

Scott Pruitt, Administrator
U.S. Environmental Protection Agency
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March 13, 2017

Dear Administrator Pruitt,

As scientists who study the Earth's climate system, we are deeply troubled by your recent statement that there is “tremendous disagreement” about whether carbon dioxide from human activities is “a primary contributor to the global warming that we see.”

This statement is incorrect. In fact, we know with an exceptionally high degree of confidence that most of the climate warming over at least the last six decades has been caused by rising levels of carbon dioxide and other greenhouse gases in the atmosphere due to the burning of fossil fuels and other human activities. Further, we know that if we continue to increase the atmospheric levels of greenhouse gases, the Earth will continue to heat up, with serious consequences for economies and ecosystems across the globe.

Scientists often disagree on the second- and third-level details of climate science and of new scientific findings, because we are trained to be skeptical and critical thinkers. Indeed, this is how science advances. However, focusing on disagreements over details, or among a few individuals on the margins of consensus, or on the uncertainties that are part of any accurate statement of scientific knowledge, misses the big picture: human beings are changing the Earth's climate. This key conclusion follows from the basic laws of physics. Just as there is no escaping gravity when one steps off a cliff, there is no escaping the warming that follows when we add extra carbon dioxide and other greenhouse gases to the atmosphere.

Human beings have increased carbon dioxide levels by more than 40%, and levels are rising more rapidly now than ever before, and the climate is warming in response. Our scientific expectations are confirmed by what the Earth itself is telling us. The whole climate system is changing: glaciers are in retreat globally, arctic sea ice is shrinking in extent and volume, plant and animal ranges are moving, growing seasons are shifting, sea levels are rising, and the oceans are becoming more acidic. On these points there is no meaningful controversy among scientists.

Natural factors alone simply cannot explain the great diversity of changes we are seeing with greater and greater frequency throughout the Earth system. After decades of careful and critical study, scientists have found that the only explanation consistent with the data is that human beings are now, by a significant amount, exerting the largest influence on the climate system. No serious alternative hypothesis has been proposed that can account for the observed aforementioned changes.

We hope that as EPA administrator, you appreciate that just as science has diagnosed the cause of the changes in the Earth's climate system, science can also provide the basis for solutions that mitigate the risks from climate change and at the same time provide the economic foundation for future American prosperity. Science gives us the principles for designing low-cost clean energy systems that won't warm the planet. Science helps inform us how to better manage our crops for food and fiber

production at lower environmental impact.

Science shows us clearly that we face grave risks if we fail to slow emissions of carbon dioxide and other greenhouse gases. It is the role of citizens, policymakers, and political leaders to decide which paths are most in accord with societal values and economic priorities. But to be effective, it is critical that these decisions be based on our best unbiased and shared understanding of climate science.

Sincerely,

* Mario J. Molina, Nobel Laureate in Chemistry
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University of California, San Diego, CA

* Steven C. Wofsy, Abbott Lawrence Rotch Professor
Atmospheric and Environmental Science, Harvard University, Cambridge, MA

And the following 28 climate scientists (in alphabetical order. Note: * indicates a member of the U.S. National Academy of Sciences).

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Note: This letter represents the personal views of the signatories, not those of their institutions. Academic titles/affiliations are included here for identification purposes only.