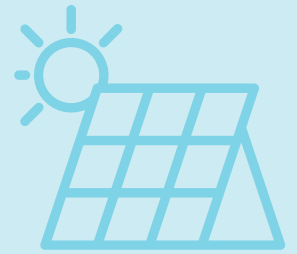


RENEWABLE ENERGY CERTIFICATES



Overview

Renewable Energy Certificates (RECs) are an essential and reliable tool for tracking and promoting renewable energy adoption. RECs help drive the economic development of new renewable energy facilities, promote a cleaner, greener grid, and support technological innovation. RECs empower both individuals and businesses to actively participate in the renewable energy transition, making tangible environmental benefits possible.

What are RECs?

- **Renewable Energy Certificates (RECs):** Certification representing one megawatt-hour (MWh) of clean, renewable electricity (as defined by X) that is tracked for a specific renewable energy generator. RECs are market-based, tradeable, and reliable in tracking and authenticating renewable energy that is being generated and consumed.
- **Bundled RECs:** Sold together, where the purchaser receives both the electrons and the environmental attribute from the same source.
- **Unbundled RECs:** Sold separately from the electricity itself, where the purchaser receives the environmental attribute and the electrons from different sources.

REC Regulation

RECs are generally regulated by the state, with REC disclosure requirements often changing between states. The disclosure requirements often include information on the amount of energy generated, the source and nature of the energy, a description of the generating project, authentication, and the cost of the REC. Some states place restrictions on which sources and markets can qualify for RECs and how long different RECs have before retirement. In the absence of state regulation, the [Federal Trade Commission's \(FTC\) Green Guides](#) are used as an industry standard.

Compliance vs Voluntary RECs

Some states have established a Renewable Portfolio Standard (RPS), putting minimum requirements on the amount of clean energy sold to each customer, the type and sometimes geographic source. This requirement applies to all sales of electricity. The RECs purchased to meet the state's RPS requirement are often called Compliance RECs. Voluntary RECs are any RECs voluntarily purchased in addition to the RPS requirement. While these RECs still comply with federal guidelines, they do not have to meet the state RPS requirements.

REC Life Cycle

Generation to Retirement

- 1 Renewable electricity is generated and each megawatt-hour (MWh) produced is registered as a REC with the regional or national tracking system and assigned a unique serial number that includes information such as the facility name, type of energy, location of generation and year it came online.
- 2 The electricity is then delivered to the grid where it is mixed in with other regional generation and distributed to regional customers.
- 3 The generator can then sell the REC to a variety of entities such as a company, retail energy supplier, broker, utility, etc.
- 4 Once the REC is sold, it is retired in the system where it was registered to avoid double counting.

ABOUT US

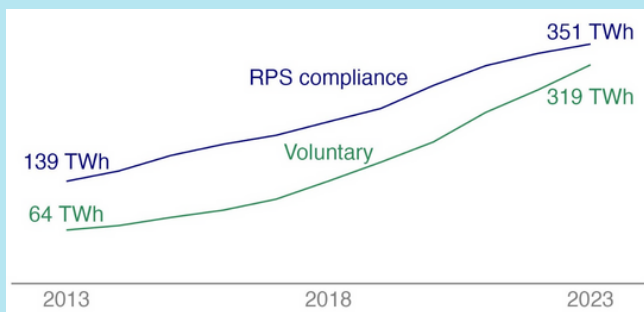
The Retail Energy Advancement League developed this guide to provide customers with valuable insights into the advantages of selecting a competitive electric supplier and equipping them with the knowledge to make well-informed decisions within the market.

If you have any questions, please email info@retailenergychoice.org



REAL

REC Sales in the U.S.



Graph Source: National Renewable Energy Laboratory

Voluntary procurement of RECs in the U.S. continues to rise, demonstrating the value of market structures that provide customers with options. In vertically integrated utility monopoly states, some utilities offer one “green pricing option” whereas in restructured, competitive energy states suppliers provide residents with a variety of 100% renewable energy plans and sometimes community choice aggregation options. Voluntary REC sales in restructured, competitive energy states more than double the sale of RECs by utilities in monopoly states, even though there are fewer competitive energy states.

- “Green pricing option”: available in 37 states
 - (only 6% of U.S. voluntary REC sales)
- 100% Renewable competitive supplier plans or green CCAs: available in 19 states
 - (14% of U.S. voluntary REC sales)

Clean Energy Options for Customers of All Income Levels

Customers voluntarily choosing clean energy make up almost half of the market driving investments in clean energy resources in the U.S., reducing costs for customers who may not be able to afford a higher state RPS.

Sometimes compliance RECs from in-state or regional projects are very expensive, are delayed because of the lack of infrastructure, or the availability of RECs is curtailed because of too much of an influx at one time, creating a supply and demand challenge. Allowing customers to purchase RECs from clean energy sources in other states gives cost-conscious customers with the ability to support clean energy development and existing clean energy resources at a price they can afford, rather than support fossil fuels with their default utility service. At a time when default utility service is still predominantly fossil fuels, customers should have a choice to purchase what may be a higher-cost REC from a local facility compared to a lower-cost RECs from outside the region.

Key Takeaways

- **Economic Opportunities:** RECs signal demand for renewable energy above state requirements, encouraging private investments in new projects and sustaining existing renewable energy facilities.
- **Transparency:** Customer priorities and preference varies and they need to have the information needed to make an informed decision. States determine what information should be shared with customers about their clean energy options through disclosure requirements. In the absence of state regulations, the FTC Green Guides are used as an industry standard.
- **Voluntary REC Options:** Provide renewable energy options for customers of all income levels and drive additional demand in the market, attracting private investments in clean energy resources.
- **Competitive Energy Markets:** Open markets that allow companies to compete with the utility have significantly more renewable energy offers available to customers with plans that vary on energy type, cost and terms. Voluntary purchases of RECs are higher in these markets than vertically integrated markets where the utility still has a monopoly.
- **Challenges:** Restricting REC purchases to different attributes than national standards and certain geographic areas will result in higher costs, fewer voluntary REC products and fewer customers participating in the market.

Additional Resources

- [A More Comprehensive View of the Impacts of Voluntary Demand for Renewable Energy](#), by Eric O’Shaughnessy
- [Making Voluntary Markets for Clean Electricity Work](#) by CRS - September 2024
- [Project Map](#) | US EPA
- [Recognition and evaluation in voluntary renewable energy markets](#), by Eric O’Shaughnessy
- [Renewable Energy Credits as Property](#) – Harvard Law Review
- [Assessing the Impact of Voluntary Actions on the Grid](#) – RMI, ZEROgrid’s Impact Advisory Initiative
- [NREL Voluntary Green Power Procurement 2023 Data](#)