Northeast Gas Association

Lowering Carbon in Our Gas Supply

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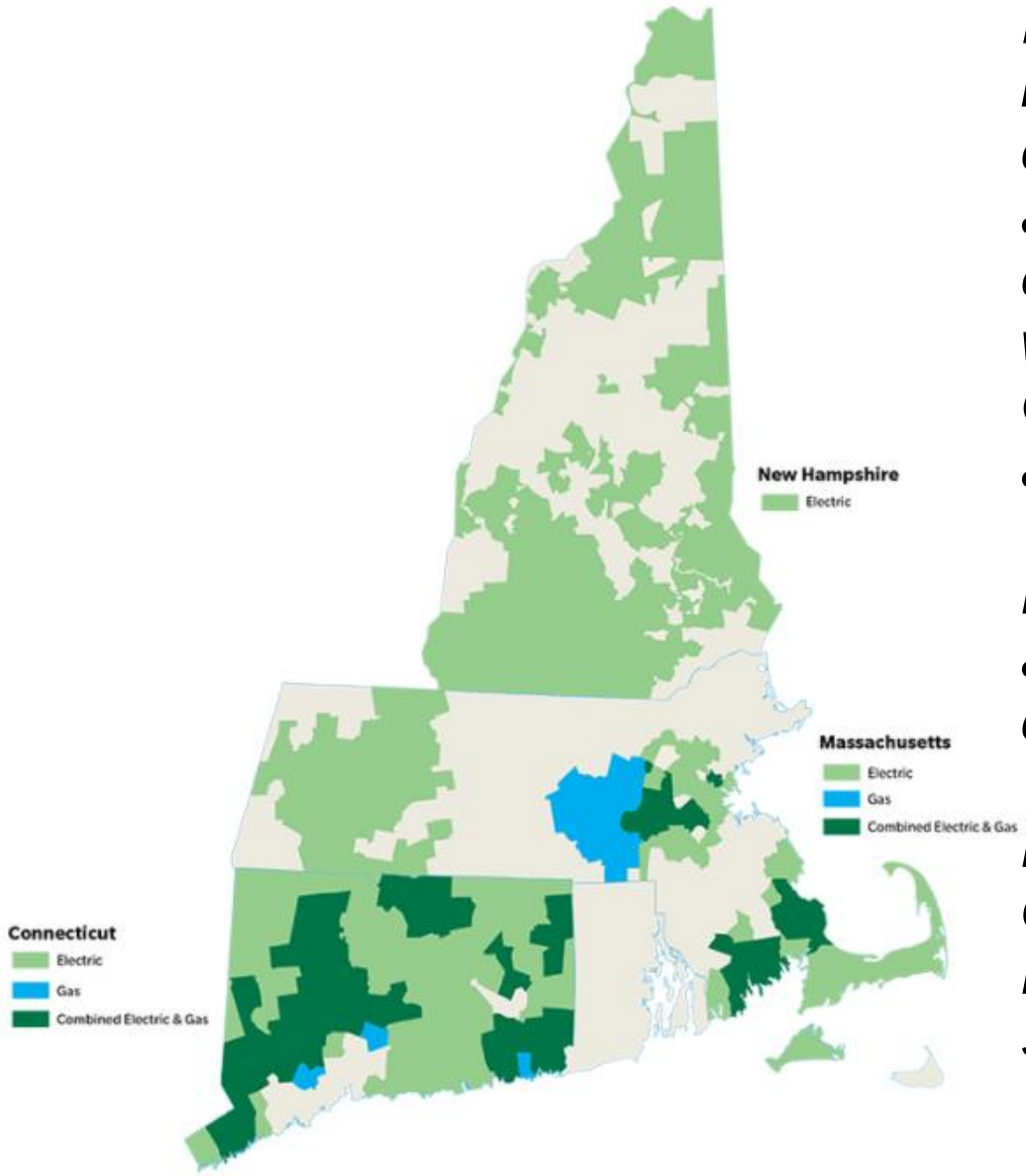
Eversource Overview



Eversource is New England's largest energy delivery company and serves approximately 4 million electric, natural gas and water customers in Connecticut, Massachusetts and New Hampshire.

Eversource has approximately 530,000 gas customers in CT and MA.

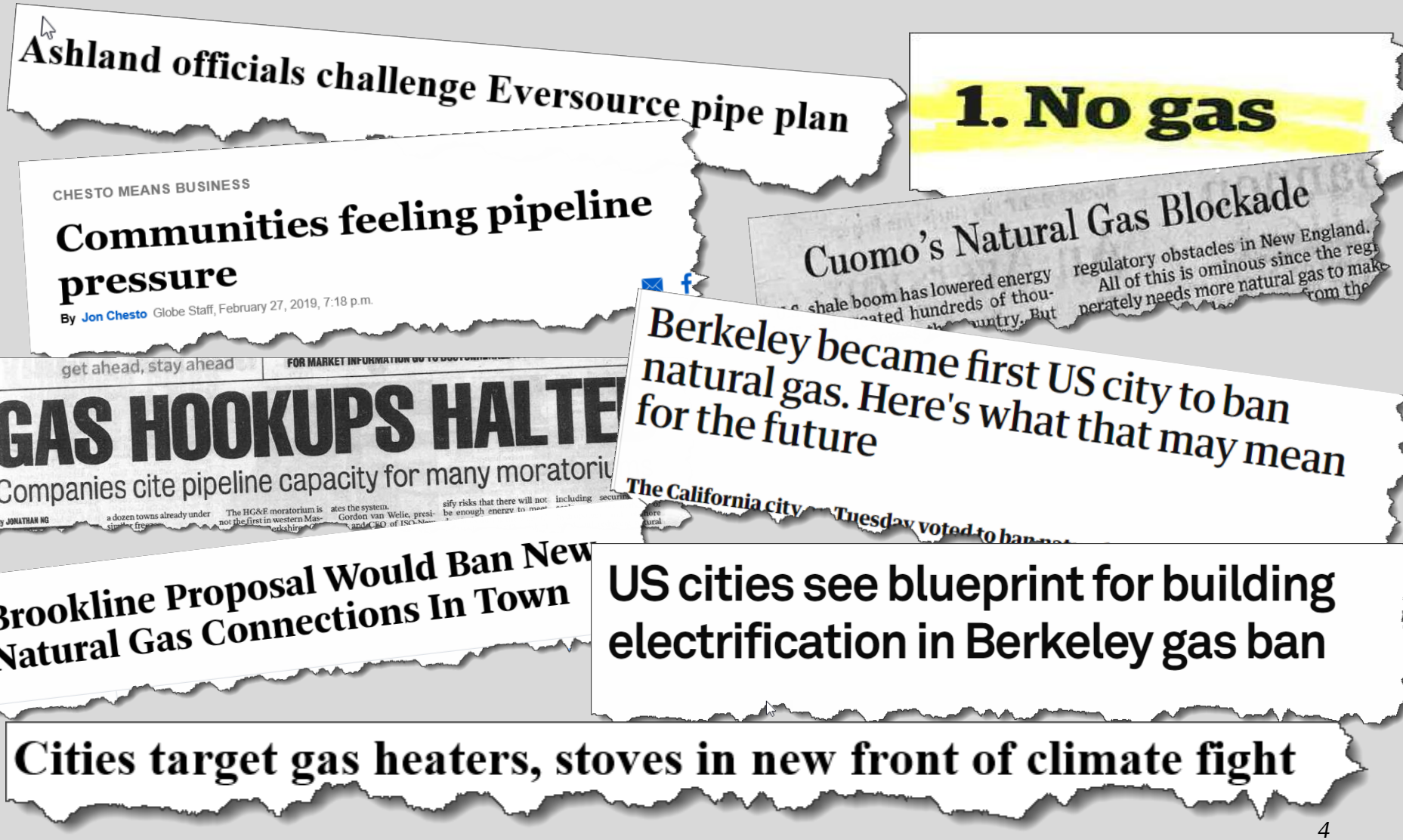
Eversource and Columbia Gas Massachusetts to join in Fall 2020, an additional 300,000 customers.

Lost Messages

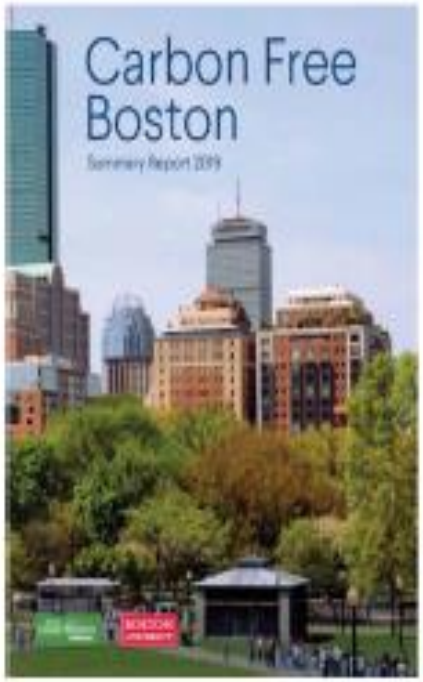
Natural Gas is:

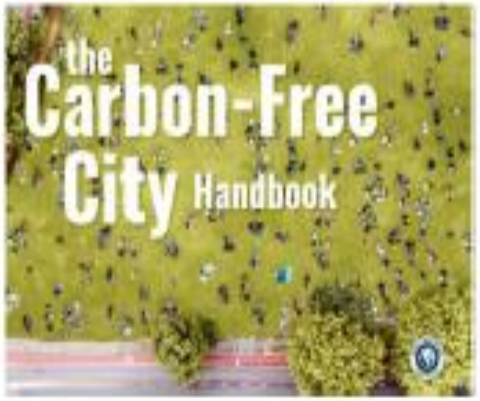
- ***Sustainable***
- ***Low-emitting high-efficiency fuel source***
- ***Cost effective***
- ***Reliable***

Recent Headlines – Anti-Gas Pressure Growing



Eversource Customers Implementing Drastic Carbon Reduction Initiatives





CITY OF CAMBRIDGE
LOW CARBON ENERGY SUPPLY STRATEGY

Boston, Cambridge, Harvard and MIT

FOSSIL FUEL-FREE BY 2050

FOSSIL FUEL-NEUTRAL BY 2026

Designing the low-carbon campus of the future

Earth reached its highest temperature on record in 2016, beating the record-breaking temperatures of the three previous years. The change in climate suggested by this statistic has far-reaching ramifications for all of our planet's inhabitants. At the same time, the U.S. National Aeronautics and Space Administration (NASA) has recorded that carbon dioxide levels in Earth's atmosphere are higher now than at any point in the past 400,000 years.

Challenges – It's Complicated

NE LA- Climate Collective members address LA Dept. of Water and Power's board of commissioners on stopping a Utah gas fired power plant to replace an existing coal fired power plant.

Sustainability – Our Future

- What is it? - Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural ***environment.*** To pursue sustainability is to create and maintain the conditions under which humans and nature can exist in ***productive harmony*** to support present and future generations.
- Sustainability is based on "Three Pillars" :
  - Economic
  - Social
  - Environmental

Eversource Gas GHG Perspective

- Eversource Gas has approximately 6,700 miles of main that emitted approximately 169,000 mT CO2e in 2018.
  - Down from 218,000 mTCo2e in 2011 a 22% reduction
- Eversource Gas' throughput is approximately 120 BCF/yr.
  - Resulting in approximately 6.6 million mTCO2e in emissions.
  - As oil this would be 9 million mTCO2e in emissions.
  - As electric this would be 11 million mTCO2e in emissions - and a little more costly.
- In 2018 US EPA reported emissions from the natural gas supply chain as 1% of its throughput – first time.

Eversource's Commitment To Environmental Sustainability and Carbon Neutrality

Eversource aims to be carbon neutral by 2030, and the benefits of our regional clean energy initiatives will more than offset Eversource's greenhouse gas emissions.

CLIMATE LEADERSHIP

Reducing our Carbon Footprint from Corporate Operations:
We are targeting these steps to help us attain our long-term emissions reduction goals:

- Reduce our own energy use by improving the efficiency of our facilities and reducing fleet emissions.
- Reduce line losses in the electric transmission and distribution system.
- Reduce sulfur hexafluoride in our electrical gas-insulated switchgear.
- Replace remaining bare steel and cast-iron mains in our natural gas distribution system to improve safety and eliminate methane leaks.

Our Current Focus

- Aggressive Gas main replacement
  - Approximately 60 miles of main per year
  - Reduces CO2e emissions by 1,500 mT annually
- Gas Conversions
  - On 2019 we added approximately 9,200 new customers, each residence represents a 2.4 mT CO2e annual carbon reduction
  - At reduced cost
- Promote CNGV - a reduced carbon fossil fuel
  - A carbon neutral transportation fuel option (RNG)
- Promote Natural Gas Energy Efficiency Projects
  - Statewide Energy Efficiency programs reduced natural gas use by 1.2% in 2017

Eversource Introducing New Clean Energy Concepts

Filed November 6, 2019 expect to be in place for January 2021.

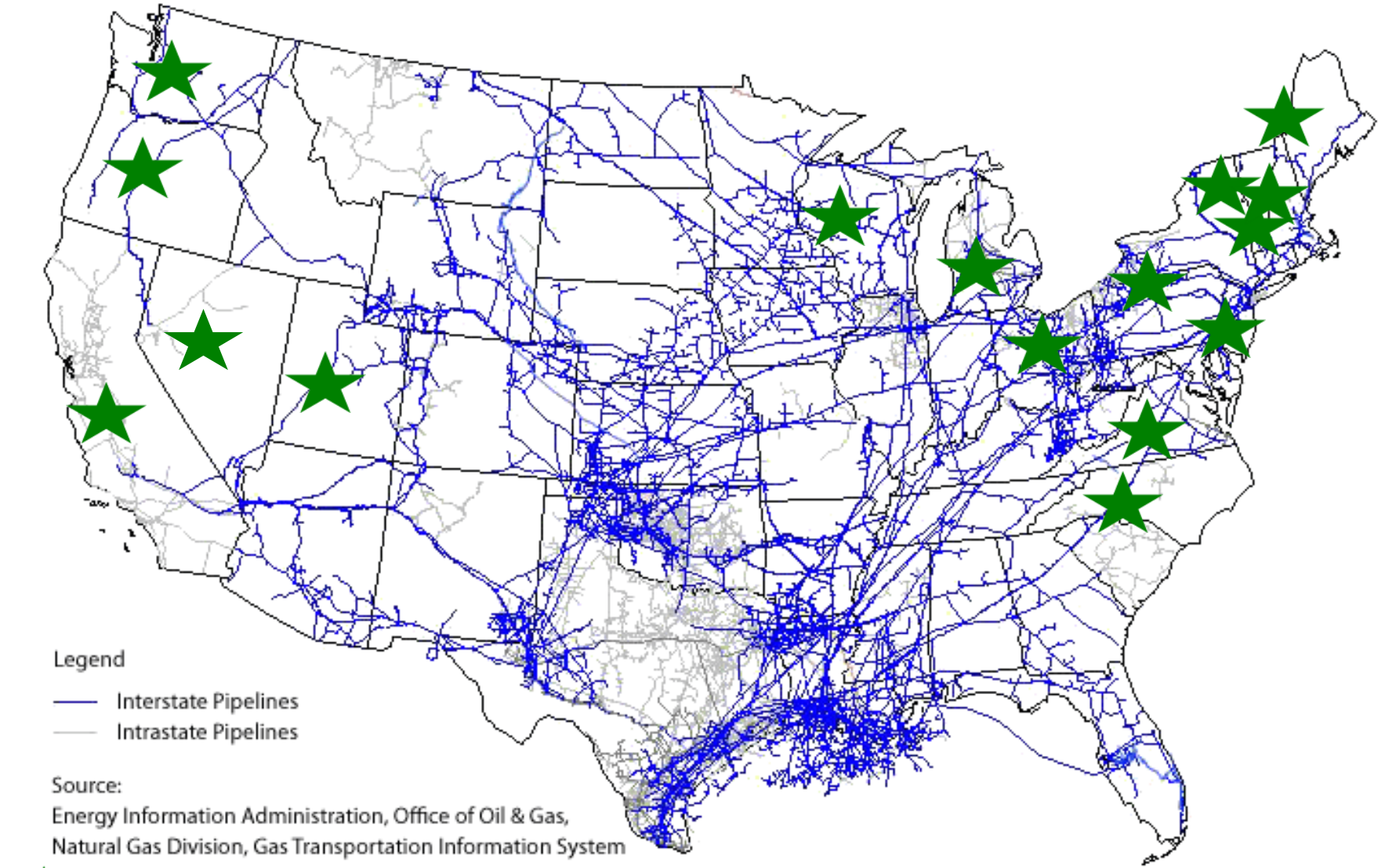
Focus on greening up operations by reducing emissions and exploring clean energy programs for the natural gas customer:

- **Gas Demand Response:** Demonstration to determine if a gas demand response program would shave peak demand, alleviate physical pipeline constraints, reduce capacity, and reduce overall emissions
- **Geothermal Heating:** Demonstration on deployment and study of geothermal networks in different residential and commercial & industrial scenarios
- **Responsible and Renewable Natural Gas:** Establish criteria to enable Renewable and Responsible Natural Gas supply – **a Carbon Neutral Option**
- **Combined Heat and Power Systems (CHP)**
  - Twice the carbon reduction at half the price as solar
- **Additional Evolving Gas Technologies** – Heat pumps
  - Increased efficiencies during high demand periods- a force multiplier

Other Carbon Reduction

EVERSOURCE ENERGY

Harnessing the Power of an Existing National Distribution Grid



States with Customer RNG Offerings