

Maine Could Tackle the Housing and Climate Crises in Tandem

Annie Ropeik, Energy News Network

Maine's deepening housing crisis is colliding with the global climate crisis.

The state's population is growing faster than its housing supply — and that growth is driven in part by people seeking out temperate locations to call home in a rapidly warming world.

Some advocates see an opportunity in tackling these two crises at the same time, if state leaders can steer new construction toward the type of denser, all-electric, energy efficient housing that can help bring down living costs and carbon emissions.

Maine Conservation Voters policy director Kathleen Meil is part of the buildings working group of the Maine Climate Council, which is preparing to update its ambitious, four-year 2020 climate plan this fall. She hopes the next phase of their work will dig deeper into this intersection.

"It's one of the things that I actually find really exciting about this work and about everything related to climate action," Meil said. "It feels much better than being overwhelmed... We get to tackle all of the most important problems that people face at the same time."

Data shows that Maine especially lacks housing units that are affordable for the lowest-income people. The state has struggled to shelter thousands of unhoused people and hundreds of incoming asylum-seekers from overseas. And the new arrivals are likely only to increase as the climate warms.



High performance construction with attention to sealing and continuous insulation can help to solve the housing and climate crises at the same time. (kimchi and kraut)

to see more and more [people] be displaced," domestically and abroad," said MIRC's Tobin Williamson. "Now's the time to build housing for them."

This preparation means infrastructure upgrades and other community planning improvements, he said, including denser housing development, enabled by a bill the state passed last year.

But in order to meet state goals for lowering emissions and to help combat the climate changes that are helping fuel this migration, the homes that Maine adds to meet the needs of new and existing residents will also need to be built differently than traditional Maine homes.

Maine relies more than any other state on pricey, carbon-intensive heating oil. Though electric heat pumps are increasingly efficient in cold temperatures, these and similar upgrades can make for complicated retrofits in older, less weatherized homes, which are common in Maine.

State officials announced in late July that they have already met an initial climate plan target for installing 100,000 new heat pumps by 2025. More aggressive goals for future years are

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Despite facing climate change impacts of their own, Northern New England states have been called potential "climate havens," where the temperate and relatively wildfire- and hurricane-free climate is poised to be a draw for people fleeing more extreme conditions.

Staff with the Maine Immigrants' Rights Coalition (MIRC) say people emigrating to Maine, including from countries in Africa, may not cite climate change as the topline reason they moved — but dig a little deeper and its signature can be seen throughout migration patterns worldwide.

Historic drought and sporadic rainfall have been disrupting the food and farming systems in these migrants' home countries like these, creating economic disruption and new threats of violence.

"We certainly expect, as time moves on,



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John Bos

America is facing an environmental crisis that is taking thousands of lives, costing us tens of billions a year, and causing tens of millions of people to attempt to migrate to countries where they believe they can survive.

We are not being helped by the fossil fuel industries whose bottom line and shareholder dividends take precedence over what they might be able to do to help avoid the planet's diminishing capacity to support millions of people, especially in the global south.

"Many of the largest companies have engaged in massive fraud," said former U.S. Vice President Al Gore in a harsh rebuke of the fossil fuel industry at the *New York Times'* Climate Forward event on September 21. Gore, who won the Nobel Peace Prize in 2007, criticized the industry for using their influence to lobby against effective climate action. "The fossil fuel companies, given their record today, are far more effective at capturing politicians than they are at capturing emissions," he said.

"I was one of many who felt for a long time that the fossil fuel companies, or at least many of them, were sincere in saying that they wanted to be a meaningful part of bringing solutions to this crisis," Gore said, as *The Independent* reported. "But I think that it's now clear they are not. Fossil fuel industry speaks with forked tongue."

While he acknowledged that it was not fair to expect the industry to solve a crisis its business model encouraged it to

perpetuate, "it's more than fair to ask them to get out of the way and stop blocking the efforts of everybody else to solve this crisis," he said. "I think it's time to call them out."

The last time our country faced an environmental disaster of similar severity, President Franklin D. Roosevelt stepped up and dealt with it. Now the Biden administration is doing the same. On September 20 President Biden rolled out a new American Climate Corps.

In 1933, America was both in the depths of the Great Depression and facing an environmental disaster of national proportions. Sweeping from Texas to Nebraska, the Dust Bowl lifted 1.2 billion tons of soil from over 100 million acres, blowing it as far east as New York City, where it browned out the skies for weeks. The Dust Bowl killed around 7,000 people and left at least 2 million homeless.

The storms also had a cascade effect on U.S. agriculture. Wheat production fell by 36% and maize production plummeted by 48% during those years. On a single day, "Black Sunday" April 14, 1935, an estimated three million tons of topsoil were lost from the Great Plains.

"As best anybody knows," writes Thom Hartmann in his Substack column, "the main cause of the Dust Bowl was the widespread deforestation of the central United States for cropland, combined with soil-destructive agricultural practices



Stefan Keller/Pixabay

and a widespread drought through much of the 1930s."

President Roosevelt ended it by starting the Civilian Conservation Corps (CCC), which planted more than three billion trees; built trails and shelters in over 800 parks; planted over 200 million trees in a belt from Bismarck, North Dakota to Amarillo, Texas; and planted seedlings on marginal or abandoned farmlands.

President Biden committed to revisiting the CCC or something like it to deal with today's climate emergency. On January 27, 2021, he issued an executive order on "Tackling the Climate Crisis at Home and Abroad."

On September 18, Senator Ed Markey and Representative Alexandria Ocasio-Cortez, along with 49 colleagues, wrote a public letter encouraging the President to implement his executive order and create a modern-day CCC. In the letter they state "...your Administration can realize the vision of a Civilian Climate Corps that establishes a unified front in the face of climate change - one that looks like

America, serves America, and puts good-paying union jobs within reach for more young adults."

Markey and Ocasio-Cortez, along with 49 colleagues also introduced legislation, the Civilian Climate Corps for Jobs and Justice Act of 2023, in both the House and Senate to bring such a program into existence. Over 25 environmental and other groups have endorsed this program.

President Biden has responded by rolling out the new Civilian Climate Corps. Its website American Climate Corps states, "The American Climate Corps will put a new generation of Americans to work conserving our lands and waters, bolstering community resilience, advancing environmental justice, deploying clean energy, implementing energy efficient technologies, and tackling climate change. American Climate Corps members will gain the skills necessary to have access to good-paying jobs that are aligned with high-quality employment opportunities after they complete their paid training or service program." Go to (www.whitehouse.gov/climatecorps/)

The program President Biden rolled out through executive action is not as ambitious as the one Markey and Ocasio-Cortez envisioned, but at least it is a start.

John Bos is a regular contributor to Green Energy Times. He writes a regular column entitled "Connecting the Dots" for the Greenfield Recorder. His articles have appeared in the Springfield Republican, the Daily Hampshire Gazette, the Brattleboro Reformer and other regional newspapers. Comments and questions may be sent to john01301@gmail.com. ♻️

Maine Housing and Climate

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based on models for reducing emissions.

For new construction, upgrades like these are perhaps "the single biggest no-brainer in the field," said Matt Rusteika of the Building Decarbonization Coalition.

The big potential users of fossil fuel power in most homes, he said, are the space heating and cooling systems, water heating, stove and oven, and washer and dryer. Where available, gas is commonly used to power these, and is a candidate for change-out. Maine has less home gas access than nearly any other state, putting it at a climate advantage.

"It can actually be cheaper to build a new home or a new building with electrification," Rusteika said, "than it is to build something with fossil fuels."

A 2022 law in Maine mandates that new construction funded by the state must meet a high-level energy efficiency standard, such as the Passive House certification or something similar, emphasizing electrification, healthy air quality and low, predictable energy costs.

Fossil fuel power is "not necessary, in a climate way" in new housing, said Naomi Beal, who leads *passivhausMAINE*. "It's dirty, it's expensive and volatile. ... The value of a Passive House-level approach is that the costs are small and super predictable."

But regulations to help decarbonize in new housing must strike a tricky balance, said the Affordable Housing Coalition's Mitchell — improving housing quality, sustainability and affordability, without making projects too expensive to build or otherwise slowing the pace of develop-

ment to house those most in need.

"There's kind of that sweet spot, because there's also a social equity issue involved in this," Mitchell said. "The cost of energy efficiency and addressing climate change shouldn't fully fall on the backs of people in need of affordable housing."

Rusteika said regulatory requirements can give developers more certainty, but aren't always needed at a time when climate-friendly building alternatives are becoming cost-competitive.

"A lot of people choose electrification on the merits," he said. "It's not an 'eat your vegetables' thing."

One case study is the West End Apartments, a two-building affordable housing complex in South Portland, Maine that opened half in 2021 and half this year. Some units were set aside to house asylum-seekers.

The complex was built to a near-Passive House standard mainly to cut operating costs, said architect Jesse Thompson. It has all electric appliances, heat and utilities, except for gas water heaters. These were the cheapest option when the project was designed, but electric water heaters might be preferable in the near future, he said.

"It's changing really, really rapidly," Thompson said. "The machinery's getting less expensive; the state is pushing much harder to do it."

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Heat Pump Performance

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during extreme cold snaps in the last couple of years.

Still, the myth of heat-pump insufficiency persists. Ironically, a nation with milder winters, the U.K., is one of the places Gibb has seen the misconception most. In media stories and social posts, people have reported being dissatisfied with their heat pumps. It can happen, Gibb acknowledged, but it isn't necessarily a reflection of the tech's capabilities, he said. "In many cases, they just got a bad installation."

These types of stories represent "a pretty dangerous line of misinformation," Gibb said, "because it erodes public trust in [heat-pump] technology when it can achieve very high performance." The U.K. installed less than a tenth of the number of heat pumps that France did last year.

What's more, companies in the fossil-fuel business have pounced on even slight declines in heat-pump efficiency as a valid reason to delay a transition to clean heat. For example, in July, U.S. utility Xcel Energy argued that heat pumps should play a limited role alongside the continued use of fossil gas as part of efforts to decarbonize Colorado, citing a recent report the utility had funded. Preliminary results found a modest drop in heat-pump efficiency, 5 to 12%, at higher altitudes — the testing facility was about a mile above sea level.

Xcel also stated that while heat



A heat pump keeps a waiting room warm. (public domain)

pumps do well above 40°F, "their performance degrades at lower levels."

For those reasons, "most homes using heat pumps for heat would require additional backup heating, either gas-fired or resistance electric heating," Xcel concluded.

"It's true that the performance does decline when it gets colder. That's a fact," Gibb said. But when "entrenched interests" use that to write off heat pumps, they're ignoring the fact that the technology still handles cold weather reliably — and more efficiently — than fossil-based alternatives.

Alison F. Takemura is a staff writer at Canary Media.

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