



Photo: Judy Berk

Regional Greenhouse Gas Initiative: Working for Maine

NRCM began helping develop and establish RGGI in 2005. Working collaboratively with stakeholders across the region, we pushed for an initiative that benefited our environment and energy consumers. In 2007, NRCM helped Maine adopt legislation authorizing our participation in the program, and the first public auction of carbon credits was held in the fall of 2008. Since then, NRCM has worked to refine how RGGI revenue is spent in Maine. Maine should be proud of its choice to focus on energy efficiency as the way to maximize public benefits from RGGI. More work remains to be done to ensure those benefits continue.



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This globally significant initiative is lowering our energy costs, reducing climate change pollution, creating Maine jobs, and protecting our environment.

The Regional Greenhouse Gas Initiative (RGGI) is a cooperative market-based effort among northeastern states to reduce climate-changing carbon pollution from power plants and spur investments in energy efficiency and clean energy. The initiative took effect in 2009, and today RGGI is making our electricity supply cleaner while creating a more energy-independent and competitive economy for Maine.

In 2017, the nine participating states agreed to strengthen and extend the initiative through 2030, and two more states—New Jersey and Virginia—are in the process of joining RGGI. The initiative directly benefits Maine, and sets an example for globally significant leadership on climate at a time when every other nation in the world is committed to reducing carbon pollution.

Harnessing Market Competition to Reduce Pollution

RGGI has proven to be a powerful, successful, and cost-effective tool to reduce power plant emissions. RGGI shifts the burden of carbon pollution costs from families and communities to polluters and fossil fuel companies. RGGI works by setting a region-wide limit on carbon pollution and requiring power plants in the region to compete for a permit to emit carbon. This model engages market forces to reduce carbon pollution at a competitive cost. Power plants bid on these carbon permits, and the states receive the revenues and funnel them back to energy consumers, mostly in the form of funding for energy efficiency improvements and other clean energy investments.



We Must Address Climate Pollution

Maine is already seeing effects of climate change, from warming oceans and more intense storm damage to widespread Lyme disease and threats to moose and other species. Our coasts and oceans are not only symbols of what makes Maine special, but are also huge economic drivers. Commercial fishing is a \$2 billion part of Maine’s economy, employing roughly 39,000 people (Mainebiz, 2016; MainePublic, 2017).

The warning signs in our oceans alone are clear:

- The Gulf of Maine is warming faster than 99 percent of the world’s oceans (GMRI, 2015).
- Maine’s shrimp fishery has been closed for several years now, in part due to warmer waters.

- Invasive species like green crabs ravage Maine clam flats and eelgrass beds.
- Warming oceans are adding troubling volatility to lobstering, and warming waters just to our south have contributed to the collapse of the lobster industry there.
- Shellfish face an existential threat: the same carbon pollution that is warming the water is making the oceans more acidic, which makes it more and more difficult to build a shell.

We must act now to avoid much more disruptive impacts, by reducing the carbon pollution that is warming our atmosphere and waters and acidifying our ocean.

Starting in 2001, the northeastern states, including Maine, and our Canadian neighbors set joint carbon pollution reduction goals that are informed by climate science.

2010	2020	2030	2050
Return to 1990 levels ✓	10% below 2010 <i>Maine appears on track</i>	35-45% below 2010 <i>Action needed now</i>	75-80% below 2010 <i>Future action needed</i>

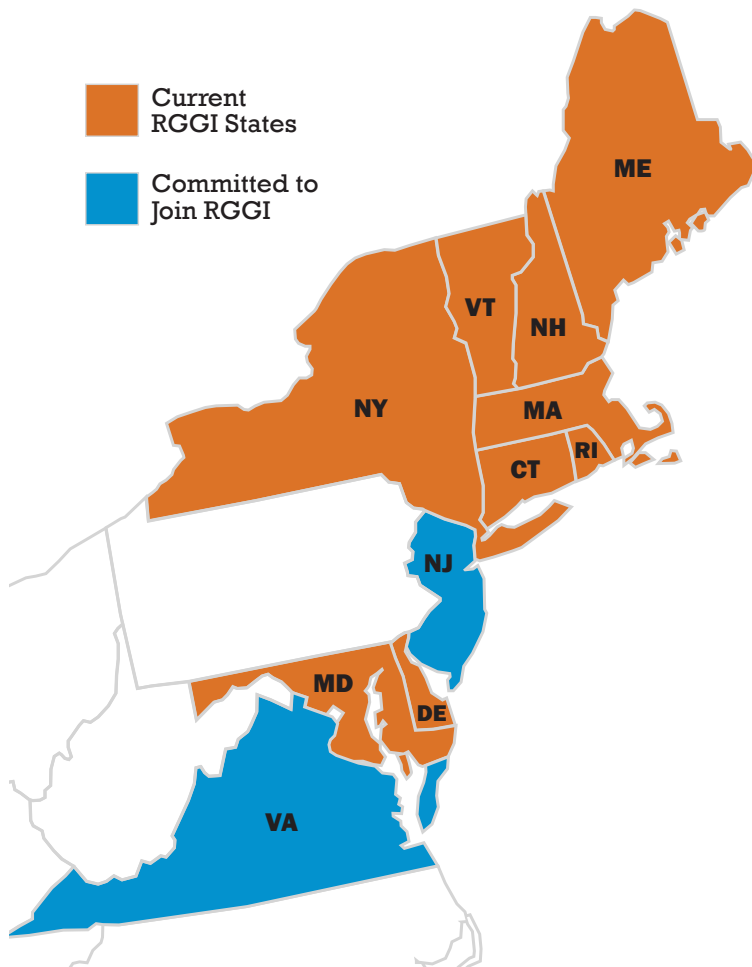
The 2030 carbon pollution goal was established by Governor LePage and others in 2015, all others became Maine law in 2003.

RGGI as National & Global Climate Leadership

Maine cannot solve climate change alone; however we can and must do our part. Many of Maine’s traditional industries, natural resources, and the Maine way of life are at stake. Working together with other states in the region multiplies our impact and makes it easier to reduce carbon. When New Jersey and Virginia join, the RGGI region will affect an area with more carbon pollution than is emitted by Canada, Mexico, Brazil, Saudi Arabia, or the United Kingdom. In fact, if this expanded RGGI region was a nation, that nation would be the 7th largest carbon emitter in the world.

RGGI Reduces Upwind Pollution

One reason RGGI is a powerful tool is because it addresses power plants across the entire northeastern United States. This includes places upwind from Maine like Maryland, where coal is still the #1 source of power. The



RGGI and Top 20 Countries by Carbon Emissions

- | | |
|----------------------------|--------------------|
| 1. China | 11. Brazil |
| 2. United States | 12. Saudi Arabia |
| 3. India | 13. Mexico |
| 4. Russia | 14. Indonesia |
| 5. Japan | 15. United Kingdom |
| 6. Germany | 16. Australia |
| 7. RGGI Region 2020 | 17. South Africa |
| 8. Iran | 18. Turkey |
| 9. South Korea | 19. Italy |
| 10. Canada | 20. France |

* Countries in black are committed to the Paris Climate Accord.

U.S. EPA established the Clean Power Plan to set carbon pollution limits for power plants nationwide. RGGI would easily achieve and surpass those limits. However, under President Trump the Clean Power Plan is under attack at the EPA and in the courts. Maine cannot afford to leave climate protection solely to the federal government, especially when it is neglecting its responsibilities and we have a proven tool here and now that works to reduce pollution while helping our economy, too.

A Legacy of Bipartisanship

RGGI has been a bipartisan initiative since it was first proposed by a Republican governor. Twice it has been further strengthened through mutual cooperation of Democratic and Republican governors. Although President Trump seems intent on turning his back on clean energy and international cooperation on climate change, governors, state legislatures, mayors, and others are stepping up and stepping in. RGGI is one of the most striking examples to date of this kind of climate leadership, which is grounded in sensible, innovative policy that works for Maine people and our economy.



Saving Money on Energy for Maine Homes and Businesses

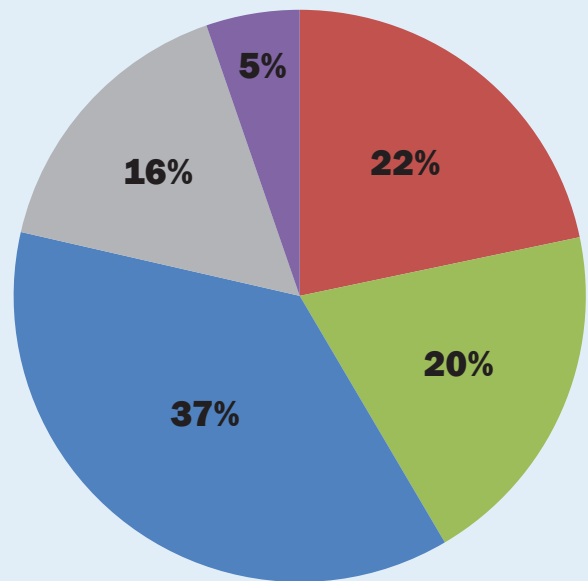
Like most RGGI states, Maine has used most of the revenue it has gained through RGGI to help Maine people and businesses fund efficiency improvements that save energy and money. From 2013–2017, Efficiency Maine used \$45 million from RGGI—leveraging \$88 million in private investment—to help Maine people, businesses, and industry save \$277 million in lifetime energy costs (EMT, 2018). Energy savings came from everything from home weatherization on Monhegan Island to more efficient paper mill boilers in Madawaska.

Breaking down the savings from RGGI-funded energy efficiency efforts between 2013–2017, the lifetime energy savings in Maine have been:

- Large commercial & industrial: \$76 million
- Small & medium business (includes towns, schools): \$46 million
- Residential: \$155 million

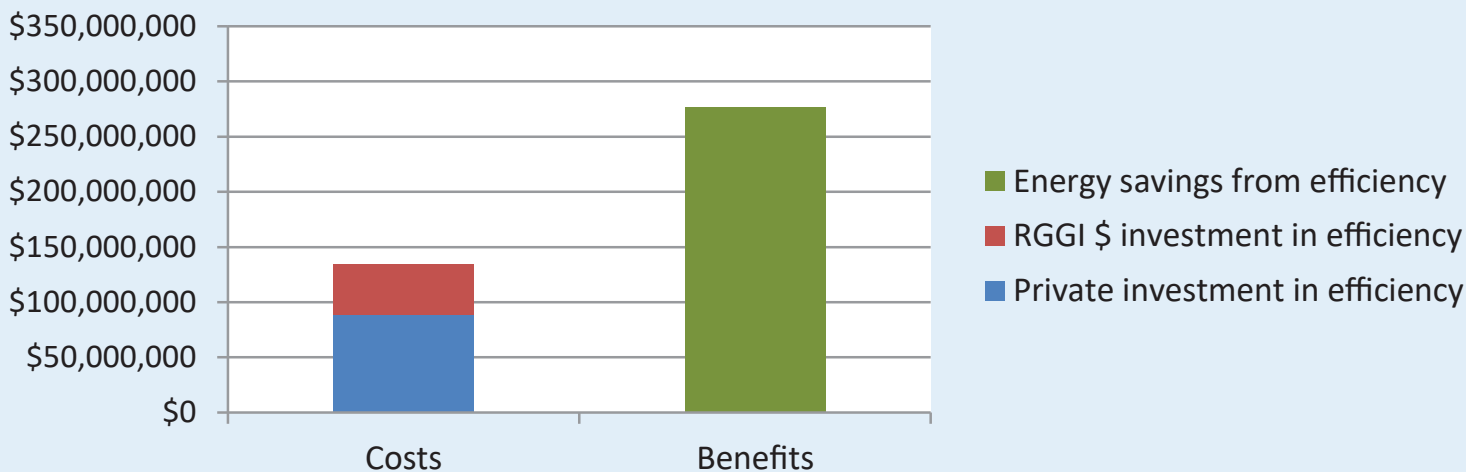
In addition, nearly \$9 million of RGGI funds over these five years was also given to ratepayers as a direct payment. Today this payment goes only to very large manufacturers. This payment is not used to increase energy efficiency, which returns \$3-5 for every \$1 spent. It is akin to “giving a man a fish” in the old adage, whereas the ongoing savings from energy efficiency are akin to “teaching him to fish.”

Breakdown of RGGI Spending MAINE 2013-2017



- Large Commercial & Industrial Efficiency
- Small & Medium Business Efficiency
- Residential Efficiency
- Ratepayer Payments
- Administrative Costs

Costs and Benefits of RGGI Investment in Maine, 2013-2017



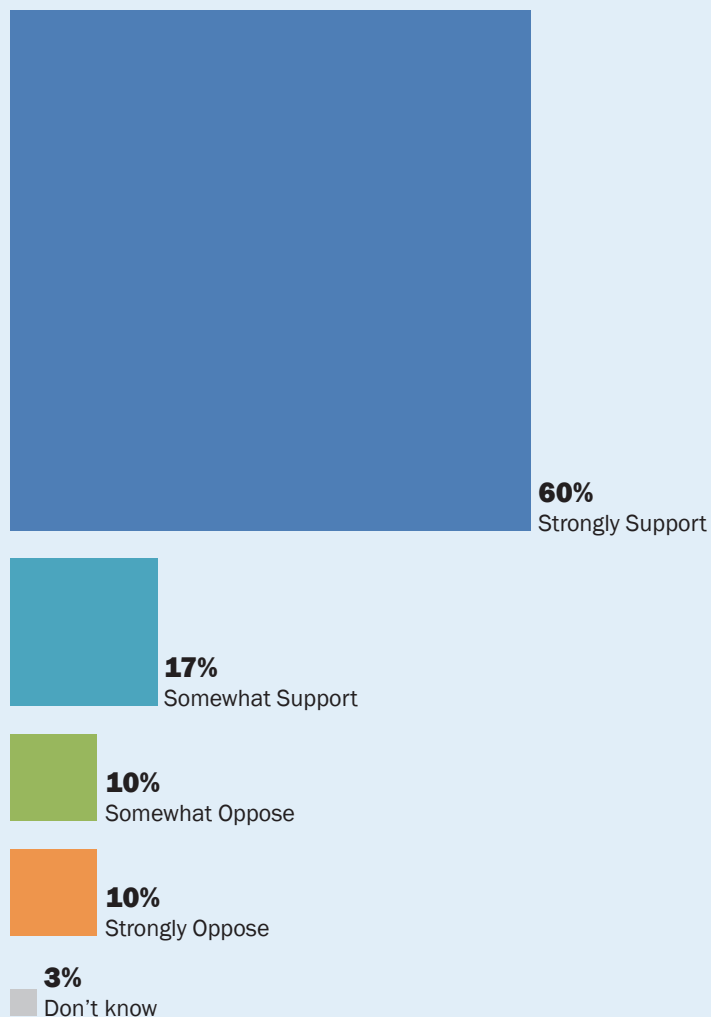
Maine People and Businesses Support RGGI

Maine people overwhelmingly support reducing power plant carbon pollution through RGGI. In a 2016 poll, a majority across all demographic groups and political parties supported the plan to use RGGI to decrease carbon emissions by 5% each year (NRCM, 2016). (In 2017, RGGI states agreed to shift from a 2% per year decrease to 2.5% per year.)

In 2018, nearly half of Maine voters said climate change is already having a negative impact on Maine, and around 60% think it will cause a moderate or great deal of harm within ten years. 77 percent of Maine people want the next governor and Legislature to take action to achieve Maine’s 2030 carbon reduction goal (NRCM, 2018). RGGI also has broad support from businesses and public health organizations around Maine including:

- Diverse Maine businesses such as Reed & Reed, Mook Sea Farm, East Brown Cow, and the Maine Pellet Fuels Association
- Public health groups such as the Maine Public Health Association, the Maine Nurse Practitioners Association, and the American Lung Association of the Northeast
- Utility companies such as National Grid, Exelon, and Calpine
- Regional businesses that do business in Maine such as King Arthur Flour, Stonyfield, Staples, Thule, and Ben & Jerry’s.

Do you Support or Oppose Reducing Power Plant Carbon Emissions Through RGGI by 5%/year?





Power Plant Pollution

Pollution from power plants harms public health in many ways:

- Harmful NO_x and SO_2 and particulate pollution cause smog (and other dangerous conditions), increasing incidence of lung disease;
- Warmer summers accelerate smog formation (which is why bad air days occur most in the summer); and
- Warmer winters increase the spread of insect-borne diseases like Lyme disease.

Maine has one of the highest rates of asthma per capita. This may be related to our location downwind of many dirty power plants.

Protecting Public Health

Since RGGI took effect, power plants in the region have reduced their carbon emissions more than 40 percent. Economists say RGGI is responsible for a large portion of

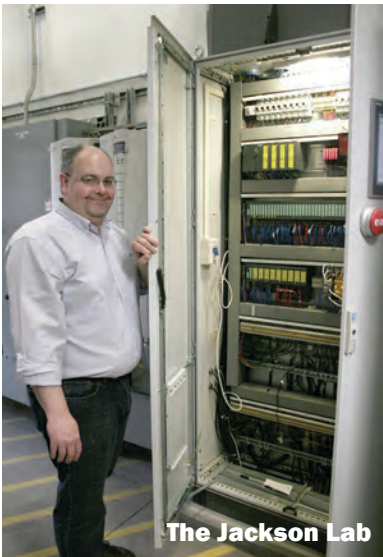


those reductions (Duke, 2015). When power plants cut carbon emissions, they also reduce other air pollutants like SO_2 and NO_x . Therefore RGGI also saves lives, prevents asthma attacks and cuts health costs.

One detailed study, which calculated the health benefits from RGGI's reduction of tiny particulate pollution *alone*, found:

- 300 to 830 lives saved;
- More than 8,200 asthma attacks avoided;
- 39,000 lost work days averted; and
- \$5.7 billion in health savings and other benefits.

This study did *not* consider the health benefits of reduced smog (ozone) pollution, or those from slowing atmospheric warming, which yield tremendous health benefits, too (Abt, 2017). Both of these would multiply the health benefits of RGGI.



RGGI Strengthens Maine's Economy through Efficiency Maine

RGGI has measurably improved Maine's economy, especially through the savings consumers enjoy on their energy bills from energy efficiency. Energy efficiency improvements create direct economic activity—such as hiring a contractor to add insulation to a basement—and create good-quality local jobs. However, an even larger economic impact comes from the savings. Households and businesses that save money on energy bills have more income to spend in the Maine economy, which creates prosperity broadly across the state.

Over the most recent five-year period, RGGI funding has created \$277 million in lifetime energy savings for Maine households and businesses.

Independent economists have analyzed the benefits and costs of RGGI every three years (Analysis Group, 2018). Each time they have found enormous net benefits to the region and to each participating state. From 2015-2017, RGGI has:

- Saved \$220 million (net) on energy bills, including through RGGI-funded energy efficiency improvements.
- Added \$1.4 billion in net economic activity in the region; totaled over the decade, RGGI added \$4 billion to the economy.
- Increased jobs by 14,500 job-years.
- Kept \$1.3 billion in our regional economy that otherwise would have been exported to buy imported fossil fuels.





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