

# COG BUILT ENVIRONMENT AND ENERGY ADVISORY COMMITTEE (BEEAC) MEETING AND SOLAR WORKSHOP KICKOFF

DC Solar Market Overview

★ ★ ★ DEPARTMENT  
OF ENERGY &  
ENVIRONMENT

# Overview

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- Solar Market Drivers
- Solar Mandates and Goals
- Challenges
- Solar Initiatives

# Solar Market Drivers

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- Primary legislative drivers
  - Renewable Portfolio Standard (RPS) Act of 2005
  - Clean and Affordable Energy Act of 2008 (CAEA)
  - Community Renewables Energy Amendment Act (CREA)
  - Renewable Portfolio Standard Expansion Amendment Act 2016 (RPSEAA)
- Additional drivers
  - Renewable Energy Development Fund (REDF)
    - Solar For All Initiative



# Solar Market Mandates and Goals

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*The Renewable Energy Portfolio Standard (RPS):*

**50%** of electricity MUST come from renewable energy resources **by 2032**

**5%** of electricity MUST come from solar **by 2032**

*Sustainable DC Plan (SDC):*

Increase use of renewable energy to **50% by 2032**

Reduce carbon emission **50% by 2032**



# Solar Renewable Energy Credits (SRECs)

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- Tradeable certificates representing environmental benefits of solar energy
- One SREC = One megawatt-hour (MWh), 1,000 kWh
- Electricity suppliers (195 approved, 29 currently active) must purchase SRECs to comply with RPS
- SREC shortfall - pay a Solar Alternative Compliance Payment (SACP or ACP)
- SRECs generated by systems certified by the PSC prior to February 1, 2011 are excluded from higher requirement, allowed to be used to meet RPS solar requirement.
- ACP is price ceiling that suppliers pay for SRECs; fixed at \$500 per MWh until 2023, falling thereafter
- SREC values fluctuate with market - supply and demand
- Three-year lifespan from date created
- D.C. Public Service Commission (PSC) manages RPS program, certifies systems as eligible generators
- SREC generation, transfers tracked through PJM's Grid Attributes Tracking System (PJM-GATS)

# DC SREC Sources

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- 3,046 solar PV and 112 solar thermal systems in the District (~39.3 MW)
- Additional 2,292 eligible systems outside the District
- Current solar capacity - 60.2 MW, less than the ~83.2 MW of estimated solar capacity needed

Ward	PSC Registered Systems
1	322
2	131
3	400
4	463
5	406
6	471
7	440
8	246

\* Source Public Service Commission

# DC SREC Sources cont.

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- Outside of the District, six (6) states with more than 100 eligible solar systems:
  - Pennsylvania (928),
  - Virginia (493)
  - Maryland (237)
  - North Carolina (156)
  - Delaware (150)
  - Ohio (132)
- These states account for ~92 percent of the non-DC solar energy systems approved for the District's RPS program (2016).

These systems were registered with the PSC prior to February 1, 2011 and are grandfathered into the RPS program.

# DC Solar Market Challenges

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- Available Real Estate
- Project Financing
- Consumer Education/Protection
- Alternative Compliance Revenue Projection



# DC Solar Initiatives

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- DGS ~10 MW at 50 sites (PPA, under procurement)
- DOEE Grants - Solar For All Initiative ~ 7 MW from 10 projects
- DGS/DOEE ~ 1.5 MW Community Renewable Energy Facility District owned (under procurement)
- Working with other sister agencies to identify opportunities to deploy solar photovoltaics in their building portfolios.



# Thank You

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Daniel White  
Energy Administration  
Department of Energy and Environment  
1200 First Street, NE 5<sup>th</sup> Floor  
Washington, DC 20002