



498 Maine Avenue, Bangor, Maine 04401 | bangorgas.com | 207.941.9595

TESTIMONY BEFORE THE ENERGY, UTILITIES AND TECHNOLOGY COMMITTEE

LD 2077

An Act Regarding Customer Costs and the Environmental and Health Effects of
Natural Gas
-In Opposition-

Representative Zeigler, Senator Lawrence, and Members of the Joint Select Committee on Energy, Utilities and Technology ("EUT"): My name is Jeff Nehr, and I am the Senior Vice President of Corporate Development for Bangor Natural Gas Company ("Bangor Gas" or "the Company"). I have 35 years' experience in the energy industry working for Peoples Gas, Hope Gas, EQT and Green Mountain Energy. I have developed microgrids including the Pittsburgh Airport Microgrid and AHN Hospital Wexford CCHP Energy Plant. I have worked with WATT Fuel Cell for over five years developing residential fuel cells including the ARCH2 hydrogen hub fuel cell program. I have also worked with renewable natural gas development including five facilities connected to Peoples Gas producing almost one billion cubic feet annually.

L.D. 2077 prohibits local gas distribution companies ("LDC") from including costs related to new gas service mains and gas service lines installed for residential and commercial gas service in the LDC's utility cost of service. Instead, L.D. 2077 requires that these costs be borne solely by and recovered from the customer requesting the gas service.

L.D. 2077 will increase the cost of natural gas service in Maine and leave consumers susceptible to unreliable and higher emission energy sources. The Maine representatives, public utility commission, and consumer advocates have a duty to Maine residents to develop a well thought out plan for carbon reductions that doesn't sacrifice reliability and affordability. L.D. 2077 does the opposite. Most customers would not accept electric outages, increased electricity prices, and risks to public safety by adopting rigid policies that are not thought through to an implementable plan.

Bangor Gas opposes L.D. 2077. Bangor Gas provides safe, reliable, and affordable natural gas service to approximately 8,500 customers in Penobscot, Waldo, and Hancock counties. These customers heat their homes and run their businesses assured that their natural gas service will not be interrupted.

Natural gas is the most reliable and effective source of energy to heat Maine homes. Natural gas pipelines are installed 3 feet below ground to not expose gas pipelines to weather conditions that interfere with service. Natural gas is not affected by sun, wind, or water levels, which all impact the availability of renewable electricity.

Unlike natural gas, the availability of renewable electricity is predicated on environmental conditions and energy storage availability. Solar availability in the northeast is only 20% of peak output, requiring five times the number of solar panels



498 Maine Avenue, Bangor, Maine 04401 | bangorgas.com | 207.941.9595

and 80% of energy storage to support the full rated output of solar. Storage requires batteries made from rare earth materials obtained through high impact mining and imported from other countries, making the U.S. dependent on those often unstable and low regulation countries for its energy security.

Homeowners with natural gas will be safe by having heat during the winter when low temperatures can create health risks due to hypothermia and home damage caused by freezing water lines. We've recently witnessed these types of events and the consequences materialize in Texas during freezing weather and lack of electricity to heat homes.

Natural gas also supports economic development. Energy intensive businesses choose to locate in states where energy is affordable. Energy sensitive businesses choose to locate in states where natural gas and electric generation are reliable. As businesses locate in states that have energy security, they bring family sustaining jobs to those states. Their workers pay state and local taxes, and those workers' families support local businesses.

By developing local resources versus relying on other countries for energy, our nation strengthens its energy independence. Last winter, we saw the importance of energy independence in Europe when its energy security was threatened by war in Ukraine.

Natural gas is also a transition fuel to help reduce emissions from other more carbon intensive, dirty, and often unsafe and inconsistent fuels. Natural gas is the cleanest of all fossil fuels. Composed primarily of methane, the main products of the combustion of natural gas are carbon dioxide and water vapor. These are the same compounds we exhale when we breathe. According to the Energy Information Association ("EIA") table below published on September 7, 2023, natural gas provides carbon emissions savings by converting customers using wood, coal, oil, and propane to low carbon natural gas.

Carbon Dioxide (CO₂) Factors:	Pounds CO₂ Per Million Btu
For homes and businesses	
Propane	138.63
Diesel and Home Heating Fuel (Distillate Fuel Oil)	163.45
Kerosene	161.35
Coal (All types)	211.47
Natural Gas	116.65



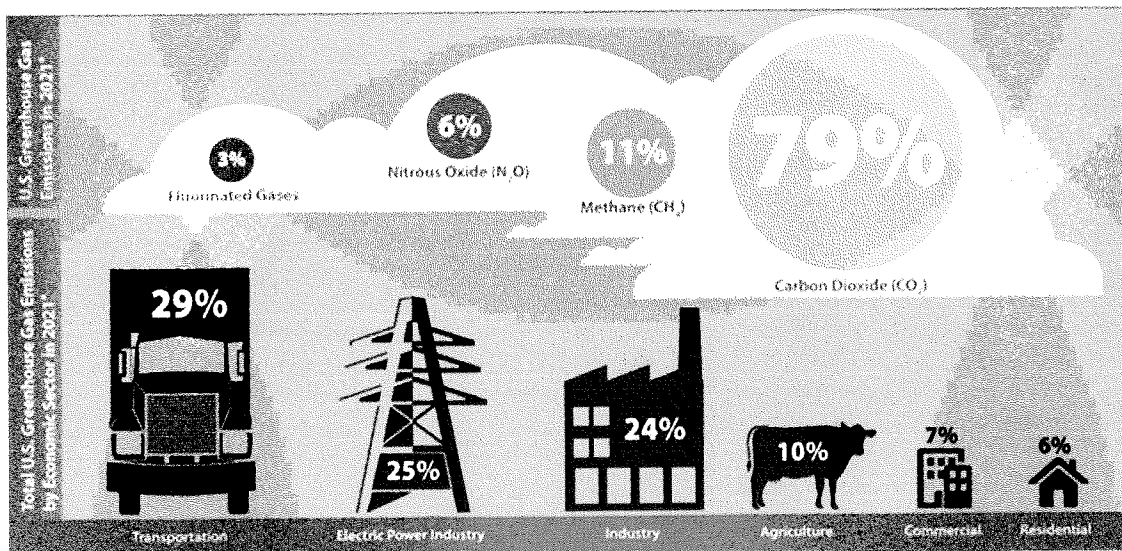
498 Maine Avenue, Bangor, Maine 04401 | bangorgas.com | 207.941.9595

US Census Data	United States		Maine	
Total:	122,354,219		569,551	
Utility gas	58,269,718	47.6%	44,218	7.8%
Propane	5,925,357	4.8%	64,581	11.3%
Electricity	48,141,177	39.3%	42,162	7.4%
Fuel oil, kerosene, etc.	5,599,403	4.6%	348,845	61.2%
Coal or coke	114,177	0.1%	1,154	0.2%
Wood	2,075,845	1.7%	54,919	9.6%
Solar energy	222,369	0.2%	1,236	0.2%
Other fuel	600,652	0.5%	10,347	1.8%
No fuel used	1,405,521	1.1%	2,089	0.4%

Based on the above EIA information and US Census Data, switching from propane and heating oil to natural gas for home heating in Maine would lower CO2 emissions by 8,873 tons per year.

During the conversion process, customers install the latest technology, providing emission reductions through high efficiency natural gas appliances and low carbon natural gas fuel. Converting one home from an old, inefficient heating system to a highly efficient natural gas system can reduce emissions by an estimated 38 percent. And the benefits of conversion to natural gas extend well beyond home heating.

The U.S. Environmental Protection Agency published the below information regarding sources of greenhouse gas emissions and their overall impact. Emissions from heating homes are 6%, which is less than the emissions created from agriculture, industry, electric power generation, and transportation. Natural gas can lower emissions in transportation, electric power generation, and industry without sacrificing affordability and reliability.





498 Maine Avenue, Bangor, Maine 04401 | bangorgas.com | 207.941.9595

Moreover, a robust natural gas industry offers significant opportunities for further emission reductions through the growing use of renewable natural gas ("RNG") and hydrogen as part of LDCs' supply portfolio, which each offer certain challenges but also many benefits. The American Gas Association recommends utilities adopt RNG in their supply portfolio to reduce carbon emissions where there is availability of biowaste from landfills, food waste, agricultural waste, and municipal wastewater. Adoption of RNG as a utility's gas supply source requires state regulatory approval and possible changes to a utility's gas procurement policies, but RNG is compatible with existing natural gas pipeline infrastructure and existing home appliances.

An alternative to RNG is green or blue hydrogen, created from water through electrolysis or methane through steam reforming and carbon capture. Hydrogen pilot projects are happening in most states, allowing the injection of hydrogen-blended natural gas into distribution pipelines. Hawaii Natural Gas has been receiving hydrogen blended gas into its distribution system for 30 years.

Both RNG and hydrogen can have beneficial impacts on reducing carbon emissions while continuing the use of existing distribution pipelines and customer appliances and maintaining safe, reliable, and affordable natural gas service. By allowing LDCs to offer RNG and hydrogen-blended gas supply to customers, carbon emissions will be reduced. Bangor Gas believes that these premium products should be offered to LDC customers on a voluntary basis, allowing customers in Maine to choose products and prices without mandates.

Advocates of L.D. 2077 and similar proposals have not presented a plan for zero carbon reliable and affordable energy. Renewable electricity advocacy at the expense of natural gas customers without a feasible plan will mean low reliability and high electric costs in Maine and a reliance on higher carbon emission, dirtier fuels than natural gas.

Extending gas pipelines in Maine in accordance with consumer needs allows for the promotion of safe, reliable, and affordable energy and the reduction of carbon emissions and provides a pathway to responsible adoption of renewable fuels.

Respectfully submitted by:

Jeff Nehr
Bangor Gas