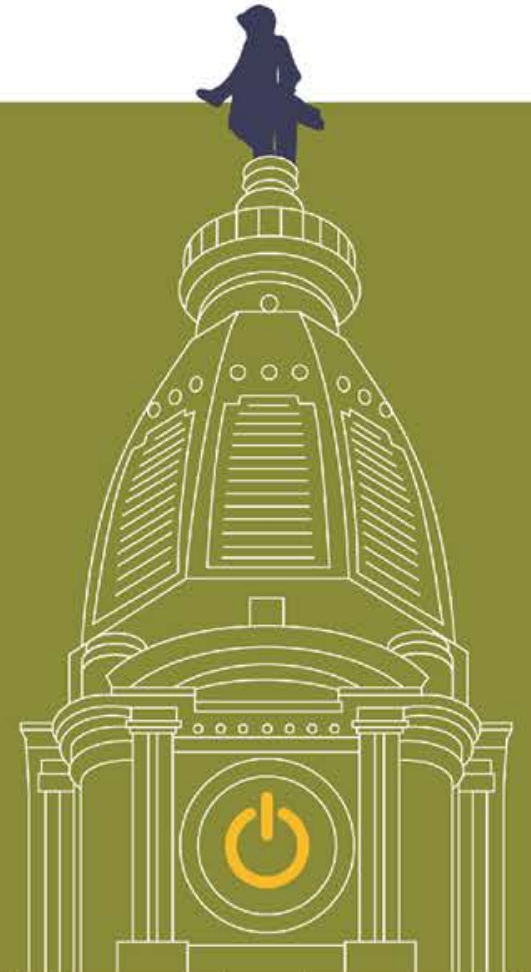




Driving Energy Efficiency & Clean Energy in Philadelphia

*PEA Overview
July 15, 2019*

Emily Schapira, *Executive Director*



“The Poorest Big City in America”

- 1.6M residents, population increasing, 6th 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

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



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



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