

## THE WHITE HOUSE

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### **A CLEANER, MORE EFFICIENT POWER SECTOR IN MASSACHUSETTS**

We have a moral obligation to leave our children a planet that's not polluted or damaged. By taking action now to combat climate change, including developing homegrown clean energy and cutting energy waste, we can help protect our kids' health, cut carbon pollution, and begin to slow the effects of climate change so we leave a cleaner, safer environment for future generations.

We are already feeling the dangerous and costly effects of a changing climate across the nation. In the past three decades, the percentage of Americans with asthma has more than doubled, and climate change is putting those Americans at greater risk of landing in the hospital. And extreme weather events – from more severe droughts and wildfires in the west to more powerful hurricanes and record heat waves – are affecting communities across the country. Now is the time to act. We have already made progress by moving to cleaner sources of energy and improving the energy efficiency of our cars, trucks, and buildings.

The Clean Power Plan, a key part of the President's Climate Action Plan, cuts harmful carbon pollution from the power sector that's fueling climate change. By setting the first-ever national standards to limit carbon pollution from power plants, the largest single source of U.S. carbon pollution, it will improve the health of Americans across the country, create clean energy jobs, and help households and businesses save on their energy bills. The final plan takes into account the more than 4 million comments received from states and stakeholders across the country, creating strong but achievable standards for power plants that provide flexibility and choices for states and utilities on how to achieve their clean energy future.

#### **The Clean Power Plan Will Improve the Health of Massachusetts Residents**

We know climate change will put vulnerable populations at greater risk – including the elderly, our kids, and people already suffering from burdensome allergies, asthma, and other illnesses. According to the Centers for Disease Control and Prevention, 11.4 percent of Massachusetts's adult population suffers from asthma. The sooner we act, by taking responsible steps to cut carbon pollution from existing power plants, the more we can do to prevent impacts that affect all Americans – especially the most vulnerable.

In 2013, approximately 15 million metric tons of carbon pollution were emitted from power plants in Massachusetts — equal to the yearly pollution from over 3 million cars. In addition to reducing a portion of this carbon pollution, EPA's guidelines will also cut other forms of air pollution like soot and smog. Overall, these reductions will provide significant health benefits.

Since the Clean Air Act was implemented more than 40 years ago, the EPA has continued to protect the health of communities, in particular those vulnerable to the impacts of harmful pollution, while growing the economy. In fact, since 1970, air pollution has decreased by nearly 70 percent while the economy has tripled in size. The Clean Power Plan builds on this progress, while providing states the flexibility to have clean, reliable, and affordable electricity.

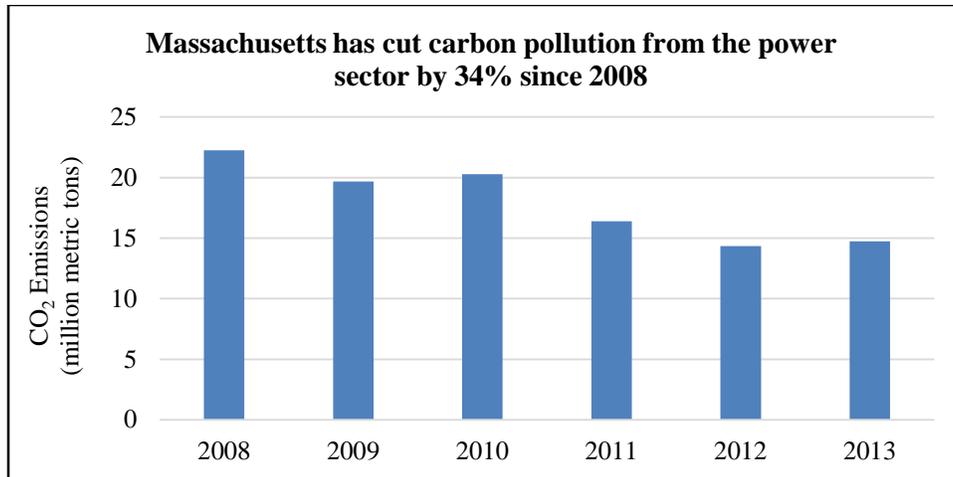
#### **Reducing Carbon Pollution Lowers Risks and Costs for Massachusetts**

Massachusetts is part of the U.S. National Climate Assessment's Northeast Region. The findings in the National Climate Assessment underscore the need for urgent action to combat the threats from climate change, protect American citizens and communities today, and build a sustainable future for our kids and grandkids. According to the third U.S. National Climate Assessment Highlights report, regional and state-specific impacts include:

- *Climate:* The Northeast depends on aging infrastructure that has already been stressed by climate hazards including heat waves and heavy downpours. The Northeast has experienced a greater recent increase in extreme precipitation than any other region in the U.S.; between 1958 and 2010, the Northeast saw more than a 70% percent increase in the amount of precipitation falling in very heavy events (defined as the heaviest 1% of all daily events). This increase, combined with coastal and riverine flooding due to sea level rise and storm surge, creates increased risks.
- *Extreme Heat:* Since the hottest days in the Northeast are often associated with high concentrations of ground-level ozone and other pollutants, the combination of heat stress and poor air quality can pose a major health risk to vulnerable groups: young children, the elderly, and those with pre-existing health conditions including asthma.
- *Coastal Flooding:* The northern states, including Massachusetts, Rhode Island, and Connecticut, have less land area exposed to a high inundation risk because of a lower relative sea level rise and because of their relatively steep coastal terrain. Still, low-lying coastal metropolitan areas in New England have considerable infrastructure at risk. In Boston alone, cumulative damage to buildings, building contents, and associated emergency costs could potentially be as high as \$94 billion between 2000 and 2100, depending on the sea level rise scenario and which adaptive actions are taken.
- *Infrastructure:* In the transportation sector, many of the region's key highways (including I-95) and rail systems (including Amtrak and commuter rail networks) span areas that are prone to coastal flooding. In addition to temporary service disruptions, storm surge flooding can severely undermine or disable critical infrastructure along coasts, including subway systems, wastewater treatment plants, and electrical substations.
- *Fisheries:* Long-term monitoring of bottom dwelling fish communities in New England revealed that the abundance of warm-water species increased, while cool-water species decreased. A recent study suggests that many species in this community have shifted their geographic distributions northward by up to 200 miles since 1968, though substantial variability among species also exists. The northward shifts of these species are reflected in the fishery as well: landings and landed value of these species have shifted towards northern states such as Massachusetts and Maine, while southern states have seen declines.

### **Massachusetts is Already Reducing Carbon Pollution and has Many Tools to Meet its Clean Power Plan Goals**

Massachusetts has already set ambitious goals to reduce carbon pollution. Massachusetts has committed to cut greenhouse gas emissions 25 percent by 2020 and 80 percent by 2050, compared to 1990 levels. Mayors in over 30 cities in Massachusetts have joined the Mayors Climate Protection Agreement, committing to take action in their communities to reduce greenhouse gas emissions. In 2014, there were approximately 9,900 people employed in the wind and solar industries in Massachusetts.

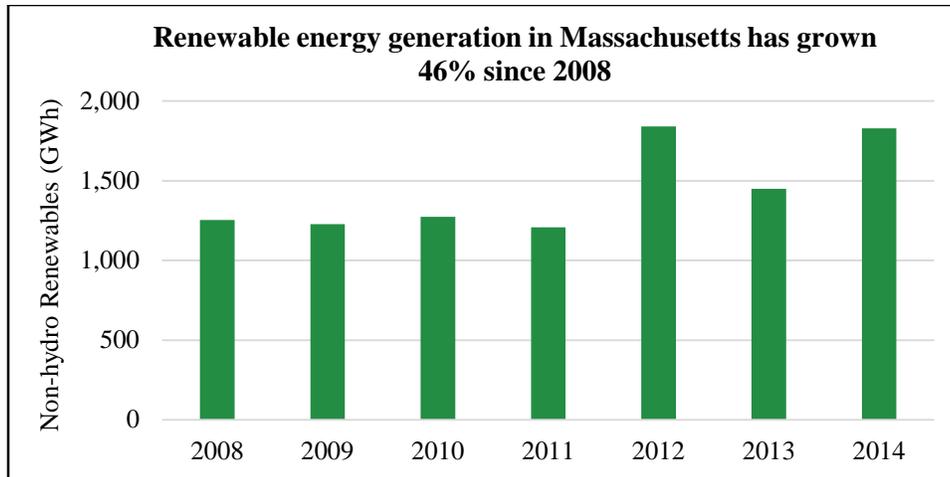


Massachusetts has already reduced its power sector carbon pollution by 34 percent since 2008. Massachusetts is one of nine states that form the Regional Greenhouse Gas Initiative (RGGI), the first mandatory emissions budget and trading program in the United States for reducing greenhouse gas emissions from the power sector. Massachusetts, like all states, will have flexibility to meet EPA’s goal by using the energy sources that work best for it and by cutting energy waste. To date, all 50 states have demand-side energy efficiency programs, 37 have implemented renewable portfolio standards or goals, and 10 have adopted market-based greenhouse gas emissions programs. Massachusetts is no exception. The state has a goal to generate 15 percent of its electricity from renewable energy resources by 2020 and 25 percent by 2030 and a goal to achieve 2.6 percent annual electricity savings by 2015. EPA’s rule builds on progress already underway in each state and provides guidelines for states to develop plans to meet their carbon pollution reduction goals. It lets states work alone to develop plans or work together with neighboring states to develop multi-state plans, creating thousands of good jobs for Americans who are making our electricity system cleaner and our homes and businesses more energy efficient.

### **Cutting Carbon Pollution and Saving on Energy Bills in Massachusetts**

Through the President’s leadership, and the initiative of the state of Massachusetts, local communities, and the private sector, a number of common sense measures to combat carbon pollution in Massachusetts are already in place. EPA’s flexible guidelines for power plants will continue driving cost-effective measures to reduce carbon pollution in Massachusetts, building off of recent progress:

- Increasing the Deployment of Clean Energy:*** Since President Obama took office, the United States has more than doubled its use of renewable energy from wind, solar, and geothermal sources, including tripling wind energy generation and increasing solar generation by more than twenty times. In Massachusetts, renewable energy generation from these sources has increased by 46 percent since 2008. The Administration has supported tens of thousands of renewable energy projects throughout the country, including 3,337 in Massachusetts, generating enough energy to power over 76,000 homes. Furthermore, the U.S. produces more natural gas than ever before – and nearly everyone’s energy bill is lower because of it.



- Improving Energy Efficiency:** Using less energy to power our homes and businesses is critical to building a clean and secure energy future. President Obama has made essential investments in research and development to advance energy efficiency, and set new standards to make the things we use every day more efficient. Since October 2009, the Department of Energy and the Department of Housing and Urban Development have jointly completed energy upgrades for more than 1.5 million homes across the country, saving many families more than \$400 on their heating and cooling bills in the first year alone. Already, local communities are taking initiative. As part of the President's Better Buildings Challenge, the commonwealth of Massachusetts committed to reducing energy intensity 20 percent by 2020 in 65 million square feet of its buildings. Massachusetts has already achieved 8 percent improvement in energy performance. The cities of Boston and Medford committed to the same goal in a combined 17.37 million square feet of city buildings. Worcester pledged to reduce energy intensity 20 percent in just three years. To date, Medford and Worcester have achieved energy intensity reductions of 13 percent and 7 percent respectively. The New Bedford Housing Authority committed to 20 percent reduction in energy intensity within 10 years in 2.67 million square feet of the buildings within its authority.