

# Green Power Communities:

*An EPA-designed platform to promote community-based support for renewable energy*

*U.S. EPA's Green Power Partnership*

*Mollie Lemon, GPP Communications Director*



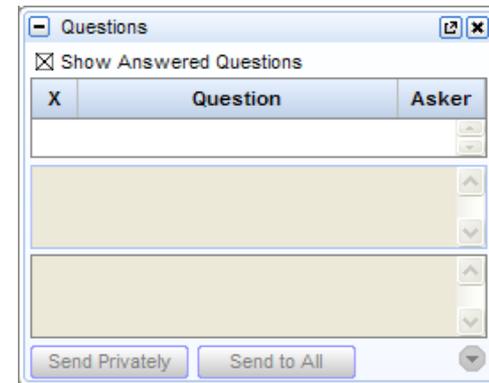
*Green Power Partnership Webinar*

*January 18, 2012*

*1:00 – 2:15 p.m. Eastern*

# Webinar Logistics

- Attendees are muted to reduce background noise.
- Attendees submit questions and comments in writing via the online control panel. →
- To minimize or maximize the control panel, click on the >> button at the top left of the tool bar.



# What is Green Power?

- Green power is an “environmentally-differentiated” electricity product from:
  - solar
  - wind
  - geothermal
  - biomass
  - biogas
  - small hydro



# Green Power Procurement Options

- On-site Generation
  - Install renewable energy system on-site (e.g. solar panels, wind turbines)
- Green Power Electricity Products
  - Buy electricity from utility green pricing programs or green power retail marketers that is completely, or partially, generated from renewable sources
- Renewable Energy Certificates (REC)
  - Buy only the environmental “attributes” associated with the electricity generated (1 REC = 1 MWh)



# Solar & Wind Energy Screening Decision Trees

- Developed by EPA & NREL
  - For local governments & other stakeholders to screen candidate sites across a community or individual sites
  - Fills knowledge gap / encourages leadership role for local governments in development of renewable energy resources at the community level
- Targeted sites
  - Brownfields or other potentially contaminated sites, greyfields, rooftops, abandoned parcels, landfills
- EPA soliciting comments through 2/16
  - See <http://www.epa.gov/renewableenergyland/>
  - Seeking City and County volunteers to beta test (email Karen Irwin at [irwin.karen@epa.gov](mailto:irwin.karen@epa.gov))



# Green Power Benefits

- Environmental
  - Addresses indirect GHG emissions
- Energy Price Stability/Reliability
  - Electricity price stability
  - On-site systems can reduce T&D issues, costs
- Economic Development
  - Job creation
  - Landowner lease payments (\$2000-\$5000/wind turbine)
  - Tax revenues (often in rural areas that need them)
- Captures favorable media attention
  - Clean technology
  - Domestic energy supply
  - New U.S. jobs

# U.S. EPA's Green Power Partnership

- The GPP is a voluntary program that supports the organizational procurement of green power by offering expert advice, technical support, tools and resources.
- Partners agree to purchase green power and provide annual update
- In return, EPA commits to:
  - Provide public recognition
  - Provide procurement and communications assistance, as requested
  - Provide a brief description of the Partner's green power commitment on the Green Power Partnership Web site
- Currently, nearly 1,300 Partners in the program using nearly 21 billion kWh of green power annually, equivalent to the annual CO<sub>2</sub> emissions from electricity use of nearly 1.8 million average American homes.



# Green Power Communities Initiative

[www.epa.gov/greenpower/communities](http://www.epa.gov/greenpower/communities)

- EPA initiative that challenges communities to buy green power in an amount that collectively meets the Partnership's green power use benchmarks
- Intended to motivate collective action of a community's local government, businesses, and citizens to reduce the community's carbon footprint by procuring green power



# EPA Green Power Communities



- 32 Green Power Communities
- Collective green power use of ~3.3 billion kWh annually
  - Avoids over 2.5 million tons of CO2 emissions
  - Equal to the annual CO2 emissions from ~445,000 cars
  - Equal to the annual electricity use of ~284,000 average American homes

# Top Green Power Communities

## GPC Rankings Based on Green Power Usage

Green Power Community	Annual Green Power Usage (kWh)	Green Power % of Total Electricity Use
1. Washington, DC Community	772,324,379	8.5%
2. Hillsboro, OR Community	709,336,690	35.7%
3. Portland, OR Community	708,666,565	9.3%
4. Santa Clara, CA Community	225,613,900	8.1%
5. Corvallis, OR Community	126,735,822	21.2%
6. Gresham, OR Community	125,843,124	11.5%
7. Bellingham, WA Community	94,533,140	14.4%
8. Beaverton, OR Community	76,276,884	4.5%
9. Palo Alto, CA Community	73,209,780	7.7%
10. Rockville, MD Community	67,188,768	3.1%
11. Salem, OR Community	61,619,623	3.5%
12. Bend, OR Community	59,357,165	7.7%
13. Lake Oswego, OR Community	33,554,768	9.4%
14. Aurora, IL Community	26,890,148	2.1%
15. Park City, UT Community	26,290,019	7.5%
16. Lacey, WA Community	21,116,566	5.9%
17. Durango, CO Community	19,410,000	11%
18. River Falls, WI Community	17,379,279	14.9%
19. Swarthmore, PA Community	14,578,448	27.9%
20. Clayton, MO Community	10,320,000	2.6%

# Requirements for Communities

1. Local government must join as a Green Power Partner
  - Stake out a leadership position within community; initiate and support a campaign to become a GPC
2. Community joins as Community Partner
  - 1. Collective purchase by community (govt, businesses, citizens) of green power meets EPA benchmark levels
  - 2. Local government official signs Community Partnership Agreement on behalf of community
3. Local government (or local utility) provides annual updates of community-wide electricity and green power use



# Green Power Benchmarks

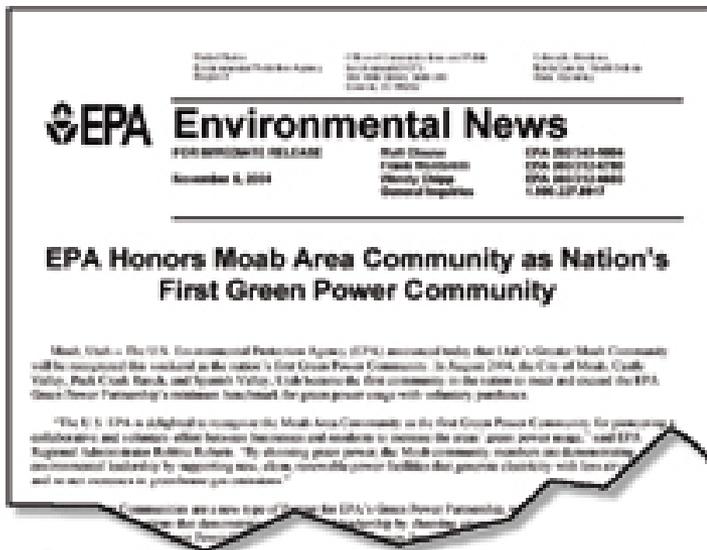
<b>Community-wide Electricity Use</b>	<b>Green Power Minimum Requirement</b>
<b>If the Community's annual electricity use is...</b>	<b>The minimum green power purchase requirement is...</b>
<b>Over 100,000,000 kWh</b>	<b>3%</b>
<b>10,000,001 – 100,000,000 kWh</b>	<b>5%</b>
<b>1,000,001 - 10,000,000 kWh</b>	<b>10%</b>
<b>Under 1,000,000 kWh</b>	<b>20%</b>

Note: green power must be met with "new" renewable energy (i.e. installed on or after January 1, 1998)



# Community Benefits

- Reduce environmental impacts of electricity use
- Community pride and image
- Build bridges between community and utility (and other community-based organizations)
- Media coverage of a good story
- Stepping stone for more collective sustainable action



# What EPA Offers Green Power Communities

- Metrics & Credibility
  - Metric for “How much green power is enough?”
  - Definition of eligible renewables resources
- Expert Advice
  - Identify types of products to best suit community needs
  - Determine environmental benefit of options
- Network of Like-minded Organizations & Communities
  - Learn what worked and what didn't from other communities
- Recognition
  - Assistance with messages and marketing
  - Use of EPA Green Power Partner mark →
  - Eligibility for Leadership Awards



# Individual Community Page on EPA Web Site

- Each Community has own individualized webpage on EPA site
- Lists green power accomplishments
- Links to Community's website on green power use or sustainability efforts



## Community Profile

Corvallis, OR Community	
Percentage Green Power	21.2%
Participation Rate*	15%
Provider(s)	Bonneville Environmental Foundation, Pacific Power, Consumers Power, On-site Generation
Green Power Community Since	October 2005

[Community Green Power Web Page](#) [EXIT Disclaimer](#)

### Community Profile

The City of Corvallis, Oregon, boasts a population of approximately 55,000 residents. In 2005, Corvallis became the first city on the West Coast to become a Green Power Community, purchasing a little over 17 million kilowatt-hours (kWh) of green power. Today, Corvallis' green power use has reached more than 100 million kWh annually and makes up approximately 15 percent of the community's total electricity consumption. Such extraordinary community-wide support for green power has placed Corvallis near the top of EPA's Green Power Communities list.

Corvallis' community-wide participation is the result of strong collaborative efforts between the city government, residents, businesses, and educational institutions. In 2005, by way of a City Council Resolution, the Corvallis local government chose to lead by example by purchasing seven percent green power for all city-owned facilities and urged its residents and businesses to do the same. Oregon State University is the largest single purchaser of green power in Corvallis and this is in part due to the "green energy" fee that students approved in 2007. The University purchases more than 95 million kilowatt-hours of green power annually, accounting for more than half of its overall electricity use.

# Typical Steps in Becoming an EPA Green Power Community

- Local gov't gauges interest among stakeholders in becoming an EPA Green Power Community
- Community's local government purchases green power and joins EPA Partnership as organization-wide Partner
- Design and implement a "campaign" to increase the use of green power among residents and businesses with goal of becoming an EPA Green Power Community
  - Campaign is designed to rally support for green power
  - Often feature campaign goal(s) (i.e. increasing # subscribers by X)
- Find a leader(s) for "campaign" within City Council, citizen group, utility or marketers, NGOs, etc.
- Mayor signs EPA Partnership Agreement on behalf of community, possibly with City Council Resolution
- Capture the benefits and publicity



# Local Government's Role

- Campaign leader and lead coordinator with EPA
  - Collect and track annual electricity use and green power data
- Make decision to sign agreement on behalf of entire community
- Work with local NGOs and utility to support the campaign
  - Consider seeking funding from state clean energy funds

River Falls, WI City Council



Santa Clara, CA City Council



# Green Power Community Sign

- Highlights a successful campaign
  - Each Community receives two 24" x 30" aluminum signs
  - Designed for outdoor display
- Other Recognition
  - Artwork for Community Banner
  - Press Release Assistance



Oregon's Governor Kulongowski and EPA's Matt Clouse holding a Green Power Community sign



The U.S. Environmental Protection Agency congratulates Palo Alto for becoming California's first Green Power Community!



## GREEN POWER—ENERGIZING COMMUNITIES

Event Banners: EPA can provide artwork development services to produce banners for announcement events.

# Green Power Community Outreach Materials

## City of Lacey, Washington Official Proclamation

WHEREAS, a sustainable energy supply is critical to the well-being of our nation; and

WHEREAS, the burning of fossil fuels to generate electrical energy is our nation's single-largest industrial source of air pollution; and

WHEREAS, non-polluting sources of renewable electrical energy, including wind, solar energy, and biomass are increasingly available to all who live and work here; and

WHEREAS, the use of renewable, environmentally-friendly energy known as Green Power is a significant step toward energy independence and reduction of negative impacts on the environment; and

WHEREAS, Lacey has been designated as an official Green Power Community by the United States Environmental Protection Agency in recognition of our citizens' commitment to Green Power use, making Lacey one of only twelve such communities in the entire nation;

NOW, THEREFORE I, Virgil S. Clarkson, Mayor of the City of Lacey, do hereby proclaim the month of November 2007, as

## "Green Power Month"

FURTHER, I urge all residents and businesses in our community to support further development of Green Power resources by participating in the Lacey Green Power Challenge and implementing the use of renewable energy within their homes and places of business.

Signed this 11<sup>th</sup> day of October, 2007

Virgil S. Clarkson, Mayor



## Thanks, Corvallis *you're making a difference*

Your community can be proud of all you've accomplished during the Corvallis Blue Sky<sup>™</sup> Challenge.

With 780 new participants signed up for Blue Sky, more than 10 percent of the city is now buying renewable energy. Today, Blue Sky customers are creating benefits equivalent to taking more than 3,500 cars off the road.

Because of the overwhelming support of renewable energy here, the EPA has named Corvallis the **first Green Power Community on the West Coast.**

Thanks all participants, the City of Corvallis and Renewable Northwest Project for teaming up with us to bring more Blue Sky to Corvallis.

### Join in the celebration

You help move energy in the right direction when you choose renewable energy. To learn more and enroll, please visit [pacificpower.net/bluesky](http://pacificpower.net/bluesky) or call 1-800-769-3717.

### Thanks to Corvallis-area businesses now buying Blue Sky, including:

American Dream Pizza  
Barber Hearings Insurance  
Cascade Printing  
City of Corvallis  
Columbia Concrete Sawing  
Core Communications  
Corvallis Chamber of Commerce  
Corvallis Environmental Center  
Corvallis EPA  
Corvallis Tourism  
Dairy Queen Corvallis  
FedEx Kinko's  
First Alternative Coop  
Footwise Birkenstock Store  
Grass Roots Bookstore  
Harrison House Bed & Breakfast  
Hewlett-Packard  
Nearly Normal's  
Peak Sports  
Riverside Window & Door  
Robnett's Hardware  
Sibling Revelry  
Staples  
The Toy Factory  
Woodstocks Pizza  
Your Green Home

There's a complete list at [pacificpower.net/partners](http://pacificpower.net/partners).

Sustainability  
*it's in our nature.*

PACIFIC POWER



# Green Power Community Outreach Materials

green: Green Power Purchasing - Windows Internet Explorer provided by EPA

http://rrc.dc.gov/green/cwp/view.asp?a=1244&q=463844&pm=1

File Edit View Favorites Tools Help

Convert Select

green: Green Power Purchasing

MAYOR DC GUIDE RESIDENTS BUSINESS VISITORS GOVERNMENT FOR KIDS

## buygreen power

**Take the District Green Power Challenge. Switch your household or business to green power today.**

**The Smart Choice!**

Set aside for a moment the potential money-saving and health benefits associated with Green Power. Also, set aside the competitive edge your business will gain from using Green Power. Green Power is clean energy. It is electricity generated from environmentally-preferable renewable resources such as wind, solar, low-impact biomass, geothermal, and low-impact hydro resources. The fact is Green Power is good for you, your community, your bottom line, and the environment.

**We Did It! You Should Too!**

The District and Federal Governments, as well as thousands of local households and hundreds of businesses are already using green power. Join us!

**Local Green Power Partners include:**

- Ben's Chili Bowl
- British Embassy
- DowntownDC Business Improvement District
- Flow Yoga
- Gallaudet University
- Hyatt Regency Washington
- Landis Construction
- National Geographic Society



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**Green Hot Topics**

- green.dc map  
Natural Environment
- green.dc agenda  
Green DC Agenda
- Climate Change
- Leading by Example
- Sustainable Development
- Waste and Hazards

# Want to Know More?

- Basic Information
  - To learn more and to see a complete list of EPA's Green Power Communities, please visit: [www.epa.gov/greenpower/communities](http://www.epa.gov/greenpower/communities)
- Today's presentations have been posted online at:  
[http://www.epa.gov/greenpower/events/18jan12\\_webinar.htm](http://www.epa.gov/greenpower/events/18jan12_webinar.htm)
- More Questions?
  - Blaine Collison, 202-343-9139, [collison.blaine@epa.gov](mailto:collison.blaine@epa.gov)
  - Mollie Lemon, 202-343-9859, [lemon.mollie@epa.gov](mailto:lemon.mollie@epa.gov)
  - Anthony Amato, 781-674-7225, [anthony.amato@erg.com](mailto:anthony.amato@erg.com)

