

I didn't use to think that eliminating methane emissions should be a priority. True, methane is a potent greenhouse gas. But it's also a short-lived one, which only stays in the atmosphere for twenty years or so. In contrast, CO<sub>2</sub> emissions cause warming for 2-3 centuries or more. So methane emissions seemed to be something that could be addressed at any point we got around to them. I've rethought that conclusion, however for a combination of policy and political economy reasons.

On the policy side, cutting methane would have immediate benefits that aren't limited to reducing warming. Because methane contributes to ozone pollution, emissions cause immediate health effects as well as warming effects. According to the [U.N.](#), "a 45 per cent reduction would prevent 260 000 premature deaths, 775 000 asthma-related hospital visits, 73 billion hours of lost labour from extreme heat, and 25 million tonnes of crop losses annually."

In addition, one reason to worry about methane is that it accelerates warming, even if the world would have eventually gotten to the same temperature due to CO<sub>2</sub> emissions. The pace of warming matters, not just the extent of warming. A pulse of methane today may not matter in a century, but it does mean that warming over the next few decades will happen faster. Slower warming gives the world less time to adopt adaptation measures like strengthening flood defenses, making crops more drought resistance, taking precautions against heat waves. . Before we can take those steps, institutions and public attitudes will themselves have to adapt to the realities of climate change. If we can slow warming a bit, even if we end up in the same place ultimately due to carbon emissions, that gives us more time to prepare for what's coming down the road.

Also on the policy side, even if methane only stays in the atmosphere for a limited period, some of the effects of its effects may last longer. That warming could trigger other greenhouse gas emissions. For instance, methane-induced warming could increase the number of wildfires. The carbon from those wildfires could stay in the atmosphere a long time, causing additional warming. Moreover, some of the direct impacts of the temporary warming may not be reversible. If a pulse of warming causes a species extinction, that species will still be gone after the pulse ends.

Straddling the line between policy and politics, addressing methane also has some beneficial economic and political effects. The Biden Administration is well aware of that. Part of the Biden program calls for employing people in coal country and the oil patch to cap old wells and eliminate pipeline leaks. This program can cushion the economic impact of the transition to clean energy. Doing so makes sense as a policy matter. It also makes sense as a political matter, because the people who live in those areas tend to strongly oppose climate

action. Giving them a stake in climate policy is a smart move.

More purely on the political economy side, cutting methane emissions provides a quick, cheap win for climate action. Many of the steps needed to cut emissions have low or even negative cost (meaning that they actually *save* money). The decline in atmospheric concentrations of methane is immediate, and the short-term cooling caused by cutting emissions is also observable. As Eric Biber is pointed out, reducing CO<sub>2</sub> emissions has the political disadvantage that the beneficial effects don't show up for several decades. Cutting methane is kind of a "gateway drug" for climate action: it's cheap and gives immediate gratification.

All of these factors persuade me that cutting methane should be a priority. It doesn't really compete with the bigger project of cutting CO<sub>2</sub>, and there are plenty of benefits to moving quickly. Much of the required action is also low cost. So let's grab that low-hanging fruit.