

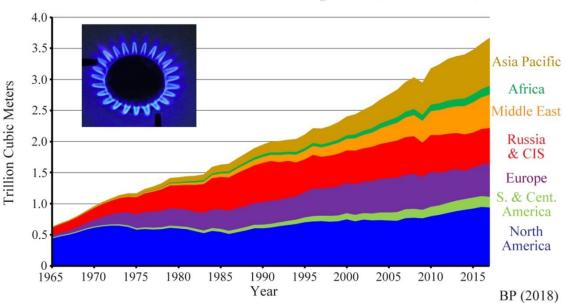
New England Curtails amid World Natural Gas Boom

By Steve Goreham

Originally published in Master Resource.

Global usage of natural gas continues to grow rapidly. Gas is an essential low-cost, non-polluting fuel for heating, cooking, industrial use, and generation of electrical power. But states in New England, New York, and some nations seek to curtail the use of natural gas.

From 1965 to 2017, world natural gas consumption <u>increased</u> almost six times, from 631 billion cubic meters to 3.7 trillion cubic meters per year. Gas use in North America doubled, increased in Europe by a factor of 14, and skyrocketed in Asia Pacific by a factor of more than 100. Gas became the primary fuel for heating and cooking in developed nations and a major fuel for industry and electricity generation across the world.



World Natural Gas Consumption (1965-2017)

In 2017, natural gas <u>delivered</u> 23 percent of the world's energy, up from about 15 percent in 1965. Today gas provides nine times as much global energy as wind and solar combined.

Natural gas, or methane, is a clean-burning fuel, free of nitrous oxides, sulfur dioxide, soot, and other pollutants. Water vapor is the largest waste product from methane combustion. But New England states have decided to curtail the use of gas to reduce greenhouse gas emissions.

Connecticut, Maine, Massachusetts, New Hampshire, New York, Rhode Island, and Vermont now pursue decarbonization targets that call for a 75 to 85 percent reduction in emissions by 2050. These states have <u>adopted</u> a policy of "strategic electrification." Electrification calls for elimination of natural gas and propane from home and water heating applications by substitution of electric appliances and heat pumps, which use electricity from wind and solar systems.

A 2015 survey by the US Department of Energy <u>found</u> that 58 million US residences use natural gas as the primary heating fuel. An additional 11 million homes use propane, fuel oil, or kerosene. Natural gas and other hydrocarbon fuels heat about 58 percent of US homes. Gas use is even higher in New England, with <u>hydrocarbons</u> the primary fuel for over 80 percent of one- to four-family homes.

Elimination of natural gas and propane for heating will be costly for New England residents. A 2017 <u>study</u> by the New York State Energy Research and Development Authority found that only four percent of the state's heating, ventilation, and air conditioning load could cost-effectively switch to heat pumps.

To force a transition away from natural gas, New England policymakers have blocked construction of new gas pipelines. The Constitution Pipeline, a project to bring gas from the shale fields in Pennsylvania to the pipeline network in Schoharie County, NY, is one of many examples. This pipeline continues to be <u>stalled</u> after receiving a construction permit from the Federal Energy Regulatory Commission in 2014.

In opposing the Constitution Pipeline, Governor Andrew Cuomo's office <u>stated</u>, "...we will not relent in our fight to protect our environment and ensure a cleaner, healthier future...New York is stepping up for the future of our planet, our economy, and our children."

Because of insufficient gas pipeline capacity, New England now faces critical shortages. In January, utility Con Edison <u>announced</u> a moratorium on new natural gas customers in Westchester County, New York. That same month, Holyoke Gas & Electric of Massachusetts also <u>announced</u> that it can no longer accept new natural gas service requests due to a lack of supply.

New England residents pay high prices for heating and electricity, particularly in winter months. Shortages during weeks of severe cold <u>push</u> residential gas prices up by as much as 400 percent. Power plants are forced to use expensive oil fuel, with gas reserved for home heating. Oil <u>provided</u> almost one-quarter of New England's electricity during the severe cold at the end of December, 2017.

New England policies contrast sharply with those of most of the country. US natural gas main and service distribution pipelines <u>grew</u> 80 percent from 1984 to 2016 and <u>continue</u> to expand in most states.

In an extreme case, in 2017 the government of Netherlands <u>called</u> for elimination of all natural gas usage by 2050. Despite the fact that 90 percent of Dutch homes are heated by natural gas, the government proposed that 170,000 gas lines would be disconnected every year, to be replaced by geothermal and heat pump systems. Last year Amsterdam <u>announced</u> a phaseout of natural gas in favor of more "sustainable" sources of energy.

In contrast to efforts to curtail gas use in New England and Netherlands, global shipments of liquefied natural gas (LNG) are <u>exploding</u> to help satisfy growing demand. World LNG trade increased 12 percent in 2017, 10 <u>percent</u> last year, and is projected to <u>increase</u> by another 11 percent in 2019.

Japan and South Korea remain the world's largest importers of liquefied natural gas, with LNG demand <u>growing</u> fastest in China, South Korea, and Pakistan. LNG supply growth is dominated by shipments from Australia and the fracking fields of the United States.

There is no evidence that restrictions on New England usage will have a measurable effect on world demand for natural gas, or the slightest effect on global temperatures. But misguided government energy policies will raise prices for New England residents.

Steve <u>Goreham</u> is a speaker on the environment, business, and public policy and author of the <u>book</u> Outside the Green Box: Rethinking Sustainable Development.