


# **SMART COLUMBUS ENERGY**

## ACCELERATING THE CLEAN ENERGY TRANSITION IN CENTRAL OHIO WITH PRIVATE SECTOR AGGREGATION

Zach McGuire  
Director, Clean Energy Solutions - Columbus Partnership  
[zm@columbuspartnership.com](mailto:zm@columbuspartnership.com)



**SM  
RT**  
COLUMBUS

**ENERGY**



# SMART COLUMBUS ENERGY STORY



## INSPIRED BY THE SMART CITY CHALLENGE

With the \$10M Smart City Challenge electrification grant winding down, we asked ourselves, how can we harness the Columbus Way again to not only continue, but amplify, the impact of our sustainability mission? We convened a task force of representatives from the Acceleration Partner network and other local experts, and together, found that **there is a high demand in the Columbus Region for renewable energy, but no strong offering in the market.**

We identified an opportunity for Smart Columbus to offer a clean energy solution that is:

- Cost-competitive
- Simple to implement
- Generated from new Ohio-based wind and solar projects
- Designed to fulfill ESG goals of Acceleration Partners and large Columbus organizations that care about the prosperity of our region

We conducted months of market research and finalized a model with our task force that leverages strategic partnerships to offer clean energy solutions to partners throughout the community.

**SMART COLUMBUS ENERGY MISSION: Accelerate Central Ohio's clean energy transition, so we may become the most prosperous region in the country.**

## THE TASK FORCE



# SMART COLUMBUS ENERGY

## CORPORATE CLEAN POWER



To provide low cost clean energy for private sector organizations, leveraging a portfolio of assets is key.

### SIMPLE

Pricing is fixed, and you choose how much load it serves

### CLEAN

Electricity is 100% from new wind and solar assets with associated RECs

### ADDITIONAL

Power purchases from regional corporations enable new wind and solar projects to be built

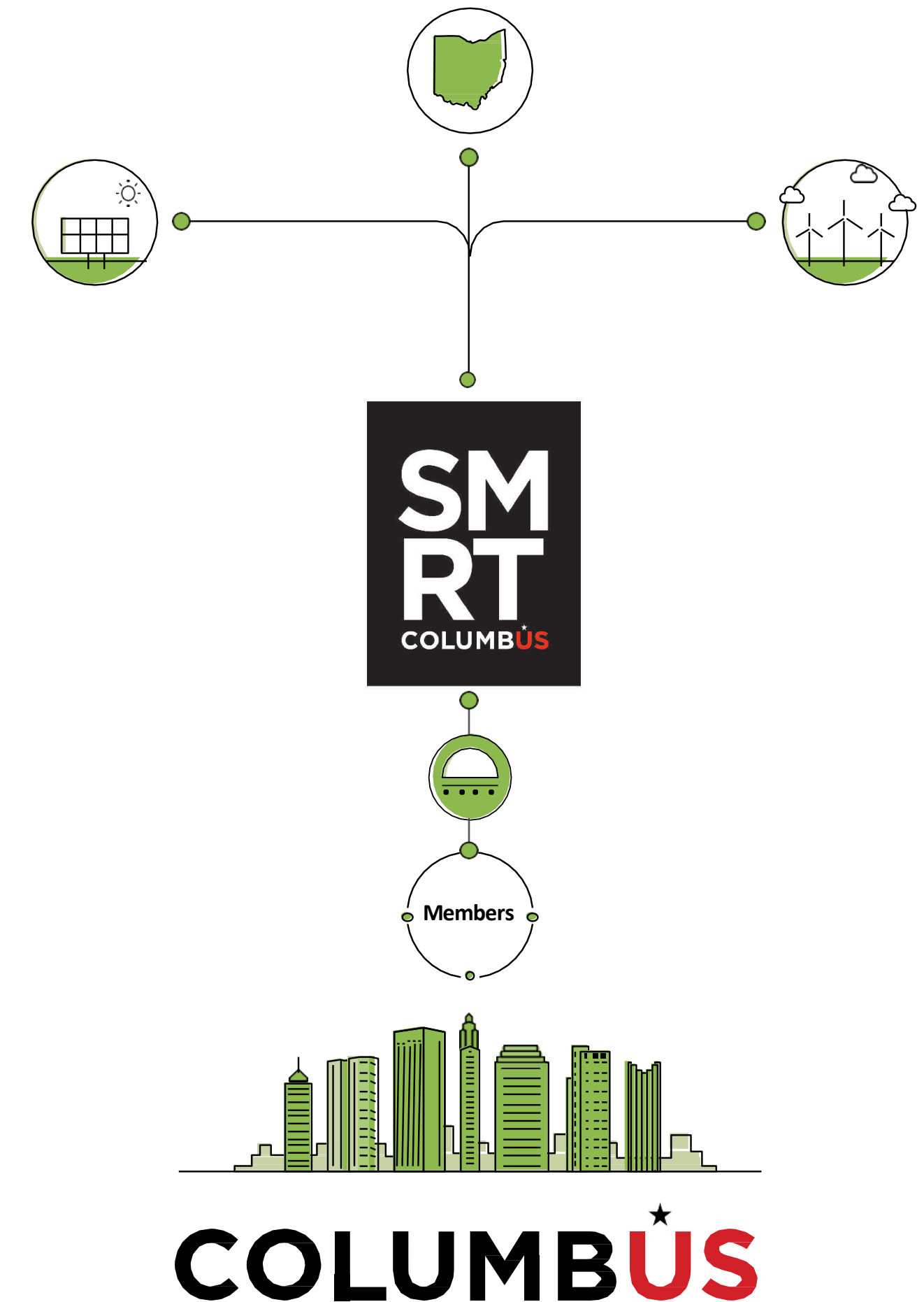
### IMPACTFUL

Projects are Ohio-based, benefitting the local economy. Purchases also fund sustained smart city efforts in our region.

### COST-EFFECTIVE

Pricing is 12-year flat rate that hedges against future volatility and is competitive with current “brown power” prices

## HOW IT WORKS

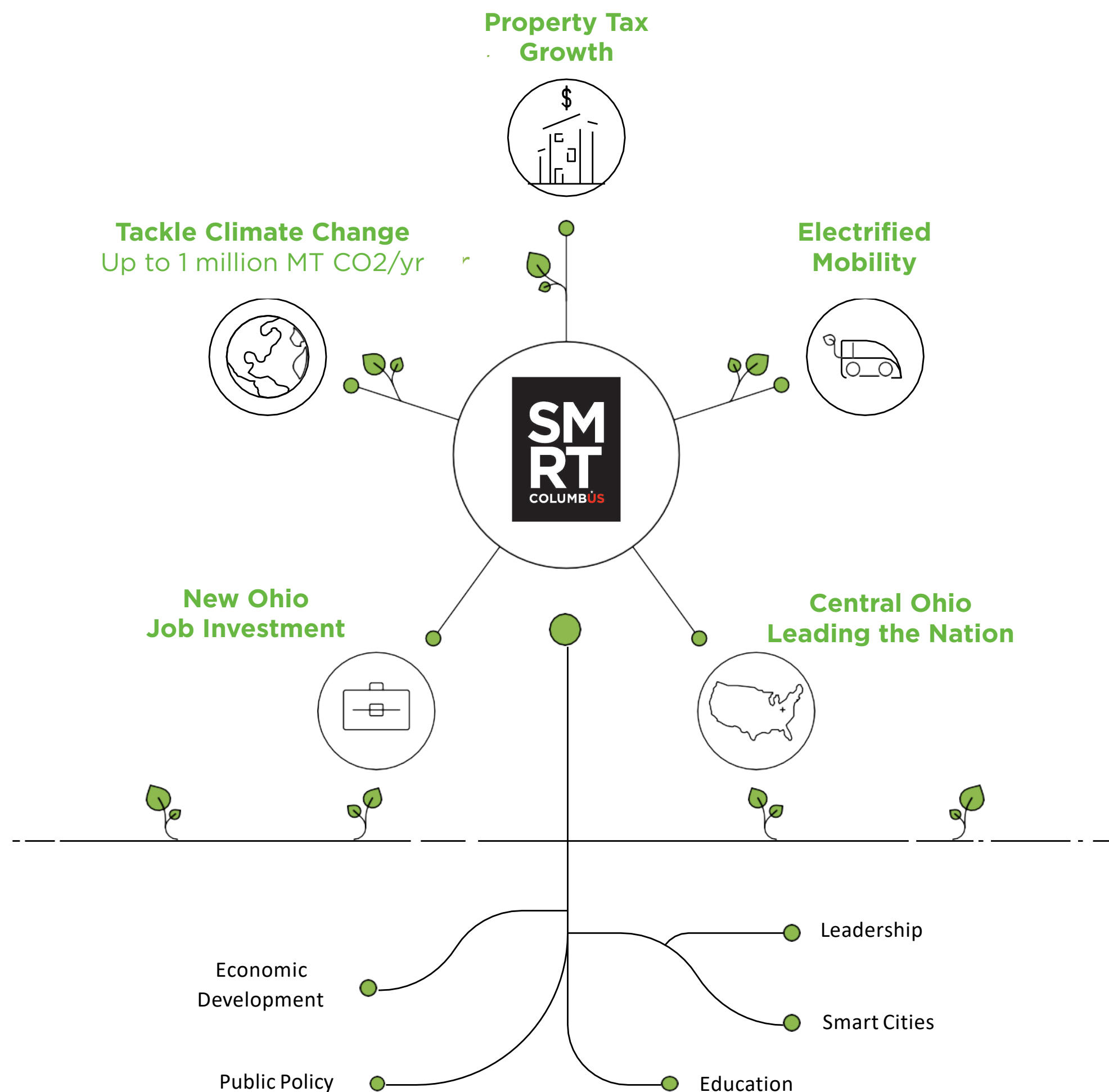


# SMART COLUMBUS ENERGY COMMUNITY VALUE



## MISSION

Accelerate Central Ohio's clean energy transition, so we may become the most prosperous region in the country.



## COMMUNITY VALUE

Revenue generated from the program is re-invested back into the community through programming supporting:

- Clean energy
- Electrified mobility
- Improved air quality
- New economic investment
- New tax revenue



# CATCHING ATTENTION

**ThisWeek**  
COMMUNITY NEWS

Food & Wine USA TODAY Obituaries E-Edition Legals

GROVE-CITY

## Grove City expected to send RFPs for electricity aggregation in 2021

**Alan Froman** ThisWeek group  
Published 10:47 a.m. ET Nov. 5, 2020



Grove City voters' approval of Issue 10 is only the first step in the process to establish an electricity-aggregation program for residents and small businesses.

"The next step is for the city administration to prepare a request for proposals that will be sent to companies," said council member Ted Berry, who served as co-chair of Clean Grove City, the group that campaigned for Issue 10.

With all precincts reporting, voters approved the issue 13,370 votes to 7,780 votes, or 63.22% to 36.78%, according to unofficial results Nov. 3 from the Franklin County Board of Elections.

An exact timeframe for when the RFP will be sent hasn't been set, but proposals will be sought sometime next year, Berry said.



Grove City Hall *ThisWeek* File Photo



Smart Columbus Energy functions as a non-profit energy broker, fostering agreements between large corporate companies and local utilities, to buy renewable energy.

THE BUSINESS JOURNALS | Select a City ▾

**COLUMBUS BUSINESS FIRST**

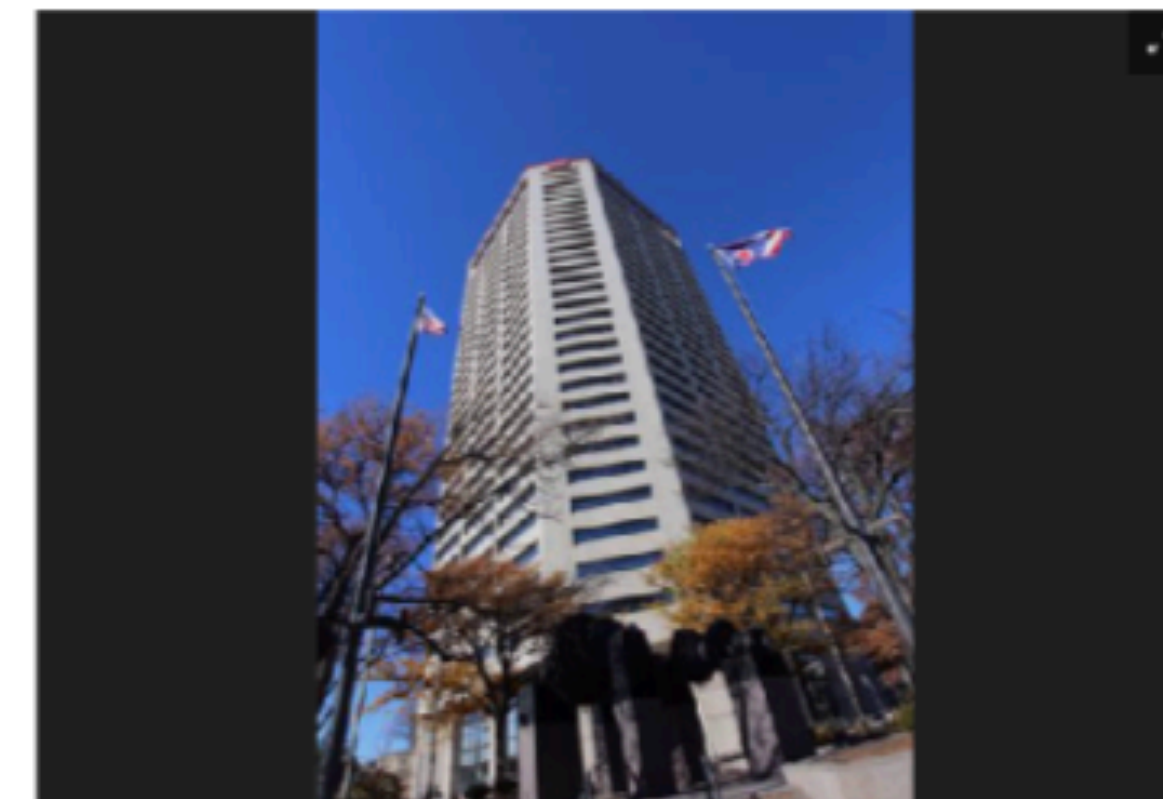
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Energy

## Cardinal, Huntington, AEP buying renewable energy through Smart Columbus

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AEP will power its Columbus headquarters with renewable energy purchased through a Smart Columbus aggregation program.  
DOUG BUCHANAN



By **Carrie Ghose** — Staff reporter, Columbus Business First  
Dec 9, 2020, 6:48am EST

IN THIS ARTICLE

**Alex Fischer**  
Person

**Energy**  
Industry

**Renewable Energy**  
Topic

Smart Columbus has landed large Central Ohio public companies as customers as it launches renewable energy aggregation.

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facility to help reach  
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ENERGY

Duke Energy earns key  
boost in effort to join  
Southeast energy  
market



BANKING & FINANCIAL SERVICES

OHIO

## Columbus aggregation initiative aims to procure clean energy for city ratepayers

WRITTEN BY



Kathiann M.  
Kowalski  
October 22, 2020

PHOTO BY

Nick Olejniczak /  
Flickr / Creative  
Commons



Columbus, Ohio.

**Ballot Issue 1 could lower the Ohio capital city's greenhouse gas emissions by nearly a fifth, according to supporters.**

Columbus, Ohio, voters are deciding this election whether to let city government seek out and collectively bid for renewable electricity on their behalf.

Ballot Issue 1 would create Ohio's largest community aggregation program. In states where ratepayers choose their electricity supplier separate from their local utility, the programs let cities negotiate a default option for residents.

The city's goal "is to provide residents with 100% clean, renewable electricity through a community choice aggregation program by 2022," said Erin Beck, director of special projects for the city of Columbus. "Aggregation gives us the leverage to drive these changes in a win-win for consumers, our economy and the environment."



# TOTAL ENVIRONMENTAL IMPACT SO FAR

Environmental impacts can be massive when the private sector is bought in.

For many of you, your largest GHG contributors may be private industry. To effectively address GHG in your community, the private sector needs solutions.



Cardinal Health, Huntington and AEP are purchasing Ohio wind and solar power for its Central Ohio offices through Smart Columbus Energy



Annual average clean electricity purchased is 63,454,000 kWh  
→ This totals 761,448,000 kWh over the 12-year term



This will remove 44,865 metric tons of CO<sub>2</sub>e emissions per year  
→ This totals over 538,380 metric tons over the term



Equivalent to reducing 5,048,331 gallons of gasoline consumed



This is the equivalent environmental impact of planting 741,844 trees



This is enough renewable energy to power 5,177 homes

# SMART COLUMBUS ENERGY

## UNIQUE INITIATIVE, THE COLUMBUS WAY



### COLUMBUS WAY IN ACTION

The Smart Columbus Energy program shows how the spirit of collaboration among private sector organizations in Central Ohio can achieve community good.

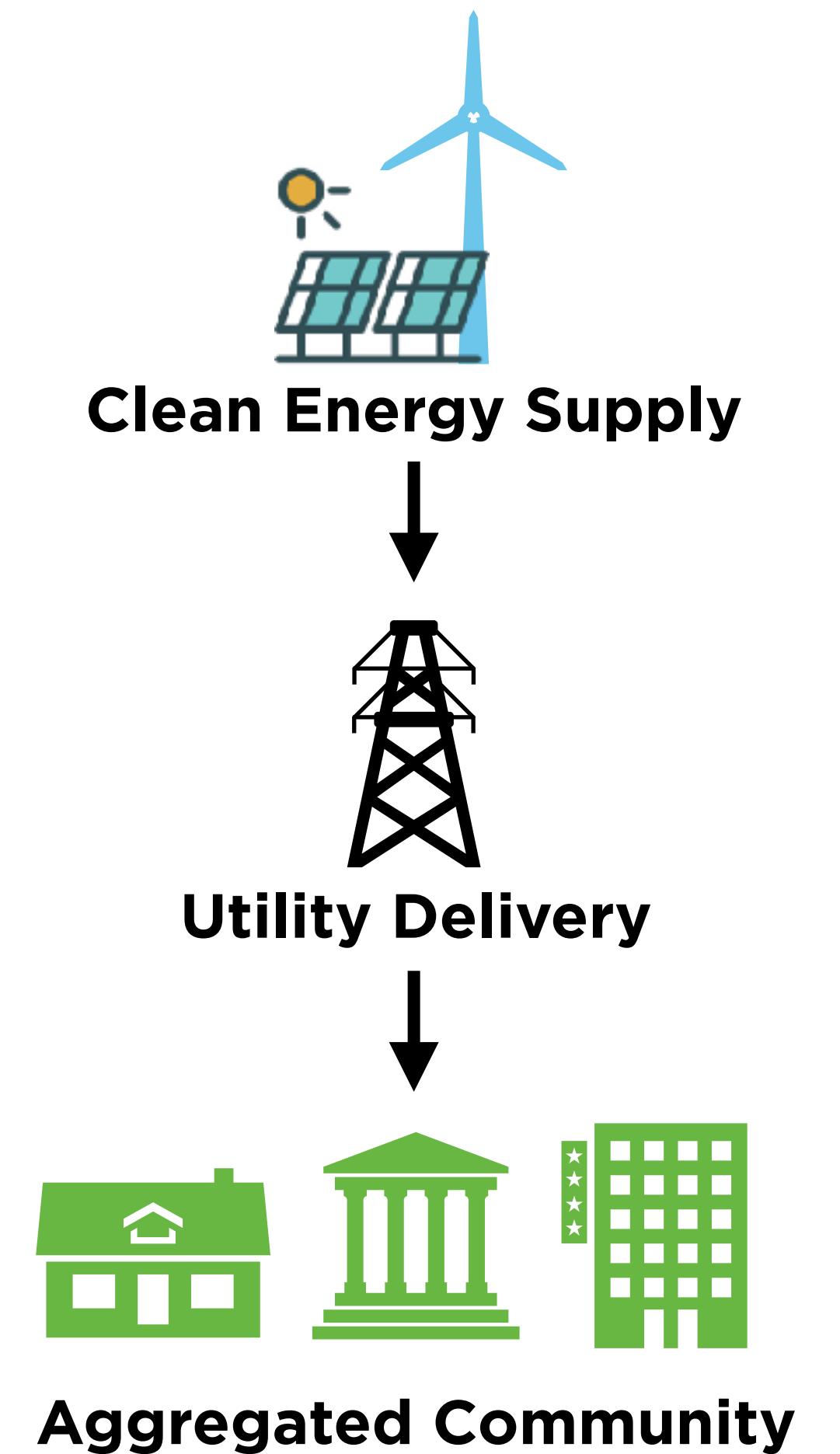
Nowhere in the country does a localized private sector clean energy program like this exist. The model was built by the companies who have participated. AEP and Cardinal Health are the fellow initial participants in the program.



# COMMUNITY CHOICE AGGREGATION, RECAP

Communities can supply renewable energy to residents and small businesses by aggregating their community's energy load, through community choice aggregation (CCA). One of the most powerful ways to achieve community sustainability goals is to leverage a CCA and power it with renewable energy. **Community choice aggregation is the most efficient way to shift the region toward a clean energy future.**

- Electric aggregation started in Ohio in 2000 (Toledo)
- Over 400 communities aggregate in Ohio
- Different types of aggregators
  - Counties, township, cities, villages
- Not everybody can participate
  - Only residential and commercial (<700,000 kWh/year)
  - Within municipal boundary
  - Not with another supplier
  - Not in PIP
- Types of Aggregation (opt-in/opt-out)
- Agreements (community and resident)
- **Why communities aggregate - better rate, savings, renewable, non taxed-based revenue**





# COMMUNITY CHOICE AGGREGATION

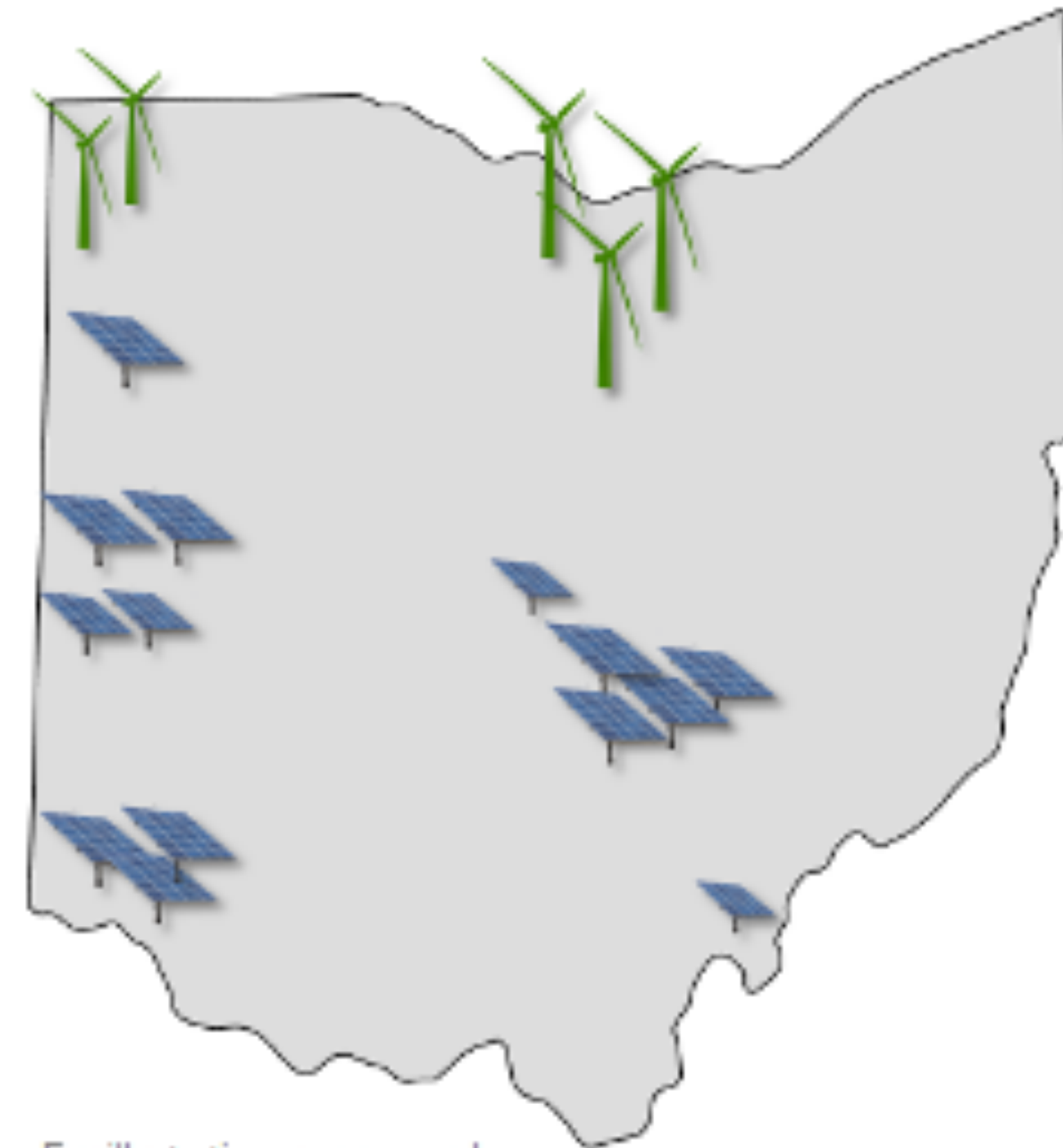
## COLUMBUS IMPACT

### Installed capacity for the CCA creates Ohio jobs

- The new 700 MW wind and solar capacity supporting the Columbus CCA will create or induce roughly 4,463\* jobs.

### This includes:

- 213 direct and indirect induced jobs post-construction.
- 4,250 direct and indirect induced construction phase jobs.



For illustrative purposes only

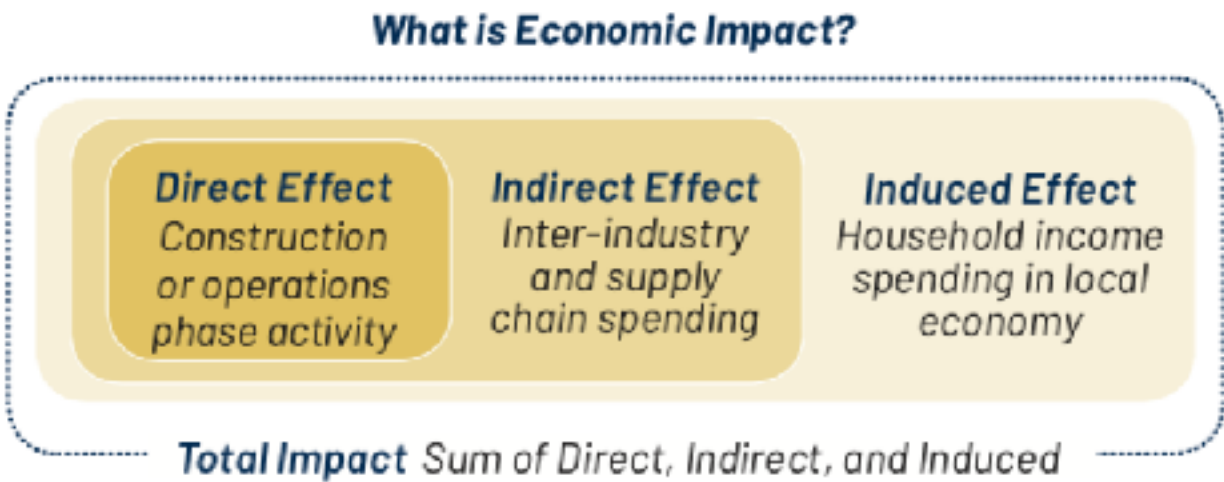


# COMMUNITY CHOICE AGGREGATION

## REGIONAL POTENTIAL

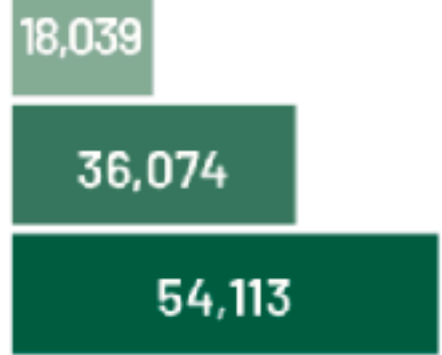


- Solar and wind jobs are good paying jobs and have been two of the fastest growing jobs in the US in past years.
- Utility scale solar projects present opportunity fo not only jobs, but for new sustained tax revenue for municipalities.
- Our goal is to drive \$1 billion of new investment into Ohio’s energy infrastructure.

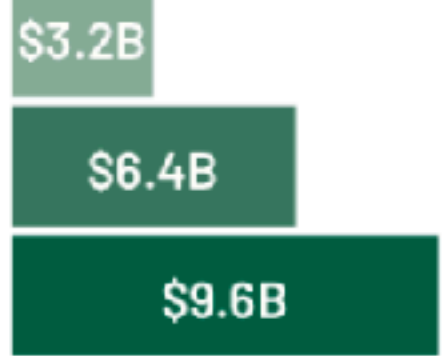


### One-Time Construction Phase Impacts

#### Total Jobs



#### Total Economic Impacts



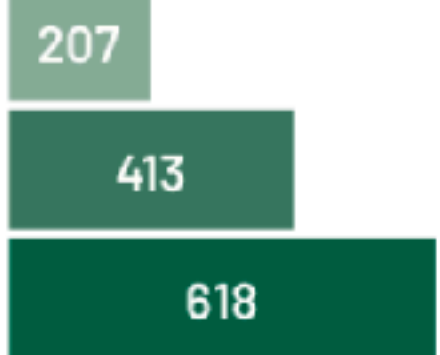
### Deployment Scenarios

- Low (2.5 GW)
- Moderate (5 GW)
- Aggressive (7.5 GW)

\* All calculations assume 80% of labor and 30% of materials originate in Ohio.

### Annual Operations Phase Impacts

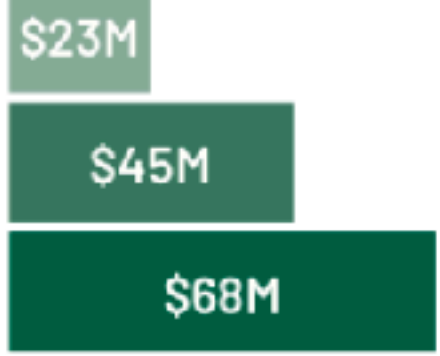
#### Total Jobs



#### Total Economic Impacts



#### Tax Revenues (PILOT)



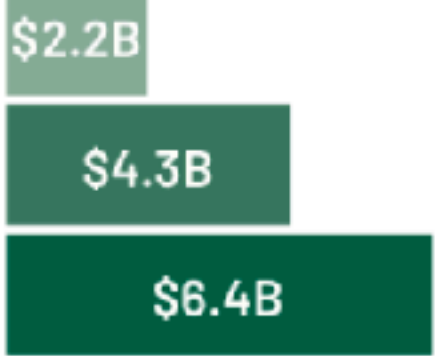
#### Total Homes Powered



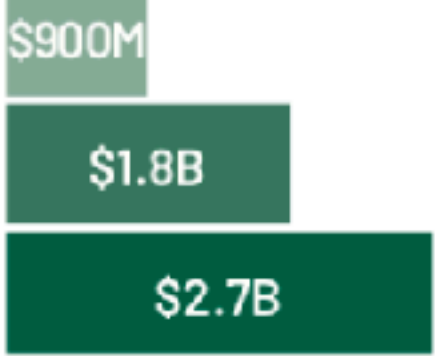
### Aggregate Lifespan Operations Phase Impacts



#### Total Economic Impacts



#### Tax Revenues (PILOT)



In the aggressive (7.5 GW) deployment scenario, the energy produced could power all of the households in Columbus, Ohio roughly **four** times over.



# COMMUNITY CHOICE AGGREGATION

## TOTAL REGIONAL POTENTIAL

By facilitating the aggregation of as many of the Columbus region's municipalities as possible to then procure clean energy, the potential benefits are massive:

### HEALTH

- \$525 millions of avoided healthcare costs in Ohio over 20 years
- 45+ fewer premature deaths
- 1,600+ fewer cases of breathing illness
- 16,000+ fewer school days missed
- 2,500+ fewer work days missed

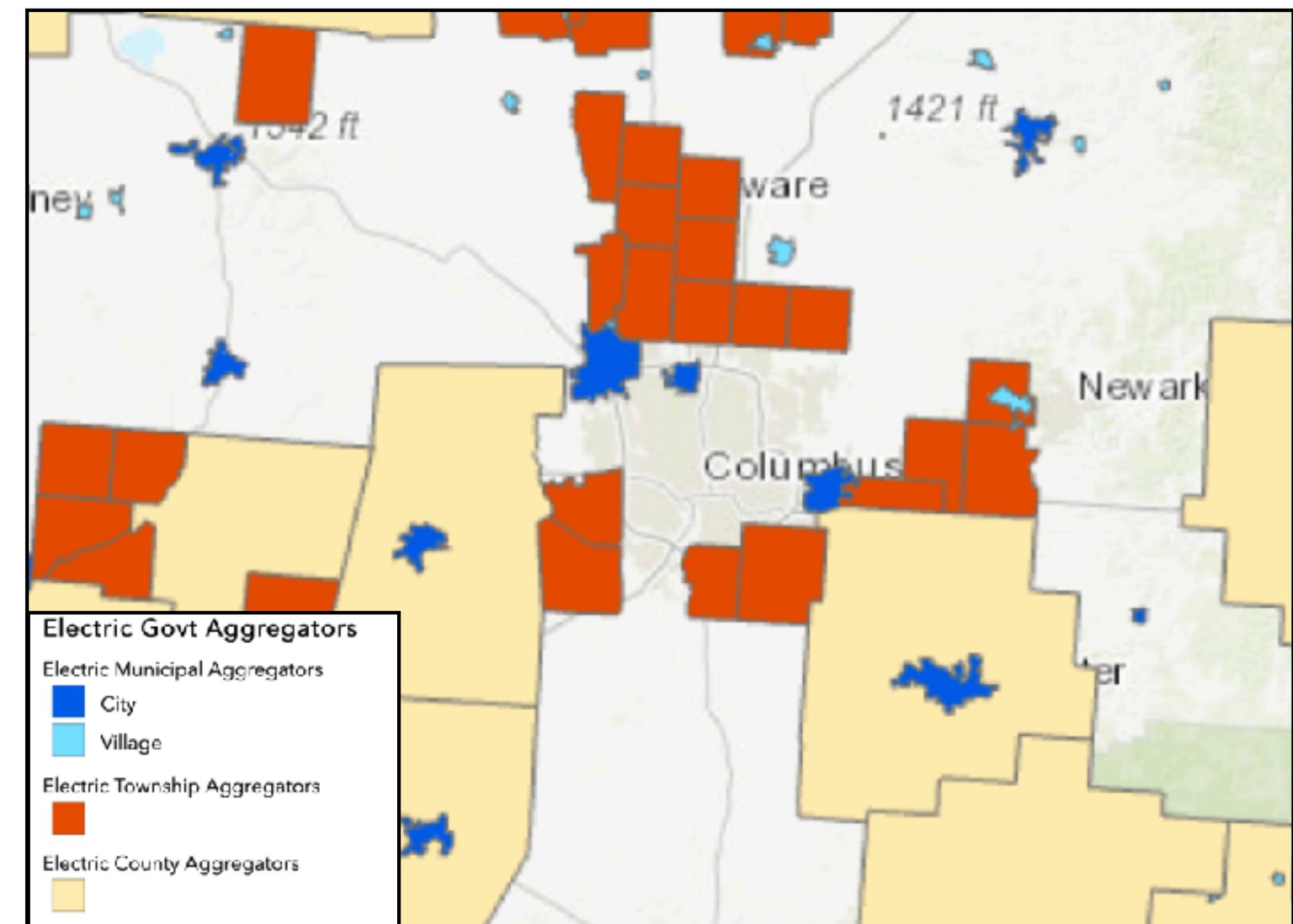
### ECONOMIC

- 18,000+ construction phase jobs
- 200+ permanent jobs
- \$900 million new local tax revenue
- \$3.2 billion total economic impact


### ENVIRONMENTAL

- 56 million MT CO<sub>2</sub>e removed
- Equivalent of 46 million trees
- Equivalent of taking over 600,000 gas cars off the road

Central Ohio is mostly void of active aggregation programs, leaving a large opportunity to drive adoption of new aggregation programs specifically focused on the clean energy transition.








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