



Republic of the Philippines
DEPARTMENT OF ENERGY
(Kagawaran ng Enerhiya)

DEPARTMENT CIRCULAR NO. DC2022-02-0002 *JK*

**PRESCRIBING THE POLICIES AND PROGRAMS TO PROMOTE AND
ENHANCE THE DEVELOPMENT OF BIOMASS WASTE-TO-ENERGY (WTE)
FACILITIES**

WHEREAS, Republic Act No. (RA) 7638 or the "Department of Energy (DOE) Act of 1992" declares as a policy of State, among others, to ensure a continuous, adequate, and economic supply of energy through the integrated and intensive exploration, production, management, and development of the country's indigenous energy resources;

WHEREAS, under RA No. 9136 or the "Electric Power Industry Reform Act" (EPIRA), it is the declared policy of the State to ensure the quality, reliability, security, and affordability of the supply of electric power;

WHEREAS, the EPIRA mandates the DOE to encourage private sector investments in the electric power industry and promote the development of indigenous and renewable energy (RE) resources;

WHEREAS, RA No. 9513 or the "Renewable Energy Act of 2008" (RE Act) provides that it is the declared policy of the State to accelerate the development, exploration, utilization of and commercialization of RE by institutionalizing the development of national and local capabilities in the use of RE systems, and promoting their efficient and cost-effective commercial application by providing fiscal and non-fiscal incentives;

WHEREAS, Section 6 of the RE Act requires all stakeholders in the electric power industry to contribute to the growth of the RE industry of the country;

WHEREAS, Section 30 of the RE Act provides that the DOE shall, where practicable, encourage the adoption of waste-to-energy (WTE) facilities and, in coordination with the Department of Environment and Natural Resources (DENR), ensure compliance with said provision of law;

WHEREAS, Section 4(b) of the RE Act defines biomass resources to include biodegradable organic fractions of industrial and municipal wastes that can be used in bioconversion process and other processes, as well as gases and liquid recovered from the decomposition and/or extraction of non-fossilized and biodegradable organic materials;

WHEREAS, Section 6 of the RE Act and Section 4, Rule 2 of its Implementing Rules and Regulations (IRR) established the Renewable Portfolio Standards (RPS) as a policy mechanism to encourage the growth of the RE industry of the country by requiring electric power industry participants such as generators, distribution utilities, or suppliers to source or produce a specified fraction of their electricity from eligible RE resources;

WHEREAS, on 22 December 2017, the DOE issued DC No. DC2017-12-0015, entitled "Promulgating the Rules and Guidelines Governing the Establishment of the Renewable Portfolio Standards for On-Grid Areas," establishing the RPS Rules for On-Grid Areas (RPS On-Grid Rules);

WHEREAS, on 01 February 2018, the DOE issued DC No. DC2018-02-0003, entitled "Adopting and Prescribing the Policy for the Competitive Selection Process (CSP) in the Procurement by the Distribution Utilities of Power Supply Agreement for the Captive Market," which aimed to ensure transparency and competitiveness in the conduct of CSP through wide dissemination of bid opportunities to ensure participation of all eligible and qualified generation companies;

WHEREAS, on 24 August 2018, the DOE issued DC No. DC2018-08-0024, entitled "Promulgating the Rules and Guidelines Governing the Establishment of the Renewable Portfolio Standards for Off-Grid Areas," establishing the RPS Rules for Off-Grid Areas (RPS Off-Grid Rules);

WHEREAS, Section 10 of DC No. DC2017-12-0015 and Section 9 of DC No. DC2018-08-0024, consider WTE technology as an eligible RE facility for compliance with the RPS On-Grid Rules and RPS Off-Grid Rules, respectively;

WHEREAS, on 24 September 2021, the DOE issued DC No. DC2021-09-0030, entitled "Amending Certain Provisions of and Supplementing DC No. DC2018-02-0003 on the Competitive Selection Process (CSP) in the Procurement by the Distribution Utilities of Power Supply Agreement for the Captive Market," promulgating the amendatory and supplementary provisions to DC No. DC2018-02-0003 in the conduct of CSP;

WHEREAS, the DOE recognizes that Biomass WTE facilities simultaneously achieve the twin socio-economic benefits on Local Government Units' (LGUs) solid waste management and provision of additional source of power supply;

WHEREAS, Biomass WTE is recognized as a relevant intervention in reducing methane emission by conversion of wastes into usable heat, electricity, or fuel; and

WHEREAS, the DOE deems it necessary to further support as well as address issues and concerns in the development of Biomass WTE projects in the Philippines, including repurposing of coal power plants into Biomass WTE systems, by issuing this Policy;

NOW THEREFORE, after due consideration of the above premises, the DOE hereby issues this Circular:

Section 1. Title. – This Department Circular shall be known as "*Policy Program for the Enhancement of Biomass Waste-to-Energy (WTE) Development*".

Section 2. Purpose and Objectives. This Circular is issued to:

- 2.1. Promote Biomass WTE facilities as baseload Renewable Energy which can contribute to additional supply sources, solid waste management, benefit to the local economy, and create green jobs, among others;
- 2.2. Provide classification and conditions for eligible Biomass WTE facilities utilizing locally-sourced municipal solid wastes (MSW) pursuant to the RE Act; and
- 2.3. Prescribe policies and programs to enhance the electric power industry in the development of Biomass WTE facilities.

Section 3. Scope. This Circular shall apply to the following stakeholders:

- (a) RE Developers;
- (b) LGUs;
- (c) Distribution Utilities (including Electric Cooperatives);
- (d) Philippine Electricity Market Corporation (PEMC) and the Independent Market Operator;
- (e) National Grid Corporation of the Philippines;

- (f) National Transmission Corporation;
- (g) Energy Regulatory Commission;
- (h) Concerned Government Agencies and Entities (i.e., DENR, DOH, NSWMC, etc.); and
- (i) Other entities which may be later created or otherwise identified relevant to the implementation of this Circular.

Section 4. Definition of Terms. As used in this Circular, the following terms shall be understood to mean as follows:

- (a) **“Baseload Renewable Energy Generation Facility”** refers to a facility consisting of one or more generation units, where energy is produced from a source that is renewable, which is normally operated to take all or part of the minimum load of a system, and which consequently produces energy at an essentially constant rate and runs continuously. This includes, but not limited to, biomass, geothermal, impounding hydroelectric generation facilities, and other emerging renewable energy technologies;
- (b) **“Biomass Waste-to-Energy (WTE)”** shall refer to the process of converting Biomass WTE Resources to produce heat, steam, mechanical power, or electricity through either thermochemical, biochemical, or physico-chemical processes, or through such other technologies which shall comply with the prescribed environmental standards pursuant to RA No. 9513;
- (c) **“Biomass WTE Facility”** shall refer to the structure/appurtenant facility where the Biomass WTE operations are housed;
- (d) **“Biomass WTE Resources”** shall refer to biomass resources consisting of the biodegradable organic fractions of industrial and municipal wastes that can be used in Biomass WTE;
- (e) **“Distribution Utilities”** or **“DU”** refer to electric cooperatives, private corporations, government-owned utilities, or existing local government units, which have exclusive franchises to operate distribution systems in accordance with the EPIRA, including but not limited to, ecozone developers or utility enterprises operating in the special economic zones and/ or export processing zones;
- (f) **“Mandated Participant”** refers to electric power industry participants required to comply with the RPS annual requirement pursuant to Sections 6 and 12 of the RE Act;
- (g) **“Municipal Solid Waste”** refers to waste produced from activities within the territory of LGUs which shall include a combination of domestic, commercial, institutional, and industrial wastes and street litters as defined in RA No. 9003;
- (h) **“Renewable Energy Certificate”** or **“REC”** refers to a certificate issued by the RE Registrar to electric power industry participants showing the energy sourced, produced and sold or used. RE Certificates may be traded in the RE Market in complying with the RPS. For the purposes of this Circular, the REC shall represent all renewable and environmental attributes from one (1) MWh of electricity generation sourced from duly registered eligible RE Facilities;
- (i) **“Renewable Energy Market”** or **“REM”** refers to the market established by the DOE to facilitate compliance by the Mandated Participants of the RPS; and
- (j) **“Renewable Portfolio Standards”** or **“RPS”** refers to a market-based policy that requires the Mandated Participant to source a portion of their energy supply from eligible RE Facilities.

Section 5. Classification of Biomass WTE Resources. Under this Circular, Biomass WTE Resources comply with the definition of renewable energy resources under Section 4(uu) of RA No. 9513 and, as such, shall also be considered a renewable energy resource.

Section 6. Eligibility of Biomass WTE Facilities. To be considered eligible to receive the benefits under this Circular, Biomass WTE facility shall, at all times, meet the following conditions:

- 6.1. Be duly registered with the DOE under the RE Act; and
- 6.2. Be compliant with RA No. 8749 (*Philippine Clean Air Act of 1999*), RA No. 9275 (*Philippine Clean Water Act of 2004*), RA No. 9003 (*Ecological Solid Waste Management Act of 2000*), Presidential Decree No. 1586 (*Establishing an Environmental Impact Statement System*), RA No. 6969 (*Toxic Substance and Hazardous and Nuclear Wastes Act of 1990*), RA No. 9136 (*EPIRA*) and its Implementing Rules and Regulations, other technical standards/guidelines set for the establishment and operation of Biomass WTE facilities, and other laws, rules, and regulations which may later be enacted or issued relevant to Biomass WTE development.

Section 7. Policy Support for Biomass WTE Development

- 7.1. **Compliance with RPS. A Renewable Energy Certificate (REC)** shall be issued to Mandated Participants procuring energy from eligible Biomass WTE Facilities, as follows:

For every 1-MWh generation sourced from duly registered Eligible Biomass WTE facility shall be granted one (1) REC under the RE Market. Provided that generation shall be properly metered as basis for issuance of RECs. Provided further, that the REM Rules for issuance of RECs under DC No. DC2019-12-0016 shall apply.

- 7.2. **Embedded Biomass WTE Generating Facilities.** This Circular prescribes the following policies for eligible Biomass WTE facilities embedded to Distribution Utility (DU) with capacity within the DU's uncontracted electricity supply:
 - (a) **Power Supply Agreements with Eligible Biomass WTE Facilities.** With due consideration to its impact on the power rates of the DU, the term of a Power Supply Agreement to be entered between an eligible Biomass WTE facility and a DU is recommended to be a minimum twenty (20) years.
 - (b) **Conduct of Competitive Selection Process (CSP).** Eligible Biomass WTE facilities shall be exempt from the conduct of CSP in accordance with Section 2.2.1.3 of DC No. DC2021-09-0030.

Section 8. Regulatory Support. The Energy Regulatory Commission shall issue the necessary rules and regulations for the effective implementation of this Circular within sixty (60) days upon its effectivity.

Section 9. Prohibited Act. Pursuant to Section 35(e) of the RE Act and its IRR, non-compliance or violation of the provisions of this Circular shall be subject to the administrative penalties provided thereunder.

Section 10. Information, Education and Communication (IEC), and Promotion Activities to Stakeholders. Pursuant to Section 31, Rule 10 of the IRR of the RE Act, the DOE, through REMB shall develop and implement an intensive and massive IEC and promotion activities to increase the public awareness and appreciation of this Circular and the RE industry as a whole.

Section 11. Separability Clause. If any provision of this Circular is declared invalid or unconstitutional by a court of competent jurisdiction, the other provisions not affected thereby shall remain valid and subsisting.

Section 12. Repealing Clause. Any prior issuances, orders, or circulars inconsistent with this Circular are hereby repealed, amended or modified accordingly.

Section 13. Effectivity. This Circular shall take effect fifteen (15) days after its publication in two (2) newspapers of general circulation. Copies of this Circular shall be filed with the University of the Philippine Law Center – Office of the National Administrative Register.

Issued on FEB 17 2022 at the Department of Energy, Fort Bonifacio, Taguig City, Metro Manila.


ALFONSO G. CUSI
Secretary



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DEPARTMENT OF ENERGY

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