

Climate Pollution Standards for New Power Plants: Making all power plants as clean as Maine's

President Obama and the US Environmental Protection Agency are working to develop climate pollution standards for power plants. On September 20, 2013, the EPA released its draft rules for new facilities.

Climate change poses a serious threat to Maine's economy, environment, and quality of life:

- Warmer and more acidic oceans endanger lobsters and other marine fisheries, jeopardizing the culture and economy of Maine's coastal communities. This includes the many Maine businesses supported by tourism on our working waterfronts, including lobster and other shellfish fisheries.
- A rising sea level and more extreme weather further imperil coastal properties, roads and infrastructure, and wildlife habitat.
- Climate change is likely to increase smog and worsen public health with increased asthma, ticks that carry Lyme disease, and more.
- Climate change is already hurting our economy through impacts to winter recreation, forest products, and other sectors.
- We owe it to our children and future generations to address the causes and impacts of climate change.

Maine has everything to gain and little to lose through national power-plant pollution standards. We breathe air from upwind states that burn large amounts of dirty coal. Maine and the Northeast have *already* taken major steps to reduce power plant pollution, including through the Regional Greenhouse Gas Initiative. **The EPA's rules will help ensure that power plants across the country follow our lead.**

Limiting carbon pollution from power plants will **spur innovation and investment** in clean energy, strengthening Maine's economy and curbing the climate instability that could have devastating impacts on Maine's small businesses and economy.

America's existing fleet of power plants – especially those run on fossil fuels like coal and natural gas – emit 40% of our nation's carbon pollution, our single largest source. Until now, the US had no national limits on power plants' carbon pollution, so requiring that *new* power plants run cleanly is the first step to halting the instabilities of global warming.

What difference can a few Maine businesspeople make?

Maine's US Senators have an outsize role in standing up to support the EPA as it rolls out these new carbon pollution standards. And as the owner of a small business in Maine, you have a critical role in connecting with Senator Susan Collins and Senator Angus King.

Climate Pollution Standards for New Power Plants: The Details

What do these proposed carbon standards require?

The Environmental Protection Agency's carbon pollution standards set limits for new power plants to slow the effects of dangerous climate change. Under the newly proposed standards:

- New large natural gas-fired turbines must meet a limit of 1,000 pounds of carbon dioxide per MWh (C02/MWh);
- New small natural gas-fired plants must produce less than 1,100 pounds C02/MWh; and
- New coal-fired units must emit no more than 1,100 pounds C02/MWh. Additionally, coal-fired plants will have an option to meet a stricter limit if they wish to average their carbon emissions over several years. This provision eases major investments in carbon-scrubbing technologies, like carbon capture and storage, which soaks carbon dioxide from a coal-plant's emissions and pumps it underground.¹

How much do power plants contribute to climate pollution?

Gina McCarthy, head of the Environmental Protection Agency, tells it straight (emphasis added):

We know that carbon pollution is the most prevalent heat-trapping greenhouse gas, warming our planet and fueling climate change. In 2011, power plants and major industrial facilities in the United States emitted over 3 billion metric tons of carbon pollution, which is equal to annual pollution from over 640 million cars. Annually in the U.S., carbon pollution from power plants accounts for one-third of all greenhouse gas emissions, or 40 percent of total carbon pollution, surpassing industrial sources or the transportation sector. *That means power plants emit more carbon pollution than every boat, plane, train, and car in the U.S. combined.*²

So cutting power-plant carbon pollution is a big deal.

How do these standards spur clean investment?

With these proposed rules, the cleanest ways to power our grid – with efficient and renewable energy – become the most cost-effective too. In fact, the new economic incentive will drive America's signature innovation, making these technologies even cheaper over time.

¹ EPA, "2013 Proposed Carbon Pollution Standard for New Power Plants," <u>http://www2.epa.gov/carbon-pollution-standards/2013-proposed</u>carbon-pollution-standard-new-power-plants, (9/23/13).

² McCarthy, Gina; "Time to Act on Climate Change," <u>http://www.huffingtonpost.com/gina-mccarthy/time-to-act-on-climate-change b_3954969.html</u>, (9/20/13).

These standards put a more accurate number of the health costs we bear for coal, making it more expensive to generate electricity with coal. But there are very few plans for new coal plants anyway. That's because coal is dirty, and getting more costly for a variety of reasons. There is only one coal plant under construction in the US right now, and it is already more than \$1 billion over budget.³

How will cutting carbon pollution protect Maine's jobs and even create new ones?

Tackling climate change means protecting thousands of Maine jobs that rely on a stabile climate, from farming and forestry to fishing for lobsters and skiing our slopes.



And tackling climate change will require new jobs to power a cleaner economy. Cutting carbon pollution from power plants will save American families an average of \$1 a month on their electric bills, according to a recent analysis by the Natural Resources Defense Council and business and labor groups.

Moreover, stronger pollution standards drive innovation by requiring companies to invest in new technologies and practices, which generate more jobs. Specifically, the EPA's new carbon-pollution

standard will "generate thousands of jobs in labor-intensive energy-efficiency retrofits in buildings; the manufacture, installation, and operation of wind and solar power; and other investments necessary to slash this pollution," according to a synopsis by Daniel Weiss.⁴ And these are jobs that can't be outsourced overseas.

How will cutting carbon pollution save us money and even lives?

Power plants have limits on their emissions of mercury, sulfur, arsenic, cyanide, and lead, but no federal limits on the dangerous carbon pollution that is responsible for climate change. And it's everyday Americans who bear the costs. Warmer temperatures spurred by carbon pollution worsen smog and pollen levels, leading to more asthma attacks and other respiratory problems - the nation's asthma rates alone have doubled over the past 30 years.⁵ Maine is already seeing the impacts of a warmer climate in the Lyme disease-carrying ticks spreading farther north.⁶

³ Wald, Matthew L., Shear, Michael D.; "Challenges Await Plan to Reduce Emissions," <u>http://www.nytimes.com/2013/09/21/business/energy-environment/challenges-await-plan-to-reduce-emissions.html? r=0</u>, (9/20/13).

⁴ Weiss, Daniel J., "10 Truths that Should Be Said at This Week's House Climate Change Hearing," Center for American Progress, <u>http://www.americanprogress.org/issues/green/news/2013/09/16/74181/10-truths-that-should-be-said-at-this-weeks-house-climatechange-hearing/</u>, (9/16/13).

⁵ McCarthy, Gina; "Time to Act on Climate Change," <u>http://www.huffingtonpost.com/gina-mccarthy/time-to-act-on-climate-change_b_3954969.html</u>, (9/20/13).

⁶ Miller, Kevin, "EPA to propose emissions rules for older power plants," *Portland Press Herald*, <u>http://www.pressherald.com/news/northeast-has-a-head-start-on-emissions</u> 2013-09-21.html, (9/21/13).

Furthermore, Superstorm Sandy and 24 other extreme weather events over 2011-2012 caused damage in excess of \$1 billion each - \$188 billion total - and left more than 1,100 people dead across the country. The number of these extreme weather events, as well as the price tag, has grown over the past three decades.



Taking action to avert the worst effects of climate change, such as investing in renewable energy and energy efficiency, will create jobs and a more resilient economy. Since 1970, every \$1 invested to comply with Clean Air Act standards has returned \$4-8 in economic benefits, and estimates show that by 2020, total benefits from the Clean Air Act will outweigh the costs by a ratio of 30 to 1.⁷ Imagine your retirement investments offering a 3,000% return!

Doesn't Maine already have strong limits on our power-plant carbon pollution?

Yes, and these national carbon pollution standards would require that all new power plants be as clean as Maine's.

We've been a member of the Regional Greenhouse Gas Initiative (RGGI) since 2007, a market-based approach reducing global warming pollution from power plants from Maine to Maryland by spurring investment in energy efficiency. The Natural Resources Council of Maine has a <u>more information on RGGI here</u>.

The fact that Maine and the region are already in the lead makes national standards even more in our competitive advantage.

Where are we now in the process of reducing industrial carbon pollution?

The Supreme Court's 2007 decision in *Massachusetts v. EPA* ruled that Section 111 of the decades-old Clean Air Act covers climate change pollutants. From there, EPA Administrators under both Presidents Bush and Obama determined that greenhouse gas pollution endangers Americans' health and welfare by leading to long-lasting changes in our climate that can have a range of negative effects on human health and the environment. This decision provides the EPA with the legal authority to set carbon-pollution limits on major industrial polluters.^{8,9}

In April, 2012, the EPA first drafted carbon rules for new power plants. More than 3.2 million Americans wrote to the Administration in support of these very rules: that's more than on any other clean-air standard ever. Now the EPA has released an updated draft of those rules, which will also be open for

⁷ McCarthy, Gina; (9/20/13).

⁸ Weiss, Daniel J., (9/16/13).

⁹ US EPA, "New Power Plants: Basic Information," <u>http://epa.gov/carbonpollutionstandard/basic.html</u> (as of 9/18/13).

public comments before finalization. Next, EPA will address carbon pollution from our nation's 6,000+ existing power plants.

In an era when Congress seems deadlocked, these standards make serious progress against destructive climate change.

So why ask our Congressional delegates for support?

Great question. Even though every branch of our national government has taken action on this ...

- Congress gave the Environmental Protection Agency the legal authority to enforce clean air in 1970, and
- the Supreme Court mandated the EPA to act specifically against climate pollution in 2007, and
- EPA Administrators under both Presidents Bush and Obama have determined that EPA will take action, and
- President Obama specifically addressed the nation announcing his EPA will accelerate their work,

...there are still very powerful interests working to slow or prevent rules against carbon pollution.

The US Senate will have a chance to weigh in on these standards through various votes in the coming months. We'll need champions like our Senators to lend multi-partisan support for national climate action as strong as Maine's.

Will you join a letter of Maine businesspeople urging Senators Collins and King to support US carbon pollution standards a strong as ours?

If you own a business in Maine and want to know more about standing for up climate action, drop Bonnie Frye Hemphill a line at bhemphill@nrcm.org.