

DECONSTRUCT

THE LACK

CLIMATECH

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ACTING OF POLICY CHANGE

Climate change policy is a necessary, yet incredibly difficult policy challenge for the 21st century. Unlike local air and water pollution, climate change affects the entire planet - though admittedly disproportionately so. Additionally, unlike many other emerging risk environmental issues that require more research to understand the full scope of their implications, the effects of climate change and carbon emissions are almost undisputed; 97% of scientists agree that the planet is warming due to anthropogenic activity (NASA).

Thus, it is obvious that climate change poses challenges to public health and to environmental protection, both of which are critically important to governments. Despite this, many countries have been lagging in terms of climate change policy. Paradoxically, those countries that have taken the largest strides with their environmental policies (notably Germany, Denmark, Norway, Sweden) are not the primary polluters. The countries with the highest net carbon dioxide emissions, such as the United States and China, have enacted very little climate change policy. For the United States, as the former and last hegemon, the lack of climate change policy is especially alarming, as the United States has historically branded itself as a leading country for all kinds of issues.

By Rita Wegner

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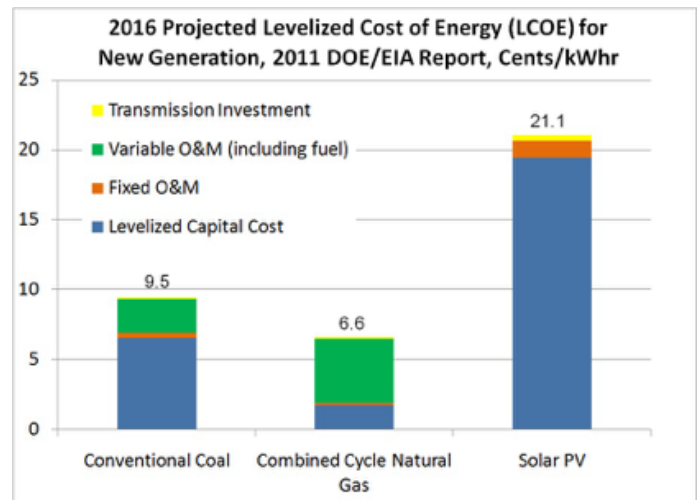
ECONOMIC CHALLENGES

To begin, health care costs will rise globally due to climate change. The WHO predicts that, between 2030 and 2050, climate change will cause 250,000 additional deaths per year due to health factors. The direct costs of these illnesses that are exacerbated by climate change, such as malaria and malnutrition, are \$2-4 billion dollars per year by 2030 (WHO). However, even though health care costs will rise due to climate change, economic factors play a key role in hindering, instead of accelerating, climate change policy. The economic cost of taking action to reduce carbon emissions has been one of the primary reasons for the lag in United States climate policy. Traditionally, consensus amongst government officials has been that climate litigation puts significant costs on industrial economies in terms of losses for future GDP growth. And certain countries, such as China, believe that enacting climate litigation would disadvantage them economically and disable them from industrializing fully. Additionally, the potential to economically harm the fossil fuel industry with climate litigation is very high, as sanctions to limit greenhouse gas emissions may reduce demand for such carbon-intensive fuels.

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Furthermore, some proponents and pragmatists may argue that climate change litigation would require the restructuring of capitalist economies. In short, our capitalist economies are running on fossil fuels to provide the energy to fuel our daily lives. Everything we do, from driving a car to turning on our lights, burns fossil fuels. Complete reliance on other energy sources would require massive restructuring and infrastructure development (creating solar grids, allocating land for wind turbines, etc). Additionally, levelized capital

cost comparisons show that renewables are not cheap, especially when first built.



The chief principle of an industrial society is abundant and cheap energy (Gowdy). Substantial climate change policy would require changing this organizing principle of an industrial society.

Economically speaking, the industry that would suffer the most from rigorous renewable energy mandates is the fossil fuel industry. With climate change, the fossil fuel industry treads a precarious position between using environmentally harmful production processes, resulting in carbon emissions which accelerate climate change, and maximizing profits under their current business model (Menestrel). Climate change litigation would impede the industry's ability to maximize profits, which explains the fossil fuel industry's successful attempts at influencing US climate change policy. For example, the Global Climate Commission and Climate Council are partially funded by fossil fuel companies, thus creating an organization one would believe to be pro-climate, unduly influenced (Newell).

In the 2006 Congressional election, 19 million dollars were spent by the fossil fuel industry to finance political campaigns, and 80% of that money went to Republican candidates, most of whom endorse the idea that climate change is not anthropogenic (whether this comes



from their lack of scientific awareness or the undue influence from fossil fuel companies is not easily determined). Moreover, many of these Republican candidates in 2006 endorsed defunding the EPA and lessening environmental and climate regulations (Frumhoff). Terrifyingly, Exxon Mobil has spent 16 million dollars between 1998 and 2005 to fund groups that encourage climate change denial and disseminate disinformation about climate change. Organizations with ties to the fossil fuel industry, such as Engie (utility company) and BNP Paribas (bank with investments in the fossil fuel industry) were top funders at COP21 (McDonnell). It is clear that the fossil fuel industry has major governmental sway in matters regarding climate change policy, causing a lag in the legislative progress.

ENVIRONMENTAL JUSTICE ISSUES

As with any major environmental problem, environmental justice issues must be considered when enacting policy. In the case of climate change, dwindling resources and rising temperatures are causing justice problems to be exacerbated globally. In regards to socioeconomic equity, this problem manifests itself in economic disparities both within and between countries (particularly between rich and poor, developed and developing nations). At the forefront of socioeconomic justice is the problem that the richest 1% of people in the world emits 175 times more carbon than the poorest 10% (Ikeme). Yet, the poor countries are and will continue to be more affected by climate change, as they do not have the resources nor the infrastructure and economic engine to build and innovate substantial mitigation techniques. For example, Bangladesh does not have the

same economic ability as the Netherlands to build and maintain dykes to prevent flooding.

THE INTERSECTION

Science, economics and politics all play a key role in determining climate change policy, and together, are the drivers behind the lack of climate change policy in the United States. Specifically, countries have a (legitimate) deep fear of substantial, negative economic impacts from addressing climate change. For some politicians, the immediate, perceptually salient cost of combating a global trend is more worrying than climate change, which is often seen as an inevitable problem with nebulous costs. This holds true particularly for politicians competing for reelection in the short-term, which can make their economic policies short-sighted as well. To be re-elected, a politician must satisfy its constituents, making it is easy to push climate change litigation to the back of the agenda in order to satisfy issues that Americans feel are more important to their daily lives, such as the economy and health care. The fossil fuel industry similarly attempts to delay climate legislation - a stance proven by the astounding donations invested in lobbying to hinder climate change policy.

A global answer is necessary, as there is little incentive for a single country to take action if there is little international consensus.

McDonnell, Tim. "The Fossil Fuel Industry Is Bankrolling the Paris Climate Talks." *Mother Jones*. December 2, 2015, accessed 8 April 2016. <http://www.motherjones.com/environment/2015/12/climate-change-summit-paris-cop21-fossil-fuels-sponsors>.
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THE CALL FOR BINDING INTERNATIONAL CLIMATE CHANGE AGREEMENTS

Climate change mitigation is no longer an application of the precautionary principle; these issues are affecting us now. We are experiencing heightened social, environmental and health costs due to climate change. The focus must shift toward mitigation before climate change spirals beyond our control. Behind these three drivers of climate change policy lies the need to focus on environmental justice and international agreements. Overall, climate change is causing global environmental justice problems that are and will continue to be exacerbated as time passes. A global answer is necessary, as there is little incentive for a single country to take action if there is little international consensus. This global agreement must incorporate agreements to lower emissions in a measurable way. Additionally, these agreements must be made to favor the developing world to avoid exacerbating the environmental justice issues created by climate change. This is where the decisions made at COP21 come in.

Before COP21, countries had simply pledged to reduce carbon emissions. However, these noncommittal goals are projected to cause an approximate temperature rise of 3 degrees Celsius by 2100. At COP21, governments agreed to maintain temperature increases below 2 degrees, to eventually achieve net zero carbon emissions, to take stock every 5 years of progress, to create non-binding financial goals (especially for developing nations) and to provide loss and damage compensation from climate disasters. Despite these promises, the COP21 agreement fails to provide a reliable standard of measurement for actual progress and further falls short with no power to enforce commitments made. Further, it does not outline how to finance developing countries' efforts. Promising to reduce carbon footprints is a step in the right direction, but without a measurable solution, significant changes in climate change policy are improbable.

To remedy this, COP21 should have further discussed setting a cap on additional global emissions to stay within the agreed-upon limit

of a maximum 2 degrees warming. With this cap, the agreement should have instituted a cap and trade system by allocating carbon “credits” to countries depending on their respective size, GDP, and status as a developing versus non-developing nation. Allowing for trade between nations would leave the choice to each individual nation whether to operate with their allocated “credits,” or to innovate and reduce emissions by increasing carbon sinks or shifting their energy system towards renewable energy sources.

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BALANCING THE BOOKS

To make progress in climate change mitigation, four additional numbers must be understood: overall energy growth/reduction, net carbon emissions, the percentage of energy generated from fossil fuels, and the percentage of energy generated from renewables. For example, if energy usage is growing, yet carbon emissions are being reduced percentage-wise, the net effect may be negative, as energy consumption is increasing. With these four numbers, progress in energy reduction, fossil fuel reliance, and renewable usage can be measured simultaneously.

While these recommendations are hefty, they also provide a measurable way of achieving a clear-cut global reduction in emissions. In this instance, it seems half-developed goals are worse than no goals. Insufficient goals won't solve the problem; in fact, they may create new obstacles. Essentially, this method of problem-solving to the fullest solution ensures long-term success of these emission reduction goals, even if short-term costs are high.

A SOLUTION TO OUR DOMESTIC GOALS

It is undeniable that emitting carbon creates a negative externality. Thus, the United States should factor a social price of carbon into a national carbon tax on the fossil fuel industry, through a cap and trade tax system. Part of the money collected from this carbon tax would be funneled into international funds dedicated to helping developing countries transition and industrialize in a more sustainable fashion. Additionally, I would recommend campaign refinance as a tool for allowing successful government assistance in these climate change policies. As previously discussed, fossil fuel lobbies have been largely prevented comprehensive domestic climate change policy, and campaign refinance could alleviate some of the influence of fossil fuel companies hold on climate change policies.

Lastly, I would recommend that governments implement mitigation techniques when dealing with climate change. Immediate action is imperative, as even if we immediately halted greenhouse gas emissions, the climate would continue to warm for many years due to the earth's delayed reaction. Many government agencies in the United States have already begun to enact mitigation strategies. Specifically, the California Department for Public Health is taking initiatives to protect against heat, drought, wildfires, and vector-borne diseases. The department is also working on developing climate change resilience. The U.S. Department of Health and Human Services has publicly supported research and support initiatives in regards to climate change, especially through NIH and CDC. The Department of Health and Human Services Climate Change Adaptation Planning requires federal agencies to evaluate climate change risks and to prepare an adaptation plan. These are great examples of national initiatives that should be implemented on a global scale, particularly in developing nations. Specifically, I recommend using NGOs like Doctors Without Borders to increase resilience in developing nations,

through finance and investment. I also highly recommend investment in infrastructure in the developing world to mitigate the effects of sea level rise. These kinds of initiatives require a policy approach that is guided mainly by a moral compass -- an improbable outcome. For this reason, the recommendations following COP21 are unfortunately more reasonable than adaptation initiatives for the developing world.

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Ultimately, following through with COP21 will require collaboration and cooperation between different countries and different industries if it is to succeed. That is why I

recommended not only a market-based solution to the approach, but fair, quantitative and justice-concerned mitigation strategies to these problems. To reiterate, the allocation of carbon, the reporting of carbon emissions, and assistance to the developing world for development and mitigation are all examples of ways in which countries, governments, and industries need to cooperate. Climate change is a complex, multi-faceted problem with complex solutions, and it is unclear whether the world is on board to fix it. Only time will tell.

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