

## The Better Buildings Act

## Reducing energy use and harmful pollution from existing large buildings

*An Act relative to better buildings* Rep. Maria Robinson (HD.3385); Sen. Becca Rausch (SD.2114)

Our buildings are responsible for a large share of Massachusetts' global warming pollution. Burning oil and gas in residential and commercial buildings — primarily for heating and hot water — produces 27% of our greenhouse gas emissions, and electricity is responsible for an additional 19% of emissions.<sup>1</sup>

Pollution from fossil fuels also harms our health, contributing to asthma, heart attack, and premature birth. A recent study from the Harvard School of Public Health shows a link between air pollution from fossil fuels and a higher rate of death from COVID-19.<sup>2</sup>

To achieve our climate goals and protect public health, we must reduce the amount of energy used in our buildings, while transitioning away from polluting sources of energy toward clean and renewable resources like solar and wind.

Increasing energy efficiency and replacing fossil fuel heating with clean alternatives in large buildings — including office buildings, apartment buildings, and hospital and university campuses — is one way to make rapid progress toward a pollution-free future. Improving the efficiency of a single large building can have the same energy reduction benefits as implementing similar measures in several single-family houses. These energy efficiency measures can also help renters and small business tenants save money on their utility bills.

<sup>&</sup>lt;sup>1</sup> "Appendix C: Massachusetts Annual Greenhouse Gas Emissions Inventory: 1990-2017, with Partial 2018 & 2019 Data," Massachusetts Department of Environmental Protection, <a href="https://www.mass.gov/lists/massdep-emissions-inventories">https://www.mass.gov/lists/massdep-emissions-inventories</a>.

<sup>&</sup>lt;sup>2</sup> "Coronavirus and Air Pollution," Harvard School of Public Health,

<sup>&</sup>lt;https://www.hsph.harvard.edu/c-change/subtopics/coronavirus-and-pollution/>.

## How can we reduce energy use in large buildings?

We can reduce energy use in our buildings by installing more efficient appliances and lighting, reducing heat loss through walls and windows, and encouraging tenants to adopt energy-saving behaviors. We can replace heating and cooling systems with efficient electric technologies like heat pumps. We can install rooftop solar panels to generate clean, renewable electricity on site.

The building code requires new buildings to be built to a minimum energy efficiency standard, but there are no statewide requirements for existing buildings to become more efficient. A study in Boston projected that 85% of the square footage that will exist in 2050 has already been built.<sup>3</sup>

The first step toward reducing energy use in large buildings is to require the owners of these buildings to report their energy use on an annual basis. A similar requirement already exists in Boston and Cambridge. Adopting it on the state level would extend the benefits of this program to smaller communities. The second step is to set energy performance standards for large buildings and require the owners of inefficient buildings to reduce their energy use over time. Washington State and cities from St. Louis, Missouri, to Reno, Nevada, have already adopted similar policies.

## What will the Better Buildings Act do?

- The Better Buildings Act will apply to large buildings only. The threshold will start at 25,000 square feet and decrease to 15,000 square feet over time.
- Owners of large buildings will report energy use in their buildings to the Department of Energy Resources (DOER) every year. DOER will make the energy use information available online and publish an annual report analyzing the data.
- DOER will establish energy performance standards for different types of large buildings. The least energy-efficient buildings will be required to reduce their energy use or greenhouse gas emissions by at least 20 percent over five years. These standards will achieve an 80 percent emissions reduction from large buildings by 2040.
- DOER will work with utility companies to provide information and incentives to help building owners meet the standards.
- Owners of buildings that fail to meet the standards can pay an alternative compliance payment.
- Cities and towns can establish their own energy disclosure requirements and performance standards for large buildings, similar to existing programs in Boston and Cambridge.

<sup>&</sup>lt;sup>3</sup> Carbon Free Boston Summary Report, Boston Green Ribbon Commission, 2019,

<sup>&</sup>lt;https://www.greenribboncommission.org/wp-content/uploads/2019/01/FINAL\_CFB\_SummaryRpt\_FEB19.pdf>.