Africa is not a major geopolitical player today and is a relatively small part of the energy picture. But Africa's global profile is scheduled to rise. Fifteen years from now, the *Washington Post* reports, "the number of young people reaching working age in Africa will exceed that of the rest of the world combined, and will continue every year for the rest of the century." By 2050, Africa's population is projected to be 2.5-2.7 billion – about the same as India and China combined. One out of every four people on the planet will be African. That projection is relatively certain, because the increase is mostly based on the huge number of kids in Africa today getting old enough to have babies of their own. And by 2100, the current estimate is that four out of every ten human beings will live in Africa. We can't meet global emission goals if all those people are depending on coal and oil for their energy.

What level of future emissions are we talking about? We can get a general idea by projecting economic growth and then comparing 2050 Africa with current emissions somewhere that has comparable wealth in 2019. Today, average income and emissions are low; the World Bank says one out of three Africans lacks access to electricity. Unless something changes dramatically, the average African will still be poor in 2050. Brookings projects per capita incomes between those of India today and twice that level. But there will be more than twice as many people in Africa as there are in India today. So if Africa relies on fossil fuels for the same share of its energy as India does today, Africa's total emissions will be about twice as high, or roughly the same as the U.S. today. With better economic growth and unrestrained emissions, emissions could be twice as high again, or about like China's today. We just can't afford to add that much carbon on top of the sources we are struggling to control today.

These calculations are very rough. I'm also averaging across a whole continent that has tremendous diversity. But in terms of climate change, what matters are overall emissions, not differences from place to place. And there are a lot of reasons to worry about those overall emissions.

So, how are we doing on building a low-carbon future for Africa? The good news is that Africa has tremendous renewable resources. The World Bank provided more than $11.5 billion in financing for renewable energy and energy efficiency between 2014 and 2018. But the baseline is low. As of 2012, 75% of Africa's electricity came from fossil fuels; the rest was hydro and a little bit of nuclear. Renewables were a negligible factor. (See here, p. 82). And the Chinese have been investing in new coal plants in Africa, which is the last thing we need.

The bottom line is that expanding the use of renewables in Africa should be a top priority, so we can get ahead of what will otherwise be a big buildout of fossil fuel generation. As

people are talking about spending big to decarbonize America, they should think about throwing a bit of that cash toward the Mother Continent where all of our ancestors came from. Let’s try to get ahead of the curve on this one.