

RISING TO THE CHALLENGE:  
Addressing Climate Change and  
Protecting the Environment

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MARTHA   
COAKLEY  
F O R G O V E R N O R

## Introduction

How we respond to a changing climate and other threats to our environment are decisions that will determine what kind of world we leave for future generations. The good news is that we are not too late; we still have time to avert the worst potential impacts of climate change, protect precious environmental resources, and seize the economic opportunity of a transition to a low-emissions economy. But the time for half steps is clearly over. It will be the responsibility of the next Governor to not only continue implementing the groundbreaking initiatives begun over the past eight years, but to identify new and innovative strategies to reduce our environmental impact.

This is not simply an environmental challenge – developing clean energy sources and protecting our environment are critical to the health of our economy and the quality of life for every resident of Massachusetts. We have put in place a strong legal framework to address greenhouse gas (GHG) emissions, and made substantial investments in conservation, but significant challenges remain. We are feeling the effects of climate change, including rising sea levels and more frequent severe weather, and we continue to grapple with more “traditional” environmental threats, including development, deforestation, and local pollution. Energy and environmental policy is not always seen as a place to promote equality, fairness, and opportunity, but it has a fundamental role to play in building a Commonwealth that is reflective of these values. We can expand economic opportunity by growing the clean energy industry, we can improve public health by ensuring access to clean air and clean water, especially in low-income urban communities, and we can protect our valuable environmental resources for generations to come.

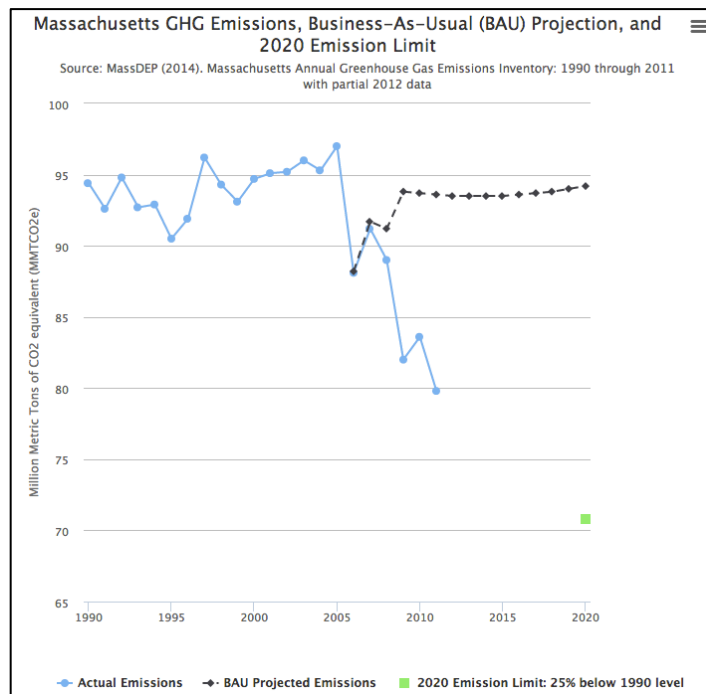
The next Governor must bring climate change and environmental protection to the forefront of the public discussion, build on the progress we have made, and articulate an expansive vision for what’s next. As Governor, I will be committed to:

- Ensuring that we meet our 2020 and 2050 GHG reduction goals
  - Ensuring that every home and business in Massachusetts undergoes an energy audit within the next eight years.
  - Increasing regional investments to expand access to public transit, and supporting the expansion of electric and other alternative fuel vehicles.
  - Incentivizing smart-growth development, which combines housing, business development, and transit.
- Developing new clean energy technologies
  - Doubling the funding for the Massachusetts Clean Energy Center, to expand access to capital and technical services for businesses.
  - Building a strong clean energy workforce, including expanding clean energy curriculum in secondary and post-secondary education.
  - Modernizing our grid and utility regulation to ensure that electric and gas utilities have the right rules and incentives to more rapidly deploy energy efficiency and renewable energy.
- Protecting our environmental resources

- Increasing the funding for environmental agencies to at least one percent of the total state budget.
- Continuing significant investment in the preservation of land and water resources and the reclamation of brownfields.
- Improving sustainability at properties owned and managed by the Commonwealth; with the goal of making all new state buildings zero net energy.

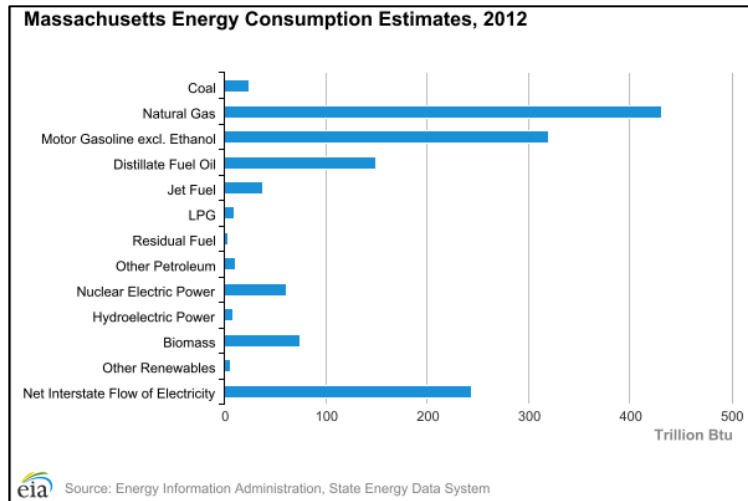
**Current Picture**

In 2008, Governor Patrick signed two groundbreaking pieces of legislation: the Global Warming Solutions Act and the Green Communities Act. Together, the two bills established aggressive goals for reducing our GHG emissions 25% by 2020 and 80% by 2050, required utilities to increase investment in energy efficiency, and mandated that 15% of electricity be supplied by renewable power facilities by 2020. Largely as a result, Massachusetts has decreased its GHG emissions by 16%, or 14 million metric tons, from the 1990 levels established as the baseline. This decrease is significant, but reaching our 2050 goals will still require reducing emissions by a further 60 million metric tons.



After 2008, clean technology and renewable energy rapidly became economic drivers, and provide substantial benefits for both businesses and homeowners. The Commonwealth’s clean energy sector is thriving, even in tough economic times. In 2013, the number of clean energy jobs grew 11.8%, and the industry currently employs nearly 80,000 workers. Investments in clean energy also generate positive returns for both businesses and homeowners; every dollar invested in energy efficiency returned \$5.10 to businesses and \$4.17 to homeowners. Despite the economic and environmental benefits of supporting clean energy technologies however, renewable energy sources still account for a relatively small percentage of Massachusetts’ overall energy mix. In 2013, only 9.3% of Massachusetts’ net

energy production came from renewable sources; comparatively, 63% came from natural gas. This continued overreliance on fossil fuels raises concerns about price fluctuations and unreliability as a result of extreme weather, global market shocks, infrastructure problems, or other factors, in addition to concerns about continued methane leakage. It is critical that we continue to think of natural gas as a bridge fuel, and look for ways to diversify our energy supply by introducing renewable energy sources.



While much of the focus recently has been on addressing the challenge of climate change, Massachusetts has also made great strides in environmental protection and preservation. Since 2007, the state has invested nearly \$300 million in land conservation, allowing for the protection of 100,000 acres and the creation of 150 new parks in communities across Massachusetts. The Commonwealth’s conservation efforts don’t end at the shoreline; in 2009, the Commonwealth implemented its first-ever Ocean Management Plan, which provided protections for marine habitats and other ocean resources. Even with these gains, however, 55% of critical wildlife habitat in Massachusetts still lacks permanent protection, we are losing thousands of acres of existing or retired farmland to development every year, and we are on pace to lose 13% of our forested land over the next half century.

There are many compelling reasons to prioritize environmental protection and reclamation: forested landscapes are increasingly essential for the role they play in recapturing carbon, land that is home to Massachusetts’ wide variety of plants and animals is being destroyed by development, and public health is threatened by pollution and lack of access to open space. It is important that we promote equity in our conservation efforts; low-income families living in urban settings often have far less access to clean air, clean water, and fresh food, and, partly as a result, we see higher rates of chronic disease in these communities. Ensuring equitable, abundant conservation will be fundamental to improving quality of life in Massachusetts, and helping us deal with the effects of climate change.

**Moving Forward**

**Ensuring That We Meet Our 2020 and 2050 GHG Reduction Goals**

GHG emissions, most notably carbon dioxide, are the primary contributing factor to climate change. Over the past five years, we have begun implementing effective strategies to reduce

emissions, but reaching our aggressive 2050 goal requires that we start today on developing longer-term policies to address the major GHG emitters in Massachusetts. It is also important that we establish intermediate emissions goals, so that we can meaningfully assess our progress towards our future targets. With our 2050 goal in mind, we must:

- *Develop strategies with the goal of ensuring that every home and business in Massachusetts undergoes an energy audit within the next eight years.*

Buildings represent the second-largest source of GHG emissions in the state. Home energy audits, which are available from electric utilities at no charge and provide a custom list of energy-saving recommendations, can help consumers save a significant amount in excess energy costs, and can dramatically reduce wasted energy, which helps us reduce GHG emissions, because the majority of our energy is still produced using carbon-intensive fuels. Although the number of audits done annually in Massachusetts has increased sharply since 2008, the vast majority of homes and business have still not undergone an audit.

As Governor, my goal will be to ensure that every home and business in Massachusetts has undergone a home energy audit within the next eight years. We will design and implement an outreach campaign to increase awareness of the availability and benefits of receiving an audit, and taking steps to increase efficiency like adding insulation or updating heating and cooling units. I will also explore the possibility of requiring audits at the point of sale for properties that are changing hands. Finally, I will commit to increased funding for energy efficiency programs for income-eligible families, who can often see the greatest benefit from energy efficiency because they tend to use carbon-intensive energy sources, and spend a greater percentage of their income on energy.

- *Make regional investments to increase access to public transit, and supporting the rapid expansion of electric vehicles and other alternative fuel vehicles.*

Transportation accounts for 40% of all GHG emissions in the Commonwealth. Of the more than 26 million trips taken by people in Massachusetts every day, nearly 70% take place by car. Conversely, only about 8% are on public transit.

Decades of underinvestment have left Massachusetts with a public transportation system that is crumbling and inaccessible for far too many people. We need to look for the most cost-effective investments that address public transportation needs regionally, because the transportation priorities in Boston are different from those in the Pioneer Valley and other areas of the state. I will also look at revising Transportation Impact Assessments to ensure that developers, especially in congested urban areas, have a stake in identifying and funding more sustainable transportation options.

We also need to recognize that cars will always be necessary for many families in Massachusetts; we need to accelerate support for electric, and other alternative fuel, vehicles, including expanding fueling infrastructure. We need to modernize our grid so that the transition to more electric cars, greater penetration of solar power and the integration of more power storage is smooth and predictable.

- *Support legislation to incentivize “smart-growth” development in cities and towns*

“Smart-growth” is concentrated development that combines housing and business development with public transit and other alternative transportation options, with the goal of providing a range of both housing and transportation options while cutting down on sprawl and preserving open space.

A bill currently before the legislature (H1859) would reform Massachusetts’ outdated zoning laws, to give municipalities the tools to promote coordinated, dense development, encourage walkable neighborhoods, and reduce unregulated sprawl development. As Governor, I will make this legislation a priority and work with cities and towns, and the legislature, to ensure its passage.

### **Developing New Clean Energy Technologies**

In addition to reducing GHG emissions, we must remain focused on bringing clean energy technologies to scale here in Massachusetts and creating an affordable, sustainable energy supply for future generations. This is why I have worked as Attorney General to increase the use of energy efficiency and renewable energy. I partnered with the Patrick Administration, energy utilities, Environment Northeast and low-income advocates to establish the most aggressive energy efficiency plans in the nation, and I have held utilities accountable for complying with the Commonwealth’s Renewable Portfolio Standard (RPS), which requires that a certain percentage of Massachusetts’ energy come from renewable sources.

We need to continue adding to our renewable energy toolbox and implement smart net-metering rules, long term contracts for renewable energy to provide certainty in the market, flexible financing, incentives for energy storage so intermittent renewable energy can be more viable, and streamlined interconnection. More generally, we need to invest in emerging energy sources, especially land-based and offshore wind energy, which has the greatest capacity for large-scale energy generation, and support the companies that are driving innovation in energy efficiency and other clean technologies. To support the development of new, clean technologies and energy sources, we must:

- *Double the funding for the Massachusetts Clean Energy Center, to expand access to capital and technical services.*

Created in 2008, the Massachusetts Clean Energy Center supports the Commonwealth’s burgeoning clean technology industry in multiple ways: the MassCEC assists communities and individuals who want to adopt renewable energy, collects industry data, connects clean energy companies across the Commonwealth, and provides strategic, early-stage investment to growing clean energy companies.

MassCEC currently receives \$25 million annually through the Renewable Energy Trust Fund. By doubling this level of funding, we will enable MassCEC to significantly increase their support of the clean energy industry, which has been growing steadily and currently employs nearly 80,000 workers in Massachusetts.

- *Build a robust clean energy workforce.*

Massachusetts’ workforce has always been one of its greatest competitive strengths but, according to the Clean Energy Center report, many clean energy employers see an impending shortage of workforce age individuals with the right skills to take over

for retiring workers and fill new jobs; this is a concern for every company, but a particularly serious concern for small companies that draw on local job markets.

We need to form meaningful partnerships between clean energy companies and both our public K-12 and higher education systems, so that students are exposed to the opportunities in the clean energy industry, and have the skills to take advantage of those opportunities. We also need to address other cost drivers that put a burden on young workers and families, including housing and transportation, to ensure that the young people who will drive innovation can afford to remain in Massachusetts.

Improving clean energy curriculum is also a part of improving overall environmental literacy among young people. Ensuring that the next generations are aware of the environmental challenges they are facing, and feel empowered to do something about them, is critical to sustaining the long-term strategies needed to achieve our goals.

- *Modernize our grid and utility regulation, ensuring that electric and gas utilities have the right rules and incentives to more rapidly deploy energy efficiency and renewable energy.*

As Attorney General, I have both partnered with utilities and held them accountable to create an energy marketplace in Massachusetts that balances requirements and incentives to promote the expansion of clean energy.

As Governor, my goals will include increasing the RPS standard in Massachusetts, decreasing the amount of CO<sub>2</sub> allowances under the Regional Greenhouse Gas Initiative, and implementing a clean energy performance standard to decarbonize our power supply. These are strategies that will continue to put pressure on the gas and electric utilities to invest in energy efficiency and support clean energy development.

Using market forces to reduce GHG emissions and promote renewable energy is not limited to utilities; I will continue to explore additional ways in which we can use market forces to reduce fossil fuel consumption without harming business competitiveness, including a potential revenue-neutral carbon tax.

### **Protecting Our Environment**

As Attorney General, I empowered the Environmental Crimes Strike Force to work closely with law enforcement and environmental authorities to aggressively prosecute crimes like illegal dumping, which needlessly endanger our environmental resources. I made this a priority because I recognize the importance of ensuring universal access to clean water, clean air, fresh food, and open space; everyone in Massachusetts should have access to these things, regardless of where they live or what their income level is. To do that, we must:

- *Increase the amount of our state budget devoted to environmental protection to at least 1% of our overall spending.*

In FY2013, the budget for environmental agencies in the Commonwealth, including DEP, DCR, and the Department of Fish and Game, shrank to 0.6% of the total state budget. This level of funding means that these agencies are even more constrained

in their ability to carry out critical tasks, including identifying and stopping environmental violations, maintaining state parks, and protecting endangered species.

As Governor, I will be committed to increasing the level of funding for these agencies to at least 1% of the overall state budget. This is not simply an investment in our environment; it is also an investment that will improve public health, bring down our health care costs, and help us preserve critical natural spaces that are a key to the broader goal of combating climate change.

- *Continue significant investment in the preservation of land and water resources and the reclamation of brownfields.*

For every \$1 of state funds invested in land conservation, \$4 is returned in natural goods and services to the Massachusetts economy. As Governor, I will continue Governor Patrick's commitment to a high level of investment in land conservation. I will also explore additional strategies to support cities and towns that prioritize land preservation, and to incentivize philanthropic land donations; these strategies include continuing to invest in the Community Preservation Act and increasing the existing state conservation land tax credit.

In addition, the AG's office administers the Brownfields Covenant Program, which incentivizes property owners and developers to clean up contaminated sites and create spaces for playgrounds, community gardens, and other projects that revitalize communities. Reclaiming brownfields is especially important to promoting urban agriculture, small-scale farming that enables inner city residents to access fresh, locally-grown food. As Governor, I will maintain my commitment to not only protecting existing natural spaces, but also reclaiming these currently blighted areas.

- *Improve sustainability at properties owned and managed by the Commonwealth; with the goal of making all new state buildings zero net energy.*

The Commonwealth manages more than 80 million square feet of building space, which annually "consume more than 1 billion kilowatt hours of electricity, 22 million gallons of heating oil, and 46 million therms of natural gas, and create 1.1 million tons of GHG emissions per year," according to the Division of Capital Asset Management and Maintenance (DCAMM).

As Governor, I will work with DCAMM and other state agencies to expand initiatives like the Accelerated Energy Program, which aims to retrofit 700 state-owned sites by January 2015, saving \$43 million annually through water and energy conservation. I will also explore strategies to ensure that new state development incorporates green building principles, which reduce the burden on the environment by mimicking natural cycles. Our goals should be to reduce energy usage at all state facilities to 50% of 2007 levels within 10 years, make all new state buildings zero net energy, and decrease the emissions from the state's fleet of vehicles, including setting an aggressive goal for incorporating electric and other alternative fuel vehicles into the fleet.