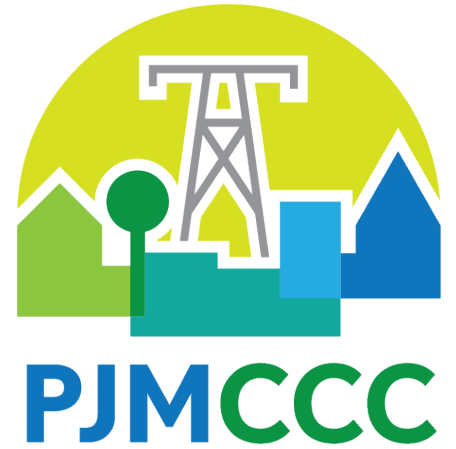




WORLD  
RESOURCES  
INSTITUTE



# Clean Energy Goals and Procurement Strategies of Local Governments

PJM Clean Attribute Procurement Senior Task Force (CAPSTF)  
June 28, 2022

# AGENDA

- Overview of local governments' clean energy goals, perspectives, and procurement strategies
- Presentations from two PJM Cities & Communities Coalition members
  - Arlington County, VA
  - City of Philadelphia, PA
- Open call for feedback from local government staff in attendance
- Q&A

**The speakers will also accept questions after each segment**

# THE UNIQUE ROLE OF LOCAL GOVERNMENTS

*As both large purchasers of energy as well as public entities, local governments occupy a unique position when it comes to decision-making, influencing policy, and advancing the deployment of clean energy.*



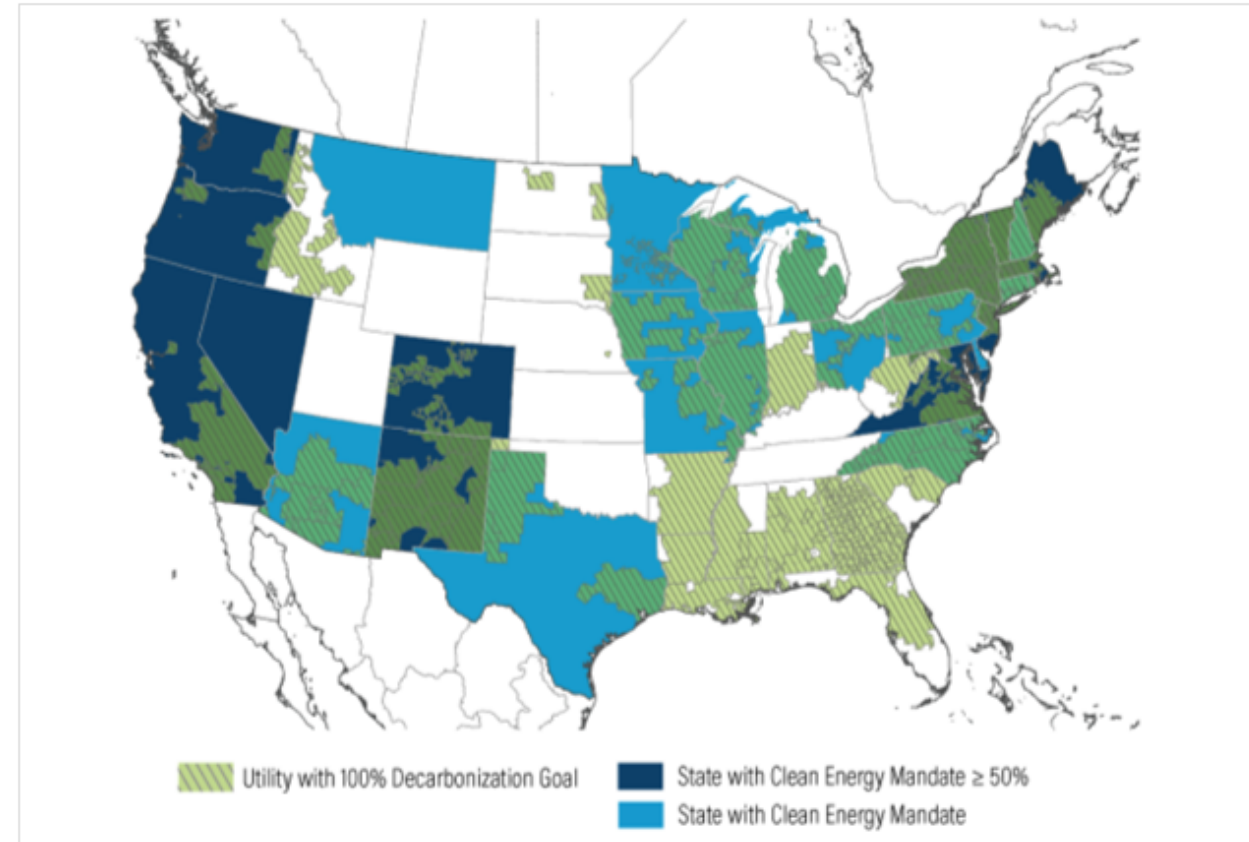
# KEY CONSIDERATIONS ABOUT THE ROLE AND ACTIONS OF LOCAL GOVERNMENTS

- Local governments approach clean energy and decarbonization broadly, targeting emissions reduction through renewable energy deployment, electrification, energy efficiency and other solutions.
- Local governments address both operational and communitywide energy needs, and often take a portfolio approach to advancing clean energy.
- When advancing clean energy adoption, local governments prioritize equity and co-benefits, such as economic development, in potential solutions.
- The actions of local governments often spur action from other public institutions, private entities, and residents.



# LOCAL GOVERNMENTS & CLEAN ENERGY GOALS

- States have set RPS and utilities have established clean energy targets that advance clean energy deployment.
- Local governments and corporates are also aggressively setting clean energy goals and taking action.
- Almost 200 local governments nationwide have committed to 100% clean energy as part of Sierra Club's Ready for 100 campaign.
  - At least 57 are located within PJM's footprint.



**There are more local governments not captured by this campaign that have set goals for deploying clean energy**



# GOING BEYOND JUST MEETING CLEAN ENERGY GOALS

In advancing clean energy goals and strategies, local governments often look to address the following priorities:

Environmental  
Impact

Local Economic  
Impact

Financial Impact

Scalability &  
Contribution to  
Goal

Equity

Grid Resilience

Clean Energy  
Leadership

Ease of  
Procurement

*These priorities have direct consequences on the potential for local governments to procure clean energy attributes from a centralized market*

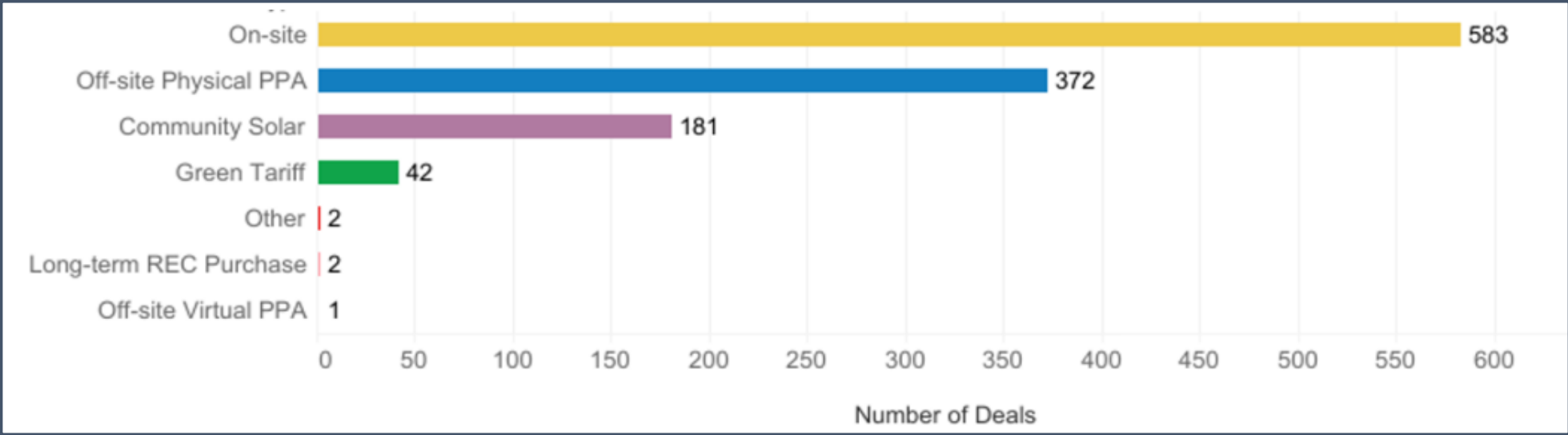
# CLEAN ENERGY PROCUREMENT PATHWAYS FOR LOCAL GOVERNMENTS

- Local governments have diverse procurement options, which vary depending on state law, and often pursue a portfolio approach.
- Clean energy procurement may include:
  - Unbundled Renewable Energy Certificates (RECs)
  - On-site solar
  - Community solar
  - Physical or Virtual Power Purchase Agreements (PPAs)
  - Utility special contracts and green tariffs

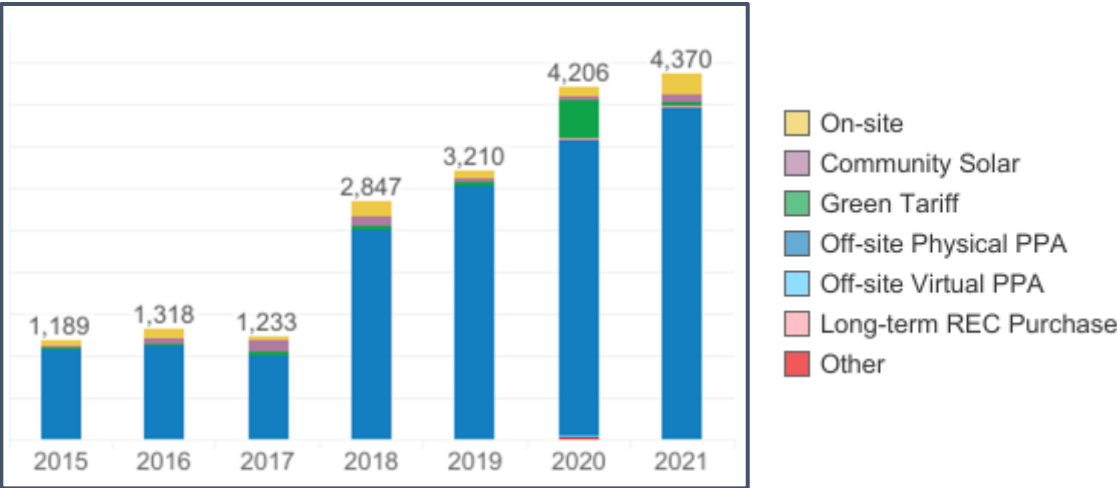
Local governments are also exploring innovative solutions such as aggregated procurement, 24/7 carbon-free energy and community choice aggregation (CCA)

# LOCAL GOVERNMENT TRANSACTIONS NATIONWIDE

Number of Local Government Transactions by Type Nationwide (2015-2021)



Transaction Sizes (MW) Nationwide (2015-2021)



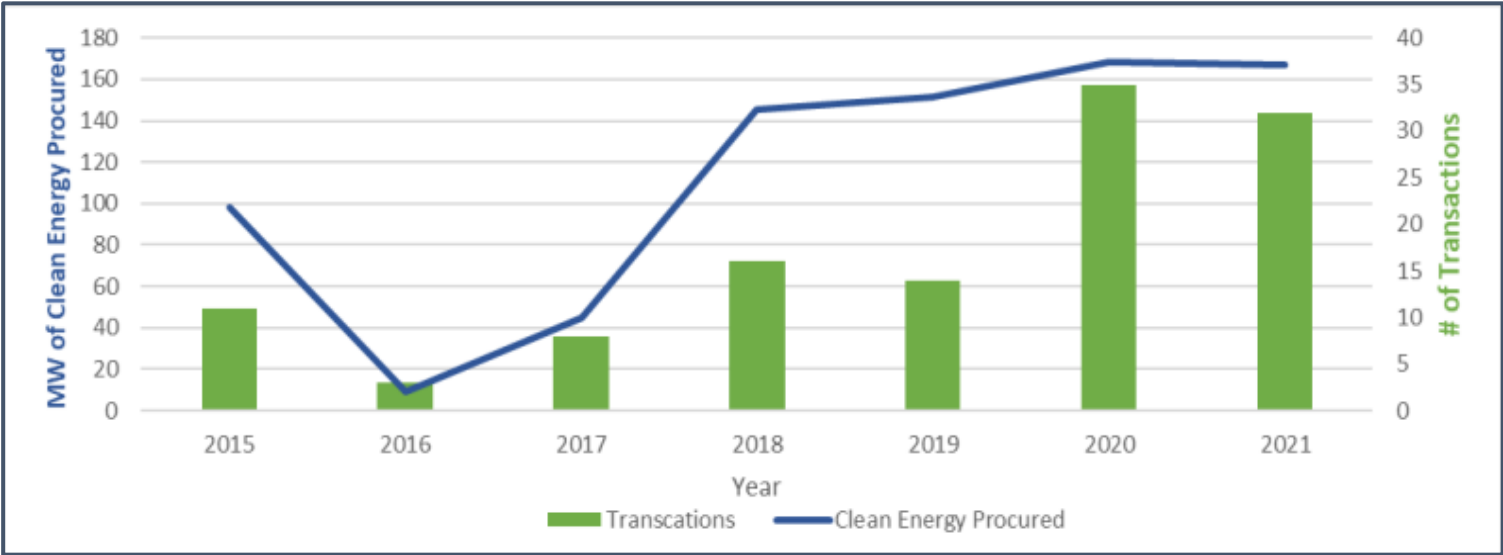
Total Transactions (in MW)  
between 2015-2021

**18,372.4**

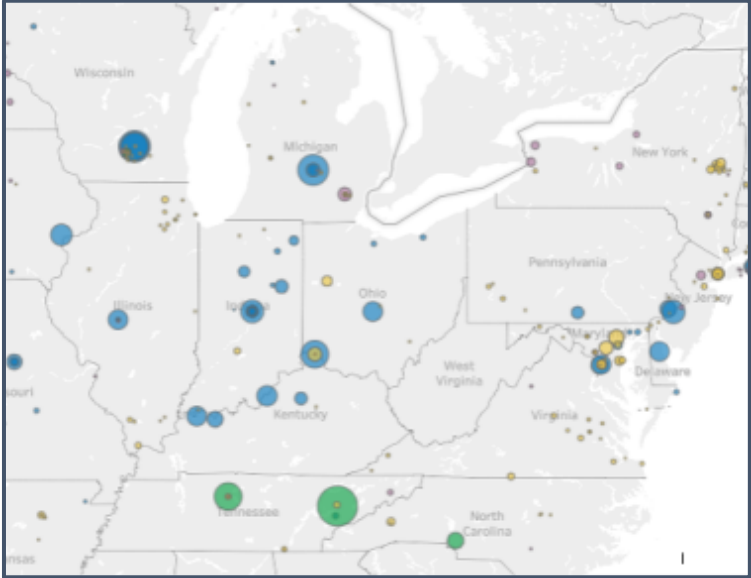


# TRANSACTIONS BY LOCAL GOVERNMENTS WITHIN PJM'S TERRITORY

Transactions by Local Governments in PJM Territory (2015-2021)



Map of Transactions (2015-2021)



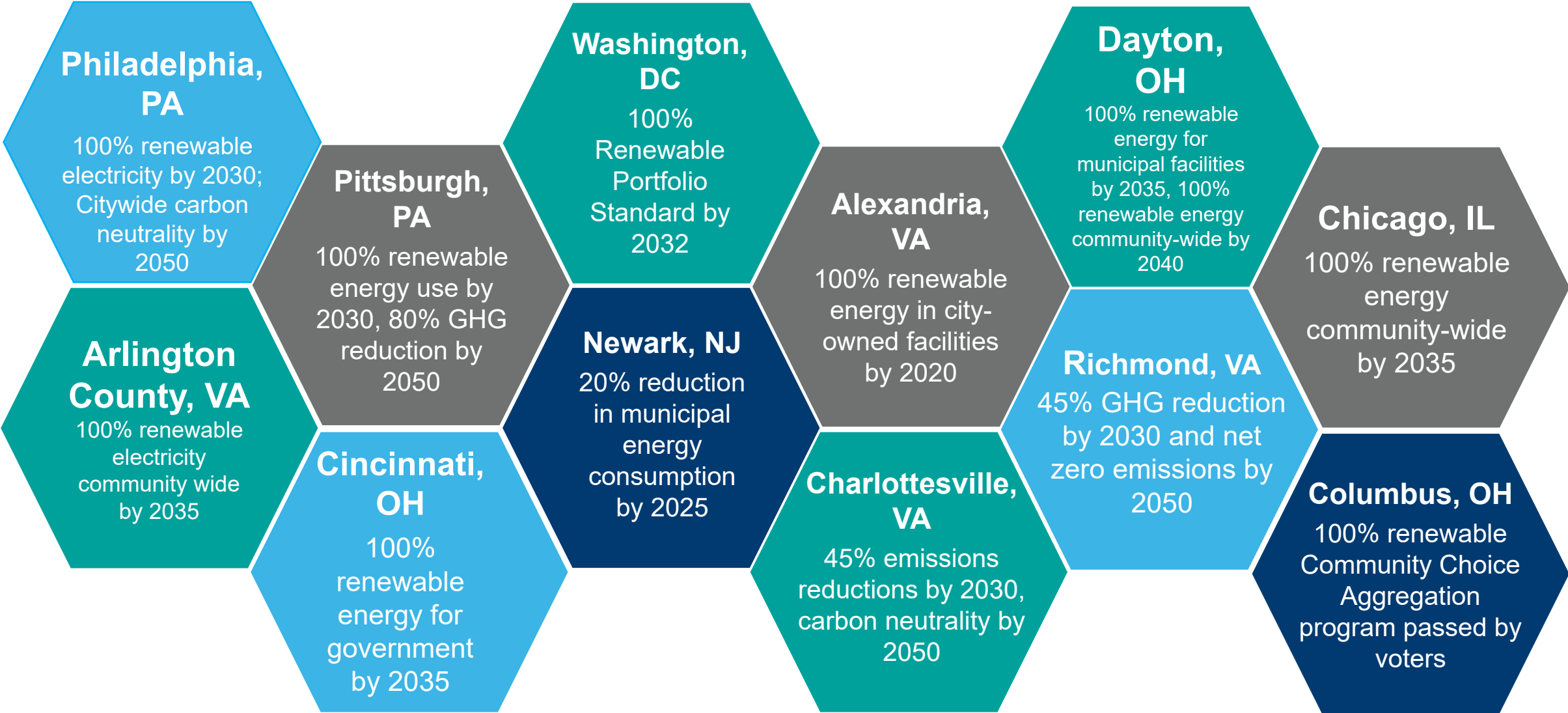
**Between 2015 - 2021, over 18,000 MW of local government transactions nationally, with about 785 MW from local governments in PJM's territory**

# PJM CITIES AND COMMUNITIES COALITION (PJMCCC)

- The Coalition formed in 2018 to coordinate the efforts of cities and communities in the PJM territory that are interested in removing and preventing barriers to decarbonization solutions in their regional wholesale electricity market.
- PJMCCC members recognize that RTO rules and processes affect their ability to achieve local goals.
- The Coalition provides a platform for members to:
  - Educate and build capacity on these issues;
  - Form partnerships to collaborate with similarly aligned organizations, and;
  - Create opportunities for members to work collectively to drive decarbonization within the PJM region.
- PJMCCC has engaged multiple stakeholders: PJM, FERC, NGOs, and the public.



# PJMCCC members represent over 12% of customers in the PJM territory



# Arlington County Renewable Energy Goals and Strategies



- **Annual County Operations and Community-wide Electricity Loads**
  - County Operations: 95,000 MWh annually
  - Community-Wide: 2,800,000 MWh annually

- **Community Energy Plan (CEP)**
  - Government operations will achieve 50% Renewable Electricity by 2022, and 100% by 2025
  - The community will achieve 100% Renewable Electricity by 2035
  - Optimize the use of renewable energy technologies in the public, private, and non-profit sectors, from a variety of on- and off-site sources, transactional options, cooperatives and diverse utility models.
  - Carbon Neutrality by 2050
- **Strategies and Successes**
  - *Forecasting 100% Renewable Electricity goal for County Operations beginning in calendar year 2023*
  - On- and off- site PPA both in progress
  - Voluntary on-bill Green Power purchases
  - Voluntary unbundled REC purchases
  - On-site solar

# Potential Benefits of Expanded Voluntary Clean Attribute Markets for Arlington County



Expanding Tools in the Toolbox to Achieve Goals

Transparent product offerings, engagement with community



Promoting Choice and Competition

Procurement processes and potential barriers to purchases, help meet aggressive goals



Considering the Multi-Dimensions of Renewable Electricity

Impact on residents and businesses, costs, education, equity, co-benefits



Expanding Information

Resource type, other important projects parameters, reduced market confusion





# PJM Clean Attribute Procurement Senior Task Force 6/28/22



City of  
Philadelphia



# Municipal Energy Master Plan



**Reduce greenhouse gas emissions from the City's built environment 50 percent by 2030**



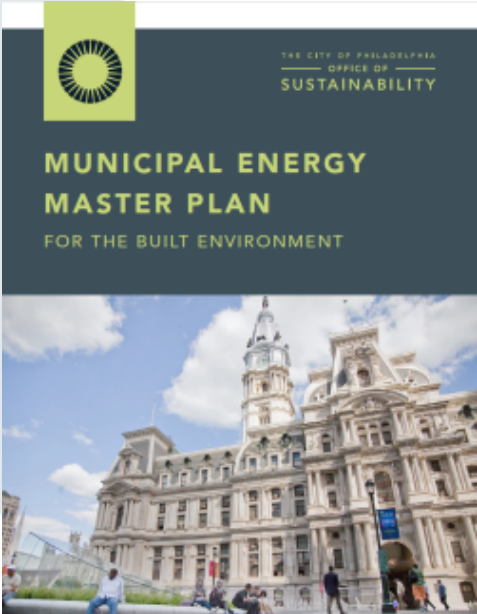
**Reduce the City's built environment energy use 20 percent by 2030**

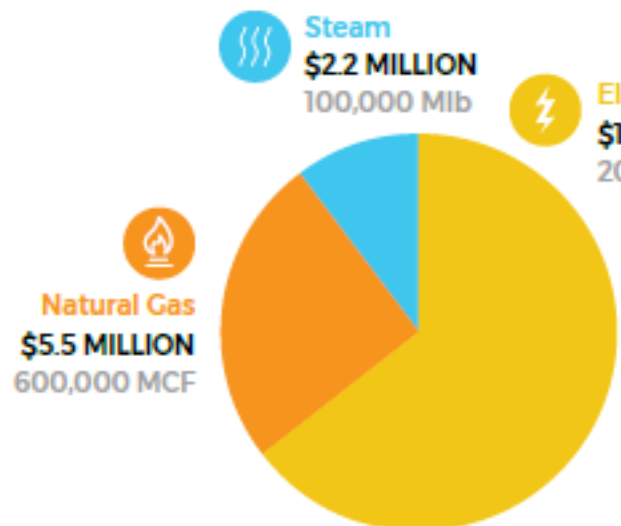


**Generate or purchase 100 percent of all electricity for the City's built environment from renewable resources by 2030**



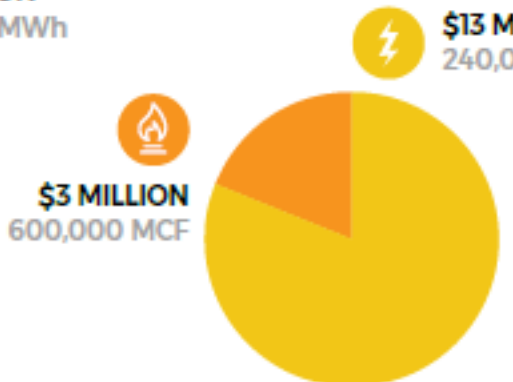
**Maintain or reduce the City's built environment cost of energy**





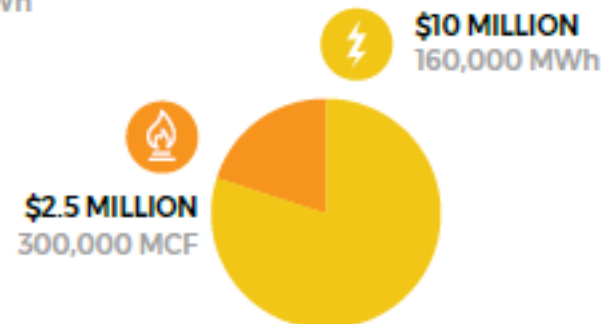
**GENERAL FUND**  
\$21.7 MILLION

**600** buildings | **5,850** accounts



**WATER**  
\$16 MILLION

**45** locations | **1,100** accounts



**AVIATION**  
\$12.5 MILLION

**2** sites (PHL & PNE) | **180** accounts



**STREETLIGHTING**  
\$12 MILLION



**VEHICLE FUEL**  
\$11 MILLION

**TOTAL PROCUREMENT:**  
**\$73.2 MILLION**  
as of 2021



**8.3%** Renewable electricity (CY20)  
(2016 baseline: 6%)

2030 Goal:  
**100%**

With the PPA project in Adams County coming online in 2024 renewable electricity is expected to jump to 22-30%.

- 70 MW PPA in Adams County
  - RFP was issued in 2018
  - Project to be completed in Jan 2024
- 1.5 MW PPA at Philadelphia Northeast Airport
  - RFP was issued in 3/17/22
  - Project was given authority by City Council to go into a contract 6/23/22
- City-owned systems
  - 5.6 MW biogas cogeneration system
  - 250 kW on-site solar array
- Electric supply contract
  - One year with three opportunities to extend (longer contracts require an authority)
  - Must get approval from City Council to purchase electricity more than one fiscal year out





# Questions?

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City Energy Manager  
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**Energy Office**

CITY OF PHILADELPHIA

**Any additional comments or feedback  
from other local governments  
attending this meeting?**



**Q&A**

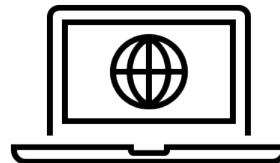


# THANK YOU

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