

Natural gas represents 34% of total energy consumption in the U.S. There are 75 million natural gas customers in the country. Gas is the nation's leading home heating fuel, and also is a leading fuel of choice for industry, power plants, schools, hospitals and numerous commercial enterprises.

As of 2022, about 50% of power generation capacity in the Northeast is fueled by natural gas, and over 50% of home heating in the 9-state region is also fueled by natural gas.



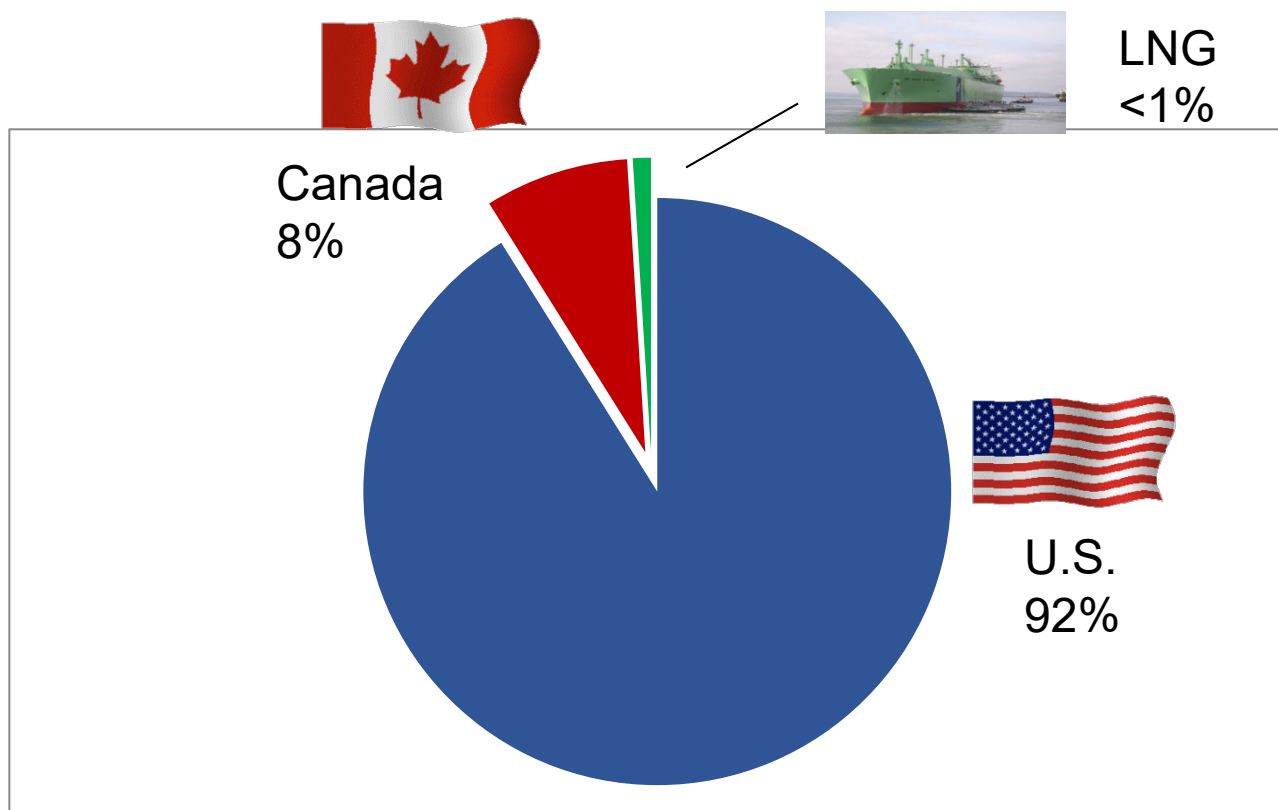
What is Natural Gas?

- Combustible hydrocarbon gasses
- Primarily methane (CH₄)
- Found in underground reservoirs
- Comes from bacterial decomposition of plant and animal matter

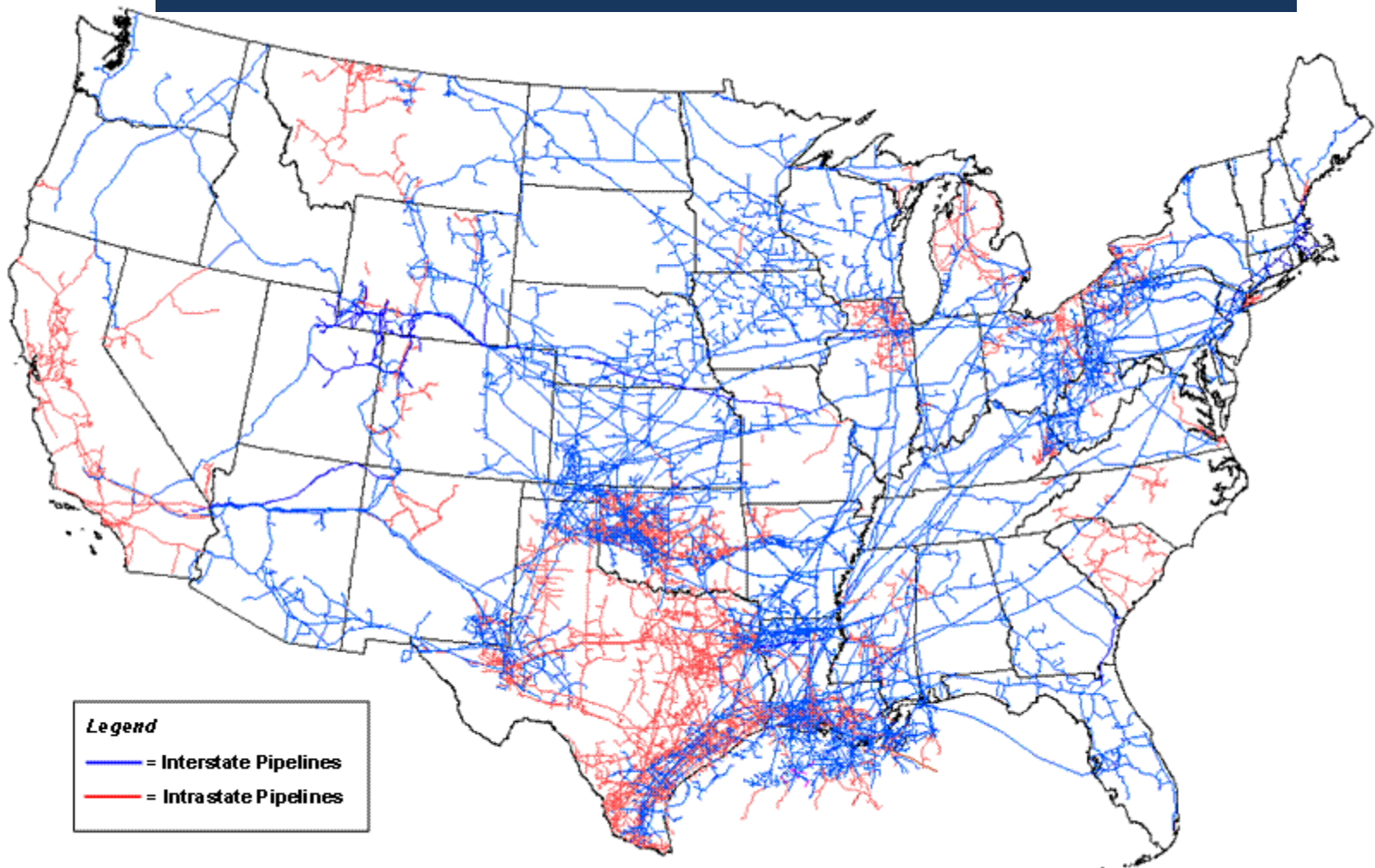


Where does our gas come from?

The natural gas resource base in the U.S. (and North America) is abundant. The U.S. gets over 90% of its supplies from domestic fields, about 8% from Canada, and less than 1% from liquefied natural gas (LNG) shipments from overseas. The U.S. is the largest producer of natural gas in the world.



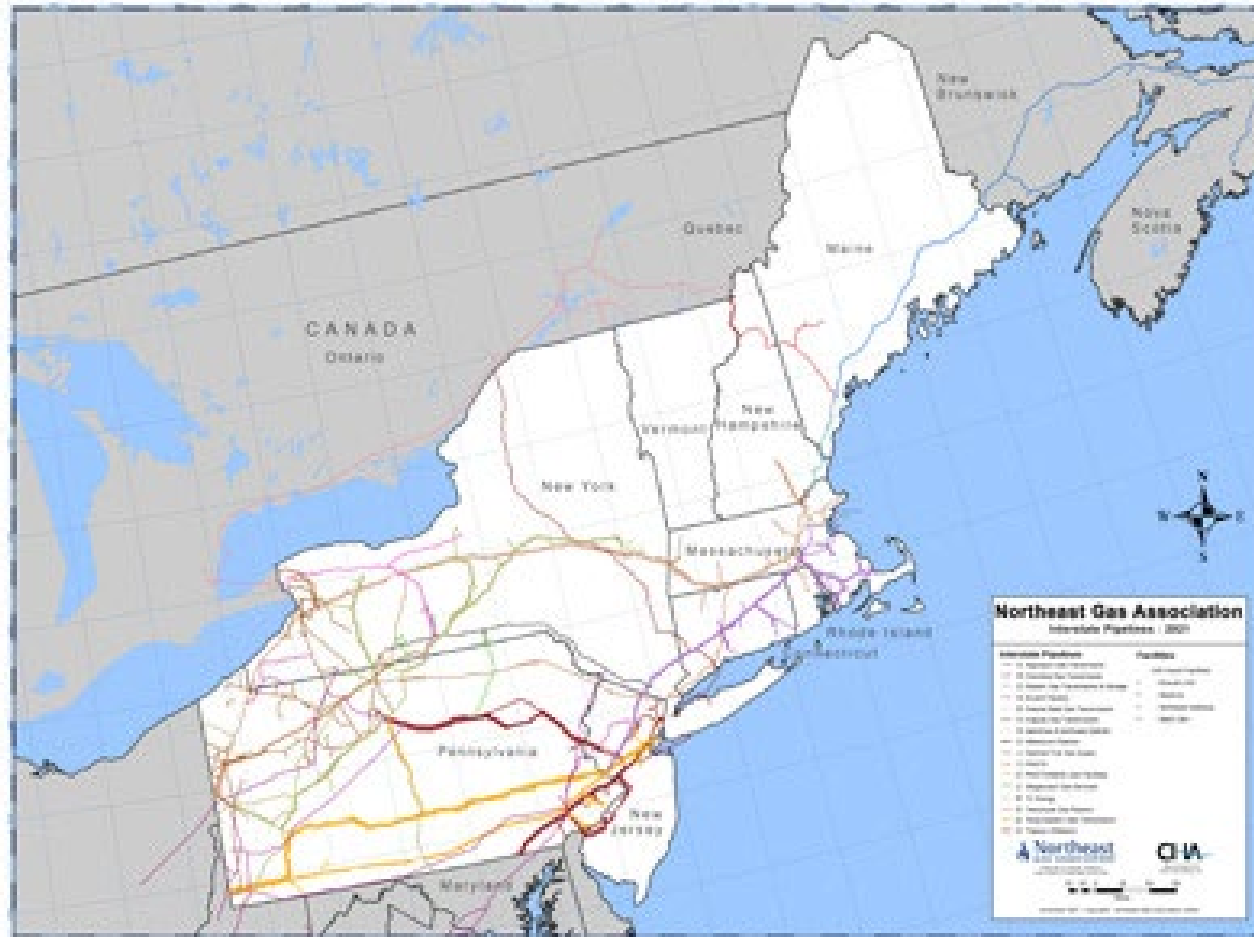
There are 2.6 million miles of underground natural gas lines in the U.S. (including gathering systems), transporting gas from production fields to local markets throughout the country.



Source: Energy Information Administration, Office of Oil & Gas, Natural Gas Division, Gas Transportation Information System

Mileage data as of 2021, source: PHMSA

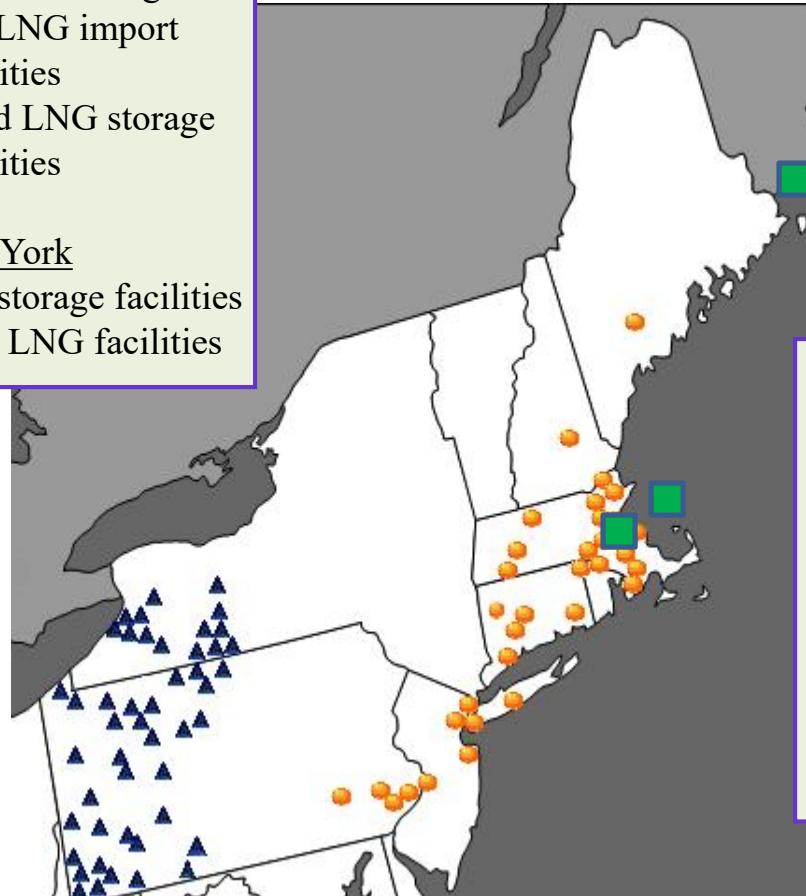
The Northeast U.S. has over a dozen different interstate pipelines, transporting gas into the region from various supply points in the U.S., as well as western and eastern Canada. Most of the natural gas flowing to the Northeast market is now sourced from shale fields in Appalachia, principally the Marcellus Shale.



The Northeast also uses storage to ensure enough gas is located close to the region to meet demand on peak winter days. Storage can be based in underground caverns (blue triangles here), or LNG tanks (orange circles).

New England
No underground storage
2 operating LNG import facilities
28 LDC-owned LNG storage facilities

New York
26 underground storage facilities
3 peak-shaving LNG facilities



New Jersey
No underground storage
LDC- and pipeline-owned LNG storage facilities

Pennsylvania
49 underground storage facilities
4 LNG storage facilities

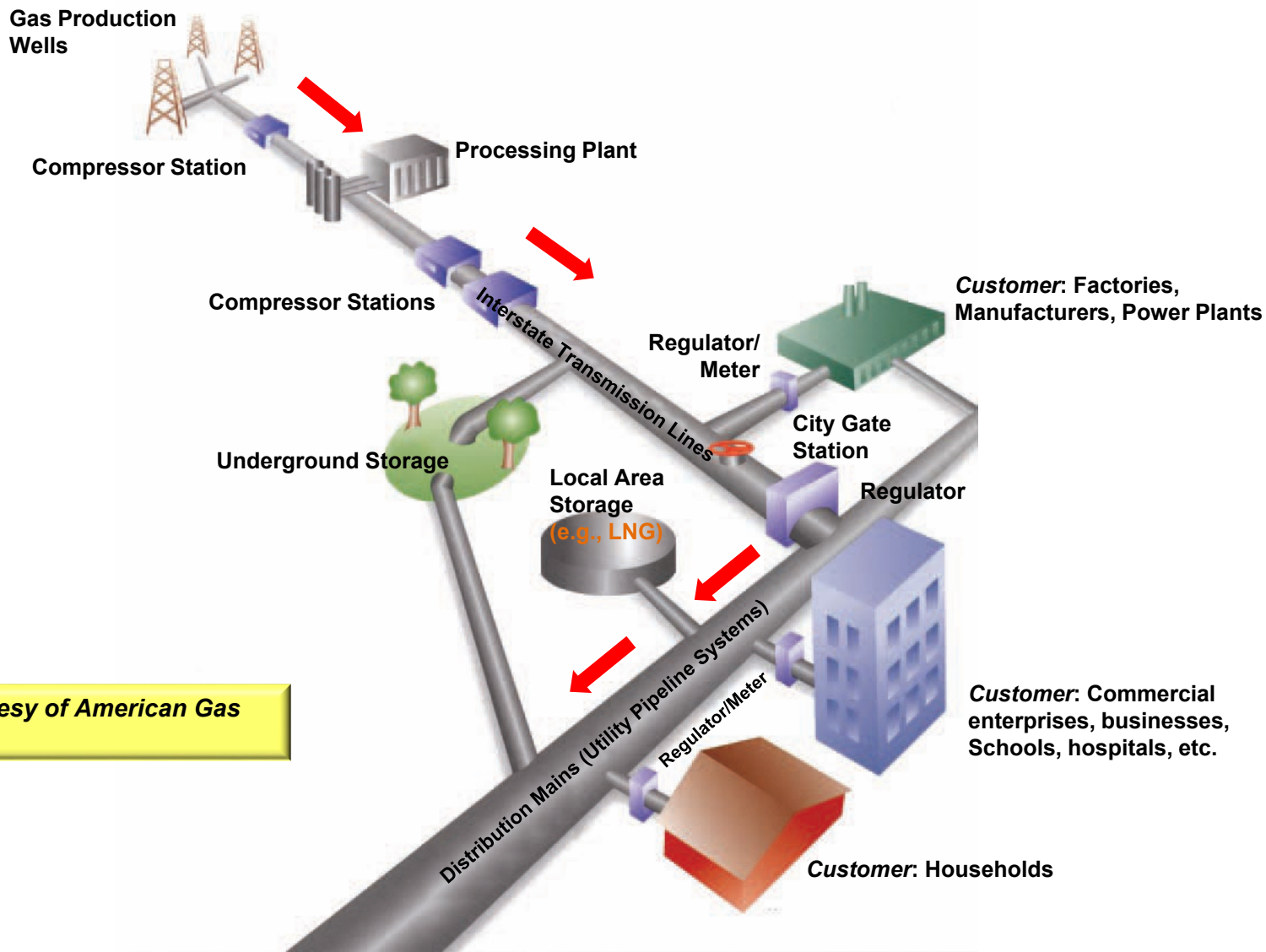
*Blue = underground storage, orange = LNG.
Green = LNG import facilities
Source: U.S. EIA*

Pipeline companies use “compressor stations” to “push” the gas through the system. These stations are generally located every 70 to 100 miles or so along a pipeline’s route, and help assure continuous forward movement of supplies through the system.




Photos courtesy of Tennessee Gas Pipeline.

How does natural gas move from the production fields to your home or business? It follows the path indicated here, through the interstate pipeline system, and then into the local natural gas utility's distribution network.



Graphic courtesy of American Gas Association

Natural gas is odorless in its natural state, but at the city gate, the local gas utilities add a harmless chemical called mercaptan into the gas system, with an odor similar to rotten eggs, so that, if there is a release of gas, the public can be aware of it.



IMPORTANT
NATURAL GAS
SAFETY
INFORMATION

What everyone needs to know.

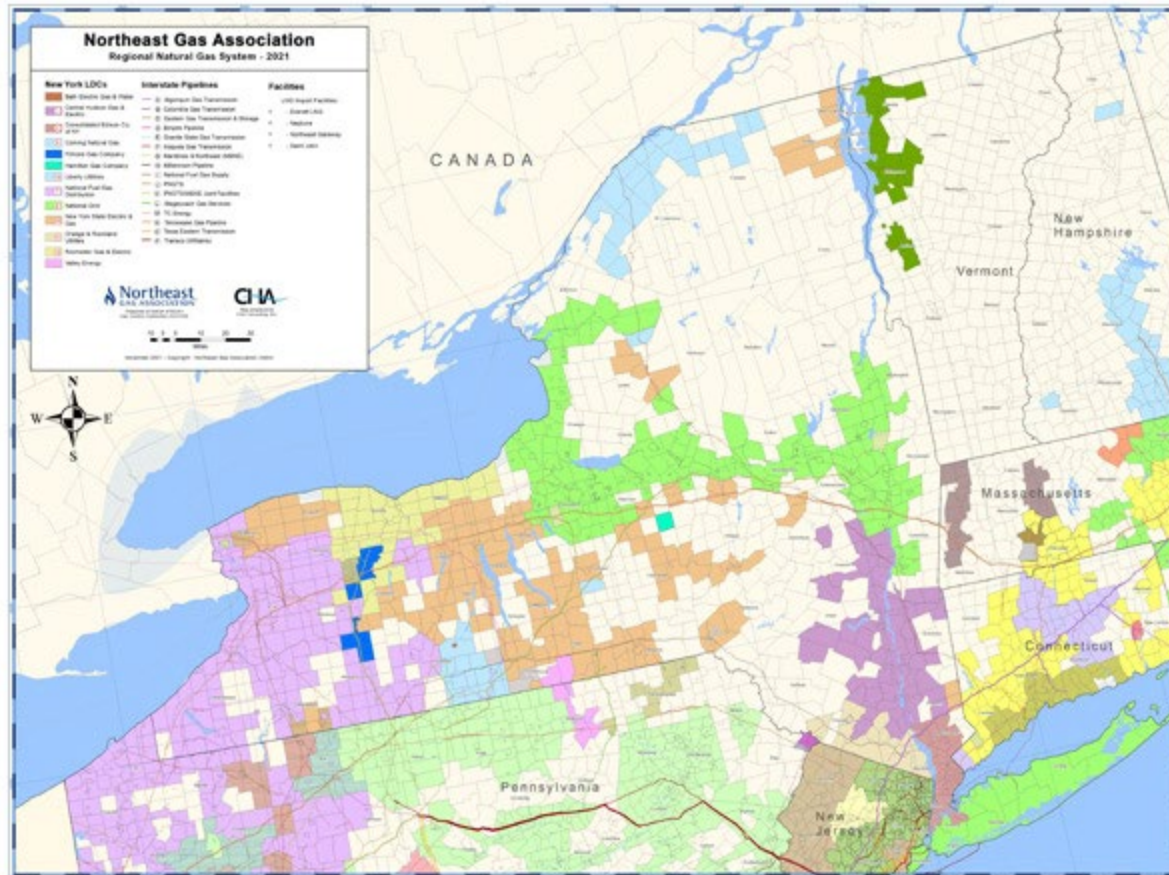
SMELL GAS?
LEAVE FIRST! Then call us immediately!

Call the number on the brochure you received or 911

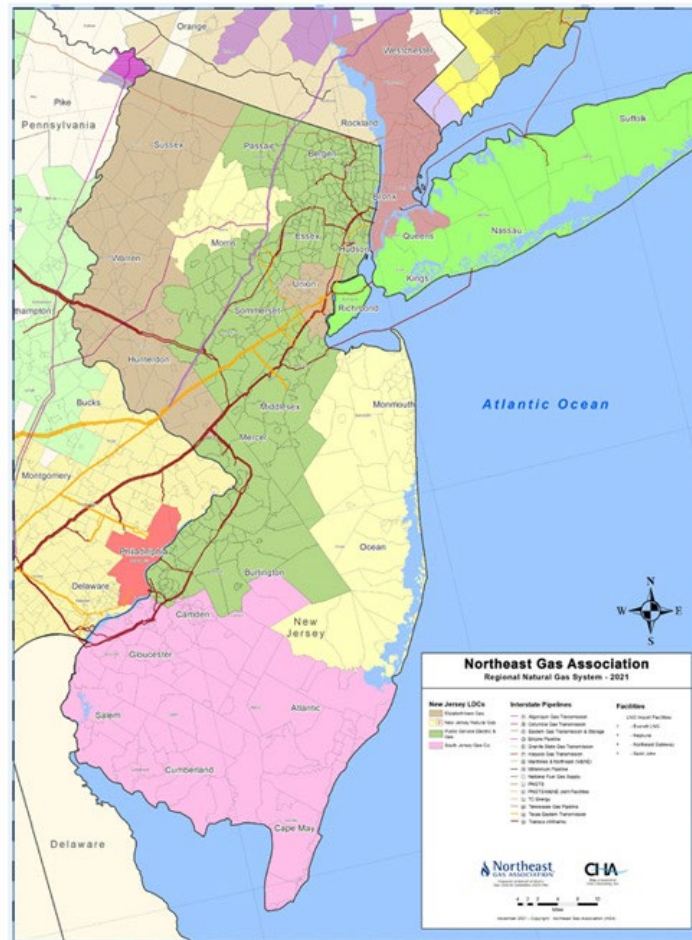


Know what's below.
Call before you dig.

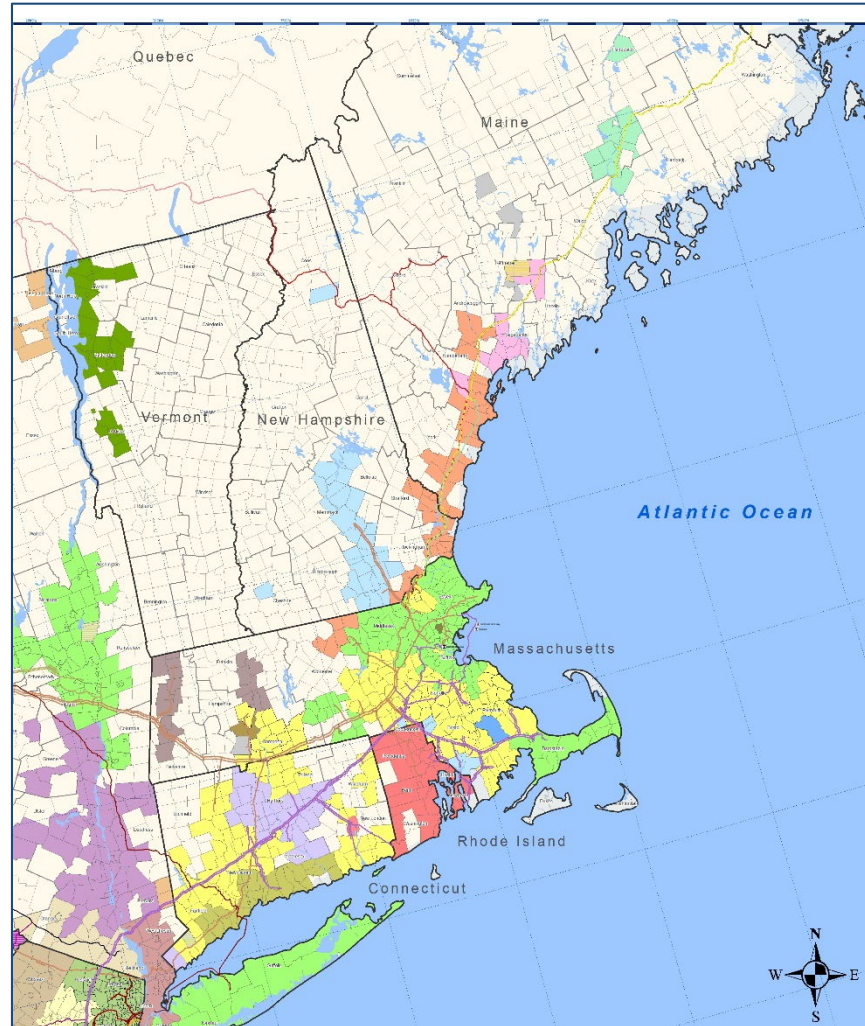
There are 5 million natural gas customers in the State of New York. They are served by multiple local natural gas utilities. The utility service areas are illustrated here.



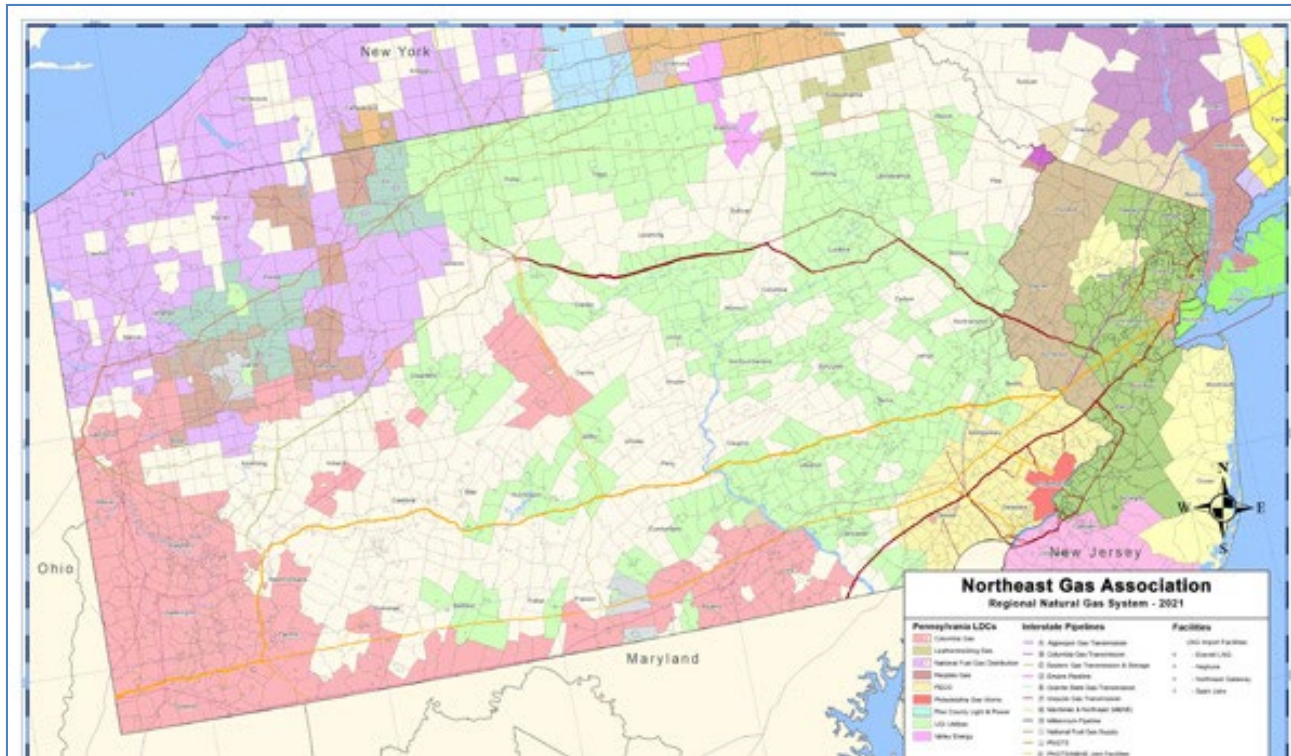
There are 3.1 million natural gas customers in the State of New Jersey. They are served by four local natural gas utilities. The utility service areas are illustrated here.



There are 2.8 million natural gas customers in the six New England states. They are served by numerous local natural gas utilities. The utility service areas are illustrated here.

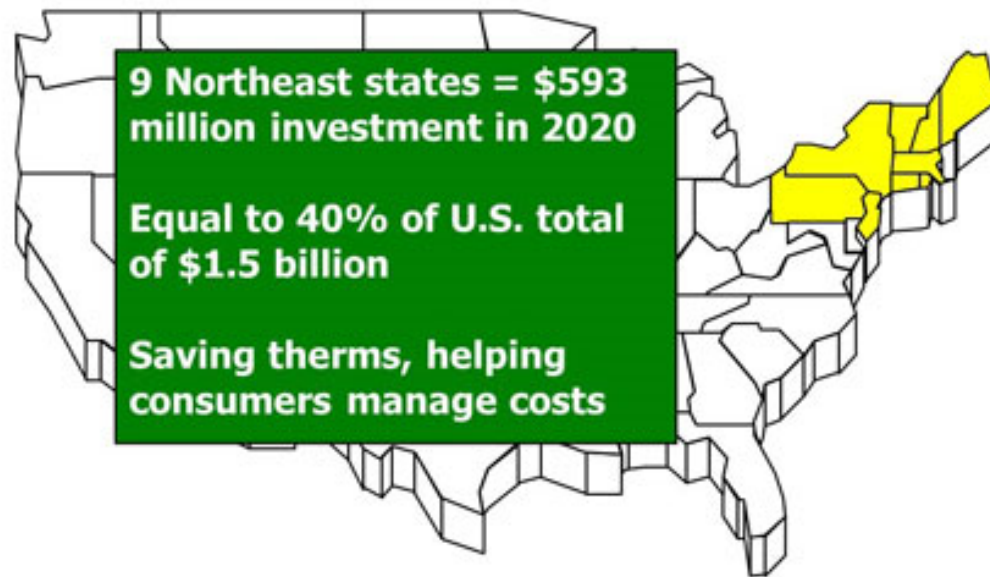


There are 3.1 million natural gas customers in the State of Pennsylvania. They are served by multiple local natural gas utilities. The utility service areas are illustrated here.



The Northeast states are leaders in the U.S. in natural gas efficiency investments. Efficiency represents a great, ongoing opportunity for the regional economy and energy system.

Northeast States are Leaders in U.S. Gas Efficiency Investments



Source: ACEEE, "State Energy Efficiency Scorecard: 2021 Progress Report", released Feb. 2022

Natural gas systems contribute to CH₄/methane emissions in the U.S., along with agriculture, landfills and coal mining. But methane emissions from natural gas have come down compared to prior decades; U.S. EPA noted in 2022 that methane emissions related to natural gas systems have declined by 15% in the last few decades. Natural gas companies are striving to reduce CH₄ and CO₂ emissions through new technologies and a comprehensive approach to reduce leaks through pipeline upgrades.

“Decarbonizing the gas network”

Natural gas utilities are working to reduce carbon intensity, through such steps as:

- Continued efficiency investments;
- Replacement of older pipe systems;
- Renewable natural gas (RNG);
- Hydrogen blending.



The natural gas industry is regulated by numerous government agencies at both the federal and state levels.



U.S. Department of Transportation/Office of Pipeline Safety / Pipeline and Hazardous Materials Safety Administration (PHMSA)

U.S. Federal Energy Regulatory Commission

U.S. EPA

U.S. Coast Guard

National Transportation Safety Board



State Public Utilities Commission

State Department of Environmental Protection

State Fire Marshal's Office

The local natural gas utilities and natural gas industry are dedicated to system safety and to increasing public awareness of natural gas and its attributes.

The natural gas system is safe and well-maintained, and closely regulated by federal and state agencies.

Natural gas utilities in the region have procedures in place, overseen by federal and state agencies, to reduce the occurrence of system incidents. Incidents are rare.

The rate of incidents in the U.S. and the region over recent decades has been declining, at the same time that the number of customers and pipeline mileage on the system has increased.

The industry takes all incidents seriously and is constantly working to ensure the integrity of its system, including regular maintenance and replacement of line segments on an approved schedule.

The industry also undertakes regular training of its employees and contractors.

Companies are active in promoting public awareness communications with customers, stakeholders and the general public; the leading cause of incidents is “third party damage.” Be aware and call before you dig!

The local natural gas utilities and their personnel work hard to maintain system safety, reliability and integrity.

Natural gas utilities regularly monitor their systems for safety, reliability and integrity.

Companies monitor for leaks, corrosion, outside damage, etc.

Substantial resources are expended annually on line improvements and replacements.

Companies monitor gate and regulator stations and conduct periodic gas odor level tests.



PHMSA notes:

“Gas Distribution Operators are inspected to ensure they are in compliance with all applicable section of 49 CFR 192 *Transportation of Natural / Other Gas by Pipeline*. This includes a review to ensure that all operation and maintenance procedures, abnormal and emergency operating procedures, damage prevention and public education procedures, and pipeline installation, connection, repair and operations are in compliance.”

**Remember to Call before You Dig and to Dig Safely!
Resources exist in every state to provide guidance on system safety.
Be aware, and be safe!**

Emergency Responders / Links to One-Call Centers

