Will we turn away from fossil fuels in time?

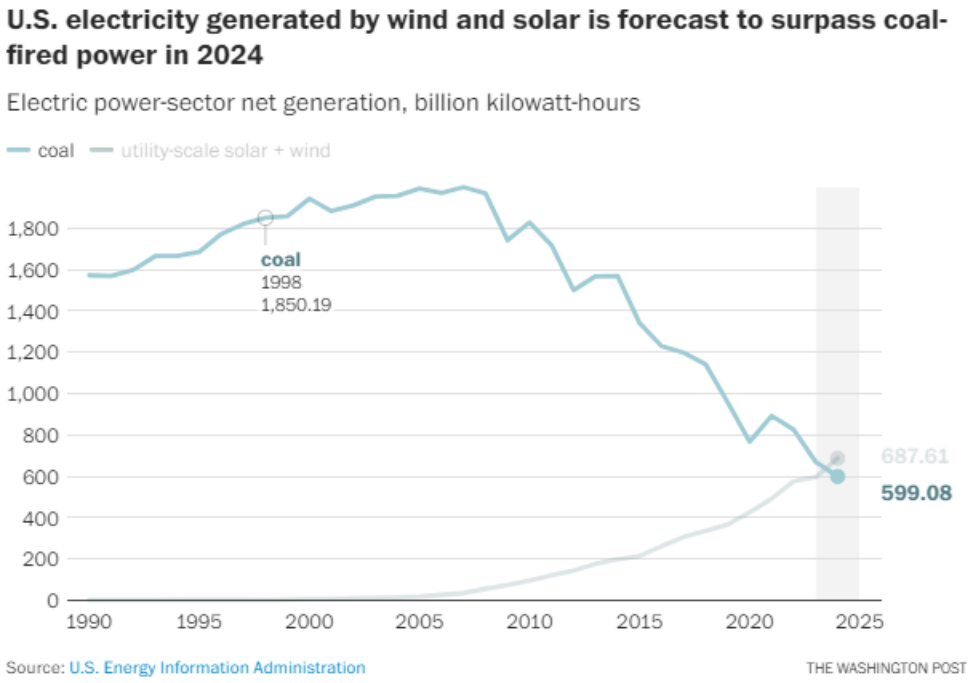
Catherine Rampell *Washington Post* January 2, 2024

One looming threat dwarfs every other economic or political challenge humanity faces: Will we transition away from fossil fuels soon enough to beat the irreversible consequences of climate change?

To be clear, the U.S. transition away from fossil fuels and into cleaner, renewable forms of energy is a question of when, not if. Politicians can speed up the process or slow it down, but, either way, it will happen. In the long run, even without subsidies, the economics are on the side of renewables. Though the initial, upfront investments in clean-energy infrastructure might be expensive, once the wind farm or solar array is built, wind and sunshine are free.

The same is not true of coal, oil or natural gas, whose extraction always costs money.

Thanks to faster-than-expected technological advances and more generous subsidies, solar and wind power have already become increasingly cost-competitive with traditional sources of energy. In fact, in much of the country, it's already cheaper to build and operate an entirely *new* solar or wind plant than to continue operating an *existing* coal-fired plant. Perhaps unsurprisingly, the electricity generated by wind and solar combined is expected to surpass coal-fired electricity sometime this year, according to forecasts from the independent U.S. Energy Information Administration.



Challenges remain, though. Among them: how to store all that new renewable energy so that people can reliably get power even on cloudy, windless days. Battery technology is improving, but it's not yet where it needs to be. Additionally, we need to build more infrastructure — transmission lines, electric vehicle charging stations — so that energy can get from the places it's produced to the places people need it.

Speeding these things up needs a bit of a nudge.

Fortunately, last year, the United States enacted a record-high investment in renewable and battery development through the Inflation Reduction Act. Whether that money will be spent efficiently is a separate question entirely though.

For political reasons, the act primarily deploys carrots rather than sticks: that is, paying people to adopt clean energy instead of taxing or otherwise limiting the use of dirty, high-carbon-emission energy. The latter strategy — which has been adopted by the European Union and elsewhere — is less popular but more efficient.

The United States has also weighed down its climate programs with unrelated objectives, such as protectionism and well-intended social justice measures (e.g., prioritizing the placement of electric vehicle chargers in low-income neighborhoods, even though low-income households are less likely to purchase new EVs). However you feel about these aims, they mean we're not optimizing on metrics that will help get better technology designed, built and adopted quickly.

We've also failed to clear away nonfinancial hurdles to renewable development: for example, our convoluted permitting process. The problem has been exacerbated by states and counties deliberately slowing (or outright banning) construction of wind turbines, solar arrays and, critically, the transmission lines needed to get energy around the country.

Some of these regulatory and permitting hurdles could be alleviated by Congress, which has so far been unmotivated to act. Others require convincing communities that, say, a new wind farm or unsightly transmission line is in their best interest. This is a challenging political economy problem: The benefits of building out clean infrastructure are diffuse while the costs (aesthetic or otherwise) are more concentrated.

Then, of course, there's the rest of the world.

Conservatives who acknowledge climate change sometimes point out that without cooperation from major foreign polluters, working to expedite the transition away from fossil fuels will impose costs on Americans without sufficiently curbing climate change.

That's true. But it doesn't mean we shouldn't try. We need politically savvy governance, strong diplomatic relations and a real strategy for aligning global incentives. The insular, go-it-alone, damn-the-rest-of-the-world approach presented by the far right (among others) degrades our ability to solve this hard collective action problem.

There are several selfish reasons we — as Americans, as humans — should be motivated to accelerate this process. The obvious one is the already apparent rise in deadly and costly heat waves, drought, famine, hurricanes, floods, infectious diseases. As well as the destabilizing mass migration that accompanies climate change. Americans have already begun seeing the consequences of failing to act, both at home and along our borders. Furthermore, building out our

renewable-energy infrastructure would make the United States less vulnerable to the whims of oil-rich authoritarians.

The race between climate change and the fossil fuel phaseout is growing more, well, heated. Without substantial policy intervention, the planet is on track to surpass a catastrophic temperature threshold within the next decade, the U.N. Intergovernmental Panel on Climate Change forecasts. I have to hope human ingenuity and an instinct for self-preservation will help us make our deadline.