



Newton Citizens Commission on Energy City of Newton, Massachusetts

<http://www.newtonma.gov/building/projects/energycomm>

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Mayor Fuller and City Councilors
City of Newton 1000 Commonwealth Avenue
Newton, MA 02459

Re: Electrification Ordinance Docket items:

- #61-20 Discussion to limit or prohibit the installation of fossil fuel infrastructure
- #294-20 Discussion to require or encourage the use of efficient electric technology
- #275-21 Request for Home Rule Petition to require electricity in new or rehabilitated buildings

January 18, 2022

Dear Mayor Fuller and Honorable City Councilors,

Newton Citizens Commission on Energy was established on October 24, 1979 by city ordinance, which reads, in part: Sec. 2-302. Purpose, powers and duties. (a) The commission shall develop a city-wide energy plan to encourage energy conservation and the use of alternative energy forms and provide a plan to coordinate state and federal experts to provide for energy needs and emergencies.

We are writing in response to the December 15, 2021, [letter](#) from the Economic Development Commission (EDC) regarding the Home Rule Petition on electrification that is currently under consideration by the Public Facilities Committee.

The EDC letter raises several important issues that need to be considered by the Council as part of the discussion of the proposed ordinance, should the state legislature approve the Home Rule Petition. But the letter also contains several factual errors and incorrect or unrealistic implicit assumptions. Unfortunately, the current resources of the Newton Citizens Commission on Energy are too thin to address all of these at length point by point. Nonetheless, in this letter, we seek to clarify several of the most significant, which may lead the City Council and the Mayor to abandon the Home Rule Petition altogether or kill it slowly by embarking on endless further studies.

- A. The impact of the proposed ordinance on homeowners who are performing major renovations and replacements of their heating systems.*

The EDC is correct to ask the City Council to consider such impacts. But the City Council has demonstrated time and time again that it is a reasonable legislative body that makes the utmost effort to balance the economic interests of the residents, businesses, and the City as a whole with other critical social and environmental objectives. We have complete confidence that it will act in such a balanced way in this case.

B. The feasibility of implementing the ordinance for hospitals and other healthcare facilities needs review.

We concur. As stated in the recent letter from Green Newton, Mothers Out Front, 350Mass Newton Node, and us, we recommended excluding Newton Wellesley Hospital from the Home Rule Petition ordinance.

C. Direct natural gas heating is up to 2.5 times more energy efficient for heating than electricity.

This statement is incorrect. In current professional energy circles, “electrification” and “electric heat” are shorthand for air or ground source heat pumps. These technologies are far more efficient than outdated and seldom used resistance electric heating systems, and overall more efficient than heating with natural gas. A heat pump can transfer 300 percent more energy than it consumes. In contrast, a high-efficiency gas furnace can transfer about 95 percent of energy it consumes; a factor of more than 3 difference. Especially from a carbon emissions standpoint, using Newton Power Choice default values, electric heatpumps have additional benefits by reducing greenhouse gas emissions.

D. The implementation process has yet to determine such specifics as what counts as a major renovation and how that is determined, or whether a routine replacement of a current heating system will trigger the electrification requirement.

We agree that many details need development. These details are required for the electrification ordinance and other pending regulations, such as the Net Zero Massachusetts building stretch code, currently under development by DOER. They are important, and their development should continue while the Home Rule Petition is under review by the Massachusetts legislature. But there is no reason at this stage to slow down the progress of the Newton Home Rule Petition while the work on the details continues.

The building envelope needs upgrading to achieve the maximum energy use reduction, which may be costly.

We agree. Members of the Energy Commission have on numerous occasions brought up the importance of insulating building envelopes of old and leaky buildings in Newton before installing heat pumps in order to reduce the size (and cost) of the initial investment and the operating costs. But this matter is outside the essence of the Home Rule Petition, which seeks to enable the City to require electric heating rather than gas heating in *new*

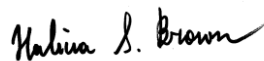
construction and major renovations. Since current construction methods are much more energy-efficient than those used in old buildings that dominate Newton, the issue of insulation before electrification is irrelevant. Furthermore, under the forthcoming Net Zero Stretch Code, the energy performance of all future construction will be much improved, making the point raised by EDC a red herring altogether.

E. Business owners, developers, and homeowners may choose to build elsewhere.

The old and tired framing of environmental programs and climate action as inimical to economic development has lost its persuasive power. The evidence is all around us. The businesses on Wells Avenue are taking the initiative to electrify their systems. One large construction project after another in Newton is adopting electric heating and high-efficiency construction methods. The entire business community in Boston supported the recently adopted BERDO ordinance. The demand for homes in Newton is very high, and it will surely not diminish under the electrification mandate. Businesses are aiming for high-performance buildings because their investors and bankers are pushing for it, and because it is simply good business. Highly performing modern buildings will have higher market value than their laggard counterparts. We live in the times when Newton does not need to enter an environmental race to the bottom to be economically competitive.

There are still many uncertainties and unresolved details in the proposed ordinance and Home Rule Petition. One approach recommended by the EDC is to conduct further extensive, slow, and expensive studies while taking no action in the meantime. An alternative approach, one that the Energy Commission urges, is to go ahead with the Home Rule Petition process while giving reasonable and earnest attention to these details. We need, however, to keep in mind that there is no policy with a 100% certainty of outcomes nor a guarantee that all costs are minimized, and all benefits will accrue. If we seek such a policy while taking no action to reduce greenhouse gas emissions in Newton, we will fail in our responsibility to the Newton community, the Commonwealth, and the rest of the world.

Sincerely,

A handwritten signature in black ink that reads "Halina S. Brown". The signature is written in a cursive, flowing style.

Halina Brown, Chair, Newton Citizens Commission on Energy.