

Comments of the Union of Concerned Scientists in Support of 100% Clean Energy

Massachusetts Joint Committee on Telecommunications, Utilities, and Energy Hearing, 7/23/2019

Thank you, Chairman Golden, Chairman Barrett, and committee members. My name is John Rogers and I am a senior analyst in the Climate and Energy program at the Union of Concerned Scientists, a non-profit that puts rigorous, independent science to work to solve our planet's most pressing problems. Joining with people across the country—including thousands in Massachusetts—we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

I will speak today about the power sector, then turn the microphone over to my colleague Dan Gatti to speak about transportation.

In the context of this past week's heat wave, it seems wholly appropriate to mention a new UCS analysis about one particular dimension of climate impacts, extreme heat. *Killer Heat in the US: Climate Choices and the Future of Dangerously Hot Days* projects how often across the United States the heat index—or “feels like” temperature—will be above 90°F, 100°F, 105°F, or beyond (“off-the-charts” heat thresholds) based on different global warming emissions scenarios.¹

And the projections are stunning, under the course we're on:

- Rapid, widespread increases in climate-change-driven, potentially lethal heat, with serious implications for daily life...
- ...Including in Massachusetts, where, by late century, in terms of heat index, we'll have on average 26 days above the 100-degree mark, and 15 days above the 105-degree mark
- More days above 100 degrees than Texas currently has (21), and a number of above-105-degree days that would be *more than double* what Arkansas currently has (7)
- In Boston itself by mid-century, on average as many above-100-degree heat index days as Columbia, SC, currently has

UCS's analysis also presents the results by congressional district, and for major metropolitan areas in Massachusetts.²

All of those results, however, are based on us staying on the course we're on.

¹ Available online at <https://www.ucsusa.org/resources/killer-heat-united-states-0>

² Available online at <https://www.ucsusa.org/resources/killer-heat-interactive-tool>

Changing the course we're on

Rapid action on climate change, on the other hand, could prevent the most serious impacts, and spare millions of people across the country from the threat of relentless summer heat.

For Massachusetts, rapid action could mean dramatically fewer of those over-100- and over-105-degree days right here. It could mean an average of five of those over-100 days annually instead of 26, and two of the over-105 days instead of 15.

We have the power to change the path we're on. *You* have power to change the path.

This committee has already been a key step for many important moves in that direction in past sessions. And many of the power sector bills before you today—on energy storage and net-zero stretch energy codes, for example—are additional important steps.

Action and ambition

We want to express UCS's support today for action and ambition. And, particularly, for the level of ambition in House Bill 2836 and Senate Bill 1958 in going 100% in the power sector.

Other states have looked at the need, and the opportunity, and determined that that level of ambition—100%—was the way to go; this is definitely not just a California thing. Hawaii was first, with its 2015 commitment to 100% renewable energy by 2045. And it has been followed by a host of states, most in the past year: California, yes, but also Maryland, Nevada, New Jersey, New Mexico, New York, and Washington, plus Washington, DC, and Puerto Rico.³ And, just last month, Maine.⁴

These states have defined 100% in different ways—renewable, clean, zero-carbon—but:

- Each has them hitting the target in the near term
- Each has renewables clearly specified to play a major role in meeting their 100% target (including all of it, in several cases)
- Each signals clearly that fossil fuels have no long-term future in our power mix

That last one is a message that energy developers need to hear, and hear clearly—now, in 2019.

This push isn't about keeping up with the Joneses. This is about keeping up with the evolving science of climate impacts like extreme heat, and continuing to find new ways to rise to the occasion. This is about keeping up with the expanding range of cost-effective tools in our clean energy toolbox.

This is about seeing what other states are doing, and embracing smart policies they've pioneered—just as other states have done in following Massachusetts on, for example, the idea of a renewable portfolio standard two decades ago, or strong energy efficiency policies, or economy-wide carbon reduction.

³ See <https://blog.ucsusa.org/jeff-deyette/states-march-toward-100-clean-energy-whos-next>

⁴ See <https://blog.ucsusa.org/steve-clemmer/maine-hits-clean-energy-grand-slam>

One hundred percent clean energy is doable, it's appropriate, and it's necessary.

And we'll be in great company when we choose that path. When *you* choose that path.

So thank you for your attention to H.2836 and S.1958, and to the clear signals that such bills would help provide.

Sincerely,

A handwritten signature in black ink, appearing to read "JH Rogers", with a long horizontal flourish extending to the right.

John H. Rogers
jrogers@ucsusa.org
617.301.8055