

TED NORDHAUS

The Empty Radicalism of the Climate Apocalypse

What would it mean to get serious about climate change?

“We must stop asking what the Earth can do for us,” newly elected President Jay Inslee concluded in his inaugural address, “and start considering what we must do for the Earth.”

Inslee had launched his campaign two years earlier as a longshot, single-issue candidate. But events rapidly outpaced what had begun as a boutique candidacy intended to call attention to climate change.

In the spring of 2020, another record Mississippi River flood, a brutal tornado season, drought in the Northwest, and a series of damaging thunderstorms in the Northeast brought battleground primary states into Inslee’s camp. As Democrats gathered for their convention in Milwaukee that July, three weeks of heat that approached 40 degrees Centigrade across the corn belt wiped out half the nation’s corn crop. Then, on Labor Day weekend, a category 3 hurricane made its way up the Eastern Seaboard, maintaining hurricane strength all the way to Washington, DC. Six weeks later, a category 4 hurricane took dead aim at New York City, forcing a hasty evacuation of millions of people out of Manhattan and other boroughs.

Inslee had set out to run an optimistic campaign, arguing that a Green New Deal to take on climate change would create good jobs at home and position the United States to compete for growing clean energy markets abroad. But by the time of his election, the feel-good rhetoric was unnecessary. The nation faced a crisis and President-elect Inslee was the person to fix it.

As his first act as president, Inslee declared a national climate emergency. As his second, he announced national carbon rationing. Until further notice, consumers were limited to one tank of gas per month. Based on time of year and regional climates, natural gas and heating oil deliveries

to households were cut by as much as 60%. Utilities were directed to submit plans within the month to cut total electricity generation by 40% and to optimize their existing generation mix to use as little fossil generation as possible.

The rationing was dubbed temporary by the new administration, a stopgap measure until the president and the new Democratic Congress were able to mobilize the full force of the nation’s manufacturing and industrial capacities to retrofit the economy for a low carbon future. Inslee informed congressional leaders that he would relax rationing only once Congress had enacted the measures he would shortly send to the House and Senate.

Inslee delivered to Congress a sweeping package of legislation to tackle the crisis. Senate Bill 1 nationalized the power sector, centralizing the nation’s mostly private utilities under the publicly owned Tennessee Valley Authority in the East and the Bonneville Power Authority in the West. Senate Bill 2 created the National Renewable Energy Corporation with a mandate to convert domestic manufacturing capabilities to produce wind turbines and solar panels sufficient to produce 60% of the nation’s electric power with renewable energy by 2030. Senate Bill 3 created the National Nuclear Energy Corporation, which consolidated the nuclear divisions of Westinghouse, General Electric, General Atomics, and Bechtel into a single public corporation with a mandate to operate the nation’s existing nuclear reactors and construct 200 more large light water reactors of a single design to meet the rest of the nation’s electrical needs within 10 years. Senate Bill 4 nationalized the Big Three automakers, along with Tesla. The new national automobile corporation would produce only electric and fuel cell vehicles, with a target of retooling all automobile manufacturing capacity to electric vehicles within three years.

A month after his inauguration, Inslee traveled to meet with European allies. There, he announced his plan to convert NATO to a global climate mitigation and relief force. NATO and its wealthy members would directly finance the construction of low carbon infrastructure across the globe. Like the Marshall plan that rebuilt Europe, NATO would provide long-term, low-interest loans for developing economies to purchase and deploy clean energy technology. NATO forces would also lead relief efforts to rebuild after natural disasters and resettle refugees in regions less vulnerable to climate change. "It doesn't matter whether you are black, white, or brown, American, Indian, or Chinese," Inslee thundered at the end of the NATO meetings. "We are all Earthlings now, with a common challenge and a common destiny." As Inslee boarded Air Force One, en route to meet his Indian and Chinese counterparts, the battle to stop catastrophic climate change had finally been joined.

A radical proposal

Many conservatives have attacked the Green New Deal as socialism—a Trojan horse that in the name of addressing a manufactured climate crisis reveals the true progressive agenda, which aims to overthrow capitalism, abrogate economic freedom, and centrally plan the US economy. And yet, as my imagined narrative of a climate change presidency illustrates, what is striking about the Green New Deal and similar proposals coming from climate hawks and left-leaning environmentalists is not their radicalism but their modesty.

At a moment when advocates make a range of demands that are simultaneously vague and controversial, from ending capitalism and economic growth to rejecting materialism and consumption to reorganizing the entire global economy around intermittent sources of renewable energy, almost no one, in either electoral politics or nongovernmental organizations, seems willing to demand that governments take direct and obvious actions to slash emissions and replace

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Helen Glazer

Walking in Antarctica

Walking in Antarctica is inspired by Helen Glazer's experience as a 2015 grantee of the National Science Foundation Antarctic Artists and Writers Program. Since returning from her trip, she has been working with a rich cache of raw material, creating the photographic prints, sculpture, and an accompanying narrative that comprise the project. The series combines dramatic photographs with sculptures generated from photographs of ice and rock formations via 3D scanning technology, fabricated on 3D printers and CNC routers (computer-controlled cutting machines), then hand-painted. The work also incorporates an audio tour available through a mobile phone.

Glazer has organized her material as a series of "walks" through remarkable Antarctic landscapes: over frozen lakes, around towering glaciers and baroque sea ice formations, into a magnificent frozen ice cave, across fields of surreal-looking boulders, and through a lively colony of nesting Adélie penguins. The images range from sweeping landscapes to close-ups of small-scale features, depicting richly articulated and colorful environments that counter the common perception of a bleak, white wasteland. The sculptures offer an opportunity to experience the unique polar ice and rock formations from different vantage points.

Working out of remote Antarctic scientific field camps, Glazer had access to protected areas that can be entered only with government permits or in the company of a skilled mountaineer. Insights from her research and interactions with scientists enhanced her experience of nature during her residency. Her photographic vision, application of emerging 3D technologies, and storytelling skills have enabled her to capture and communicate experiences of remote places that few people are able to witness in person. Through her art, she strives to convey the wonder and





HELEN GLAZER *Canada Glacier From Lake Fryxell, Antarctica* 2017. Acrylic, oil, and wax on high-density urethane, 15.5 x 60 x 17.5 inches.

complexity of the natural world and to motivate a desire among viewers to protect and preserve wild places

Glazer has exhibited *Walking in Antarctica* at Rosenberg Gallery, Goucher College, Baltimore. She served as 2014–15 Baltimore Ecosystem Study Artist-in-Residence, producing a project based on

long-term ecological research into urban ecology. Her recent work has been featured in exhibitions at BWI Marshall Airport, the New York Hall of Science, and Baltimore's Artscape festival.

For more information visit
<https://helenglazer.com>.

fossil energy with clean.

By that, I don't mean simply demanding that governments regulate emissions. Advocates and even many governments have been calling for and even committing to deep emissions cuts for decades now, to little effect. Rather, I mean actually offering specific proposals to rapidly build the infrastructure of a low carbon economy or restrict carbon-intensive activities

call for a World War II-style mobilization to fight climate change. But virtually no one will actually call for any of the sorts of activities that the United States undertook during the war mobilization—rationing food and fuels, seizing property, nationalizing factories or industries, or suspending democratic liberties.

Nationalize health insurance through Medicare for All? Sure. Nationalize the power sector or the automobile



HELEN GLAZER *Penguin Subcolonies, Cape Royds, Antarctica 2015–2017*. Archival pigment print, 14.75 x 22 inches.

woven into the fabric of Americans' daily lives. It is one thing to suggest to Americans that tackling climate change will involve regulating fossil fuel companies or providing tax credits to help build the clean energy industries of the future, quite another to tell them that they will need to stop flying or that starting immediately the government will need to take possession of the auto or utility industries.

As many environmentalists and even elected Democrats have come to believe that serious climate disruption is already upon us, it has become fashionable to

industry? Not so much as a word about it from progressives or democratic socialists advocating a Green New Deal. The environmental literature, both scholarly and advocacy, is similarly rife with calls to drastically cut air travel and meat consumption. But the mere suggestion from critics on the right that the Green New Deal would require restrictions on eating hamburgers (not without cause) and flying provoked howls from environmentalists, who insisted that such claims were just standard conservative smear tactics.

If one believed that the climate crisis was already under

way and that the world had only a decade or so not only to stop the growth of emissions but to slash them deeply, an emergency mobilization to rapidly cut carbon dioxide emissions would seemingly be the only sane response. But the apocalyptic rhetoric, endless demands for binding global temperature targets, and radical-sounding condemnations of neoliberalism, consumption, and corporations only conceal how feeble the environmental climate agenda actually is. The vagueness and modesty of the Green New Deal is not proof that progressives and environmentalists are closet socialists. It is, rather, evidence that most climate advocates, though no doubt alarmed, don't actually see climate change as the immediate and existential threat they suggest it is.

Practically, the specific decarbonization policies advocated by environmentalists and progressives are incremental, lukewarmist, and neoliberal, boiling down to some variant of either regulating corporations to stop them from doing things that produce carbon emissions or subsidizing them to use energy and other technologies that reduce carbon emissions—mostly the very small set of technologies and practices that environmentalists approve of: wind, solar, bioenergy, electric vehicles, and organic farming.

These sorts of proposals, to be sure, are anathema to the libertarian and laissez-faire principles that many conservatives profess. But they are a far cry from anything recognizable as socialism. Whether a carbon tax, a cap-and-trade program, or a Green New Deal, the environmental climate agenda, as advocated by market-oriented centrists, fire-breathing climate hawks, and “this changes everything” progressives alike, comes back to two things: regulating or taxing private companies to stop them from emitting carbon, and subsidizing them to utilize or sell clean technology. In this, the disconnection between what the environmental left says about capitalism and the role of government and what it actually proposes to do is far more interesting than the predictable histrionics from conservatives.

The libertarian left

The evolution of views on the left and among environmentalists toward the role of government over recent decades has been a complicated one. Until the mid-1960s, liberals, progressives, and Marxists alike were entirely comfortable with public ownership of the means of production. Liberals and progressives preferred a mixed economy, with heavy public investment in public goods—infrastructure, electricity, and water systems—and state-supported industrial policy to ensure that industries that were important to the national economy would prosper. The old Marxist left envisioned a much more expansive role for the state, with state-owned enterprises supplanting the private sector.

Today, many on the left blame conservatives and the rise of neoliberal economic orthodoxy after the elections of Margaret

Thatcher in the United Kingdom in 1979 and Ronald Reagan in the United States in 1980 for the turn away from state-sponsored economic development and infrastructure investment. But in the developed world, this transition came much earlier, and was led as much by the left as the right.

The proximate causes in many cases were wholly understandable. The US military-industrial complex had presided over a Cold War with the Soviet Union that threatened nuclear annihilation and a hot war in Southeast Asia that had killed tens of thousands of Americans and millions of Vietnamese. A nation that claimed the mantle of democracy abroad was struggling to extend the franchise to African American citizens at home. On the East Coast, Jane Jacobs was fighting Robert Moses's expressways and inventing modern urbanism. On the West Coast, David Brower was fighting Floyd Dominy's plan to dam the Grand Canyon and launching the modern environmental movement. By the end of the '60s, the government for many on the left was as much of a part of the problem as it was for Ronald Reagan a decade later.

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But there were other factors at play as well. The booming postwar economy had created unprecedented material abundance across the developed world, discrediting claims by the old Marxist left that capitalism would immiserate the working classes. A new generation of left-leaning intellectuals who had come of age amid postwar abundance would come to see materialism and consumption, not religion, as the opiate of the masses.

As a result, many on the left cast an increasingly skeptical eye toward state-led economic development efforts. This skepticism powerfully influenced the nascent environmental movement, which increasingly saw industrialization and consumption as the root cause of most environmental ills and hence opposed public efforts to expand domestic production and consumption and to build infrastructure that would support the social and economic aspirations of a growing and increasingly affluent population. Combined with the off-the-grid, do-it-yourself impulses of many young environmentalists, the environmental community would embrace a vision of small-scale, decentralized, “appropriate” technologies in contrast to centralized, state-led, technocratically planned and operated infrastructure and technology.

At the same time, the new public interest movements, inspired by Ralph Nader's crusading against General Motors, would break with the old New Deal regulatory model, which saw the state in partnership with corporations, working to ensure safety for workers and consumers alike, but also to ensure that companies would continue to prosper, in order that they might provide employment, wages, and support for regional economies. Nader and his followers attacked this model as regulatory capture, arguing that the regulatory state needed to take a far more adversarial approach toward corporations if it was to keep citizens safe and healthy.

Taken together, the turn away from dialectical materialism by the New Left, the hostility of the environmental movement toward economic development and big, centralized infrastructure, and the strong anticorporate stance of the public interest movements, left the post-'60s, post-Marxist environmental left with an extremely limited set of interventions that it was willing to countenance as the climate issue came into view in the late 1980s.

From public goods to market failure

Over the past three decades, advocates for taking action to stem climate change have proposed three distinct although not mutually exclusive policy approaches: regulation, pricing, and subsidies. The first of these provided the basic template for international action to address the issue and was initially the preferred approach of the environmental community. The United Nations Framework Convention process, initiated at the 1992 Rio de Janeiro "Earth Summit," was designed to get the nations of the world to agree through treaty to a legally binding regulatory regime to cap and reduce global emissions. It reflected both the traditional "polluter pays" approach that environmental nongovernmental organizations had advocated to address air quality and similar pollution problems, and the United Nations' successful effort to establish a global treaty to protect the ozone layer—command and control regulations stipulating exactly the manner and degree through which nations and firms would control regulated pollutants associated with their activities, in this case greenhouse gases.

The second approach was really an elaboration of the first, calling for policy to harness the efficiency of markets to find cheap ways to reduce emissions rather than telling firms how to do so. Based on early successes phasing out the last 15% or so of leaded gasoline refining in the 1980s and then cutting emissions that caused acid rain in the 1990s, many economists advocated for cap-and-trade programs or carbon taxes rather than command and control regulatory regimes. These ideas were adopted

at times by Republican policy-makers and firms, mostly when they concluded that some regulation of emissions was inevitable.

But these so-called market-based strategies were really just a somewhat different approach to regulating emissions. Policy-makers determined either the annual carbon cap for emissions or the social cost of carbon that would be internalized through a carbon tax, and allowed firms to determine how to comply with the cap or minimize their carbon tax liability.

The third approach involved subsidizing firms to produce or consumers to purchase clean energy technology, mostly wind turbines, solar panels, and electric vehicles. In the United States, subsidies have been mostly established in the form of tax credits, rather than direct payments to producers or purchasers. But irrespective of the mechanism, subsidies, like pricing and regulatory strategies, focus on the firm and the private sector as the locus of climate mitigation action.

Put somewhat differently, the primary frame through which climate change has been viewed over the past three decades is as a market failure. Because the social costs of carbon emissions are externalities that aren't reflected in their market price, emissions are too high. The market failure, then, must be corrected.

Economists have long argued that pricing carbon is the simplest and most economically efficient way to internalize the externality. But each of the three approaches described above see markets and the firms and individuals that interact through them as the primary agents of decarbonizing action, with the state enacting policies to either incentivize or penalize the behavior of those agents.

Missing from this frame is the notion that abundant, cheap, clean energy and the low carbon infrastructure and technology necessary to provide it is a public good. Historically, nations have provided these sorts of goods directly and governments have done just that for public goods as diverse as national defense, public health, scientific research, and clean and abundant water. In these cases, government agencies don't incentivize or mandate that private firms build, say, modern water and sewage systems; rather, they either build them themselves or contract with firms to build them. But in either case, it is government that specs the system, procures its various elements, coordinates construction and operations, and finances construction directly from the public purse. The same has been broadly true, to a greater and lesser extent, of road, transit, and yes, electrical systems in most parts of the world.

The most successful clean energy initiatives in modern history followed this public-led model, not any of the three policy models that have dominated climate policy-making. France decarbonized 80% of its electrical system through the state-led deployment of nuclear energy. Sweden did the same through a combination of nuclear and hydroelectric dams. Brazil achieved similar levels primarily by building dams.



HELEN GLAZER *Pressure Ridge Beneath the Double Curtain Glacier* 2015–2016. Archival pigment print, 26.75 x 40 inches.

Nuclear advocates often highlight the cases of France and Sweden, while everyone else ignores them. But the prominent role that dams have played suggests that there are lessons for climate mitigation efforts that go well beyond the benefits of nuclear energy. What all three cases have in common is the direct public procurement of large, centralized infrastructure to provide clean energy to residential, commercial, and industrial users in large, modern economies.

Treating climate change as a public infrastructure challenge, not a private market failure, brings a range of advantages that pricing and regulation cannot provide. It enables long time horizons that private investors are unlikely to tolerate; planning and coordination across sectors of the economy to integrate technology, infrastructure, and institutions necessary to achieve deep decarbonization; and low-cost public finance that could make the price of the energy and climate transition far more manageable. And assuming a reasonably progressive tax system, it would arguably do so in a manner at least as straightforward and equitable as cap-and-trade or carbon taxes that aim at “correcting” market failures.

Communitarian capitalism

One reason that many environmentalists, progressives, and even socialists have rejected a major role for state-led deployment of low carbon infrastructure in climate mitigation efforts is because historically those initiatives have been tangled up with technologies that environmentalists have opposed. Green opposition to nuclear energy and hydroelectric dams has evolved into skepticism of centralized grids and infrastructure planning. The soft energy path centered around wind and solar energy and energy efficiency was constructed, by Amory Lovins and his compatriots in the 1970s, explicitly as an alternative energy infrastructure, philosophically and institutionally as much as technologically.

“In an electrical world, your lifeline comes not from an understandable neighborhood technology run by people you know who are at your own social level,” Lovins wrote in his seminal 1976 essay in *Foreign Affairs*, “but rather from an alien, remote, and perhaps humiliatingly uncontrollable technology run by a faraway, bureaucratized, technical elite who have probably never heard of you. Decisions about who

shall have how much energy at what price also become centralized—a politically dangerous trend because it divides those who use energy from those who supply and regulate it.”

Lovins’s anti-nuclear politics and communitarian green utopianism were born of New Left distrust of establishment institutions and postwar corporatism. But his vision proved to be much better suited to neoliberal corporate capitalism. Lovins and his Rocky Mountain Institute do a big business in corporate consulting, and Lovins has become an evangelist for green capitalism.

“Any serious energy transformation effort—whether the Green New Deal or ‘pragmatic, bipartisan solutions,’ ” Lovins and his colleague Rushad Nanavatty argued in the *New York Times* in the spring of 2019, “will need to harness America’s immensely powerful and creative economic engine, not dismantle it.” Lovins’s alternative to the Green New Deal offered familiar neoliberal green remedies, including utility deregulation and carbon pricing.

Lovins’s arguments have always been, in essence, libertarian and deregulatory. It was only the distortion of energy markets by policy-makers, at the behest of fossil

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and nuclear incumbents, Lovins has long insisted, that has stood in the way of the rapid adoption of renewable energy. In reality, the growth of renewable energy has depended on decades of state subsidies, deployment mandates, and research initiatives. But Lovins has long elided all that, insisting instead, since at least the early 1980s, that the combination of energy efficiency and renewable energy technologies were already the cheapest sources of energy for electricity and a range of other applications.

Lovins’s soft energy vision established the template for virtually all green energy initiatives since the energy crises of the 1970s. And as contemporary environmentalism increasingly fused itself with contemporary progressivism and the Democratic Party from the 1970s onward, the green preference for decentralized and distributed renewable energy that Lovins prescribed fit well with reformed liberalism and the New Democrats who championed it.

But as a new generation of progressives and climate advocates have come to question the shift toward market-oriented neoliberal policy, the fealty among progressives to Lovins’s decentralized, market-based soft energy vision is due for some reconsideration. All the more so given that the realities of renewable energy at scale look nothing like the distributed and decentralized utopia that Lovins and

his environmental followers promised.

Most renewable energy today comes not from homes clad in solar panels but from enormous, industrial-scale wind, solar, and biomass facilities. Moreover, scaling renewable energy such that it might contribute much to the fight against climate change will require exactly the sort of large, centralized, and technocratic institutions that Lovins railed against in the 1970s: to permit huge new renewable generation facilities over the objections of local communities; to build an enormous new transcontinental transmission network to bring electricity from places that are ideal to generate it with wind and solar technology to the urban and industrial centers where it will be utilized; to co-locate renewable generation capacity with infrastructure and industry that can use the large surpluses of energy that massive renewable energy generation will produce during times of low grid demand; and to coordinate the deployment and operations of intermittent sources of energy with demand management and energy storage needs across vast geographic regions.

And therein lies the rub. Progressive environmental advocates have long framed the failure to make headway on the climate issue in egalitarian terms—that the fossil fuel industry and other corporate interests are thwarting the will of the people—to which the solution is more egalitarianism: more protest, more community organizing, more bottom-up democracy, and more decentralized technology. But whether hydro and nuclear or wind and solar energy, the only remotely plausible path to the sorts of changes that many environmentalists now demand, such as zero net emissions by 2030, or stabilizing global temperatures at 1.5 degrees Centigrade above preindustrial levels, would require top-down, centralized, technocratic measures that most environmentalists are unwilling to seriously embrace.

The exigencies of large-scale technocratic action to rapidly build the infrastructure of a low carbon economy cannot be easily reconciled with the communitarian, small-is-beautiful localism that has defined the culture and politics of contemporary environmental thought and action since the rise of the movement in the 1960s. That is why the rhetoric of climate emergency in recent years has not been matched by explicit and specific proposals to do the sorts of things that a climate emergency would seem to demand.

Progressive environmentalists instead find themselves advocating corporate subsidies for clean energy technology while inveighing against corporations, calling for an end to capitalism and attacking market-based climate policies while continuing to advocate for policies that are predicated on private-sector development and diffusion of low carbon technology, and calling for enormous investments in low carbon infrastructure in principle but often opposing that infrastructure in practice, when it would bring local environmental impacts or require the abrogation of local control and prerogatives over zoning and planning.

Tilting with windmills

It is easy enough to excuse the disconnect between apocalyptic claims of looming climate catastrophe and the modesty of solutions that climate advocates are willing to propose as a concession to political reality. Political mobilization perhaps demands hyperbole, and though public opinion broadly supports government action to address climate change, there appears to be little stomach among either voters or policy-makers for the imposition of sweeping restrictions on consumption or for rendering much of the nation's industrial capacity to Caesar in the name of avoiding climate apocalypse.

And yet, a not-insubstantial segment of the environmental movement and its leadership explicitly rejects this sort of pragmatism, on the grounds that the world has only a decade or so to achieve net zero emissions or civilization itself will likely end. Physics and chemistry, as the environmentalist and author Bill McKibben has famously observed, cannot be negotiated with. The explicit claim of McKibben, many major environmental nongovernmental organizations, and, increasingly, progressive Democrats and Democratic Socialists such as Alexandra Ocasio-Cortez and Bernie Sanders, is that radical action is the only way to avoid climate catastrophe. But if these demands represent a kind of radicalism, it is a radicalism that is quick to speak its name—a demand for systematic economic and social change—but fundamentally lacking any well-formed idea of what such a world would look like, in either its institutions, its actual social and economic organization, or most of its specifics—rationing, nationalization, or even just preempting local resistance to action.

Apocalyptic environmentalism has, since its origins in the years after World War II, regularly made these sorts of sweeping and inchoate demands. But there has never been any actionable agenda that green radicalism will actually embrace. It is a politics of protest and negation, of divestment, of “keeping it in the ground,” and of degrowth. It is postmodern nihilism dressed up with the trappings of moral seriousness.

The result is a radicalism that attacks the technofix while simultaneously demanding 100% renewable energy and rejects technocracy while demanding technocratic solutions of unprecedented speed and scale. It insists that capitalism and technology are the problem, not the solution to our present predicament when practically, after the sloganeering and rhetorical flourishes are done, what most environmentalists, including radical greens, are basically demanding is capitalism with carbon regulations and lots of windmills.

For this reason, there is actually much less than meets the eye to the various debates within the environmental community about how to address climate change, between the Green New Dealers and the carbon pricers, those who

believe in the power of markets and those who believe in the power of government. Critics on the right typically see it all as either creeping socialism or Luddism. But mostly, it is a debate among liberals who care about such things about what mix of government and market, private and public, regulation and innovation, market pull or tech push offers the optimal path to lower emissions.

Our divided neoliberal house

The fact that virtually no one on the environmental left appears willing to advocate for state-led deployment of low carbon infrastructure and technology suggests that most of the rhetoric on the left about both climate catastrophe and capitalism is hollow. Faced with a choice of big infrastructure and big institutions or egalitarian politics and decentralized technoeconomic systems, progressive environmentalists long ago made their choice. That choice, in the end, must depend on markets, private firms, and entrepreneurial innovation, for the simple reason that it will not entrust sufficient social authority in any political institution that might be capable of planning, financing, building, and operating low carbon infrastructure at the speed and scale that would be remotely commensurate with deeply and rapidly cutting emissions.

Despite progressive claims that growing inequality and climate disruption in the years since the financial crisis were bringing an end to the existing political and economic order, these contradictions explain why there has appeared no serious egalitarian and democratic alternative to the era of neoliberal economic policy and corporate capitalism. Indeed, insofar as the crisis of early twenty-first century capitalism and liberal democracy has created space for new models of political and economic organization, the dominant reaction has been a wave of populist nativism and “soft authoritarianism” supported by constituencies more willing to invest sweeping power in the hands of political authority figures, albeit not the sort of authority figures that progressive environmentalists have long imagined would lead the transition to a more sustainable economy.

These developments should give progressives and environmentalists some pause. It is convenient for progressives to point the finger at conservatives for declining faith in public institutions, and for environmentalists to blame science denial for the failure of publics and governments to rally to the cause of climate action. And there is surely plenty of blame to go around. But progressives and environmentalists have done plenty of damage themselves—constructing a worldview that has rejected centralized planning and technocratic institutions and that depends on exactly the sort of “policy-based evidence-making” that they have long accused conservative intellectuals and activists of engaging in.

Since their conjoined births in the 1960s and ’70s, post-Marxist progressivism and environmentalism have built strongholds in the nation’s universities, mostly in

the social sciences, from which an alternate set of facts, values, and politics has been constructed. In this world, the history of modernization and urbanization has been entirely one of enclosure and expropriation, not aspiration and agglomeration; our continuing dependence on fossil fuels is an enormous conspiracy foisted upon humanity by extractivists; we can power the entire world with distributed and intermittent sources of renewable energy; poor Indians and Africans need only solar panels and batteries so that they might continue to live simple agrarian lives with a few modern conveniences; and smallholder farms, farmer's markets, and urban gardens are the solution to both the environmental impacts of the global food system and enormous disparities in health outcomes in low-income communities of color.

Conservatives have done the same, through think tanks such as the American Enterprise Institute and the Cato Institute and in the economics departments of so-called freshwater universities. In this world, markets are always rational and efficient, most public investment in technology and infrastructure is rent-seeking, and climate change is, if not beneficial, a manageable problem that human societies won't have a problem adapting to.

Absent from either worldview is any future in which governments would build low carbon public works projects such as large nuclear plants, hydroelectric dams, industrial solar and wind farms, high speed rail systems, and carbon capture and sequestration technologies at a scale consistent with decarbonizing the global economy rapidly.

Indeed, the worldviews constructed by progressives and conservatives are two sides of the same coin, reflecting broader currents in the cultures of late modern, advanced economies, where increasingly autonomous, individualistic, and well-educated publics will simply not take the word of political authorities of any sort that they hold their best interests in mind.

In a world in which science and knowledge, actions and consequences, are endlessly contestable, the sort of mobilization that many climate advocates call for is simply not possible. There will be no French-style centralized build-out of large, centralized nuclear power plants in the United States or most other parts of the world. Nor will the United States embark on a World War II-style mobilization to manufacture and deploy wind turbines, solar panels, and electric vehicles. The climate presidency I imagined earlier is fanciful not just because the events described are unlikely to either happen or be interpreted in the way that many environmentalists imagine, but also because there is little reason to believe at this point that we are capable of arriving at or sustaining the sort of political consensus that such an undertaking would require.

Under these circumstances, insofar as climate mitigation proceeds at all, it is much more likely to proceed in partial, capillary, oblique, and emergent fashion. Incremental steps such as improving land, energy, and resource productivity to

accelerate salutary environmental trends, the continued spread of urbanization, and the demographic and forest transitions will tend to be more successful than direct efforts to restrict environmental impacts or deploy environmental technology, not because the latter are not technically possible but because the proliferation of values, identities, and ideologies that modernization brings simply can't support the level of social solidarity or consensus that planning and coordination of infrastructure and development at national—much less global—scale requires.

The shale gas revolution and Uber, not France's nuclear build-out or the wartime US economy, are more likely models for energy system transformation. Both are double-edged, and to date, though shale gas seems to have significantly reduced the role of coal in the US electricity market, it's not at all clear that ride-hailing has or will bring any climate benefit at all. But they are potent examples because both were already well on their way to transforming global energy markets and urban mobility respectively before most people understood what was going on. Indeed, neither would likely have happened had many people fully understood their implications. By the time most did, it was too late to put the genie back in the bottle. Both were made possible by decades of public technology policy, some obvious and some not. And both have sparked *ex post facto* institutional and political efforts to shape their direction and impact.

In this way, technological change will likely continue to prove more easily seeded and sustained than political change. Techno-economic change will be accompanied by political and institutional change in mutually reinforcing fashion. But it will be technological change and the new "facts on the ground" that it creates that will make political and institutional evolution possible. That change will track back to various public initiatives and institutions and will spark various demands for political or legal intervention. But technological change itself will be experienced as exogenous, and the very nature of the demands for intervention will reinforce our experience of technological change as something separate and apart from politics.

I would happily be proven wrong in this prognostication. Abundant, low carbon energy for all is a public good, and a concerted national effort by public institutions to build that infrastructure would be welcome. But the fact that even self-identified Democratic Socialists appear unwilling to call for such a thing suggests that insofar as we are going to make much progress reducing carbon emissions and addressing climate change, we will likely do so in much more incremental, partial, decentralized fashion, making prospects for deep or rapid reductions in emissions extremely unlikely. Practically, we are all neoliberals now. Some of us just haven't realized it.

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