



# Electrify Everything

## Why Electrify Everything?

Experts agree: electrifying everything that uses power is crucial to curbing the worst impacts of climate change. Electric motors are three times more efficient than internal-combustion engines at converting primary energy into useful work. “Electrify everything” has emerged as a simple, unifying principle in combatting the climate emergency while there is still time.

The widely respected report of 2020 by Intergovernmental Panel on Climate Change (IPCC) is clear: To avoid the worst impacts of climate change, the world must dramatically reduce its carbon emissions and prevent global warming from exceeding 1.5 degrees Celsius (2.7 degrees Fahrenheit). To achieve this, we must halve carbon emissions by 2030 and fully decarbonize by 2050.

Rapid electrification is the most effective, economical, and practical way to reach this existential goal. It relies on already well-developed technologies: rooftop solar, heat pumps, electric vehicles, wind and solar power plants, and storage batteries. If everyone uses carbon-free energy to heat their homes and get around, and if renewable fuel sources power all electric generation, the bulk of the problem will be solved.

Every time a natural-gas or oil furnace, or “baseboard” electric heating is replaced, it must be upgraded to a heat pump. Whenever a gas or diesel auto is replaced, it must be replaced with an electric vehicle (EV). Every time a new power plant is built, it must run on renewable energy.

From a jobs viewpoint, [Rewiring America](#), a nonprofit working to launch a movement that electrifies everything, estimates that decarbonizing rapidly through electrification would create 15 to 20 million jobs in the next decade.

Massachusetts is one of the fastest-warming states in the country. We have seen a rapid increase in extreme heat events that threaten our health and the ecosystems we rely on. Rising seas and increased flooding threaten Boston and other coastal communities. Globally, climate change brings significant public health risks, including more and larger wild fires, stronger hurricanes, more heat-related deaths, and worse pandemics and other disease outbreaks. Millions of “climate refugees” are relocating to escape worsening environmental disaster in their home countries.

The Commonwealth has committed to tackle these threats. In March 2021, Gov. Charlie Baker signed a sweeping climate bill into law, signaling a new era in Massachusetts’ plans to cut greenhouse-gas emissions, build a greener economy, and prioritize equity and environmental justice (EJ).

The new law, S.9, "An Act Creating a Next Generation Roadmap for Massachusetts Climate Policy," commits the state to reach Net Zero by 2050. S.9 addresses everything from solar panels and offshore wind to new building codes and state regulatory priorities. It codifies EJ language into law, improves gas-pipeline safety, and helps employees from the fossil-fuel industry advance in the clean-energy industry.

Learn more at [How to drive fossil fuels out of the US economy, quickly.](#)