

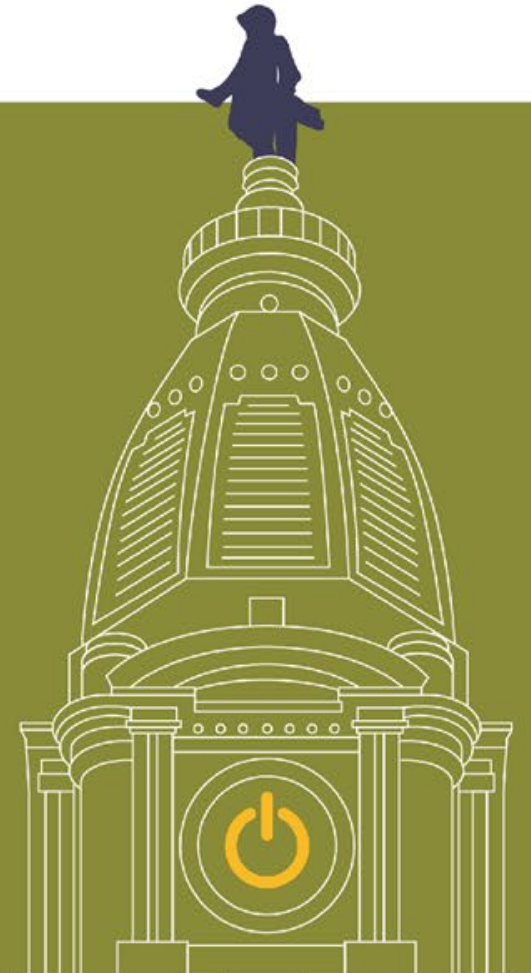


PHILADELPHIA
ENERGY AUTHORITY

Board Update – Q1 FY22

October 27, 2021

Emily Schapira, *President & CEO*



Organizational Updates

New Hires!



Nkechi Ogbue
VP, Strategy & Operations



Katie Bartolotta
VP, Policy & Strategic Partnerships



Shonique Banks
Director, Development &
Workforce Initiatives

New Intern!

- Greg Bostick (Wharton MBA, Solarize)

Ribbon Cutting Held For Solar Training Lab At Frankford High School



Frankford High School introduces solar, clean energy careers training for students

John Mc Devitt · 2 days ago



Like Comments

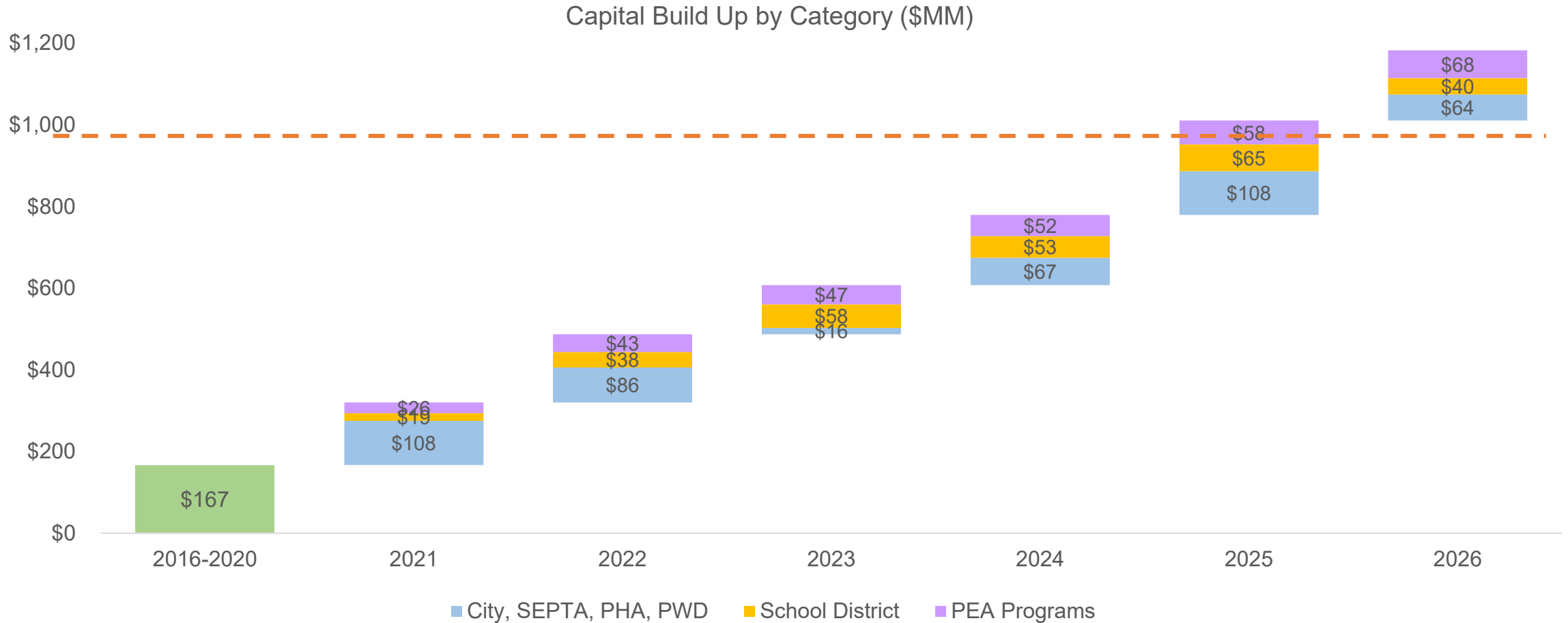
PHILADELPHIA (KYW Newsradio) — Frankford High School in Northeast Philadelphia is making history, as the first high school in the country to have a clean energy training lab. It's all to prepare students for careers in solar and clean energy.



© Provided by KYW Radio Philadelphia



PEA Road to \$1 Billion, 10,000 Jobs



Note: Projections are based on program goals, existing contracts and City and School District energy plans at this time. Subject to change.

FY22 Q1 program activity overview

1

MUNICIPAL BUILDINGS



- LED Streetlighting vendor selected
- PNE Solar vendor selected
- Working on additional PPA RFP
- OOS Updates: PGW Diversification study, Clean Fleet Plan + RFI

2

K-12 SCHOOLS



- \$60MM Green Bond for next two rounds of GESA projects
- Construction ongoing GESA-I Ph. 2 (4 schools, nearly complete), Ph. 3 under construction, GESA-II Ph. 1 (3 schools) under construction
- Frankford Solar Lab Ribbon cutting!

3

AFFORDABLE RESIDENTIAL



- Solarize Philly Ph 5 ongoing, includes new LMI model, lease option, Commercial partners
- BTL: Pilot 1 launched!
- 92,000+ households enrolled in Water Sewer Program, 14,000+ in new programs

4

SMALL BUSINESS



- BlocMaps tool release planned Q2, targets multi-family & cultural institutions
- Closed additional CPACE projects, total of \$52MM (7 projects)

OTHER INITIATIVES

- PGCC moving forward
- Bright Solar Futures 3rd PowerCorps cohort starts January
- GRIT training complete!
- Energy Justice Partnerships launched with SEIA
- Virtual Power Plant RFI planned for Q2



Solar Schools

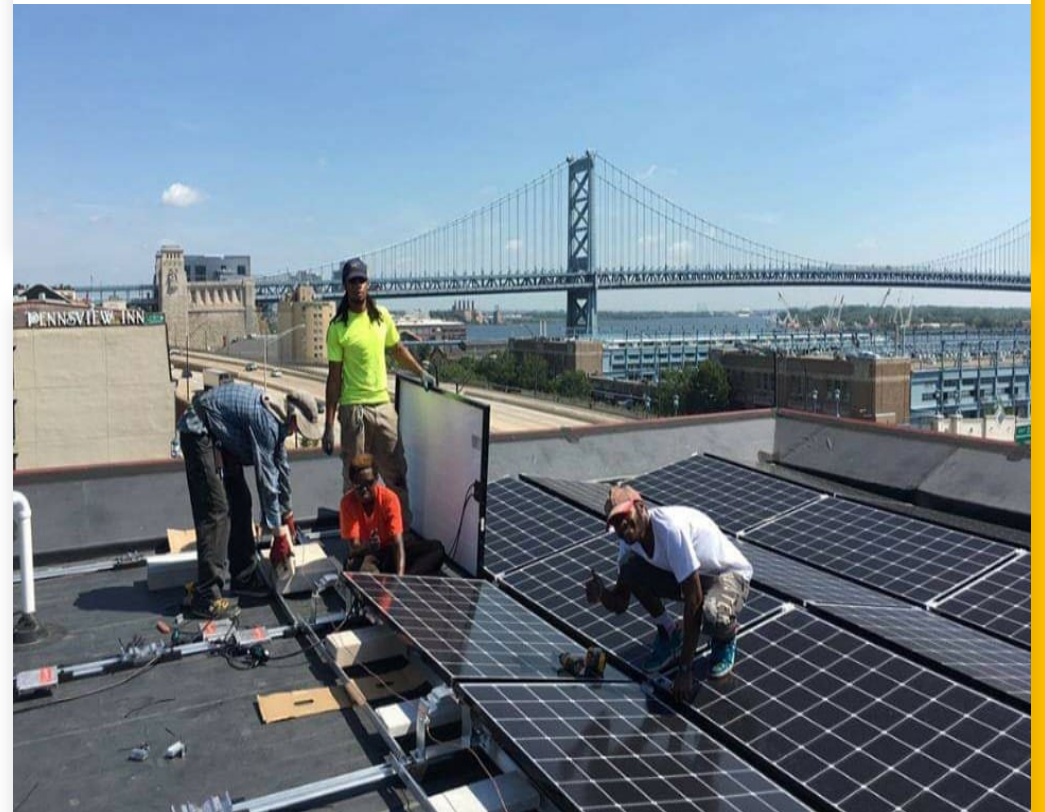
- Working with SDP on first solar schools pilot, will install solar at 5 target schools
- Providing technical support to SDP for RFP and beyond
- Presenting to SDP Leadership
- Talking to community partners about funding support

Phase 5 (2021)

- Enrollment opened during Solar Week (August 2021), runs through early 2022
- Selected four contractor partners:
 - **Residential:** Solar States, Superior Solar Design and Posigen (**LMI**)
 - **Commercial:** Solar States and EDP Renewables

Phase Goals:

- **LMI:** 120 homes, new lease model
- **Residential:** 250 homes contracted
- **Commercial:** 2 MW, new market offerings



Largest Solarize campaign in the U.S.



Contracts Signed as of Today

750+

Phase 5 +13



Contracted Solar Capacity

3.7 MW



\$ Invested in Philly's Clean Energy Economy

\$12+ million



Households Signed up

6,500+

+1,004



Direct Jobs Created

98

Other Solar Milestones

- **Solar Week 2021** was a hit!
- Celebrated **50th install** for the **Solar Savings Grant Program**, serving LMI homes at <80% AMI citywide
 - Served by new lease model in next round

SOLAR WEEK 2021

BUILDING A DIVERSE WORKFORCE FOR SOLAR - CAREER PANEL

FRIDAY, AUGUST 20 | 10-11:30 AM EST
solarizephilly.org/events



Keynote Speaker:
Katherine Gilmore Richardson
Councilmember At-Large,
City Council of Philadelphia



Moderator:
Tracey Woods
VP of Operations, AABE



Keith Kinch
GM/Co-Founder, BlacPower



Spencer Wright
Founder, Harness the Sun



Marc Shackelford-Rowell
Manager, Solar States



Brian Barr
Manager, PECO Green Power Connect Team

REBUILDING THE ECONOMY POWERED BY THE SUN

Thursday, August 19 | 10-11:30 AM EST
solarizephilly.org/events



Keynote Speaker: Donna Bullock
State Representative



Moderator:
Nicole Sitaraman
VP of Strategic Engagement,
Sustainable Capital Advisors



Derek Green
Councilmember At-Large,
City Council of Philadelphia



Christine Knapp
Director, Office of
Sustainability



Scott Elias
Senior Manager of State
Affairs, SEIA



Yesenia Rivera
Director of Energy, Equity,
and Inclusion, Solar United
Neighbors



Flipping the switch on our 50th SSGP installation (Sept. 2021)



Water and Sewer Line Protection Program

- 92,000+ customers, 14,000+ in new in-home programs
- \$24MM+ in repair cost savings
- 77% of claims to date serviced by M/W/DBE contractors
- Only 6.5% of all claims, 28% of repair claims had a NOD from PWD
- ~4,400/month calls handled, 91% Customer Satisfaction



Built to Last Launched!

- Pilot 1 launched in September 2021 with referrals from Basic Systems Repair Program. Currently completing intake, home evaluation, and scope of work development on first set of clients.
- On track to execute a 50-home pilot in 2021 to demonstrate coordination of home improvement services, second pilot in 2022.
- Ongoing fundraising: received \$400k PHARE grant, have made a request of City Council via NPI and request for funding in federal funding package. Recently notified of future funding through GHFI.



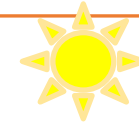


Built to Last Home Improvements

Basic Systems

- Roof
- Electric
- Plumbing (interior/exterior)
- HVAC + Hot Water
- Structural Issues

Other Measures



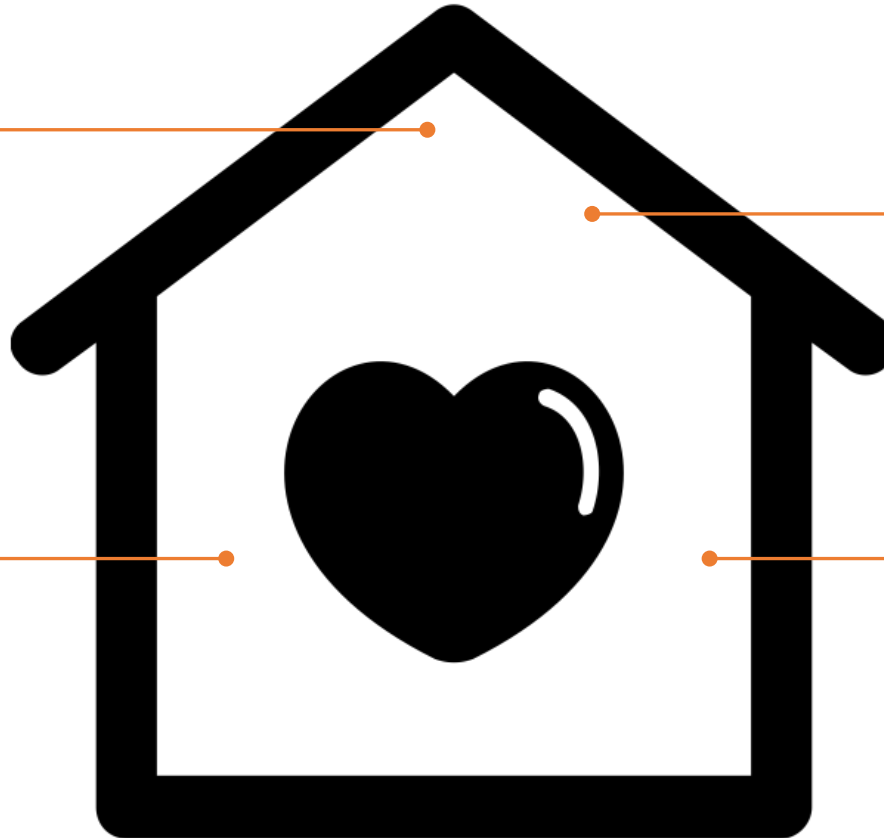
- Solar (where feasible)
- Heat pump (heat + AC)
- Fuel switching

Energy Efficiency

- Weatherization
- Insulation (esp. attic)
- LED lighting
- Efficient windows/doors
- Low-flow water fixtures

Health and Safety

- Trip and fall hazards
- Excess moisture
- Lead paint
- Mold
- Pests





Green Retrofit Immersive Training (GRIT)

- Residential contractors in high demand, holistic knowledge critical to optimize health and energy savings benefits
- Additional workforce required to scale up Built to Last, serving 10,000 homes by 2032
- 2021 Green Home Retrofit training in partnership with ECA and FRP, funded by Commerce Dept. Seeking 2022 funding
- 11-week class, 6-week internship retrofitting single-family units for affordable housing; all trainees received stipends.
- 15 graduates, 8 placed into industry-relevant jobs (ongoing)



GRIT graduation at ECA.

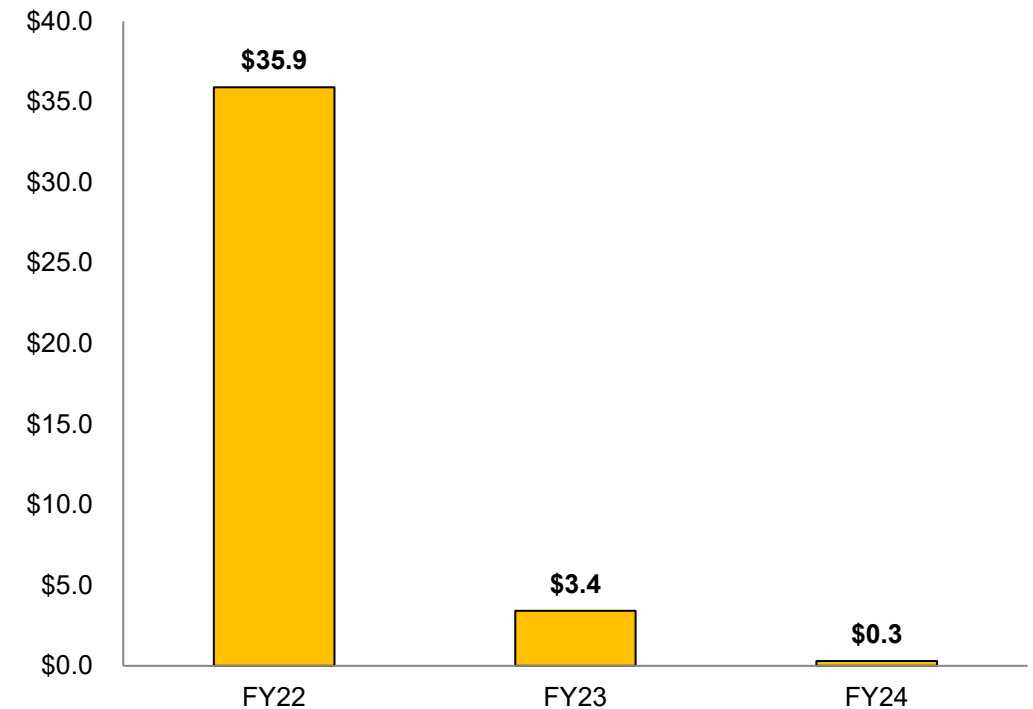
Credit: ECA 2021



C-PACE Pipeline Update

- 7 projects closed, \$52MM (87% of statewide 5-year target)
- 46 projects in pipeline
- Probability-weighted average value of current pipeline is ~\$39.6MM
- Outreach ongoing for new project development

Probability-Weighted Deal Volume by Fiscal Year (\$MM)



C-PACE Program Overview

Program Administration & Marketing

- Increased to 16 (from 2) minority/woman owned firms on our list of Qualified Engineering Professionals
- Developing joint marketing strategy for PEA's 3 commercial initiatives: C-PACE, PGCC and Commercial Solarize

C-PACE Amendment

- SB 635 sponsored by Sen. Yudichak passed unanimously out of Committee
- Should be taken up by full Senate in coming weeks
- House Bill waiting for committee hearing to be scheduled
- Reminder: Amendment expands C-PACE eligibility to include Multifamily buildings of 5+ units, indoor air quality projects, resiliency improvements

Rhoads Industries (Bldg 57, Navy Yard)

PROJECT OVERVIEW

Property Type: Heavy Industrial

Financing Amount: \$15,000,000

Building Measures: Substantial renovation including envelope, lighting and HVAC

Environmental Impact: Reduction of the building's total lifetime carbon footprint by 19,870 metric tons of CO2 equivalent



Property Owner:

Industrial Metals
Manufacturing, LLC



Capital Provider:

CCG PACE Funding



Image courtesy of Rhoads Industries

- \$15MM C-PACE financing to cover **91% of hard and soft costs** of the energy efficiency upgrades for the substantial renovation of ~2/3 of the footprint of the industrial facility
- 311K SF industrial facility located at 1900 Kitty Hawk Ave. in the Philadelphia Navy Yard. Built in 1919 by the U.S. Navy
- Energy savings calculations based on improvements above IECC-2018, Phila.'s energy code baseline and % of qualified project financed with C-PACE



**PHILADELPHIA
GREEN CAPITAL CORP**
ACCELERATING OUR CLEAN ENERGY FUTURE

Financing tools and programs

for:

- ✓ **Businesses (large & small)**
- ✓ **Non-profits**
- ✓ **Multifamily buildings
(affordable & market rate)**
- ✓ **Homeowners**
- ✓ **Going solar**
- ✓ **Designing & building energy
efficiency projects**

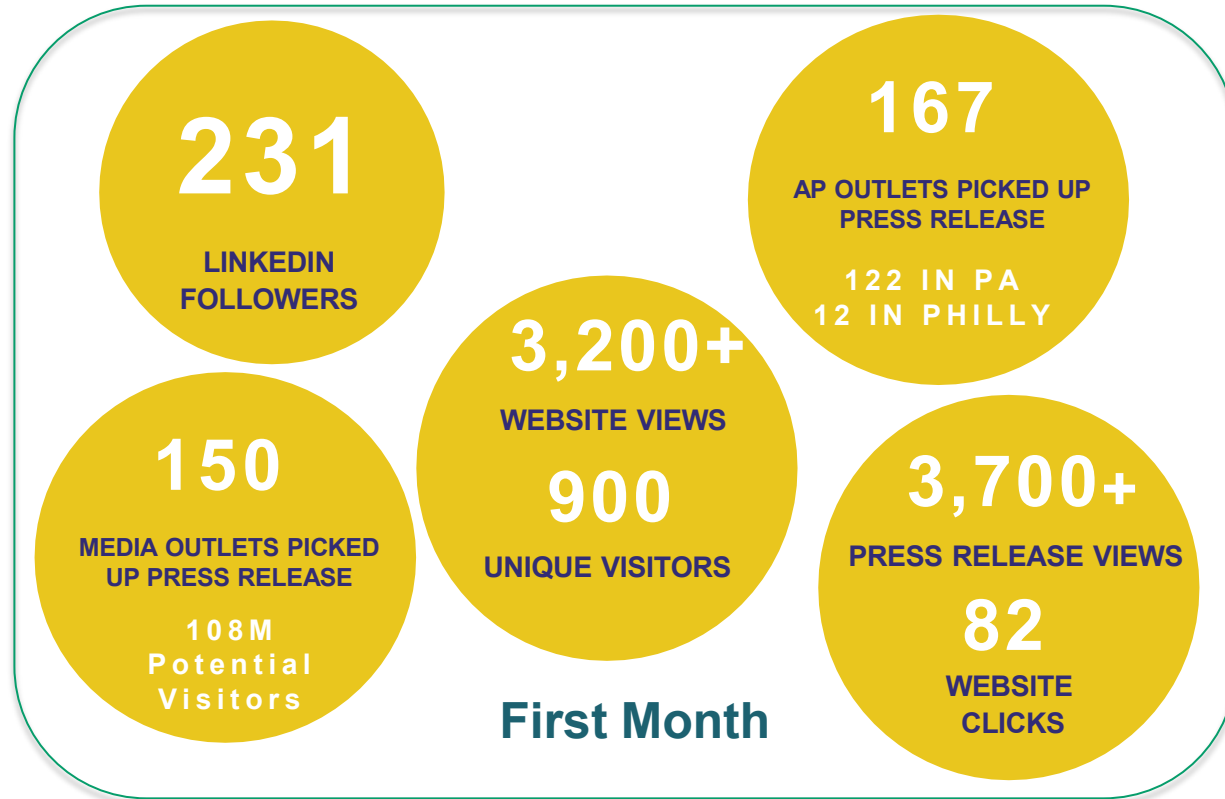
*We empower businesses,
developers, and everyday
Philadelphians to build a
clean energy future*

*PGCC is the green bank affiliate of
the Philadelphia Energy Authority*





PGCC Launch & Awareness Update



















Press Release from Councilman Derek Green



[PGCC] ...MOVES THE NEEDLE TOWARDS A MORE PROSPEROUS & EQUITABLE FUTURE & DRIVE ECONOMIC GROWTH, ELEVATE OUR UNDERSERVED NEIGHBORHOODS, AND ENSURE THAT EVERYONE GETS A FAIR SHOT AT CREATING GENERATIONAL WEALTH.

Commercial Financing Options Comparison Table

	Navigator Pre-Development Loan	Catalyst Term Loan	Commercial Solarize	C-PACE
<i>Target audience</i>	Non-profits			
	Multifamily (market rate & affordable)			
			For-profit commercial buildings	
<i>Eligible projects</i>		 		   
	 = soft costs	 = solar	 = energy efficiency	 = water conservation
<i>Term & security</i>	24 months; unsecured	7-20 yrs; unsecured	PPA (20 yrs) or own	Up to 30 yrs; secured
<i>Rates</i>	1.99-3.99%	5.79-6.99%	N/A	~5.00-7.00%
<i>Administrator</i>	 PHILADELPHIA GREEN CAPITAL CORP <small>ACCELERATING OUR CLEAN ENERGY FUTURE</small>	 PHILADELPHIA GREEN CAPITAL CORP <small>ACCELERATING OUR CLEAN ENERGY FUTURE</small>	 PHILADELPHIA ENERGY AUTHORITY	 PHILADELPHIA ENERGY AUTHORITY



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