

Proposed Natural Gas Extension in Town of Bolton

Natural Gas Delivers Value & Diversity



Heat Economically

- The most abundant fuel source in the US (supply and demand)
- The Least expensive way to heat your home or business.
- Stable pricing: Utilities are publically regulated & can't manipulate prices



Heat Sustainably

- Cleanest fossil fuel available
- Domestic fuel, sourced right here in the North East

Heat Reliably

- No Deliveries - On demand, piped directly to your facility
- Abundant - The U.S. has a supply of Natural Gas for ~100 years.
- Fuel of choice for back up generators, fuel cells and microgrids.



Heating

Cooling

Cooking

Fireplace

Drying

Power

Lighting

Snow Melt

Transportation

*Emergency
Power*

Hot Water

Environmental

Natural gas is an extremely important source of energy for reducing pollution and maintaining a clean and healthy environment.

- It is domestically abundant
- It is a secure source of energy
- It offers a number of environmental benefits over other sources of energy, particularly other fossil fuels.
- Natural gas adds another energy option to oil, solar, geothermal, or wood burning.

Natural Gas

Natural gas is the cleanest of all the fossil fuels, as evidenced in the Environmental Protection Agency's data comparisons as of 2010. Composed primarily of methane, the main products of the combustion of natural gas are carbon dioxide and water vapor, the same compounds we exhale when we breathe.

A major study performed by the Environmental Protection Agency (EPA) and the Gas Research Institute (GRI), now [Gas Technology Institute](#), in 1997 sought to discover whether the reduction in carbon dioxide emissions from increased natural gas use would be offset by a possible increased level of methane emissions. The study concluded that the reduction in emissions from increased natural gas use strongly outweighs the detrimental effects of increased methane emissions.

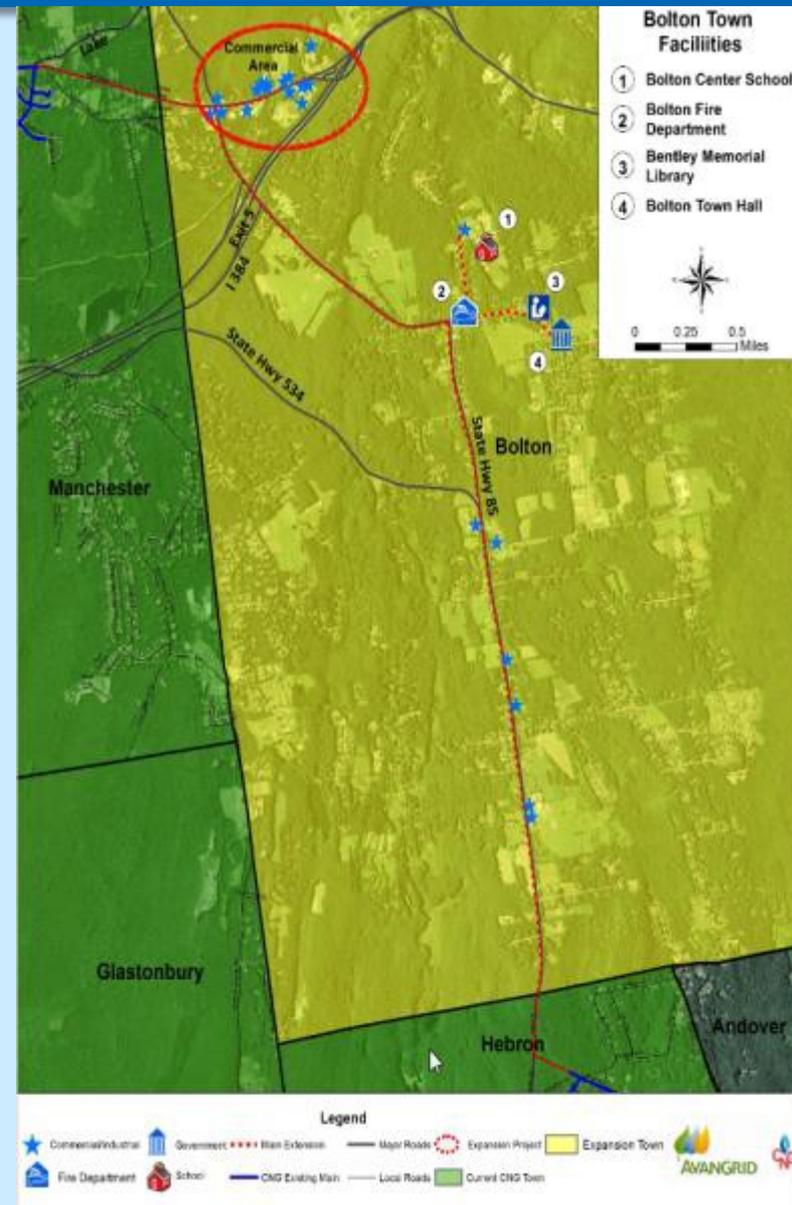
Benefits of Natural Gas

- Many businesses and residences in town currently use propane gas
- Natural gas is more cost efficient than propane gas
- Natural gas requires less equipment (serviced by a direct underground line as opposed to above-ground outdoor tanks)
- Natural gas doesn't require constant monitoring to refill a tank
- Most businesses, when offered, will use natural gas instead of oil or propane

Cost can be variable and volatile in most energy offerings. The ability for a consumer to be able to choose different sources of energy allows the consumer to make the best choice for their life style and budget, and makes the companies that deliver the energy more competitive.

Bolton Proposed Expansion

- Proposed 7 miles of gas main
- Main to be installed from current Hebron gate station
- Main would extend into Bolton Town Center and commercial area
- Natural Gas available to:
 - Bolton Center School
 - Bolton Town Hall
 - Bentley Memorial Library
 - Bolton Fire Department
 - Simoniz Facility
- Route would serve areas of commercial and residential customers



Bolton Expansion

2016 Project Summary*

Projected construction cost	\$1,130,000
Shortfall based on projected revenue	\$ 556,000
Non-Firm Margin (NFM) contributed by CNG	\$ 340,000
Town of Bolton Financial Contribution **	\$ 216,000

*Project summary is based on 2016 construction costs and 2016 regulatory model and may be impacted by 2017 changes.

**CNG and Bolton will work to achieve mutually agreeable terms for the contribution portion of this project.

Financial Contribution:
\$216,000 over 7 years

- No interest charges
- Approximately \$30,860 per year

CNG Taxes

CNG Taxes paid to Town of Bolton

- Estimated to be \$150,000 over 5 years

Heat Effortlessly. Switch to Natural Gas.

Natural Gas is Safe and Reliable with minimal impact to Bolton

- CNG Engineers & designs
- CNG Contractors excavate an ~18 to 24 inch wide trench and install the main
- CNG backfills, temporary patches and then permanently restores the roads
- CNG Installs services to all customers with signed service agreements along the route



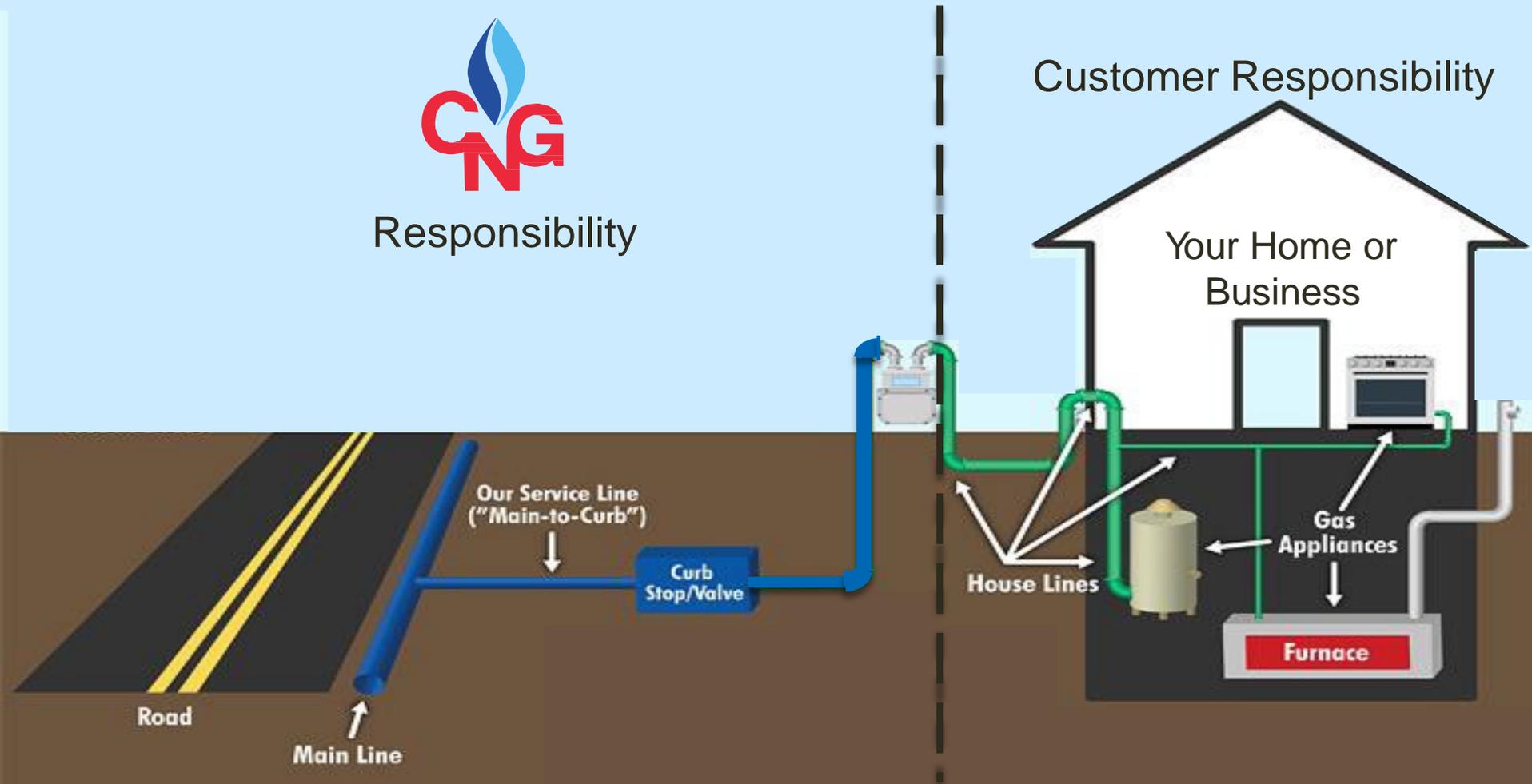
Heat Smart. Switch to Natural Gas.

CNG Constructs, Owns, Maintains & Inspects all pipes and meters up to the home or business. The customer's responsibility begins after the meter.



Responsibility

Customer Responsibility



Financial Calculation – The Hurdle Rate Test

Natural Gas Expansion Projects must be financially prudent in order to move forward.

- CNG provides upfront investment for the entire project for the following:
 - Engineering costs
 - Construction costs
 - Labor costs
 - Pipes
 - Meters
 - Infrastructure up to the home or business
- CNG operates, maintains & inspects the system
- CNG pays municipal taxes for all infrastructure in the town
- CNG is allowed to recover this investment over 25 Years

Bolton's Responsibilities to Heat Smart

Bolton's Responsibilities include Equipment Conversions:

- ✓ Conversion of boilers to natural gas
- ✓ Conversion of water heaters to natural gas
- ✓ Conversion of kitchen equipment to natural gas
- ✓ All piping from the gas meter to the converted equipment

Bolton is responsible for all costs associated with equipment conversion.

CNG's Responsibilities include:

- ✓ Installation of all natural gas mains within the project
- ✓ Installation of service lines to committed customers
- ✓ Installation of the natural gas meters
- ✓ Maintenance of all mains, services and meters

CNG's responsibilities will be provided at no cost to Bolton

Heat Economically. Switch to Natural Gas

Bolton Facilities	Fuel Type	Fuel Usage (Gal)	Price per Gallon	Current Fuel Cost	Gas Equiv. Usage (CCF)	Natural Gas Cost	Cost Savings
Bolton Center School	Oil	22,300	\$ 2.46	\$ 54,858	31,200	\$ 24,866	\$ 29,992
Fire Department	Oil	3,650	\$ 2.46	\$ 8,979	5,100	\$ 6,712	\$ 2,267
Bentley Memorial Library	Oil	2,000	\$ 2.46	\$ 4,920	2,800	\$ 3,850	\$ 1,070
Town Office Building	Oil	3,100	\$ 2.46	\$ 7,626	4,350	\$ 5,351	\$ 2,275
Notch Rd. CC (Main)	Oil	9,300	\$ 2.46	\$ 22,878	13,000	\$ 12,805	\$ 10,073
Notch Rd CC (South	Oil	3,300	\$ 2.46	\$ 8,118	4,600	\$ 5,603	\$ 2,515
TOTALS				\$ 107,379		\$ 59,187	\$ 48,192

NOTE: Fuel consumption history and cost per gallon provided by the Town of Bolton
 Natural gas costs based on approved CNG distribution rates and approved 12 month
 historical CNG commodity costs.

On-going costs:

	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	10 year review
Fuel Savings*	\$0	\$48,192	\$48,192	\$48,192	\$48,192	\$48,192	\$48,192	\$48,192	\$48,192	\$48,192	\$433,728
Maintenance Savings Est**	\$0	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500	\$4,500	\$40,500
Annual Contribution:	(\$0)	(\$0)	(\$31,000)	(\$31,000)	(\$31,000)	(\$31,000)	(\$31,000)	(\$31,000)	(\$30,000)	(0)	(\$216,020)
Net:	(\$0)	\$52,692	\$21,692	\$21,692	\$21,692	\$21,692	\$21,692	\$21,692	\$22,692	\$52,692	\$258,208

*Based on CNG projection at current pricing for five (5) buildings.

**Savings based on annual cleaning and parts

Conversion Estimates

Bolton Center School \$30,000 in FY17 budget for replacement

Town Buildings:

Fire Department	\$6,650
Bentley Memorial Library	\$5,550
Town Hall	\$1,950
Notch Road Municipal Center	\$10,150
Nozzle replacement (all town)	\$3,500
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	\$27,800

Plus labor \$1,500-\$2,000 per unit.

Underground Storage Tanks

	Removal:	Removal & Install:
Bolton Center School	\$15,000	\$45,000
Fire Department	\$4,800	\$25,600
Bentley Memorial Library	\$4,800	\$18,500
Notch Road Municipal Center	\$8,500	\$29,500

Underground storage tanks testing and insurance costs approximately \$7,000 per year.

Requirements to Commence

- ❑ Commitment from the Town of Bolton for the financial contribution portion of the project in the amount of \$216,000*.

- ❑ Signed service agreements by from Bolton to convert the following Town buildings to natural gas by Winter 2017:
 - Bolton Center School
 - Bolton Town Hall
 - Bolton Fire Department
 - Bentley Memorial Library

- ❑ Signed service agreement from Simoniz to convert their facility located at 201 Boston Turnpike to natural gas.

*** Financial contribution is based on 2016 project construction costs and 2016 regulatory model and may be impacted by 2017 changes.**

Thank You

Q&A Section