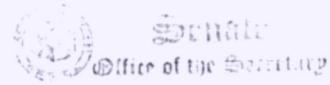


EIGHTEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)



SENATE

'19 JUL 11 P1:23

S.B. No. 363

RECEIVED BY J

Introduced by SEN. WIN GATCHALIAN

**AN ACT ESTABLISHING A NATIONAL ENERGY POLICY AND REGULATORY
FRAMEWORK FOR FACILITIES UTILIZING WASTE-TO-ENERGY
TECHNOLOGIES**

EXPLANATORY NOTE

Republic Act No. 9513, otherwise known as the Renewable Energy Act of 2008 (RE Act), mandates the Department of Energy (DOE) to encourage the adoption of waste-to-energy (WTE) facilities and considers biodegradable organic fractions of industrial and municipal wastes as part of biomass resources.¹ However, more than a decade after the enactment of the RE Act, WTE facilities are almost negligible in the energy mix with only 13.83 MW of installed capacity and a mere 26.48 MW of committed or indicative capacity.² Discussions with WTE proponents identify the continuous source of feedstock, in the form of waste, as the main barrier to entry.

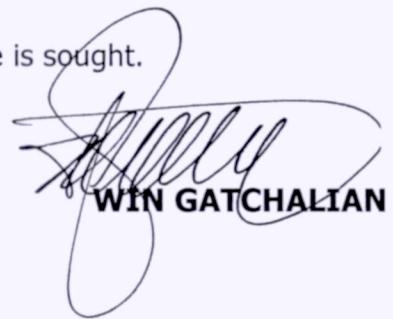
This measure seeks to provide a framework for the entire value chain of WTE facilities, and in turn ensure the uninterrupted supply of waste by (1) mandating a WTE strategy in the national, provincial, and local solid waste management plans; (2) authorizing local government units to enter into cooperative undertakings, joint ventures, and other similar modalities in choosing a common WTE facility provider; and (3) requiring standards, criteria, guidelines, and formula in computing for a fair, equitable, and reasonable tipping charge for WTE facilities taking into consideration the cost of

¹ Sec. 4(b) and Sec. 30 of Republic Act No. 9513

² Reports and Updates submitted by the DOE- Renewable Energy Management Bureau (REMB) to the Senate Committee on Energy (15 May 2019)

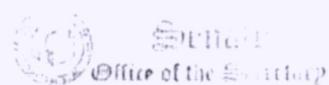
construction, operation, and maintenance of the facility and the potential revenue from the sale of energy output such as electric power and biofuels.

Given the foregoing, the immediate passage of this measure is sought.



WIN GATCHALIAN

EIGHTEENTH CONGRESS OF THE
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**AN ACT
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FRAMEWORK FOR FACILITIES UTILIZING WASTE-TO-ENERGY
TECHNOLOGIES**

*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 referred to as the "Waste-to-
2 Energy Act".

3
4 Sec. 2. *Declaration of Policy.* – It is hereby declared the policy of the State
5 to:

- 6 (a) Ensure protection of the public's health through ecological solid waste
7 management;
- 8 (b) Encourage the development and utilization of new and alternative
9 technologies in resource recovery, resource conservation, and processing,
10 treatment, and disposal of solid waste;
- 11 (c) Support the expansion of bioenergy technologies, such as waste-to-energy,
12 in order to attain sustainable energy;
- 13 (d) Strengthen the integration of solid waste management, bioenergy
14 promotion, and environmental protection towards healthful cities amidst
15 economic growth and development; and

- 1 (e) Promote collaboration and cooperation among local government units
2 through coordinated approaches to solid waste management.

3

4 Sec. 3. *Scope and Application.* – This Act shall apply to all local government
5 units and waste-to-energy facilities.

6

7 Sec. 4. *Definition of Terms.* – For purposes of this Act, the following terms
8 shall be defined as stated below:

- 9 (a) *Agricultural waste* refers to waste generated from planting or harvesting of
10 crops, trimming or pruning of plants, and wastes or run-off materials from
11 farms of fields;
- 12 (b) *Biomedical waste* refers to pathological wastes, pharmaceutical wastes,
13 chemical wastes, and sharps as defined in this Act;
- 14 (c) *City or Municipal Solid Waste Management Board* refers to the entity
15 established by each city or municipality pursuant to Section 12 of Republic
16 Act No. 9003, otherwise known as the Ecological Solid Waste Management
17 Act of 2000;
- 18 (d) *Chemical waste* refers to discarded solid, liquid or gaseous chemicals from
19 laboratories or other sources such as diagnostic work, environmental work,
20 cleaning, housekeeping and disinfecting procedures;
- 21 (e) *Collection* refers to the act of removing solid waste from the source or from
22 a communal storage point;
- 23 (f) *Disposal* refers to the discharge, deposit, dumping, spilling, leaking, or
24 placing of any solid waste into or in a land;
- 25 (g) *Disposal site* refers to a site where solid waste is finally discharged and
26 deposited;
- 27 (h) *Feedstock* refers to a waste source utilized as fuel for a waste-to-energy
28 facility;
- 29 (i) *Generation* refers to a person, natural or juridical, who last uses a material
30 and makes it available for disposal or recycling;

- 1 (j) *Generator* refers to a person, natural or juridical, who last uses a material
2 and makes it available for disposal or recycling. For purposes of this Act, a
3 generator refers to the local government unit (LGU);
4 (k) *Hazardous waste* refers to a combination of solid waste which, because of
5 its quantity, concentration, physical, chemical, or infectious characteristics,
6 may:
7 (i) Cause or significantly contribute to an increase in mortality or an
8 increase in a serious irreversible or incapacitating reversible illness, or
9 (ii) Pose a substantial present or potential hazard to human health or the
10 environment when improperly treated, stored, transported, or disposed
11 of, or otherwise managed;
12 (l) *Incineration* refers to the burning of municipal, biomedical, and hazardous
13 wastes which process emits toxic and poisonous fumes;
14 (m) *Local Government Solid Waste Management Plan* refers to the ten (10) year
15 solid waste management plan, consistent with the National Solid Waste
16 Management Framework, prepared by the province, city, or municipality
17 pursuant to Section 16 of Republic Act No. 9003;
18 (n) *Municipal waste* refers to wastes produced from activities within LGUs which
19 include a combination of domestic, commercial, institutional, and industrial
20 wastes and street litters;
21 (o) *National Solid Waste Management Commission* refers to the Commission
22 created and primarily tasked with overseeing the implementation of solid
23 waste management plans and prescribing policies to achieve the objectives
24 of Republic Act No. 9003;
25 (p) *National Solid Waste Management Framework* refers to a document
26 prepared by the National Solid Waste Management Commission based on
27 the National Solid Waste Management Status Report pursuant to Section 15
28 of Republic Act No. 9003;
29 (q) *National Solid Waste Management Status Report* refers to a document
30 prepared by the Department of Environment and Natural Resources (DENR),
31 which is used as a basis in formulating the National Solid Waste
32 Management Framework pursuant to Section 14 of Republic Act No. 9003;

- 1 (r) *Pathological waste* refers to all human tissue, whether infected or not,
2 animal carcasses and tissue, together with all related swabs and dressings;
- 3 (s) *Pharmaceutical waste* refers to pharmaceutical products, drugs and
4 chemicals that have been returned from wards, have been spilled or soiled,
5 are expired or contaminated, or are to be discarded for any reason;
- 6 (t) *Provincial Solid Waste Management Board* refers to the entity established by
7 each province pursuant to Section 11 of Republic Act No. 9003;
- 8 (u) *Resource recovery* refers to the collection, extraction, or recovery of
9 recyclable materials from the waste stream for the purpose of recycling,
10 generating energy, or producing a product a suitable for beneficial use;
- 11 (v) *Sanitary landfill* refers to a waste disposal site designed, constructed,
12 operated, and maintained in a manner that exerts engineering control over
13 significant potential environment impacts arising from the development and
14 operation of the facility;
- 15 (w) *Segregation* refers to a solid waste management practice of separating
16 different materials found in solid waste in order to promote recycling and
17 re-use of resources and to reduce the volume of waste for collection and
18 disposal;
- 19 (x) *Solid waste* refers to all discarded household, commercial waste, non-
20 hazardous institutional and industrial waste, street sweepings, construction
21 debris, agricultural waste, and other non-hazardous or non-toxic solid
22 waste. It shall not include:
- 23 (i) Waste identified or listed as hazardous waste of a solid, liquid,
24 contained gaseous or semisolid form, which may cause or contribute to
25 an increase in mortality or in serious or incapacitating reversible illness,
26 or acute or chronic effect on the health of persons and other
27 organisms,
- 28 (ii) Infectious waste from hospitals such as equipment, instruments,
29 utensils, and fomites of a disposable nature from patients who are
30 suspected to have or have been diagnosed as having communicable
31 diseases and must therefore be isolated as required by public health
32 agencies, laboratory wastes as pathological specimens, and disposable

- 1 fomites that may harbor or transmit pathogenic organisms, and
2 surgical operating room pathologic materials from outpatient areas and
3 emergency rooms, and
- 4 (iii) Waste resulting from mining activities, including contaminated soil and
5 debris;
- 6 (y) *Solid waste management facility* refers to any resource recovery system or
7 component thereof; any system, program or facility for resource
8 conservation; any facility for the collection, source separation, storage,
9 transportation, transfer, processing, treatment, or disposal of solid waste;
- 10 (z) *Solid waste management* refers to the discipline associated with the control
11 of generation, storage, collection, transfer and transport, processing, and
12 disposal of solid wastes in a manner that is in accord with the best principal
13 of public health, economics, engineering, conservation, aesthetics, and
14 other environmental considerations, and that is also responsive to the public
15 attitudes;
- 16 (aa) *Sharps* refer to needles, syringes, scalpels, blades, and any other items that
17 could cut or puncture;
- 18 (bb) *Tipping charge* refers to the amount paid by a generator to a waste-to-
19 energy facility for the disposal of waste;
- 20 (cc) *Toxic and poisonous fumes* refer to emissions and fumes which do not
21 conform to internationally accepted standards, including World Health
22 Organization guideline values;
- 23 (dd) *Waste-to-energy (WTE) technology* refers to any waste treatment process
24 that creates electricity, heat, or transport fuels from a waste source which
25 serves as the feedstock;
- 26 (ee) *WTE facility* refers to any processing facility that utilizes WTE technology
27 such as a power plant, a biofuel plant, and biogas-producing sanitary
28 landfill; and
- 29 (ff) *WTE strategy* refers to a plan of action with measurable targets towards the
30 sustainability of feedstock for and increased utilization of WTE facilities.
31 The strategy is as a tool both for solid waste management and increased
32 utilization of bioenergy technologies.

1 Sec. 5. *Waste-to-Energy Facility.* – A WTE facility shall be considered a solid
2 waste management facility and shall be exempted from the ban on incineration
3 under Section 20 of Republic Act No. 8749, otherwise known as the Clean Air Act of
4 1999: *Provided*, That the facility shall comply with Section 19 of the same Act. A
5 WTE facility shall be required to have arrangements with a sanitary landfill as a
6 disposal site for any waste generated from its operations.

7
8 In addition to the provisions of this Act, the segregation, collection, transfer,
9 storage, and transport of solid waste as feedstock for a WTE facility, and the waste
10 treatment process of the WTE facility shall be governed by Republic Act No. 9003
11 and Republic Act No. 8749, while the energy production aspect of the WTE facility
12 shall be governed by Republic Act No. 9136, otherwise known as the Electric Power
13 Industry Reform Act of 2001, Republic Act No. 9367, otherwise known as the
14 Biofuels Act of 2006, and Republic Act No. 9513, otherwise known as the Renewable
15 Energy Act of 2008, whichever is applicable.

16
17 Sec. 6. *The National Solid Waste Management Commission.* – The Secretary
18 of the Department of Energy shall serve in *ex officio* capacity as member of the
19 National Solid Waste Management Commission, which shall now have fifteen (15)
20 members) from the government sector. In addition to its powers and functions
21 under Republic Act No. 9003, the National Solid Waste Management Commission
22 shall:

- 23 (a) Include a WTE strategy in the National Solid Waste Management Framework;
- 24 (b) Develop and implement a program to assist LGUs in the determination of the
25 potential of WTE facilities in their respective localities;
- 26 (c) Ensure LGUs incorporate a WTE strategy in their respective Local
27 Government Solid Waste Management Plans;
- 28 (d) Coordinate the operation of Provincial, City, and Municipal Solid Waste
29 Management Boards especially for clustered LGUs employing a common WTE
30 facility;
- 31 (e) Regularly determine, review, and publish the following:
 - 32 (i) Standards, criteria, and guidelines for:

- 1 1. Siting, design, operation, and maintenance of WTE facilities,
 - 2 2. Characterization and composition of solid waste utilized as
 - 3 feedstock for WTE facilities to ensure emissions are consistent
 - 4 with Republic Act No. 8739, and
 - 5 3. Disposal of residual waste from WTE facilities, if any;
- 6 (ii) Standards, criteria, guidelines, and formula in computing for a fair,
- 7 equitable, and reasonable tipping charge for WTE facilities taking into
- 8 consideration the cost of construction, operation, and maintenance of
- 9 the facility as well as the potential revenue from the sale of energy
- 10 output such as electric power and biofuels, and
- 11 (iii) Reference tipping charges for various kinds of WTE facilities;
- 12 (f) Adopt regulations to ensure compliance with standards, criteria and
- 13 guidelines promulgated pursuant to this Section; and
- 14 (g) Perform all other acts that are analogous to the foregoing, which are
- 15 necessary and incidental to accomplish the policy objectives of this Act.

16

17 *Sec. 7. Role of the Department of Energy.* – In addition to its powers and

18 functions under Republic Act No. 7638, otherwise known as the Department of

19 Energy Act of 1992, as amended, the Department of Energy shall:

- 20 (a) Accredit and classify WTE facilities based on the energy output, and
- 21 determine the standards, criteria, and requirements applicable for each kind
- 22 of WTE facility pursuant to Republic Act No. 9136, Republic Act No. 9367, and
- 23 Republic Act No. 9513, whichever is applicable;
- 24 (b) Include a WTE strategy in the Philippine Energy Plan, taking into
- 25 consideration the National Solid Waste Management Framework;
- 26 (c) Make available to the public, especially to potential WTE investors, local and
- 27 national information on the following:
 - 28 (i) Current and potential uses of WTE facilities in relation to solid waste
 - 29 management,
 - 30 (ii) Inventory of existing WTE facilities,
 - 31 (iii) General feedstock characterization,
 - 32 (iv) Status and projection of feedstock generation,

- 1 (v) Specific locations of potential feedstock and WTE facilities,
2 (vi) Reference tipping charges for different kinds of WTE facilities,
3 (vii) Current tipping charges, and
4 (viii) Other relevant information.
5 (d) Promote WTE facilities as a kind of renewable energy power plant pursuant to
6 Republic Act No. 9513, and as a type of biofuel plant pursuant to Republic Act
7 No. 9367; and
8 (e) Perform all other acts that are analogous to the foregoing, which are
9 necessary and incidental to accomplish the policy objectives of this Act.

10

11 *Sec. 8. Role of the Department of Environment and Natural Resources.* – In
12 addition to its powers and functions under Republic Act No. 9003 and Republic Act
13 No. 8759, the DENR shall:

- 14 (a) Include a WTE strategy in the National Solid Waste Management Status
15 Report;
16 (b) Based on the program created by the National Solid Waste Commission
17 pursuant to Section 6(b) of this Act, provide technical and other capability
18 building assistance and support to the LGUs to determine the potential of
19 WTE facilities in their respective localities;
20 (c) Recommend policies to eliminate barriers in the uptake and construction of
21 WTE facilities from a solid waste management perspective;
22 (d) Ensure compliance with Sections 6 (e) and (f); and
23 (e) Exercise visitorial and enforcement powers to ensure strict compliance of WTE
24 facilities with this Act, Republic Act No. 9003, and Republic Act No. 8759.

25

26 *Sec. 9. Role of Local Government Units.* – In addition to their powers and
27 functions under Republic Act No. 7160, otherwise known as the Local Government
28 Code of 1991, and Republic Act No. 9003, all LGUs shall:

- 29 (a) Include a WTE strategy in their respective Local Government Solid Waste
30 Management Plans; and
31 (b) Be authorized to enter into:

- (i) Clustering arrangements with other LGUs for a common WTE facility, on their own or upon recommendation of the Provincial Solid Waste Management Board,
 - (ii) Long term contracts with WTE facilities, on their own or with clustered LGUs, and
 - (iii) Joint ventures, public private partnerships, cooperative undertakings under Sec. 33 of Republic Act No. 7160, otherwise known as the Local Government Code of 1991, as amended, and other contractual arrangement allowed by other existing laws, rules, regulations, and their respective charters for the establishment of WTE facilities:
Provided, That LGUs shall be allowed to determine the standards and quality of technology and services of a WTE facility provider.

Sec. 10. Role of the Provincial Solid Waste Management Board. – In addition to its powers and functions under Republic Act No. 9003, the Provincial Solid Waste Management Board shall:

- (1) Integrate a WTE strategy in the Provincial Solid Waste Management Plan from the submitted Local Government Solid Waste Management Plans of all its component cities and municipalities;
 - (2) Identify and include potential locations for WTE facilities in the Provincial Solid Waste Management Plan: *Provided*, That no WTE facility shall be built outside of the locations identified by the Provincial Solid Waste Management Board;
 - (3) Identify and recommend potential clustering of cities and municipalities for a common WTE facility, based on the LGU's location, composition of feedstock, projection of feedstock generation, common solid waste management problems, among others, after reviewing and integrating the submitted Local Government Solid Waste Management Plans of all its component cities and municipalities;
 - (4) Provide the necessary logistical and operational support to cities and municipalities who have the potential to be clustered or have decided to be clustered for a common WTE facility;

- (5) Coordinate the efforts and oversee the implementation of the clustering of component cities and municipalities for a common WTE facility; and
 - (6) Coordinate with other Provincial Solid Waste Management Boards in identifying possible inter-province clustering for a common WTE facility based on the LGU's location, composition of feedstock, projection of feedstock generation, common solid waste management problems, among others, after reviewing and integrating the Local Government Solid Waste Management Plans of all its component cities and municipalities

Sec. 11. Role of the City or Municipal Solid Waste Management Board. – In addition to its powers and functions under Republic Act No. 9003, the City or Municipal Solid Waste Management Board shall integrate a WTE strategy in the Local Government Solid Waste Management Plan.

Sec. 12. Permits and Licenses. – The procedure for the issuance of permits and licenses for all kinds of WTE facilities shall be governed by Republic Act No. 11234, otherwise known as the Energy Virtual One Stop Shop.

Sec. 13. Prohibited Acts. – The following acts are prohibited:

(a) For LGUs:

- (i) Failure to include and implement the WTE strategy in their respective Local Government Solid Waste Management Plans, and
 - (ii) Failure to enforce proper segregation of waste resulting to a change in the composition of the feedstock, which causes the emissions of toxic and hazardous fumes;

(b) For government agencies, failure to perform the powers and functions indicated under Sections 6, 7, and 8 of this Act; and

(c) For the owner and operator of the WTE facility:

- (i) Failure to ensure correct composition of feedstock resulting to the emission of toxic and hazardous fumes, and
 - (ii) Failure to comply with the standards, criteria, guidelines, and formula, when applicable, pursuant to Section 6(e) of this Act;

1 (d) Use of imported solid waste as feedstock for a WTE Facility.

2

3 Sec. 14. *Penalties.* – Without prejudice to civil and criminal liability, the
4 following persons found to have violated the Sections mentioned below shall be
5 meted with the following penalties:

6 (a) Officials of LGUs and government agencies who violate Section 13(a):

7 (i) First offense: six (6) months suspension,
8 (ii) Second offense: Dismissal from service, perpetual disqualification
9 from holding public office, and forfeiture of retirement benefits.

10 (b) Officials of LGUs and government agencies who violate Section 13(b) shall
11 be suffer dismissal from service, perpetual disqualification from holding
12 public office, forfeiture of retirement benefits, and imprisonment for one (1)
13 to six (6) years with a fine of not less than Five hundred thousand pesos
14 (P500,000.00) but not more than Two million pesos (P2,000,000.00).

15 (c) Any person who violates Section 13(c)(i) shall pay a fine of One million pesos
16 (P1,000,000.00) and an amount not less than ten percent (10%) but not
17 more than fifteen percent (15%) of the net annual income during the
18 previous year, and shall suffer imprisonment of a minimum period of one (1)
19 year but not to exceed three (3) years at the discretion of the court and
20 permanent revocation of the license of the WTE facility.

21 (d) Any person who violates Section 13(c)(ii):

22 (i) First offense: Fine of One million pesos (P1,000,000.00) and an
23 amount not less than ten percent (10%) but not more than fifteen
24 percent (15%) of the net annual income during the previous year,

25 (ii) Second offense: The same penalties as with the first offense including
26 an additional penalty of imprisonment of a minimum period of one (1)
27 year but not to exceed three (3) years at the discretion of the court,

28 (iii) Third offense: The same penalties as with the second offense and
29 permanent revocation of the license of the WTE facility.

30 (e) Any person who violates Section 13(d) shall pay a fine of One million pesos
31 (P1,000,000.00) and an amount not less than ten percent (10%) but not
32 more than fifteen percent (15%) of the net annual income during the

1 previous year, and shall suffer imprisonment of a minimum period of one (1)
2 year but not to exceed three (3) years at the discretion of the court and
3 permanent revocation of the license of the WTE facility. The same person
4 shall repatriate the imported solid waste to its country of origin.

5

6 For Section 13 (c) and 13(d), if the violation is committed by a corporation,
7 partnership, or other juridical entity duly recognized in accordance with the law, the
8 chief executive officer, president, general manager, managing partner, or such other
9 officer-in-charge shall be liable for the commission of the offense penalized under
10 this Act.

11

12 Sec. 15. *Incentives.* – The incentives for LGUs under Republic Act No. 9003,
13 biofuel plants under Republic Act No. 9637, and renewable energy power plants
14 under Republic Act No. 9513 shall continue to apply when it comes to the
15 construction, operation, and maintenance of WTE facilities constructed after the
16 effectivity of this Act, whichever is applicable.

17

18 Sec. 16. *Congressional Oversight.* – The Joint Congressional Oversight
19 Committee, created under Republic Act No. 9003, shall exercise oversight powers
20 over the solid waste management aspect of the implementation of this Act. The
21 Joint Congressional Energy Commission, created under Republic Act No. 9136 and
22 renamed under Republic Act No. 11285, shall exercise oversight powers over the
23 energy aspect of the implementation of this Act.

24

25 Sec. 17. *Implementing Rules and Regulations.* – The DOE together with the
26 DENR, in consultation with the appropriate government agencies mentioned herein
27 and energy industry stakeholders, shall issue the implementing rules and regulations
28 of this Act within sixty (60) days upon its effectivity.

29

30 Sec. 18. *Amendatory Clause.* – Section 20 of Republic Act No. 8749,
31 otherwise known as the Clean Air Act of 1999, and Sections 3(dd), 4, 5, 8, 9, 10, 11,

1 12, 14, 15, 16, and 17 of Republic Act No. 9003, otherwise known as the Ecological
2 Solid Waste Management Act of 2000, are hereby amended.

3

4 Sec. 19. *Separability Clause.* – If any portion or provision of this Act is
5 declared unconstitutional, the remainder of this Act or any provisions not affected
6 thereby shall remain in force and effect.

7

8 Sec. 20. *Repealing Clause.* – Any law, presidential decree or issuance,
9 executive order, letter of instruction, rule or regulation inconsistent with the
10 provisions of this Act is hereby repealed or modified accordingly.

11

12 Sec. 21. *Effectivity Clause.* – This Act shall take effect fifteen (15) days
13 following its complete publication in the Official Gazette or a newspaper of general
14 circulation.

Approved,