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The Silver Bullet Of Climate Change Policy

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If you think like an engineer climate change has dozens of challenges. If you think like an economist, it has one.



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By Bob Litterman and Gernot Wagner

Whenever the conversation turns to climate change, someone is sure to opine that *there's no silver bullet*. The issue is simply too complex to have one solution. When you focus on all the changes that

need to occur to reduce greenhouse gas emissions globally it seems like a multifaceted approach is the only way forward.

Most of the world's vexing problems share that feature. Mideast peace, nuclear non-proliferation, Eurozone stability, and plenty of other national security problems have no single right plan of attack. Some past plans might have brought us tantalizingly close to a seeming solution, but then reality started interfering once again, reconfirming the complexity of it all.

Climate change must surely be in that category. No single country, no single technology, no single approach can seemingly solve this one for us once and for all. Picking a single technology will almost inevitably end in some form of disappointment. Bureaucrats, the saying goes, ought not to try to pick winners. Leave that to venture capitalists for whom failure is a way of life. For every Apple and Facebook, there are dozens who never make it out of the garage. And clean technology doesn't yet even have a single Apple and Facebook as *th*estandout approach revolutionizing the field.

It turns out, though, that how you frame the issue is crucial. If you think like an engineer there are dozens of challenges. If you think like an economist, there is one. It's guiding the 'invisible hand'. How can you create the appropriate incentive to decrease the pollution that's causing climate change? For that, the government need not be in the business of picking winners at all. What it should—and can—do is identify the loser that's been clear for decades: greenhouse gas pollution. And the solution is equally clear: create incentives to reduce emissions by pricing it. If we make this one change, most other actions that are needed will follow.

That's what the European Union has done by capping carbon emissions from its energy sector, including large industrials, covering almost half of total carbon emissions. That's what California is doing with over 80 percent of its total global warming emissions. It's what China is experimenting with in seven city and regional trials, including in Beijing and Shanghai. All these systems put a price on greenhouse gas pollution.

On the other side of the ledger, there are still much larger incentives to consume fossil fuels in many other countries. The International Energy Agency estimates that global subsidies are well over \$500 billion. These subsidies, which incentivize emissions, sadly dwarf the paltry incentives to reduce them. Free marketeers, small government advocates, and others who dislike distorting government subsidies should be appalled at the tax money poured into fossil fuels.

There's one simple principle that's been around in economics for so long that no economist worth his or her degree would question the conclusion: increase the price, watch the quantity demanded go down. It's such a universal truism that economists call it the "Law of Demand." Generations of graduate students have estimated the effects of price on demand for anything from the generic widget to demand for car miles driven. People may be irrational at times, but one thing that we know for sure is that they respond to incentives.

Everything we know from decades of the study of human behavior would lead us to believe that carbon pollution will go down as the price on emissions increases. The only interesting question is by how much.

The prescription then for anyone seriously concerned about climate change is simple: price carbon to the point where its now unpriced damages are incorporated into the price, and get out of the way. It's simple. It works. It's conservative to the core.

It's also a silver bullet solution if there ever was one.

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