



TOWN OF DRYDEN – BORGER STATION OPERATIONS

April 20, 2023

2022 Review



WHO WE ARE



CORE PRINCIPLES



**CUSTOMER
SERVICE**



**EMPLOYEE
COMMITMENT**



**ENVIRONMENTAL
RESPECT**



**FINANCIAL
STRENGTH**



**OPERATIONAL
EXCELLENCE**



**REGULATORY
INTEGRITY**

Berkshire Hathaway Energy



 **PACIFICORP**

 **PACIFIC POWER**

 **ROCKY MOUNTAIN POWER**

 **BHE TRANSMISSION**

 **ALTALINK**

 **BHE U.S. TRANSMISSION**

 **BHE CANADA**

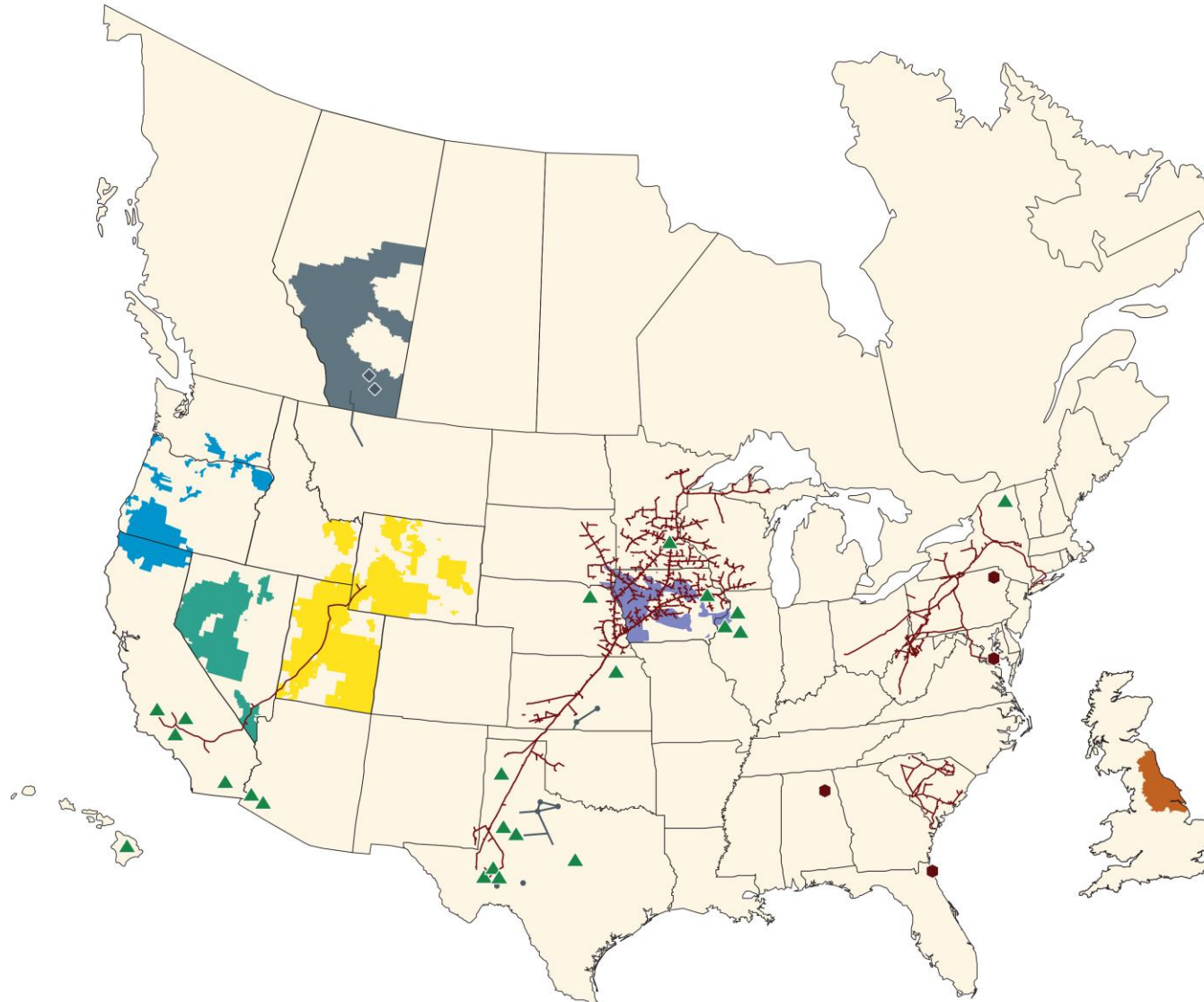
 **MIDAMERICAN ENERGY COMPANY**

 **NV Energy**

 **NORTHERN POWERGRID**

 **BHE PIPELINE GROUP**

 **BHE RENEWABLES**



- 12 million customers and end-users
- Top-rated service provider within the industry



- OSHA Recordable Incident Rate of 0.38



- \$569 million investment in EV charging infrastructure

BHE Renewables in West Virginia



- Construction of a titanium melt facility for the aerospace industry
- First of its kind solar powered microgrid with onsite battery factory



- \$133.8 billion in total assets
- Exceptional cyber and physical protection



- 2022 net income > \$5.2 billion
- Operating cash flows > \$9.4 billion

Eastern Gas Transmission & Storage

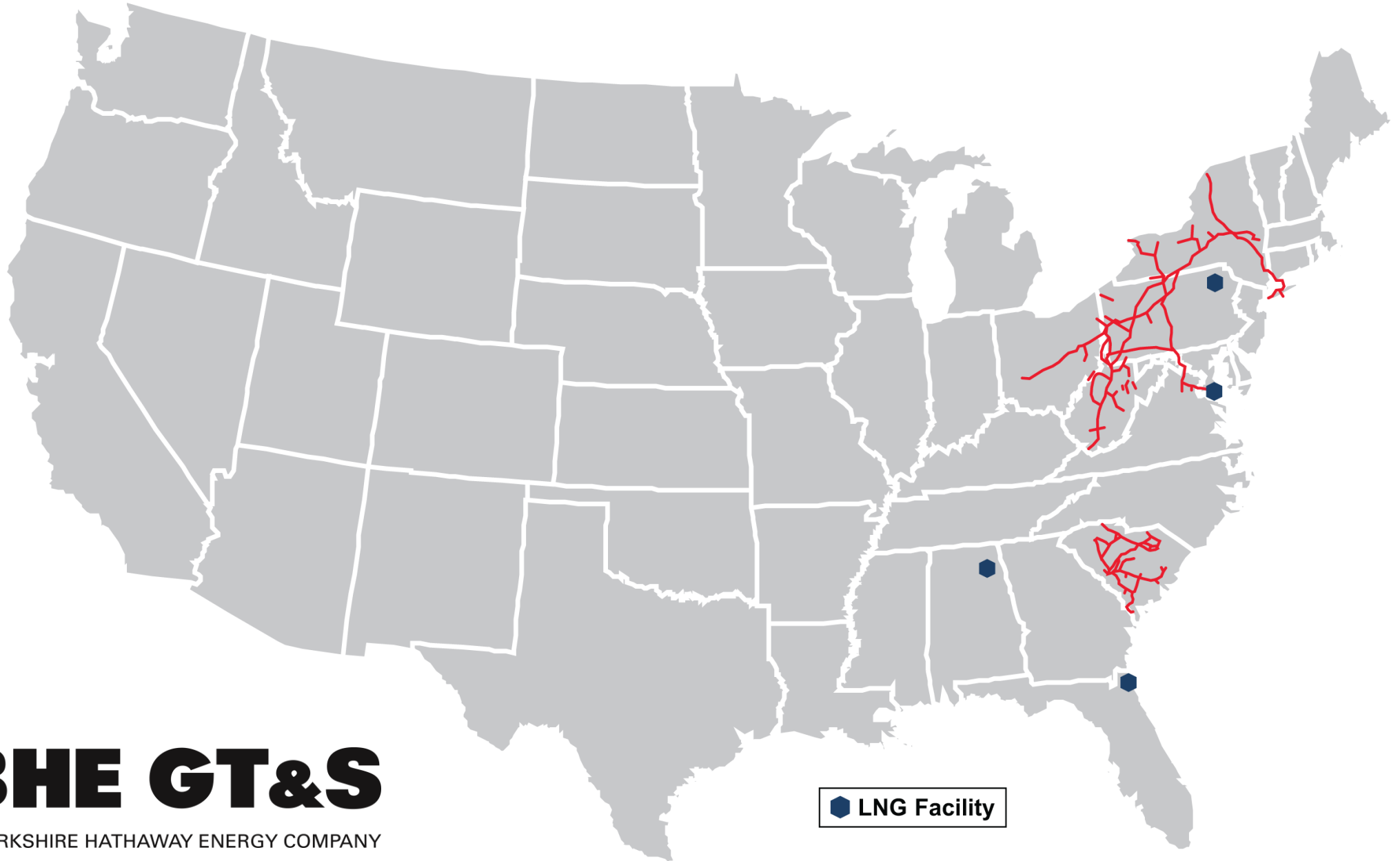
Who We Are

BHE GT&S, through its local operating company Eastern Gas Transmission and Storage (EGTS), provides gas transportation and storage services with one of the largest underground natural gas storage systems in the United States with 756 bcf of storage capacity.

Headquartered in Bridgeport, West Virginia, this multi-state pipeline system links to other major pipelines and to markets in the Midwest, Mid-Atlantic and Northeast regions.

We safely maintain nearly 3,600 miles of pipeline in six states: Ohio, West Virginia, Pennsylvania, New York, Maryland and Virginia. We reliably supply natural gas for large customers, such as major utilities and power plants, and to local distribution companies to heat homes, hospitals, nursing homes, & run small businesses.





STATION UPGRADES



Borger Replacement Project

Borger 2/3 Replacement Project – In Service February 2022



**OPERATIONAL
EXCELLENCE**

- ✓ Replace two (2) existing turbines with more efficient new units that will reduce air emissions.
- ✓ Install an oxidation catalyst on an existing turbine to further reduce air emissions.
- ✓ Install three (3) new microturbines.
- ✓ Replace blowdown silencers/vents to allow for capped emergency shutdowns to further reduce air emissions.
- ✓ Replace an aging boiler system and install other minor station piping and updates

EMISSIONS DATA

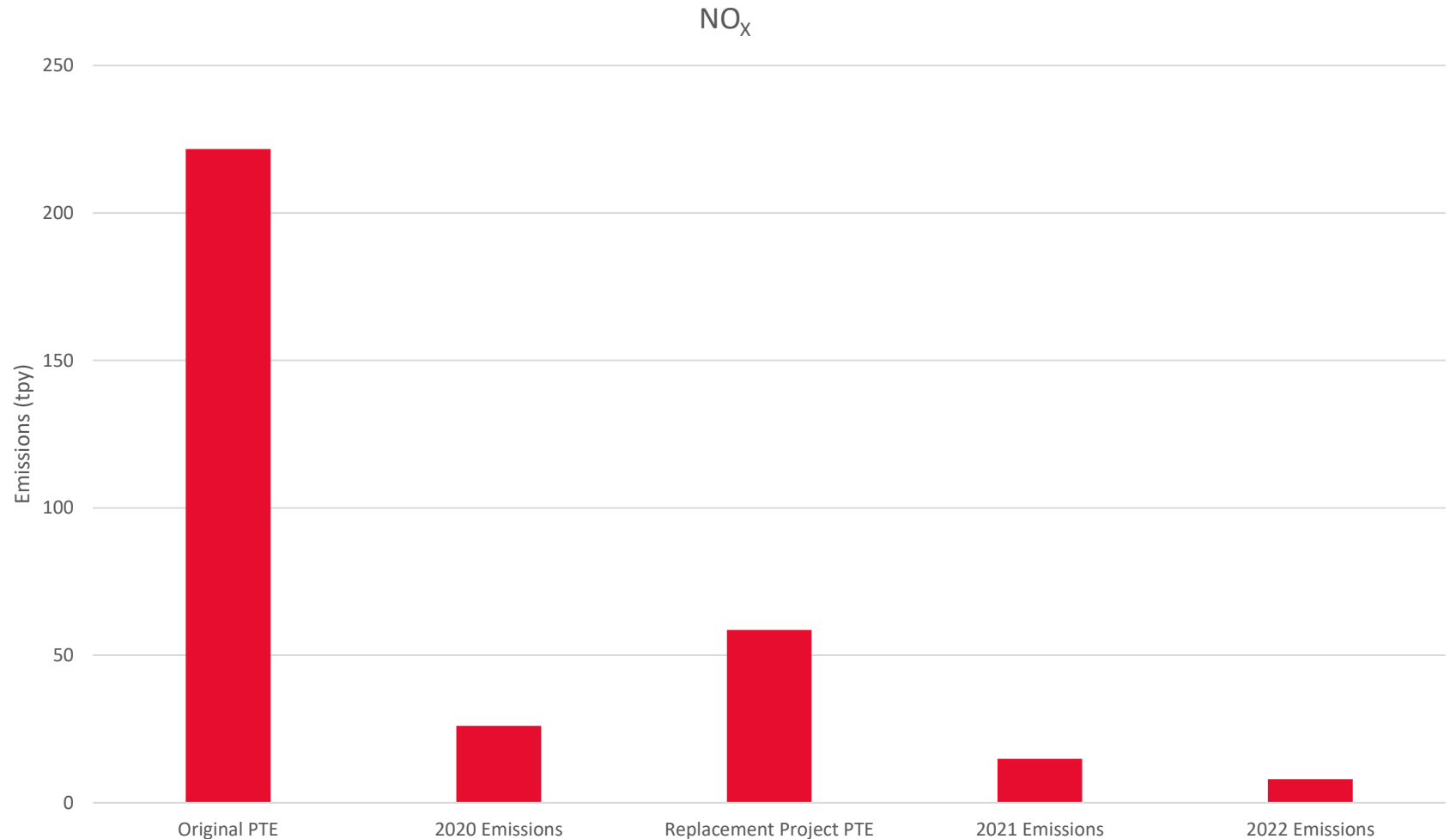


Emissions Reductions - NO_x

In atmospheric chemistry, NO_x is a generic term for the nitrogen oxides that are most relevant for air pollution, namely nitric oxide (NO) and nitrogen dioxide (NO₂).

These gases contribute to the formation of smog and acid rain, as well as affecting tropospheric ozone.

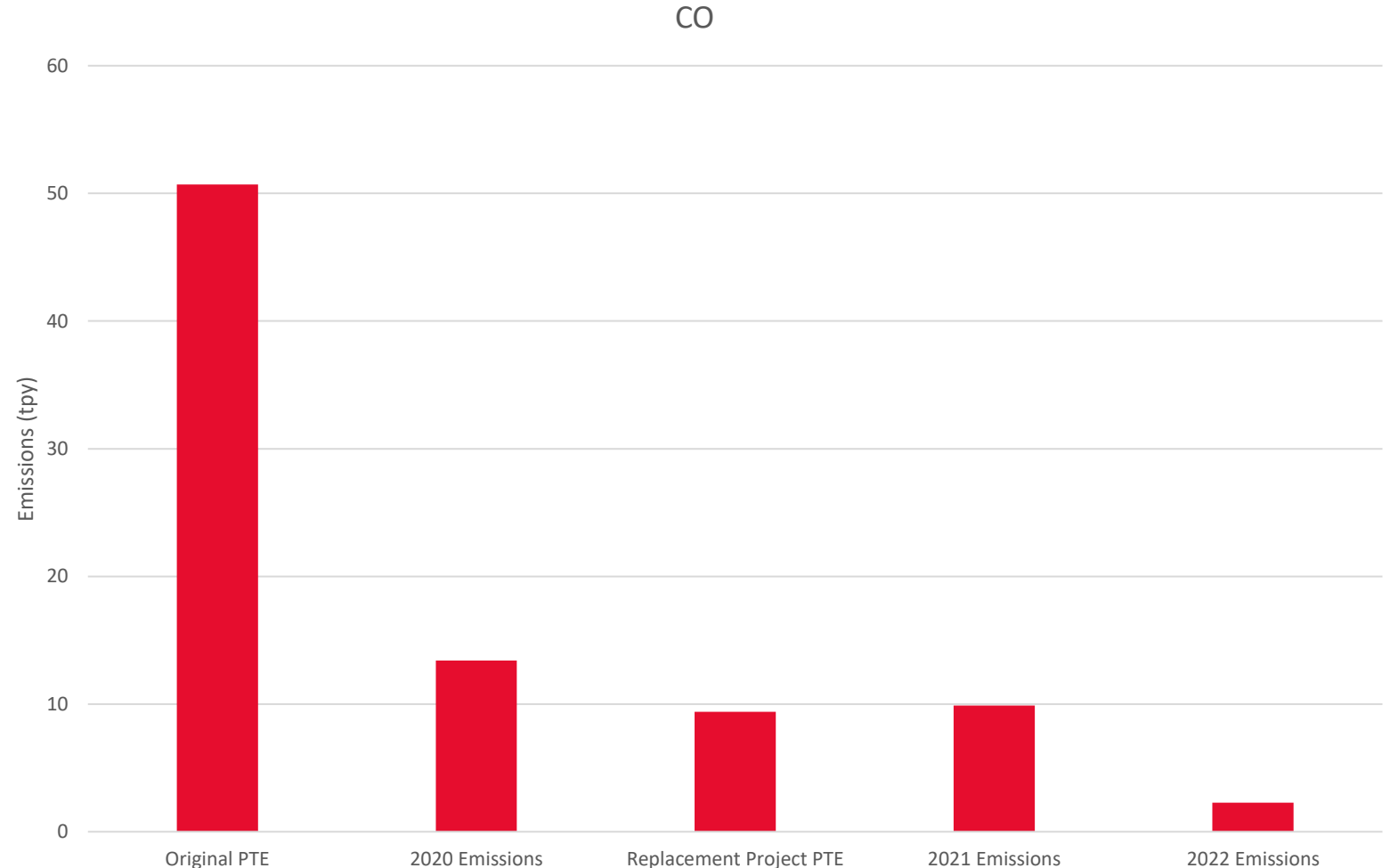
PTE = Potential to Emit



Emissions Reductions - CO

CO is a colorless, odorless gas that can be harmful when inhaled in large amounts. CO is released when something is burned. The greatest sources of CO to outdoor air are cars, trucks and other vehicles or machinery that burn fossil fuels.

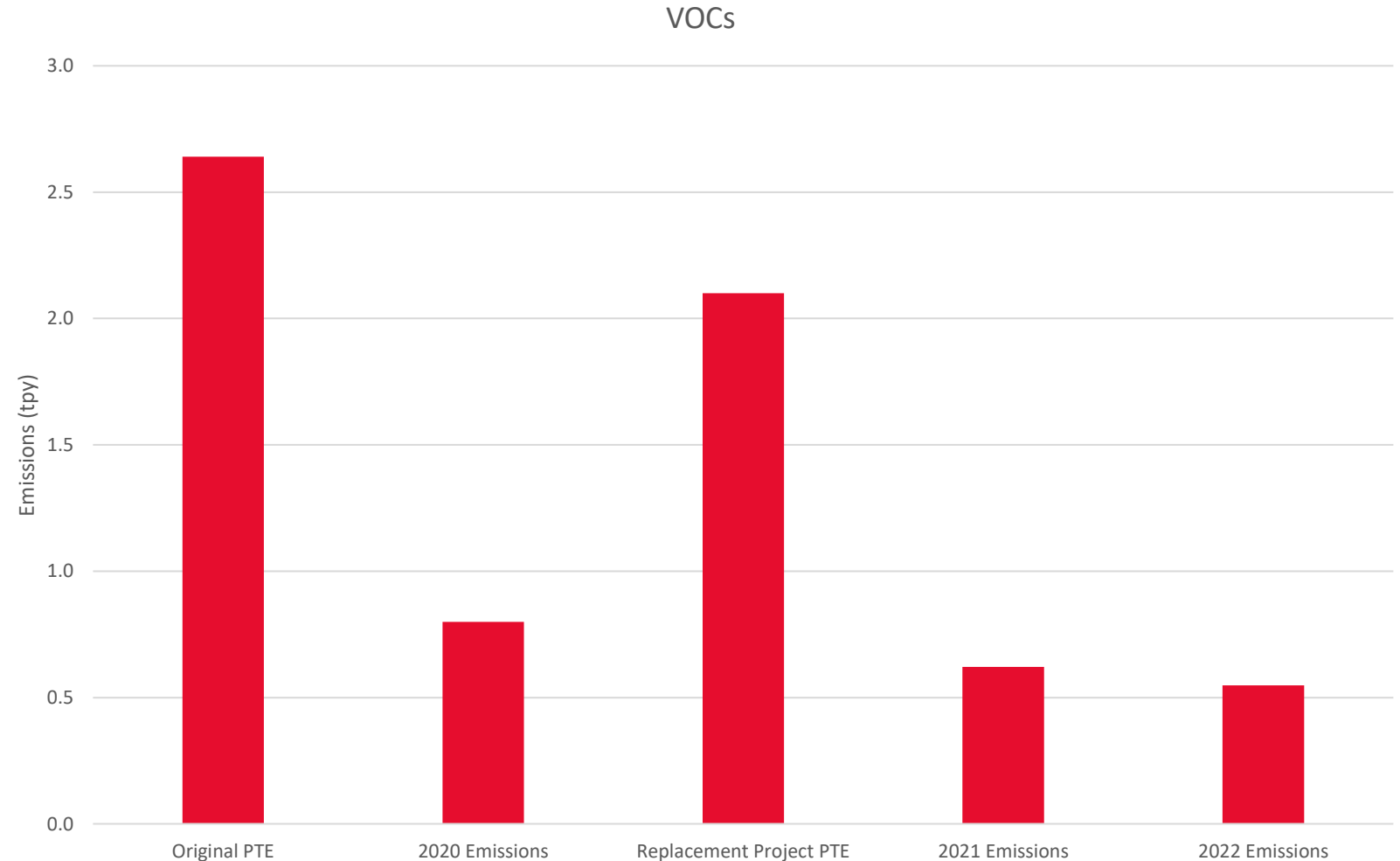
A variety of items in your home such as unvented kerosene and gas space heaters, leaking chimneys and furnaces, and gas stoves also release CO and can affect air quality indoors.



Emissions Reductions - VOCs

Volatile organic compounds, **VOCs** for short, are a common type of EPA-regulated drinking water contaminant.

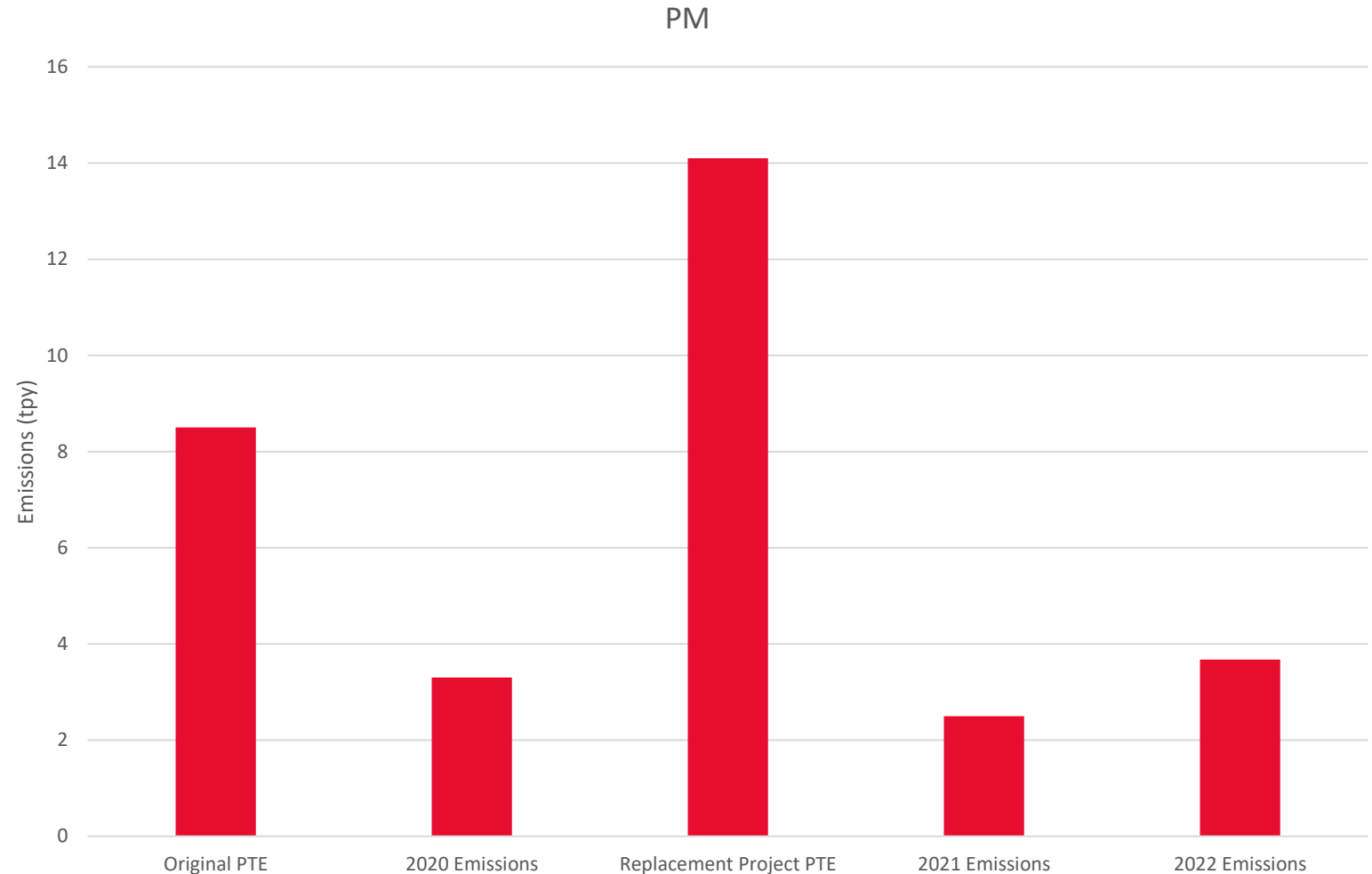
Even today, **VOCs** can be found in a number of products that are used on a daily basis, like paint thinners, pesticides and insect sprays.



Emissions - PM

“Particulate matter” (PM) is the general term used to describe solid particles and liquid droplets found in the air. The composition and size of these airborne particles and droplets vary.

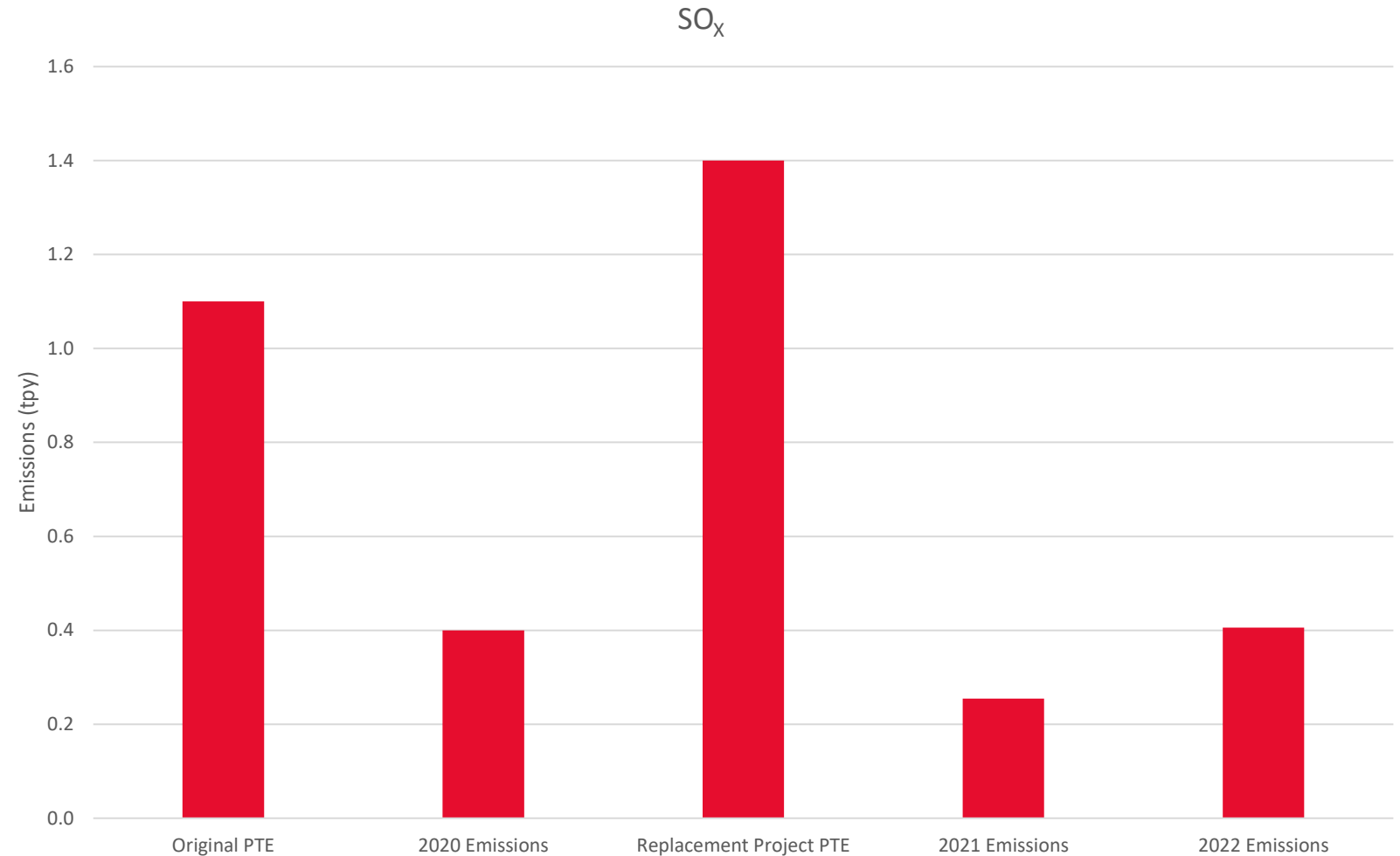
PM can be emitted directly or formed in the atmosphere. “Primary” particles are those released directly to the atmosphere. These include dust from roads and black and/or elemental carbon from combustion sources.



Emissions Reductions - SO_x

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. Sulfur dioxide (SO₂) is the predominant form found in the lower atmosphere.

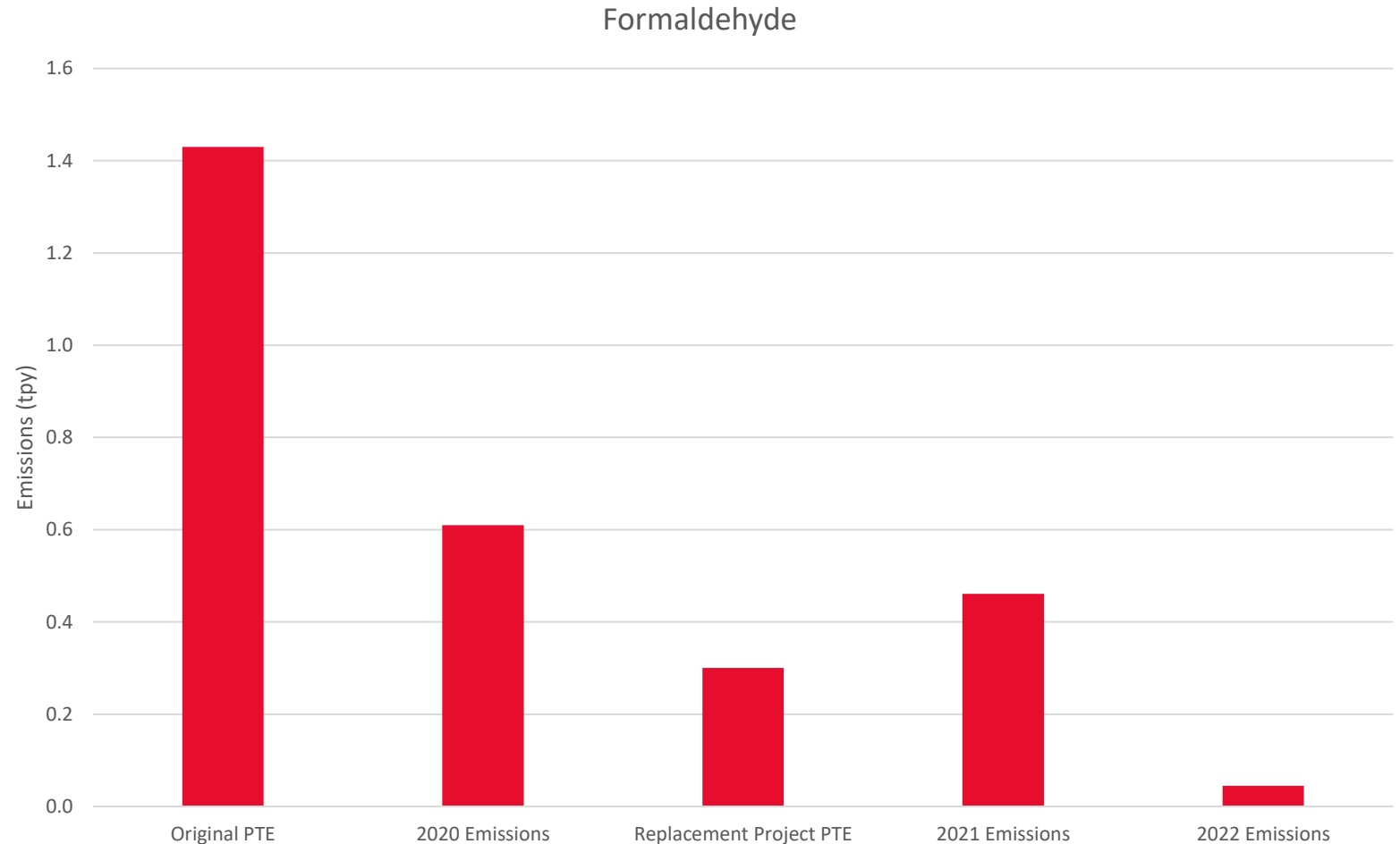
It is a colorless gas that can be detected by taste and smell in the range of 1,000 to 3,000 micrograms per cubic meter (µg/m³).



Emissions Reductions – Formaldehyde

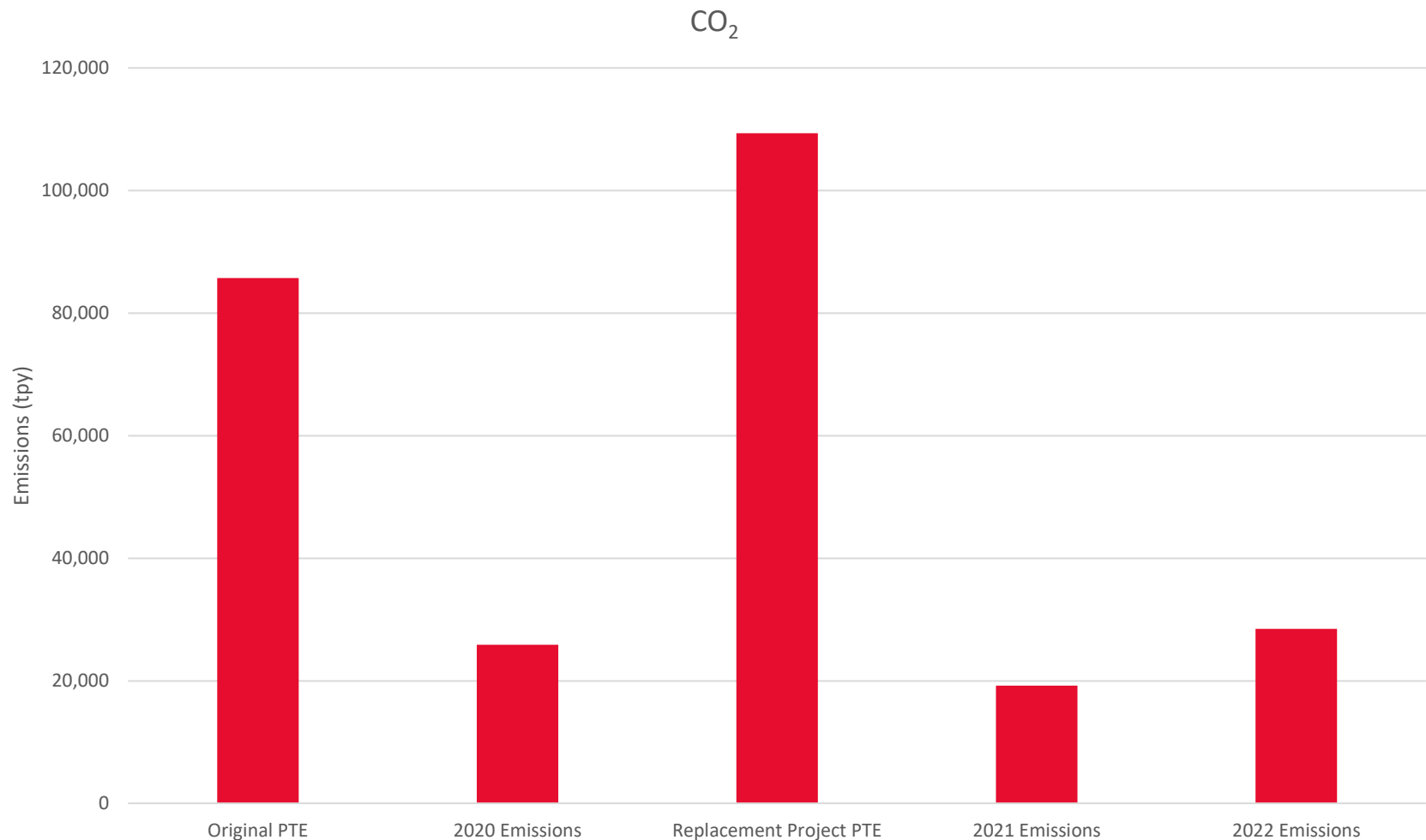
A colorless, pungent-smelling gas; an important hazardous air pollutant.

Sources include environmental tobacco smoke and other combustion sources; pressed wood products (such as particle board); and certain textiles, foams, and glues.



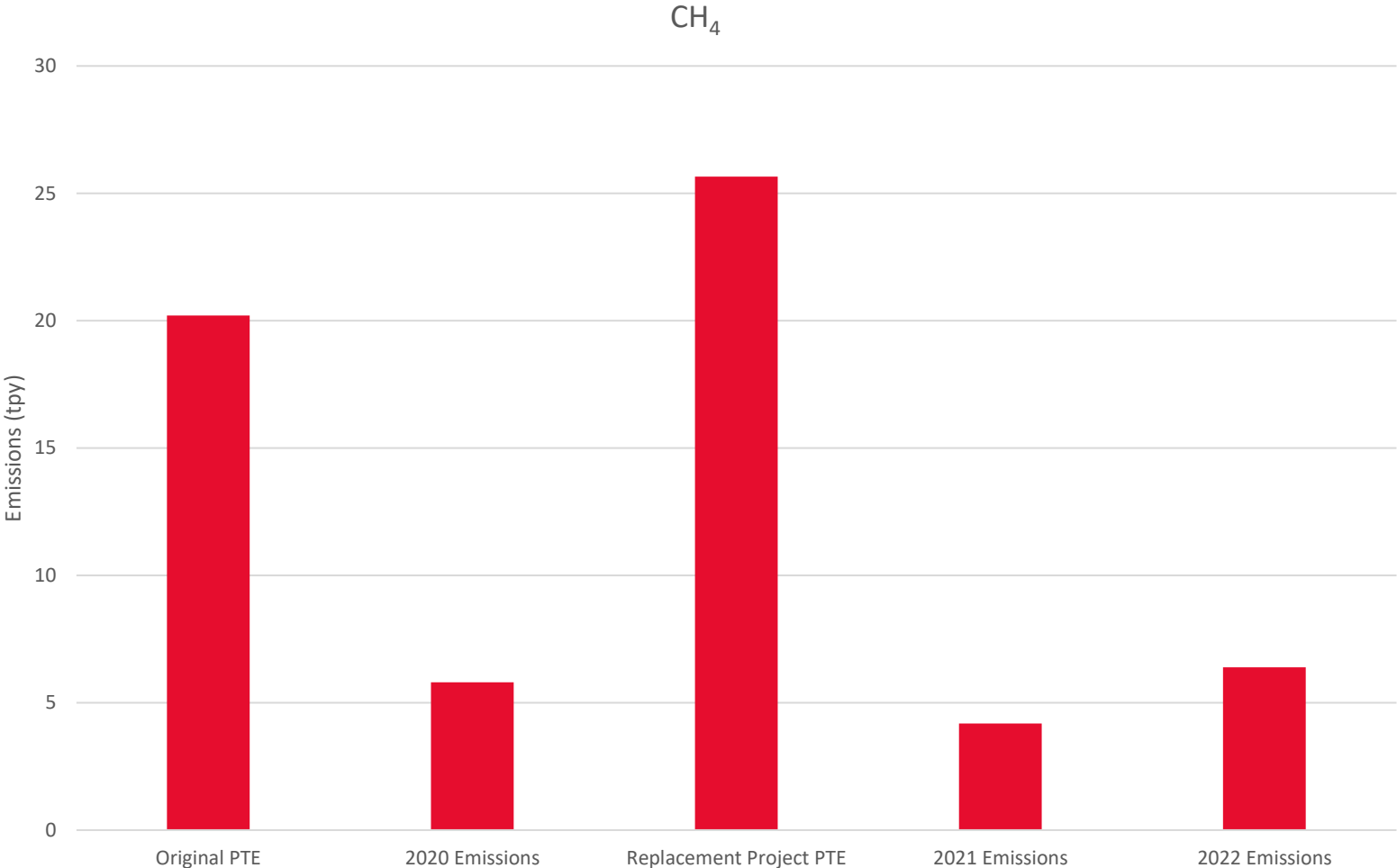
Emissions – CO₂

Carbon dioxide is an acidic colorless gas with a density about 53% higher than that of dry air.



Emissions – CH₄

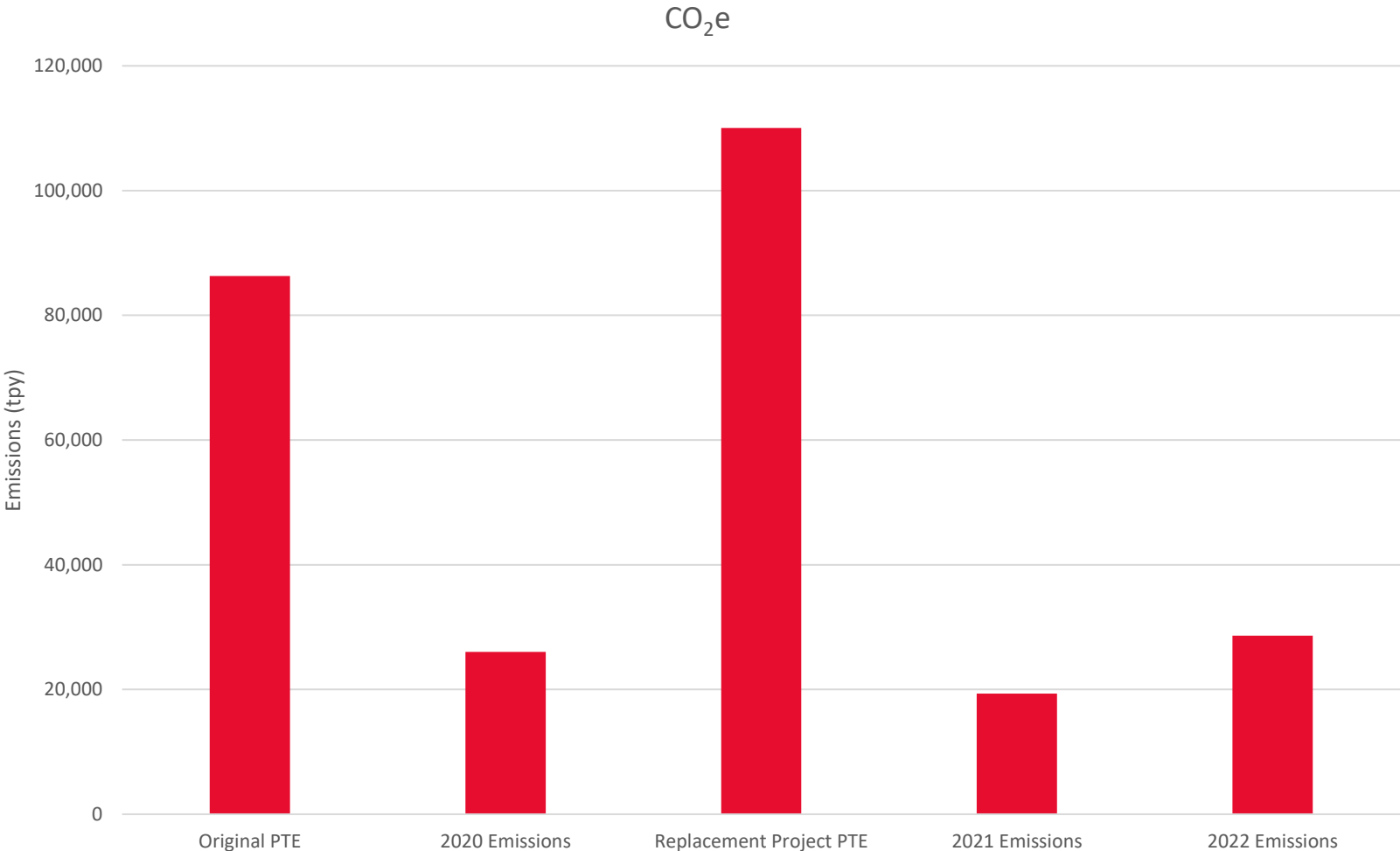
Methane



Emissions – CO₂e

CO₂e is the shorthand for carbon dioxide equivalents.

It is the standard unit in carbon accounting to quantify greenhouse gas emissions

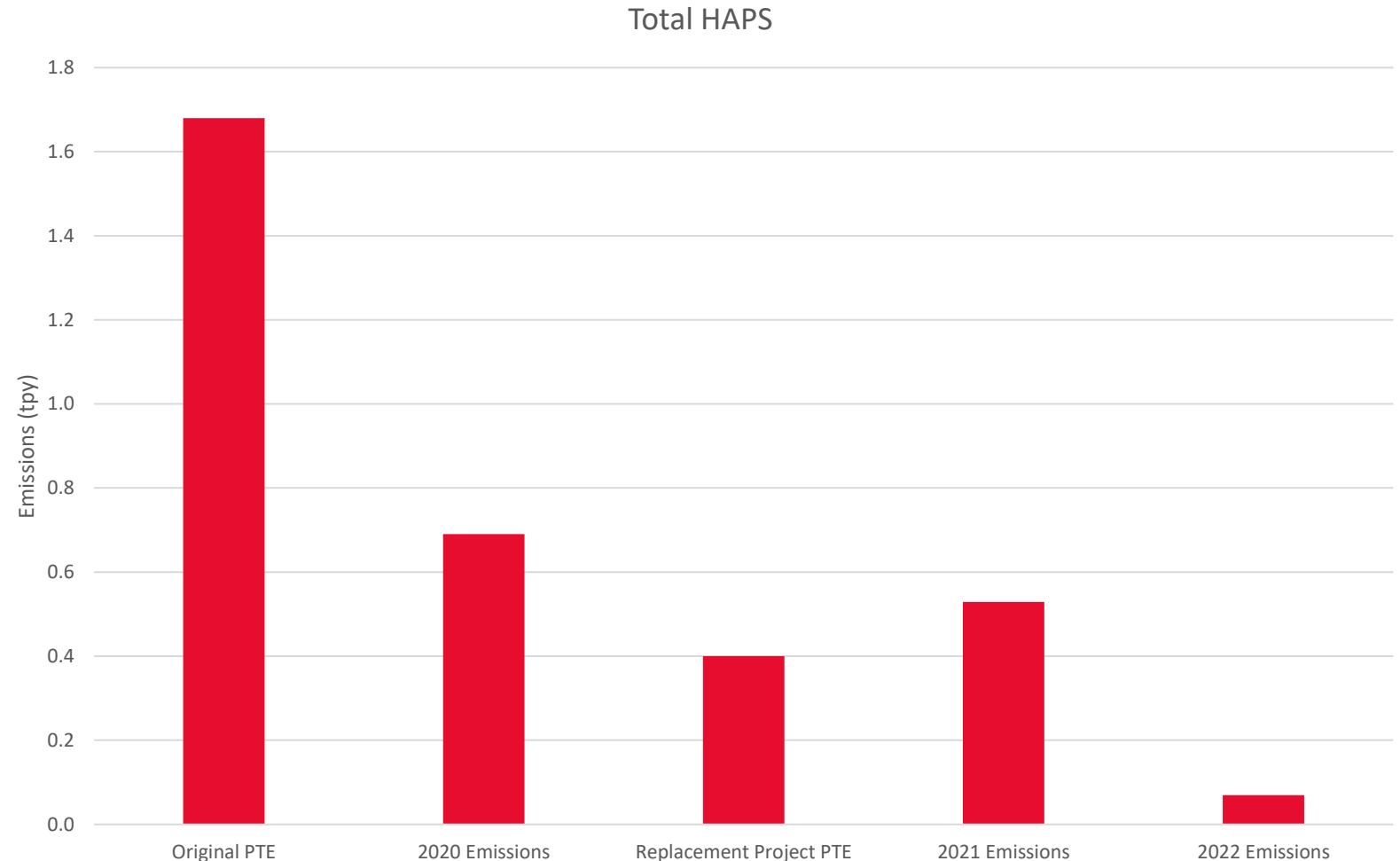


Emissions Reductions – Total HAPs

Hazardous air pollutants, also known as toxic air pollutants or air toxics.

Examples of toxic air pollutants include

- benzene, which is found in gasoline;
- perchloroethylene, which is emitted from some dry cleaning facilities; and
- methylene chloride, which is used as a solvent and paint stripper by a number of industries.



HOW MUCH GAS?



How Much Gas is Flowing Through the Station?

Total Gas Through Borger Station



**OPERATIONAL
EXCELLENCE**

139,436,204 mscf of natural gas through the station in 2020.

99,248,749 mscf of natural gas through the station in 2021.

134,647,373 mscf of natural gas through the station in 2022.

***** mscf = thousands of standard cubic feet of gas***



CORE PRINCIPALS



BHE Environmental Respect



**ENVIRONMENTAL
RESPECT**

BHE Pipeline Group continues to reduce and avoid methane emissions. In 2022, BHE Pipeline Group's combined leak rate was 0.028%, which is 90% lower than the average methane emissions rate of 0.26% for the transmission and storage segment of the natural gas industry.

As a leading energy provider, we remain committed to protecting our environment and ensuring the energy we deliver remains reliable and affordable. When exploring energy opportunities, we look beyond traditional approaches and use proven technologies in new and creative ways, always doing what's best for customers without sacrifice to our environment.

Winter Storm Elliott

Wind chill drove temperatures to -22°F through the central portion of the Eastern Gas operating footprint.

Eastern Gas Transmission and Storage (EGTS)



**OPERATIONAL
EXCELLENCE**

- ✓ **Throughput:** the approximate volume of gas handled on December 24, 2022, was **9.00 billion cubic feet (Bcf)**. This total surpasses any single day in our system history by almost 15%. On *each* of Gas Days 23, 24 and 25, EGTS exceeded the previous daily throughput record of 7.88 Bcf, which had been set on January 14, 2018.
- ✓ **Storage withdrawals:** on December 24, EGTS also set a record storage withdrawal of 4.54 Bcf. On *each* of Gas Days 24 and 25, EGTS exceeded its previous daily storage withdrawal record of 4.17 Bcf, which had been set on January 6, 2018.
- ✓ **Instantaneous Peak Volume:** similarly, EGTS established a new instantaneous peak volume of 9.36 Bcf on December 24, 2022. On Gas Days 23, 24 and 25, EGTS exceeded the previous instantaneous record of 8.34 Bcf, which had been set on January 22, 2022.
- ✓ **Handled over 100 call-out requests in six states during a three-day period.**

Customer Satisfaction



**CUSTOMER
SERVICE**

MASTIO recently published the 2023, 27th Edition of the industry-wide Natural Gas Pipeline Customer Value / Loyalty Benchmarking Study.

BHE Pipeline Group finished with the top ranking in the Major Organizational Group category in the latest edition of the Mastio & Company Customer Satisfaction Survey.

The Mastio & Company pipeline customer satisfaction survey is conducted annually and is considered by many in the industry as a benchmark of pipeline customer service. BHE Pipeline Group has finished in first place for 18 consecutive years.

Among the 38 interstate pipelines in the survey, Kern River was ranked first, Carolina Gas Transmission ranked second, Northern Natural Gas was third, and Eastern Gas Transmission was sixth among the pipelines tallied in the survey.



Employee Commitment & Philanthropy



EMPLOYEE COMMITMENT

The people who work at BHE GT&S aren't just employees—they're community members and recognize the importance of contributing through volunteer work. Volunteering is a value deeply embedded in our company's history, and each employee receives paid volunteer time every year to pursue the community work they're passionate about. This might mean serving at a local food bank or providing meals to the elderly, helping to deliver holiday toys to children, cleaning up our environment, or mentoring young people.

Our employees are also active volunteers outside of work, where they serve as leaders in their communities, on boards of non-profits and leading community civic activities. Beyond supporting our employees through leave time, we also provide matching funds.

At BHE GT&S, we have a broad footprint, but a focus on positive local impact. Our long history of investment in our communities includes donating our time as well as our funds to support the many important organizations and services that help a community thrive. In 2022, BHE GT&S awarded \$250,000 in grants to worthy non-profit and community-based organizations.

Thank you

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www.bhegts.com