## Rep. Michael Vose: There's power in the truth about climate

THE NAMEPLATE of this newspaper quotes New Hampshire's own Daniel Webster as saying, "There is nothing so powerful as truth." A corollary surely would suggest that untruths and partial truths carry their own power to mislead and deceive.

Occasional articles that appear in these pages warn of a climate apocalypse. Most leave out much information relevant to that subject that could lead to a better understanding of a complex and important issue.

For example, many articles use the term "climate change" in an ambiguous way. Climate, according to Merriman-Webster, is "the average course or condition of the weather at a place usually over a period of years as exhibited by temperature, wind velocity, and precipitation."

Weather changes continually over time, which means the climate also changes.

Meteorologists typically use a 30-year window for assessing weather changes that mark a change in climate. Picture using a magnifying glass to examine a large table of numbers — the numbers in your magnifier field of view are analogous to a snapshot of the climate over a given time. The time window you choose determines the amount of that change.

Simply stated, weather causes the climate to change but a changing climate does not cause the weather to change.

Similarly, the historical record does not support claims that recent storms, such as Helene and Milton, are more intense than past storms.

The recent devastation in Asheville, North Carolina, seems eerily familiar to two July 1916 hurricanes over a three-week span that included a Category 2 hurricane (before storms were named) that pounded that area with 8 to 12 inches of rainfall and caused catastrophic flooding in the city and surrounding mountain communities. The damage was severe with many homes and factories washed away and roads and railroads made impassable. Over 80 people lost their lives and crops were destroyed, imperiling the lives of the survivors.

A recent master's thesis examining flood deposits on the banks of the French Broad River near Asheville over the last 250-300 years found that a flood in 1769 produced water levels approximately as high as those reported from Hurricane Helene.

As a seven-year-old child living in Cary, North Carolina, I witnessed the destruction in 1954 of hurricane Hazel, the only Category 4 storm ever to come ashore in that state. The economic losses from Hazel amounted to the equivalent of more than a billion of today's dollars.

Reports about 100-year weather events always apply to a specific location. It is possible to have 100-year events every year in the U.S., as long they are in different locations. A 100-year flood in western North Carolina this year could be followed by a 100-year flood in eastern North Carolina next year. That doesn't mean 100-year floods are getting more frequent.

Similarly, these pages have carried laments about an increase in heat related illness. Such stories almost always fail to mention that cold-related illness and death is far more prevalent, occurring in the U.S. at a rate of 2.5 to 1, according to EPA data.

One recent article asserted that 7 million people worldwide die prematurely from burning fossil fuels (the Global Burden of Disease Study puts the number at 4.2 million). Sadly, many of the deaths attributed to such air pollution occur in third-world countries that burn wood and dung for cooking, with tragic effects on many women and children.

In contrast, plentiful and affordable energy has saved billions of lives over the last century through advances in living conditions, sanitation, medical science, and countless innovations.

Abundant energy comes primarily from fossil fuels, which today supply 81% of the world's energy, a percentage that has changed very little in the past 30 years. Attempts to replace our energy supply with renewable sources has proved expensive and ineffective because hydrocarbons deliver a torrent of energy while renewables produce a trickle.

The U.S. Department of Energy on October 17 reported that electricity today is four times the cost of natural gas, which means electrifying everything will be very expensive and will push many Americans into energy poverty.

Google, Amazon, and Microsoft all signed contracts recently to buy nuclear energy to power data centers, which will significantly boost the momentum of the long-awaited small modular nuclear reactor industry. This new generation of small reactors promises to be safer and less expensive than traditional nuclear plants. Once again, a vibrant economy leads the way to a better energy future.

The truth about climate and energy is out there, and its power is liberating.

Rep. Michael Vose (R-Epping) serves as chairman of the House Science, Technology, & Energy Committee.