

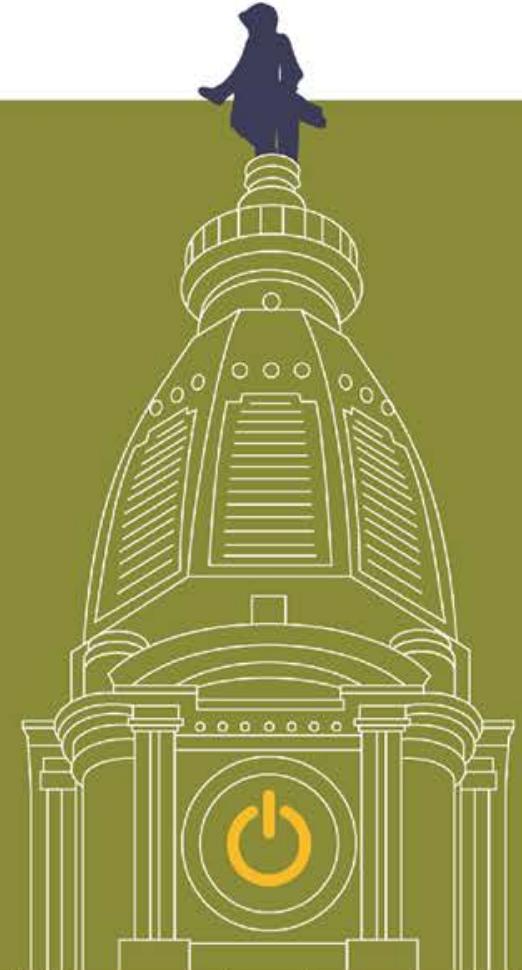


# Driving Energy Efficiency & Clean Energy in Philadelphia

*PEA Overview*  
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# “The Poorest Big City in America”

- 1.6M residents, population increasing, 6<sup>th</sup> largest city in US
- 26% live below the poverty line, incl. 1 in 3 children
- Real estate boom, thriving downtown and inner ring neighborhoods
- 4.6% unemployment citywide, unemployment among African-Americans historically 2x the city average



# Philadelphia's Energy Issues

- Residents below 30% AMI pay 23% of their income to utilities
- >50% of African-American households at any income level faced energy insecurity at least once last year
- >40% renters faced energy insecurity last year
- Corner stores pay more for utilities than rent



CLEAN, EFFICIENT, AFFORDABLE

# energy as a tool for impact

## ECONOMIC development

Projects that move the needle on carbon reduction are bringing established companies, investors and entrepreneurs to the city.

## CREATING jobs

Statewide, the number of clean energy jobs already outpaces the number of fossil fuel jobs.

## ALLEVIATING poverty

Reducing the energy burden for Philadelphians means homes that are safe, warm, healthy and affordable for the long term.

## IMPROVING public health

In public buildings, schools, homes and businesses, clean and efficient energy is a vehicle for improving the health of our communities.



# The Philadelphia Energy Campaign

- **\$1 billion investment over 10 years** in energy efficiency and clean energy projects, leveraging public and private dollars
  - 10,000 jobs
  - 25,000 households
  - 2,500 small businesses
- **Results from first 2 years:**
  - \$101 million in active projects
  - 984 total jobs
- Often self-funding projects



# City Energy Projects

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## Philadelphia Museum of Art

- JCI EPC, under construction
- Largest City energy user (\$3M/yr), 24% energy savings

## Major Projects pipeline

- LED Streetlighting, Prisons Complex

## Energy Master Plan & City Climate Commitments

- 100% renewable electricity by 2030
- 80% carbon reduction by 2050

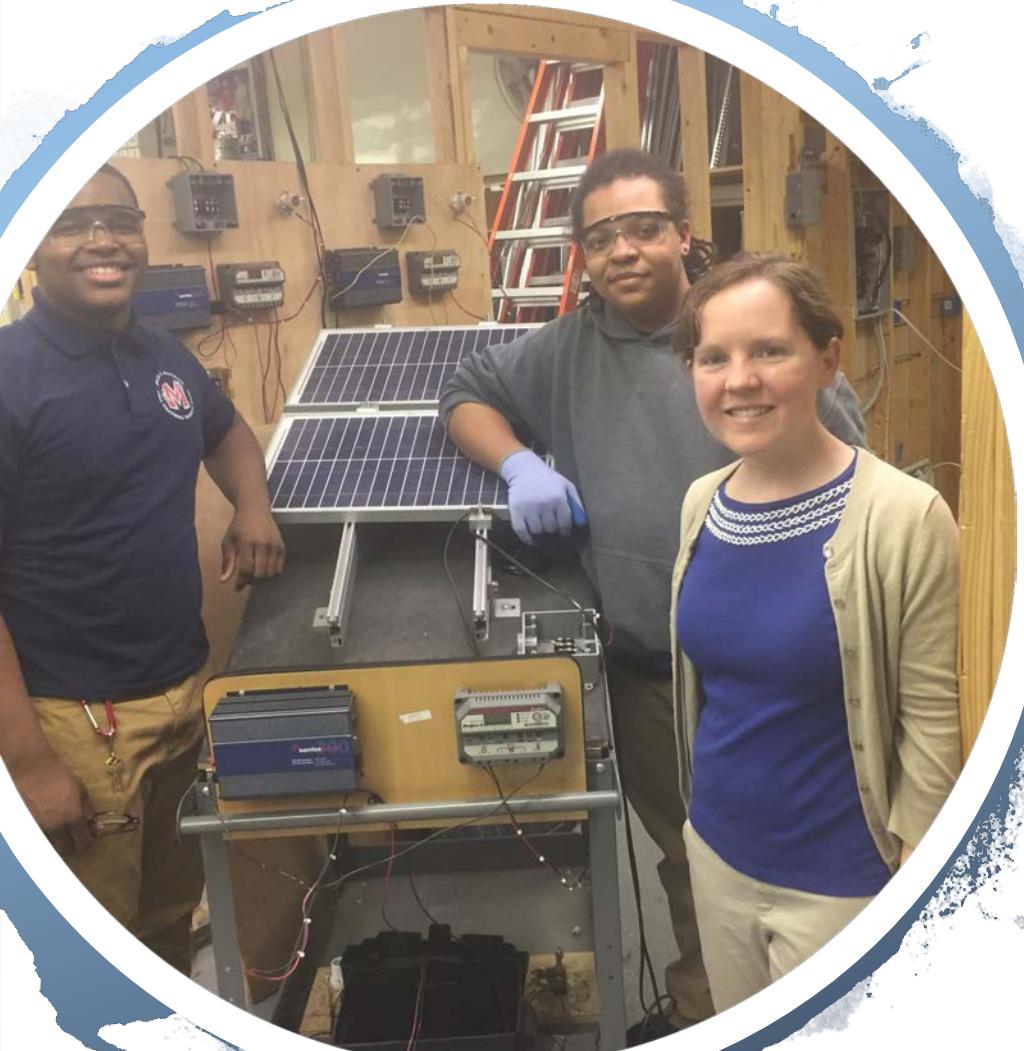


# Adams Solar, PA's largest solar array

- 70 MW Solar PV project in Adams County, PA (to be built), ~700 acres
- Developed by Community Energy
- 20-Year Contract, fixed price electricity and other attributes
- Cost of approximately \$6 Million annually (budget neutral)
- Project will provide **22% of city government electricity use**
- Will provide training opportunities for at least 15 Opportunity Youth trainees



# School District



- **SDP EPC – Pilot**
  - 3 high schools, \$23M, major capital work (incl. boilers, windows)
  - 20% savings, currently under construction
- **SDP EPC – GESA 1**
  - 20 schools, in contracting now, awarded to Johnson Controls
- **SDP Solar Schools Assessment**
  - Sponsored by PECO
  - Pricing and engineering evaluation for rooftop (and 1 ground mount) PPA
  - Preparing 4-school pilot, targeting Fall 2019 for RFP



# Solarize PHILLY

A CITYWIDE  
PROGRAM TO HELP  
ALL PHILADELPHIANS

# GO SOLAR AT HOME

SIGN UP BY SEPTEMBER 30 at  
[solarizephilly.org](http://solarizephilly.org)



PHILADELPHIA  
ENERGY AUTHORITY

@solarizephilly  
  

# 2 Solarize Rounds, Largest in the U.S.



Contracts Signed as of  
Today

**363**



Contracted Solar  
Capacity

**1.6 MW**



\$ Invested in Philly's  
Clean Energy Economy

**\$5.8**  
**million**



Households Signed up

**4,237**



Direct Jobs Created

**52**

# Bright Solar Futures: \$1.25M DOE Award

## 3-year Program of Study in Clean Energy

- High school vocational students
- Clean energy curriculum (1,080 hrs)
- Available to other Districts in PA once approved by PA Dept of Education

## New program for Opportunity Youth

- Partnering with YouthBuild Philly
- Parallel track
- Employment-ready
- Condensed curriculum (600 hrs)



ENERGY

## Trump administration awards Philly \$1.25M solar workforce grant

Posted: October 26, 2018 - 4:48 PM



# Multi-Family Affordable Housing Pilot

- Pilot 1 delivering comprehensive building retrofit with >30% energy savings over 2 phases
- 4 properties, 197 units, all low-income:
  - Phase 1 completed December 2017 and produced 15-30% savings
  - Smart thermostats, boiler controls, lighting, low-hanging fruit measures
- Pilot 2 using more traditional ESCO model and single phase, no up-front audit cost, leveraging utility programs



## KEY PARTNERS:



# Water and Sewer Line Protection Program

- 65,000+ customers
- \$1.8M+ in avoided consumer cost
- 76% of claims to date serviced by M/W/DBE contractors
- Less than 7% of claims had a PWD NOD
- Projected to save PWD >\$400k annually



# Contact

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