

The main reason to control carbon is to protect the climate. But cleaning up the energy system has plenty of other benefits. Those benefits will flow to people in rural areas as well as urban ones, to national security and international development, and to nature itself.

To begin with, there are the health benefits of the energy transition away from fossil fuels. As we clean up our energy system, we simultaneously reduce the tons of pollutants we now produce from burning coal, oil, and natural gas. Pollution from these sources kills thousands of Americans a year and millions of people globally. This is not to mention the avoided childhood asthma or the lost days of work due to illness.

Then there are the benefits of protecting nature. Limiting climate change will itself protect ecosystems and biodiversity around the world. But even apart from that, the energy transition will benefit nature. It will limit the environmental harms caused by producing and transporting millions of tons of fossil fuels. Renewable energy and batteries do require use of metals and rare earths, which involve mining. The amounts are tiny, however, compared to the amount of environmental disruption to feed coal and natural gas power plants and our gas and diesel vehicles.

There will also be major economic benefits. Reducing healthcare costs frees up money for other purposes and also limits hours of work lost to illness. We will also be new infrastructure such as transmission lines, charging stations, and wind and solar farms. The Inflation Reduction Act also seeks to redevelop America's manufacturing base, to provide well-paid jobs for American workers.

And then there are the possible equity benefits. The disadvantaged face the biggest risks from climate change. Simply put, they can't afford to take the same precautions as the more affluent, whether in moving to higher ground or maxing out on air conditioning during heat waves. But the energy transition could also create other equity benefits apart its impact on climate change. The disadvantaged bear the heaviest burden from air pollution today. They often live near roads and transportation hubs, not to mention refineries and power plants. So cleaning up the energy system is not only good for public health writ large. It may also tend to reduce health inequities. Because of the Inflation Reduction Act, there will also be economic benefits targeting disadvantaged communities in both rural and urban areas.

Finally, there are national security benefits. Europeans are seeing right now how

dangerous it can be to depend on fossil fuels from abroad. Even countries that don't import fossil fuels are vulnerable to price spikes when there's a global shortfall. In contrast, issues in the market for batteries or solar panels have short-term effects, and the millions of products already in use are unaffected. These impacts go beyond the not-inconsiderable national security risks posed by climate change. Droughts, heatwaves, and super-storms result in mass displacements and promote political instability - in turn, producing hotbeds for terrorist networks and rogue governments that pose threats to US security.

In short, cleaning up our energy system will produce a wide range of benefits simply by getting climate change under control. But it's not just about protecting ourselves from the direct impacts of climate change. The energy transition will also pay dividends in many other ways. What's not to like?