Climate Smart Communities Webinar

Telephone call-in number

- 1-866-394-2346
- Code: 1982360347#
- No audio signal will be transmitted over the Internet

Welcome

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Climate Smart Communities Webinar

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Climate Smart Communities Webinar

Website Address

http://www.dec.ny.gov/energy/50845.html

Climate Smart Community Webinars

- November 20, 11:00 a.m. *Collaborative Green Power Procurement and NYSERDA PON 2672,* and Follow-up Meeting with Optony V.P. Ben Foster, 1:30 p.m.
- December 11, 10:30 a.m. *The New York State Land-use Toolkit & Streamlining Municipal Electric Vehicle Permitting*

Coming Events

- January 24, 2014-Climate Change: Adaptation & Building Resiliency in Our Communities, Schenectady. http://muse.union.edu/climatechange/
- May 19-21, 2014-Local Solutions: Northeast Climate Change Preparedness Conference. Keene, NH. http://www.antiochne.edu/innovation/climate-change-preparedness/

Collaborative Solar Procurement:

Changing the Dialogue across the National Capital Region

Blaine Collison

Program Director, U.S. Environmental Protection Agency

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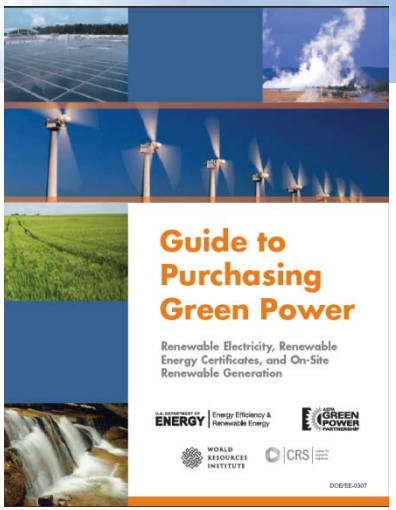
The Next Few Minutes…

- The Collaborative Model & Market Barriers
- Notes from the DC Regional Experience

EPA's Green Power Partnership

- **Credible Benchmarks**
  - Metric for "How much green power is enough?"
  - Definition of eligible renewables & products
- **Planning & Implementation Resources**
  - Green power locator
  - Purchasing guidance
  - Marketing and communications support
- **Recognition**
  - Top Partner Lists
  - Use of the Partner logo ➔
  - Green Power Leadership Awards
  - Promotional opportunities
- **Best Practices & Innovation**
  - Collaborative procurement
  - New contract mechanisms



Clean Energy Collaborative Procurement: Metro DC Project Overview

Project Goal:

To implement an effective distributed clean energy deployment platform across public stakeholders that changes the scale of regional activities and catalyzes activity beyond EPA's initial convening, while maximizing benefits to the local economy and regional environment.

Launched by EPA's Green Power Partnership with MWCOG

- Based on successful Silicon Valley collaborative model
- Focused on public partners; local & regional government, higher education
- EPA evaluated 170 sites at 20 organizations in MD, VA & DC
- 36 viable sites at 4 organizations for 18.5MW of capacity

Metro DC Collaborative Framework

Enable Regional Collaboration, Communication & Support

Independent Solar Project Expertise – OPTONY Solar for Life™

Lead Agencies –Montgomery County/District of Columbia

+ 4 Participating Agencies

Round 1:

41 Sites & Installations

Private Sector: Resources, Projects, Financing

Regional Utilities: Expanding Dialogue

Metro DC Regional Initiative Timeline

EPA-funded Steps

Q1 & Q2 2011
Strategy Developed ✓
Agencies Recruited ✓
Sites Identified ✓

Q3 2011 - Q2 2012
Sites Screened ✓
Feasibility Studies ✓
RFQ/RFPs Issued

Participant-funded Steps

Next Steps

Q3 & Q4 2012
Vendor Awards
Contracts Negotiated
Project Approvals

2013
Construction Underway
Economic Impact
Environmental Benefits

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Metro DC Area Regional Update

21 Organizations submitted sites to GPP for technical & economic evaluation

- District of Columbia
- University of District of Columbia
- George Washington University
- Georgetown University
- Howard University
- National Defense University
- American University
- Frederick County
- City of Greenbelt
- Montgomery County
- City of Rockville
- WMATA
- Amtrak
- MDOT
- Metropolitan Washington Airport Authority
- Inova Hospitals
- Loudoun County
- Prince George's County
- City of Alexandria
- Arlington County
- Arlington County School District

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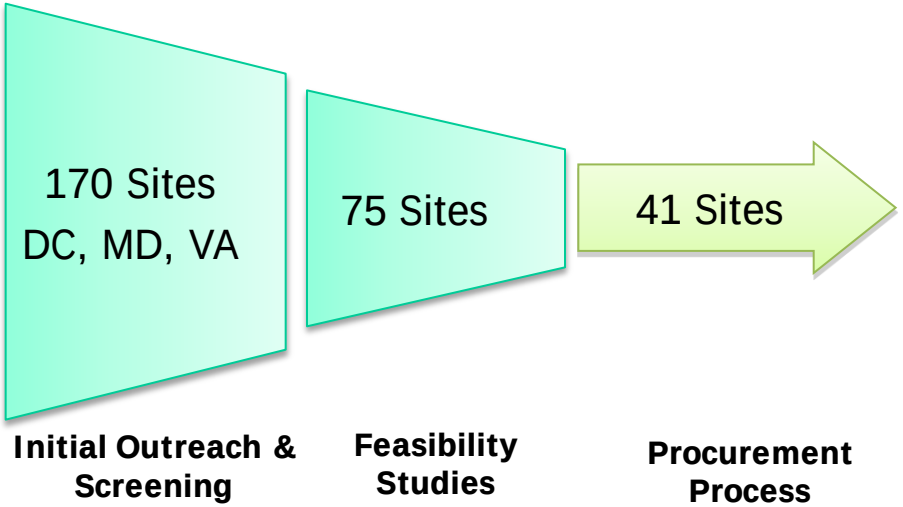
Solar Energy Collaborative Procurement

Process:



Anticipated Results:

41 High-Potential Sites across DC & MD
10 MW combined solar PV potential

10 MW of new solar capacity
Producing over 6.5 million kWh per year

Drive $19M in local economic activity
Create 140 green jobs for at least 1 year

Enough electricity to power 700 homes
Equivalent to taking 875 cars off the road
Or reduction of 4,200 MT CO2 emissions/year

Round 2 Procurement is forming now:
District-led and may include: Howard, Georgetown, American, Gallaudet, WMATA

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Stakeholders' Key Barriers

Technical & Knowledge Barriers

- Solar requires technical, economic and financing knowledge
- Organizations don't tend to have all of the required expertise in-house
- Typical PPA model is imprecise and adds costs to balance risk while also missing opportunities
- Solar tends to be supplier-driven ("this is the solution, take it or not!") v. client-driven ("this is what we need.")
- Public-sector/higher ed stakeholders may have special financing and contracting needs
- Volatility/uncertainty of U.S. solar demand tightens supply and doesn't support manufacturing commitments

Institutional & Financial Barriers

- Moving at scale requires buy-in of multiple organizational departments
- Large-scale deployments require bigger site portfolios than typical of single owners
- Staff- and transaction costs may be prohibitive
- No stakeholder wants to get caught out front alone
- Long-term energy contracts have not generally been business as usual
- Parallel single-organization efforts are overhead-intensive
- Leadership can stall

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This Model Addresses Key Market Barriers

Barriers:

- Solar requires technical, economic and financing expertise
- Costs matter and vary regionally
- Large-scale deployments require bigger site portfolios than typical of single owners
- Typical PPA model is imprecise and adds costs to balance risk while also missing opportunities
- No stakeholder wants to get caught out front alone
- Special financing and contracting needs
- Volatility/uncertainty of U.S. solar demand tightens supply and doesn't support manufacturing commitments

Value Drivers:

- Dedicated, specific, non-vendor expertise is provided
- Aggregation yields greater market interest and better pricing (10% - 15% discounts)
- Transaction costs and administrative effort are dramatically improved (50% - 75% reduction)
- Up-front site intake, technical & financial analysis eliminates risk for both suppliers and purchasers
- Contracts are standardized in favor of purchasers
- Renewable energy can generate savings, when managed properly
- Solar is positioned to solve problems v. being another to-do
- The model redefines the opportunity and excites stakeholders; rush to be included
- The model brings meaningful slugs of economic activity to market

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Collaborative Momentum

"...This project...has made the discussion of solar PV [within our organization] more manageable and focused. The momentum of others around the region has rubbed off on folks here thus far..."

- Metro DC Phase 1 Participant