

United States Senate

WASHINGTON, DC 20510

December 9, 2014

The Honorable Gina McCarthy
Administrator
Environmental Protection Agency
1200 Pennsylvania Ave, N.W.
Washington, D.C. 20460

Dear Administrator McCarthy:

We commend the EPA for using its authority under the Clean Air Act to propose the *Clean Power Plan*—a flexible and practical approach to reduce carbon emissions from the electrical generation sector. The need for national action to reduce carbon emissions is essential to the United States taking responsibility for curbing its carbon emissions.

While the emission reduction goals of the *Clean Power Plan* are laudable, we believe that with modest changes to reflect real-world market and technological conditions, the plan can, and should, achieve even greater emissions reductions. Specifically, this letter includes recommendations in its Appendix that would result in more renewable energy (under Building Block Three) and energy efficiency (under Building Block Four) being deployed than is currently accounted for under the draft plan.

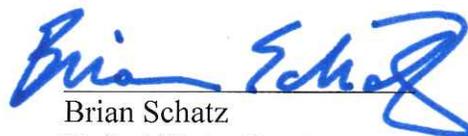
The *Clean Power Plan* will be the single most significant step this country has ever taken to tackle greenhouse gas emissions in the power sector, so it is essential that it be done right. For the *Clean Power Plan* to be a success, it must achieve the level of emissions reductions that the science calls for to avoid the most dangerous impacts of climate change. Maximizing the deployment of cost-effective renewable energy and energy efficiency will be the key to achieve the necessary emissions reductions. EPA's proposed *Clean Power Plan* can meet these objectives by making the modifications to the plan outlined in this letter.

We look forward to continue to work with you on this important and historic proposal to combat climate change. Attached is an appendix that provides greater detail on the recommendations made in this letter.

Sincerely,



Jeffrey A. Merkley
United States Senator



Brian Schatz
United States Senator

Ben Cardin

Benjamin Cardin
United States Senator

Barbara Boxer

Barbara Boxer
United States Senator

Edward J. Markey

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United States Senator

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Cory A. Booker
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S. Whitehouse

Sheldon Whitehouse
United States Senator

Dianne Feinstein

Dianne Feinstein
United States Senator

Elizabeth Warren

Elizabeth Warren
United States Senator

Appendix: Recommendations to Improve Renewable Energy and Energy Efficiency Targets in the *Clean Power Plan*

Support for the General Framework

The overall framework of the *Clean Power Plan* provides important flexibility to each state, including the ability for states to join together in regional compliance plans, to pursue a variety of strategies to reduce emissions across the power generation sector. The building block approach prescribed in the proposed *Clean Power Plan* rule allows states to use multiple tools to reduce existing power plant emissions. Such flexibility will allow for states to reduce emissions in the manner most appropriate, and at lowest cost, to match their unique resource potentials and circumstances.

We believe that the rule could be further improved to reflect real world market conditions, and better align with existing state energy policies by making modest changes to the methodologies used in setting targets for renewable energy and energy efficiency. The improvements recommended in this letter are consistent with the statutory definition of Best System of Emission Reduction (BSER), which requires that an emissions limitation technology be “adequately demonstrated,” while taking into consideration costs and non-air quality health and environmental impacts.

Improving Renewable Energy Targets Under Building Block Three

Building Block Three of the *Clean Power Plan* considers the use of non-fossil energy technologies towards setting state emission reduction targets. The EPA proposed two possible methodologies for determining the amount of renewable energy available. We recommend using the Alternative Renewable Energy Approach, with the following changes:

- **Recognize the regional nature of the electricity system.** In most parts of the country, electric grids are regional, and so state targets should reflect renewable energy generation potential at the regional level. The EPA should use the alternative methodology to estimate regional technical potentials constrained by costs and grid integration limitations, and then set state targets on an equitable, pro-rata basis in a manner that would align with state Renewable Portfolio Standards. This approach would result in an accurate depiction of achievable state goals for renewable energy use based on regional generation potential.
- **Remove the benchmark deployment rate as a constraint on the target.** The EPA should instead set targets based on the Integrated Planning Model (IPM), which can calculate renewable energy development potential by evaluating the technical potential, costs, and grid conditions in each state. The EPA has previously relied on the IPM to analyze the impact of other air emissions policies on the US electric power sector, such as the Clean Air Interstate Rule, Cross-State Air Pollution Rule (CSAPR), the Mercury and Air Toxics Standards (MATS), and the proposed Carbon Pollution Standards for New

Power Plants.^[1] Therefore, there is precedent for relying on the IPM when setting renewable targets for each state.

- **Use current data to evaluate resource potential.** In its proposed rule, the EPA used outdated data for renewable energy, which do not reflect the current market conditions or recent technological developments. For example, the costs of solar energy have dropped dramatically in the past several years, and the technical resource potential of wind has increased due to an increase in the average hub height. EPA should make use of data from not only the Energy Information Administration, but also the National Renewable Energy Laboratory and Lawrence Berkeley National Labs, to reflect the latest renewable energy and energy efficiency technology costs and resource potentials.
- **Include distributed generation technologies in calculating state targets.** Distributed generation provides a significant and increasing portion of renewable energy production, however it is not accounted for in the draft rule. Utilities are increasing the use of distributed generation within their energy portfolios, and are purchasing renewable energy credits from distributed units to reduce carbon emissions in a cost-effective manner. Distributed renewable energy generation is a well-demonstrated technology and market, and should be accounted for as a component of BSER in the Clean Power Plan.

Improving Energy Efficiency Targets Under Building Block Four

Building Block Four of EPA's *Clean Power Plan* sets energy efficiency targets for each state. The EPA's preferred approach sets a target of 1.5% annual energy efficiency improvement. While these targets are set based on what the top performing states currently achieve in utility-based energy efficiency programs, this target does not capture all the efficiency measures available to states, and therefore underestimates energy efficiency potential. To more accurately represent energy efficiency potential, we recommend that the EPA should:

- **Consider all efficiency measures that have been adequately demonstrated in the marketplace.** Many states have adopted a wide variety of approaches to reduce energy consumption. For example, some states use loan programs and Energy Savings Performance contracts to finance energy savings retrofits. We believe that the 1.5% annual energy savings target is a readily achievable level of ambition for the suite of energy efficiency measures generally pursued by utility-based energy efficiency programs. We recommend that the EPA also consider the additional energy savings that can be achieved through measures outside of these programs, and increase the annual energy savings targets in Building Block Four accordingly.
- **Adopt a consistent approach in which any state that implements energy efficiency measures will receive full credit for such measures.** If states are not given full credit for energy efficiency measures, it is likely that energy efficiency will no longer be

^[1] Regulatory Impact Analysis for the Proposed Carbon Pollution Guidelines for Existing Power Plants and Emission Standards for Modified and Reconstructed Power Plants. June 2014. Page 3-3.
<http://www.epa.gov/ttn/ecas/regdata/RIAs/111dproposalRIAFinal0602.pdf>

considered a cost-effective emissions reduction strategy in many parts of the United States.

Additional Improvement for Consideration

- **Emissions reductions from displaced fossil fuels through the deployment of renewable energy and efficiency should be accurately captured in emissions reduction targets for states.** As EPA explained in its October 27, 2014 Notice of Data Availability, the formula EPA used to set state targets fails to reflect the full carbon reductions possible from energy efficiency and renewable energy. This is because, in the original formula, EPA adds new megawatt-hours of renewable energy generation and efficiency savings to the formula, but does not reduce corresponding tons of carbon pollution from displaced fossil generation. When EPA sets final state targets, it should correct the formula to account for projected displaced fossil generation.