

# The 100% Clean Act

# 100% clean electricity by 2035, 100% clean heating and transportation by 2045

An Act transitioning Massachusetts to clean electricity, heating, and transportation Rep. Marjorie Decker and Rep. Sean Garballey (H.3689)

#### It's time to move past fossil fuels

Most of the energy we use today comes from fossil fuels. The lights in our homes, the cars in our garages, and the furnaces in our basements run on oil and gas.

**Burning fossil fuels releases pollution into the air that harms our health.** Fossil fuel pollution contributes to asthma, heart attack, premature birth, and a host of other health problems.<sup>1</sup>

**Fossil fuels are also warming our climate, with devastating consequences for us and for future generations.** If global warming pollution continues at high levels, kids born today could see our oceans rise by more than 10 feet off the coast of Massachusetts within their lifetimes and experience 20–80 days each summer with temperatures above 90 degrees.<sup>2</sup>

#### 100 percent clean energy is achievable

Renewable energy is becoming more efficient, affordable, and widespread each year. When our communities run on renewable energy, our air will be cleaner, our families will be healthier, and we'll have a shot at preventing the worst impacts of global warming.

Massachusetts should set its sights on 100 percent renewable energy for electricity, heating, and transportation -- the three sectors that are responsible for the vast majority of fossil fuel use in our state.

<sup>&</sup>lt;sup>1</sup> Trouble in the Air: Millions of Americans breathed polluted air in 2020, Frontier Group, Environment America Research & Policy Center, and U.S. PIRG Education Fund, October 2021, <a href="https://environmentamerica.org/center/resources/trouble-in-the-air/">https://environmentamerica.org/center/resources/trouble-in-the-air/</a>.

<sup>&</sup>lt;sup>2</sup> Climate Change Impacts and Projections for the Greater Boston Area, Ellen Douglas and Paul Kirshen, University of Massachusetts Boston, June 2022, <a href="https://www.umb.edu/news/detail/new\_umass\_boston\_report\_details\_latest\_climate\_risk\_projections\_for\_the\_greater\_boston\_areas">https://www.umb.edu/news/detail/new\_umass\_boston\_report\_details\_latest\_climate\_risk\_projections\_for\_the\_greater\_boston\_areas</a>.

We can make our homes and businesses more efficient. Through efficiency and conservation measures, we can cut U.S. energy consumption by about 50 percent by 2050.<sup>3</sup>

We can replace fossil fuel power plants with renewable energy resources like solar and wind. Offshore wind could generate more than 20 times as much electricity as Massachusetts consumes on an annual basis.<sup>4</sup> Rooftop solar panels could meet up to 47 percent of Massachusetts' current electricity use.<sup>5</sup>

We can transition heating and transportation to clean electricity. Electric technologies like air source heat pumps and electric vehicles can replace the use of fossil fuels for heating and transportation. Buildings with efficient, modern electric heating are being built today in Massachusetts at a similar cost to buildings heated with fossil fuels.<sup>6</sup>

### A growing movement for 100 percent clean energy

More than 380 global companies, including Apple, P&G, and Biogen, have committed to 100 percent renewable energy targets.<sup>7</sup> Major institutions like Boston University and Partners HealthCare are also pledging to go 100 percent renewable.

Eleven states have passed laws committing to 100 percent clean electricity, including Maine, New York, and Rhode Island.<sup>8</sup>

#### We're making progress

In July 2022, the Legislature passed a climate law that takes important steps to accelerate Massachusetts' transition to renewable energy. The 2022 climate law will remove barriers to the development of solar and offshore wind, make our homes and businesses more energy-efficient, and ensure that 100% of cars sold in Massachusetts are electric vehicles by 2035.

The 100% Clean Act will build on this progress. Now is the time for Massachusetts to set its sights on a future powered by 100% renewable energy.

<sup>4</sup> Offshore Wind for America: The Promise and Potential of Clean Energy off Our Coasts, Frontier Group and Environment America Research & Policy Center, March 2021, <a href="https://environmentamerica.org/center/resources/offshore-wind-for-america-3/">https://environmentamerica.org/center/resources/offshore-wind-for-america-3/</a>.

<sup>7</sup> "RE100 Members," RE100, <https://www.there100.org/re100-members>.

<sup>&</sup>lt;sup>3</sup> Halfway There: Energy Efficiency Can Cut Energy Use and Greenhouse Gas Emissions in Half by 2050, Steven Nadel and Lowell Ungar, American Council for an Energy Efficient Economy, September 2019, <a href="https://www.aceee.org/sites/default/files/publications/researchreports/u1907.pdf">https://www.aceee.org/sites/default/files/publications/researchreports/u1907.pdf</a>.

<sup>&</sup>lt;sup>5</sup> Rooftop Solar Photovoltaic Technical Potential in the United States: A Detailed Assessment, Pieter Gagnon et al., National Renewable Energy Laboratory, January 2016, <a href="https://www.nrel.gov/docs/fy16osti/65298.pdf">https://www.nrel.gov/docs/fy16osti/65298.pdf</a>>.

<sup>&</sup>lt;sup>6</sup> Zero Energy Buildings in Massachusetts: Saving Money from the Start, Marshall Duer-Balkind et al., U.S. Green Building Council Massachusetts Chapter, 2019, <a href="https://usgbcma.org/wp-content/uploads/2019/09/ZeroEnergyBldgMA2019.pdf">https://usgbcma.org/wp-content/uploads/2019/09/ZeroEnergyBldgMA2019.pdf</a>.

<sup>&</sup>lt;sup>8</sup> "Minnesota governor signs 100% clean electricity bill," Environment America, 7 February 2023,

<sup>&</sup>lt;https://environmentamerica.org/updates/minnesota-governor-signs-100-clean-electricity-bill/>.

## The 100% Clean Act

The 100% Clean Act (HD.3348) will transition Massachusetts to 100 percent clean electricity by 2035 and 100 percent clean heating and transportation by 2045. It lays out clear requirements and actions for the Commonwealth to achieve these objectives, while ensuring that workers and environmental justice communities are included in the transition.

The key provisions of the bill include:

#### 100% clean electricity by 2035

- Investor-owned utilities must provide 100 percent clean electricity by 2035, with at least 80 percent from Class I resources like wind and solar through the renewable portfolio standard (RPS).
- At least 15 percent of new renewable energy generation must be from distributed resources like rooftop solar.
- Municipal utilities must provide 100 percent clean electricity by 2035.
- Trash incineration is not eligible to be considered "renewable" or "clean" electricity.

#### 100% clean heating by 2045

- After 2028, new houses and small commercial buildings must be highly energy efficient and use clean heating. After 2033, this requirement will apply to all new buildings.
- At least 1 million homes and 300 million sq. ft. of commercial space must be retrofitted to be efficient and use clean heating by 2030.
- A trust fund will offset the cost for residents and businesses to switch to clean heating.

#### 100% clean transportation by 2045

- The RTAs will transition to zero emission buses, and commuter rail lines will be electrified.
- The Main Streets Program will promote walkable, bikeable, and transit-accessible neighborhoods.

# Just transition for workers and environmental justice communities

- The Just Transition Office will assist workers that are displaced in the transition off of fossil fuels.
- The Clean Energy Equity Office will ensure that environmental justice (EJ) communities benefit from clean energy incentive programs.
- Public hearings to implement this bill will be held in EJ communities, and residents of EJ communities will have seats on advisory committees.