



GREENHOUSE GAS EMISSIONS REDUCTION REPORT

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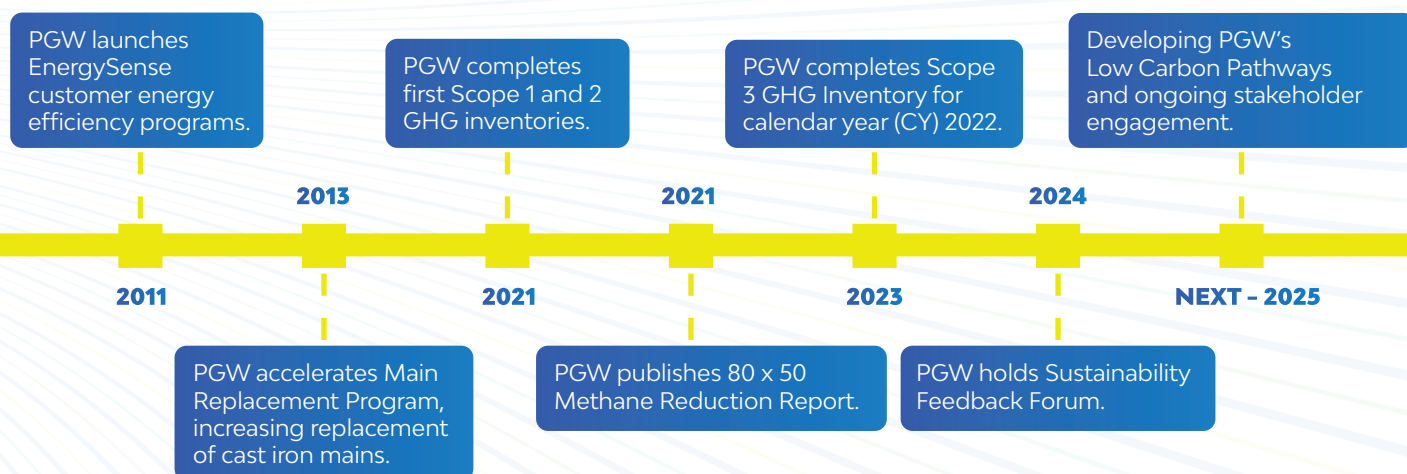
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INTRODUCTION

Philadelphia Gas Works (PGW) is pleased to present its comprehensive greenhouse gas (GHG) emissions reduction plan for FY 2024-2025. As a key component of PGW's Corporate Strategy, the organization is dedicated to achieving a targeted annual emission reduction of 10,000 metric tons of carbon dioxide equivalent (CO₂e) in FY 2025, addressing Scope 1, 2, and 3 GHG emissions.

Since PGW lit the city's first natural gas streetlamps along Second Street in 1836, it has been a leader in energy innovation and sustainability in Philadelphia. Over the years, PGW has grown its clean energy profile while lowering emissions. From the development of EnergySense in 2011, Pennsylvania's first voluntary portfolio of natural gas energy efficiency programs, to offering more efficient technologies like combined heat and power, micro combined heat and power, and compressed natural gas vehicles.



PGW understands that achieving its sustainability goals requires collaboration with stakeholders through research, studies and pilot programs to ensure its goals reflect the concerns and aspirations of the broader community.

This is why PGW has begun hosting its annual Energy Innovation Symposium, to convene national experts for public dialogues on Philadelphia's clean energy future, and our Sustainability Feedback Forum, to capture public input on our emissions-reduction planning. It is also why PGW launched The Energy Innovation Lab, a small business incubator designed to empower energy entrepreneurs whose product or service ideas have the potential to reimagine the future of the energy industry. PGW and Temple University Small Business Development Center (TU SBDC) created the incubator in 2021 to foster environmentally friendly concepts that meet the evolving energy needs of Philadelphia residents, underserved communities, and businesses.

Additionally, PGW is actively pursuing and developing new opportunities to diversify its business, including opportunities involving hydrogen, renewable natural gas, and its partnership with the School District of Philadelphia in performing a geothermal site feasibility study. These efforts aim to deliver increased value to its customers while expanding on its clean energy portfolio and lowering emissions.

In CY 2024, PGW published its first annual GHG Emissions Reduction Report covering FY 2023 accomplishments and FY 2024 targets; this FY 2025 plan builds on these efforts to-date and represents the company's ongoing plan for achieving actionable comprehensive GHG emission reductions.

PGW has several existing programs actively reducing the company’s carbon footprint and is continuing to pursue new opportunities to further lower emissions. This plan highlights updates on all of PGW’s initiatives. All emissions projections within this report are forecasted estimates of incremental annual reductions, based on expected programming between September 1, 2024, and August 31, 2025. This may be subject to change due to scheduling delays, supply chain limitations and/or other circumstances out of PGW’s control.

Finally, this FY 2025 plan is one more step forward in PGW’s sustainability planning. It is a snapshot in time capturing the best analysis and information currently available to PGW. PGW continues to pursue further opportunities for reducing its carbon footprint. Over the course of this coming year, PGW will develop low carbon pathways for its future. These too will evolve over time. PGW will be inviting customers and stakeholders to join the process. Please visit pgworks.com/sustainability to learn more and to share your feedback.

PGW GHG EMISSIONS INVENTORIES

In FY 2023, PGW updated its GHG emissions inventories, capturing the latest Scope 1 and 2 inventories for CY 2019 and CY 2022, and compiled its first Scope 3 inventory for CY 2022. These inventories are critical in first providing a thorough understanding of emission sources to develop the most impactful reduction plans. These inventories demonstrate that PGW’s Main Replacement Program continues to be the most effective tool for reducing the greatest portion of its Scope 1 and 2 emissions – pipeline fugitives. However, when including Scope 3 emissions, PGW’s downstream customers’ use of natural gas presents the greatest overall opportunity for PGW emission reductions.

FIGURE 1: PGW SCOPES 1 & 2 EMISSIONS CY* 2022

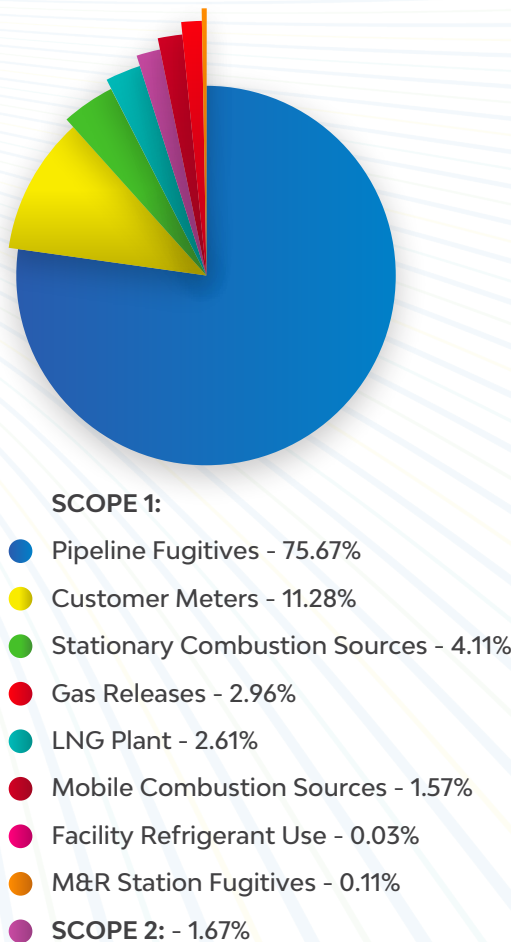
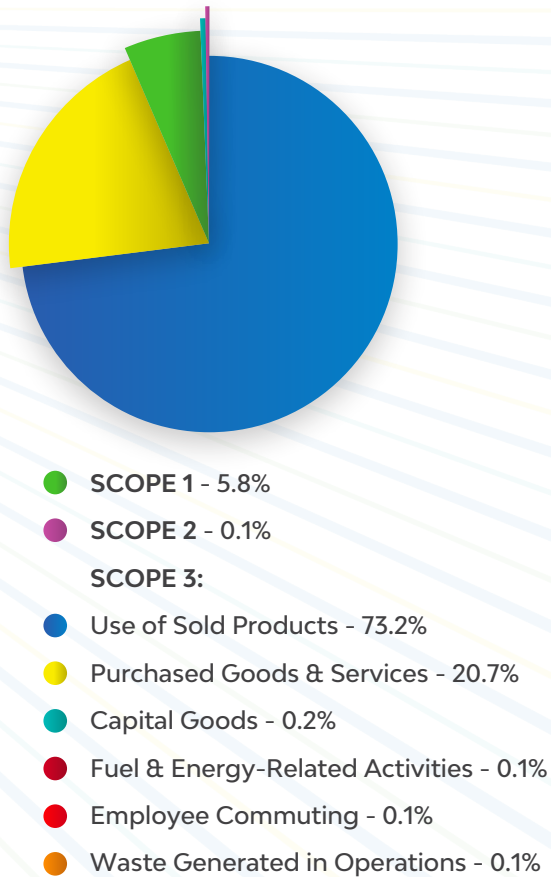
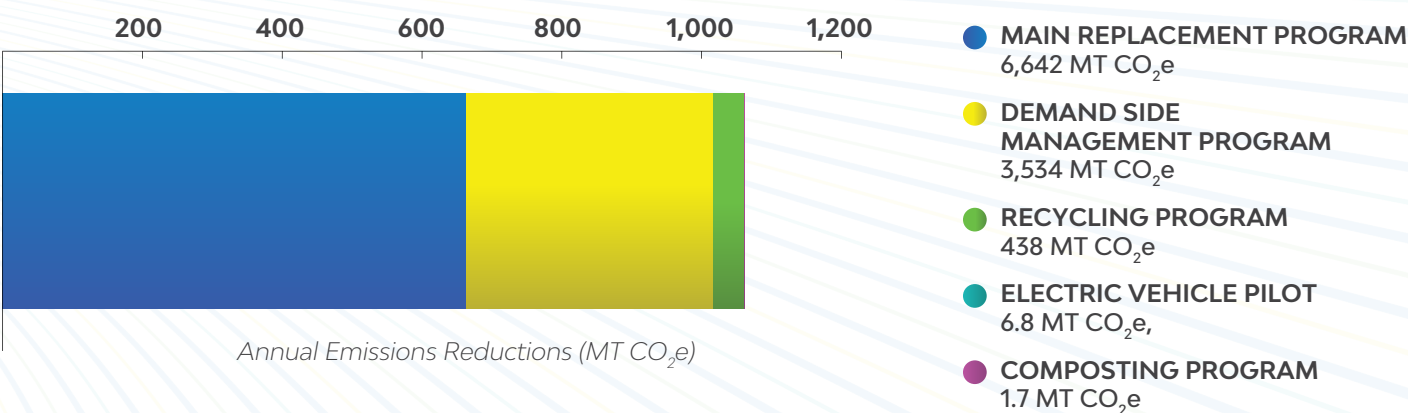


FIGURE 2: PGW ALL EMISSIONS CY* 2022



*Calendar Year (CY) indicates data collected from January 1 – December 31, 2022.

FIGURE 3: FY* 2024 ANNUAL INCREMENTAL EMISSIONS REDUCTION



PGW reduced 10,622 metric tons of CO₂e emissions in FY 2024, exceeding its target of 10,000.

**Financial Year (FY) indicates data collected from September 1, 2023 – August 31, 2024.*

In FY 2025, PGW will be updating its GHG emissions inventories for Scopes 1, 2, and 3 for CY 2024, which should reflect PGW’s continued efforts in reducing its carbon footprint.

FY 2024 ACCOMPLISHMENTS IN EMISSIONS REDUCTION

PGW had several sustainability accomplishments in FY 2024, from September 1, 2023, to August 31, 2024. Perhaps most important was not only achieving but exceeding the corporate objective to decrease PGW Scope 1, 2 and 3 emissions by 10,000 metric tons of CO₂e. This achievement was largely based on PGW’s ongoing accelerated Main Replacement Program, which is both replacing at-risk pipelines and reducing methane emissions.

Main Replacement Program – Scope 1 Emissions Reduction

PGW’s Main Replacement Program is an accelerated effort to replace cast iron mains and unprotected steel services, improving safety and environmental impact by reducing sources of methane leaks. Currently, PGW is on track to eliminate its unprotected steel services inventory by 2038 and cast-iron mains inventory by 2058. In FY 2024, PGW replaced 32.6 miles of cast iron main and unprotected steel services, reducing emissions by approximately 6,642 metric tons of CO₂e. In CY 2024, PGW was provisionally awarded \$40 million from the U.S. Department of Transportation’s Pipeline and Hazardous Materials Safety Administration’s (PHMSA) first ever funding opportunity from the Natural Gas Distribution Safety and Modernization Grant (NGDISM) Program. This \$40 million, in addition to two other NGDISM awards since 2022, will fund an additional \$125 million total to further bolster PGW’s existing infrastructure upgrade plan. PGW intends to use these funds in FY 25 to replace cast iron main with durable polyethylene lines, enhancing safety and reliability.

Electric Vehicle Pilot – Scope 1 Emissions Reduction

In FY 2023, PGW purchased 5 Chevrolet Bolt EUVs, the first electric vehicles (EVs) to enter the PGW fleet, with funding support from the Alternative Fuels Incentive Grant program. These EVs replaced older, gasoline-fueled vehicles that reached their end of life. PGW also received rebates from the Driving PA Forward and PECO Level 2 Commercial Charging Pilot programs to install EV charging stations at its corporate headquarters. Construction of the charging stations was completed in Fall 2023. The first 2

Chevy Bolt EUVs were delivered in FY 2023. The remaining 3 EVs were delivered in FY 2024, saving a total of 6.8 metric tons of CO₂e emissions.



Demand Side Management – Scope 3 Emissions Reduction

PGW's greatest source of Scope 3 emissions reductions has been through its Demand Side Management (DSM) program and Low-Income Usage Reduction Programs (LIURP). In FY 2024, PGW's voluntary DSM program, branded as PGW EnergySense, included five individual programs: Residential Equipment Rebates, Commercial Equipment Rebates, Residential New Construction, Smart Thermostat Marketplace, and the Low-Income Smart Thermostat program. PGW's LIURP offerings include Home Comfort and the Low-Income Multifamily Efficiency (LIME) program. These programs offer no-cost energy efficiency upgrades and energy conservation education to income eligible customers in single-family and multifamily homes, respectively. In FY 2024, PGW's DSM program and LIURP saved 3,534 metric tons of CO₂e emissions.

Recycling Program – Scope 3 Emissions Reduction

PGW's recycling program has been in place since 2008 and continues to be a consistent source of emissions reductions, diverting hundreds of tons of waste a year that would otherwise be landfilled or incinerated as trash. In addition to single-stream recycling, PGW separately recycles office paper, electronics, wood pallets, PET plastic and other materials. In 2020, PGW's corporate headquarters became a Zero Waste Partner with the City of Philadelphia, offering an opportunity to report the amount of waste diverted from landfills and offering solutions on how to improve zero waste practices in the future. In FY 2024, PGW diverted approximately 438 metric tons of CO₂e emissions from landfills, a significant increase from previous years.

Composting Program – Scope 3 Emissions Reduction

PGW's employee composting program at corporate headquarters continues to see great success. The pilot program kicked off in June 2022, with composting containers located in common eating areas. In FY 2024, PGW diverted 7,880 pounds of food waste from landfills and saved nearly 2 metric tons of CO₂e. Due to the success of the pilot, PGW's composting program will continue through FY 2025.

Table 1: Summary of FY 2024 Scope 1 and 3 Emissions Reductions

Program	Scope	Projected Incremental Emissions Savings (MT CO ₂ e)
Main Replacement Program	1	6,642
Electric Vehicle Pilot	1	6.8
Demand Side Management Programs	3	3,534
Recycling Program	3	438
Compost Program	3	1.7

Table 2: FY 2024 Annual Incremental Emissions Reductions Target

FY 2024 Total Scope 1, 2, and 3 Incremental Emissions Savings	10,622 MT CO ₂
FY 2024 Target for Scope 1, 2, and 3	10,000 MT CO ₂
% of Target Reached	106.2%

FY 2025 EMISSIONS REDUCTION PLAN

PGW will continue executing its current signature sustainability initiatives, while pursuing new opportunities to reduce its carbon footprint and positively impact the environment for all Philadelphians. Based on this portfolio of programs, PGW has set a goal for itself of achieving GHG emissions reductions of 10,000 metric tons of CO₂e in FY 2025 for Scopes 1, 2 and 3. A summary of the anticipated emissions reduction programs for FY 2025 is listed below. Note that this list of programs is subject to change.

Table 3: Summary of FY 2025 Projected Emissions Reduction Programs

Program
Main Replacement Program (Scope 1)
Natural Gas Actuator Upgrades (Scope 1)
Demand Side Management Programs (Scope 3)
Recycling Program (Scope 3)
Composting Program (Scope 3)
FY 2025 Annual Target - Scopes 1, 2, 3: 10,000 MT CO₂e

FY 2025 EMISSIONS REDUCTION PROGRAMS

Main Replacement Program – Scope 1 Emissions Reduction

PGW's ongoing accelerated Main Replacement Program will continue reducing the company's Scope 1 emissions. PGW is targeting the replacement of 31.5 miles of main in FY 2025. Since the \$40 million in funding that PGW has received from the PHMSA NGDISM program, PGW has received additional funding in 2024, bringing PGW's total NGDISM Grant Awards to \$125 million that cumulatively will replace 66 miles of cast iron pipelines, create 120 skilled jobs, and reduce methane emissions by 412 metric tons over the next 5 years. There are several dependencies that will determine the timing of when PGW would be able to leverage the funding. However, even excluding the PHMSA grant, PGW expects another successful year of main replacement, eliminating at-risk infrastructure, reducing its carbon footprint, and ensuring safe, reliable, and affordable energy for PGW's customers.

Natural Gas Actuator Upgrades – Scope 1 Emissions Reduction

In accordance with PGW's Methane Reduction Plan, PGW continues to upgrade its natural gas actuators to low-bleed alternatives that release significantly fewer emissions into the atmosphere. In FY 2025, PGW plans to build on the previous pilot project by installing new actuator replacements at the Richmond Plant and O34 Metering and Regulating Station. All the actuators installed to-date have been operated with natural gas; however, in FY 2025, for the first time, PGW will also install an electrohydraulic actuator that is a no-bleed, zero emission alternative. This should translate into even greater emissions savings.

Demand Side Management Program – Scope 3 Emissions Reduction

PGW has been approved by the Pennsylvania Public Utility Commission (PUC) to offer its DSM program, EnergySense, through the end of FY 2027. In FY 2025, EnergySense will offer customers the ability to save energy and money through seven individual programs (including two new programs): Residential Equipment Rebates, Commercial Equipment Rebates, Residential New Construction, Smart Thermostat Marketplace, the Low-Income Smart Thermostat program, EnergySense Kits (ESK) and Small Business Energy Check (SBEC). These programs all offer incentives to help motivate customers to pursue energy efficient equipment when making purchasing decisions.

PGW's LIURP will continue to provide income-eligible customers with whole-home weatherization services through at least 2027. Home Comfort targets low-income customers in single-family homes, while the LIME program will provide services to customers in buildings with three or more dwelling units. All of PGW's energy efficiency programs aim to help customers reduce their Scope 3 GHG emissions by lowering their gas usage via energy efficient equipment, appliances, and other energy-savings upgrades.

Recycling Program – Scope 3 Emissions Reduction

PGW will continue its recycling program in FY 2025 and pursue opportunities to increase program performance through employee awareness, communications, and training. In the past year, PGW has seen the benefits of these efforts with increased recycling rates across the organization, so PGW will continue to support and strengthen its recycling program to lower Scope 3 emissions.

Composting Program – Scope 3 Emissions Reduction

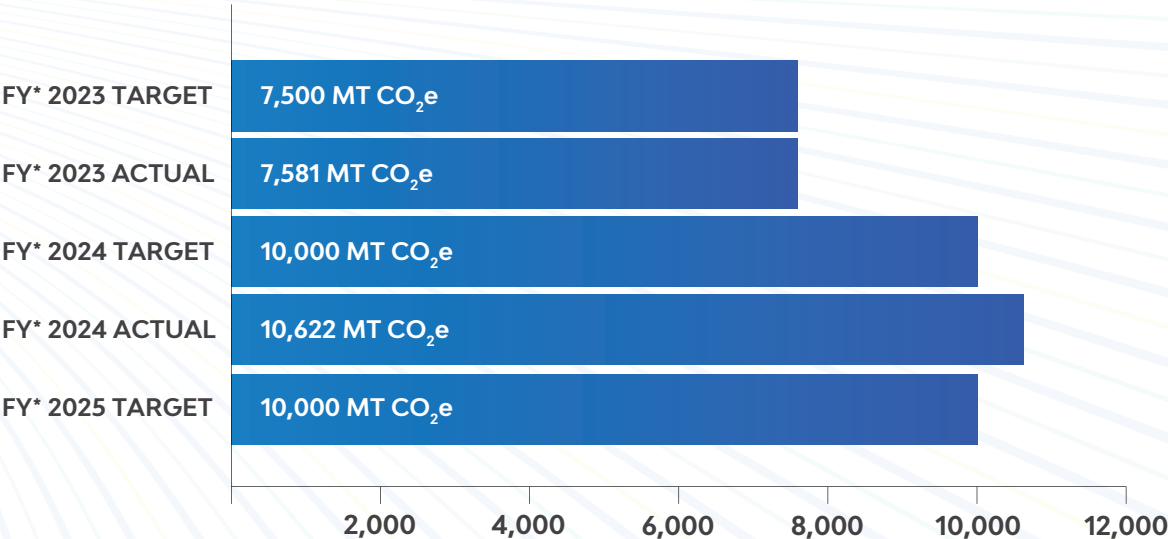
After a successful pilot year in FY 2023, PGW is continuing to develop and implement employee engagement initiatives to maintain and hopefully grow the composting program.

Going Forward

PGW is taking steps to reduce its environmental impact, and as described above, is demonstrating commitment to reducing its Scope 1, 2, and 3 emissions by 10,000 metric tons of CO₂e in FY 2025. PGW will use the strategies outlined above to continue to drive emissions reductions and will seek new opportunities for further, longer-term emissions reductions. As mentioned above, this FY 2025 plan is a snapshot in time, which builds on historical progress to-date, and will be continually refined and enhanced going forward. PGW’s immediate next steps will be developing its Low Carbon Pathways to strategically lower PGW’s carbon footprint in the near and long-term. PGW invites its customers and stakeholders to join the process.

Please visit pgworks.com/sustainability to learn more and to share your feedback.

FIGURE 4: PGW INCREMENTAL ANNUAL EMISSIONS REDUCTION TARGETS & ACTUALS MT CO₂e



*Financial Year (FY) indicates data collected from September 1– August 31 of its respective year.

APPENDICES/ADDITIONAL INFORMATION

What are Scopes 1, 2, and 3?

PGW is responsible for three different types of GHG emissions:

- Scope 1: emissions generated by sources under PGW's direct control, such as combustion of heaters and vehicles.
- Scope 2: indirect emissions generated from the purchase of electricity; and
- Scope 3: indirect emissions upstream and downstream of operations that are outside of PGW's control, such as emissions from purchased goods and services and use of sold products.