Decarbonizing the US Economy:
Pathways Toward a Green New Deal

SAMPLE POLICY: ELIMINATING FOSSIL FUEL SUBSIDIES

INTRODUCTION

The climate crisis is here. According to the UN Intergovernmental Panel on Climate Change, limiting climate change to 1.5°C—and avoiding some of its most harmful impacts—would require a 45 percent cut in human-caused CO_2 emissions by 2030 and carbon neutrality by mid-century. We argue that decarbonizing at this rapid pace is not only possible, but that it will improve our economic outlook, create jobs, and promote equity. Such an endeavor, however, necessitates immediate action and a broad range of policy tools. In *Decarbonizing the US Economy: Pathways Toward a Green New Deal*, we outline the three pillars of such an approach: 1) carbon pricing that promotes an equitable transition while meeting our emissions goals; 2) comprehensive regulations to redirect private spending and to ensure climate targets are met; and 3) large-scale public investments.

Solving these sizable problems will require a sizable actor: government. To change the everyday decisions of businesses, individuals, and communities, and to provide a true alternative to the dirty "business-as-usual" economy, we must put a price on carbon and deploy direct environmental regulation. Though necessary, regulations and carbon pricing alone will be insufficient to meet the scale of the challenge and to address the dislocation associated with decarbonization. Carbon pricing and regulation may reduce fossil fuel extraction, for example, but they won't ensure that workers in carbon-intensive industries find quality jobs; they may reduce transportation-related emissions, but they won't offset increased driving costs or expand access to alternative modes of transit. Fortunately, the choice between decarbonization and meeting other social needs is a false one. A rapid transition to a carbon-neutral economy will raise living standards for the majority of Americans.

We must rewrite the rules of our economy to promote a rapid and equitable transition, with an increase in public investment at the core of such an undertaking. To transform our economy on the scale that a Green New Deal would require, we need a large degree of coordination—coordination that can and must be directed by the government. While the economics of decarbonization are often misunderstood as a problem of *scarcity*, in which doing more to avert climate change means doing less to meet other social needs, we argue that a more robust public sector to facilitate this transition is both affordable and attainable.

In *Decarbonizing the US Economy*, we outline a set of policy proposals that demonstrate how we can decarbonize the economy in ways that promote growth and ensure equitable outcomes. These sample policies show that decarbonizing the US economy can create quality jobs, reduce inequality, and tackle the existential threat of climate change. Here, we explore one of these policies: eliminating fossil fuel subsidies.

SUMMARY

Fossil fuel companies in the US heavily rely on government subsidies to make drilling, mining, and extracting feasible, amounting to approximately $20 billion per year (Redman 2017). These corporate payouts not only sustain current fossil fuel extraction, but they also incentivize expansion into new fossil fuel projects. The US government should cease subsidizing the fossil fuel industry through a full repeal of existing subsidies to the coal, oil, and natural gas industries.

BACKGROUND

Historically, the US government has chosen to subsidize the fossil fuel industry to a significant degree. These subsidies amount to large transfers from the government to the fossil fuel industry.[1] Handouts such as these help to prop up the existing fossil fuel sector and are largely responsible for driving up fossil fuel extraction and use in the economy. The subsidies, initially put in place to stimulate fossil fuel extraction and further develop domestic fossil fuel assets, are partly responsible for access to cheap fossil fuels. If the government were to stop paying these polluters through state and federal subsidies, it's estimated that almost half of all new US oil production would be unprofitable and thus left undeveloped (Erickson et al. 2017). Additionally, fossil fuel subsidies represent an obstacle to renewable energy investment by artificially increasing the relative cost of renewable energy (Carbon Pricing Leadership Coalition 2017). While there is some disagreement in the literature on how much of a reduction in carbon emissions would be achieved by repealing fossil fuel subsidies, studies largely agree that fossil fuel subsidies constitute a government handout to pad the profits of fossil fuel companies (Coady 2017; Jewell 2018).

According to Oil Change International, the US government spends approximately $20.5 billion subsidizing the fossil fuel industry, $14.7 billion of which comes from federal subsidies and another $5.8 billion from state subsidies (Redman 2017).[2] Others contest subsidies are lower, amounting to roughly $8.7 billion as outlined in the *US Self-Review of Fossil Fuel Subsidies* conducted under the Obama administration in 2015 (OECD 2015). These estimates are lower primarily due to the fact that they focus on tax preferences specific for the fossil fuel industry.

[1] For the purposes of this report, a fossil fuel subsidy is "any government action that lowers the cost of production, lowers the cost of consumption, or raises the price received by producers. Types of fossil fuel subsidies include financial contributions or support from the government or private bodies funded by the government, including direct transfers of funds; transfer of operating or accident risks, such as by capping liability; foregone revenue including tax breaks; and provision of goods and services at below-market rates" (Redman 2017).

[2] This leaves out important consumer subsidies including the Low Income Home Energy Assistance Program (LIHEAP), which helps families pay their heating bills. According to the Division of Energy Assistance and Office of Community Services, LIHEAP has released $3.65 billion for the federal fiscal year 2019 (LIHEAP 2018); total consumption subsidies amount to $14.5 billion.

Top 10 Federal Subsidies to Fossil Fuel Companies

Top 10 Federal Subsidies to Fossil Fuel Companies	2015-2016 U.S. Average Millions of $
Deduction for Intangible Drilling Costs	2,292
Last-In, First-Out Accounting for Fossil Fuel Companies	1,690
Corporate Tax Exemption for Fossil Fuel Master Limited Partnerships	1,614
Excess of Percentage Over Cost Depletion	1,310
Lost Royalties on Offshore Drilling	1,072
Powder River Basin Coal Lease Subsidy	963
Domestic Manufacturing Deduction for Oil & Gas Extraction	805
Fossil Energy R&D	591
Dual Capacity Taxpayer Deduction	530
Amortization Period for Coal Pollution Control	450

Table 1 displays the top 10 federal subsidies handed out to fossil fuel companies.[3] The 10 major federal subsidies alone amount to an annual transfer to the fossil fuel companies of $11.3 billion, while the remaining $9.2 billion can be found in over 100 additional subsidies accessible to these polluting companies.[4] To put these numbers into context: Fossil fuel firms receive seven times more subsidies in terms of permanent expenditures than the entire renewable energy sector does (Redman 2017).

Eliminating these payments would bring about important changes for fossil fuel investment returns and production decisions. These could include reducing GHG emissions through slowing current extraction, halting development of new fossil fuel infrastructure investments, lowering profits of existing fossil fuel firms, and freeing resources currently directed at the fossil fuel industry to be deployed in building the green economy—all without having a negative effect on economic growth (Monasterolo and Raberto 2019).[5] Experts also agree that this would not put US energy independence at risk, a common line for people pushing the mantra "drill, baby, drill" (Aldy 2013). Eliminating these corporate payouts will raise fossil fuel prices while freeing up additional resources for the rapid decarbonization of the US.

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[3] A complete list can be found in Redman 2017. Note that 80 percent of subsidies flow to oil and natural gas while 20 percent flows to the coal industry.

[4] If we break down these subsidies by stage of production, we find that 17 percent are for remediation–cleaning up the environmental messes and abandoned resources left behind by fossil fuel companies. With the financial future of fossil fuel firms in jeopardy, there's a legitimate concern that the government could be responsible for far more environmental cleanup from these destructive practices.

[5] It is also worth noting that these authors find that fossil fuel subsidies have a higher negative distributional effect than green subsidies.

SAMPLE POLICY

The US should repeal all existing fossil fuel subsidies. There are 16 provisions in the US federal tax code that currently subsidize fossil fuel producers and could be eliminated to roll back fossil fuel subsidies by an estimated $8.7 billion per year (Aldy 2013; OECD 2015). With a total of $20.5 billion per year in subsidies, this rule change would represent an approximately 40 percent cut to existing subsidies—though policymakers should work to eliminate all fossil fuel subsidies. Excluding the $8.7 billion documented above, the remaining subsidies amount to an additional $6 billion at the federal level and $5.8 billion across US states. Congress, in partnership with the US Treasury and state governments, should end polluter welfare by fully eliminating these subsidies.

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