

DOUGLAS HOLTZ-EAKIN | JULY 15, 2020

Eakinomics: Biden's Energy Speech – What is it Really?

For the second week in a row, the Biden campaign orchestrated the rollout of a new part of the candidate's policy platform with stories in the *Wall Street Journal*, *Washington Post*, and *New York Times*, this time for his energy policy. The stories were all keyed to an address by Biden, so I listened to the speech in its entirety. I was especially struck by the assertion that "These aren't pie in the sky dreams. These are actionable policies."

Let's think about that.

The New York Times described that plan thusly: "Joseph R. Biden Jr. announced on Tuesday a new plan to spend \$2 trillion over four years to significantly escalate the use of clean energy in the transportation, electricity and building sectors, part of a suite of sweeping proposals designed to create economic opportunities and build infrastructure while also tackling climate change. In a speech in Wilmington, Del., Mr. Biden was building on his plans, released last week, for reviving the economy in the wake of the coronavirus crisis, with a new focus on enhancing the nation's infrastructure and emphasizing the importance of putting the United States on a path to significantly cut fossil fuel emissions." Further, *The Wall Street Journal* (and others) said that the proposal "would attempt to eliminate carbon emissions from the power grid by 2035." There are two flavors of this goal in the literature: renewables only, and a net-zero emissions grid (i.e. renewables plus nuclear energy and carbon-capture technology).

First of all, let's be very clear that this set of proposals is not a policy to recover from the ravages of the COVID-19 recession. The time scales are all wrong and, more important, changing the energy portfolio of the nation is a *costly* endeavor that requires reallocating labor, capital, and innovation. Those reallocation costs – especially getting people to new jobs – will slow the recovery. It was pie-in-the-sky thinking when it was embedded in the Obama Administration American Recovery and Reinvestment Act. It still is.

Second, it is not a move to a 100 percent renewables electricity grid by 2035. The plan is advertised as spending \$2 trillion, which is not even close to enough money. The United States would need enough renewable electricity capacity and storage capacity to produce about 1,100 gigawatts of capacity. Solar power can only produce power during daylight hours, and wind power is most efficient at night, so there has to be redundancy. And to implement the redundancy there has to be storage capacity that does not yet exist. Still, using the Energy Information Administration's capital costs from the 2018 Annual Energy Outlook puts the capacity cost at \$5.7 trillion. That leaves out the new storage costs. It omits the operating costs. And it skips over the money needed for the transmission lines to get the power where it is needed. 100 percent renewables by 2035 is pie in the sky.

Third, it is not a policy to get a zero-carbon emissions grid by 2035. This standard is slightly different than a 100 percent renewable grid because it would allow the continued use of existing nuclear capacity and the introduction of carbon capture and storage (which have yet to be implemented) for emissions from natural gas-

powered generating capacity. More feasible, but at a cost well above \$2 trillion, and facing the same innovation and transmission obstacles. Pie in the sky, not policy.

Fourth, it could be a plank in a broad climate policy aimed at reducing the emissions of greenhouse gases in the United States. If so, it is a real policy, but hardly a home run. Past AAF research has demonstrated that broad regulatory mandates are not effective climate policies. When controlling for business cycles, for example, greenhouse gas regulation in the United States has only been about half as effective as claimed on paper. Further research from AAF comparing carbon taxes and regulation found that regulations cost twice as much per ton of greenhouse gas abated as a carbon tax. Finally, and most important, zero net carbon emissions by the United States does nothing to guarantee global reductions in the concentration of greenhouse gases in the atmosphere.

Fifth, it could just be a disappointing speech that missed the chance to make a real case for better climate policies by instead dressing them up as stimulus, scientific innovation, and social justice.