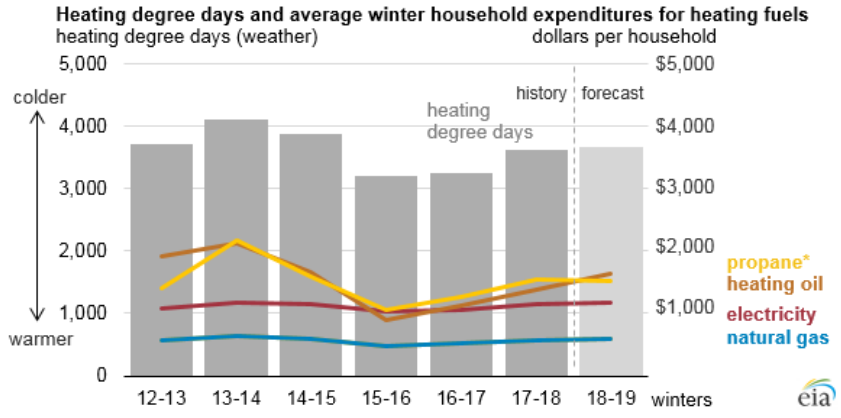
2018/2019 Winter Forecast: High Heating Bills for the Northeast

Rising, and large fluctuating, energy costs present a challenge for American families, particularly those facing economic hardship or living paycheck to paycheck. In 2015, the U.S. Energy Information Administration (EIA) reported almost one-third of American households could not afford to heat or cool their homes. The survey further reported that families would forego necessities such as food or medicine to pay their energy bills. Eleven percent of the households surveyed also reported keeping their homes at an unhealthy or unsafe temperature to reduce energy expenses.[1]

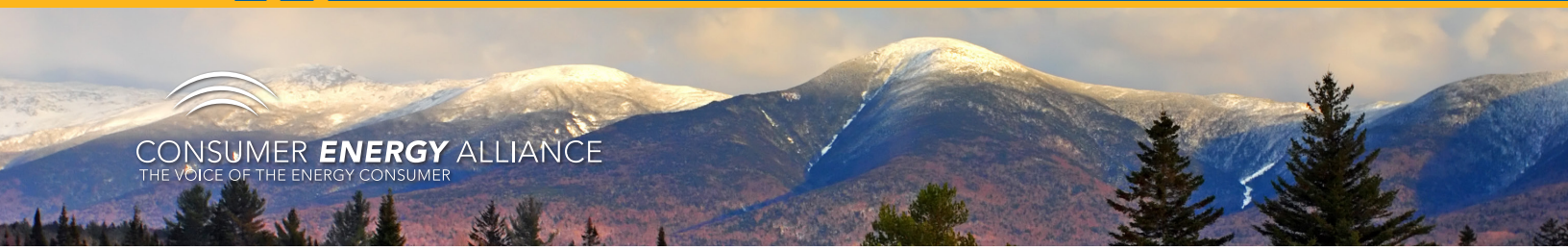
The U.S. Energy Information Administration (EIA) predicts Americans' household heating costs, particularly heating oil, could rise by as much as 33 percent if this winter is colder than last year.

Meteorologists predict the winter of 2018-2019 will look much like last year, perhaps even colder for New Yorkers and New Englanders, with threats of snow and ice looming ahead in January and February.[2] As the Northeast braces for another chilling winter, residents throughout the region are preparing for higher heating costs. The EIA predicts Americans' household heating costs, particularly heating oil, could rise by as much as 33 percent if this winter is colder than last year.[3] The agency has also reported that natural gas storage inventory levels were at their lowest level since 2005, and considerably lower than their 5-year average, heading into this winter season.[4]

Energy prices typically spike during winter weather, especially during prolonged cold snaps, because of reduced energy supplies and difficulties delivering these supplies to utility providers. According to federal data, Northeastern families and households paid $263 more for



Source: U.S. Energy Information Administration



electric heating and an additional $179 for natural gas, than the national average during the winter of 2017-18.[5] Electric utilities in the Northeast have increasingly come to rely on natural gas to run turbines that can keep up with customer demands for power and home heating. While the growth in U.S. natural gas production has certainly helped utilities prepare for these high energy demand days during the winter months, it hasn't helped that state policymakers - bowing to pressure from anti-energy activists - have blocked development of pipeline infrastructure needed to deliver critical energy supplies that would ensure American families are warm this winter. In fact, in February 2018 when natural gas supplies became scarce during a series of harsh winter storms, liquefied natural gas (LNG) from Russia was imported in New England to heat American homes. At one point last winter, the Boston metro area had the highest natural gas prices in the industrialized world, despite the United States leading role as the world's largest producer[6]. Much of this is due in large part to bottlenecks created by a lack of pipeline capacity, and lower generation capacity due to fuel retirements[7] as well as aging and declining assets.

Unlike other areas of the U.S., 21 percent of homes in the Northeast use heating oil during winter months. Due to the instability of oil prices, EIA predicts these households could spend an average of $269 more this winter. While the agency notes that current fuel supplies are sufficient, the Northeast region typically imports additional fuel resources during severely cold weather.[8] If the 2018-2019 winter season is just 10 percent colder

Percent change in fuel bills from last winter (forecast)

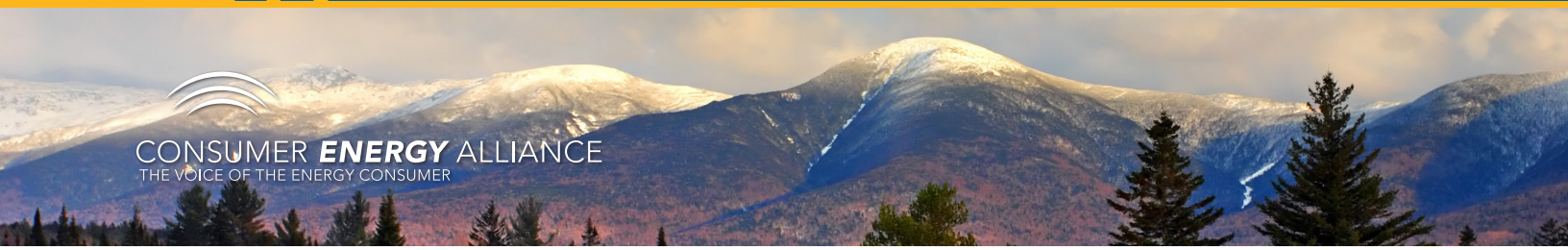
	Base case forecast	If 10% warmer than forecast	If 10% colder than forecast
Heating oil	20%	7%	33%
Natural Gas	5%	-4%	16%
Propane*	-1%	-17%	15%
Electricity	3%	-2%	9%

*** Propane expenditures are a volume-weighted average of the Northeast and Midwest regions. All others are U.S. volume-weighted averages. Propane prices do not reflect prices locked in before the winter heating season starts.**

Source: U.S. Energy Information Administration

than expected, natural gas price and electricity price increases could triple over the agency's base forecast.

Fortunately, programs such as the Low Income Home Energy Assistance Program (LIHEAP) offer much-needed aid to families who are unable to pay for home heating costs or repair/replacement of heating equipment. However, increasing energy costs and government budget cuts pose a significant challenge for these programs.



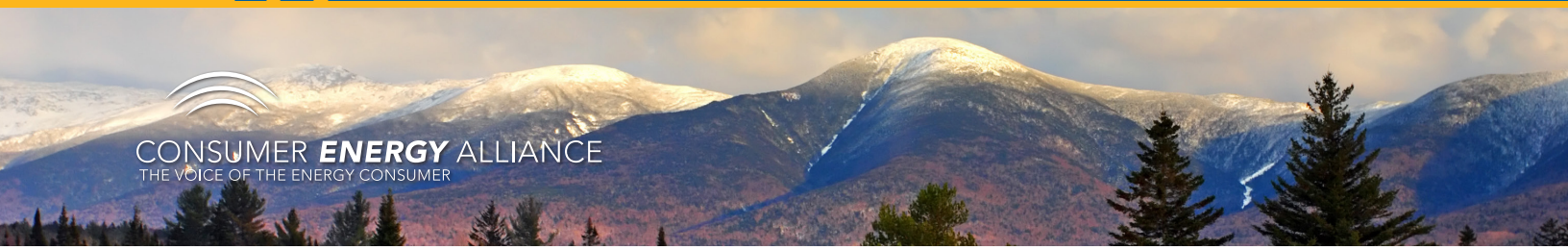
Last year, LIHEAP assisted nearly 5.9 million households nationwide – including over a million New York households and almost 361,000 New England households.[9] [10] National Energy Assistance Directors' Association (NEADA), the organization representing state directors for LIHEAP, noted they expect 8.9 million American households will qualify for assistance during the 2018/2019 winter season.[11]

In April 2018 testimony before the House Subcommittee on Labor, Health and Human Services and Education and Related Agencies, NEADA requested additional appropriations to meet the growing demand of individuals and families due to unaffordable energy costs. The Association noted that in 2018, the average annual price for home heating increased 9.9 percent, or $77, from the previous year.[12] The group recently estimated that homeowners could see their home heating bills increase by 10.5 percent. [13]

Implications for Low-Income Residents in New York

In addition to expected rising energy costs for the state, New York City faces additional challenges with winter preparations as the NYC Housing Authority (NYCHA) needs $32 billion, including $3.1 billion to repair or replace old inefficient heating systems primarily operating on heating oil for residents over the next five years.14 In anticipation of these repairs and replacements, this means that more than 400,000 New Yorkers will face this winter without reliable home heating.[15] This development is troubling as last year's bitter cold snaps resulted in 80 percent of the NYCHA's residents losing their heat and hot water - an astounding 320,000 people forgotten in the public debate about bringing more affordable and reliable energy service from upgraded energy infrastructure.[16]

According to one tenant, it was warmer outside than it was inside the apartment. "It was an ice box. We froze, we were sleeping in sweaters," they said.[17] Governor Andrew Cuomo commented, "It is just shocking that in New York State we would have people subjected to these conditions. This situation we have seen is as upsetting and disturbing as I've seen anywhere and I've been in public housing across this country."[18] The New York State Energy Research and Development Authority pointed out that last winter, oil prices for home heating rose from $2.55 per gallon in early October to $3.03 in late January. This year, prices in the New York City region were already at $3.56 on October 1.[19] Fortunately, utilities in western New York that have access to pipelines with affordable natural gas supplies from the Marcellus and Utica Shale in states like Pennsylvania and Ohio have been able to predict minimal prices increases this winter.[20] That is why it is critical to have new and upgraded pipeline infrastructure in place to deliver reliable supplies and lower energy costs for consumers across New York.



One thing is certain, the region needs more dependable, affordable energy. Fortunately, there are near-term solutions that can help with this natural gas and energy supply constraint facing New York and the Northeast.

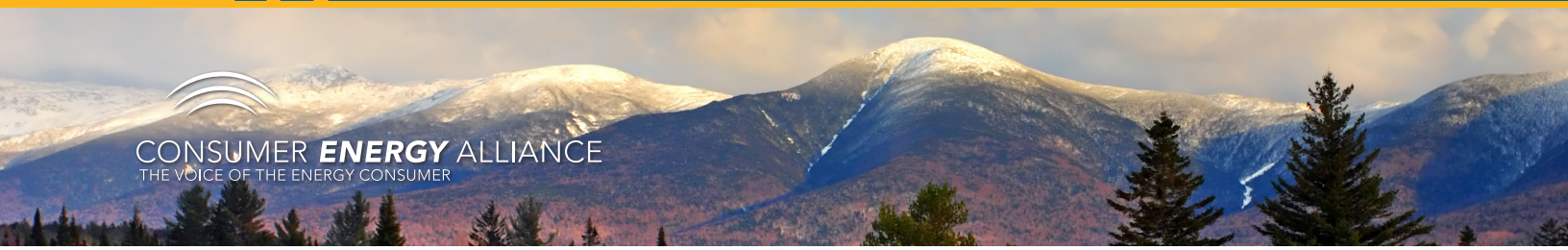
The Outlook for New England

Spanning from Maine south to Connecticut, the New England region also faces challenges with access to the infrastructure that it needs to deliver energy to heat homes during the winter. According to a recent survey by the Massachusetts Department of Energy Resources, December home heating oil costs are expected to increase by over 11 percent from the same point in 2017.[21]

In early 2018, Gordon van Welie, President and Chief Executive Officer of ISO New England, the region's electricity transmission network, testified before the Senate Committee on Energy and Natural Resources, noting, "New England's limited fuel infrastructure will eventually cause severe reliability issues if fuel security is not addressed." [22] As noted prior, last winter, New England's limited natural gas infrastructure resulted in the region having the most expensive spot natural gas prices in the world. ISO New England's Operational Fuel Security Analysis noted that if there if the 2018/2019 winter season is similar to the previous year, the region could face rolling blackouts.[23] Under its analysis, it examined 23 hypothetical possibilities ranging from a worst-case scenario to the best. According to its report, 19 of those hypothetical cases resulted in "load shedding," which is a deliberate shutdown of power distribution to protect the entire system from failing - during extended periods of high demand by the mid-2020s.[24]

Moving Forward

One thing is certain, the region needs more dependable, affordable energy. Fortunately, there are near-term solutions that can help with this natural gas and energy supply constraint facing New York and the Northeast. The most immediate, and effective steps that New York and New England can take to ease home heating spikes and outages for low-income families and those living paycheck to paycheck would be to end the state's blockade on natural gas, and allow the expansion of critical pipeline infrastructure projects. Ending this blockade is especially important as the region heads into another cold winter where the most vulnerable in our communities are counting on policymakers to put politics aside and provide solutions to help them stay warm.



Endnotes

1. https://www.eia.gov/consumption/residential/reports/2015/energybills/
2. https://www.accuweather.com/en/weather-news/2018-2019-us-winter-forecast-storms-to-target-mid-atlantic-snow-and-ice-to-strike-the-southern-plains/70006208
3. https://www.eia.gov/outlooks/steo/report/winterfuels.php
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5. EIA Short Term Energy Outlook, November 2018.
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10. For the purpose of this report, the New England region is defined as Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont.
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