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Clean Energy Collaborative Procurement : A Model for Agencies and Public Stakeholders

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Metro DC Clean Energy Collaborative Procurement Initiative Overview

- Launched by EPA's Green Power Partnership
 - Based on successful Silicon Valley collaborative model
 - Public-sector community partners including Federal, Local, Military, Higher Education
 - Focused on agencies in the greater Metropolitan Washington DC Area



Mission:

To develop an effective and collaborative platform for deploying clean energy (predominately solar PV) across multiple government and educational organizations for maximum impact on the regional environmental, installed solar systems, and the local economy.

Metro DC Update & Potential Benefits

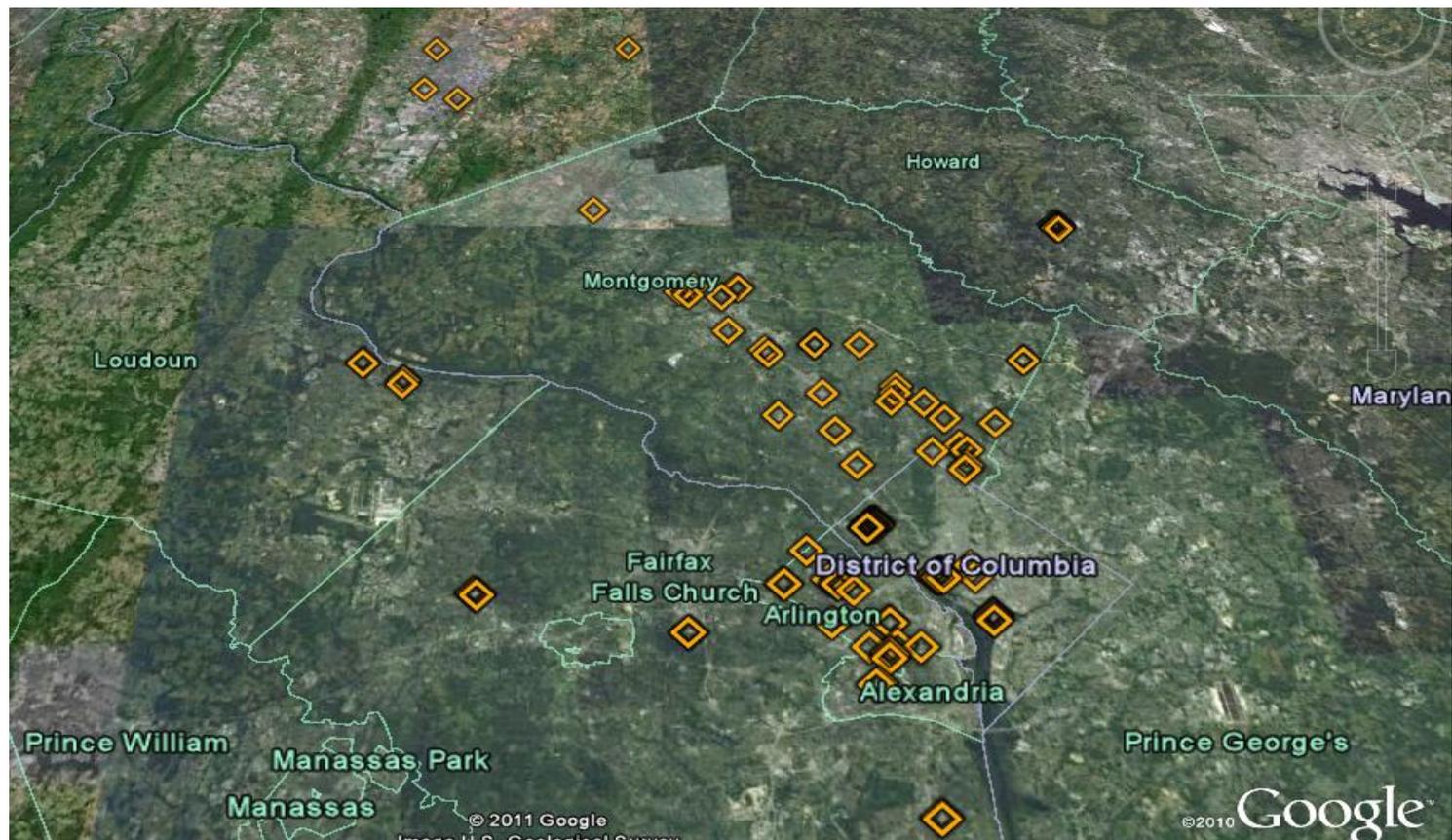
As of May 2011...

14 Organizations with 160 sites and 41MW in Solar PV Capacity have joined the initiative!

Including 5 Higher Education Institutions, 8 Public Agencies and 1 Hospital System

- Effort could increase the total installed solar capacity in MD, VA and DC combined by 500%
- If half of the projects are completed, the economic impact could be +\$100M and 500+ jobs
- New stakeholders participating in the solar conversation
- Volume & competitive pricing expected to reduce average costs by 10-15%
- Reliable long-term electricity costs with low, contracted escalation rates
- Transaction and administrative costs could be reduced by 50% to 75% for participants
- Potential to capture federal tax benefits (ITC + Depreciation), depending on financing options
- Demonstrate leadership and reach sustainability goals faster through multiple projects

123 Viable Sites Identified Across VA, DC and MD (of 160 submitted)



Year Two will more than double the community participation!

Metro DC Collaboration Model



Enable Regional Collaboration, Communication & Support

Independent Solar Project Expertise - Optony

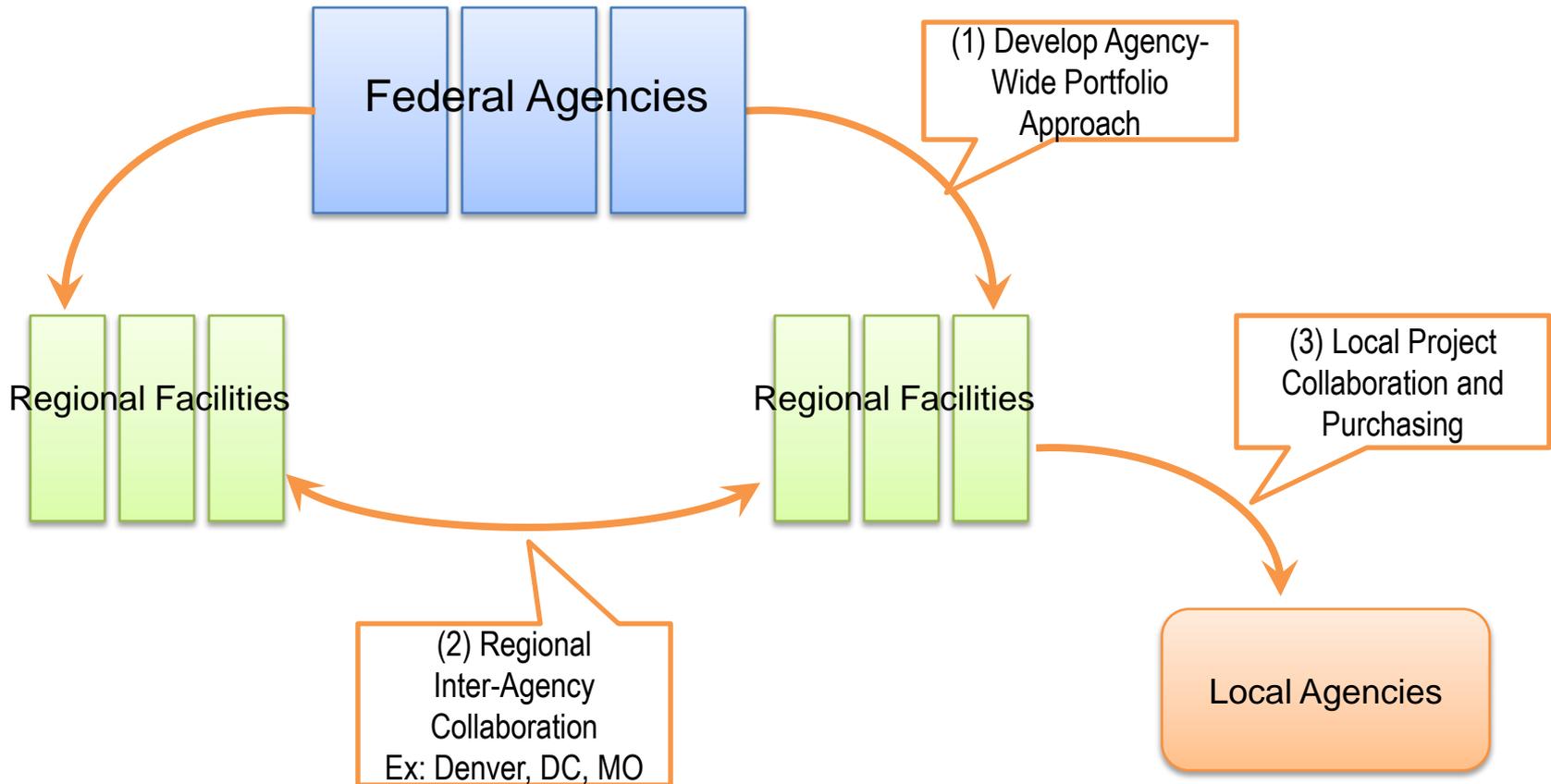
Lead Agency – Fed-Civilian/Fed-Military/Higher Ed/Local Agencies

+ Participating Agencies

Phase 1
Sites & # MW
Create Jobs
Economic Growth
Energy Savings
GHG Reductions

Private Sector
Resources, Projects, Financing

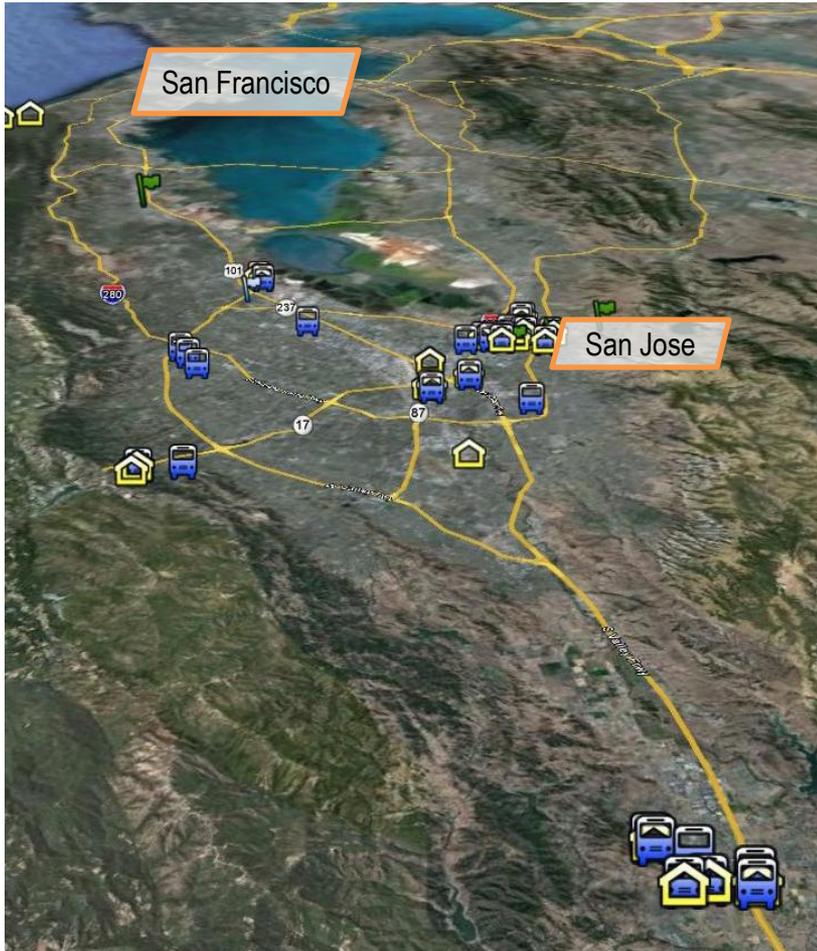
Three Approaches to Federal Solar Project Collaboration



Strategic Bundling – A New Model

- Thorough review of individual site characteristics
 - Look for potential sizing issues and opportunities
- Consider site-specific and agency-level constraints
 - Incentive structures, financing options, contracting requirements, procurement process
- Bundling sites by installation type, host facility, size and other attributes
 - Make bundles attractive to qualified integrators
- Incorporate solar market input
 - Capabilities, economies of scale
 - Avoid deal-breakers found in many other projects
- Consider total size (MW) and number of sites per bundle
 - Some bundles can be too small or too large
 - Evaluate other non-PV options

Silicon Valley Regional Project Overview



- Includes 70 sites
 - Collaboration across 9 jurisdictions
 - 14.4MW of combined solar PV
- Multiple Site Types:
 - Carports
 - Rooftops
 - Ground mounted
- Largest multi-agency effort to date
 - County of Santa Clara
 - 6 Cities
 - 2 Special Districts

LESSONS: Aggregated effort yields volume discounts, lower administrative and transactions costs, along with better qualified vendors and projects.

Demonstrated Collaboration Benefits

- Stakeholders that otherwise couldn't or wouldn't pursue PV have a pathway
- Achieve Strategic Sustainability Plans faster by working together
- Aggregation yields greater market interest and better pricing (10% - 15% discounts)
- Working together yields lower project risks with higher returns
- Dramatically reduce transactions costs and administrative effort (50% - 75% reduction)
- Demonstrate leadership nationally, regionally and locally
- Very few mandatory Federal/Local programs reduce long-term costs, but...
 - Renewable energy can generate savings, when managed properly
- Strategic planning demands a comprehensive approach, but...
 - Need to shorten the long learning curve on new technologies

Compelling Return on Investment

- Low-cost for initial outreach and screening:
 - Awareness across 20+ agencies about the benefits of solar
 - 14 Interested with massive numbers of sites
 - Building regional momentum and more want to be part of the initiative
- Detailed Economic/Technical Site-study Phase:
 - If 20MW (approximately half of the 41MW potential) is developed:
 - \$100M in economic development (~770% return in 2 years)
 - 22,000 MWh from clean regional energy sources (~\$6/MWh of solar)
 - Over 16,700 tons of CO2 emissions avoided annually (~\$8/Ton avoided)

Initiative Observations, Risks & Opportunities

- Massive opportunity to redefine the scale of solar deployment around the US!
- Building awareness with municipalities is critical – regional conveners are keys to success
- Most agencies cannot easily fund initial scoping activities, even though low-cost
 - Creating a technical assistance fund (like climate showcase communities) and/or revolving fund for up-front costs will alleviate this barrier
- Providing initial outreach, education and screening quickly builds momentum
- The model, approach and roadmap is now scalable for national rollout
- This fits very well within existing regional council energy initiatives and solar projects have increasingly positive economics, making this initiative easy to adopt
- Leveraging NGO and DOE efforts will yield better results, faster

These are ~2 year efforts, so participants can avoid short-term thinking

National Impact Planning

- National awareness is growing rapidly and effort is supported by WRI and others
- Leverage supportive organizations: NARC, AASHE, ICLEI, DOE, EPA regions & EPA HQ programs; Smart & Sustainable Communities, Brownfields, Higher Education
- Outreach, events, activities to maximize results with minimal EPA resources
- Impact nationally if 10 regions are supported and move forward:

– Today	(SV + MWDC)	10 Regions Total
– Deployed Solar	~34MW	~150MW
– Economic Impact	~\$170M	~\$675M
– CO2 Avoided	~28M Tons	~125M Tons

More Information

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