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## Comment on “From Air Pollution to the Anthropocene and Planetary Health. Implications for Clinicians, Researchers, and Society”

To the Editor:

I read with great interest the eloquent perspective by Hu entitled “From Air Pollution to the Anthropocene and Planetary Health. Implications for Clinicians, Researchers, and Society” (1).

Unfortunately, the world is divided about whether climate change is happening, and even people who agree on that point are divided in their views about what is causing it and how to “fix” it.

As with many similar complex situations where the answers to many questions are not precisely known and the consequences of interventions are difficult to predict, we need to use the art of conflict resolution and positive action to find common ground on which all parties can agree.

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The profound impact of air pollution on human health is indisputable and extensively documented in many publications, including the paper by Hu (1). Given the prevalence of respiratory and other diseases caused or significantly exacerbated by air pollution, almost everyone is affected either directly or by the misery and death of people close to them.

We therefore have a real chance to persuade the general public as well as politicians and other decision makers to accelerate efforts to reduce air pollution, be it “man-made,” such as that due to fossil fuel use, or “natural,” such as that caused by the recent catastrophic bushfires in Australia.

Although reductions in air pollution may not be viewed by everyone as measures that would be necessary or effective in terms of an impact on global climate, an agreement on the need for such reductions would likely be achievable and would positively impact global health in the foreseeable future. We as individuals and our professional respiratory societies could provide very trustworthy leadership on this front.

**Postscript:** It is one of a few positive consequences in the current COVID-19 pandemic that the global air pollution has been drastically reduced. Perhaps, we can find a way to “normalcy” without return to the poor air quality.

**Author disclosures** are available with the text of this letter at [www.atsjournals.org](http://www.atsjournals.org).

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## Reply: Comment on “From Air Pollution to the Anthropocene and Planetary Health. Implications for Clinicians, Researchers, and Society”

*From the Author:*

I agree with Gonda *except* with respect to his view that the world is divided about whether climate change is happening and how to fix it. The conclusion that global warming is occurring and caused by humans was shown by a 2013 survey to be shared by 97% of climate scientists (1), and this figure was validated by multiple additional surveys in 2016 (2). All 193 current member states of the United Nations signed the 2016 Paris Climate Agreement, with the aim to reduce greenhouse gas emissions, use green energy sources, and establish a \$100 billion fund to help developing nations move toward the use of green energy sources. Of these 193 nations, only 13 have not ratified the agreement. The United States did not ratify the agreement because it viewed the accord as an executive agreement rather than a legally binding treaty, which allowed President Obama in 2016 to accept the accord without ratification by the U.S. Congress. However, in 2017, the newly-elected President Trump issued an executive order withdrawing the United States from the agreement.

Nevertheless, current polls indicate that 71% of Americans (including 52% of Republicans) understand that climate change is happening, with 62% finding that human activity is primarily responsible and 56–57% acknowledging that global warming will harm their neighbors or their own families (3, 4). This reflects profound changes in attitude driven by weather changes, fires, and other phenomena that people can see for themselves. As such, I believe the time is ripe for professionals to provide leadership not only to confirm these realities but to endorse solutions that simultaneously address air pollution, climate change, and planetary health. Integration of such solutions is essential given the multiple cobenefits. For example, promoting urban renewal and zoning associated with increased walkability, cycling, and green space would reduce air pollution from cars, increase physical activity, and reduce stress. Conversely, lack of integration can be counterproductive. For example, some diets that improve nutritional quality by increasing fruits and vegetables have been associated with higher greenhouse gas emissions (5) (the default diets, high in starches and sugars, are generally associated with lower greenhouse gas emissions), whereas a diet that increases fruits

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and vegetables *and lowers red meat* will lower net greenhouse gas emissions while also improving health. With regard to reducing air pollution, calls to reinvest in nuclear energy as a solution must be balanced against the continuing lack of clear avenues for the safe disposal of nuclear waste, as well as the lack of public support for nuclear energy, which in a 24-country survey after the Fukushima disaster dropped to well below 40% (6).

Finally, I write this as the coronavirus disease (COVID-19) global pandemic is upending lives and economies, and the world is facing an unprecedented recession. Perhaps when we finally emerge from this crisis, we will be given the opportunity to regrow economies, trade, and regional development in better alignment with the United Nations' sustainable development goals and planetary health.

**Author disclosures** are available with the text of this letter at [www.atsjournals.org](http://www.atsjournals.org).

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