

One of the most persistent claims in the climate debate is that global warming leads to more extreme weather. This is a common concern expressed by those who fear a dangerously warming planet. President Barack Obama did so eloquently in his 2013 State of the Union Address when he talked about "the devastating impact of raging fires, and crippling drought, and more powerful storms." Many others have offered similar sentiments.

Global warming is a problem that needs to be addressed, but exaggeration doesn't help. It often distracts us from simple, cheaper and smarter solutions. To find those solutions, let's address the three horsemen of the climate apocalypse to which President Obama referred. Historical analysis of wildfires around the world shows that since 1950 their numbers have decreased globally by 15%. Estimates published in the Proceedings of the National Academy of Sciences shows that even with global warming, the level of wildfires will continue to decline until midcentury and won't resume on the level of 1950 – the worst for fire – before the end of the century.

Claiming that droughts are a consequence of global warming is also wrong. The world has not seen a general increase in drought. A study published in Nature in March 2014 shows globally that there has been little change in drought over the past 60 years.

The U.N. Climate Panel in 2012 concluded: "Some regions of the world have experienced more intense and longer droughts, in particular in southern Europe and West Africa, but in some regions droughts have become less frequent, less intense, or shorter, for example, in central North America and northwestern Australia."

And finally, the third horseman: hurricanes. Global hurricane activity today, measured by total energy, hasn't been lower since the 1970s. While it is likely that we will see somewhat stronger (but fewer) storms as climate change continues, damages will be lower because we'll be better adapted. A March 2012 Nature study shows that the global damage cost from hurricanes will be 0.02% of gross domestic product by 2100 – down 50% from today's 0.04%. Let me make this clear: this does not mean that climate change isn't an issue. It means that exaggerating the threat concentrates resources in the wrong areas.

Consider hurricanes (though similar points hold for wildfire and drought). If the aim is to reduce storm damage, then first focus on resilience – better building codes and better enforcement of those codes. Ending subsidies for hurricane insurance to discourage building in vulnerable zones would also help, as would investing in better infrastructure (from stronger levees to higher-capacity sewers).



These solutions are quick and comparatively cheap. Most important, they would diminish future hurricane damage, whether climate-induced or not. Had New York and New Jersey focused resources on building sea walls and adding storm doors to the subway system and making simple fixes like porous pavements, Hurricane Sandy would have caused much less damage.

In the long run, the world needs to cut carbon dioxide because it causes global warming. But if the main effort to cut emissions is through subsidies for chic renewables like wind and solar power, virtually no good will be achieved – at very high cost.

The cost of climate policies just for the European Union -- intended to reduce emissions by 2020 to 20% below 1990 levels -- are estimated at about \$250 billion annually, or about \$20 trillion over the century. And the benefits, when estimated using a standard climate model, will reduce temperatures only by an immeasurable one-tenth of a degree Fahrenheit by the end of the century.

Even in 2040, under its most optimistic scenario, the International Energy Agency estimates that just 2.2% of the world's energy will come from wind and solar. As is the case today, almost 80% will still come from fossil fuels. As long as green energy is more expensive than fossil fuels, growing consumer markets like those in China and India will continue mostly to be powered by them.

Solar, wind, and other renewables are still inefficient because they require subsidies of more than \$120 billion a year. And even in 2040, they won't be efficient. The International Energy Agency estimates they will still require more than \$200 billion dollars annually.

Instead of pouring money into subsidies for existing, inefficient wind and solar energy, we'd be far better off supporting research and development of green energy technologies to make them cheaper, faster.

When innovation eventually makes green energy as cheap or cheaper than fossil fuel energy, everyone will use it, including China and India. Until then, let's cool the fear mongering and make practical decisions that will help people now.

I'm Bjorn Lomborg, President of the Copenhagen Consensus Center.

