

**OASIS** **ENERGY**  
PARTNERS

# Meet the Author

## Brooke Smallwood, CEO OASIS EP

- Over 20 years of experience with major utilities in North America, gas and electric including: Exelon, Alta Gas and Southern Companies
- Worked on energy programs and projects with: Lockheed Martin Energy (TRC), AECOM, Honeywell and Johnson Controls
- Helped to develop and launch the EE Programs for Pepco and Delmarva Power in 2009 and the EVSmart Programs in 2019
- Started OASIS EP in early 2023

***Powered by Diversity, OASIS EP is paving the way to a clean energy future for all***



*A special thanks to our Data Curation Partner, Firmographs*

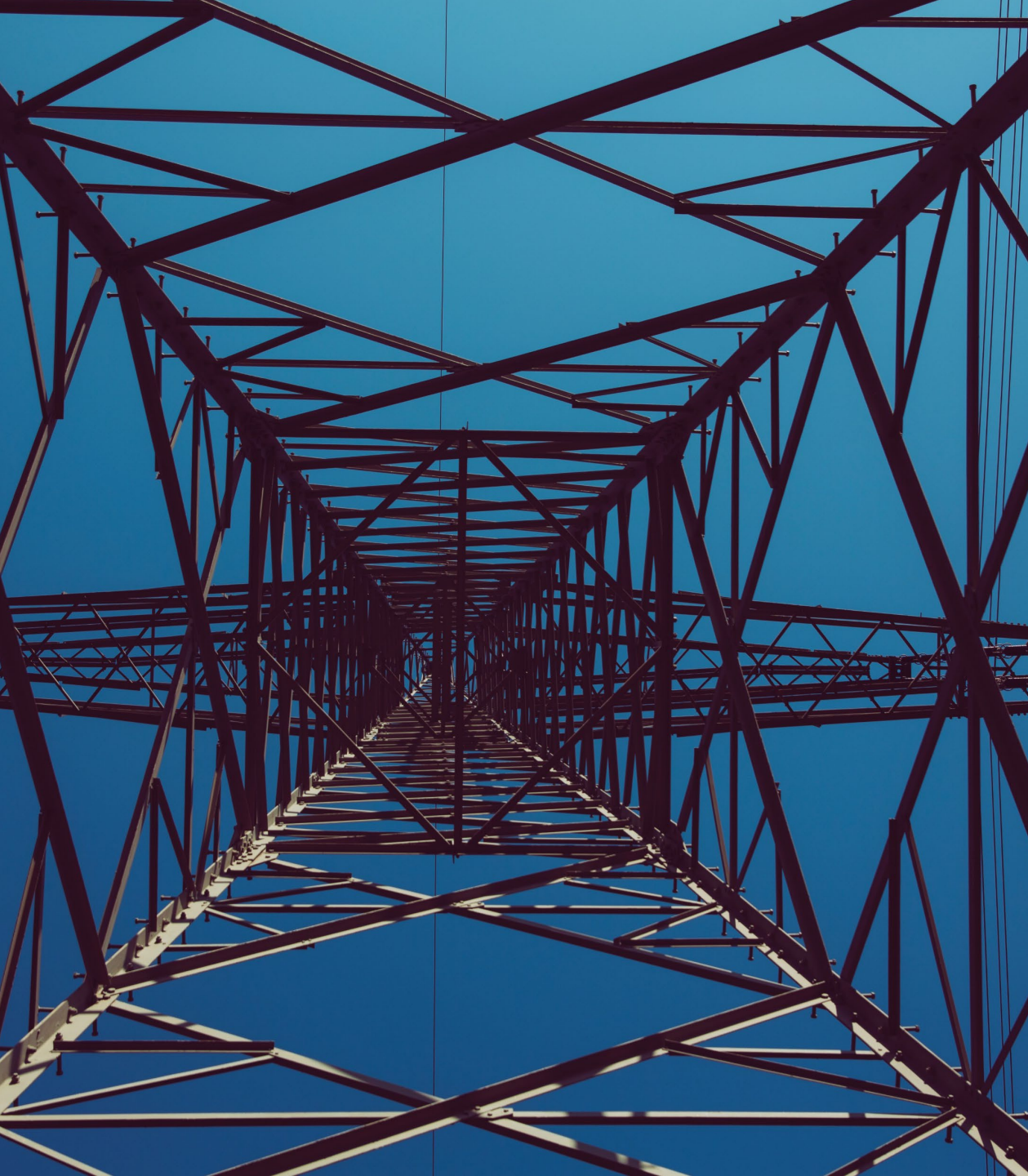


# NWAs Meet Energy Efficiency

# Key Terms

- **Distributed Energy Resources (DER)**
- **Energy Efficiency (EE)**
- **Constraint**
- **Green House Gas (GHG)**
- **Decarbonization**
- **Power Path DC**
- **Building Energy Performance Standards (BEPS)**
- **ENERGY STAR Score**





# What is a Non-Wire Alternative (NWA)?

The definition of a Non-Wire Alternative (NWA) is an **alternative solution** or **approach** that serves as a **substitute for traditional wired infrastructure**.

NWAs aim to address the challenges and requirements typically met by wired electric towers, transmission and distribution lines, substations, and associated equipment. NWAs entail innovative **alternatives such as Distributed Energy Resources (DERs)** like solar power, battery storage, geothermal energy, or microgrids.



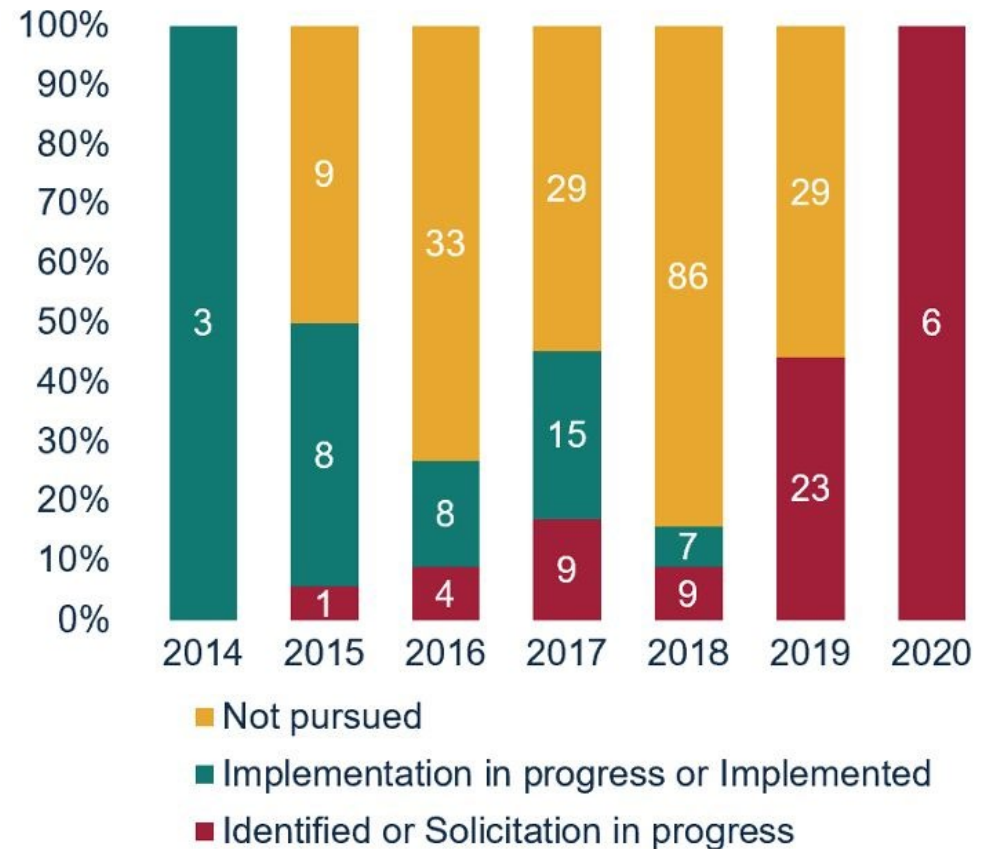
## Why NWAs?

- Supports **Decarbonization**
- State and local governments are reducing GHG, one way is preventing the installation of new substations, Washington, DC is one example
- Utilities are looking for new means of **Transmission & Distribution** of electricity
- Advancements in DER technologies give NWAs multiple options

# Barriers for NWA

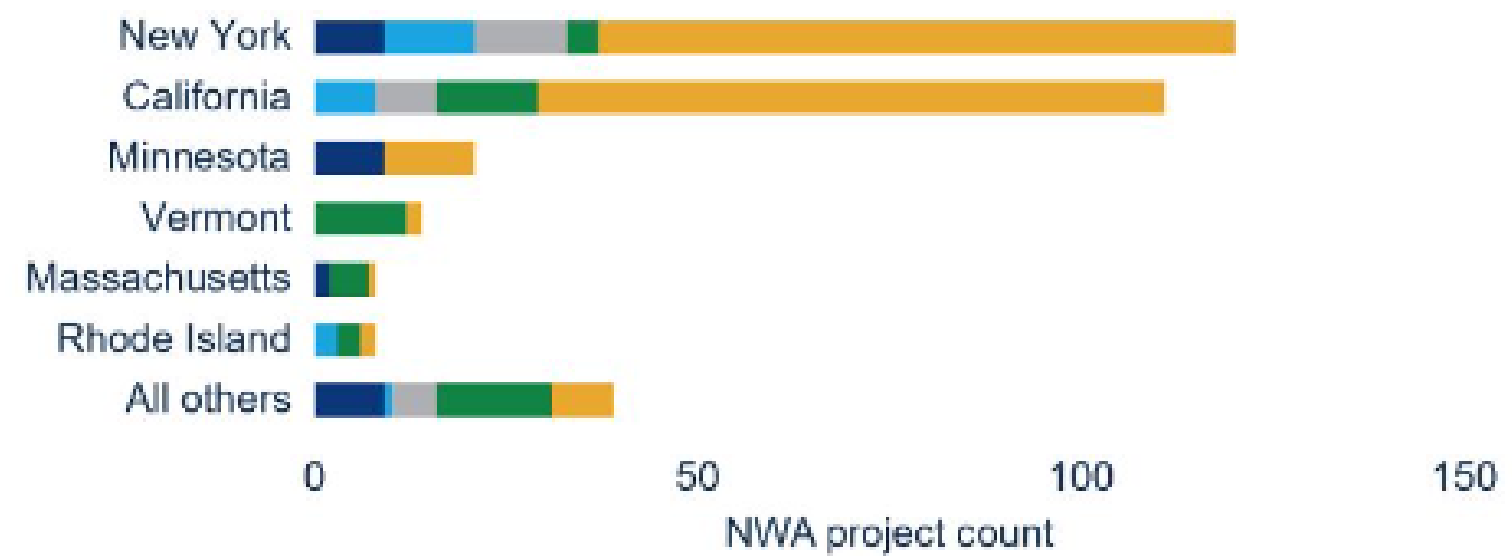
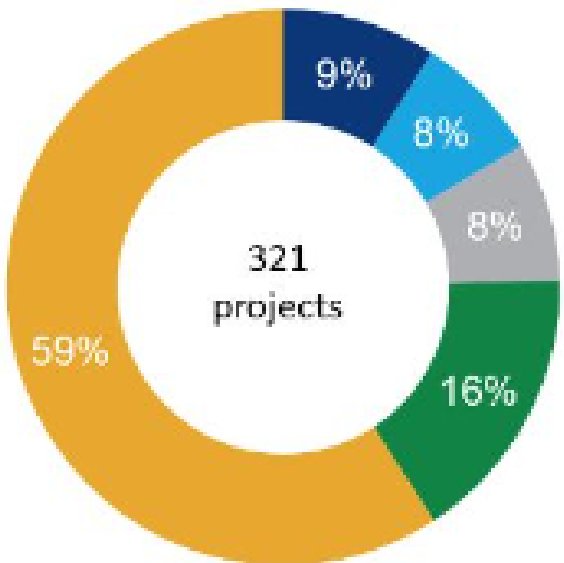
- Most projects are Not Pursued
- Barriers include:
  - Cost
  - ROI
  - Land acquisition
  - Local regulations

NWA project stage by year announced



Source: Wood Mackenzie Grid Edge service, [Wood Mackenzie Data Hub](#)

### NWA project count by status and U.S. state



■ Identified  
 ■ Solicitation in progress  
 ■ Implementation in progress  
 ■ Implemented  
 ■ Not pursued

GreenTech Media  
<https://www.greentechmedia.com/articles/read/where-are-all-the-non-wires-alternatives>

# States Struggle to Deliver Non-Wire Alternatives







# Case Study

## Constraint in Ward 6 DC

---

- Pepco is the electric utility for Washington, DC
- In 2020, Pepco released an RFI for a Non-Wire Alternative for Ward 6 in Washington, DC
- **DC PSC Power Path Initiative** has mandated that new substations would not be built in DC, instead NWAs are the preferred solution to grid constraints
- The **constraint** was expected in 2026

## Analysis

### **Several NWAs were considered including:**

1. Solar
2. Solar with battery storage
3. Battery
4. Fuel Cell
5. New substation- for comparison only

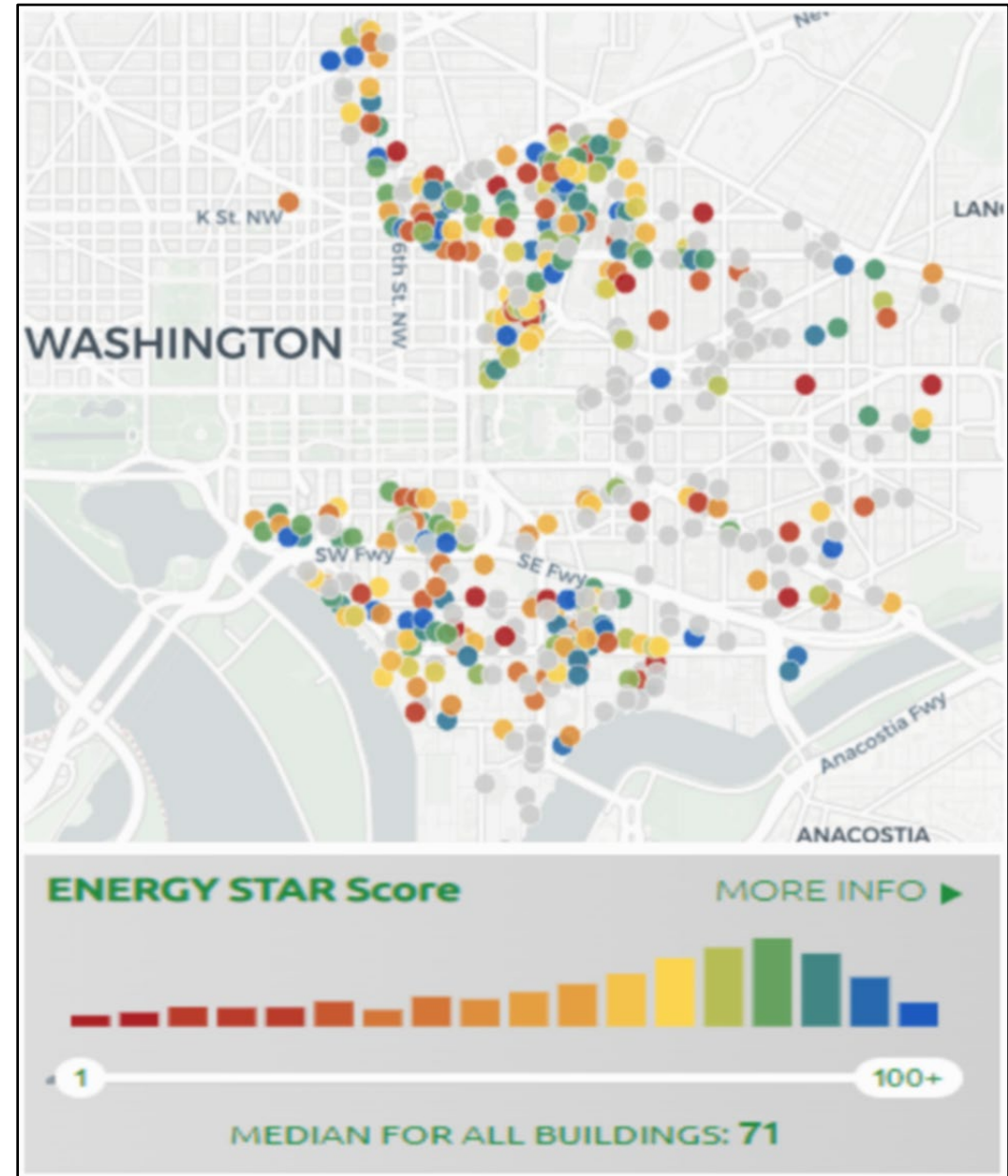
### **None of these solutions were feasible, why?**

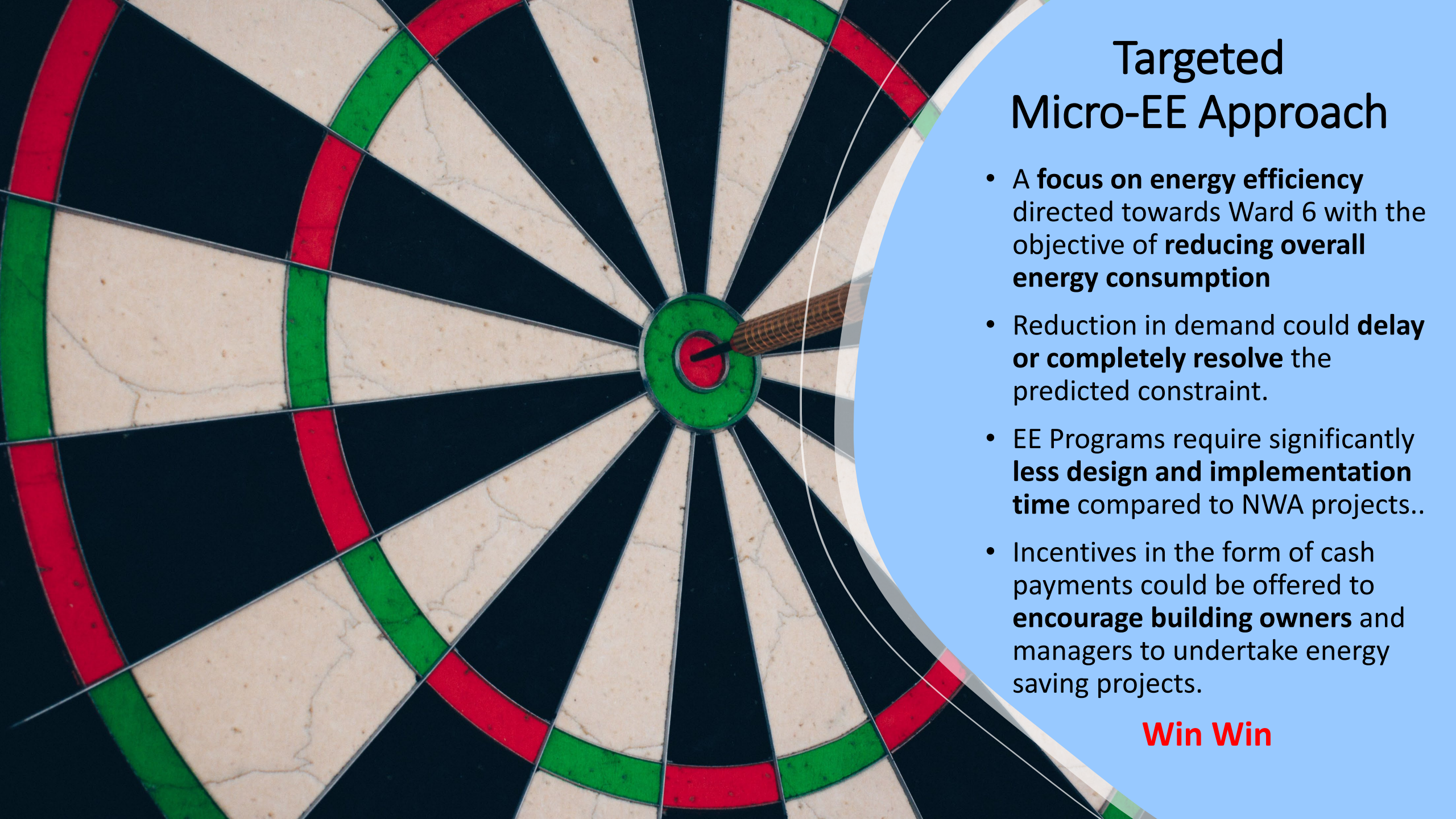
- Land in Ward 6 is scarce
- Mostly private land available
- Land is very expensive
- Landowners did not want to use their valuable land for DER
- Interior options were also not available, not enough space and cost prohibitive

# The Case for Energy Efficiency



# Ward 6's Opportunity for EE



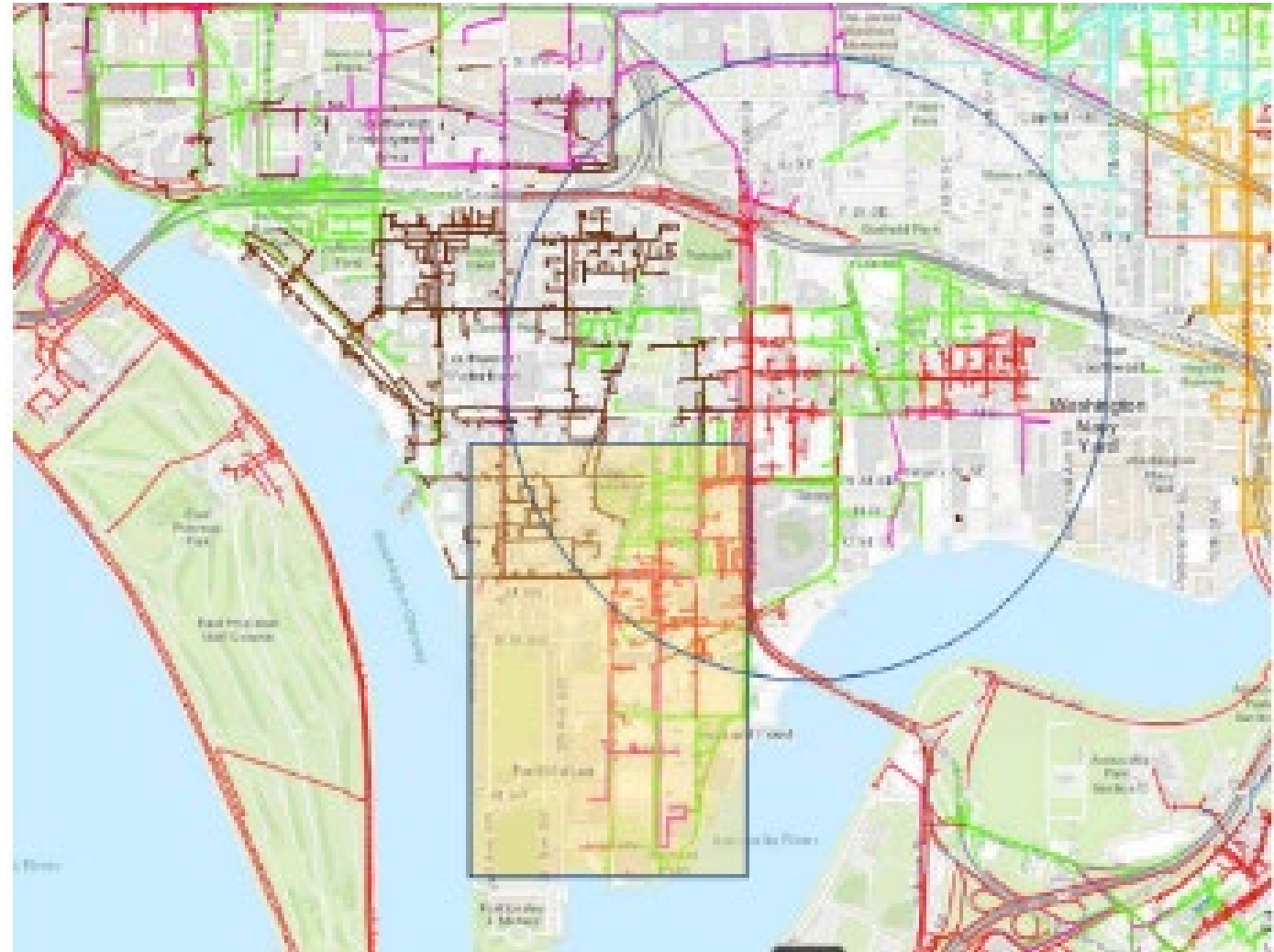


# Targeted Micro-EE Approach

- A **focus on energy efficiency** directed towards Ward 6 with the objective of **reducing overall energy consumption**
- Reduction in demand could **delay or completely resolve** the predicted constraint.
- EE Programs require significantly **less design and implementation time** compared to NWA projects..
- Incentives in the form of cash payments could be offered to **encourage building owners** and managers to undertake energy saving projects.

**Win Win**

Radius  
around Ward  
6  
should be  
evaluated for  
EE



# Major Takeaways

- Energy Star Scores avg 71
  - Room for improvement
- BEPS Data
  - Building Energy Performance data is public. EE can help buildings increase their BEPS Score and therefore appear as efficient and energy conscious
- Multi-Family sector had some of the lowest Energy Star Scores

# Conclusion

- Pepco could have benefitted from an EE Approach for Ward 6 since other NWA's were not feasible
- NWA projects are critical for grid modernization and resiliency
- No one-sized approach, all options should be considered including:
  - DERs like solar and batteries
  - Energy Efficiency
- Energy Efficiency is a more cost-effective option than DERs
- Micro-EE is a new concept which should be explored





# THANK YOU

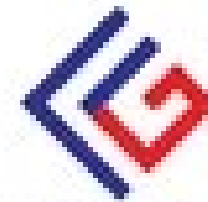


**OASIS ENERGY**  
PARTNERS

Forging new paths to a clean energy  
future for all

[brooke@oasisenergypartners.com](mailto:brooke@oasisenergypartners.com)

[www.oasisenergypartners.com](http://www.oasisenergypartners.com)



FirmoGraphs

<https://www.firmographs.com>

[bryan@firmographs.com](mailto:bryan@firmographs.com)