

February 8, 2023

Department of Energy Resources (DOER)
100 Cambridge Street, Suite 1020
Boston, MA 02114

RE: Ten Community Fossil Fuel Free Demonstration Project - public testimony submitted for written record

Dear Commissioner Woodcock, Director McCarey, and DOER Staff:

Good afternoon. My name is Lisa Cunningham, I am a co-founder of the non-profit [ZeroCarbonMA](#), as well as a co-founder of a statewide Building Electrification Accelerator coalition now comprising over 50 municipalities throughout Massachusetts. I am also an architect whose practice is now focused on decarbonizing homes, and I am one of the original co-petitioners for Brookline's 2019 prohibition on the installation of new fossil fuel infrastructure in new buildings and major construction, as well as the subsequent Home Rule Petition we passed in the fall of 2020.

First of all, I want to thank DOER for their efforts to date, and I also want to commend my colleagues and officials in many communities for their work and engagement with DOER. I want to highlight the **testimony of Senator Mike Barrett on the timeline issues he mentioned**, and also both for his sponsorship and strong support of this legislation, and to Miranda D'Oleo from MCAN for her remarks on the importance of having this program expand to accommodate every town and city wanting to participate, and to Tommy Vitolo, Brookline's State rep, who has been instrumental in so many of our climate efforts in Brookline and in his role in the State Legislature. And I have to stop after those three because my list got too long.

I want to focus on a few points:

First of all Electrification. **We know that in order to avoid catastrophic climate failure we need to stop using fossil fuels - including gas, oil and propane - immediately.** We've been told by the United Nations International Panel on Climate Change – repeatedly – with increasingly dire warnings. [IPCC report: 'Code red' for human driven global heating, warns UN chief | | UN News](#) We have been told by even more conservative organizations like the International Energy Agency - again in stark terms- that we need to stop using fossil fuels immediately. We have been told by our own national security agencies. I bring this point up in almost every public hearing I attend, but for some reason I don't get the feeling that this is being heard. We are dealing with an existential crisis - an unfolding and accelerating climate crisis - and the cause is our use of fossil fuels. Sure we had a 16 hour historic cold snap – but let's admit it – our NE winters are disappearing before our eyes. It's scary.

I want to commend DOER for linking the Pilot program guidelines to the new Stretch and Specialized code guidelines. BUT...The State has a legal obligation to reduce emissions 50%

by 2030 and to be 100% net zero by 2050 (goals, by the way, which we know are not scientifically adequate). The State also has a moral, climate, and fiscal obligation to enable ALL communities – not just some - who have expressed – with overwhelming support – their desire to meet their own climate targets to do so. ‘

It impossible to meet our climate mandates without widespread building electrification. This has been outlined in the State’s own [Massachusetts 2050 Decarbonization Roadmap](#). The [Commission on Clean Heat](#) came to the same conclusion, as did the [Carbon Free Boston](#) report.

According to [DOER's own data](#), all-electric buildings have the lowest life-cycle cost across all project types when compared with gas. [The Stretch Code is mandated](#) to minimize the life-cycle costs of buildings, but it is currently not in compliance with this mandate.

It is not equitable or just to allow only ten “first-come first-serve” communities the option to adopt a healthy, all-electric building code, while prohibiting other municipalities from adopting a FFF building code, including municipalities with large Environmental Justice (EJ) populations and high rates of new construction – including Boston, Somerville, Northampton, and Salem - who are currently prevented from joining because of the 10 municipality cap.

Even more communities have indicated an interest to us in participating in this so-called pilot project, but are reluctant to engage in the process of passing a Home Rule Petition without any guarantee of being included in the building electrification demonstration project, and possibly being relegated to a waitlist for years.

So what can DOER do? We need support from DOER on getting as many communities into this program as quickly as possible. Brookline has been waiting for well over three years for the authority to be able to regulate its greenhouse gas emissions from buildings.

The idea that we now have 14 communities who are jockeying in position to try to be a part of this program is not acceptable. Again, ANY community who wishes to participate should be allowed to.

I also want to say that there is nothing experimental or a “pilot’ about this program. Heat pump technology is well-proven and established, as DOER knows and as the all-electric pathway in both the Stretch and Specialized Code underscore. Fun fact: 2/3rds of all heating systems sold in Switzerland last year were heat pumps.

I also need to address the health imperatives of getting as many communities into this program as quickly as possible. Because we also have a public health crisis that is due to our use of fossil fuels.

We know that this program will reduce indoor and outdoor air pollution and improve health outcomes and health equity.

Poor air quality from burning fossil fuels in our buildings is associated with [higher rates](#) of disease and death throughout the Commonwealth. [Air pollution](#) and its associated health outcomes are

also worse in EJ communities. Gas appliances are associated with an increased [risk of asthma development](#) in children. In Massachusetts, **1 in 8 children have an asthma diagnosis; in EJ communities in Boston and Springfield it jumps to 1 in 6 children**. Gas stoves are attributable to about [15% of childhood asthma](#) in the Commonwealth, equal to having a smoker in the home.

Construction and operational costs of efficient [all-electric homes](#) are already on a par or lower than their fossil fuel counterparts. All-electric building technology is also mainstream and well-established for [commercial construction](#).

On the flip side, continuing to allow the installation of new fossil fuel infrastructure results in future displacement and far greater cost and complexity, as we know these buildings must be retrofitted and systems ripped out and reworked to achieve the goals of Massachusetts [Clean Energy and Climate Plan](#).

Burdening communities with the added costs of fossil fuel buildings and relegating them to a wait-list does not achieve a necessary and just transition.

In the words of UN Secretary-General António Guterres , our climate crisis is "[a code red for humanity](#)." In our current climate crisis, we know that [time is of the essence](#), every year is critical, and **every delay that moves us further away from meeting our climate goals – even by just one year – is an untenable path.**

Thank you for the opportunity to testify. Sincerely

Lisa Cunningham, Architect, Brookline resident