Voluntary Renewable Energy Markets 101

Green Power and Green Power Partnership: Motivations, Claims, & Standards

Renewable Energy Markets Conference 2015

October 19, 2015

Green Power Partnership Overview

- **Summary**
  - The U.S. EPA's Green Power Partnership is a **free, voluntary** program that encourages organizations to use green power as a way to reduce the environmental impacts associated with conventional electricity use.
- **Objectives**
  - Reduce U.S. greenhouse gas emissions
  - Expand the voluntary green power market
  - Standardize green power procurement as part of best practice environmental management
  - Provide recognition platform for organizations using green power in the hope that others follow their lead
- 1,300 Partners are purchasing >28 B kWh annually

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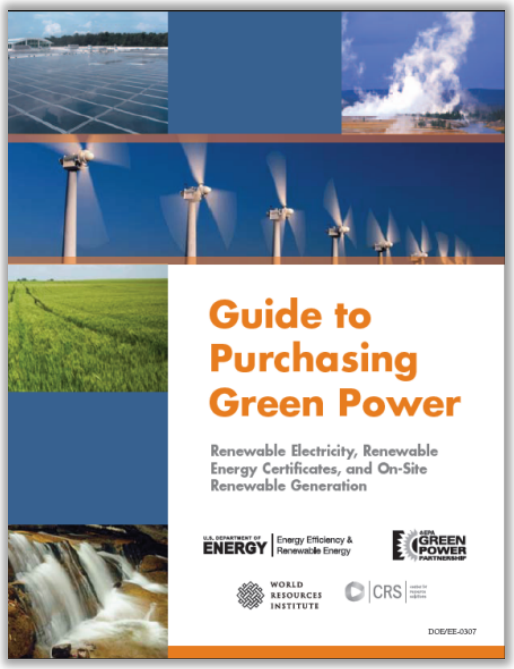
Partnership Offerings & Benefits

- **Benchmarks**
  - Definition of eligible renewables
  - Metric for "How much green power?"
  - Green Power Communities
- **Resources**
  - Purchasing guidance
  - Marketing and communications support
  - Informational webinars
- **Recognition**
  - Top Partner Lists
  - Green Power Leadership Awards
  - Use of the Partner logo



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Key Partnership Activities

- **Top Partners Lists**
  - National Top 50
  - Top 20 Retail
  - Top 10 Federal Government
  - Top 20 College & University
  - Top 20 On-site Generation
  - Long-term Contracts
  - 100% Green Power Users
  - Fortune 500® Partners
  - Top 20 Local Government
  - Top 20 Tech & Telecom
  - Top 20 K-12 Schools
  - Green Power Communities
- **College & University Green Power Challenge**
- **Green Power Leadership Awards for Purchasers and Suppliers**

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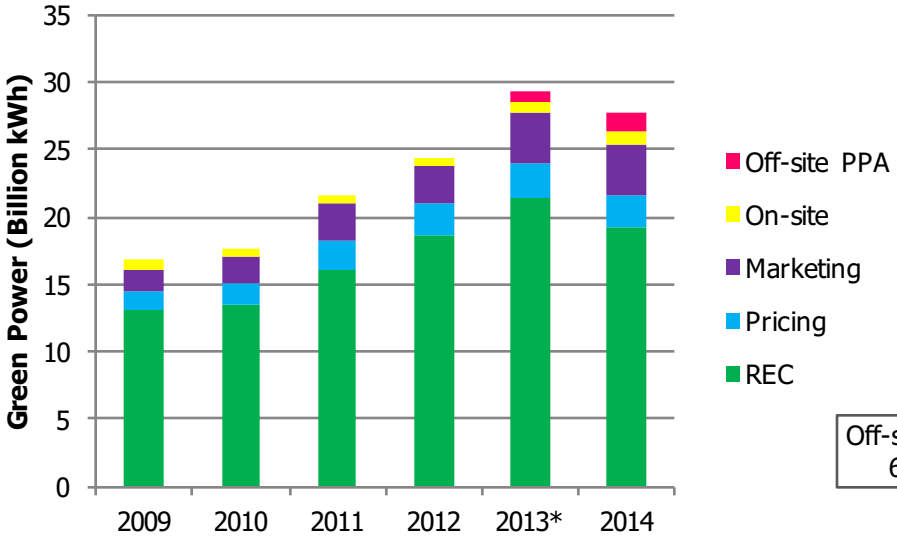
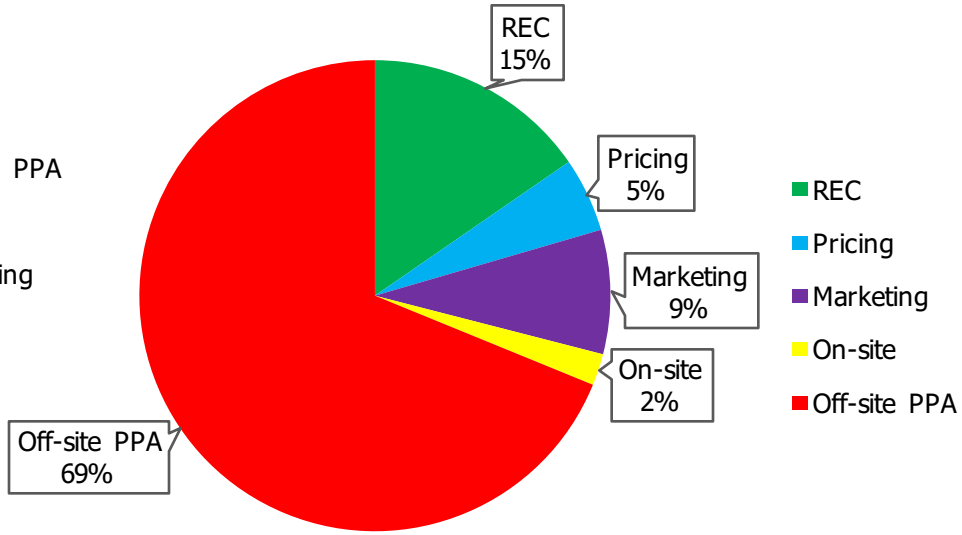
GPP Summary Statistics

Program kWh by Product type 2014



Average Green Power Use by Product Type 2014



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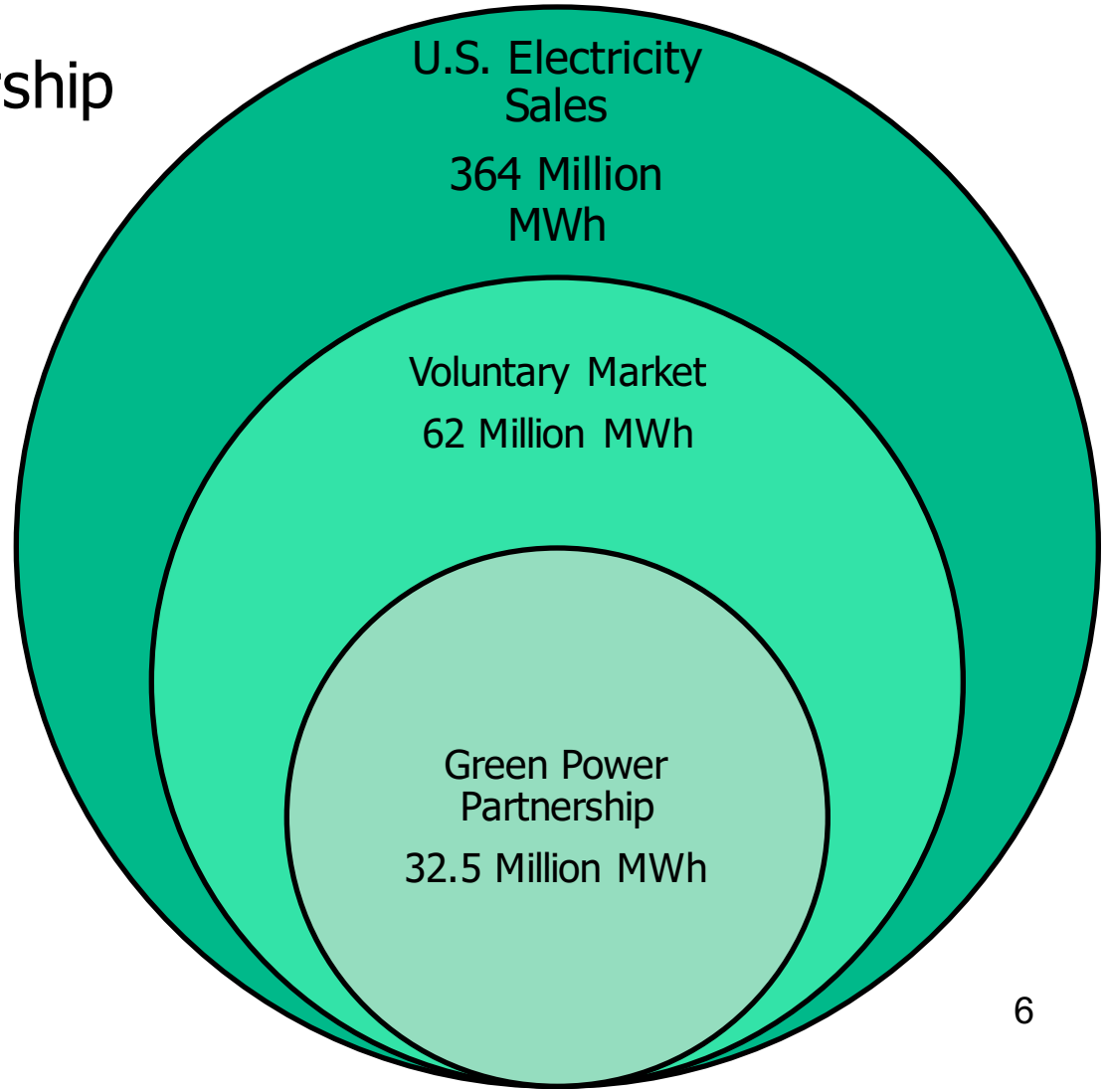
The Green Power Partnership represents:

- Nearly 1300 Partners
- 52 percent of the total voluntary market



Topics

- **MOTIVATIONS** — **Why purchase?**
- **CLAIMS** — **What are safe statements?**
- **STANDARDS** — **Where to look for guidance?**
- **SUPPORT** — **Who can help?**

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Green Power Purchase Motivations

- **Range from basic desires to strategic goals**
- **Basic motivations:**
  - Be a market leader
  - Do the right thing
  - Make an impact
- **Strategic motivations:**
  - Plans to be a more socially responsible organization
  - Seeks to reduce a corporate greenhouse gas (GHG) inventory
  - Desires to differentiate products or services
  - Reduce electricity costs and/or stabilize electricity costs

Example:
Corporate GHG Accounting

- **Many organizations are accounting for the GHG emissions related to their operations and doing business**
- **Purchased electricity is often a big source of GHGs**
- **Renewable electricity is one way to reduce the emissions associated with purchased electricity**

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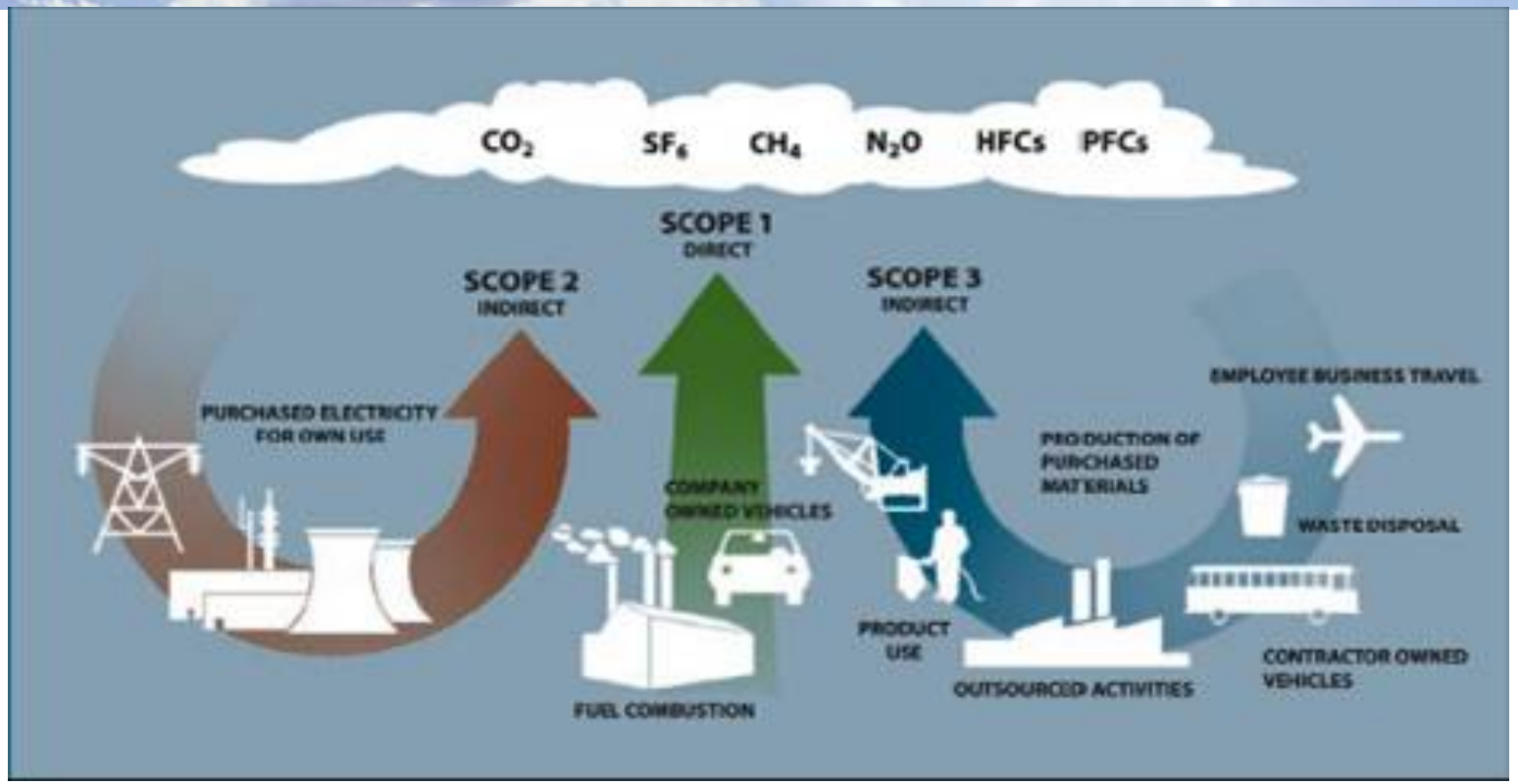
Example: Corporate GHG Accounting



- **Renewable electricity benefits**
  - Actual emissions of renewable electricity are very low, if not zero
  - When renewable electricity reduces need for electricity from sources that emit GHGs, there are avoided emissions

Environmental Claims

- **A simple, safe claim**
  - I use renewable electricity which has lower GHG emissions
- **Focus on GHG emission claims, rather than clean air**
  - Environmental regulations for SO_2 and NO_x complicate those claims

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Types of Partner Claims

- **Purchaser claims**
  - Powered in part or wholly by renewable electricity
  - Reducing our emissions associated with purchased electricity
  - Supporting renewable energy

- **Generator claims**
  - Generates renewable electricity
  - Produces zero or low emissions electricity

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Making Environmental Claims

- **Explain green power & the environmental benefits**
  - Most have a limited understanding of green power and its benefits
  - Provide simple information about the difference you will make
  - Ensure that you have retained the contractual rights to make claims
- **Make your message tangible**

More info → http://www3.epa.gov/greenpower/buygp/claims.htm

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Partners' Procurement Options

- **Install a renewable electricity system**
  - Self-generate or have a third-party owned system installed
- **Purchase renewable electricity**
  - Purchase electricity and RECs bundled from an electricity supplier
  - Purchase unbundled RECs from a REC marketer or broker

- ***Renewable electricity use is demonstrated by the ownership and retention of Renewable Energy Certificates (RECs)***

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Renewable Energy Certificates (RECs)

- **A renewable energy certificate (REC) is a tradable commodity generated by renewable electricity sources**
  - 1 REC = 1 megawatt-hour (MWh) of renewable electricity
- **RECs allow one to monetize the renewable attributes and can be sold separately from the underlying power**
- **REC contracts give the buyer the exclusive rights to the renewable and environmental values of renewable electricity**
  - RECs are the mechanism used to track the emissions benefits and environmental attributes of renewable electricity
  - RECs can be formally recognized by bilateral contracts and tracking systems

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RECs Are Not Offsets

Don't confuse RECs with carbon offsets

RECs

- RECs are the environmental benefits of 1 MWh (1,000 kWh) of renewable electricity
- RECs can reduce GHG emissions associated with purchasing and using electricity
- GHG claims pertain to purchased electricity only

Offsets

- Offset is a metric ton of GHG emissions reduced or avoided
- Offsets can offset an organization's GHG emissions
- GHG claims pertain to GHG reductions achieved by the offset project

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- http://www.green-e.org/learn_re_faq.shtml

Market Standards & Guidance

- **U.S. EPA**
  - Green Power Partnership minimum purchase requirements
- **U.S. FTC revised Green Guides on marketing claims**
  - https://www.ftc.gov/news-events/media-resources/truth-advertising/green-guides
- **WRI/WBCSD GHG accounting standards**
- **Third-party certification/verification**
  - Certification is a best practice for voluntary REC markets
  - While certification is not mandatory or necessary for REC generation, the standards used by REC certifiers set expectations for both the compliance and voluntary REC markets

Market Standards & Guidance: Avoiding Double Counting

- **Counting RECs for compliance that were bought by a voluntary buyer is prohibited by state RPS rules**
- **Double counting RECs is also prohibited by third-party certifiers, such as Green-e**
  - Overt double counting – selling a REC to more than one party
  - Implicit double counting – having multiple parties unwittingly claim the environmental attributes or benefits
- **Standards (and standard REC contracts) prohibit customer-sited projects from selling hosts 'renewable electricity' if RECs are sold separately**

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Support for Buyers and Sellers

- **US EPA's Green Power Partnership**
- **US DOE's Green Power Network**
  - Current information on green power providers, products, consumer protection issues, & policies affecting green power markets
- **Center for Resource Solutions**
  - Green-e Energy for sellers
  - Green-e Marketplace for purchasers
- **Tracking systems**
  - Tracking systems provide a basis for creating, managing, and retiring RECs, ensuring that each REC is counted only once

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