That's the question implicitly raised by <u>this article in the New York Times</u> from late August. The article surveys a range of criticisms of the use of carbon taxes as a tool to address greenhouse gas emissions, and criticisms of the focus of many economists on carbon taxes as the primary tool to address climate change. Among the targets of the critics is the work of William Nordhaus, who won the Nobel Prize in Economics in 2018 for advancing economic analysis of climate change, and for his steadfast advocacy of a carbon tax. As the article notes, the recently enacted Inflation Reduction Act foregoes any use of carbon pricing, and instead uses tax credits and other subsidies as the primary tool to advance decarbonization.

The article quotes a range of economists and other climate policy experts to the effect that subsidies and regulations are superior to carbon pricing because they can address equity issues, and that they can move investment in decarbonization technology more quickly than carbon pricing.

Consistent with <u>my initial reaction to the IRA's passage</u>, I'm generally in agreement with much of what is said in the article. But I want to add a couple key points. First, the article very briefly glosses over the politics of carbon pricing – as the article puts it, "the political reality that taxes are a hard sell." That's true, but I think the article understates its importance. I think these political constraints are a key reason economists focused so long – too long – on carbon pricing. Politics is central in policy. If you can't get the politics right, you can't enact a law, or the law won't stick. That's why the most economically efficient policy isn't what is ideally achievable in theory, but what is realistically plausible in politics. And subsidies and regulation are simply more politically feasible than carbon pricing.

Second, I want to build more on the point made in the article by a number of people that subsidies are more likely to drive large-scale investments in decarbonization technology than carbon pricing. I completely agree with this assessment – an economy-wide carbon price faces real political and practical constraints on how high it can go. Those constraints mean that the carbon price can't create very strong incentives for expensive initial investments in new technology. To drive those investments, we may need carbon prices in the order of hundreds or even thousands of dollars per ton of carbon avoided. But a targeted subsidy can reach those levels – because it is targeted to a nascent technology, it is feasible in terms of cost, and because it is a subsidy, it is feasible in terms of politics.

This advantage for subsidies in driving investment doesn't just directly advance decarbonization by driving down the costs of technology and increasing its potential availability, as discussed in the article. It also has political benefits – it creates investment by economic actors in decarbonization, investment that in turn can create interest groups

supportive of further action on decarbonization. Thus subsidies that drive investment have a double-benefit – both directly in advancing technological innovation and reducing costs, and indirectly by changing what is political feasible.

Does this mean that there is no role for carbon pricing in climate policy? I think it's plausible that we will have a need for carbon pricing, particularly as we scale up our ambitions in decarbonization (such that economic efficiency becomes more important) and as decarbonization technology becomes more mature, cheaper, and thus a more feasible alternative to fossil fuels. But I envision carbon pricing as not the engine that drives our decarbonization transition, but instead as the caboose that follows-up, playing an important role to be sure, but not the motive power.