### **Built Environment and Energy Advisory Committee Meeting**

Washington Metropolitan Council of Governments 777 North Capitol Street, NE, Washington, DC

# October 17, 2013 Draft Meeting Highlights

#### Attendance:

Joan Kelsch, Arlington County, Co-Chair Olayinka Kolawole, DDOE, Co-Chair Luisa Robles, Greenbelt Emil King, DDOE Tyler Espinoza, Optony Jeff Bond, Prince George's County Jeannine Altavilla, Arlington County Mark Baff, Bluefin LLC Daniel Lee, WMATA Mike Healy, Skykine Innovation Jeremiah Dancy, Bluefin LLC LTC David Johnson

#### By Phone:

Bill Eger, Alexandria Marie Genovese, Loudoun County Lisa Orr, Frederick County Najib Salehi, Loudoun County

### Staff:

Leah Boggs, COG DEP Jeff King, COG DEP Joan Rohlfs, COG DEP

### **DC Smart Roof Optimization**, Richard Bast, Bluefin LLC

- Bluefin worked with and is funded by the District of Columbia Department of General Services
  (DGS) to install smart roof technology on 435 buildings including schools, police stations, fire
  stations, parks/rec centers and office buildings (321 acres of roof area or 12.5 mill square feet of
  roof)
- Implementation of solar contracts will be done by PPA contracts
- Objectives:
  - Conserve Energy: Insulating, air-barrier, and day-lighting
  - Reduce Runoff: Collecting, retaining, and re-using rainwater
  - Reflect Heat: Reducing temperatures across the city
  - Collect Solar Energy: Producing electricity and hot water
  - Manage Carbon: Tracking and reducing carbon footprints
  - Lead: Demonstrating best practices and directly involving the community
- Solar PV Summary:
  - 8.5 MW at 47 Sites (working to identify up to 10 MW)

- o 38 sites/6.5MW can be developed immediately
- o 9 sites/2MW require roof restoration prior to PV installation
- 20 25 year PPA large single procurement with "carve out" for local participation
- o \$17 \$20M in utility savings over PPA term
- Annual benefits
  - 10,000+ MWh generated (based on 8.5 MWh systems)
  - 7,000 tons CO2 displaced
- Solar Thermal Summary:
  - o 13 schools and 5 recreation centers with indoor pools
  - Domestic hot water, building heating/cooling and pool heating
  - Direct appropriation and/or a solar-thermal PPA
  - \$9.6M in utility savings over 20 years
  - Annual benefits:
    - 1,800 MWh generated
    - 2,300 MWh natural gas offset
    - 2,250 metric tons CO2 displaced
- Next Steps
  - Feasibility study
  - Stakeholder review
  - Procurement
  - Contracting
    - The contract is expected by Nov. 2014
    - Installation timeframe is indeterminate

#### DISCUSSION:

- How is DGS financing projects for green roofs?
  - DGS is looking at stormwater credits

## **DC Rooftop Solar Challenge/Roadmap**, Tyler Espinoza, Optony

- The American Solar Transformation Initiative was a US DOE supported program to reduce the total installed costs of solar PV systems and increase deployment of solar across the US by lowering barriers to adoption in targeted focus areas
- Focus Areas:
  - Local Permitting Process
  - Planning & Zoning Regula0ons
  - Utility Interconnection
  - o Education and Outreach
  - Financing Tools and Resources
  - Innovative Deployment Programs
- The goal of the initiative is to make it easier, faster and cost effective to "go solar" by providing coordinated technical assistance and resources to individual jurisdic0ons
- Round 1 Optony was 1 of 22 teams selected to create the solar road map to help local governments accomplish the goals
- Round 2 Optony was 1 of 19 teams selected to continue on for further implementation
- Optony is currently recruiting, looking for new regions and intersected jurisdictions to participate

- Six COG member jurisdictions had expressed interest; COG and Optony interested in getting more jurisdictions to participate
- Next Steps
  - Review Solar Roadmap website and materials
  - Deadline date to participate by October 25, 2013
  - Work with MWCOG, Optony and regional partners to set goals and plan for implementation

### DISCUSSION:

- How will Optony deal with the different zoning issues in communities?
  - Solar access laws are different in each community
  - Not every policy is relevant to each community and the goals can be customized in the interview process
- How does Optony engage the local utility?
  - Optony is working with CEPA to help with utility engagement
  - o There has not been much engagement with the utilities in the region

## **Rooftop Solar Thermal Program, Michael Healy**

- Skyline Innovations offers a web-based platform for analysis of renewable energy and efficiency projects
- Skyline applications will reduce costs and offers guaranteed savings through patent-pending technology
- Skyline installs solar systems on the roof for a shared savings of usually 30-40%
  - o The savings is measured and not based on the baseline
  - Skyline typically Contract
  - Skyline will own and operate the systems and sell it back to customers
  - Contracts are typically 15 years
  - After the contract term the customer gets the system or continue under contract
  - Local subcontractors are used for installation of the systems
- DC has 60 buildings solar water heating system;
  - Mid-size, mostly multi-family buildings
  - o Provides 30-70% of the hot water load

## DISCUSSION:

- What is the relationship with Washington Gas?
  - Washington Gas Holding Company provides 50% of Skyline's project fund
  - Washington Gas Energy Systems is also a developer of solar projects

#### Roundtable

- Luisa Robles, Greenbelt, MD Using MEA's Smart Energy Communities Grant to review ordinances for renewable energy
- Jeff Bond, Prince George's County, MD Using the Smart Energy Communities Grant for EV charging stations
- Lisa Orr, Frederick County, MD Using the Smart Energy Communities Grant for a refrigeration replacement program next Spring

# **Next Meeting Date and Other Announcements**

The next BEEAC meeting is November 21, 2013.