Air Conditioning and the Climate Crisis: Cooling our homes in a warming world

Rhode Island is heating up. Last year was the hottest on record, and locally, we've already seen days in the 80s and 90s. Heat waves and large, irregular temperature swings are pronounced effects of the accelerating global climate crisis.

Temperature control in buildings – air conditioning – is globally becoming more necessary for survival during warm months. According to the Department of Energy and the Environmental Protection Agency, air conditioners use 6% of all electricity nationwide and release 117 million metric tons of carbon dioxide each year – just under 2% of our total greenhouse gas emissions – which is largely concentrated in the warmest months of summer.

Many frame the issue as one of individual choice, and it's true that there are some simple actions an individual can do to reduce energy consumption. But these changes have more impact on saving people money on their electric bill than fighting the climate crisis. The climate crisis is a systems-level problem caused by fossil fuel companies' outsized influence and willingness to cause harm to people, the planet, and the future with their business practices in order to make profit.

Ultimately, any individual's behavior contributes very little to the climate crisis. Behavior changes that alter energy usage by a few percentage points change it even less, and changes that would radically alter individual energy usage – eg, buying an electric car or a heating/cooling system retrofit – are not possible for most families, at least not in the existing market economy.

What's the solution? How do we ensure that everyone can live and work in temperate, comfortable buildings without worsening the climate crisis? The answer: systems-level collective action. Governmental actions have been proposed at the local, state and national levels that, together, would significantly improve the relationship between air conditioning and the climate crisis.

Better urban planning and design. Sprawling urban planning with exposed asphalt and few trees causes more sunlight to be absorbed and turned into heat. The EPA refers to this as the heat island effect. Buildings in heat islands require more electricity to keep internal temperatures comfortable. On the flip side, urban design with more trees and greenspace, denser construction and green or solar roofs lowers the air temperature and the need for electricity demands to cool homes and businesses.

High-quality, green affordable housing. The construction of energy-efficient, high-quality affordable housing, through direct government investment and ownership and by retooling zoning and other municipal and state regulations, is another important step toward reducing the toll of building cooling on the climate.

Investments like this create homes that require significantly less energy to cool, produce electricity (sometimes more than they use), and have the important additional benefit of ensuring housing access and lowering rent prices. These will become important climate resilience tools as the crisis worsens and faltering economies threaten to make more people housing insecure.