THE CITY OF COLUMBUS
ANDREW J. GINTHER, MAYOR

SUSTAINABLE COLUMBUS
ANDREW J. GINTHER, MAYOR

# Clean Energy Columbus

## Powering Columbus with 100% Clean Energy

Ready for 100 Clean Energy for All Ohio Conference

June 25, 2021

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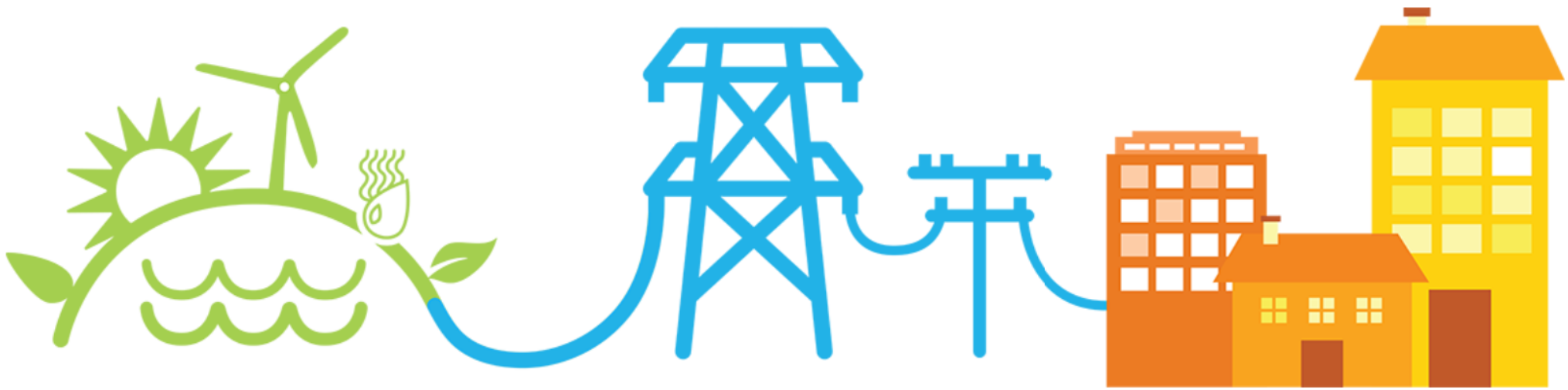
# HOW THE PROGRAM WORKS

RENEWABLE ENERGY

SAME RELIABLE SERVICE

YOUR COMMUNITY CHOICE

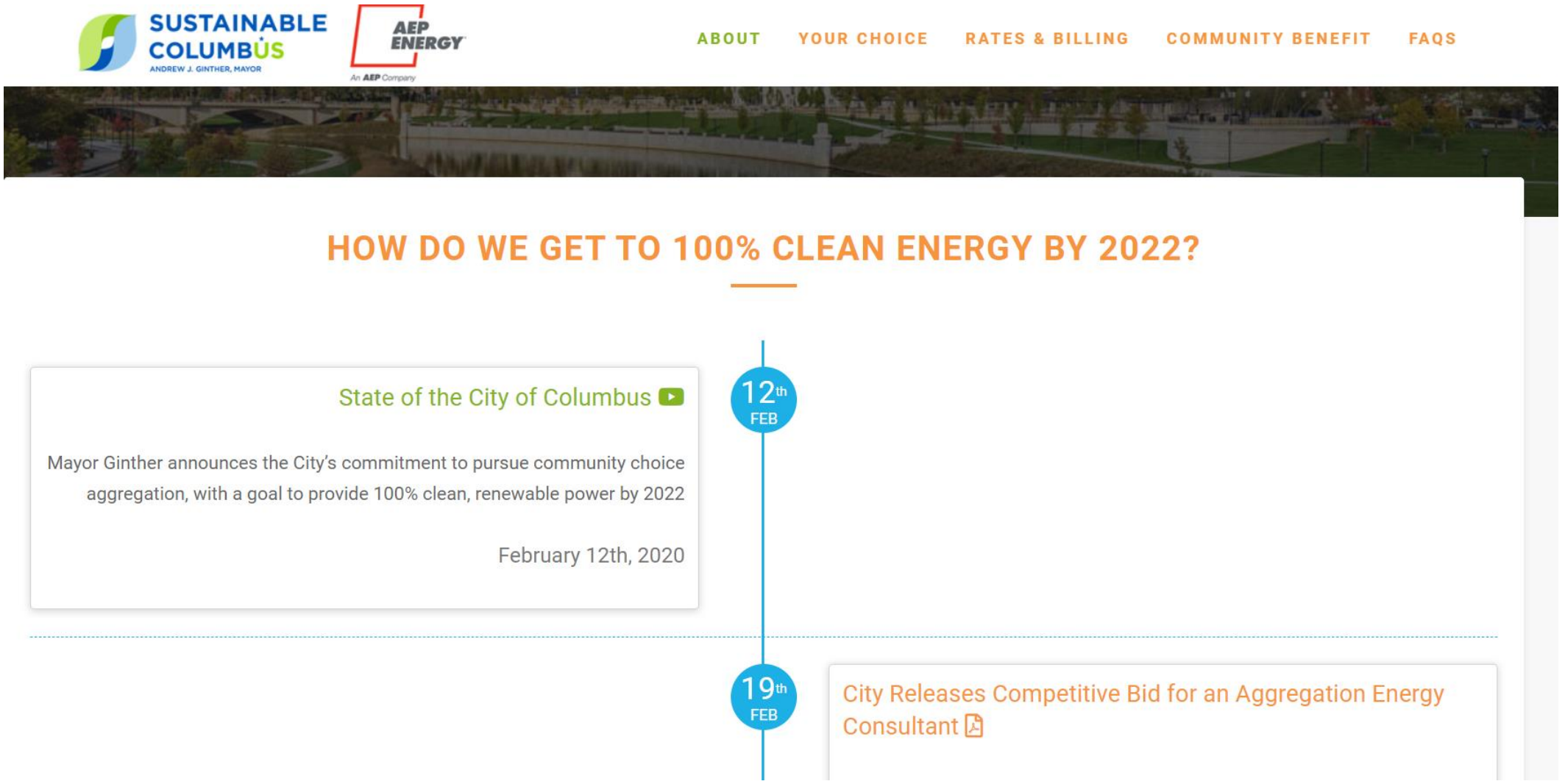


100 % CLEAN ENERGY

CLEAN ENERGY JOBS

COMMUNITY CHOICE

# Many steps taken before implementation, including a November 2020 vote by residents



# Clean Energy Columbus overview

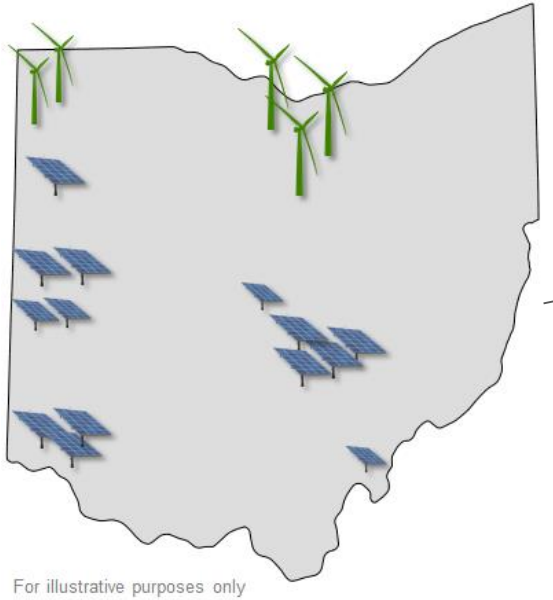
**BRIDGE PHASE**
(RECs)

*New Ohio solar and wind projects begin to come online*

**LOCAL PROJECT GENERATION PHASE**
CCA sourced by new wind & solar generation in Ohio

2021 2022 2023 2024 2025 2026 2027 2028 2029 2030 2031 2032 2033 2034

Building **new wind and solar generation in Ohio takes time**, especially to produce enough electricity to meet demand in Columbus. **RECs form a bridge** from today's grid mix to local renewables in 2023




*Approximate locations of existing or potential AEP renewable installations under contract*

# Clean Energy Columbus vs. AEP SSO

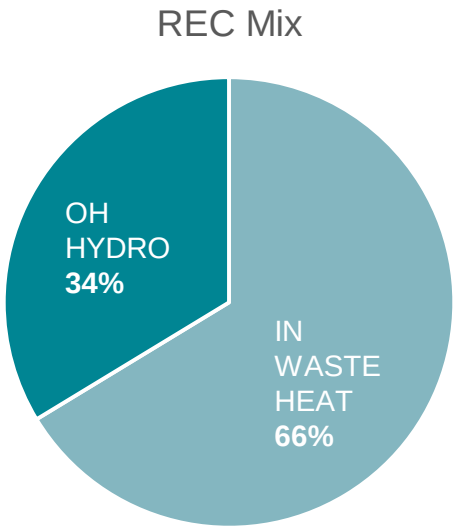
## Clean Energy Columbus

- Price: $.0549/kWh
- June 2021-June 2022
- 100% Clean Energy (Ohio wind & solar)
- Cleaner air, healthier community
- Includes Community Grant the City will use to reinvest in neighborhoods hit hardest by Climate Change
- Supports 4,500 Ohio jobs
- Supports Columbus clean energy jobs & workforce development

## Standard Service Offer – AEP Ohio (Default)

- Price: $.0536/kWh
- June 2021 (Beyond is unknown - fluctuates)
- Traditional grid power mix (mostly coal & natural gas – ie. Dirty power that pollutes)

## Clean Energy Columbus– Year 1 REC MIX




**Ohio Hydro-** Hydro power generated from the Racine Hydro Plant in Meigs County, Ohio

**Indiana Waste Heat-** Waste Heat recovery RECs from repurposed heat output used to generate electricity

# Benefits – Clean Air & Health

- 700MW of renewable energy displacing fossil fuel generation could result in $210 million of avoided healthcare costs in Ohio over 20 years.

- Specifically, this means:
  - 22 fewer premature deaths,
  - 654 fewer cases of breathing illnesses,
  - 6,480 fewer school days missed, and
  - 1,080 fewer work days missed.

These benefits are for EVERYONE, whether or not you participate in the aggregation program

# Benefits – Clean Air & Health

- 700MW of clean, Ohio wind & solar will **reduce emissions by 1.2 million tons** each year

That's the equivalent of:

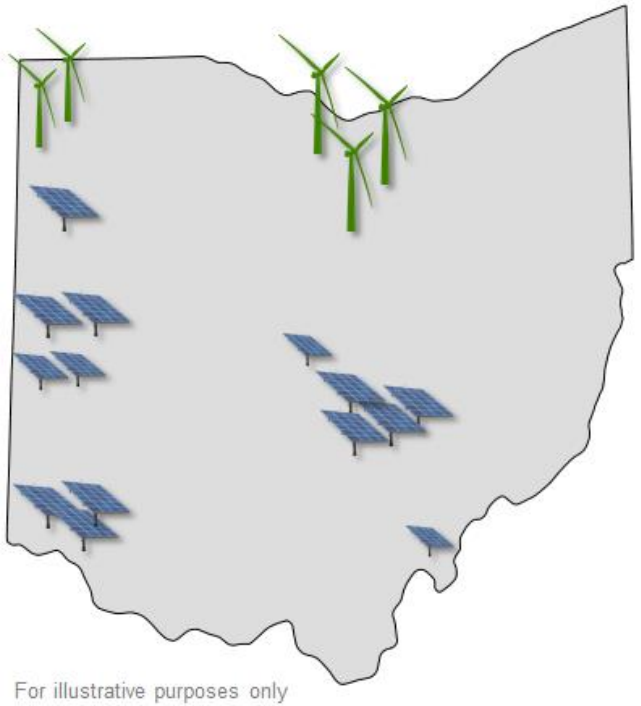
- Removing **300,000 cars** off of our roads
- Benefit of nearly **1.8 million acres of forests**

These benefits are for EVERYONE, whether or not you participate in the aggregation program

# Benefits - Workforce Development

## Nearly 4,500 Ohio jobs supported

### AEP Energy Existing and Potential Ohio Renewable Portfolio



For illustrative purposes only

| Project | Public? | Fuel | Size (MW) | Location | COD | Term | Annual MWh | Estimated Direct, Indirect and Induced pre-operations Jobs | Estimated Direct, Indirect and Induced post-operations Jobs |
|---|---|---|---|---|---|---|---|---|---|
| Emerson Creek | Yes | Wind | 240 | Huron Co, OH | May-22 | 12 | 700,000 | 960 | 48 |
| Unnamed Project 1 | No | Solar | 200 | Central Ohio | Dec-22 | 15 | 405,000 | 800 | 40 |
| Unnamed Project 2 | No | Solar | 49 | Southwest Ohio | Jun-22 | 12 | 105,000 | 196 | 10 |
| Unnamed Project 3 | No | Solar | 150 | Southwest Ohio | Dec-22 | 12 | 333,000 | 600 | 30 |
| Unnamed Project 4 | No | Solar | 48 | Southeast Ohio | Dec-21 | 12 | 100,000 | 192 | 10 |
| Unnamed Project 5 | No | Solar | 49.5 | Central Ohio | Dec-22 | 15 | 77,000 | 198 | 10 |
| Unnamed Project 6 | No | Solar | 80 | Western Ohio | Dec-22 | 12 | 172,000 | 320 | 16 |
| Unnamed Project 7 | No | Solar | 70 | Western Ohio | Dec-22 | 12 | 150,000 | 280 | 14 |
| Emerson Creek | Yes | Wind | 60 | Huron Co, OH | May-22 | 12 | 175,000 | 240 | 12 |
| Unnamed Project 8 | No | Wind | 116 | Northwest Ohio | Sep-21 | 12 | 310,000 | 464 | 23 |
| | **Total Capacity** | | **1,063** | | | | **Total Output** | **2,527,000** | **4,250** | **213** |
| | **Columbus Requirement** | | **700** | | | | **Columbus Requirement** | **1,700,000** | | |

# Timeline

| Q1 2021 | Q2 2021 | Q3 2021 - beyond |
|---|---|---|
| **March/April:**<br>- Master Supply Agreement (MSA) approved by City<br><br>- Aggregation program stand-up<br><br>- Communications Launch (4/1)<br><br>- Opt-Out Letters Go Out (4/8)<br><br>- Advisory Group Meeting (4/15) | **May:**<br>- Opt-Out Letters: 21-day window to review & opt-out<br><br>-Cont'd Communications<br><br>**June:**<br>- Aggregation program begins!<br><br>-Advisory Group Meeting | **July:**<br>- Customers receive first electric bill with aggregation program<br><br>**Future:**<br>- Renewable projects come online<br>- Aggregation-supported community programs launch<br>-Public Meetings |

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# Thank you!

## Questions?

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