Responsibility vs Response-ability Regarding the Energy Transition – Civil Society vs Government and Institution

A legally binding landmark treaty in 2015 called the Paris agreement introduced the ambitious goal of limiting the rise of global temperature above 1.5 Degree Celsius as compared to the preindustrial level(United Nations, 2015). Six years after the Paris agreement, in COP 26 for the first time in history, 197 member countries decided to phase-down coal for reducing carbon dioxide emission which is responsible for the greenhouse gas effect. This is called the Glasgow climate pact(United Nations, 2021). Although the pact emphasized the phase-down of coal it also recognized the importance of reducing other fossil fuel usage and the significance of mobilizing funds from the north for climate-related finance in the developing countries. Combustion of coal dominates anthropogenic carbon emissions with 44 percent of the total Carbon dioxide and 27 percent of the total greenhouse gas emissions (Wang et al., 2021). While most of the European countries have pledged their coal phase-out in the coming years, developing countries like India and China spoke for a phase-down which led to the dilution in the pact (Khadka, 2021). For them, the overemphasis on coal and exclusion of other fossil fuels like oil and gas would negatively impact their priorities like eradication of poverty as this can reduce their economic productivity (Khadka, 2021). This is because of their reliability on coal for industrial activities, together they burn almost sixty percent of the world's total coal (Wang & Song, 2021). The situation gets more complicated when a trade-climate dilemma is also considered. The regional trade agreements (RTAs) which are meant to encourage cross-border investments and assist economic development exist between economically weaker countries and developed countries. However, when the production is shifted from the cleaner production technologies of the well-off nations to the weaker nations, the industrial processes are expected to have more coal reliability and hence more carbon emissions (Tian et al., 2022). The international environmental law or the global standard-setting process spreads with transplanting, integrating, and harmonizing international norms from successful examples (Yang & Percival, 2009). Glasgow pact recognizes the significance of transplanting policies and cleaner technologies from successful nations to others. But the question is do we have effective policy instruments for a just transition? And also, is the national or international rule-setting enough for a transition or do we need the participation of civil society to bring notable changes?

The Glasgow agreement calls for civil society to propose its own plan of action instead of waiting for governments and international institutions to accelerate the transition to renewable energy sources. The remainder of this blog will discuss this proposition, by examining current strategies of reducing carbon emissions, and how these reductions can further be incentivised.

A well-known way of regulating carbon emissions is through a carbon tax. This tax imposes a cost on the amount of CO2 emitted for 'x' amount of energy produced. This places the cost of releasing carbon dioxide in the hands of the producers. Coal is by far the largest carbon-intensive fuel, meaning it releases the most amount of CO2 when burned compared to other fossil fuels (Carbon Tax Center, n.d.-b). As such producers would pay the most tax for emissions from burning coal, compared to say natural gas, which is the least carbon-intensive fossil fuel. This capacity to disincentive carbon emissions is why we argue that this responsibility still lies in the hands of the government and institutions who can enforce this. In fact, a policy director at Carbon Plan; a non-profit organization that analyzes climate solutions and the co-head of the initiative on energy and climate at the Brookings institution argue in their book that the decarbonisation that we desperately need in the world can only be achieved through government-led strategies, as the market-based programs, hoping that the market

would essentially self-regulate the problem, have not worked to facilitate the energy transition (Cullenward & Victor, 2020).

This can be reinforced by examining further regulation regarding carbon emissions, and to an extent the regulation for reduction of other harmful pollutants, as it proves that regulatory pathways to reducing emissions can and should work (Carbon Tax Center, n.d.-a). Such regulation can set a limit on how much carbon a producer is allowed to emit. This could lead to two outcomes, either they produce less to emit less, or they adopt new technologies to reduce their emissions, granted they have the financial capacity to do so. And this last part is crucial in considering how to incentivise producers to adopt such new technologies, as currently, they are incredibly expensive to develop, and the producers have no incentive to invest time and money into these devices on their own. That said, compared to a direct carbon tax on emissions, regulatory devices are subject to administrative delays and legal challenges (Adler, 2021). This implies that carbon tax could be a more efficient and rapid strategy for tackling carbon emissions.

Taking these two approaches in mind, however, a recent paper by Caron et al., (2018) has examined what future projections could look like at different carbon emission tax levels, but interestingly also what could be done with the money raised from these taxes. They suggested a combination of the strategies outlined above; a direct carbon tax on the producers in combination with what they call revenue recycling. This is where they return a portion of the tax raised to the energy producer in combination with setting a limit to the level of carbon that is allowed to be emitted. The combination of these strategies makes it viable for producers to invest time and resources into the development of carbon-capturing devices (Lebling, 2021). This is because they would want to maintain their level, or get as close to this level, of production in order to maintain revenue streams. It is however important to recognize that even though such capital income tax rebates would lower the cost of reducing carbon emissions for producers, it would also benefit high-income households the most (Caron et al., 2018). This is because a heavy carbon tax would initially mean the cost of energy for households would increase, making this strategy potentially harmful towards lower-income households, who may not be able to afford such increases in price. However, through a combination of revenue recycling strategies, part of the revenue stream can also be directed to those less fortunate, so that they can afford this initial spike in price for energy.

Such regulatory creativity is what we need in order to facilitate and enforce the energy transition. We argue civil society is great at developing societal discourse and therefore the overall attitude we have towards carbon emissions and renewable energies, however, they lack the capacity to enforce and regulate like governments and institutions.

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