



PHILIPPINE RENEWABLE ENERGY MARKET FAQS

What is the Philippine Renewable Energy Market (REM)?

The REM is the venue for the trading of Renewable Energy Certificates (RECs) equivalent to an amount of power generated from RE resources, and is intended as a facility for Mandated Participants to comply with their Renewable Portfolio Standards (RPS) obligations.

The Renewable Energy Act (R. A. 9513) or the RE Act is the legislation that provides for the establishment of the REM. Pursuant to Section 8 of the RE Act, the Department of Energy (DOE) shall establish the REM and shall direct the Philippine Electricity Market Corporation (PEMC) to incorporate changes to the Wholesale Electricity Spot Market (WESM) Rules for the operation of the REM under the WESM.

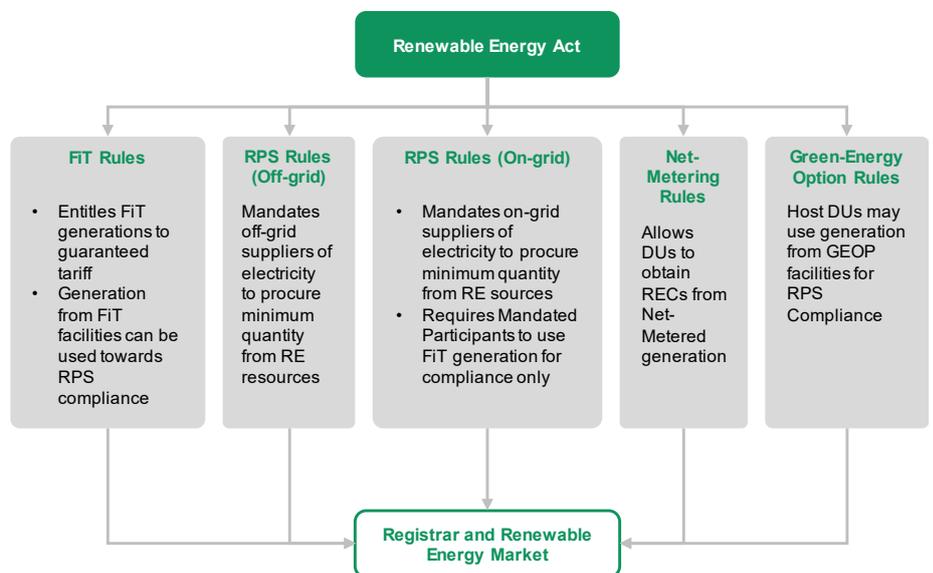


Figure 1. REM Rules Policy Framework

What are the objectives of the REM?

The objectives of the REM are to:

- Establish a fair and transparent market for the trading of RECs
- Facilitate compliance with RPS through mechanisms established under the REM Rules
- Ensure level playing field for all REM participants
- Ensure REC prices are governed as far as practicable by the fundamentals of supply and demand
- Ensure that the prices of RECs are, in the long-term, reflective of the benefits of bringing an additional MWh of RE generation into the Philippine electricity system
- Issue RECs only to actual RE generation from eligible RE generating facilities

What are the REM Rules?

The REM Rules establishes the guidelines, requirements, and procedures for the operation and governance of the REM. It seeks to:

- Facilitate the efficient operation of the REM
- Specify the terms and conditions to which entities may be authorized to participate in the REM
- Specify the authority and governance framework of the REM
- Provide for sanctions in cases of breaches of the REM Rules
- Provide a timely and cost-effective framework for resolution of disputes among REM Members and the RE Registrar

What is the Renewable Portfolio Standard?

The RPS refers to a market-based policy that mandates electricity suppliers to source an agreed portion of their energy supply from eligible RE resources contributing to the growth of the RE industry in the country.



What is the governance structure of the REM?

Under the RE Act, the DOE is mandated to establish the REM through supervising the integration of the operation of the REM under the WESM. The DOE will also promulgate the REM Rules and REM Manuals, and approve amendments to the REM Rules. The DOE is further empowered to impose administrative fines and penalties for any violation of the provisions of the RE Act, its Implementing Rules and Regulations (IRR) and other issuances relative to the same.

REM operations will be supervised and monitored by the REM Governance Committee (RGC). The RGC will also take the lead in the review, approval, and endorsement, through the Philippine Electricity Market Board of Directors (PEM Board), of proposed changes to rules and manuals to the DOE. The other governance functions such as market audit and dispute resolution will be covered by the existing governance committees for the WESM. The RGC will also have the authority to impose sanctions on REM Members if the breach of the REM Rules was proven through an investigation carried out by the Enforcement and Compliance Office (ECO) of PEMC.

The RGC will be composed of one (1) independent member to be elected from the independent members of the PEM Board, one (1) representative each from the RE Registrar (RER), the REM Generators, Electric Cooperatives (ECs) and Private DUs to be appointed by the PEM Board. The RGC Chairperson is an independent member from the PEM Board.

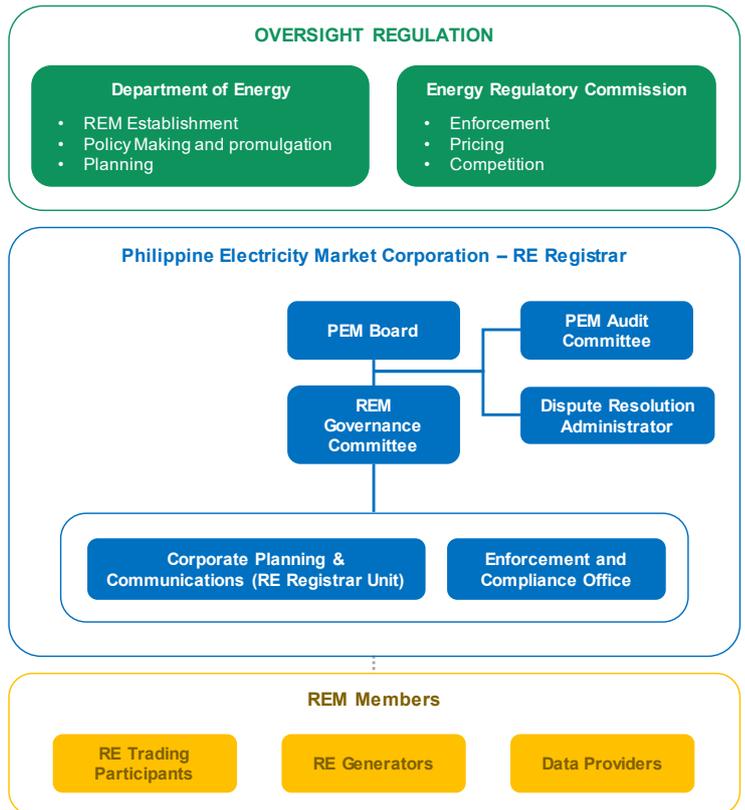


Figure 2. REM Governance Structure

Who will operate the REM?

The REM will be administered and operated by the RER, in accordance with the REM Rules and REM Manuals under the PEMC on a non-profit basis.

The Registrar’s responsibilities include the following:

- Issue RECs to eligible recipients for every MWh of eligible RE generation
- Administer and maintain the Registry and REC transactions
- Facilitate REM registration and accounts management
- Develop, improve, and maintain systems, processes, and procedures to be used in the operation of the REM and the administration of the Registry.

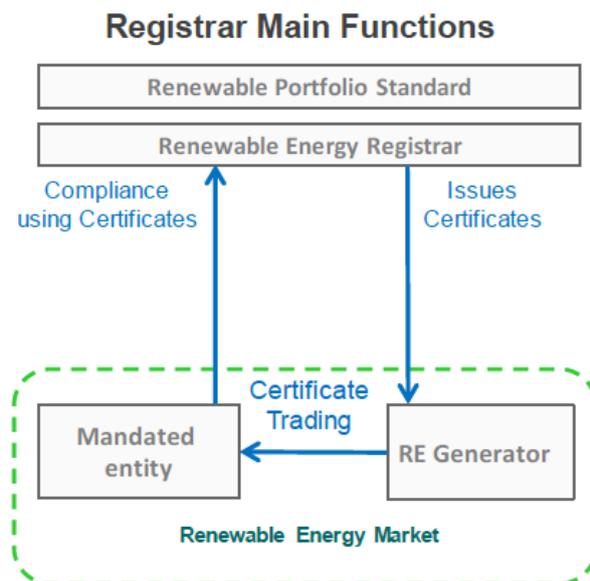


Figure 3. RER Main Functions

Who can participate in the REM?

The following are required to be members of the REM: (1) On-Grid Mandated Participants including suppliers of electricity to end users in on-grid areas (i.e. DUs, ECs, Retail Electricity Suppliers (RES), Local Electricity Suppliers (LRES), Supplier of Last Resort (SOLR), GenCos supplying DCCs); and Off-Grid Mandated Participants, which include suppliers of electricity to end-users in the off-grid areas.

Also, generation companies who own eligible RE generation facilities that participate in the WESM or operate in the off-grid area, shall register in the REM to be eligible to receive RE certificates for their generation. REM Generators must belong to one of following technology categories: biomass, waste to energy, wind, solar, ocean, run-of-river hydro, other impounding hydro systems, geothermal, and hybrid systems.

In addition, embedded RE generating facilities may register in the REM, while distribution utilities can register on behalf of the net metered RE generating facilities and participants to the Green Energy Option Program (GEOP) that they host.

What are the membership requirements to participate in the REM?

The following are the membership requirements to qualify as REM Member:

- Resident in, or is permanently established in, the Philippines
- Not under external administration as defined under any law applicable to that person or entity in any jurisdiction
- Not immune from suit in respect of the obligations of a REM Member under the REM Rules
- Capable of being sued in its own name in a court of the Philippines
- Qualified to be registered under no less than one (1) REM Member category

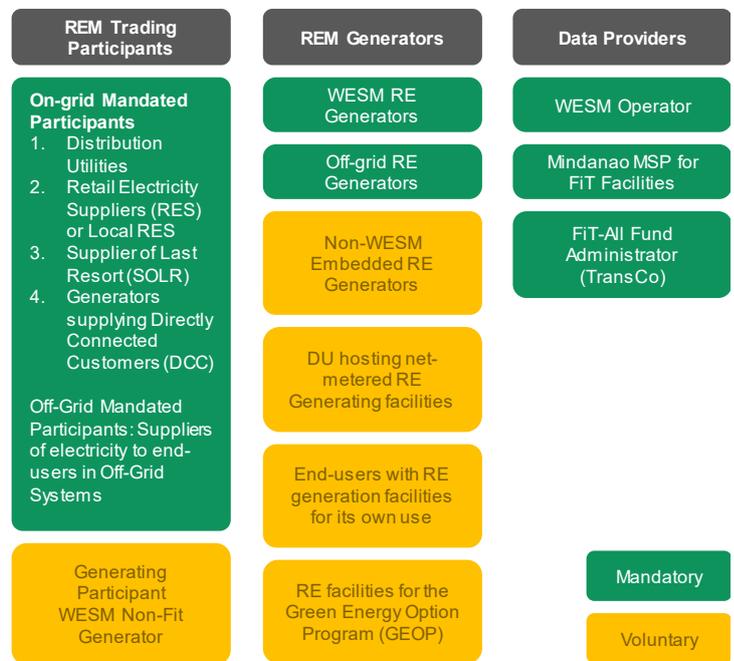


Figure 4. REM Member Categories

How are RECs transacted in the REM?

The RER will issue to eligible Trading Participant one REC for every mega-watt hour (MWh) of actual (metered) RE generation.

RECs shall be retired if a Mandated Participant surrenders the RECs for compliance with their RPS requirements. If retired, the RECs can no longer be traded with another REM Member.

A REM Trading Participant (TP) may transfer a REC to another REM TP and will disclose the price and volume of each REC transfer. In addition, the same REM TP may choose to bank a REC for up to three (3) years pursuant to the RPD.

A Mandated Participant may surrender a REC that has not been retired or has not expired for compliance with their annual RPS obligation with respect to a particular compliance period. Further, the Registrar will retire a REC if a Mandated Participant surrenders the REC for compliance with their RPS requirement. A REC that has been retired may not be transferred to another REM TP or surrendered for compliance with a Mandated Participant's RPS requirement.

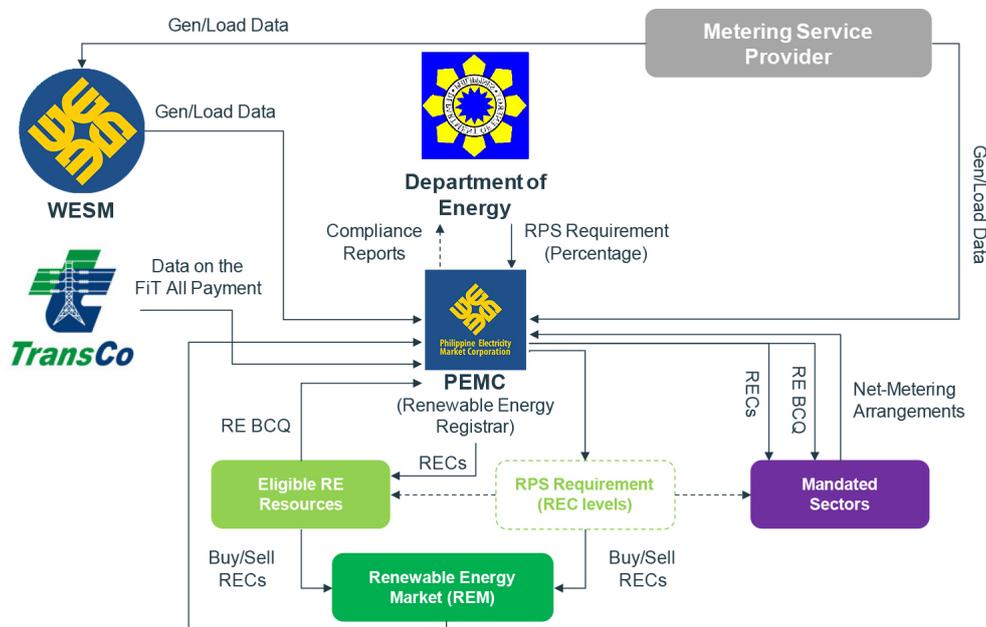


Figure 5. REM Trading and Process Overview

What will be the price of the REC when traded?

Per the REM Rules, a REC price cap will be determined by the DOE and to be approved by the Energy Regulatory Commission. In the REM's Bulletin Board, which will serve as a venue for REM Trading Participants to post information, RECs that are available for selling and REC requirements to be bought by the Mandated Participants are posted. The REM participants will coordinate with the other REM participants to sell or buy RECs, and will also settle the transaction among themselves. The REM participants shall then report the transaction to the RE Registrar, which will transfer the RECs, accordingly.

How are the operations of the WESM and the REM related?

The WESM Operator will provide settlement ready MQ and BCQ data to the RE Registrar for REM Generators in the WESM. The Mandated Participants will provide metered data to the Registrar for non-WESM RE Generators, off-grid Generators or net-metered generators. Generation Companies with hybrid systems must provide the RE Registrar with certified estimates of RE generated.

A Mandated Participant will receive one (1) REC for every MWh of energy purchased under its contract with an eligible RE Generator in the WESM, with an eligible RE embedded/off-grid generator not registered in the WESM, or with a net-metered RE generator upon verification by the relevant agency. Generation Companies will receive one (1) REC for every MWh generated by their REM Generators into the WESM for any uncontracted RE generation.

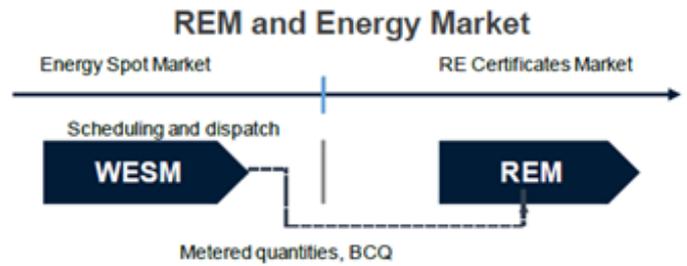
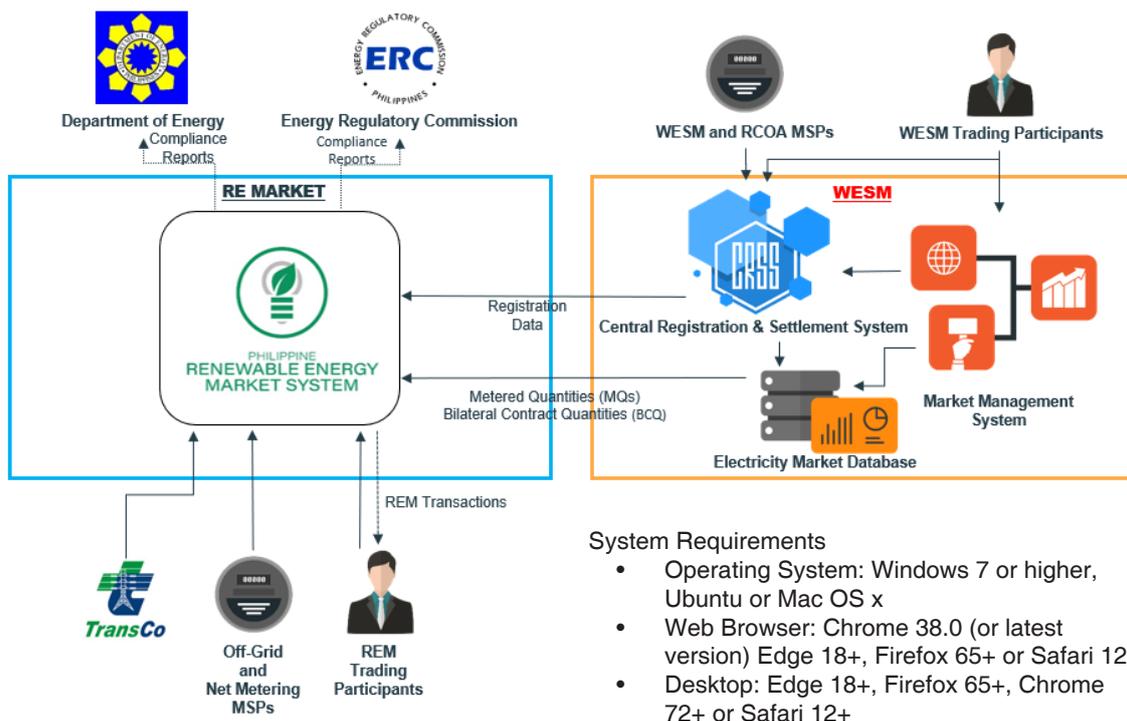


Figure 6. REM and WESM Interface

What is the Philippine Renewable Energy Market System (PREMS)?

The Philippine Renewable Energy Market System (PREMS) is an enterprise-grade system that will automate the main functions of the RE Registrar.

PREMS handles the registration of the Mandated and Generating Participants, and General Participants. The system manages the calculation, allocation, and issuance of REC. It is also in charge of the Mandated Participants' RPS Compliance and Report Management.



System Requirements

- Operating System: Windows 7 or higher, Ubuntu or Mac OS x
- Web Browser: Chrome 38.0 (or latest version) Edge 18+, Firefox 65+ or Safari 12+
- Desktop: Edge 18+, Firefox 65+, Chrome 72+ or Safari 12+

Figure 7. High Level Infrastructure and Interfaces of the PREMS

For any questions or concerns, please contact:

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