# Montgomery County Solar Projects – Status

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# Montgomery County Department of General Services

- Analogous to the federal General Services Administration,
- Custodian of the County's building portfolio, fleet, and purchasing,
- 400+ buildings, owned leased, and leased out. Totaling over 9,687,923 square feet.
- Manages \$28 million of annual energy purchases
- Fleet of over 3,000 vehicles

# Office of Energy and Sustainability

Created within the Department of General Services to reduce the environmental footprint of government operations:

- <u>Reduce</u> resource consumption across DGS. Including energy, water, waste, transportation, biodiversity. Includes <u>enhancing</u> "resiliency" to a changing climate.
- <u>Develop</u> County Sustainable Operations Plan and Report
- <u>Monitor</u> and <u>communicate</u> headline metrics for energy and sustainability. Communicate results to County Executive, Council and external stakeholders
- <u>Engage</u> and <u>empower</u> internal staff working on green initiatives
- Manage utilities, conventional and clean energy purchasing
- <u>Accelerate</u> clean energy and energy efficiency projects
- <u>Seek</u> and <u>secure</u> resources to expand green efforts. Including grants, utility incentives, public private partnerships, joint projects and more.
- Innovate as DGS Green "skunkworks"

## Solar Deployment

- Launched a broad reaching Solar Photovoltaic Project in 2014
- Identified a partner to design, building, finance, own and maintain the photovoltaic system using a solar power purchase agreement
- Created capital projects position to oversee the deployment of renewable and other advanced energy projects across the County portfolio
- Plans underway to deploy solar across 17+ facilities (pending structural and condition review)
- Includes roof mounts, parking canopy mounted solar and ground mounts
- Goal of 6 megawatts installed capacity before the end of 2016. Additional capacity being identified/evaluated

#### Phase I

- Site assessments and design fall 2014 through spring 2015
- Building and install spring 2015 through 2016
- Build as many sites as feasible given land/building resources and project management capacity
- Current vendor selected
- An additional request for energy proposals will be issued for a subset of buildings as a local small business reserve project.

# The Challenge – Finding the Sites

- Montgomery County government facilities are diverse,
- Majority are under 50,000 square feet,
- Mix of uses including warehouses, recreation, libraries, etc.
- Buildings are older, need comprehensive energy and other improvements,
- Portfolio is constantly shifting as facilities are divested and acquired,
- Often located in "tight sites" in urban areas, few available open fields or ground mount opportunities.



# Competing Uses





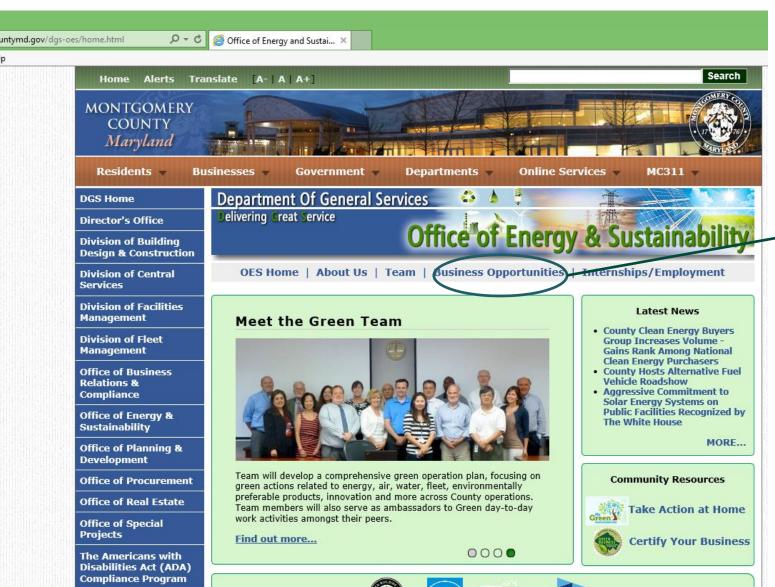
### Innovations

- Bid structure combined large sites with small sites to meet economic targets.
- Projects were arrayed to achieve community coverage to educate and encourage community adoption of solar
- Project includes potential for "premium items" that are integral to the system and expand value. Includes:
  - EV stations co-located with PV canopies at selected sites, rough outs with all PV canopies to allow easy expansion of EV charging,
  - High efficiency lighting with canopies,
  - Energy storage (where applicable) for demand response and frequency harmonization,
  - Habitat enhancements (pollinator friendly vegetation where applicable) to encourage balanced, sustainable placement of ground mounted systems.
  - Ability to purchase project SREC's after first couple years.

## Phase II and III - Partnerships

- Seek partnerships in community to lease systems and purchase power as County project sites are exhausted.
- Expect this to be a challenge given the land cost/use in Montgomery County and potential zoning limitations,
- Timing to get an RFEP out, awarded, negotiated concurrent with a ground lease or other agreement will be a challenge.
- Phase III will look for supply in the region to the East and South where transmission congestion is less.

## For the Vendors



Energy purchasing and other opportunities are posted on the business opps page at the OES website.

#### Contact Us:

Department of General Services – Office of Energy and Sustainability

http://www.montgomerycountymd.gov/dgs-oes/



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