

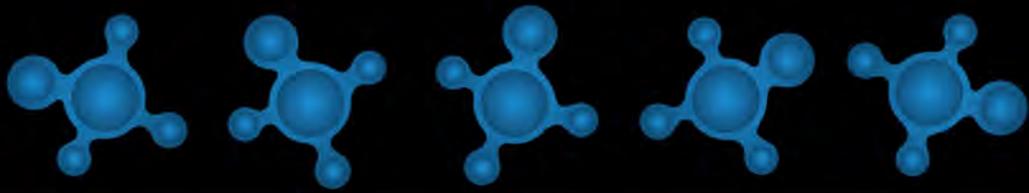


22 PHILADELPHIA
INVESTORS
CONFERENCE





**WE ARE
PGW**



OUR MISSION

Enhance the quality of life for all by delivering safe, reliable and affordable energy in an environmentally responsible way.

**SAFETY
FIRST**

**DO THE
RIGHT
THING**

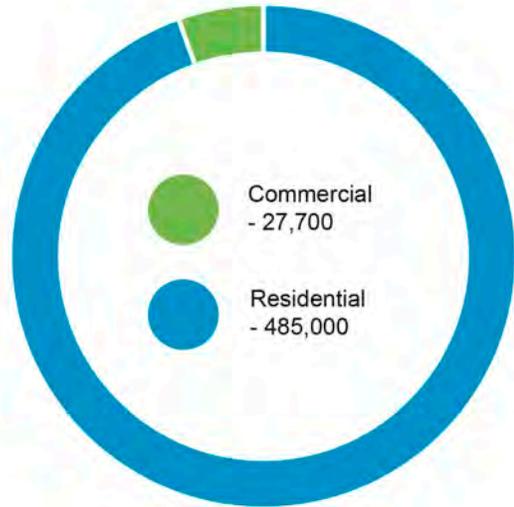
**WE DO
BETTER
TOGETHER**

**GO ABOVE
AND
BEYOND**

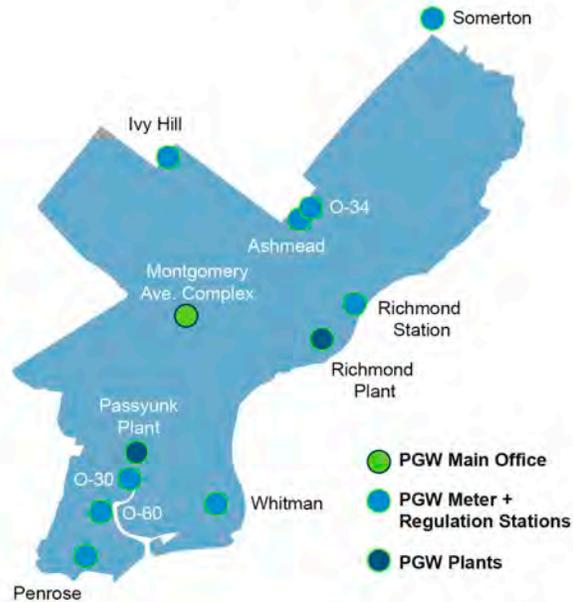
**LEAVE IT
BETTER THAN
YOU FOUND IT**



Customer Breakdown



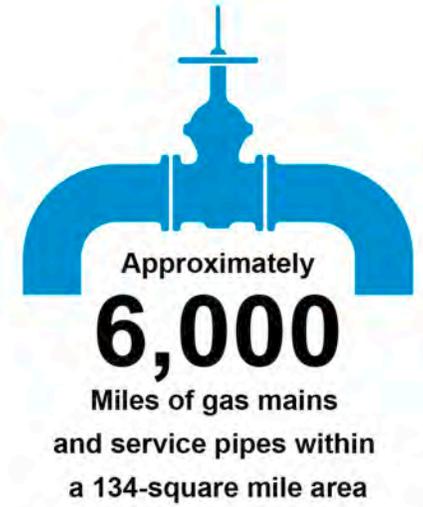
Service Map

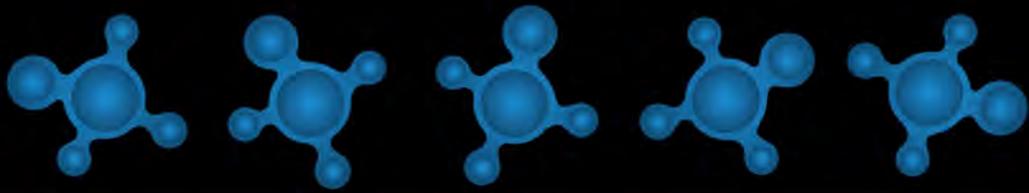


Employee Breakdown



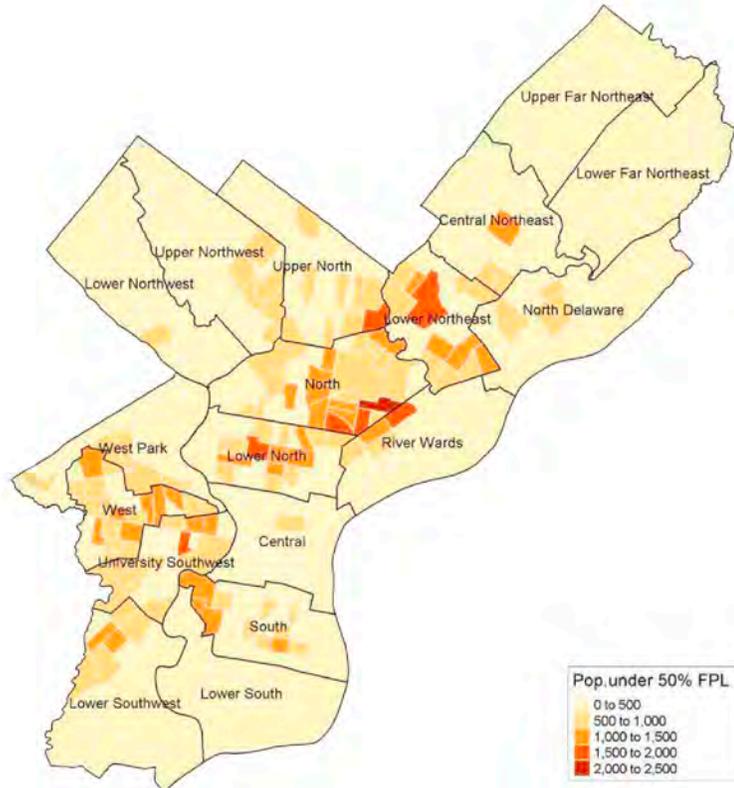
Gas Distribution





CUSTOMER ASSISTANCE

POVERTY IN PHILADELPHIA



Data Source:
US Census (2019 ACS)

FY22 UNIVERSAL SERVICE SURCHARGE PROGRAM & COSTS

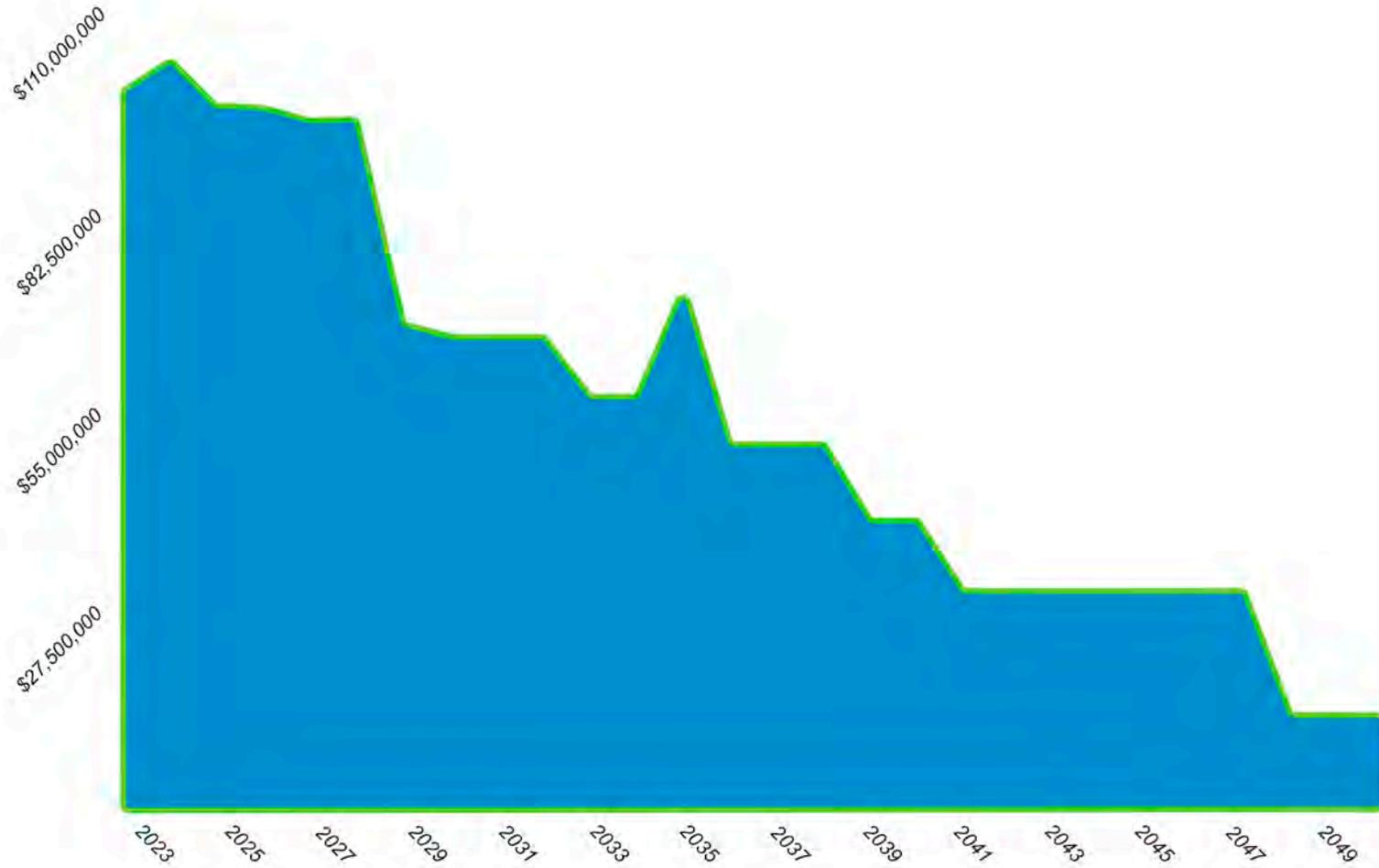
Low-income Usage Reduction	\$8,516,975
CAP Discount	\$59,420,647
CAP Forgiveness	\$13,827,188
Senior Citizen Discount	\$2,437,707
TOTAL	\$84,202,517

The image shows an industrial facility, possibly a refinery or chemical plant, with large cylindrical storage tanks and a complex network of pipes and scaffolding. The scene is overlaid with a blue tint. A central text box with a green border contains the text "WE ARE STRONG" in white, bold, sans-serif font.

**WE ARE
STRONG**



Annual Debt Service Payments



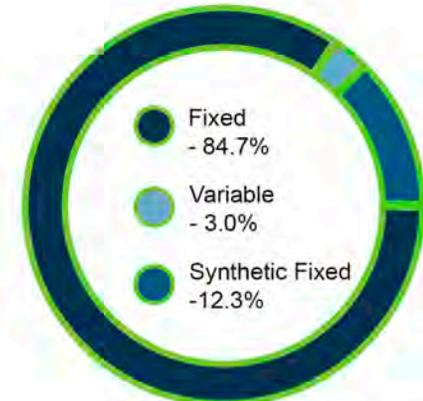
Note: Reflects only existing debt service with no projected future issuances.

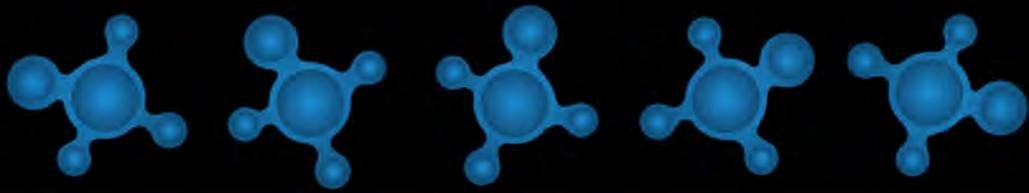
Outstanding Debt as of 8/31/2022

(\$ mm)	1998
Type	<u>Ordinance</u>
Fixed	\$844.2
Variable	30.0
Synthetic Fixed ¹	122.8
Total	\$997.0

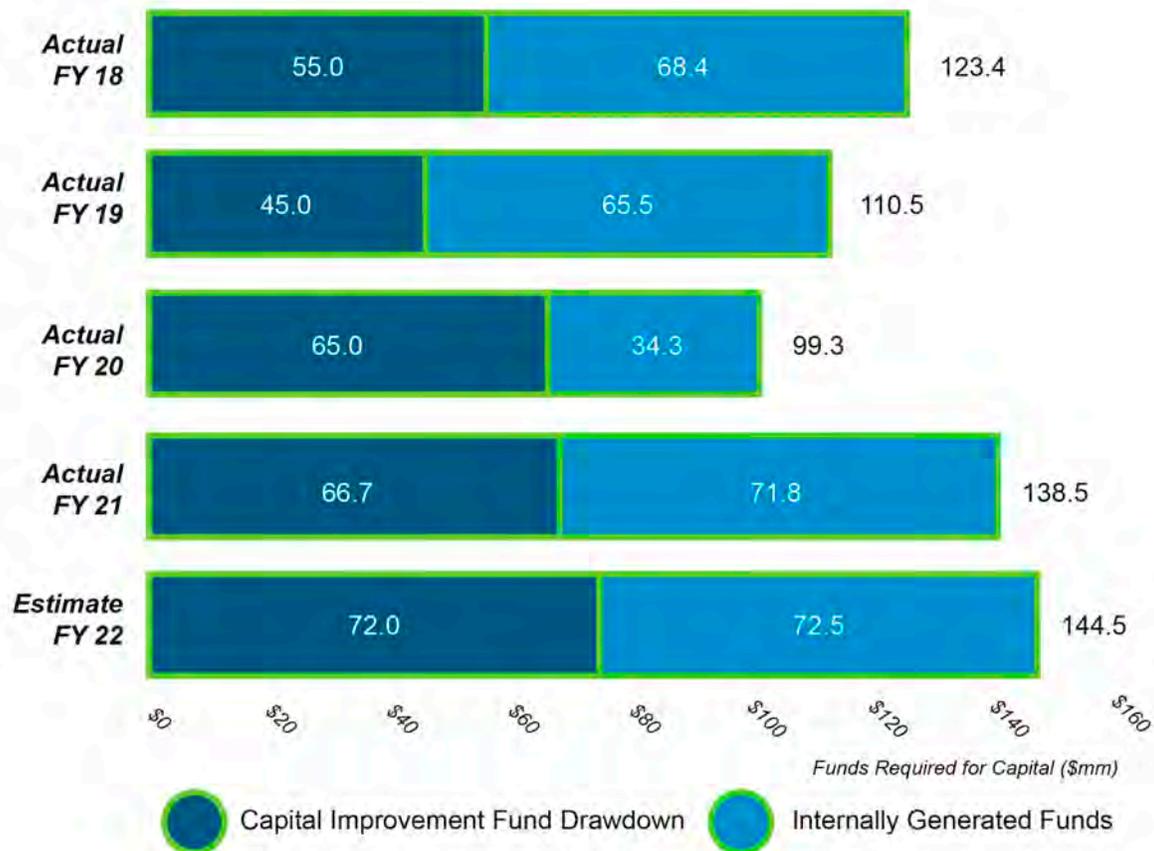
¹ Fixed payer swap layered on Eighth Series B-E, variable rate debt

Debt Mix

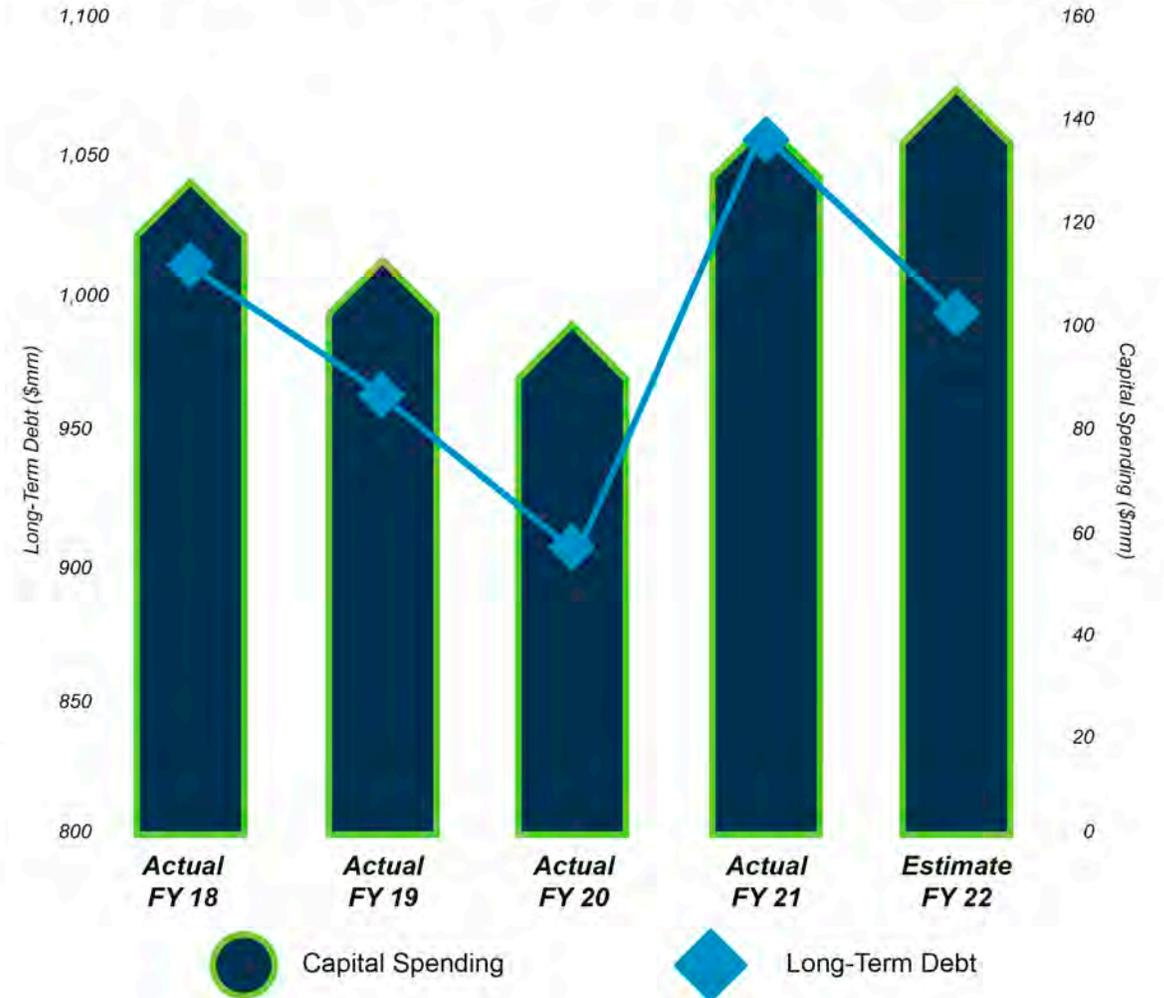


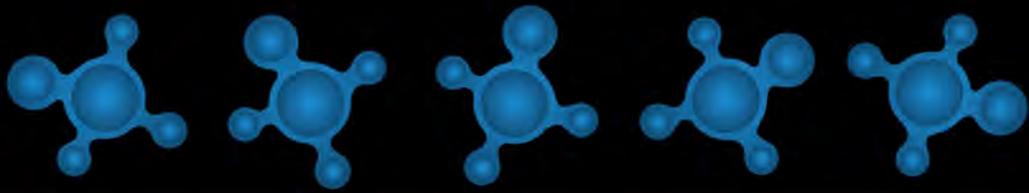


FY 18 - FY 22 Funds Required for Capital Expenditures



FY 18 - FY 22 Capital Spending and Long-Term Debt





Bond Ratings

PGW's sound fiscal management and credit supportive regulatory environment is expected to continue to yield stable financial results

MOODY'S **A3**

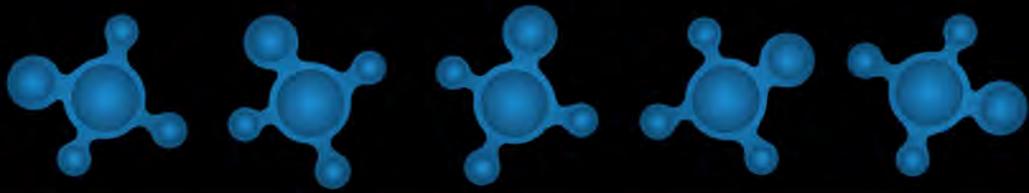
S&P Global **A**

Fitch Ratings **A-**

Rate Case Results

Pennsylvania Public Utility Commission (PUC) regulates the rates of certain PA utilities

Date of Request	Purpose	Date Relief Granted	Amount of Relief Granted	Granted
Feb. 2020	Rate Relief	11/19/2020	\$35.0 mm over 2-year period	✓
Feb. 2017	Rate Relief	11/08/2017	\$42.0 mm	✓
Feb. 2016	Recover under-collection	07/06/2016 effective 10/01/2016	\$11.4 mm over 2-year period	✓
Apr. 2015	DSM Phase I; Extend DSM Phase I until order is rendered on Phase II	05/07/2015	\$10.7 mm	✓
Feb. 2015	Continued OPEB Funding	07/08/2015	\$16.0 mm	✓



Strong Debt Service Coverage

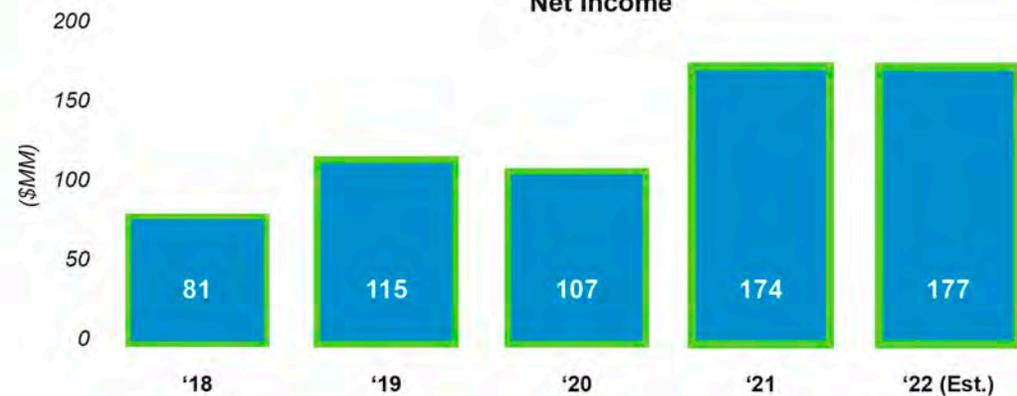
FY Ended Aug. 31 (\$000s)	'18	'19	'20	'21	'22 (Est.)
Total Operating Revenues	647,499	684,728	584,937	646,747	813,327
Other Income (Loss)	4,634	10,787	12,303	1,295	(1,006)
Total Funds Provided	653,486	696,811	599,100	650,455	812,321
Total Operating Expenses	447,267	467,577	387,730	387,968	534,808
Funds Available for Debt Service	206,219	229,234	211,370	262,487	277,513
Debt Service Requirements					
Senior 1998 Ordinance Bonds	87,690	98,417	96,182	97,383	98,430
Total Debt Service Requirements	87,690	98,417	96,182	97,383	98,430
Total Debt Service Coverage	2.35x	2.33x	2.20x	2.70x	2.82x

Source: PGW ACFR

Key Metrics

FY Ended Aug. 31	'18	'19	'20	'21	'22 (Est.)
Net Billed Sales Volume with Firm Transportation (MMdf)	50	49	46	47	46
Operating Margins (\$mm)	186	220	228	275	283
Year-End Cash Balance (\$mm)	131	124	172	158	112
CapEx Funding Ratio	55.4%	59.3%	34.6%	51.8%	52.5%
24-Month Collection Rate	95.4%	96.3%	96.6%	96.1%	96.8%

Net Income





Weather Normalization Adjustment (WNA)

The WNA allows PGW to maintain relatively stable margins despite variations in volume caused by weather

	FY '18	FY '19	FY '20	FY '21	FY '22 (Est.)
Total Operating Revenues (\$mm)	647.50	684.73	584.94	646.75	813.33
WNA (\$mm)	(3.81)	1.60	10.79	11.76	23.16
Actual Heating Degree Days	4,405	4,362	4,144	4,108	3,853
Normal Heating Degree Days	4,385	4,353	4,374	4,348	4,336

1. Experienced degree day data is provided by the National Weather Service and measured at the Philadelphia International Airport.
2. The purpose of the WNA Clause is to neutralize the impact of weather on the Company's revenues. This allows the Company to achieve the recovery of appropriate costs as authorized by the PUC. The WNA Clause results in neither a rate increase nor a rate decrease but acts as a billing adjustment. The main benefits of the WNA Clause are the stabilization of cash flow and the reduction of the need for short-term borrowing from year to year. The WNA Clause adjustment is applied to customer invoices rendered during the period of October 1 through May 31 of each year for each billing cycle.



SAFE

RELIABLE

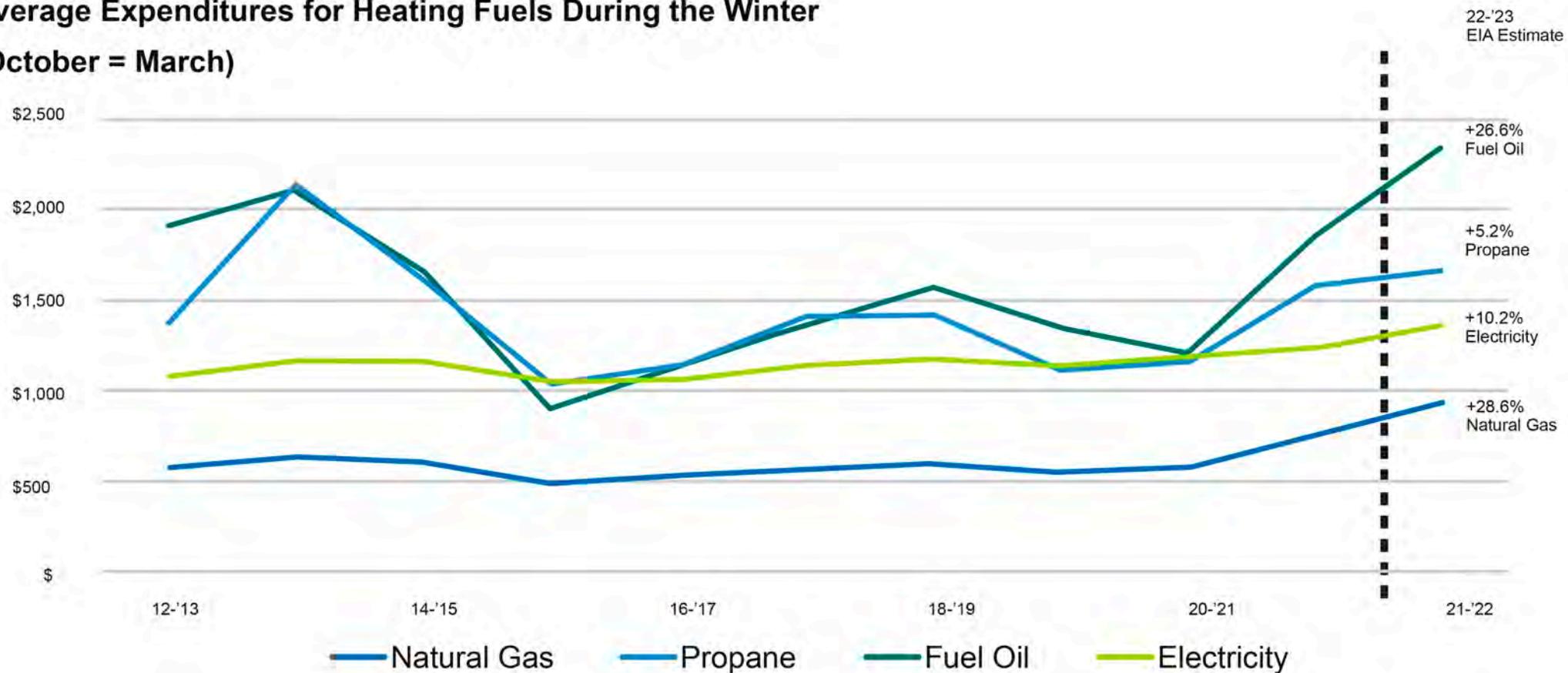
AFFORDABLE

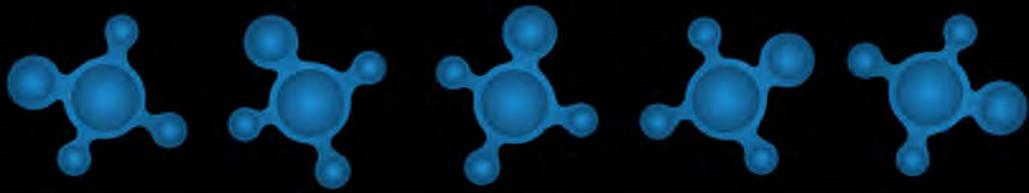
EFFICIENT



Natural gas remains the most affordable home heating fuel

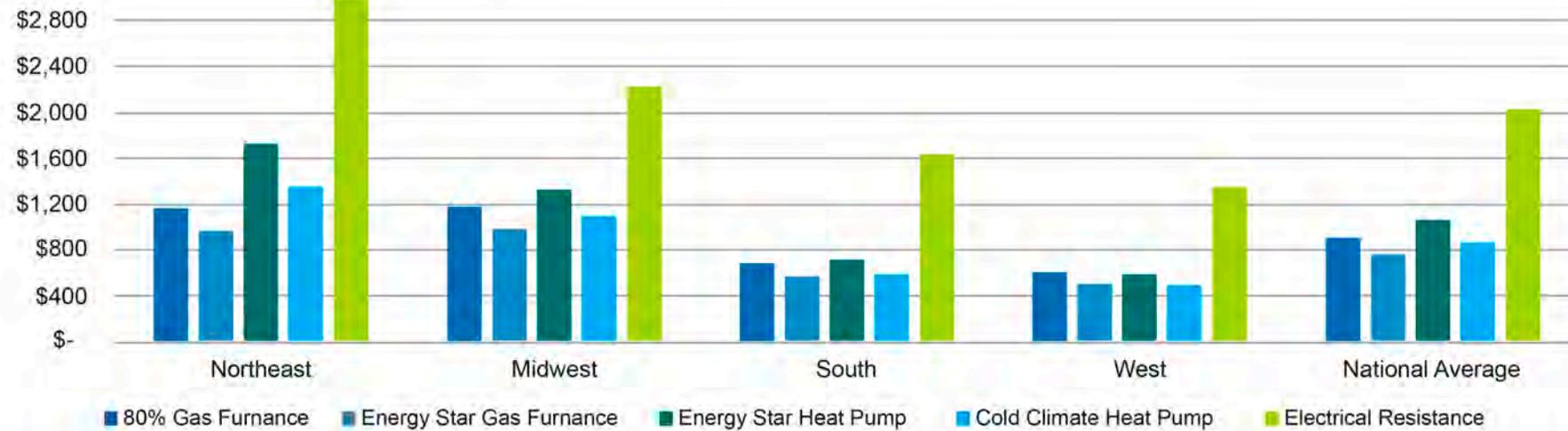
Average Expenditures for Heating Fuels During the Winter (October = March)





2022-2023 Winter Heating Cost by End-Use Equipment Type

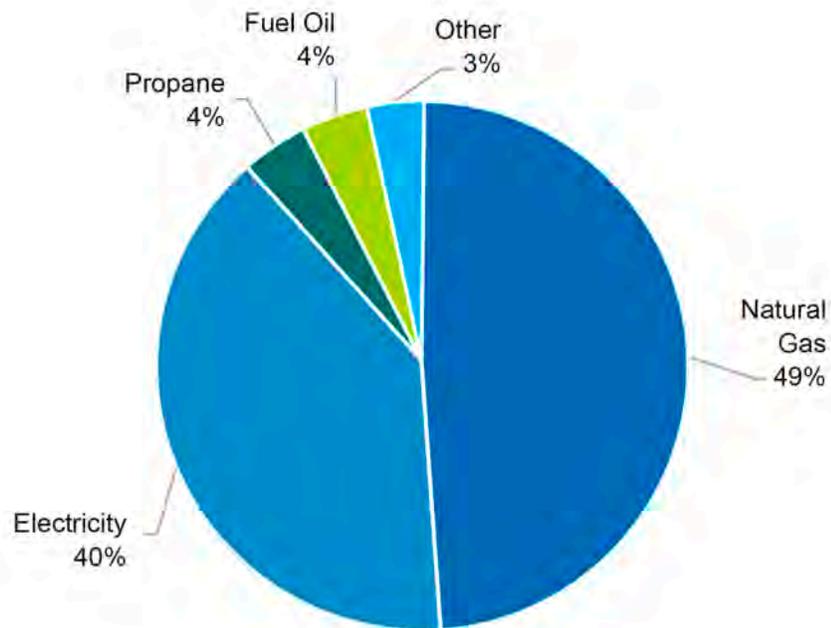
Winter Heating Bill, October-March



Source: American Gas Association Model Based on 2017 and 2018 Winter Temperature Data

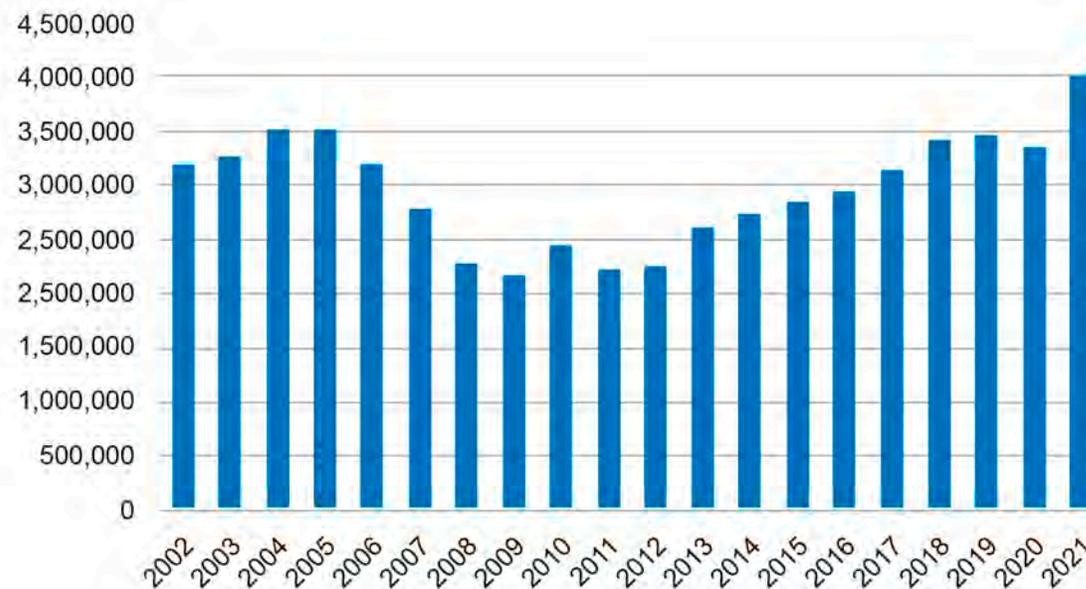


Heating Fuels Consumed By US

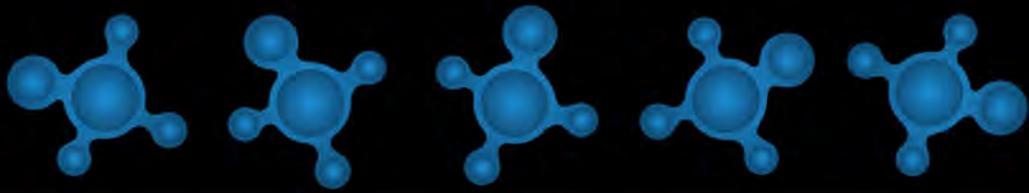


Sources: US Census, American Community Survey 2021, Heating Fuel by Occupied Homes, EIA Residential Energy Consumption

Gas Warm Air Furnaces



Sources: Monthly Shipments, Air-Conditioning, Heating, & Refrigeration institute 2022

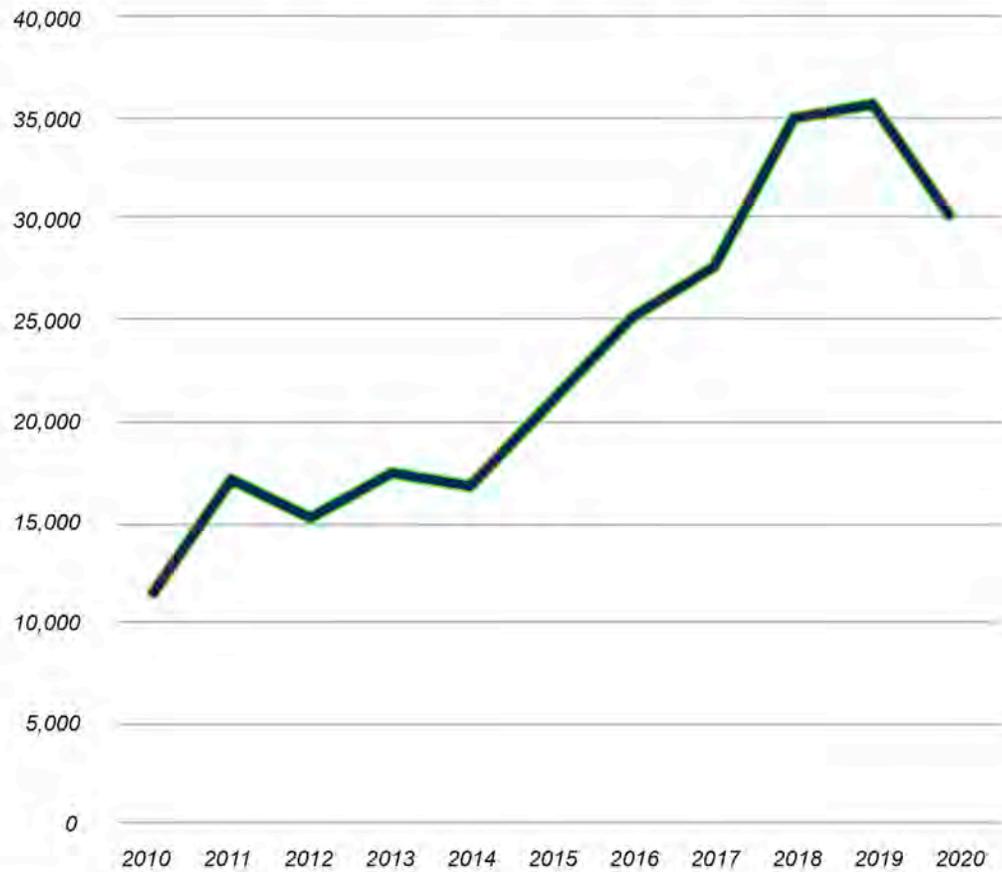


- Nearly **187 million Americans** use natural gas in their homes, and more than **5.5 million businesses** rely on natural gas daily
- The U.S. has **2.6 million miles of pipeline** infrastructure network
- **1,900 natural gas power stations** deliver 40 percent of the total power production in the U.S.
- Natural gas is **more affordable** than other energy sources
- Over the last 15 years, natural gas is responsible for lowering greenhouse gas emissions – more than **47% in power generation sector**

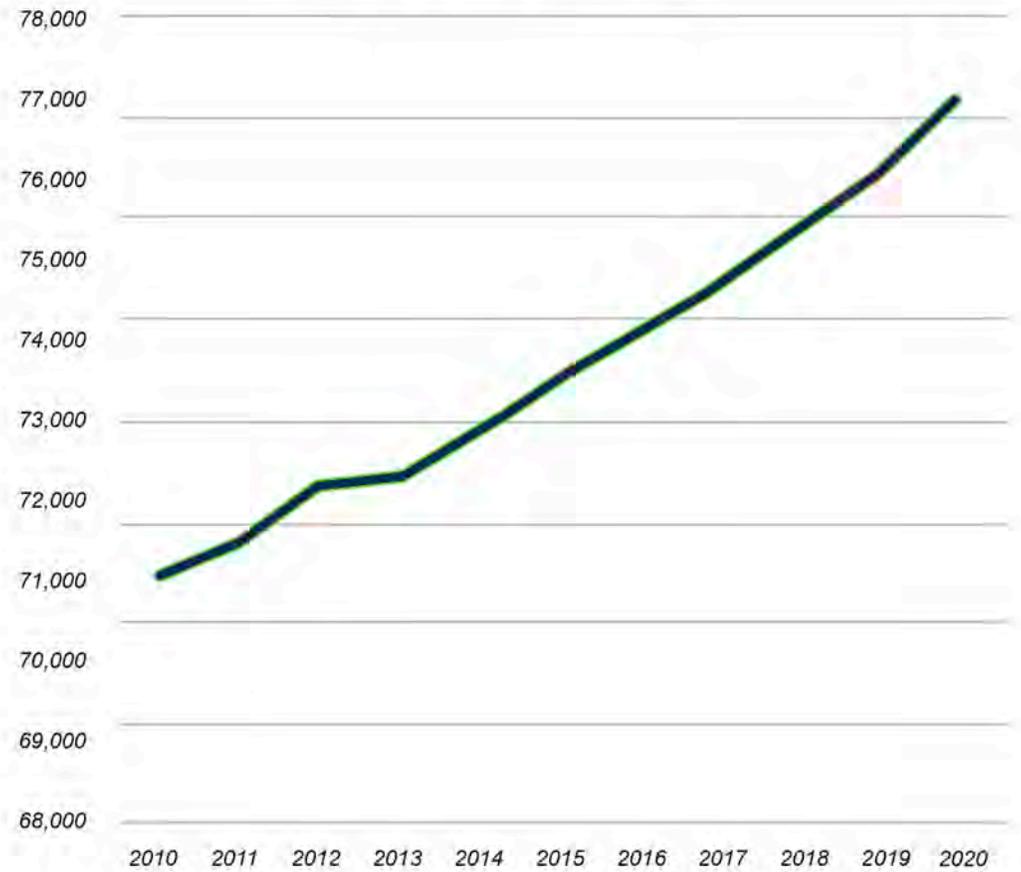


Growth of Natural Gas in United States

Construction Expenditures (\$Millions)



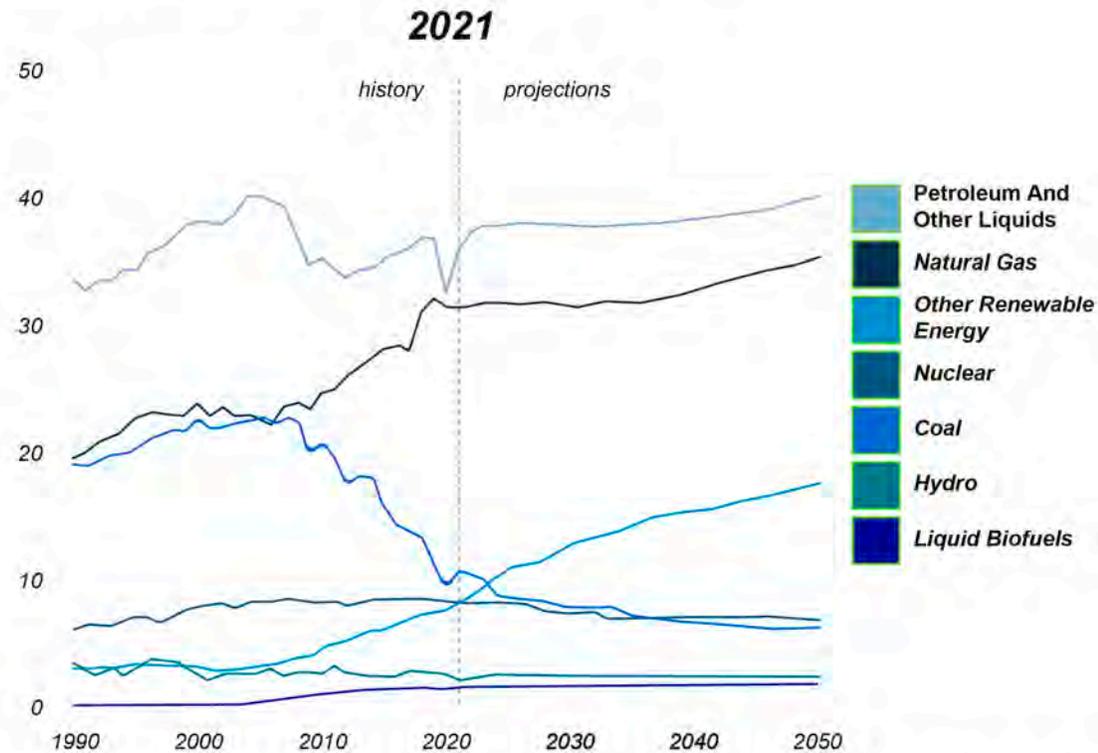
Customers (Thousands)



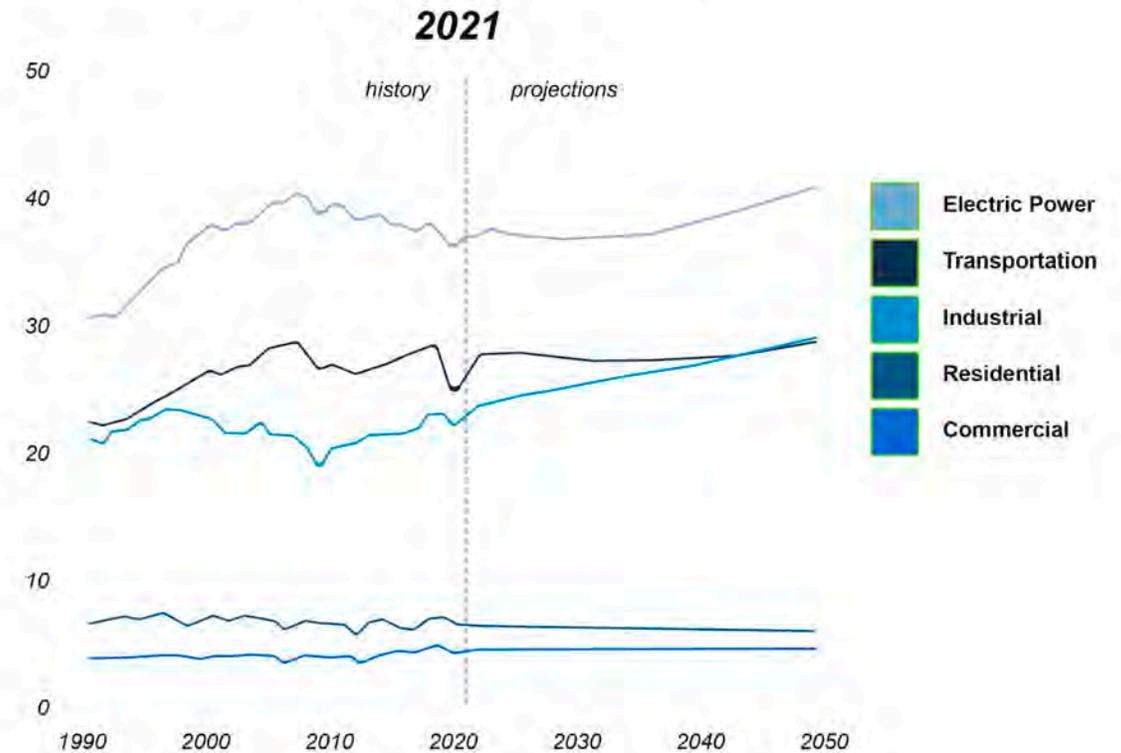


Petroleum and Natural Gas Are Expected to Remain the Most Consumed Sources of Energy in the U.S. Through 2050

Energy consumption by **FUEL** AEO2022 Reference case
quadrillion British thermal units



Energy consumption by **SECTOR** AEO2022 Reference case
quadrillion British thermal units



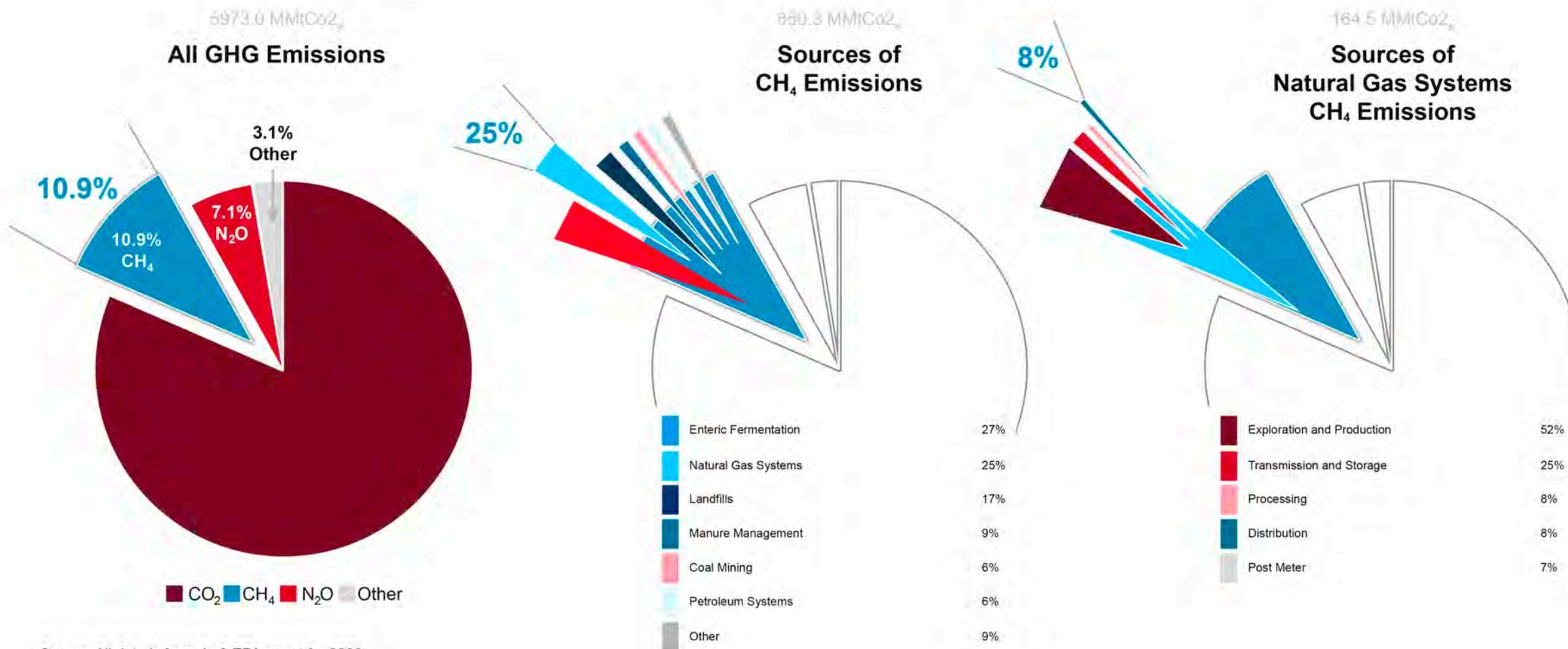
Note: Biofuels are shown separately and included in petroleum and other liquids

Source: "Annual Energy Outlook, Energy Production and Consumption, 2022" United States Energy Information Administration.

"Projections regarding the future energy consumption are based on various assumptions and estimates and are subject to various uncertainties. Actual results may vary from the projections and such variation may be material."



Gas Distribution Companies are Extremely Small Contributors of CH₄



Source: All data is from draft EPA report for 2020



The U.S. Emissions Reduction Model: An Untold Success Story

U.S. Emissions Decreased by ~1 Billion Metric Tons of CO₂ in 15 Years, Led by Natural Gas Replacing Coal

- The **U.S. leads all countries (and the entire EU) in emissions reduction** since 2005
- The leading contributor to reducing emissions was coal-to-gas switching, accounting for 61% of all emissions reduction within the U.S.
- This effort came at zero cost to U.S. taxpayers, and was the single largest emissions reduction effort in the world

From 2005-2020

Natural Gas Replaced >200 Coal Plants

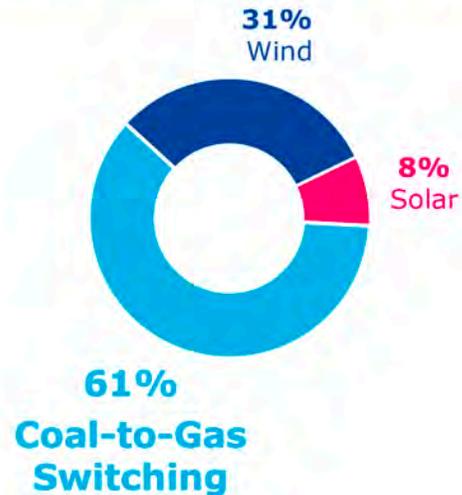


Natural Gas from Gas Shales



Retired Coal Plant due to natural gas switching

U.S. CO₂ Emissions Reduction by Solution¹



2005 – 2019 CO₂ Reduction²

(Million Metric Tons of CO₂)

Country	CO ₂ Reduction
United States	-959
United Kingdom	-188
Italy	-147
Germany	-144
Japan	-122
Ukraine	-120
Spain	-104
France	-77
Venezuela	-51
Greece	-39

¹ Data obtained from EIA's U.S. Energy-Related Carbon Dioxide Emissions, 2019 report, splitting wind and solar proportionally to their increased in power generation from 2005 to 2019 per EIA's renewable generation data; ² Data obtained from IEA. Source: IEA World Energy Outlook 2021; EIA emissions data; EIA form 860 retired plant data; EQT analysis.

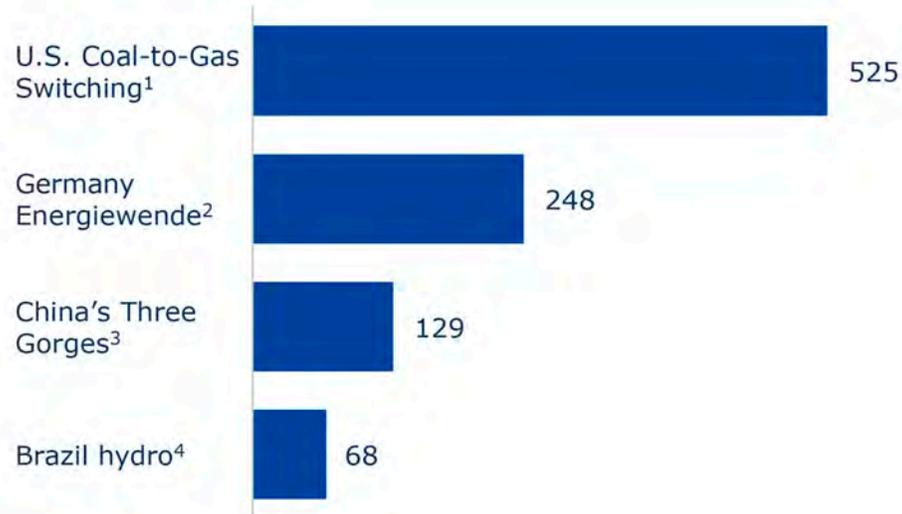


Putting this Success into Perspective

U.S. Coal-to-Gas Switching was the Largest Green Megaproject on the Planet

Impact of Green Mega Projects

(Annual Million Metric Tons CO₂ Reduced 2005-2019)



U.S. Coal-to-Gas Switching

- Funded by natural gas industry
- Replaced >200 coal plants since 2005



Germany Energiewende

- Government-funded: ~\$80 Bn⁵
- ~30,000 windmills + 2 million solar arrays installed⁶
- Electricity costs up 3x since 2000⁷



China's Three Gorges

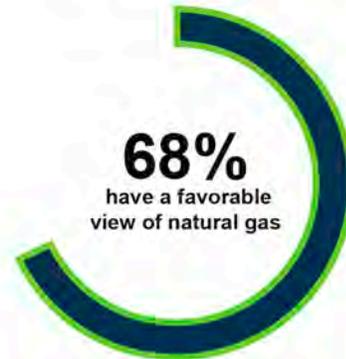
- Government-funded: \$37 Bn⁸
- Largest power plant in the world

1. Total CO₂ emissions variation between 2005 and 2019 according to EIA report; 2. Germany's CO₂ emissions reduction from 2005 to 2020 (from 997 to 749 MtCO₂) based on Federal Ministry For Economic Affairs And Climate Action data; 3. China's Three Gorges Dam 110 TWh generation in 2020 assumed to replace coal which has a carbon intensity factor of 1.15 MtCO₂/TWh; 4. Brazil hydro generation growth between 2005 and 2020 was 60 TWh assumed to replace coal which has a carbon intensity factor of 1.15 MtCO₂/TWh; 5. Estimated Germany's climate financing from 2011 through 2021; 6. Per Germany's wind Energy association and Clean Energy Wire; 7. Price index x3 in 2019 compared to 2000 based on BDEW data; 8. China's Three Gorges Dam, including resettling the 1.3 million people it displaced, cost 254.2 billion yuan (\$37.23 billion), according to the Xinhua news agency.

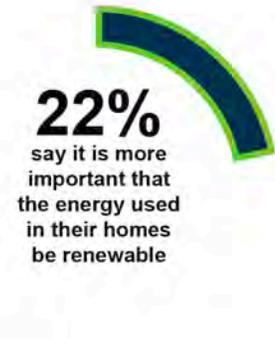
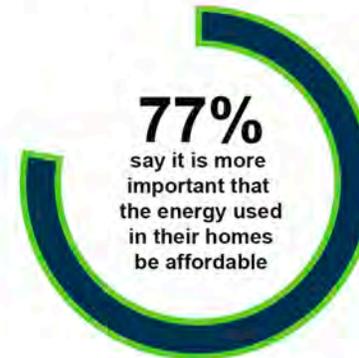
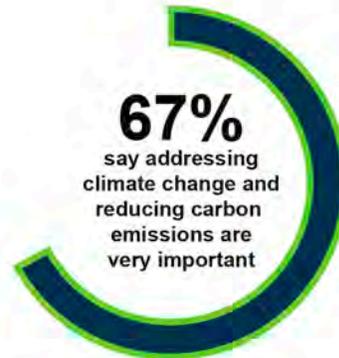
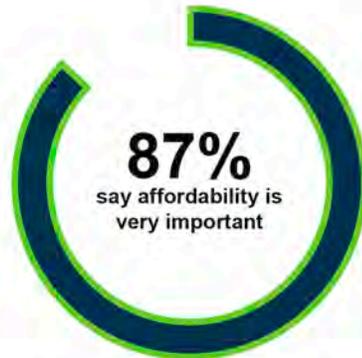


We Surveyed Philadelphians: Philadelphia residents are favorable of PGW

Natural gas is viewed favorably, and Philadelphians support continued investment in natural gas infrastructure.

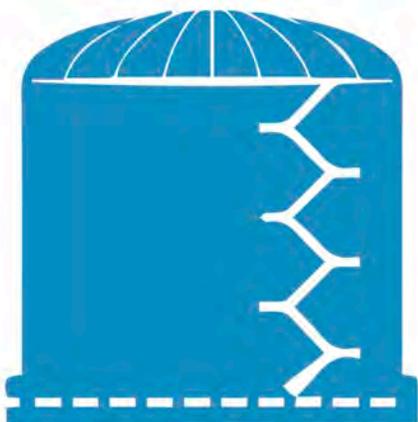


Affordability and reliability of service are clear priorities for Philadelphians





LNG



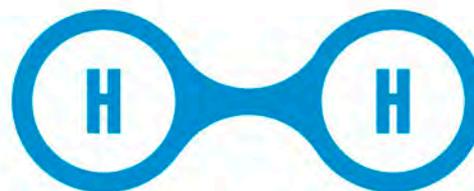
CHP



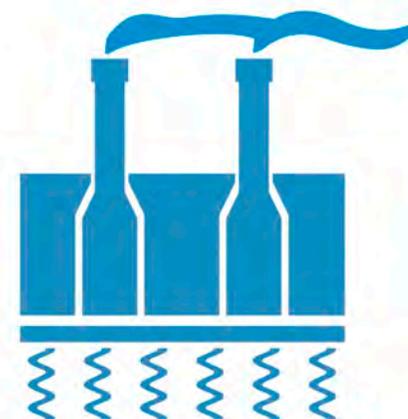
RNG

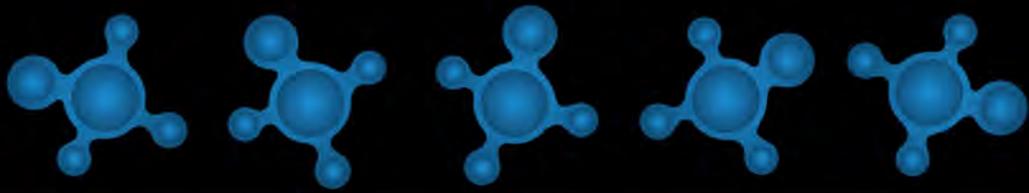


Hydrogen

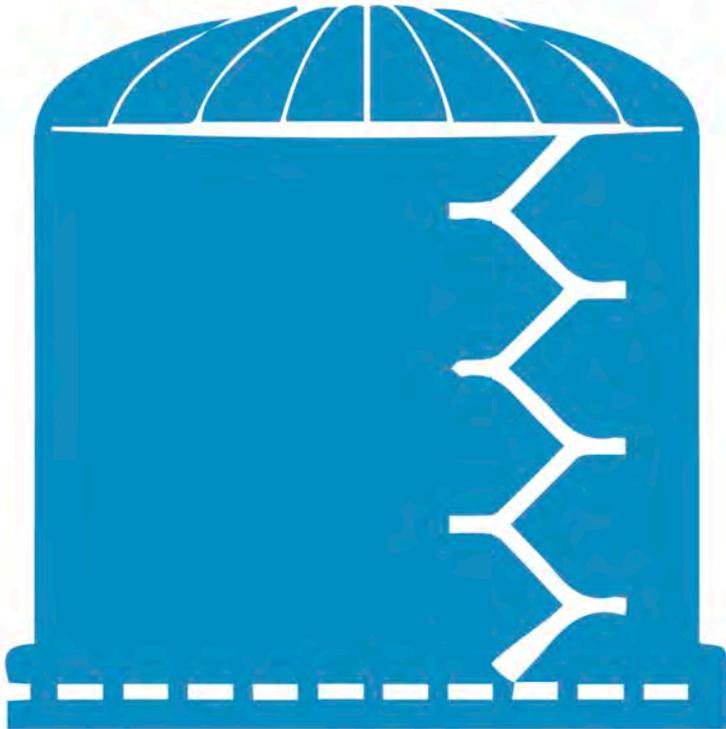


Geothermal

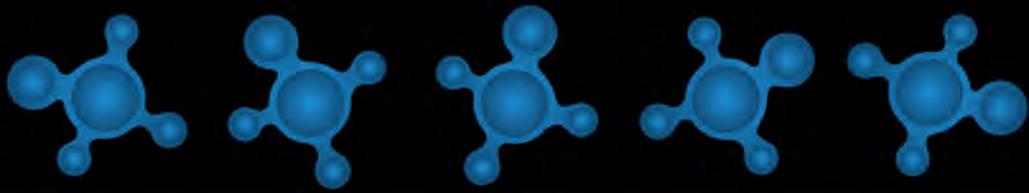




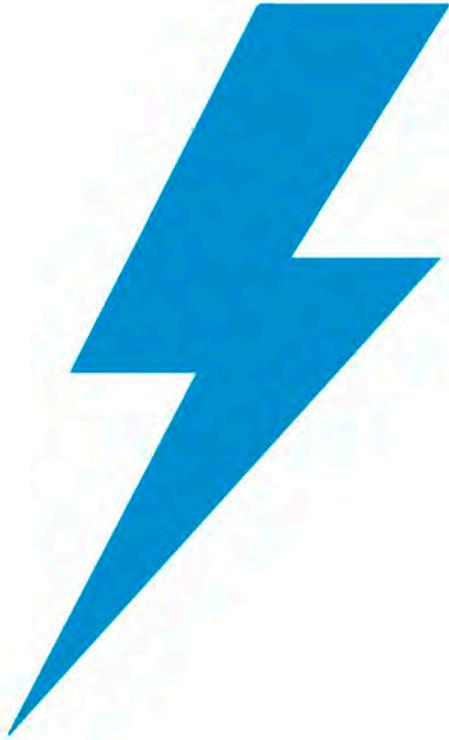
LNG (Liquefied Natural Gas)



- \$5.2 million in LNG Displacement Deals (FY22).
- 4.25 BCF of LNG Storage
- 16,000 MCF/day Liquefaction capacity



CHP (Combined Heat & Power)



- 25 sites utilizing CHP or onsite generation
- \approx 1,000,000 Dth per year
- \approx \$1,000,000 annual revenue
- 4-8 percent growth year over year (1-2 new projects per year)



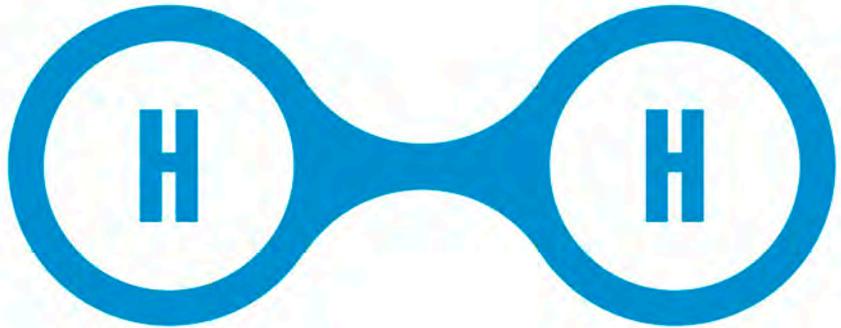
RNG (Renewable Natural Gas)



- City of Philadelphia controls a steady supply of Biomass for RNG use
- RNG (or RNG credits/RINs) are selling at a \$20-\$26/mmbtu* premium to conventional natural gas *(May 2022)



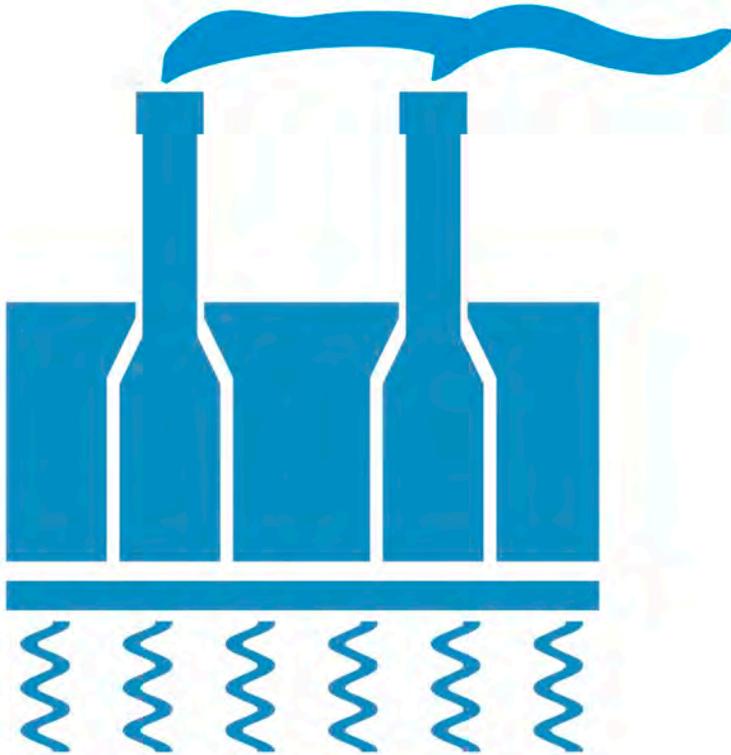
Hydrogen



- Congress appropriated \$8 billion total in Bipartisan Infrastructure Law
- DOE is targeting selection of six to ten regional H2 Hubs
- Mid-Atlantic Clean Hydrogen Hub (MACH2)
- Anticipating approx. \$1 billion regional proposal



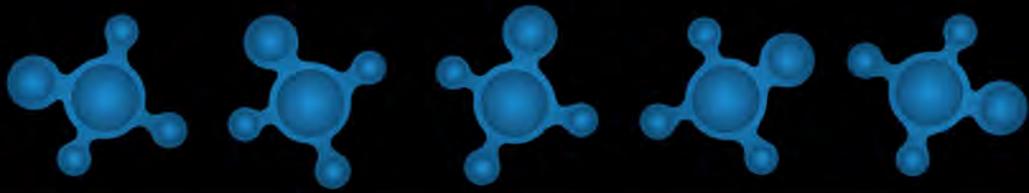
Geothermal



- Current Phase: Pilot Research and Development
- \$500K PGW Feasibility Study slated for FY23



THANK YOU



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