

Collaborative Renewable Energy Procurement for New York State

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Agenda

- **Background**
- **Collaborative solar model**
- **Case studies & examples**
- **Project timeline**
- **How to get started**



About Optony Inc.

Optony develops and deploys solar best practices across the entire solar project lifecycle for government agencies, schools, banks and commercial organizations. Optony has been involved in over 3GW of project activity globally from strategy to project commissioning.

Optony is the only independent private firm with extensive national and global experience with local governments completing large-scale collaborative renewable energy projects

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**Award Winning
Public Sector Project**



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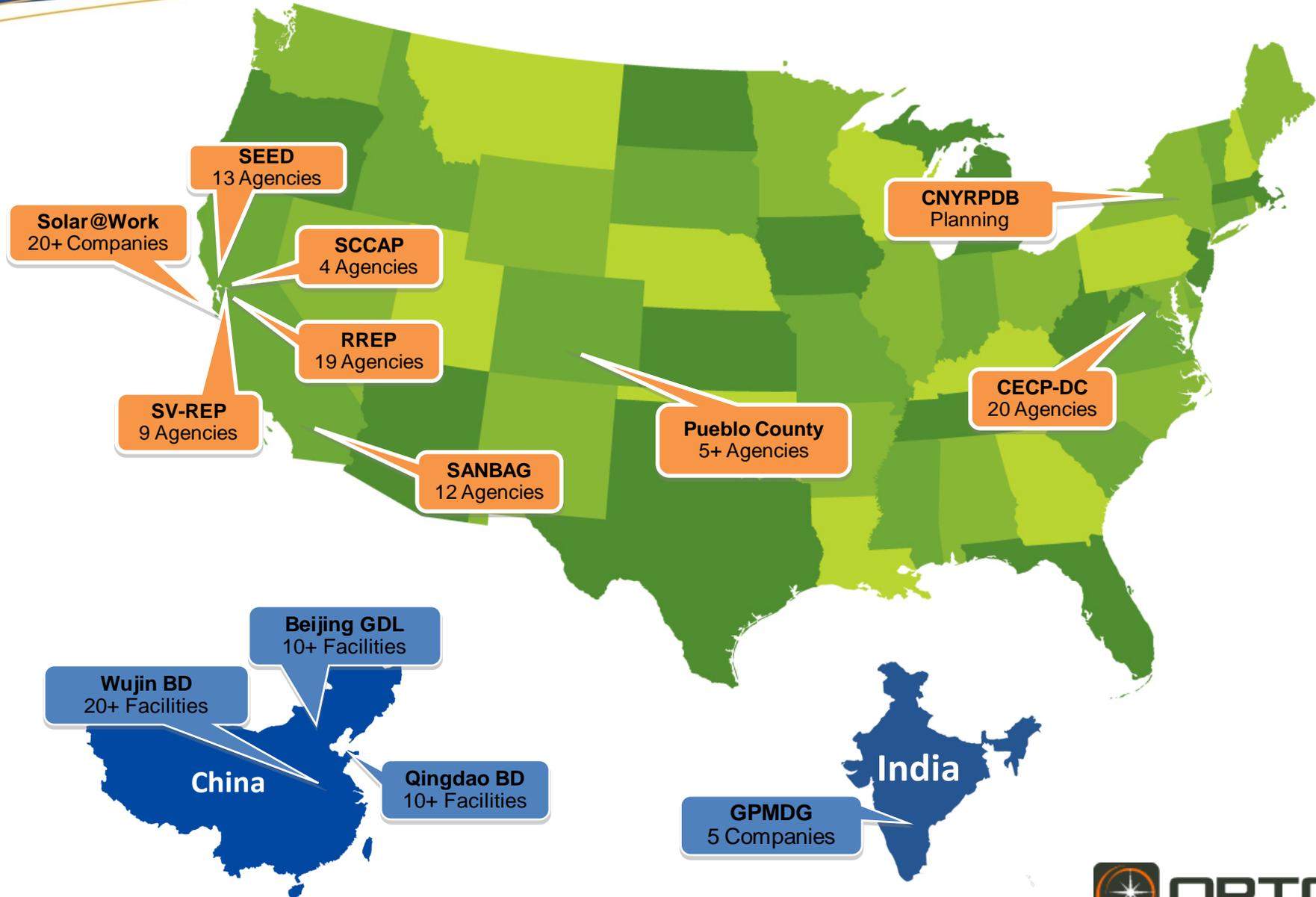
**Multiple Grant-Winner for
Solar Market
Transformation**



**Best of Silicon Valley
Recognition for
Energy Services**

“Optony's consulting service is a must-have for any organization considering an investment in solar. Based on Optony's comprehensive analysis and recommendations, we now have a low-risk, high-return solar strategy.”

Global Collaborative Solar Project Examples



Regional Collaboration Approach

Proven approach to collaborative public sector solar procurement utilizes:

- An innovative and proven collaborative framework of best practices from successful prior projects
- A step-by-step, opt-in process including evaluating sites for technical and economic feasibility, drafting and managing the RFP, in-depth proposal evaluation, and comprehensive negotiation support for buyers

Create Opportunities and Cost Savings for participants:

- **Strengthen relationships** both with local agencies and solar vendor community
- Deliver **reductions of 50% or more in transaction and administration costs** by being part of a group effort with expert technical assistance
- **Realize volume discounts of 10%-15% of total project costs** from well-managed group procurement
- **Demonstrate leadership** and establish new opportunities for the community to accelerate deployment of renewables
- **Drive efficiencies and finance options** through scale and standardization



Key Team Members

Lead Agency

A public sector agency with at least some sites in the overall procurement with the ability and commitment to issue RFQ/RFP documents on behalf of the group.

Regional Convener

Established and trusted regional organization that can pull together key stakeholders, convene working group meetings, and has an existing regional sustainability mission.

Participants

Public sector organizations who have potential sites for clean energy development including cities, counties, water & waste management districts, schools, hospitals, and universities.

Technical Advisors

Independent experts in collaborative solar and clean energy project evaluation, procurement, financing and commissioning who can support the overall effort and individual participants.

Case Study: Silicon Valley Regional Solar Project



Included 70 sites

- Collaboration across 9 jurisdictions
 - County of Santa Clara
 - 6 Cities
 - 2 Special Districts
- 14.4MW of total solar PV potential
- **12 MW installed, saving \$5M+**

Multiple Site Types:

- Carports
- Rooftops
- Ground mounted

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

Case Study: SF Bay Regional Renewable Energy Projects

Two concurrent buying groups following on from the SV-REP project:

- RREP: Alameda County, Santa Clara County, San Mateo County, Contra Costa County
 - 19 agencies, 187 sites, 32MW potential
 - Now the largest effort to-date nationally
 - Workforce development component
 - Additional refinements to collaborative model
 - Status: Receiving Proposals in Dec-2013
- SEED: Sonoma County, Marin County, Napa County
 - 13 Agencies, 32 Sites, 7MW potential
 - Includes water district, schools and municipalities
 - Using an innovative revolving fund
 - Status: Evaluating Proposals



Case Study: Metro DC Clean Energy Collaboration

- Launched by EPA's Green Power Partnership
 - Based on successful Silicon Valley collaborative model
 - Government partners including Federal, Local, Military, Higher Education
 - Focused on agencies in the greater Metropolitan Washington DC Area
 - 20 Organizations, 170 Sites, 42MW Potential
 - Status: Feasibility Studies complete, procurement of 10+ MW in new capacity beginning in Q4 2013



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 installed solar systems, the local economy, and regional environment.

Solar Collaboration Planning in Central New York

177 viable sites identified and 29 recommended roof- and ground-mounted solar PV systems on commercial and local government property

- total capacity of 88.3 MW
- capable of powering approximately 12,000 homes and offsetting nearly 20,000 MTCO₂e

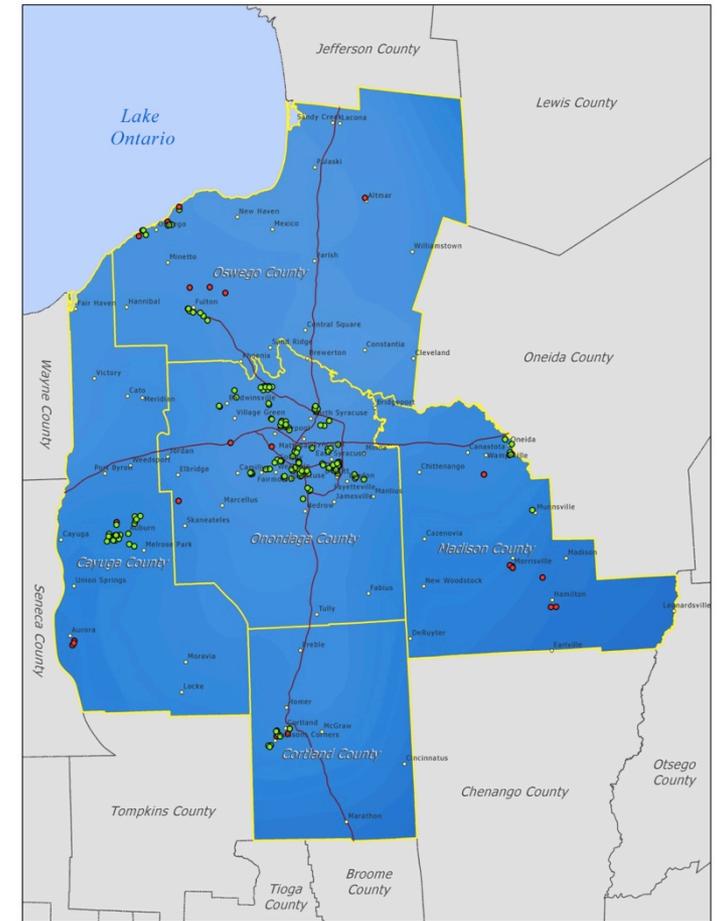
Regional project planning for collaborative solar procurement underway



Hancock International Airport



MWB Reservoir, Town of Clay



General Collaborative Procurement Project Timeline

PROJECT PHASE		TASKS	TIMELINE
STRATEGIC RFP/Q PROCESS & DOCUMENT DESIGN	Review & Vetting of Site Portfolio	Perform initial vetting of site inventory and feasibility assessments (both technical and economic) for sites that have passed the initial screen.	Month 1 - 4
	Strategically Bundle Site Portfolio	Group sites in a strategic manner that maximizes economies of scale benefits for all participants and all sites. Sites will be bundled according to various site characteristics.	Month 4 - 5
	Develop Proposal Evaluation Criteria	Develop proposal submittal requirements based on procurement best practices that will allow for a straightforward, equivalent comparison during the evaluation phase.	Month 6 - 7
	Draft Standardized RFP/Q Documents	Draft standardized RFP/Q documents that incorporate local requirements of individual participants and encourage regional vendor participation and hiring.	Month 7 - 8
PROCUREMENT MANAGEMENT	Clear Vendor Communication	Maintain clear & transparent lines of communication with vendors during proposal development period, including incorporating input.	Month 6 - 8
	Issue & Manage RFP Process	Finalize RFP, specs and documents for release; manage questions and site visits; respond to questions via addenda and collect proposals for review.	Month 9 -12
	Evaluate & Compare Proposals	Evaluate proposals in terms of experience, financing, costs, benefits, etc., in order to select optimal projects and vendors for participants. Incorporate current market trends and best practices. Determine short listed vendors for interviews.	Month 12 - 13
	Organize & Conduct Vendor Interviews	Negotiate contracts, financing, systems, and warranties, with vendor(s). Review and submit for approval at each organization.	Month 14
	Contract Negotiation & Award	Thorough contract review to identify high value areas for negotiation. Assist with contract negotiations between participants and solar vendors.	Month 15 - 18

How to Get Started

- Review materials and best practice guide

www.jointventure.org/images/stories/pdf/purchasing.power_best.practices.guide.to.collaborative.solar.procurement.pdf

- Convene a regional working group
- Gather an initial inventory of interested agencies and solar sites
- Share materials and begin training of key stakeholders



To Learn More Contact: Ben.Foster@optony.com



New York State Energy Research and Development Authority

NY-Sun Balance-of-Systems Program

New York State Climate Smart Communities Webinar

November 20, 2013

Jennifer Harvey

“Advance innovative energy solutions in ways that improve
New York’s economy and environment”

“The long-term commitment to solar energy represented by NY-Sun will make New York State a leader nationally in solar development.”

N.Y. Governor Andrew M. Cuomo on the NY-Sun Initiative, State of the State Address January 2013

Goal #1: Quadruple the amount of customer-sited PV installed in 2013 as compared to 2011

Goal #2: Technology advancement and **system cost reduction**

Approaches:

- Deployment Incentive Programs:
 - NYSERDA Standard Offer PV Program (less than or equal to 200 kW)
 - NYSERDA Competitive PV Program (greater than 200 kW)
 - LIPA Solar Pioneer (homeowner) & Solar Entrepreneur (business - up to 50 kW)
- Research & Development collaborations on BOS cost reductions
- Training installers and decision makers

NYSERDA's Range Involving PV

Research & Development:

- New & improved PV modules
- **Reduced costs of balance-of-system**
- Advanced manufacturing techniques

Workforce Development:

- Training for PV installers and for decision makers

Deployment of PV Systems (Incentives):

- Smaller systems - subscription
- Larger Systems - competitive

Streamlined PV Permitting

(PON2721, Category 1 Incentives)

- Up to \$1 million available for communities to adopt streamlined permitting for photovoltaic systems: \$2,500 for a population of up to 30,000 and \$5,000 for a population larger than 30,000
- Applications accepted starting August 1, 2013 and until 4:00 PM Eastern Time on September 30, 2014 (or earlier)
- Links to standard permits and Cleaner, Greener Communities funding here: www.ny-sun.ny.gov/Local-Community-Tools

PV BOS Cost Reduction

PON 2672

- Goal – increase market penetration of PV systems through the reduction of costs and uncertainties associated with purchasing, installing, and owning a PV system
- Funding – \$10 million available; funding provided by NYSERDA and NYPA
- Due Dates – July 30, 2013 and January 30, 2014

PON 2672

- **Category 'A' - BOS Soft Cost Reduction:** soft cost (non-hardware) projects reduce the cost of PV systems by addressing and reducing specific 'soft' cost elements
 - maximum funding per project \$500,000 (\$250,000 per phase)
 - cost share of at least 25% of each project phase preferred
- **Category 'B' – BOS Product Development:** develop a BOS product or component (hardware) that will lead to lower costs of PV systems
 - maximum funding per project is \$500,000
 - cost share of at least 50% of the total project is required
- **Category 'C' - Demonstration Projects:** projects that install PV systems in order to demonstrate and validate innovative and cost-reducing soft cost concepts or hardware
 - maximum funding per project is \$1,000,000
 - cost share of at least 50% of the total project is required

PON 2672

Examples of soft cost project areas include, but are not limited to:

- Developer/installer business costs, such as **customer acquisition costs**, carrying costs, insurance, performance and payment bonds, and incentive program participation administrative costs
- Development costs, including financing and contracting
- System design and engineering
- Permitting, interconnection, and inspection
 - Utility interconnection – costs related to fees, installer or expeditor labor related to obtaining approvals and inspections, time to get approvals, uncertainty, inspections, etc.
 - Town/local government – costs related to fees, installer or expeditor labor related to obtaining approvals and inspections, time to get approvals, licenses, fire issues, uncertainty, inspections, etc.
 - Homeowner association issues and barriers
- Installation labor
 - Reduce repeat site visits
 - Standardization/modularization
- Plug and play strategies
- O&M
 - Reduced monitoring costs and costs associated with ensuring proper performance
 - Enhanced monitoring to increase system reliability

PON 2672

What makes a good project?

- Large, sustainable, and measurable impact on reducing PV cost
- Impact over a large number of systems
- Complement, supplement, or leverage (not duplicate) other efforts

In order to do this, you must:

- Know and engage your 'customers'
- Know the marketplace (issues, barriers, competition)
- Have appropriate project partners

New York State Energy Research and Development Authority

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Climate Smart Communities Webinar

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