



CRS

center for
resource
solutions

Fact Sheet: Green-e Energy Certification Program

I. Background on Center for Resource Solutions (CRS) and Green-e®

CRS is a 501(c)(3) nonprofit organization that creates policy and market solutions to advance sustainable energy and mitigate climate change. Our leadership through collaboration and environmental innovation builds policies and consumer-protection mechanisms in renewable energy, greenhouse gas (GHG) reductions, and energy efficiency that foster healthy and sustained growth in national and international markets. CRS has broad expertise in renewable energy and greenhouse gas policy and markets.

CRS administers the Green-e programs. Green-e Energy is the nation's leading independent consumer protection program providing certification and verification for renewable electricity and renewable energy certificates (RECs) sold to households and organizations. Green-e Climate is a certification program that sets consumer protection and environmental-integrity standards for carbon offsets sold in the voluntary market. Green-e Marketplace encourages and supports businesses that use renewable energy and take steps to reduce their greenhouse gas footprint, including granting Green-e logo use for products manufactured with renewable energy.

Stakeholder-driven standards supported by rigorous verification audits are a cornerstone of Green-e and enable CRS to provide independent third-party certification of environmental commodity transactions. The Green-e environmental and consumer protection standards are determined by the independent Green-e Governance Board, which includes representatives from environmental nonprofits, consumer advocates, and purchasers. The Green-e standards have been developed and are periodically revised through an open stakeholder process. Green-e program documents, including the standards, contract templates, and the annual verification report, as well as the list of current Green-e Governance Board members, are available at www.green-e.org.

II. Green-e Certified Green Power and Renewable Energy Certificates

Green-e Certified Clean Energy Comes From New Facilities. Green-e Energy requires the highest level of environmental quality of any national standard in the United States for renewable energy. This means that renewable energy must come from qualifying sources of generation like wind, solar, low-impact hydropower, and certain types of biomass, that were built (or significantly upgraded) within the last 15 years. Green power sold through a Green-e certified program must have been generated recently—within the same calendar year, the first three months of the following year, or the last six months of the prior calendar year, from when the electricity consumer purchases it. “Banking” of renewable energy beyond this is not allowed, and renewable energy outside this window cannot be sold in a certified product. In a Green-e Energy certified electricity program offered by a utility or other electricity service provider, the renewable energy must be sourced from within the same electricity region (NERC region). Once certified

clean energy is sold to a consumer or business, it cannot be double-counted toward a state or utility goal. All Green-e Energy certified electricity is additional to any regulatory or legal renewable energy requirement.ⁱ

Consistent REC Definitions Nationwide. Renewable electricity is tracked through renewable energy certificates, one REC for every unit of renewable energy (megawatt-hour) generated. This REC embodies all the environmental attributes of that clean energy generation, a definition held by the U.S. Environmental Protection Agency and Department of Energy, and most states with renewable energy goals,ⁱⁱ including the California Public Utilities Commission (CPUC). The CPUC's definition, which is also upheld by Green-e Energy, states that a REC "includes all renewable and environmental attributes associated with the production of electricity from the eligible renewable energy resource."ⁱⁱⁱ This clarity ensures consumers who purchase RECs can make those environmental claims.

Renewable Energy Available to Anyone, Anywhere, Anytime. One of the great advantages of RECs is that they allow anyone anywhere to purchase renewable energy for their home or business. This means that not only can consumers support renewable energy generation where they choose, but developers can build where it makes the most economic sense, and sell the RECs to a broader market than just the local utility, which may not be willing to pay the necessary price to support the facility. For those customers who aren't able to install their own on-site renewable systems—either because of high up-front costs, the lack of local incentives or rebates, or because they are living in rented or multifamily housing—voluntary renewable electricity and REC programs allow them to buy clean energy, increasing demand nationwide. In 2011, about 40 million MWh of renewable energy—enough to power Alaska, Hawaii, New Hampshire, Rhode Island, and Vermont combined—was sold to voluntary buyers including households and businesses.^{iv} Green-e Energy certification gives renewable energy and REC purchasers assurances that they are provided accurate and full information by their supplier, that the supplier is audited and delivers what is promised, and that all certified renewable energy is above and beyond what is required by law.

RECs Help the Bottom Line. There are many important pieces to consider when building and financing new renewable energy generation, including the income from selling the electricity and the RECs, tax incentives like the production tax credit and accelerated depreciation, the availability of and access to transmission lines, interest rates for loans and investors, and siting and permitting constraints. Each of these can derail a project if the terms aren't favorable. But one constant that renewable energy generators can count on is the income from RECs, which are available to all types of renewable generation, including small-scale distributed generation like community solar. RECs act as an additional income stream, a premium the generator earns for being renewable instead of fossil fueled, that can be sold alongside the underlying electricity. REC prices vary over time and across the country based on a variety of factors, including the type of technology, whether there are state requirements for utilities to purchase certain types of RECs, and demand from voluntary purchasers.

REC Market Stability and Cohesiveness. Since it began in the late 1990s, the REC market has developed a sophisticated infrastructure that allows electronic tracking and trading of certificates so that customers in the voluntary market and states with renewable energy goals can buy clean energy with clear title, and full understanding of exactly what they are getting. Consistent state and federal descriptions of the environmental benefits contained in RECs means that consumers can claim zero-emission electricity use

wherever they live.^v By setting the highest standard for renewable energy sold to consumers and businesses in the U.S., and through robust verification procedures that ensure transparency and truth in marketing, Green-e has helped make the U.S. retail REC market a significant support for new renewable energy facilities.

Resources

1. [“Guide to Purchasing Green Power: Renewable Electricity, Renewable Energy Certificates and On-Site Renewable Generation”](#) (March 2010). Written by the US EPA, US DOE, World Resources Institute, and CRS, this comprehensive guide is recommended reading for anyone considering a green power procurement.
2. [“Renewable Energy Certificates, Carbon Offsets, and Carbon Claims: Best Practices and Frequently Asked Questions”](#) (April 9, 2012). Includes answers to many questions about renewable energy certificates, carbon offsets, and the relationship between renewable energy and greenhouse gas reductions.
3. [“Best Practices in Public Claims for Green Power Purchases and Sales”](#) (July 10, 2009). Written by CRS, this report details claim issues with renewable energy installations, hosts, sellers, and customers.
4. [“Market Brief: Status of the Voluntary Renewable Energy Certificate Market \(2011 Data\).”](#) A look at the voluntary green power market and the role of RECs from the National Renewable Energy Laboratory.
5. [“Quick Guide: Renewable Energy Certificates \(RECs\) \(Fact Sheet\)”](#). Federal Energy Management Program (FEMP). (2011). A brief from NREL on what RECs are and how they can also be used to help Federal agencies meet greenhouse gas (GHG) emissions reduction goals.
6. [“Status and Trends in U.S. Compliance and Voluntary Renewable Energy Certificate Markets \(2010 Data\).”](#) An annual report from NREL on the state of the retail renewable energy market, released in 2011.

For more information about Center for Resource Solutions or Green-e, please visit our website at www.resource-solutions.org or call 415-561-2100.

ⁱ *Green-e Energy National Standard*, p. 6, Version 2.1, available at www.green-e.org/getcert_re_stan.shtml.

ⁱⁱ “Guide to Purchasing Green Power: Renewable Electricity, Renewable Energy Certificates, and On-Site Renewable Generation” (Revised February 1, 2011), p. 10. Available at www.epa.gov/greenpower/documents/purchasing_guide_for_web.pdf.

ⁱⁱⁱ Available at www.cpuc.ca.gov/PUC/energy/Renewables/FAQs/05REcertificates.htm.

^{iv} *Market Brief: Status of the Voluntary Renewable Energy Certificate Market (2011 Data)*, p.4. National Renewable Energy Laboratory,

^v For a map of renewable energy tracking systems, which also define environmental attributes contained in RECs, see <http://apps3.eere.energy.gov/greenpower/markets/certificates.shtml?page=3>.