Global Warming

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Climate change is a problem that needs to be investigated and possibly addressed because the current state of carbon emissions is deviating from the IPCC's designated borderlines for a healthy atmosphere. If these carbon emissions are not curbed, in 50 years, Earth will be an uninhabitable place, withered by droughts, flooded by rising ocean levels and corroded by acidification of our oceans. Currently, the carbon emissions are being concentrated more on nation states like India and China, with the US lagging behind. Developed nations like the US account for a majority of the historic greenhouse gases emitted in the atmosphere, while developing nations account for a majority of recent emissions. China, the world's manufacturing giant, is one of the largest carbon dioxide emitters in the atmosphere. America, which produces some of the world's most efficient and highly valued products, and is an exceptionally productive nation in terms that does not include carbon emissions, is listed at number 13 in the world with respect to carbon emissions. The question of climate change thus makes it extremely important for the state of American business to be taken into consideration.

It is a difficult issue to successfully address climate change in relation to California Global Warming Solutions Act (AB 32) because of the many competing interests. There are some areas of the law which have been identified as strengths and other points where it may be lacking. For example, AB 32 is considered a strength because it covers more greenhouse gases than the original Kyoto Protocol and because it contains an emission reduction target of 80% by 2050. On the other hand, there are no requirements in AB 32 for how to achieve emissions reductions. In addition, AB32 doesn't address methane or hydrofluorocarbons (HFCs). Ultimately, these conflicting points indicate that despite being an excellent start to combating climate change in California, AB32 has its limitations and should be amended further to account for future challenges and new findings related to climate change.

However, the private sector, without sufficient motivation from the government, will not take the lead unless it can see the opportunity to make a large profit. Government intervention would improve this picture. Government intervention such as setting a price on carbon, or setting a limit on the amount of carbon dioxide a business may emit, would provide a more substantial reason for the private sector to pursue research and development into the field of renewable energy technology. This can be considered similar to the behavior of one engaged in a game of prisoner's dilemma. By cooperating with each other, they can produce more profits; however, they can maximize their profits by betraying each other. By dividing potential profits between the two players, cooperation can be achieved. This can be used to illustrate both the good and bad aspects of government intervention. Because there will still be that possibility that a business may deviate from the agreement set forth by the government, a certain degree of monitoring will still be necessary. I would recommend that the government put a carbon tax on businesses, especially those with high carbon footprints. For example, a certain tax rate would be charged per ton of carbon dioxide emitted by a company. I would make it quite complicated and daunting for any business not to be able to comply with this tax, thus providing a disincentive to deviate from the agreement.

I believe it is a sensible decision that California made to commit to reduce its emissions to 1990 levels by 2020. It will be hard to sustain and will be costly but the benefits outweigh the costs in the long run. California is the largest economy and one of the most important economies in America. California's actions will help set an example for other states and it will also affect others in terms of emissions reduction. California's decision is based on the fact that the economic costs of climate change will be larger than the benefits. The cost of reducing emissions is at present cheaper than burdening taxpayers and citizens with rising sea levels, health risks from air pollution, flooding and a higher risk of extreme weather incidents. Although California has made a good decision, I believe that it is not enough to lessen global warming. The Federal government should support actions taken by states to reduce emissions whether it comes from air transportation or from industrial emissions. It will also require other countries which are major emitters such as China and India to take action. If we do not take action now then we will pay more in the future. With prudent and effective policy, we can make old systems cleaner and switch from fossil fuels to renewable energy. We can make the Earth more habitable while we create energy independence. California is one of the states in America that will suffer the most from climate change. It is not just California that should be concerned but all states should acknowledge global warming as a problem because it will affect all of us.

This post will be about the three major policy instruments that might be used to pursue the AB 32 goal, which is to combat global climate change and reduce greenhouse gas emissions in California by 2020. We will take a look at the pros and cons of emissions standards, carbon taxes and cap-and-trade. These policies are all intended to accomplish this goal by either reducing greenhouse gas emissions or by discouraging people from using fossil fuels; however, they tend to have different impacts on society.

These include:

\* Carbon taxes on fossil fuels have a lower rate than regulation and this has been shown to have the most significant impact on reducing emissions in the United States.

\* The cost of regulation is lower than carbon taxes, meaning that regulations (e.g. emissions standards, which are the combination of emissions and equipment standards in which manufacturers must prove that their product is below or above a certain emissions standard) can increase the price of fossil fuels, but regulations will discourage consumers from using these fossil fuels.

\* Cap-and-trade markets for emissions will not reduce emissions much as compared to regulation, especially at the outset of the program. Cap-and-trade markets compete with each other and often do not reduce emissions well.

As you can see, these different policy instruments have varying pros and cons and serving their role depends largely on the situation in one's state.

The course of action I believe should have been taken to achieve the goals of AB 32 is to create a cap and trade system. A cap and trade system will help reduce the amount of emissions in the atmosphere, which is stated in AB 32. A cap and trade system would be the most affordable way to reach goals set by AB 32 because it is less costly. Each person would either have their own limit for how much CO2 they emit or limit that they buy from a trader. If someone's CO2 limit exceeds what they emit, then they could sell their remaining business to traders who need more CO2 limits. This would be the cheapest way to make sure everyone's limit is met. The major advantage of this approach is that the actual budget for each company or industrial sector can be determined without any action by government.

Another option would be a worldwide cap and trade system. This would help every country to meet their emissions reduction goals. The price of CO2 limits could also be set on a worldwide basis, so that every country gets the same amount. This way companies have an incentive to use less carbon during their production process, so they can avoid the cost of paying more money for their CO2 limits.

A drawback to cap and trade would be that a company could buy more CO2 limits on the market, than the amount of CO2 they emit. This would be unfair to companies that are trying to meet the required emission levels by AB 32. In order protect these companies, there should be a cap for how much CO2 limits someone can buy. If the government issues a license to emit x tons of carbon in a given year, only x tons can be purchased or sold on the market. This way it is still possible for companies to meet their emission limits even if they are buying more than what they emit.