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Achieving Net Zero Buildings in Massachusetts

To respond effectively to climate change, local, state, and federal governments should adopt complementary policies, but that's much easier said than done. A case in point is the drive to reduce emissions from the building sector, which accounts for nearly 30% of U.S. emissions despite substantial improvements in energy efficiency.

In recent years, some Massachusetts municipalities have tried to accelerate the decarbonization of the building sector through local regulations. In Boston, for example, the City Council adopted amendments in late 2021 that strengthened the Building Energy Reduction and Disclosure Ordinance, requiring large buildings to track and disclose their greenhouse gas emissions and then to achieve emissions-reduction goals in the next several years. The city supports audits and energy efficiency upgrades to promote compliance with the targets. Meanwhile, some Boston suburbs have moved to limit natural gas connections in residential buildings, although state law limits local authority to do so.

Pending regulations will give more tools to Massachusetts municipalities to reduce emissions from buildings. In 2021, the Legislature enacted multifaceted "Climate Roadmap" legislation that builds on Massachusetts's path-breaking Global Warming Solutions Act of 2008 (the "GWSA"). Among other important provisions, the Climate Roadmap legislation requires updates to the state Energy Code. Previously, under the GWSA, municipalities could opt-in to state's "Green Communities" program by adopting the "Stretch Energy Code" that requires more energy efficient buildings than the base building code. The Climate Roadmap legislation requires both an update to the Stretch Code and the creation of a new, higher tier of energy code for "net zero" buildings. The state Department of Energy Resources is currently taking comment on how this specialized, net-zero Stretch Code should be designed. The rulemaking process should be complete by the end of 2022.

The municipalities that lead the way in adopting the "net-zero" Stretch Code will play a vital role in demonstrating that low-carbon buildings are affordable and desirable as residences. Their efforts will be aided immensely if the federal government extends financial incentives for efficient buildings. The pending Build Back Better legislation has substantial tax credits for energy efficiency improvements, rooftop solar, and rebates for home electrification, all of which would make complying with the net-zero Stretch Code much more affordable.

Cleaning up and electrifying the building sector is essential to achieving greenhouse gas emission targets in-line with the Paris Agreement and 2021's Glasgow COP. The sustained investment needed over the next decade and beyond will be much likelier to materialize if local, state, and federal governments coordinate their policies effectively.