

Public Building Decarbonization

Pennsylvania United & Allegheny County

04/02/25



PA United



PA United was founded in 2017 to build long term organizing infrastructure in the small cities and towns across Western PA. PA United was born out of Pittsburgh United, a coalition of community, labor, and environmental organizations founded in 2007.

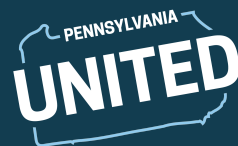
Our work is to build a multi-racial, multi-generational poor and working peoples movement across Pennsylvania. We must:

- Unite communities of color and white working-class families across rural and urban areas against those who profit off our struggles
- Grow the agency of regular people to take power in our organization and in our communities
- Deliver material change in our communities to rebuild people's faith in collective action and democracy as a vehicle for change



Our Vision

- Clean air, good jobs, safe affordable homes, and thriving communities.
- Energy transition that furthers economic and racial justice by investing in disadvantaged communities
- Decarbonize all public buildings owned and operated by Allegheny County/Allegheny County Housing Authority
 - Via organized communities, including tenants, and deep partnerships with government
 - Create a robust local workforce hiring structure to bring local residents into the trades

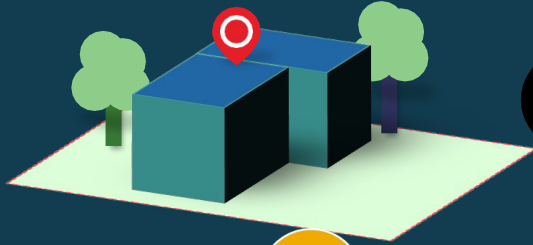


Our Power Map

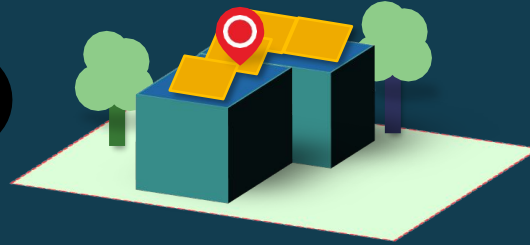


Methodology

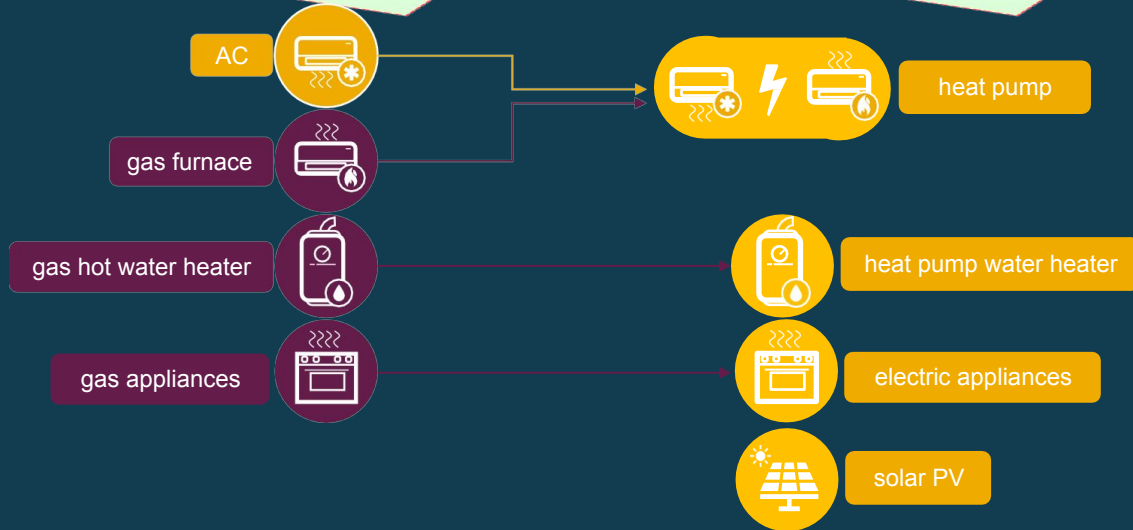
Baseline
= code-compliant
mixed fuel buildings



VS



All-electric buildings
with solar



What are the implications of this?

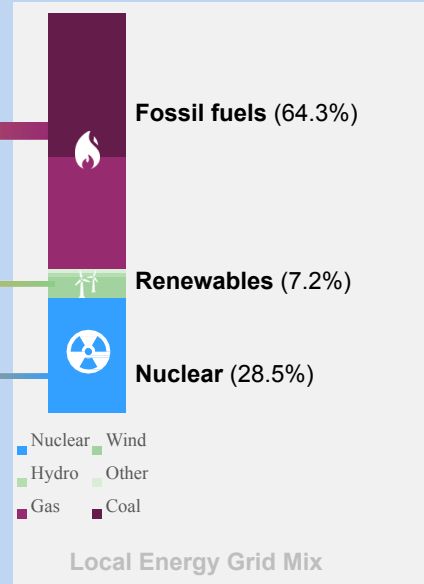
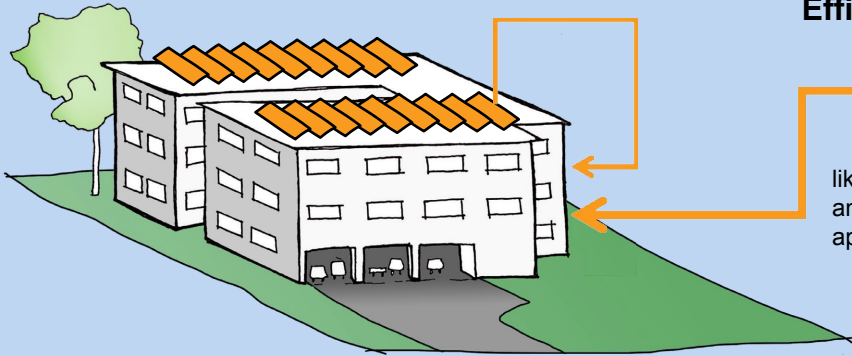
The less you ask of the grid is a win

Distributed energy resources
like solar and battery

Energy Efficiency

Utility Electricity

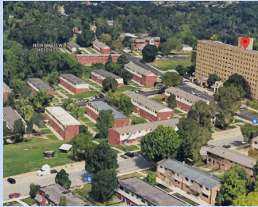
like weatherization and efficient appliances



Source of RFCW grid mix (2021): U.S. EPA
<https://www.epa.gov/eGRID/power-profiler#/RFCW>

Climate Pollution Reduction Grant

HACP



Northview Heights

Units	455
Decarb ROM Total	\$21.6M



GHG Reductions
2025 - 2050

33,360 MTCO₂e



Bedford Dwellings

Units	303
Decarb ROM Total	\$2.1M*



GHG Reductions
2025 - 2050

17,555 MTCO₂e

*delta to construction to fully electrify and solarize both phases



Mapleview

Units	30
Decarb ROM Total	\$2.9M



GHG Reductions
2025 - 2050

3,250 MTCO₂e



Springdale

Units	90
Decarb ROM Total	\$2.3M



GHG Reductions
2025 - 2050

3,059 MTCO₂e

ACHA



Blawnox

Units	90
Decarb ROM Total	\$3.5M



GHG Reductions
2025 - 2050

3,230 MTCO₂e



Uansa Village

Units	37
Decarb ROM Total	\$3.9M



GHG Reductions
2025 - 2050

4,572 MTCO₂e

Blawnox Apartments

Decarbonization Rough Total **\$3.5M**



701 Center Avenue, Blawnox, PA

- 1 bldg., 8 floors, 90 units, 118k sqft Built in 1981 Good
- Solar access (not shaded by surrounding buildings) and available roof area (not crowded by equipment) for PV
- Existing HVAC = old heat pumps, in need of replacement

Electrification	Cost Estimate
Electrical infrastructure upgrades	\$200,000
Water heating upgrades	\$250,000
Energy Efficiency	Cost Estimate
Space heating/cooling upgrades	\$400,000
Upgrade lighting to LED	\$500,000
Upgrading electric appliances	\$650,000
Envelope Improvements	Cost Estimate
Improve insulation of exterior walls, upgrading glazing and upgrading roof	\$1,100,000
Renewables	Cost Estimate
Rooftop Solar / Carport Solar	\$400,000

2025 Campaign Goals

Short Term (6 months)

- Creating a energy efficient and public housing model that can be replicated across Allegheny County
 - Can replicate the model across the other properties
Increases credibility
 - Builds support for the project across the coalition
 - A tangible manifestation that can be celebrated by our coalition
- Launch the pilot at Blawnox with the ribbon cutting with full funding by June

Medium Term (18 months)

- Building the capital stack to fund projects at the next 3 properties that all have:
 - Active tenant organizing
 - Have antiquated systems that provide opportunity for more efficient systems to maximize climate impact
 - Room for solar installations

Long Term (10 years)

- Decarbonize all public housing building and public municipal buildings in Allegheny county

Q&A

Any comments, questions, or reflections?

