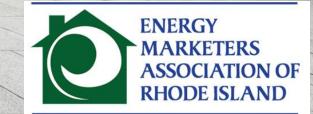
The Road to a Cleaner Heating Sector

Workforce Strategies and Development



Who are we?

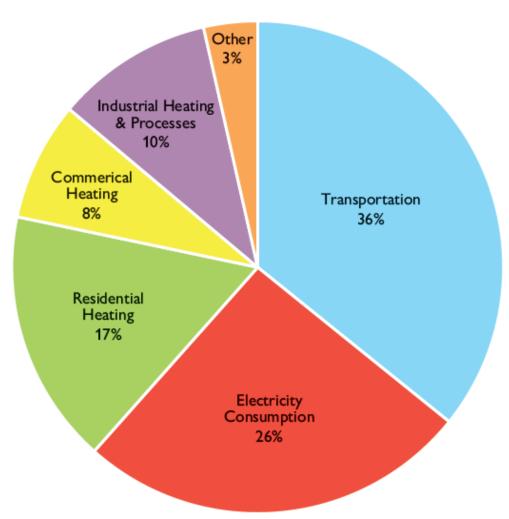


- We are more than just your home comfort specialists.
- A diverse industry encompassing many different professions:
- Entrepreneurs, Family Owned/Multi- generational businesses.
- Master and Journeyperson Plumbers, Pipefitters, Electricians, Refrigeration Tradespeople Commercial Drivers (CDL) ensuring safe, efficient, and timely delivery of your advanced heating fuel -Bioheat[®]
- Customer Service Representatives helping you make informed decisions on delivery services, payment plans, service recommendations. We are there for you all year long to make sure that you are always warm in the winter and cool in the summer. And, we want you to help continue the tradition of providing the best customer service, products and services for all of Rhode Island's energy needs

2016 GHG Emissions Inventory Results by Sector

The majority of GHG emissions in Rhode Island in 2016 were from the transportation sector (36%), followed by emissions from the electricity consumption sector (26%), and residential heating sector (17%) as shown in Figure 2. The "other" category includes agriculture, waste and natural gas distribution.

Figure 2: 2016 GHG Emissions by Sector



2016 RI GREENHOUSE GAS EMMISSIONS INVENTORY – RI DEM/OFFICE OF AIR RESOURCES DECEMBER 2019 The resolution reads as follows:

"Be it resolved that the heating oil industry will reduce its greenhouse gas emissions, based on 1990 levels, by:

- 15 percent by 2023;
- 40 percent by 2030; and
- Net-zero by 2050.

"Be it further resolved that industry groups participating in and present for this summit, including NEFI, the various state associations, and NORA, will work together to do all that is necessary to achieve these goals."



The Heating and Energiaing America Tradie Show (HEAT Show) September 13-13, 2019 at the Rhode Island Convertion Contex in Providence, N Main Offices 64 Control Street, Southborough, NA 0314 DC Office: 1637 # Storet, N.W. (Washington D.C., 2000 Phane (817) \$214-1000 - Pare (100) 375-2740 - your and contex Phane (817) \$214-1000 - Pare (100) 375-2740

2019 Northeast Industry Summit

September 16, 2019 * 1:30pm – 4:00pm Providence Convention Center, Providence Rhode Island

RESOLUTION

The below resolution, having been introduced and moved for consideration by Charles Uglietto of Cubby Oil & Energy in Somerville, Massachusetts, and seconded by Rick Bologna of Westmore Fuel in Greenwich, Connecticut, was considered and approved by more than 300 participants at the 2019 Northeast Heating Oil Industry Summit during the Heating & Energizing America Trade Show (the HEAT Show) in Providence, Rhode Island.

The resolution reads as follows:

"Be it resolved that the heating oil industry will reduce its greenhouse gas emissions, based on 1990 levels, by

- 15 percent by 2023;
- 40 percent by 2030; and
- Net-zero by 2050.

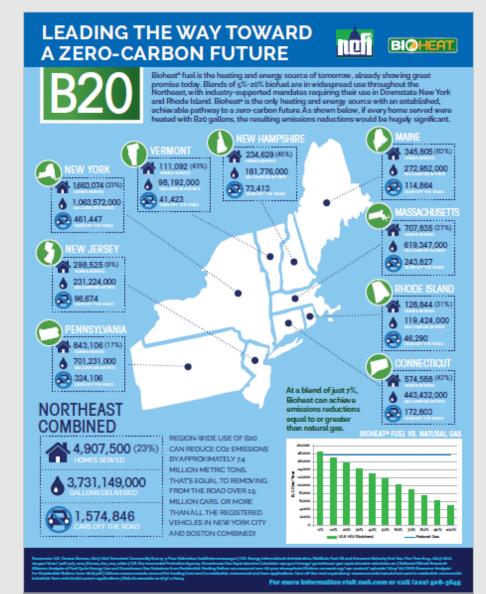
"Be it further resolved that industry groups participating in and present for this summit, including NEFI, the various state associations, and NORA, will work together to do all that is necessary to achieve these goals."

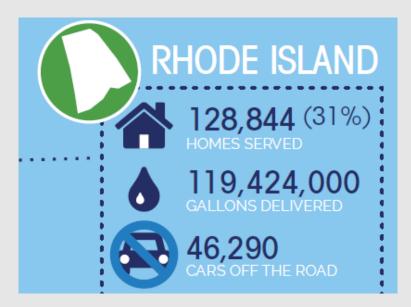
Resolution was discussed and Mr. Uglietto asked if there were objections. None were raised. Resolution was approved unanimously by voice vote.

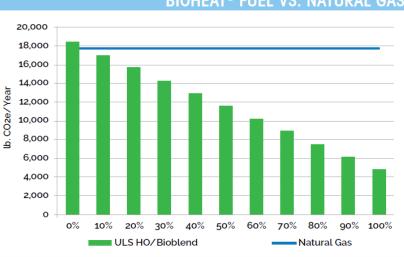
Industry associations that participated in and helped organize the summit include the Connecticut Energy Marketers Association (CEMA), Maine Energy Marketers Association (MEMA), Massachusetts Energy Marketers Association (MEMA), New England Fuel Institute (NEFI), New York Oil Heating Association (NYOHA), Oil Heat Institute of Rhode Island (OHIRI), and Vermont Fuel Dealers Association (VFDA). Representatives from the American Energy Coalition (AEC), National Oilheat Research Alliance (NORA), and the Oilheat Manufacturers Association (OMA) were present to contribute their expertise.

Revised Sept. 17, 2019 at 1:35pm ET to include list of participating organizations.









BIOHEAT® FUEL VS. NATURAL GAS

Mechanical trades (pipefitters, plumbers, refrigeration trades require a minimum of 288 hours of theoretical training, 2+ years of apprenticeship under a sponsor and 4000 hours of on the job work experience

In order for heating sector transformation to be successful and seamless with minimal disruption an army of new and incumbent worker training is critical.

Biodiesel Home Heating Act of 2014

Legislation has been introduced to increase

the mandated levels of biodiesel in home

heating oil. Increased blends provides

immediate carbon savings and lengthens

timeline to meet future GHG reduction

Current mechanical trades careers are

sustained, provides pathway for new /young

talent to enter the energy service industry.

Current licensing requirements legislated for safety and proficiency. But creates barriers and inhibit the licensing of individuals in a timely manner

To meet the goals of strategic electrification in the heating sector as necessitated and outlined in Resilient Rhode Island Act of 2014 licensing reform is a priority

The delivered fuels community saw the opportunity and necessity for increased training and recruitment for the mechanical trades. Encouraged by member companies, OHI now EMARI applied for and was granted a Real Jobs Workforce development grant "Talent for Delivered Fuels" – enabling industry driven initiatives to ready corporate partners for the energy sector evolution by embracing diversification, increase incumbent worker training, and outreach/recruitment and education of secondary education level students of career opportunities in the HVAC/R mechanical trades.

• FUEL DEALERS

	Age	2018 Jobs	2018 Percent
•	14-18	12	1.2%
•	19-24	51	5.2%
•	25-34	129	13.1%
•	35-44	158	16.1%
•	45-54	290	29.5%
•	55-64	262	26.7%
•	65+	81	8.2%

Industry Age Breakdown

• PHACC

	Age	2018 Jobs	2018 Percent	
•	14-18	19	0.5%	I
•	19-24	281	8.3%	
•	25-34	787	23.2%	
•	35-44	737	21.7%	
•	45-54	869	25.6%	
•	55-64	544	16.0%	
•	65+	162	4.8%	



.I^I Emsi

Plumbing, Heating, and Air-Conditioning Contractors in Rhode Island

Plumbing, Heating, and Air-Conditioning Contractors (NAICS 238220):This industry comprises establishments primarily engaged in installing and servicing plumbing, heating, and air-conditioning equipment. Contractors in this industry may provide both parts and labor when performing work. The work performed may include new work, additions, alterations, maintenance, and repairs. Illustrative Examples: Cooling tower installation Heating, ventilation, and air-conditioning (HVAC) contractors Duct work (e.g., cooling, dust collection, exhaust, heating, ventilation) installation Lawn sprinkler system installation Fire sprinkler system installation Mechanical contractors Fireplace, natural gas, installation Refrigeration system (e.g., commercial, industrial, scientific) installation Furnace installation Sewer hook-up and connection, building

.ıl' Emsi	Emsi Q4 2018 Data Set www.economicmodeling.com	1
-----------	--	---

Industry Summary for Plumbing, Heating, and Air-Conditioning Contractors

3,399		34.5%	\$71,566	
Jobs (2018	9	% Change (2014-2024)	Avg. Earnings Per Job (2018)	
7% below National	average	Nation: 32.5%	Nation: \$71,176	
.ıl• Emsi	Emsi Q4	24 2018 Data Set www.economicmodeling.com 1		
Industry Detail				

Payrolled Business Locations (2018)		459
Jobs Multiplier		2
Unemployed		Only Available for 2-Digit
.ıl ^ı Emsi	Emsi Q4 2018 Data Set www.economicmodeling.com	1