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## The Tax of the Century

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### The Tax of the Century

The current economic standing of the United States is nothing like it was back in the 20's when "business was booming". There are some businesses today that are still above water despite these difficult times and they are mainly fossil fuel companies. The United States, along with other developed and developing countries, has a strong and crippling addiction to these cheap and dirty fuels. The goal of several recent environmental conventions has been to find a way to decrease the amount harmful gas that is emitted from these fuels into our atmosphere. Clean energy technologies always seem to be the solution but first we must incentivize the market to fund these innovations.

William Nordhaus, an economist and Yale economics professor, wrote a paper titled "Carbon Taxes to Move Toward Fiscal Sustainability" where he paints a picture of what this tax needs to look like to be effective. It is extremely important that this tax be implemented correctly, and that it be aimed at the carbon emissions and not the fossil fuels. As Sedjo points out "taxing the fossil fuel provides no incentive to develop or utilize technologies such as carbon capture and storage." The carbon tax has a great amount of potential to raise revenue over the next decades, inspire innovation for clean technologies, and help to meet environmental standards for climate change.

Nordhaus mentions that some recent economic studies have developed the guidelines that this tax must "balance the economic costs of reducing CO2 emissions with the gains in reducing the damages from climate change." In order to raise revenues this tax must gradually increase over time as the temperature increases from additional emissions. Nordhaus talks about one study in particular which found that the optimal carbon tax for current prices in 2015 would be between \$12 and \$25 per ton of CO2. One gallon of gasoline emits 20 pounds of CO2 so the carbon tax on a gallon of gasoline would be roughly 25 cents.

The tax needs to take into consideration the past and present emissions of developed and developing nations in order to be truly efficient. There are several critics of the carbon tax that argue it will only create "pollution havens" in countries that will not have high taxes on their

carbon. According to an article in the Journal of Public Economics, a high tax for carbon intensive sectors will reduce the production of goods from these sectors as well as CO<sub>2</sub> emissions. While reducing CO<sub>2</sub> emissions is the overall goal, the tax must be differentiated across the different energy sectors if we are to avoid these "pollution havens." A tax that distributes the burden fairly across the energy sectors, as well as developed and developing nations, will be the only hope for this policy to succeed.

If the tax is fairly distributed as hoped, advancing innovation for clean energy technologies is vital if the United States, or any other developing nations, want to remain at the top in the future. The carbon tax is gradually implemented to lessen the blow that companies are going to feel when they have to find a way to reduce emissions. The problem with clean energy is that it is expensive and difficult to hook up to the power grid. The revenues generated from the tax could help fund innovation conventions where some of the greatest energy scientists could collaborate on this issue. If the recommended tax of \$25 is implemented it is possible that it could yield roughly \$123 billion in tax money that could be spent on clean energy funding.

The third responsibility of this tax shifts our focus from the monetary side of things over to the environmental side. The whole idea centered on this tax is that carbon-intensive industries will take the biggest hits forcing them to change. The prices must rise in fossil fuel industries to ensure consumers change their consumption patterns. If consumers can continue to get cheap and reliable fuel from their local gas stations they will not feel the need to alter their patterns. There needs to be something to push consumers and producers to invest their time and energy into finding fuels that will not harm our environment. A tax on carbon will incentivize firms to choose low-carbon technologies or invent some of their own. This tax has the potential to ensure a long term sustainability in both the fiscal system and the environmental sector.

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