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Current conservative orthodoxy is that no tax is a good tax. But some taxes are less bad than others. Here's why, even in the absence of environmental benefits, conservatives (and liberals) should support a carbon tax





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ongressional leaders of both parties mentioned "new revenues" during the weeks leading up to the so-called fiscal cliff. Smart politicians of both parties want to confront climate change. The best way to accommodate both is to place a price on carbon. That is already being done through cap-andtrade systems for utilities and new mileage standards for cars and trucks, but the best, simplest, fairest, and most efficient way to regulate greenhouse gases economy wide is through a carbon tax. Liberals have no problem with this concept, but to conservatives a tax is a tax and needs to be opposed. But this source of revenue is different.

Why should conservatives support a carbon tax? There are two principall answers. First, such a tax would reform the American economy in a positive way, even if there were no such thing as human-caused climate change. If a carbon tax can be used to reduce other taxes, or if a carbon tax is a new source of revenues for deficit reduction instead of other taxes, the economic benefits of such a swap are likely to be net positive even if there are no environmental benefits. Second, the alternative to a carbon tax is less efficient - command-and-control regulation of greenhouse gas emissions under the Clean Air Act. The Supreme Court has held that the Environmental Protection Agency must regulate greenhouse gas emissions under the Clean Air Act, and this requirement will not be legislatively repealed unless it is replaced by something comprehensive, like a carbon tax.

Current conservative orthodoxy is that no tax is a good tax. But some taxes are less bad than others. We believe that a carbon tax is better than many other taxes, including income taxes and payroll taxes (Social Security and Medicare). Substituting a carbon tax for income taxes or payroll taxes would have a positive effect on employment and productivity, and help reduce our country's dependence on fossil fuels. Of course, we are not the first or only ones to suggest this. We do, however, hope to make the most comprehensive case yet that such a carbon tax would not only be consistent with conservative, small-government principles, but can help advance them.

There is one reality that conservatives will have to accept: unless some other climate policy is enacted, the Clean Air Act will eventually dictate how emissions of greenhouse gases are regulated. This historically conservative Supreme Court has upheld its application to greenhouse gases, and it is unrealistic to believe that a different Supreme Court, a different Congress, or a different president would make it just go away. A filibuster-proof repeal of the Clean Air Act as applied to greenhouse gases is extremely unlikely under any Congress. The reality is that there are too many interests in place that would oppose its repeal. Earth to Tea Party: the Clean Air Act is here to stay.

That said, the Clean Air Act, as currently applied to greenhouse gas emissions, is not a particularly good way to control the emissions of greenhouse gases. Ultimately, there are too many sources to moni-



tor and regulate in the customary fashion. Given that, it is appropriate to start looking for alternatives to the command-and-control style of regulation under the Clean Air Act. There are some dangerous air pollutants that need to be carefully controlled, like mercury. But it is difficult to make the case that the Clean Air Act is a very good way to control emissions of greenhouse gases like carbon dioxide.

Against this backdrop of command-and-control regulation as the undesirable default option, what then? This is where conservatives and liberals ought to be able to share beliefs. Here are 10 reasons why both conservatives (and liberals) should find this common ground in the form of a carbon tax.

Finding winners. "Government is bad at picking winners, and losers are good at picking governments." The exact source of this saying is difficult to pinpoint, but the sentiment has been unmistakably imprinted on the public policy process. Especially in the wake of the Solyndra mishap, politicians have taken pains to parrot the new mantra that government shouldn't "pick winners."

But politicians, even supposedly conservative ones, have gravitated toward winner-picking policies, such as subsidies that happen to support favored constituencies. As governor of Massachusetts, Mitt Romney created a Green Energy Fund program to subsidize certain energy companies that produced emissions-reducing technologies, much like President Obama's much-criticized energy loan program. And for all of MBA President George W. Bush's professed trust in the free market, his muchballyhooed but failed effort to promote hydrogen fuel cell technology stands as a symbol of government's failure to pick winners.

When faced with a problem as large and daunting as climate change, there is a temptation to expect too much from governments. We have come to expect governments to directly solve the problem, rather than create

the conditions under which a solution is found. In an era of endless political campaigns and promises, voters in democratic countries have gotten accustomed to the idea that government should play the role of "fixer." This is mistaken thinking. Innovation in technology to reduce greenhouse gas emissions is most likely going to come from the private sector. A carbon tax represents the lightest touch possible in promoting technologies and measures to reduce greenhouse gas emissions. Conservatives understand that real innovators need appropriate price signals, not a governmental handout or a command-andcontrol mandate. The whole point of a price signal is that it does not pick a winner; it lets markets do that. An appropriate price signal on the emissions of greenhouse gases will unleash a competition among innovators to come up with the best and cheapest technologies to reduce emissions.

Economic efficiency. Not only do we want a competition among innovators and entrepreneurs finding ways to reduce emissions, but economic efficiency demands that there be a

fair competition. It is economically efficient for the most cost-effective technologies to rise up and emerge as the favored options for reducing greenhouse gases. Command-and-control regulation under the Clean Air Act has not historically done this. In general, EPA has been forced, politically, to regulate mostly by making industries just do their best to reduce pollution, regardless of whether their putative best was the most cost-effective option, or even effective at all. There is nothing fair or efficient about letting coal-fired power plants pollute just because they *tried* to reduce their pollution, perhaps along the way spending a lot of money installing scrubbers to reduce sulfur dioxide emissions. Economic efficiency demands that the ultimate arbiter of environmental performance be the market, not the Environmental Protection Agency. But in order to realize this, conservatives must take seriously the notion that pollution imposes costs upon society, and that polluters need to pay for those costs.

Fundamentally, what an economy facing the 21st century must do is to sort industries, top to bottom, by the marginal value their carbon dioxide emissions provide to society. A carbon tax does this. Some industries, even while they have high emissions, will continue to emit because they produce a valuable product or perform a valuable service. Refineries will pay a carbon tax but continue to refine oil because fossil fuel-based transportation is still so valuable that refineries are unlikely to go out of business because of a carbon tax. Many older, less efficient coal-fired power plants, however, cannot survive a competition in which carbon dioxide emissions are priced. This kind of sorting is not done efficiently by the Clean Air Act which, through command-and-control, basically asks each industry to try its best, with EPA's lenience and attentiveness doled in rough proportion to each industry's lobbying power.

The simple genius of a carbon tax (one that should be especially familiar to conservative fans of Hayek and of Leonard Read's *I, Pencil*) is that it aggregates disparate pieces of information throughout the economy, transmitting a price signal at every stage in which there is fossil fuel usage, and transmitting it in proportion to the carbon emissions of the production process. No bureaucracies, no models, no "job-killing regulations," and if not the erasure of political shenanigans, at least a minimization of its role in the political process.

Broader incentives to innovate. The Canadian province of British Columbia has a carbon tax of \$30 per ton of carbon dioxide. In 2009, with the British Columbia carbon tax barely a year old — and the carbon price at only \$15 per ton — one of the authors, then a Vancouver resident, undertook a large home renovation. What was surprising about that experience is that the contractor was able to translate the carbon tax into shorter payback periods for energy-efficient options such as high-efficiency furnaces, new windows and doors, solar water heating (yes, in cloudy Vancouver), and combined water and space heating equipment. How did it come to pass that a regular lunch-bucket, hard-hat kind of guy had become such an expert on the effects of the carbon tax? The reason was that he already had many clients who had inquired and demanded that he do the calculations.

Incentivizing innovation will require a broad price signal that ripples throughout an economy in order to take advantage of as many greenhouse gas reduction opportunities as possible. The strength of a carbon tax is that the price signal it creates is broad. Greenhouse gas reduction opportunities are diverse and disparate, and the only way to tap into all of them is to have a broad price signal. Pricing carbon dioxide emissions sends a price signal that ripples throughout the entire economy, inducing every single business to search for a lower carbon footprint in the hopes that it can gain a price advantage over competitors (or make more in profits). Because of the nature of regulating point sources of emissions, regulation of greenhouse gas emissions under the Clean Air Act can only be applied to a handful of facilities. Although this handful of facilities accounts for most of the greenhouse gas emissions, they are a fraction of the number of facilities that emit and a tiny fraction of the number of business and consumer end-users of energy. By regulating under the Clean Air Act, we miss the opportunity to tap into the entrepreneurial energies of all those emitting facilities and end-users. To command and to control innovation in the name of reducing emissions is the folly of big-government liberals, not conservatives.

Deeper and steadier incentives to innovate.

Many have already made the argument that command-and-control regulation of greenhouse gases is inefficient. We will not revisit those arguments here, as almost everyone accepts that a price on carbon dioxide emissions is needed.

Another alternative is cap-and-trade. Cap-and-

trade is the policy whereby a limit is set on total national emissions, and emitters can trade among themselves in mostly unregulated transactions to determine who reduces emissions and who pays to continue to emit high amounts. Both carbon taxes and cap-and-trade produce a price signal that encourages innovation to reduce emissions, but the two are not equal in their ability to induce innovation. First, a carbon tax introduces a steadier price signal than cap-and-trade. Cap-and-trade sets the quantity, but lets the price fluctuate according to market demand. All other things being equal, an investor interested in lower-carbon or non-carbon alternatives would rather not have price volatility. Second, if a cap-andtrade program is successful in encouraging innovation in greenhouse gas-reducing technologies, the ironic effect is that this innovation will reduce the price of emissions permits and thereby blunt the incentives to innovate. This is an even more significant cause for concern if — as congressional history suggests is likely — a cap-and-trade program gives away emissions permits instead of auctioning them. The free allocation of allowances creates an asset in the hands of emitters, something that does not happen under a tax regime. The fact that innovation could reduce the value of that asset is a disincentive for those emitters to find cost-saving innovations.

There are of course fiscal arguments against giving away permits as well, principally that such giveaways prevent the kind of tax swap that we advocate and raise the economic cost of climate action.

Not subsidizing the formation of capital. People seem to think that capital in the form of buildings, facilities, and structures is an unambiguously good thing. Most economists believe that capital explains the difference in wealth between developed countries and under-developed countries. But capital has a downside: when we discover that there is something harmful or inefficient about the expensive capital we have acquired, it can be very difficult to get rid of that capital.

The whole problem of climate change should have clued us in to this problem. One reason climate change is such a difficult problem to solve is that the world has trillions of dollars' worth of coal-fired power plants that cannot be simply unplugged overnight and replaced with other energy sources. How did this happen? That line of thinking went something like this: cheap electricity is an unambiguously good thing because it lowers production costs and generally makes life better for the general populace;

but cheap electricity requires expensive capital, so government assistance to help form this capital must be a good thing, too. Coal for electricity generation has thus always been heavily subsidized, enjoying numerous tax benefits. The sale of coal itself can be eligible for taxation at a lower rate or may be deducted from income under a favorable "percentage depletion" method, which allows a deduction that exceeds the value of the coal itself.

This has all been in the name of cheap electricity. And this specious line of thinking continues to haunt energy policy today, as we dream up even more ways to help the "right" technologies flourish, even those that maintain our coal-related physical capital. Did you know that the Internal Revenue Code considers "refined coal" — coal that is treated to have lower emissions — eligible for the renewable energy production tax credit? Only a lawyer could find such an audacious interpretation plausible.

Respect for federalism. Isn't state sovereignty a core tenet of conservatism? If so, then a carbon tax is the one climate instrument that allows states to truly pursue climate policy without interference from the federal government. There was a time when both Congress and a handful of western states — those that were part of the Western Climate Initiative — were pursuing parallel cap-and-trade programs to reduce emissions. Capand-trade legislation died on Capitol Hill, and all of the states except California dropped out of the Western Climate Initiative. But for a time, there was some talk of how the two cap-and-trade programs were going to be reconciled.

Why bother? Why not let states determine for themselves if and how zealously they wish to pursue climate policy? A carbon tax can easily be applied at the state or federal level, or at both levels.

Greater simplicity. We have already discussed the shortcomings of basing climate policy on Clean Air Act regulations. Recent lawsuits and second-guessing by EPA over its greenhouse gas regulations under the Clean Air Act only reinforce the notion that command-and-control regulation is endlessly manipulable, and an administrative nightmare. It turns out that cap-and-trade is also a headache. Whereas a carbon tax draws on existing tax collection procedures — such as those that at the gas pump — cap-and-trade will require the development of a new agency to monitor emissions permit trades. In the United States, the costs of setting up a greenhouse gas cap-and-trade program would be manageable, but not trivial. A Congressional Budget Office report estimated that a 2007 cap-and-trade bill that passed the Senate Committee on Environment and Public Works would cost about \$1.7 billion from 2009 to 2013 to implement, including the cost of hiring up to 400 new employees. But this is for a wealthy country with an agency with ready experience in conducting cap-and-trade programs. (At least by Washington standards, there was a fairly smooth set-up and execution for the sulfur dioxide cap-and-trade program.) Not only would some other countries find a billion dollar price tag less palatable, but it could be considerably more complicated. Several cases of online thievery have cast doubt on the ability of even developed countries to maintain market integrity for emissions permits.

Revenue raising. The need for new revenue sources remains. The revenues raised by a carbon tax could address long-term deficits and reduce other taxes. A carbon tax of \$30 per ton would generate at least \$145 billion per year to finance deficit reduction or alternatively could finance a 10 percent cut in personal and corporate income taxes, and still have roughly \$35 billion left over for deficit reduction. How does an income tax cut and deficit reduction sound to conservatives?

International coordination. Almost every treaty has sought to oblige signatories to abide by a common code of behavior. The Kyoto Protocol is a glaring exception. By acknowledging "common but differentiated responsibilities," the Kyoto Protocol sets out a schedule by which developed countries must reduce their emissions by a negotiated amount and developing countries need do nothing at all. The hope was that if the developed countries took the first step, developing countries would follow. This hope has failed spectacularly.

The plain reality is that China and India will not, in any time frame that could avoid climate change, consider quantitative limits on emissions as required by the cap-and-trade programs that the Kyoto Protocol seems to contemplate. China and India are likely to be more open, however, to a globally harmonized carbon tax. For one thing, governments get to keep the proceeds from a carbon tax, so that it does not smack of an externally imposed mandate that intrudes onto sovereignty. Also, a global carbon tax, insofar as it really looks more like international treaties that have been successfully negotiated in the past — in which signatories all agree to do the same thing — is a policy that is more likely than Kyoto to gain the kind of international buy-in that will be needed to actually solve the climate policy problem. No one disputes that in order for greenhouse gas emissions to be reduced, global cooperation will be required. A carbon tax stands a better chance of achieving this cooperation than the alternatives.

Economic efficiency, again. The world's most vibrant economies are fossil fuel powered. So fundamental is fossil fuel combustion to economic health that it will take a long time, and much willpower, to sufficiently wean economies. A widespread and sustained effort to accomplish this is like dieting: it will take long-term resolution and commitment. Some days will be better than others, but the long term habits are more important. A carbon tax is that long-term commitment. It is arguably superior to cap-andtrade because a cap remains fixed no matter what happens in a given year. In economic downtimes, carbon dioxide emissions fall; in those years having a fixed cap is a missed opportunity to reduce emissions even more, and perhaps develop some lower-carbon habits. Carbon dioxide emissions in Europe and in the United States dropped precipitously in 2009, during the depths of global financial crisis, enough to push these Kyoto signatories startling far toward meeting their commitments.

What a carbon tax does, which cap-and-trade and other alternatives do not, is to keep up a consistent and persistent price signal. In a year like 2009, the economic slowdown would have destroyed all price incentives to reduce carbon dioxide emissions. That would have been a year of missed opportunities to lock in some progress. Economic efficiency demands that the opportunities to reduce emissions be taken not just at the places where emissions reductions are the cheapest, but also *when* they are cheapest. There are ways to bank permits in cap-and-trade systems, but a carbon tax accomplishes this automatically.

o why don't we even talk about carbon taxes? One reason is that we seem to have a political allergy to anything with the word "tax" in it. In fact, some research suggests that if we were to label this policy a "fee," voters might be more receptive.

But euphemising is not the answer. The answer is to speak directly to the electorate and make the

plain-spoken argument that not all taxes are bad, especially if they are swapped for other taxes. Politicians talking down to the electorate only reinforces dumb conventional wisdoms that are a mile wide and an inch deep. The dumb conventional wisdom that we must debunk is not that climate change is a hoax. The dumb conventional wisdom we must debunk is that people can get something for nothing. For liberals who believe climate change is real and demands a policy response, there must be honest and realistic talk about the increased energy prices that everyone must face. For conservatives who either completely deny or are skeptical of climate change, there must be honest talk not only about the solid science of climate change, but about the economic benefits of this tax. The conservative case must be laid out about how government must remain small and unintrusive, and how the private sector is better at identifying ways to innovate and reduce emissions, not EPA or Congress.

Reducing greenhouse gases will require big changes in the way that we generate and consume electricity. Governments are not very good at orchestrating these kinds of changes. Private enterprises like Google, Microsoft, and Apple are very good at changing large-scale behavior very quickly. It would appear that some very quick and largescale ramp-up in energy efficiency and renewable energy technologies is needed. But the way to support these efforts is to tax all things carbon, not try to prop up all things non-carbon. Ultimately, trying to subsidize, mandate, or otherwise prop up all things non-carbon has the futility of pushing on a string. If it is carbon that we dislike, why not just tax carbon? That is what a conservative would do.

Facing the Facts

here is an excellent pragmatic case that conservatives — even those who consider climate change to be a scientific hoax — would do well to embrace a carbon tax given the practical alternative of EPA regulation. But I have my doubts about the efficacy of their argument. People who are willing to ignore the massive scientific evidence for climate change probably aren't that pragmatic. In the end, sensible policy has to begin with recognition of the scientific evidence, and I'm dubious that an effort to sidestep that issue will be successful and that a conservative clamor for a carbon tax on an economic rationale alone will result.

I can well understand why some conservatives feel reluctant to accept the findings of climate science. To begin with, the people who are most vocal about climate change are outspoken liberals.

And people instinctively distrust positions taken by adversaries. Moreover, if climate change is a serious problem, some form of government intervention is needed, whether in the form of taxes, subsidies, or regulations. That is a distasteful conclusion for conservatives. We're all human, and it's natural to hope that individual studies or even a cluster of studies will turn out to be off base and that that conclusion can be avoided.

Although I can understand the conservative impulse to resist climate science, there comes a point where being skeptical about evidence shades into closing your eyes to the facts. Climate science isn't based on one, or ten, or fifty studies. There are hundreds, maybe thousands of studies, by scientists all over the world supporting the conclusions that climate is changing due to human activity and that continued change will be harmful. There is room to debate the appropriate response, but it simply is not rational to claim that no response is needed at all.

Once conservatives get to the point of deciding among policy instruments based on an acceptance of the science, their is a good argument that carbon taxes should be their instrument of choice. They may oversell their case a bit. Some conservatives may prefer to support the less efficient instrument of direct regu-

> lation rather than take the risk that a carbon tax will eventually help increase the size of government.

> Others may favor cap-and-trade because market, rather than the government, would set the price of

carbon. Conservatives may also worry whether a carbon tax will be as simple in practice as in theory. Nevertheless, there are strong arguments in favor of a carbon tax as a policy instrument on scientific as well as purely economic grounds.

Given the increasing polarization of our political system, perhaps it is naïve to assume that reason and argument can have any real impact on policy positions. Once conservatives as a group decide to pay attention to the scientific evidence, the economic argument in favor of a price on carbon will be even more persuasive.

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