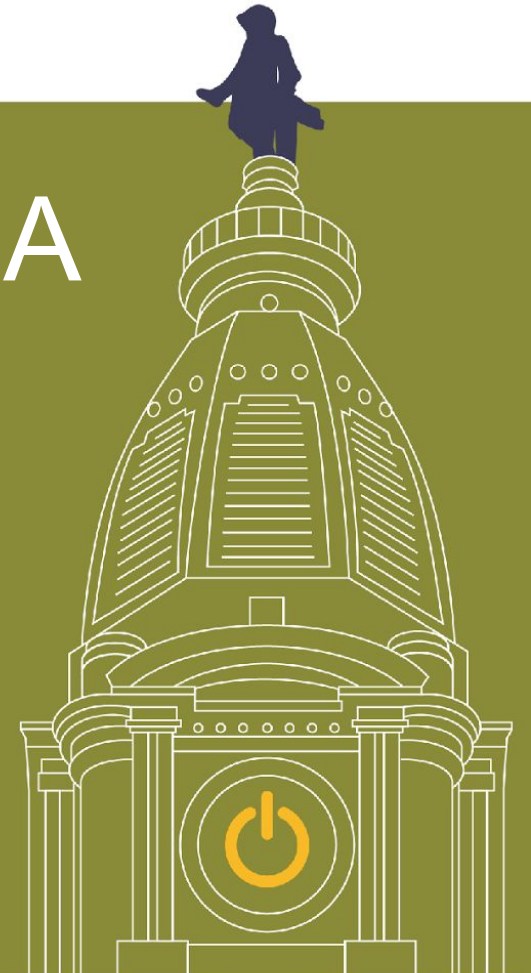




**PHILADELPHIA**  
ENERGY AUTHORITY

# Wastewater Treatment Plants GESA RFP Pre-proposal Conference

January 27, 2025



**Hosted by:** Philadelphia Water Department, Office of Sustainability, Philadelphia Gas Works, Philadelphia Energy Authority

# Agenda

- Introductions
- Project Goals and Objectives
- Overview of Sites
- GESA 101
- Project Details
- Important Dates
- Q&A

# Introductions

# Project Team



- **Role on this project:** Contract holder, issue financing
- **Mission:** A catalyst for the growth of a robust, equitable, diverse clean energy economy in Philadelphia through the development of long-term energy projects, policy, education and market-building activities



- **Role on this project:** Project management, technical support, and contract execution support
- **Mission:** Improve quality of life in all Philadelphia neighborhoods by advancing environmental justice, progressing Philadelphia's climate and energy goals, and preparing the city for a hotter and wetter future



- **Role on this project:** Project site owner & operator
- **Mission:** Plan for, operate, and maintain both the infrastructure and the organization necessary to purvey high quality drinking water, provide an adequate and reliable water supply, and to sustain and enhance the region's watersheds and quality of life



- **Role on this project:** Project advisor on biogas and RNG infrastructure and deployment; potential biogas offtaker.
- **Mission:** Enhance the quality of life for all by delivering safe, reliable, and affordable energy in an environmentally responsible way

# **Project Goals and Objectives**

# Project Goals

- The goal of this comprehensive project scope is to use the Guaranteed Energy Savings Act (GESA) project model to address:
  - deferred maintenance;
  - implement ECMs that improve plant and energy efficiency;
  - future-proof the facilities for anticipated regulations and requirements;
  - eliminate flaring of biogas;
  - and ensure productive use of the WPCPs' produced biogas.
- Projects that incorporate energy solutions that maximize co-benefits including quantifiable greenhouse gas emissions reductions and resiliency improvements are desired.

# Project Objectives (8)

1. **Reduce the overall costs and risks** related to the Philadelphia Water Department by implementing plant equipment/operations improvements, ECMs, and biogas upgrading and interconnection facilities to reduce energy costs and GHG emissions.
2. **Reduce carbon emissions** through a mix of energy efficiency, avoidance of flaring, and low-carbon energy generation opportunities to help meet the PWD's and the City's climate and energy goals.
3. **Improve coordination, reliability, and operating efficiency** at the water pollution control plants.

# Project Objectives

4. **Improve the durability and resilience** of PWD assets by:
  - i. addressing fundamental capital needs at each site, and
  - ii. making investments in technologies and approaches such as RNG generation, and
  - iii. “hardening” of mechanical equipment to withstand extreme weather events.
5. Enhance PEA’s, PWD’s, PGW’s, and the City’s efforts in **pursuing sustainable and modern technologies**.

# Project Objectives

6. Provide a robust opportunity to **maximize employment of Philadelphia-based businesses and Philadelphians with an emphasis on MBE, WBE, and DSBE companies, and a diverse workforce.**
7. Maximize opportunities for PWD and PGW to **receive available federal and utility incentives.**
8. **Comply with the requirements of “Reducing Industrial Sector Emissions in Pennsylvania” (RISE PA) grant on eligible portions of the proposed project.**

# Overview of Sites

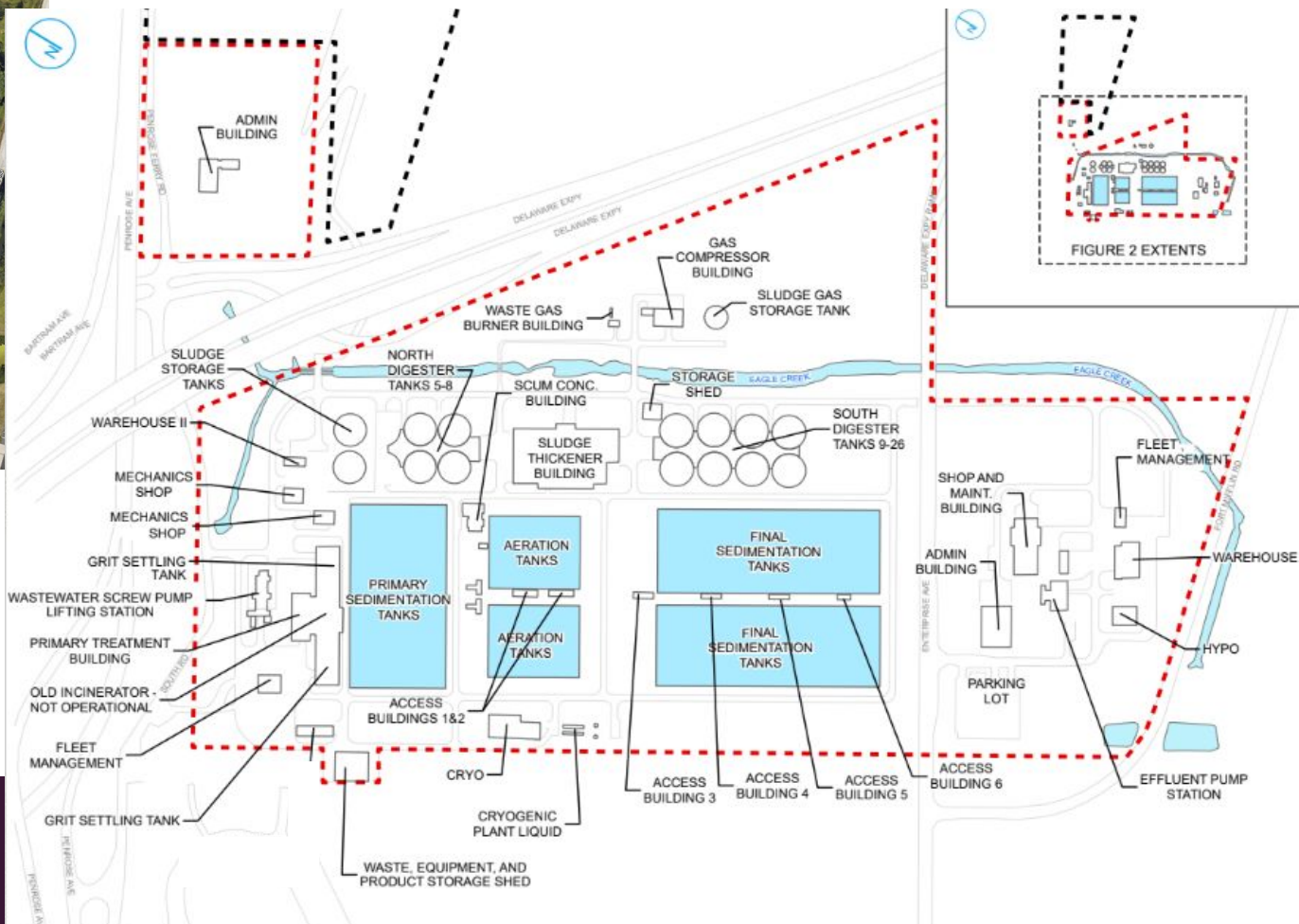
# Northeast Water Pollution Control Plant



NEWPCP RNG Tour Map Legend	
ID #	Location/Building Name
1	Storeroom
2	Maintenance Supervisors Center (MSC Building)
3	Information Technology Building (ITB)
4	Maintenance Planning Center (MPC)
5	Preliminary Treatment Building
6	Primary Sedimentation Tank Set 1 (PST)
7	Maintenance Storage Building
8	Administration Building
9	Final Sedimentation Tanks - Set 1 (FST 1 / Access Buildings 1 & 2)
10	Aeration Tanks
11	Final Sedimentation Tanks - Set 2 (FST 2 / Access Buildings 1 & 2)
12	Red Barn (where the old Belt Filter Press Building was)

NEWPCP RNG Tour Map Legend	
ID #	Location/Building Name
13	Blower Building
14	Scum Concentration Building & Primary Sedimentation Tank Set 2 (PST 2)
15	Gravity Thickener Building (GTB)
16	Sludge Gas Facility (SGF) and Waste Gas Burner Building
17	Sludge Digestion Tanks (Digesters)
18	Sludge Thickener Building (STB)
19	Sludge Transfer Station (STS)
20	Scum Disposal Facility
21	Combined Heat and Power Building (Cogen)
22	3001 Caster Ave (newly acquired)
23	Chlorine Building (Hypo)
24	Effluent Pumping Station (plant water pumps)

# Southwest Water Pollution Control Plant



# PGW Facilities - NEWPCP



# PGW Facilities - SWWPCP



# **GESA 101**

# GESA Overview

- Established by PA State Law
- Allows contracting between a government entity and an qualified provider for turnkey project with fixed pricing and performance guarantee
- Wraps energy conservation measures with capital needs
- Typically self-funding over the max. 20 year contracting period - inclusive of energy and operational savings, etc.
- Selected vendor performs Investment Grade Audit

# GESA Benefits

- Upgrade energy assets, optimize performance with focus on energy efficiency, sustainability, & greenhouse gas emissions
- Design build approach to capital projects
- Energy performance guarantee drives collaborative approach, higher quality development, execution, and detailed monitoring
- Target deferred maintenance backlogs, reduce emergency repairs
- Create local, well-paying jobs & improve workforce development with jobs of the future – MWDSBE Participation

# GESA Examples

- This is the City of Philadelphia's fifth GESA procurement for energy efficiency improvements
  - Philadelphia Museum of Art
  - Quadplex (4 buildings)
  - Philly Streetlight Improvement Project (130,000 fixtures)
  - Quadplex+ including Health Centers and Homeless Services Buildings (14 buildings)



*Photo credit: Philadelphia City Council*

# Project Details

# Economic Opportunity Plan (EOP)

- An EOP is required for all large City projects
  - Includes required commitments by all proposers to the hiring of M/W/DSBEs as part of subcontracting
  - RFP Attachment F & F-1
- Required proposal submittal includes a completed F-1
  - City Office of Economic Opportunity does not have prescribed percentages as part of initial proposal submittal; instead proposers should provide their “best and good faith efforts” in their F-1 proposals
- Anticipate an EOP Supplement at award to establish goal hiring percentages, and to incorporate additional Local Business Entity (LBE) goals

# Teaming

- Sign up to be included on a teaming list
- List to be posted to RFP webpage
- Link to form:  
<https://forms.gle/kpiVRxJmQuUv aAn3A>



# Non-Disclosure Agreement

- Distributed upon receipt of LOI (emailing [gesa@phila.gov](mailto:gesa@phila.gov))
- If you already requested one, expect an email tomorrow
- A signed NDA provides access to:
  - Attachment B-3 NE WPCP Process Flow Diagram
  - Attachment B-5 SW WPCP Process Flow Diagram
  - Site walkthroughs

# Important Dates

Activity	Date & Time
Deadline to sign up for walk-throughs via email to <a href="mailto:gesa@phila.gov">gesa@phila.gov</a>	January 31, 2025
Site Walk-Throughs for NE WPCP, SW WPCP	Feb 6 and 7
Deadline to submit non-binding LOI via email to <a href="mailto:gesa@phila.gov">gesa@phila.gov</a>	February 10, 2025
Deadline to Submit Questions via email	February 21, 2025
Answers Posted on PEA RFP website	March 10, 2025
<b>Deadline to Submit Proposal</b>	<b>April 11, 2025, 5:00 P.M. ET</b>
Proposer Interviews – Location TBA	Week of April 28, 2025
Final Selection of Proposer(s)	Week of May 19, 2025
Project approval and contract signing	Fall 2025
Investment Grade Audit (IGA) Completed	Winter 2026
Financing Secured	Spring 2026, following IGA completion
Notice to Proceed Issued	Spring 2026, following securing of financing

# Site Walkthroughs

>> **NE WPCP:** Thursday, February 6 - 9am-12pm

>> **SW WPCP:** Friday, February 7 - 9am-12pm

- 2 attendees max. per firm
- Must register in advance via [gesa@phila.gov](mailto:gesa@phila.gov)
- Must sign NDA in order to participate
  - Submit LOI to [gesa@phila.gov](mailto:gesa@phila.gov) receive NDA
- Safety gear is required

# Questions & Discussion

# Thank you!

- January 31: Deadline to sign up for walk-throughs via email to [gesa@phila.gov](mailto:gesa@phila.gov)
  - NDA must be signed in advance of walk-throughs on Feb 6, 7
- February 21: Questions due to [gesa@phila.gov](mailto:gesa@phila.gov)
- April 11 at 5pm: RFP due  
[https://philaenergy.org/public\\_bids/philadelphia-request-for-proposals-wastewater-treatment-plants-gesa/](https://philaenergy.org/public_bids/philadelphia-request-for-proposals-wastewater-treatment-plants-gesa/)