

Fossil Fuel Subsidization

[Name]

[Institution]

Fossil Fuel Subsidization

Climate change refers to the long-term shifts in weather patterns, locally and globally. While there are many natural causes of climate change, this change has accelerated over the years due to industrialization, which burns fossil fuels to generate energy while releasing by-products that harm the environment. While it is impossible to tackle the natural causes of climate change, the synthetic drivers of climate change can be reduced by implementing some key strategies. Carbon pricing systems – either Emission Trading Systems or carbon taxes – should be introduced to reduce the drivers of climate change. Moreover, fossil fuel subsidization should be eliminated while ensuring the development of social protection strategies to minimize the impact of these reforms on local populations.

One of the steps that might be taken to reduce the drivers of climate change is to establish a carbon pricing system. These systems are aimed at persuading companies to reduce their carbon footprint by establishing incentives for their actions to invest in cleaner and environment-friendly energy infrastructure. The carbon pricing systems are designed to put the responsibility of reducing carbon emissions on those that are most responsible for causing it and those who can reduce these emissions on a large scale. Without such systems, the policymakers and stakeholders argue back and forth about the domains where carbon emissions are to be reduced and how it is to be achieved. Carbon pricing returns the autonomy and responsibility to companies to decide, which pathways they can take to minimize carbon emissions without jeopardizing their growth. In this way, the cost that the environment, and the citizens that inhabit it, have to pay is shifted, and the companies can decide which ways are most flexible and cost-efficient to reduce carbon emissions. There exist two main ways through which carbon pricing might be introduced. The first is to present an Emission Trading System, or ETS, which would

put an upper limit on the amount of greenhouse gas emissions and permit the industries with low emissions to exchange their allowances with other industries that need it more or to save these allowances for future usage. It creates an emission allowance supply and demand, thereby establishing a market price for the emissions of greenhouse gases. Such an initiative ensures that the emission limits are reduced over time and that industries, as a whole, keep within their pre-defined limit of carbon emission. Another strategy that might be allowed to minimize carbon pricing is to introduce carbon taxes. Carbon taxes directly put a price on the emission of greenhouse gases and carbon content in general, rather than setting a pre-defined limit on the amount of emission allowed. By having an incentive to lower the price paid in carbon taxing, the industries would take steps to invest in more environment-friendly infrastructure, which would help reduce emissions. Over time, the government and regulating bodies can aim to increase the carbon tax, ensuring that fewer and fewer industries are opting for production systems that rely on carbon emissions. According to the Center for Climate and Energy Solutions, many countries and local governing bodies have implemented the carbon tax successfully.

As of 2021, 35 carbon tax programs have been implemented worldwide. For example, British Columbia has had a carbon tax since 2008. South Africa became the first country to implement a carbon tax in 2019. In 2006, Boulder, Colorado, became the first U.S. city with a voter-approved carbon tax, and other cities are exploring the idea (Center for Climate and Energy Solutions, 2021).

Such examples provide insights into the potential of carbon taxing strategies for reducing carbon emissions. Besides influencing the companies to reduce their carbon footprint and invest in environment-friendly production mechanisms, carbon taxing would also generate substantial revenue. This revenue can then be channeled to reduce the production cost incurred on the

consumers or could be used to invest back in creating more low-carbon strategies or developing low-carbon infrastructures. Thus, there is a net economic gain in implementing a carbon tax. Hence, the drivers of climate change can be slowed by introducing carbon pricing systems, either Emission Trading Systems or carbon taxes.

Another strategy that might be employed to reduce climate change drivers is to end fossil fuel subsidies. The usage of fossil fuels as energy for industries is widely used across the world. According to the research conducted by Dan Tong and others, “if operated as historically, existing [industrial] infrastructure will cumulatively emit about 658 gigatons of CO₂” to the atmosphere (Tong et al., 2019). Thus, reducing the incentives available to industries for using such means is necessary. The current fossil fuel subsidies that are in place tend to create even more pollutants which cause detrimental impacts on the environment. According to the study conducted by Peter Erickson and others, if the tax preferences and other subsidies provided to the oil industries are allowed to continue at their given rate, they will lead to the production of 17 billion oil barrels in the coming few decades (Erickson, Down, Lazarus, & Koplow, 2017). Such a situation would pose detrimental impacts on the environment. While fossil fuel subsidies make up a large portion of the money that goes into lowering energy prices, these subsidies do little to protect the poor. Different studies suggest that “the wealthiest 20 percent of the population captures six times the benefit from fossil fuel subsidies as the poorest 20 percent” (World Bank, 2015). When these subsidies are removed, there would be greater room for renewable energy resources to set in and help lower carbon emissions. Reducing the fossil fuel subsidies would free up much of the economic resources that often go wasted. These resources can then be invested in renewable energy sources, such as building wind turbines and solar panels, which would lower carbon emissions. It is to be noted that the reformation process that takes place in

altering subsidies implementation is not a straightforward task as the working class and poor population are not fully aware of the energy cost, which is why support for the poor and working-class ought to be provided as subsidies are being ruled out. One such step to reform fossil fuel subsidies was introduced by the World Bank, which introduced a \$20 million facility that would help implement subsidy reforms while simultaneously building infrastructure for social protection so that such reforms do not impact the local populations. Thus, to reduce the drivers of climate change, fossil fuel subsidies must be removed in a manner that does not affect the poor and working-class populations.

In conclusion, climate change drivers can be slowed by the introduction and implementation of carbon pricing systems, key among which are the Emission Trading Systems and carbon taxing. In addition, these drivers can also be paced down by ending fossil fuel subsidies, which should be eliminated so that the local population is not impacted.

References

Center for Climate and Energy Solutions. (2021, October 20). Carbon Tax Basics. Retrieved

February 28, 2022, from Center for Climate and Energy Solutions website:

<https://www.c2es.org/content/carbon-tax-basics/>

Erickson, P., Down, A., Lazarus, M., & Koplow, D. (2017). Effect of subsidies to fossil fuel companies on United States crude oil production. *Nature Energy*, 2(11), 891–898.

Tong, D., Zhang, Q., Zheng, Y., Caldeira, K., Shearer, C., Hong, C., ... Davis, S. J. (2019). Committed emissions from existing energy infrastructure jeopardize the 1.5 C climate target. *Nature*, 572(7769), 373–377.

World Bank. (2015). 5 Ways to Reduce the Drivers of Climate Change. Retrieved February 28, 2022, from World Bank website:

<https://www.worldbank.org/en/news/feature/2015/03/18/5-ways-reduce-drivers-climate-change>