

Fact Sheet on Renewable Energy Certificates



About RECs

What are RECs?

- Renewable Energy Certificates (RECs) are financial instruments that certify the purchase by an investor of units of electricity generated from renewable energy sources.
- RECs are also known in different parts of the world by various names such as¹:
 - Guarantees of Origin (GOs)
 - Energy Attribute Certificates (EAC)
 - Green Energy Certificates
 - Large-scale Generation Certificates (LGCs)
- The purchase of RECs encourages production of renewable energy, which is an energy source that does not produce greenhouse gas emissions or other pollutants; and
- Please click the links below for more information:
 - [An overview of different type of RECs traded around the world](#) (See page 42)
 - [Use of RECs by various industries](#) (See page 43)

How do RECs work²?

- Electricity generated from renewable sources typically shares the same grid as conventional fossil fuel generators.
- Electricity generated from different sources (renewables vs fossil fuels) cannot be differentiated in the grid.
- If a customer wants to buy clean energy from the same grid, it can purchase and redeem RECs to offset the consumed electricity produced by fossil fuels. This way, the customer can declare that it is using renewable energy through RECs.

How are RECs generated?

- A REC is produced when one megawatt-hour (MWh) of electricity is generated and delivered to the electricity grid from a renewable energy resource.
- Once a REC is redeemed, it cannot be used anymore.
- RECs are uniquely numbered and include information such as where they were generated, the type of renewable resource they came from, and a date stamp of generation.

¹ The International Renewable Energy Agency (IRENA). (2018, May). Corporate Sourcing of Renewables: Market and Industry Trends – REmade Index 2018, pp.4 & 44

² <https://www.epa.gov/greenpower/renewable-energy-certificates-recs#how>



Customer Journey for Purchasing RECs through EMC

