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# Moving Forward Together: Six Principles for the New EPA Power Plant Rules that Will Ensure Success

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In response to a 2007 Supreme Court ruling and additional court mandates, [1] the Environmental Protection Agency (EPA) is developing a rule to reduce greenhouse gas emissions from existing power plants. The EPA is expected to release the proposed rule as early as June 2014. After a one-year public review period, it will become final. Critics are concerned that the proposal will be too costly and rigid in dictating to states and utility companies how to cut carbon pollution.

Climate change is a serious problem that the United States must address now. And to be successful, plans to reduce emissions must be made in concert with the private sector. Third Way brought relevant businesses and advocacy organizations together to determine if an EPA regulation could both cut emissions and keep electricity rates affordable. We found that, if the EPA follows six critical principles, its forthcoming rule can reduce carbon pollution, allow states to make their own plans to meet the standard, and allow utilities to continue to provide reliable, inexpensive power to consumers.

# Introduction

The EPA is expected to propose a rule to reduce greenhouse gas emissions from existing power plants by June 2014. This is a critically important step to putting the United States on a path to addressing climate change. But this rule will succeed only if it fosters partnerships between the states required to enforce it and the private sector firms that must comply with it.

Third Way conducted a series of working groups with relevant companies and non-governmental organizations to identify the key elements in an EPA rule on carbon pollution, known as 111d. We arrived at six principles that are critical for the success of 111d:

- The rules should generate meaningful reductions that are easy to measure.
- The rules should provide for affordable compliance.
- States should be given maximum flexibility to implement the standards.
- Reductions in other greenhouse gases should count where possible.
- Regional coordination should be encouraged.
- States should be encouraged to maintain energy resource diversity.

# The EPA is Acting Because Congress Failed to Do So

Congressional action would have been the best approach to developing a national strategy to address climate change. We believe that this should have included a price on carbon to encourage the transition to cleaner energy sources (including natural gas and nuclear energy), coupled with the aggressive prioritization and funding of clean energy innovation to develop the new technologies we still need. Even without these actions, there are dozens of steps Congress could take immediately to cut carbon pollution without having a serious impact on spending or cost to consumers. (Third Way has identified such steps in our PowerBook.) [2]

Unfortunately, Congress has been unable to act. As a result, Supreme Court decisions have pushed EPA to address greenhouse gas emissions, including those from power plants. [3] Absent legislation, the debate should turn to *how* the EPA should act, not when or if. We believe the agency can develop rules that are effective at cutting pollution, affordable for utilities, industry and consumers, flexible for states to implement, and legally defensible.

# Six Principles for a Balanced, Effective Carbon Pollution Rule

## 1. The rule should generate meaningful reductions that are easy to measure.

The goal of climate change policy should be to slow, stop, and reverse the growth of greenhouse gases in the atmosphere. Third Way doesn't presume to know what the ideal numerical standard should be for the power sector; proposals have ranged from "do nothing" to "25 percent reductions." In truth, the question about how far EPA can go hinges on two issues: how easy it will be to determine emissions performance, and how much flexibility the states will have to make their own plans.

### Setting the standard: where and how to measure reductions

A key question is whether the performance standard should be "rate-based" (i.e. pounds of CO2 per megawatt hour), or "mass-based" (i.e. a statewide limit on tons of CO2 emitted). A further consideration is whether the standard itself should reflect what an individual unit can achieve (referred to as "inside the fence"), or reductions that are possible across the electric system as a whole (referred to as "outside the fence").

Third Way recommends a statewide limit over a rate-based standard that applies to an individual power plant. This approach will make it more straightforward for EPA to go "beyond the fence" and allow maximum flexibility as states make their emission reduction

plans (see Principle #2). A statewide, "mass-based" limit has several advantages relative to individual power plant regulations:

- *Greater certainty of results.* In measuring outcomes under a "mass-based" standard, the test will be simple: either emissions went down, or they didn't. This won't depend on demand for electricity, weather conditions, or anything else.
- *Simplicity in determining performance options.* Under a mass-based approach, states will have the maximum range of tools and the widest variety of low-emitting sources to choose from. This is because some measures, particularly energy efficiency increases, are difficult to gauge accurately if performance is determined using a rate.
- *Preserving existing clean generation.* A mass-based approach would treat all generating resources equally based on carbon emissions, and may serve to preserve existing clean generation as opposed to favoring one fuel over another.

## 2. The rules should provide for affordable compliance.

A key goal of the rule should be ensuring that Americans continue to have access to affordable, reliable electricity. Flexibility in determining individual state plans will be a critical determining factor: states and companies should have the widest number of options possible in order to keep costs as low as possible. The rule should be written in such a way that states and their utilities can turn to whatever option they believe is best and most cost-effective. This could include increasing nuclear capacity, bringing more renewables online, switching from coal to natural gas or waste-to-energy, or adding innovative new technologies as they come to market. This approach avoids the worst fears of many utilities, which are that EPA will put regulators in the power plants to dictate to utilities how their operations are run and which plants remain online.

## 3. States should be given maximum flexibility to implement the standards.

States can and should be empowered to be creative in reaching their pollution reduction goals. The greater the flexibility, the more successful the rule can be in terms of both environmental performance and economic value. States know their utility sectors well; they have the relationships both with their own utilities and with their counterparts across state lines, and they can use this knowledge to devise plans that work best for their businesses. Flexibility of implementation can mean many things. A partial list would include:

- *State cooperation toward emissions goals.* States already cooperate on utility-related matters, through regional transmission organizations, state coalitions to reduce greenhouse gases, and other kinds of partnerships. Cooperation across state lines can cut costs and encourage common-sense coordination.
- *Encouraging improved efficiency in the power plant*. Power plants should be encouraged to reduce their "heat rate," which is a reflection of plant efficiency.
- *Allowing states to use lower-carbon plants first, where possible. S*tates should be allowed to price carbon into electricity markets so that resources are "dispatched" accordingly. This simply means that states should be able to implement policies that affect what type of power plants are used to meet customer demand, and when they are used.
- *Adding lower-carbon sources to existing energy production.* Many power plants will accept fuel substitutes such as biomass or natural gas, which can be added to the primary fuel for a plant. Called "co-firing," this is a well-accepted strategy for reducing greenhouse gases. Another strategy could be increased use of nuclear energy or renewable energy.
- *Directing the use of natural gas and cost-effective renewables.* States should be able to choose a greater portion of their fuel mix from renewable and lower-emission fuels, such as natural gas.
- *Using energy efficiency more than ever before*. Energy efficiency should be recognized as a compliance tool. Efficiency can be achieved in a wide variety of places, from within the electric generating unit and also at the end user. [4] Buildings account for more than 35% of U.S. GHG emissions.

There are many opportunities to improve the overall energy efficiency of our built environment by focusing on the building envelope as well as systems and equipment. Industrial energy efficiency provides another avenue of potentially low cost reductions. Both utilities and industry can employ technologies such as combined heat and power (CHP) to reduce the carbon intensity of energy.

## 4. Reductions in other greenhouse gases should count where possible.

The main focus of the EPA rule is reducing carbon dioxide emissions. This, however, should not exclude strategies that reduce power plant emissions of other greenhouse gas pollutants. States should have enough flexibility that technologies with the ability to reduce

other GHGs from power generation, such as methane emissions from waste-to-energy and landfill gas processes, should also be included as acceptable compliance options.

## 5. Regional coordination should be encouraged.

Over time, electricity markets in the United States have crossed state lines and developed into regional markets. States should be allowed, and even encouraged, to synchronize their efforts to meet EPA's standards, especially where there are regional transmission organizations or other established kinds of relevant state/utility policy coordination. While there is no one model for this, it is important for EPA to recognize and value the work that utilities and states already do to coordinate power sector policies across state lines. States and regions can best ensure that the reliability of the electricity system is not compromised in any way by rules requiring changes in how power is generated to reduce emissions. [5]

## 6. The rules should preserve energy resource diversity.

Especially in the wake of the natural gas revolution, the United States has an abundance of zero and lower–emitting resources to generate electricity. In addition to natural gas, these options include nuclear, solar, wind, energy storage, and hydropower. Deploying all of these technologies, along with new ones as they come to market, are critical to preserving Americans' access to low-cost electricity that is entirely reliable. For EPA's rule to be successful, it must ensure the continued diversity of our electricity generation network. A rule that intentionally or unintentionally forces some clean energy options out of the market or leads to the market being too captured by one technology could result in rising prices and reduced reliability. For instance, the retirement of nuclear plants would dramatically affect the nation's ability to meet its carbon goals. This would undermine the goal of reducing carbon pollution and could hurt the economy.

# Conclusion

For EPA's rule on carbon emissions to succeed, it must empower states and utilities to develop the solutions they believe best fit their markets and circumstances. Balancing businesses' needs with the goal of reducing greenhouse gasses is the only way to accomplish this goal. If the EPA follows the principles we developed in consultation with the companies that will be required to comply, advocacy organizations that are committed to addressing climate change, and states that will have to enforce the rules, the rule has an enormous opportunity to succeed.

# Additional Background on the Rulemaking

The President directed that EPA engage in an unprecedented process of stakeholder engagement, collaborating with the states and seeking the advice of interested members of both the public and private sectors. Among the key criteria the President established were affordability, flexibility, use of market-based mechanisms, and preservation of the diversity of our energy sources.

EPA is using its authority under Section 111 of the *Clean Air Act*, which calls for performance standards based on the "best system of emission reduction, which (taking into account the cost of achieving such reduction and any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated." Actual implementation and enforcement of the standards is the responsibility of the states through revisions to their state implementation plans (SIPs).

## ENDNOTES

1. *Massachusetts v. EPA*, No. 05-1120, United States Court of Appeals for the District of Columbia Circuit, July 15, 2005, Petition for rehearing denied December 2, 2005. Accessed April 10, 2014. Available at: http://www.supremecourt.gov/Search.aspx?FileName=/docketfiles/05-1120.htm; See also *Coalition for Responsible Regulation, Inc., et al., Petitioners v. Environmental Protection Agency, et al.,* No. 12-1253, United States Court of Appeals for the District of Columbia Circuit, June 26, 2012, Petition for rehearing denied December 20, 2012, petition for certiorari was denied on October 15, 2013. Accessed April 10, 2014. Available at: http://www.supremecourt.gov/Search.aspx?FileName=/docketfiles/12-1253.htm.

2. PowerBook, Third Way, Accessed April 15, 2014. Available at: http://powerbook.thirdway.org.

3. *Massachusetts v. EPA*; See also *Coalition for Responsible Regulation, Inc., et al., Petitioners v. Environmental Protection Agency, et al*.

4. If EPA chooses a "rate-based" standard, it will also need to provide guidance to address issues of energy efficiency measurement and verification in order to reliably assure that states can use this tool to achieve reductions. There is a concerted effort by the National Association of State Energy Officials (NASEO), National Association of Regulated Utility Commissioners (NARUC), The Alliance to Save Energy and ACEEEand the National Association of Clean Air Agencies (NACAA) along with industry to develop tools states can use to establish a workable energy efficiency compliance pathway.

5.

The use of so-called mass-based, versus “rate-based” standards is especially relevant to this point.If EPA does not specify one or the other, it is possible that states will use them unevenly, e.g. one state chooses a rate-based approach, and a neighboring state chooses a mass-based approach.In a regional power market this dynamic could greatly complicate implementation if, for example, power is generated in one state and consumed in an adjoining one. Determining which state gets to “claim” the emissions reduction is difficult to do, and could make utilities reluctant to invest in reductions they may or may not be able to claim toward compliance with their state plans.