## In Defense of Muddling: Why Climate Advocates Should Take Their Victories Where They Can Find Them

by Ted Nordhaus, Founder and Executive Director of the Breakthrough Institute September 2020

In a new commentary titled "The Greenest Stimulus Is One That Delivers Rapid Economic Growth," Columbia economist Noah Kaufman makes an important intervention. Difficult economic times are a terrible time to attempt to enact environmental policy, most especially regulatory and pricing policies. When economic circumstances become difficult, environmental initiatives are easily framed as zero-sum trade-offs with economic growth, incomes, and jobs.

Kaufman's insight is highly relevant to the current moment. Each of the last two Democratic presidents swept into office with strong congressional majorities in the wake of significant economic downturns. Both tabled proposals that would have effectively raised energy costs early in their administrations—a proposed BTU tax in the case of the Clinton administration in 1993 and the Waxman-Markey cap-and-trade proposal in the case of the Obama administration in 2009. Both efforts suffered ignominious defeats, contributed to the loss of Democratic congressional majorities in subsequent midterm elections, and significantly limited the ambition of climate and energy policies through the remainder of both two-term presidencies.

With the nation facing a deep and arguably unprecedented economic recession, Democrats eyeing the prospect of winning the presidency and both houses of Congress, and climate advocates considering what they ought to prioritize should such an eventuality come to pass, the lessons of the last two Democratic administrations ought to inform how advocates and policymakers proceed. But while Kaufman correctly identifies the challenges of enacting environmental policy in the midst of a deep recession, I don't believe that he draws the right conclusions from past experiences.

Kaufman argues that to achieve transformational climate policy, Democrats and environmentalists ought to restrain their impulses to overly burden economic stimulus efforts with climate objectives, lest doing so would slow the economic recovery and create unnecessary headwinds to efforts to pass far-reaching climate legislation once prosperity returns. To pass "According to Hoyle" climate policy in the long term, Kaufman argues that we should limit efforts to restart the economy to "According to Hoyle" stimulus policy in the near term.

It is the sort of argument that fares well in public policy schools but not so well in the far less orderly world of actual policy making and politics for three reasons. The first is that there are no guarantees that even a large and well-designed stimulus will bring back the good times in time to allow the sort of transformational policy framework that Kaufman envisions. Should Joe Biden win the presidency with congressional majorities that would allow him to pursue ambitious climate policy, the window to do so is likely to be in the first two years of his first (and possibly only) term.

Waiting for better economic times may mean waiting until after the midterm election, at which point Biden might not have congressional majorities to work with. And anything other than a rapid and robust recovery likely means that the economic context in which climate policy efforts are likely to unfold in the first two years are unlikely to be particularly amenable to sweeping environmental policy measures.

Second, I believe that Kaufman misreads the political history of efforts during the first two years of the Obama administration to pass both green stimulus measures and cap-and-trade policy. Kaufman argues that the environmental investments in the American Recovery and Reinvestment Act of 2009 (ARRA) exhausted what little Republican willingness existed to countenance climate policy. In reality, only three Republican senators voted for ARRA, and not a single Republican member voted for it in the House of Representatives. Waxman-Markey garnered a grand total of eight Republican votes in the House and was never even brought to a vote on the Senate floor. If support for ARRA and Waxman-Markey are the measure of Republican tolerance for climate policy in the Obama era, that tolerance was close to zero. Kaufman, moreover, provides no evidence that absent green investment measures in the 2009 stimulus, there would have been substantially greater Republican support for the Waxman-Markey proposal in either house of Congress.

The bigger problem for climate policy in the first years of the Obama administration was that despite a 60 vote majority, few observers at the time believed that there were even 50 Democratic votes for Waxman-Markey in the US Senate. Much of the ire from the environmental community was directed at red state Democrats like West Virginia's Joe Manchin. But solidly liberal and environmental senators like Ohio's Sherrod Brown and even Massachusetts's Edward Kennedy were also on the fence. Federal carbon pricing and regulatory measures are a heavy lift under the best of economic circumstances. In the midst of the financial crisis, they were functionally a nonstarter once the action moved to the US Senate, where the rules and outsized power of smaller rural states hugely disadvantage environmental policy efforts and members are not so easily whipped into party-line votes.

Third, I believe that Kaufman significantly overestimates the transformative potential of pricing and regulatory measures. US emissions today remain well below levels that would have been mandated by either the failed Waxman-Markey cap-and-trade legislation or the Obama administration's subsequent Clean Power Plan.

Kaufman makes much of the fact that the carbon intensity of the US economy did not fall much faster after the 2009 green stimulus than before. Yet virtually every prominent example of the sort of transformational climate policy that Kaufman argues in favor of suffers by the same measure. The carbon intensity of energy after the establishment of the Kyoto Protocol, the

European Trading Scheme, California's cap-and-trade program, and Scandinavian carbon taxes, to name a number of high profile climate policy initiatives, fell at the same rate or more slowly than did emissions intensities before the implementation of those policies.

Proponents suggest that emissions intensities in many of these cases fell faster than would have been the case in the absence of policy. But any climate policy whose impacts are only discernible after carefully modeling and attempting to control for a range of confounding economic and technological variables is about as far from transformational as one could imagine. The failure of explicit climate mitigation policies to move the needle on emissions has been the rule, not the exception.

By contrast, the best examples of transformative events that have significantly shifted the emissions trajectories of major economies around the world in recent decades have been a series of economic and technological disruptions that haven't had much to do with efforts to address climate change at all. The reunification of Germany brought both economic dislocation in the East and huge state investments in retooling the new nation's power and industrial sectors with cleaner and more efficient technologies. Britain's "dash for gas" began that nation's long road to eliminating coal from its power sector and still accounts for much of the nation's decarbonization success.

A quiet and sustained effort by federal policy makers, national laboratories, and independent natural gas producers to produce gas economically from shale formations has transformed the US power sector over the last 15 years. Even decades of investment in the commercialization of renewable energy technologies have been driven by a broad range of environmental, economic, and technological imperatives, of which climate change has been only one and in many cases far from the most significant. Nor has the growth of renewable energy been driven by policies to cap, price, or otherwise regulate emissions virtually anywhere.

Kaufman characterizes all this as a "muddle," in contrast to the sort of transformative policy response he has in mind. But calls for "transformational" climate policy are as old as the issue itself, and it is worth considering, given the serial failure of sweeping, top-down, and coordinated policy responses, from the UN commitments to sustainable development at Rio in 1992 onward, whether continuing to muddle might not in fact be preferable.

The case for transformational climate policy has always hinged upon claims that catastrophe was likely should the world fail to meet internationally proposed temperature targets that were always largely arbitrary. There is no scientific consensus that has established that catastrophe is likely to be avoided should we keep global temperatures below 2 degrees Celsius or assured should we fail to do so.

Recent years have seen growing demands for even more radical decarbonization to stabilize global temperatures even lower, below 1.5 degrees Celsius, alongside dire warnings that absent far-reaching action, the world was on track for 5 degrees' warming by the end of the century. In reality, neither eventuality is particularly plausible.

Even prior to the COVID-19 crisis, the best estimates of future emissions and warming suggested that under current policies, global temperatures are on track for around 3 degrees' warming by the end of this century, though uncertainties in climate sensitivity mean this could end up as low as 2 degrees Celsius or as high as 4 degrees Celsius. Even assuming a worst case global depression due to the pandemic, stabilizing at or below 1.5 degrees is still implausible.

The truth is that we have far less control over the global thermostat than either activists or policy wonks would like to imagine. Policy, at the global, national, and even subnational level, will likely determine where global temperature stabilizes within a range that is much narrower than most contemporary discussions suggest, with a best estimate probably somewhere between 2 degrees Celsius and 3 degrees Celsius. The upper range could be higher if climate sensitivity and carbon cycle feedbacks are high. But if that is the case, then the level at which temperature might plausibly be stabilized is higher as well.

In any event, it is not even clear that climate policy, according to Hoyle or otherwise, will be the most important factor. That's because climate change is an emergent feature of global industrialization and modernity, influenced by long-term demographic trends, structural transformations, shifts in the sectoral composition of economies, global trade, technological change, and enormously complicated feedbacks and interactions among all of those factors.

Kaufman is far from alone in imagining that all that might be rationalized through the wise application of policy. But I would argue that the long march toward decarbonization and climate stabilization is more likely to proceed fitfully and nonlinearly and be more influenced by the sorts of shocks that we are presently experiencing and the political and policy responses to them than the top-down and centralized administrative response that Kaufman advocates.

Kaufman is dismissive of the effects that the US green stimulus had upon US emissions. But viewed more broadly, the 2009 global financial crisis marked an inflection point for global emissions, as rampant growth in global emissions over the decade following China's admission to the World Trade Organization gave way to a postcrisis decade of slower growth in emissions. The economic fallout from the COVID-19 pandemic likely means that global emissions, already on track to peak by the middle of this decade, peaked in 2019, even if reopening and economic recovery proceed in best case fashion.

Not only will economic growth this year and next be substantially lower than would have been the case in the absence of the pandemic, but economic crises of the sort the world is presently in the midst of are typically massive asset stranding episodes. The global economy will come back over the next few years, but the dirtiest energy technologies and sources that made up the precrisis energy economy will not.

For better and worse, economic crises benefit the largest, best capitalized, and most efficient producers. Old coal plants shuttered during the crisis are unlikely to be fired back up afterward.

Many of the inefficient aircraft and ships mothballed as global travel and trade collapsed this spring will likely never fly or sail again. The upheaval in the US oil and gas industry will likely consolidate production among the majors, which have far better environmental records and use cleaner technology than smaller independent competitors. Consolidation in the US agriculture sector will similarly favor the largest and most economically (and environmentally) efficient producers.

That doesn't necessarily mean that emissions won't rise again at some point, and it certainly in no way assures deep decarbonization of the global economy of the next several decades. But it is through this lens that I would argue that both stimulus and climate policy over the next several years are best considered.

Kaufman argues that green stimulus investments are short lived while national climate policy (by which he explicitly means greenhouse gas regulations or pricing) has the staying power to guide us toward a low carbon future. But even a cursory examination of the fate of much of the Obama administration's policy legacy suggests precisely the opposite. From the Clean Power Plan to Obamacare, the administration's major accomplishments have faced sustained assault from President Trump and the Republican Congress, much of it successful. The earlier Bush and Reagan administrations proceeded to dismantle key environmental initiatives of the Clinton and Carter administrations, respectively, in similar fashion. In an intensely polarized age, creating new facts on the ground—new infrastructure, technology, and interests—is the more durable path to sociotechnological change.

In the event that Democrats and their environmental allies get the opportunity to legislate over the next several years, they would do well to keep this in mind. Investments in technology and infrastructure are much better positioned to survive the vagaries of politics and partisanship than is regulatory or tax policy. In a political system designed to thwart grand policy designs and further paralyzed by historically high levels of polarization, emergencies of the sort that the nation is currently facing are one of the few times when it is possible to move real resources toward new initiatives.

While I appreciates Kaufman's acknowledgment that there are important investments in technology and infrastructure that could have significant and efficient stimulative effects, climate advocates would be ill advised to limit their ambitions to these sorts of investments if and when the window for stimulus and economic recovery opens, whether in this Congress or the next. Whether stimulus investments or climate policy, moreover, advocates would be well served to consider what sorts of strategies, policies, and coalitions are likely to be sustainable when the winds of political change inevitably shift again.

Bipartisanship may be a thing of the past, but climate and environmental advocates, who have become increasingly indistinguishable from Democratic partisans, do have choices about whether policy initiatives are constructed, bundled, and framed in ways that might sustain some support within the Republican coalition or, lacking that, at least create political problems for those who would attempt to dismantle them, when they find themselves again ascendant. In

contrast to the rollback of the Clean Power Plan and other regulatory initiatives, for instance, Republican members of Congress have reliably pushed back against Trump administration efforts to gut funding for energy innovation and even tax credits for clean energy.

Of course, if the first half of 2020 has proven anything, it is that far more is possible socially, politically, and economically than any of us can possibly imagine. Political futures, like energy futures, are maddeningly difficult to predict, not least because they are so extensively intertwined with each other. But this is all the more reason for climate advocates to take their victories where they can find them. If and when advocates find themselves in the position to advance important technological and other objectives through economic recovery efforts, they should do so.