



—KEY STATS—

Budget:
\$5.5 million

Capital Source:
Renewable Energy
Development Fund

Site Size:
15.4 acres

System Capacity:
2.85 megawatts

**GHG Emissions
Prevented:**
66,000 metric tons

Solar Equipment:
7,200 Jinko 365W PV
Modules
12 Yaskawa Solectria
String Inverters
SolrenView monitoring

Workforce Trained:
882 trainees

CASE STUDY

Oxon Run: Former Brownfield Now Generates Clean Energy for District

4669 South Capitol Street, SW, Washington, DC 20032

This ground-mounted photovoltaic system at Oxon Run is the largest community solar project in the District with a generation capacity of 2.65 megawatts. It is most notable for being the first adaptive reuse of a brownfield for solar in the District. The project serves around 750 households that receive up to \$500 per year to reduce their electric bills through DOEE’s Solar for All program. The solar arrays occupy one third of the 15-acre parcel adjacent to Oxon Run Park at the southernmost tip of the District of Columbia.

Q&A WITH EMIL KING, DISTRICT’S DEPARTMENT OF ENERGY AND ENVIRONMENT, ENERGY ADMINISTRATION

How did the Clean Energy DC Omnibus Amendment Act and goals benefit this project?

The Act mandates that 100% of the District’s electricity be sourced from renewables by 2032 as part of its plan to cut GHG emissions by 50% within the same time frame. The Oxon Run project was funded by Renewable Portfolio Standard alternative compliance payments that comprise the District’s Renewable Energy Development Fund. The system

is not currently registered with the Public Service Commission as a generator and does not produce solar renewable energy credits, so it doesn’t factor into the RPS solar carve out. While this may change in the future, the REDF was still able to fund the \$5.5 million dollar project because it is grid-tied. Ultimately, the District makes headway on other targets such as reduced GHG emissions, community and habitat revitalization, and green economy outcomes through this project.





What development scenarios were considered for the site and how did you choose the one you did?

Housing, retail, urban agriculture, and an extension of the current Oxon Run Park were initially considered as potential uses. These concepts were deemed unviable to the parcel's ownership structure, designated zoning uses, location on a floodplain near critical wetlands, and the presence of subsurface pollutants. It became clear that re-use as a location for community solar was the best use for the property. Most of the project would not extend more than a couple feet below grade, eliminating exposure to the contaminated soils. This was a key design consideration since it removed the need for costly remediation actions.

What challenges did you face and what lessons would you share with projects considering community solar?

The first challenge was getting a buy-in from the community. Other municipalities should learn to prioritize and leverage community level planning through open forums. Leadership from local stakeholders and residents helps to avoid potential conflicts. For this project, the team made several presentations in Ward 8 for over a year. The District's ANC structure helps to identify community concerns, which contribute to building rapport and incorporating community input into the project.

Cities and industry leaders should consider advocating for friendly zoning regulations that enable timely completion of solar projects. While Oxon Run had to apply for a special exception approval, the District

government has since revised the city's zoning ordinances to help streamline the construction of community solar installations. This is critical, especially as so many municipalities and organizations now have time-bound sustainability goals.

What are the benefits of this project for stakeholders?

The construction of solar arrays at Oxon Run has environmental, equity, and economic benefits for District residents. The project contributes to GHG emissions reductions while transforming an environmental brownfield into a public resource. The return of native trees and shrubs is contributing to the protection of precious wetlands, and there are plans for introducing native pollinator plants in the future.

In addition to reducing the utility bills of residents, the project employed local trainees participating in Solar Works DC, a solar jobs training program run by Grid Alternatives Mid-Atlantic as part of its construction team for the Oxon Run Project. The project serves as a demonstration site for deploying emerging technologies within a community traditionally lacking investment while providing savings to low-income households for 20+ years by reimagining an underutilized parcel of land.

KATE TANABE
kate.tanabe@dc.gov

EMIL KING
emil.king@dc.gov



EMIL KING

*Program Analyst,
DC Department
of Energy and
Environment*

“You have to go to the community where it’s supposed to happen as early as possible... The site is now safer and contributes to the public good.”

—PROJECT TEAM—

District Department of Energy and Environment
Project Owner

Department of General Services
Procurement and Construction Management

GRID Alternatives Mid-Atlantic
Solar Installation

Lightbox
Project Management

TetraTech
Environmental Assessment

Casey Trees
Native Landscaping