its implementing rules and regulations. These technologies shall be fitted with equipment that will continuously monitor, record, and make publicly available the reported data on their emissions or air pollutant concentrations. Proposed facilities that generate energy or waste-to-energy facilities shall be given priority over other treatment technologies. Entities utilizing such technologies shall incorporate in their facilities and operations the appropriate material recovery program. Thermal treatment units shall treat wastes at a temperature of not less than eight hundred fifty degrees centigrade (850°C) and shall be classified as a renewable energy resource.

A WTE facility shall be both a solid waste management treatment facility and an energy production facility. WTE facilities shall ensure the proper management of its residue which

1 to conform with relevant laws, rules, and regulations and should include making
2 arrangements with a sanitary landfill, or developing its own, prior to its operations, as a
3 disposal site for any residue generated from its operations.

4 In addition to the provisions of this Act, the segregation, collection, transfer, storage, and
5 transport of solid waste as WTE feedstock for a WTE facility, and the waste treatment
6 process of the WTE facility shall be governed by Republic Act No. 9003 and Republic Act
7 No. 8749, while the energy production aspect of the WTE facility shall be governed by
8 Republic Act No. 7638, Republic Act No. 9136, Republic Act No. 9367, Republic Act No.
9 9513, and other relevant laws, rules, and regulations.

10 **SECTION 5. *Role of the National Solid Waste Management Commission (NSWMC)*** - In
11 addition to its powers and functions under Republic Act No. 9003, the NSWMC shall:

- 12 (a) Include a WTE strategy in the National Solid Waste Management Framework;
- 13 (b) Act as the lead agency in ensuring streamlined standards, criteria, and guidelines
14 for WTE facilities to avoid inconsistent and conflicting issuances;
- 15 (c) Regularly determine, review, and publish the following:
 - 16 (i) Standards, criteria, and guidelines for:
 - 17 1. Characterization and composition of solid waste utilized as WTE
 - 18 feedstock for WTE facilities to ensure emissions are compliant with
 - 19 Republic Act No. 8749 and other relevant laws, rules, and regulations,
 - 20 2. Transport, storage, and pre-processing of WTE feedstock,
 - 21 3. Pre-operation, siting, design, operation, and maintenance of WTE
 - 22 facilities,
 - 23 4. Quality control and operational control of WTE facilities,
 - 24 5. Management of residue from WTE facilities, if any;
 - 25 6. Pollution abatement, emissions monitoring, environmental monitoring,
 - 26 and public health and safety monitoring in relation to WTE facilities,
 - 27 7. Decommissioning, closure, and abandonment of WTE facilities, and
 - 28 8. Other guidelines pursuant to relevant laws, rules, and regulations, and

- (ii) Minimum standards, criteria, and guidelines, in determining a fair, equitable, and reasonable processing fee for WTE facilities taking into consideration, among others, the cost of construction, operation, and maintenance of the facility as well as the potential revenue from the sale of energy output, in consultation with relevant government agencies, experts, and stakeholders;
- (d) Provide policy guidelines to assist LGUs in the development of WTE facilities to include the determination of the potential of WTE facilities in their respective localities;
- (e) Ensure LGUs incorporate a WTE strategy, if feasible, in their respective Local Government Solid Waste Management Plans;
- (f) Identify and recommend potential clustering of LGUs for a common WTE facility;
- (g) Coordinate with the Provincial, City, and Municipal Solid Waste Management Boards especially for clustered LGUs employing a common WTE facility; and
- (h) Perform all other acts that are analogous to the foregoing, which are necessary and incidental to accomplish the policy objectives of this Act.

SECTION 6. *Role of the Department of Energy (DOE).* - In addition to its powers and functions under Republic Act No. 7638, the DOE shall:

- (a) Issue permits to WTE facilities based on the energy output, and determine the standards, criteria, and requirements applicable for each kind of WTE facility pursuant to Republic Act No. 7638, Republic Act No. 9136, Republic Act No. 9367, Republic Act No. 9513, and other relevant laws, rules, and regulations;
- (b) Include a WTE strategy in the Philippine Energy Plan, taking into consideration the National Solid Waste Management Framework as defined by Section 15 of Republic Act No. 9003; and
- (c) Perform all other acts that are analogous to the foregoing, which are necessary and incidental to accomplish the policy objectives of this Act.

1 **SECTION 7. *Role of the Department of Environment and Natural Resources (DENR).*** -
2 In addition to its powers and functions under Republic Act No. 9003 and Republic Act No.
3 8749, the DENR shall:

- 4 (a) Include a WTE strategy, if feasible, in the National Solid Waste Management
5 Status Report, as defined by Section 14 of Republic Act No. 9003;
- 6 (b) Provide technical and other capacity building assistance and support to LGUs in
7 performing acts that are necessary and incidental to accomplish the policy
8 objectives of this Act
- 9 (c) Implement and revise, when necessary, together with the Department of Health,
10 existing guidelines issued pursuant to Republic Act No. 9003 on waste transport,
11 pre-operation, waste acceptance, waste storage, pre-processing of waste, quality
12 control, operational control, pollution abatement, management of residue,
13 emissions monitoring, environmental monitoring, public health and safety
14 monitoring, decommissioning, closure, and abandonment, among others, taking
15 into account other relevant laws, rules, and regulations, and in consultation with
16 relevant stakeholders;
- 17 (d) Investigate, motu proprio or upon complaint, reports of non-compliance of WTE
18 facilities with the provisions of this Act and other relevant laws, rules, and
19 regulations;
- 20 (e) Exercise visitorial and enforcement powers to ensure strict compliance of WTE
21 facilities with this Act, Republic Act No. 9003, Republic Act No. 8749, and other
22 relevant laws, rules, and regulations; and
- 23 (f) Perform all other acts that are analogous to the foregoing, which are necessary
24 and incidental to accomplish the policy objectives of this Act.

25 **SECTION 8. *Role of the Department of Health (DOH).*** - In addition to its powers and
26 functions DOH shall:

- 27 (a) Ensure all WTE facilities undergo a Health Impact Assessment, pursuant to
28 Republic Act No. 11223 and Presidential Decree No. 1586, as part of the

Environmental Impact Assessment System, to be jointly reviewed and approved by the DOH and DENR prior to construction and operation;

- (b) Implement and revise, when necessary, together with DENR, existing guidelines Issued pursuant to Republic Act No. 9003 on waste transport, pre- operation, waste acceptance, waste storage, pre-processing of waste, quality control, operational control, pollution abatement, management of residue, emissions monitoring, environmental monitoring, public health and safety monitoring, decommissioning, closure, and abandonment, among others, taking into account other relevant laws, rules, and regulations, and in consultation with relevant stakeholders;
- (c) Regularly conduct an analysis of the effects of WTE facilities and disposal sites on public health and submit the same to DENR for proper action, if applicable;
- (d) Undertake research on the public health Impact of WTE facilities together with government agencies, the academe, and private stakeholders;
- (e) Perform all other acts that are analogous to the foregoing, which are necessary and incidental to accomplish the policy objectives of this Act.

SECTION 9. *Role of Local Government Units.* (LGUs) - In addition to their powers, functions, and responsibilities under Republic Act No. 7160 otherwise known as the Local Government Code of 1991, and Republic Act No. 9003, LGUs shall:

- (a) Promote, encourage and implement in their respective jurisdictions a comprehensive solid waste management plan that includes waste reduction, segregation, recycling, composting, and recovery;
- (b) In the case of a city or municipality and if applicable, be responsible for the hauling of WTE feedstock to a WTE facility;
- (c) In the case of a province and if applicable, provide necessary logistical and operational support for the processing of WTE feedstock in a WTE facility;
- (d) Include a WTE strategy, if feasible, in their respective Local Government Solid Waste Management Plans;

1 (e) Establish treatment facilities within a region, province, or strategically clustered
2 LGUs, in consonance with their respective ten-year solid waste management
3 plans;

4 (f) Be authorized to enter into and shall comply with all obligations under the
5 following:

6 (i) Clustering arrangements with other LGUs for a common WTE facility, on
7 their own or upon recommendation of the Provincial Solid Waste
8 Management Board: Provided, That the province shall have the power to
9 cluster component cities and municipalities based on approved provincial
10 and local solid waste management plans;

11 (ii) Long term contracts with WTE facilities, on their own or with clustered
12 LGUs, and

13 (iii) Public private partnerships pursuant to Republic Act No. 11966 otherwise
14 known as Public-Private Partnership (PPP) Code of the Philippines,
15 cooperative undertakings under Section 33 of Republic Act No. 7160, and
16 other contractual arrangements provided for under existing laws, rules,
17 regulations as well as the LGUs' respective charters for the establishment
18 of WTE facilities.

19 (g) Perform all other acts that are analogous to the foregoing, which are necessary
20 and incidental to accomplish the policy objectives of this Act.

21 The national government shall provide support to all LGUs towards the effective
22 implementation and the achievement of the policy objectives of this Act.

23 **SECTION 10.** *Role of the Provincial Solid Waste Management Board (PSWMB).* - In
24 addition to its powers and functions under Republic Act No. 9003, the PSWMB shall:

25 (a) Integrate a WTE strategy, if feasible, in the Provincial Solid Waste Management
26 Plan taking into consideration the Local Government Solid Waste Management
27 Plans of all its component cities and municipalities;

28 (b) Recommend potential locations for WTE facilities in the Provincial Solid Waste
29 Management Plan;

- 1 (c) Identify and recommend, or direct pursuant to Section 10 of this Act, clustering
2 of component cities and municipalities for a common WTE facility, based on the
3 Local Government Solid Waste Management Plans of all its component cities and
4 municipalities;
- 5 (d) Provide the necessary logistical and operational support to component cities and
6 municipalities who have the potential to be clustered, have decided to be
7 clustered, or have been directed to be clustered for a common WTE facility;
- 8 (e) Coordinate the efforts and oversee the implementation of the clustering of
9 component cities and municipalities for a common WTE facility; and
- 10 (f) Coordinate with other Provincial, City, and Municipal Solid Waste Management
11 Boards in Identifying possible inter- and intra- province clustering for a common
12 WTE facility.

13 **SECTION 11. *Incentives.*** - WTE facilities, depending on their output, shall be entitled
14 to avail of the incentives under Republic Act No. 9367 otherwise known as the Biofuels
15 Act of 2006 and Republic Act No. 9513 otherwise known as the Renewable Energy Act of
16 2008.

17 **SECTION 12.** Section 15 of Republic Act No. 8749 is hereby amended to read as follows:

18 "SEC. 15. *Air Pollution Research and Development Program.* - The Department of
19 Environment and Natural Resources (DENR), in coordination with the Department of
20 Science and Technology (DOST), other agencies, the private sector, the academe, NGO's
21 and PO's, shall establish a National Research and Development Program for the
22 prevention and control of air pollution. The Department shall give special emphasis to
23 research on and the development of improved methods having industry-wide application
24 for the prevention and control of air pollution.

25 Such a research and development program shall develop air quality guideline values and
26 standards in addition to internationally-accepted standards, **AND INCLUDE THE**
27 **CONTINUOUS MONITORING, EVALUATION, AND DEVELOPMENT OF MORE**
28 **APPROPRIATE AIR QUALITY GUIDELINE VALUES AND STANDARDS FOR THE**

1 **TREATMENT OF MUNICIPAL AND HAZARDOUS WASTES, OR FOR THE**
2 **PROCESSING OF ANY WASTE MATERIAL FOR FUEL.** It shall also consider the socio-
3 cultural, political and economic implications of air quality management and pollution
4 control."

5 **SECTION 13.** Section 20 of Republic Act No. 8749 is hereby amended to read as follows:

6 "SEC. 20. **INCINERATION IN A WASTE-TO-ENERGY FACILITY. INCINERATION**
7 **SHALL BE ALLOWED FOR THE TREATMENT OF WASTE AND THE PURPOSE OF**
8 **ENERGY CONVERSION. PROVIDED, THAT THESE TECHNOLOGIES SHALL NOT**
9 **EMIT TOXIC AND POISONOUS FUMES INTO THE ENVIRONMENT AND SHALL**
10 **COMPLY WITH ALL THE LAWS MENTIONED HEREOF AND OTHER RELEVANT**
11 **LAWS, RULES, AND REGULATIONS. ADVANCED AIR EMISSION CONTROL AND**
12 **STRINGENT REGULATIONS SHALL BE PUT IN PLACE TO ENSURE THAT WASTES**
13 **ARE DISPOSED OF WITHOUT DETRIMENTAL IMPACT TO THE ENVIRONMENT.**
14 **NOTWITHSTANDING, TRADITIONAL SMALL-SCALE METHOD OF**
15 **COMMUNITY/NEIGHBORHOOD SANITATION "SIGA", TRADITIONAL,**
16 **AGRICULTURAL, CULTURAL, HEALTH, AND FOOD PREPARATION AND**
17 **CREMATORIA SHALL CONTINUE TO BE ALLOWED, SUBJECT TO EXISTING**
18 **RULES AND REGULATIONS.**

19 Local government units are hereby mandated to promote, encourage and implement in
20 their respective jurisdiction a comprehensive ecological waste management that includes
21 waste segregation, recycling and composting.

22 With due concern on the effects of climate change, the Department shall promote the
23 use of state-of-the-art, environmentally-sound and safe non-burn technologies for the
24 handling, treatment, thermal destruction, utilization, and disposal of sorted, unrecycled,
25 non-composted, biomedical and hazardous wastes."

26 **SECTION 14. *Implementing Rules and Regulations.*** - Within one hundred twenty (120)
27 days from the effectivity of this Act, the DOE, DENR and DOH shall promulgate the rules
28 and regulations necessary for the proper implementation of the provisions of this Act.

1 The implementing rules and regulations shall take effect fifteen (15) days after the
2 completion of its publication in two (2) newspapers of general circulation. Within three
3 (3) days from its effectivity date, three (3) certified copies of the published implementing
4 rules and regulations shall be furnished the University of the Philippines Law Center
5 pursuant to Book VII, Chapter 2, Section 3 of EO No. 292, otherwise known as the
6 "Administrative Code of 1987", as amended. The delay in the promulgation or publication
7 of the implementing rules and regulations shall not defer the effectivity and
8 implementation of this Act.

9 **SECTION 15. *Repealing Clause.*** - The pertinent provisions of R.A. No. 9003 otherwise
10 known as the "Ecological Solid Waste Management Act of 2000", as amended, and other
11 laws, presidential decrees, executive orders, letters of instruction, proclamations, or
12 administrative orders, rules or regulations or parts thereof that are inconsistent with the
13 provisions of this Act are hereby repealed or modified accordingly.

14 **SECTION 16. *Separability Clause.*** - Any portion or provision of this Act that may be
15 declared unconstitutional shall not have the effect of nullifying other portions or provisions
16 hereof as such remaining provisions can still subsist and be given effect.

17 **SECTION 17. *Effectivity.*** - This Act shall take effect after fifteen (15) days following its
18 publication in the Official Gazette or in a newspaper of general circulation.

Approved,