



Project Matching: Shovel-ready Renewable Energy Projects

Hosted by U.S. EPA's Green Power Partnership



*Green Power Partnership Webinar
May 25, 2016
1:00 – 2:30 PM EDT*

Today's Agenda

- Webinar Logistics & Introduction
 - Christopher Kent, Program Manager, EPA's Green Power Partnership
- Renewable Energy Project Summaries (8 minutes each)
 - Apex Clean Energy – Perryton Wind Project in Texas
 - EDF Renewable Energy – Cowboy Ridge Wind Project in Oklahoma
 - Geromino Energy – Blazing Star Wind Farm in Minnesota
 - OneEnergy Renewables – Ibis Solar Project in Maryland
 - Pioneer Green Energy – Chocolate Bayou Wind Energy in Texas
 - Salt Energy Group – Big Pool (Solar) in Maryland
- Question & Answers
- Post-webinar Survey
 - Attendees can self-select the developers, if any, with whom they would like to share their contact information.



Webinar Logistics

Open and close your control panel



The screenshot shows a webinar control panel with several sections. At the top, there is an 'Audio' section with a red box around the 'Audio' header and a sub-section containing dialing information: 'Dial: +1 (415) 930-5321', 'Access Code: 581-147-447', and 'Audio PIN: 385'. Below this is a 'Questions' section with a red box around the input field containing the placeholder text '[Enter a question for staff]'. At the bottom right of the questions section is a 'Send' button, also highlighted with a red box. Other visible elements include a 'Handouts - 0' section and a 'GoToWebinar' logo at the bottom.



Audio is available your computer's microphone and speakers (VoIP) or telephone:

+1 (631) 992-3221
ID: 740-520-320

Type in your questions here



Hit "send" to submit your questions



If you experience technical difficulties, please contact Christine Cho at: Christine.Cho@erg.com

Objectives of Today's Webinar

- Introduce electricity end-users and investors to new renewable energy projects that may align with their energy, environmental, and/or financial objectives.
- Offer a forum for renewable energy developers to showcase their projects in the hopes of identifying power off-takers, REC purchasers, and financial investors.

Value Proposition of Long-term Green Power Contracts

- End User
 - Hedge against price volatility
 - Potential for energy costs savings
 - Clear association with specific renewable energy project
 - Potential for naming rights to renewable energy project
- Renewable Energy Project Developer
 - Provides access to long-term financing
 - Lowers the cost of financing
 - Predictable sale price over term of contract
 - Enables renewable energy projects to enter development phase

When and how you engage a project affects claims



Timing of Engagement

- Pre-development

Market Impact

- Supply push

Claim

- I use renewable electricity
- I helped develop a new renewable energy supply

Procurement Options

- Own and build a project (retain RECs)
- Direct long-term commitment (i.e., PPA) with new project (retain RECs)



Timing of Engagement

- Post-development

Market Impact

- Demand pull

Claim

- I use renewable electricity

Procurement Options

- Utility supply
- Unbundled RECs
- PPA with existing project

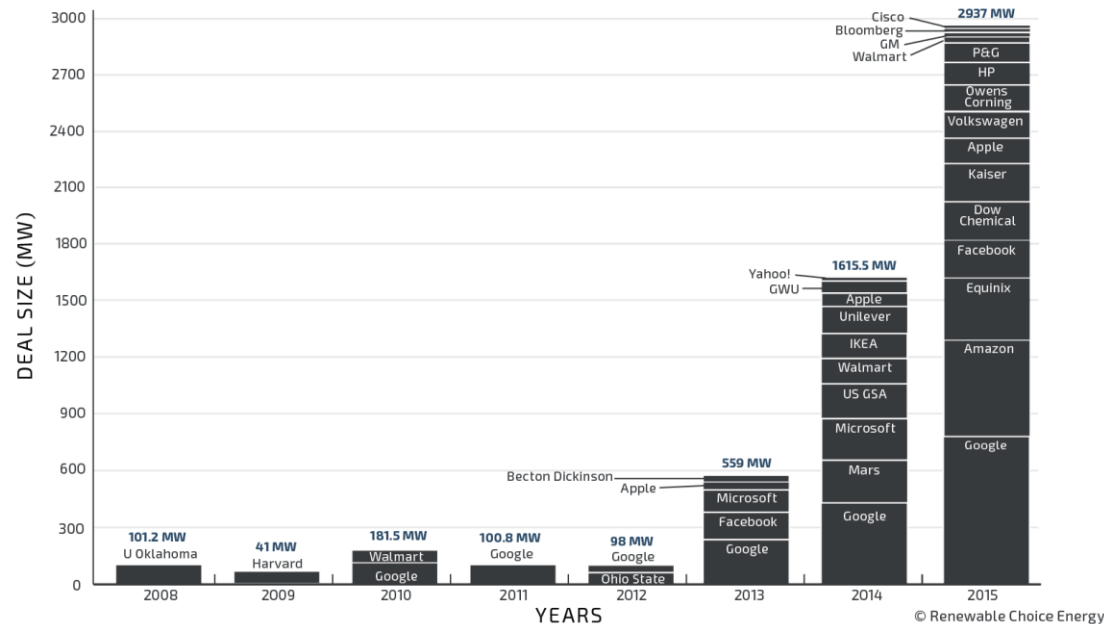
Green Power – Product Options

- Renewable Energy Certificates (RECs)
 - The environmental “attributes” of electricity generated from renewable resources
 - Attributes are based on the generation technology type, age, location, and time
 - Does not include the underlying electrons – “unbundled”
- Green Power Electricity Products
 - Green power offered by utility suppliers that is generated from renewable sources
 - Is a “bundled” product that includes both the RECs and underlying electrons
- On-site Generation
 - Install a renewable system on-site (e.g. solar panels, wind turbine)
 - Produces both electricity and RECs from the on-site source
 - Self-financed installation or via a third-party PPA
- Power Purchase Agreement (PPA) for Renewables
 - Usually a long-term contract to procure RECs and underlying electrons from a specific project



Power Purchase Agreements

- A power purchase agreement (PPA) for renewable electricity is a long-term contract between a power buyer and a specific renewable energy project.



Physical PPA

- Power is "physically" delivered to buyer
- Renewable energy project and buyer must be located in same grid region
- Direct retail access is only permitted in some states

Virtual/Synthetic/Structured PPA

- Financially-settled arrangement between renewable energy project and buyer, with buyer owning RECs.
- Renewable energy project and buyer do not need to be in same grid region.
- Appealing to organizations in states that do not permit direct retail access, or organizations that have multiple load centers.



Today's Presentations & GPP Webinar Series

- Today's presentations have been posted online at:
<https://www.epa.gov/greenpower/green-power-partnership-events-and-webinars>
- GPP's next webinar: How Colleges and Universities Can Help Accelerate Community Deployment of Solar
 - Wednesday June 15th at 1:00 PM EDT
 - Featuring University of Utah and St. Olaf College



Project Matching Webpage

<https://www.epa.gov/greenpower/project-matching-initiative>

- Updated on a rolling-basis
- Currently features 48 projects
- Sortable by key features
- Link to PDF of full project submission form

Project Matching Table

The following table represents projects submitted and found to meet the minimum project readiness criteria. The GPP reviews all project applications and evaluates them based on their readiness for construction as well as for the role that the developer is seeking to fill through GPP stakeholder involvement. Developers are welcome to resubmit projects if they are determined to be viable.

EPA's Green Power Partnership provides all project related information as a service to EPA Green Power Partners. A renewable energy project's inclusion on this page does not constitute endorsement or recommendation by EPA of the projects or the stakeholders involved.

Sort by selecting the desired column heading.

Date Submitted	Project Name	State	Resource	Size (MW)	Developer Seeking Partner for	Featured on webinar?
6/5/2015	Arizona District-Wide School Solar Project (PDF) (5 pp, 592K)	AZ	Solar	12	Long term REC offtake	
6/5/2015	Beech Ridge II Wind Energy Center (PDF) (5 pp, 247K)	WV	Wind	37	PPA, Financial hedge, Long term REC offtake, Financial investment	June 24, 2015
6/5/2015	Bishop Hill III Wind Energy Center (PDF) (5 pp, 247K)	IL	Wind	120	PPA, Financial hedge, Long term REC offtake, Financial investment	
6/5/2015	Bloom Wind (PDF) (4 pp, 269K)	KS	Wind	180	PPA, Financial hedge, REC offtake	June 24, 2015
6/5/2015	Blue Star Solar (PDF) (4 pp, 108K)	MD	Solar	7.5	PPA, Financial hedge, Long term REC offtake, Other	



EPA's 1,400+ Green Power Partners



Want to Know More?

- Basic Information
 - An overview of Green Power Partnership is available on EPA's Web site www.epa.gov/greenpower
- More Questions?
 - Christopher Kent, 202-343-9046, kent.christopher@epa.gov



Q&A Session

- Ellen Balfrey – Apex Clean Energy (TX wind)
- Jacob Susman & Kate O’Hair – EDF (OK wind)
- David Reamer & Drew Terwilliger – Geromino (MN wind)
- Russ Wright & Gia Clark – OneEnergy (MD solar)
- Patrick Buckley – Pioneer Green Energy (TX wind)
- Robert Babcock – Salt Energy Group (MD solar)