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### Eliminate the Carbon Externality

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## Eliminate the Carbon Externality

Before we do anything else, let's establish two things: the global climate is changing at an alarming rate and the primary cause is human CO<sup>2</sup> emissions. There is a worldwide scientific consensus on this fact. Even our own government, despite a remarkably vocal minority, has confirmed this. A report released this year by 13 government agencies identifies humans as the primary cause of global climate change and links this phenomenon to rising sea levels, increased incidence of droughts and floods, and the intensification of large storms.

These events are the result of the carbon externality, the social costs of emissions we have ignored for centuries that are finally starting to add up. The best way to solve this problem is through the implementation of a carbon tax, a flat price for each ton of carbon emitted that is equal to its estimated social cost. Top economists like William Nordhaus support this proposal as the only tax being proposed that simultaneously improves economic efficiency and confers public health benefits.

While Nordhaus advocates for a carbon tax as a way to raise government revenue, a better option would be a revenue-neutral carbon tax. In this scenario, revenues collected from the tax would go back to consumers and businesses in the form of a capital-tax reduction. This will reduce our emissions as carbon-intensive fuels become more expensive, this will make the fuel market more efficient as a huge externality is removed, and this will encourage investment and economic growth with the capital-tax reduction, all done without expanding the government.

On its surface, levying a new tax seems divisive, especially in this political climate. The underlying concepts of a carbon tax, however, are supported by both sides of the political spectrum. Currently, carbon-intensive fuel producers do not have to pay for the damage their CO<sup>2</sup> emissions cause. This basically amounts to a subsidy, much the same way that biofuels used to be subsidized by Renewable Fuel Standards legislation.

To harness the power of capitalism we would want to remove all subsidies from the energy market, including those for renewables. No more tax credits for wind, solar, and electric cars, and no more free carbon emissions. At its heart this is conservatism, as our various options will battle it out in the free market to determine a winner (or less dramatically, a social optimum for energy use).

Unfortunately, carbon taxation does come with its own challenges. Low income people will be disproportionately affected by the tax, since more of their income is used for transport and energy. It is also impossible to determine exactly by how much carbon emissions will fall.

An alternative to the tax that has been proposed is a cap-and-trade system, in which a total limit on carbon emissions is set, carbon permits are assigned, and individual companies trade amongst themselves to determine how the emission reductions will be distributed. This approach sets and achieves clear emission goals as well as focuses the burden of mitigation on companies rather than people, but it would impose large administrative costs on the government and keep the market price for

carbon emissions in constant flux as efficiency changes. A carbon tax, in comparison, would be easier and cheaper to implement. It would also establish a reliable price on carbon, encouraging investment in renewable sources as the energy market receives a firm price signal.

Much of the skepticism concerning this policy come from people who are concerned that the economic and environmental benefits of the policy have been overblown. The others just can't seem to see past the word "tax". Fortunately, despite this there are quite a few real-world examples of revenue-neutral carbon taxing that we can examine for efficacy.

In 2008 British Columbia instituted the first carbon tax in North America. This tax was introduced gradually, culminating in a \$30/ton CO<sup>2</sup> charge by 2012. A meta-analysis of the research into this policy was conducted by the Nicholas Institute. They found that the tax resulted in a reduction of greenhouse gas emissions between 5 and 15% while the economic effects were negligible.

It is expected that the environmental effects exhibited here will be more pronounced in places with heavier carbon use than the relatively small British Columbia. The plan also chose to cut income tax as the redistribution method rather than capital; a reduction in capital tax will inspire more investment and growth.

It's important to remember that British Columbia's was an early effort. Countries all around the world, from the cleanest and greenest to carbon giants like China, are implementing or planning carbon taxes. We are learning how to make these policies more effective and efficient, and we can use this knowledge to make America's carbon tax the best yet.

As we continue to see our world changed by our decisions, it is increasingly important to ask ourselves if we are making the right ones. Implementing a revenue-neutral carbon tax is the right decision. We need it now more than ever to balance our economy and protect our Earth.

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