

# DISSENT

A Quarterly of Politics and Culture

## A Radical Approach to the Climate Crisis



Art by Roger Peet

By [Christian Parenti](#) - [Summer 2013](#)

[Like](#)

[Tweet](#)

Several strands of green thinking maintain that capitalism is incapable of a sustainable relationship with non-human nature because, as an economic system, capitalism has a growth imperative while the earth is finite. One finds versions of this argument in the literature of eco-socialism, deep ecology, eco-anarchism, and even among many mainstream greens who, though typically declining to actually name the economic system, are fixated on the dangers of “growth.”

All this may be true. Capitalism, a system in which privately owned firms must continuously out-produce and out-sell their competitors, may be incapable of accommodating itself to the limits of the natural world. However, that is not the same question as whether capitalism can solve the more immediate climate crisis.

Because of its magnitude, the climate crisis can appear as the sum total of all environmental problems—deforestation, over-fishing, freshwater depletion, soil erosion, loss of biodiversity, chemical contamination. But halting greenhouse gas emissions is a much more specific problem, the most pressing subset of the larger apocalyptic panorama.

And the very bad news is, time has run out. As I write this, news arrives of an ice-free arctic summer by 2050. Scientists once assumed that would not happen for hundreds of years.

Dealing with climate change by first achieving radical social transformation—be it a socialist or anarchist or deep-ecological/neo-primitive revolution, or a nostalgia-based *localista* conversion back to a mythical small-town capitalism—would be a very long and drawn-out, maybe even multigenerational, struggle. It would be marked by years of mass education and

## BLOG

[Belabored Podcast #26: The Lockout Continues](#)

· October 11, 2013 ·

[Claiming Space on the Mexican Left](#)

· October 7, 2013 ·

[Belabored Podcast #25: Shutdown](#)

· October 4, 2013 ·

[Receive news, notes, and invitations.](#)

Fall 2013



[Subscribe Now!](#)



Facebook



Tumblr



Twitter



Google+



RSS

organizing of a scale and intensity not seen in most core capitalist states since the 1960s or even the 1930s.

Nor is there any guarantee that the new system would not also degrade the soil, lay waste to the forests, despoil bodies of water, and find itself still addicted to coal and oil. Look at the history of “actually existing socialism” before its collapse in 1991. To put it mildly, the economy was not at peace with nature. Or consider the vexing complexities facing the left social democracies of Latin America. Bolivia, and Ecuador, states run by socialists who are beholden to very powerful, autonomous grassroots movements, are still very dependent on petroleum revenue.

A more radical approach to the crisis of climate change begins not with a long-term vision of an alternate society but with an honest engagement with the very compressed timeframe that current climate science implies. In the age of climate change, these are the real parameters of politics.

### Hard Facts

The scientific consensus, expressed in peer-reviewed and professionally vetted and published scientific literature, runs as follows: For the last 650,000 years atmospheric levels of CO<sub>2</sub>—the primary heat-trapping gas—have hovered at around 280 parts per million (ppm). At no point in the preindustrial era did CO<sub>2</sub> concentrations go above 300 ppm. By 1959, they had reached 316 ppm and are now over 400 ppm. And the rate of emissions is accelerating. Since 2000, the world has pumped almost 100 billion tons of carbon into the atmosphere—about a quarter of all CO<sub>2</sub> emissions since 1750. At current rates, CO<sub>2</sub> levels will double by mid-century.

Climate scientists believe that any increase in average global temperatures beyond 2 degrees Celsius above preindustrial levels will lead to dangerous climate change, causing large-scale desertification, crop failure, inundation of coastal cities, mass migration to higher and cooler ground, widespread extinctions of flora and fauna, proliferating disease, and possible social collapse. Furthermore, scientists now understand that the earth’s climate system has not evolved in a smooth linear fashion. Paleoclimatology has uncovered evidence of sudden shifts in the earth’s climate regimes. Ice ages have stopped and started not in a matter of centuries, but decades. Sea levels (which are actually uneven across the globe) have risen and fallen more rapidly than was once believed.

Throughout the climate system, there exist dangerous positive-feedback loops and tipping points. A positive-feedback loop is a dynamic in which effects compound, accelerate, or amplify the original cause. Tipping points in the climate system reflect the fact that causes can build up while effects lag. Then, when the effects kick in, they do so all at once, causing the relatively sudden shift from one climate regime to another.

Thus, the UN’s Intergovernmental Panel on Climate Change says rich countries like the United States must cut emissions 25 percent to 40 percent below 1990 levels by 2020—only seven years away—and thereafter make precipitous cuts to 90 percent below 1990 levels by 2050. This would require global targets of 10 percent reductions in emissions per annum, starting now. Those sorts of emissions reductions have only occurred during economic depressions. Russia’s near total economic collapse in the early 1990s saw a 37 percent decrease in CO<sub>2</sub> emissions from 1990 to 1995, under conditions that nobody wants to experience.



The political implications of all this are mind-bending. As daunting as it may sound, it means that it is *this society* and *these institutions* that must cut emissions. That means, in the short-term, realistic climate politics are reformist politics, even if they are conceived of as part of a longer-term anti-capitalist project of totally economic re-organization.

### Dreaming the Rational

Of course, successful reformism often involves radical means and revolutionary demands. What other sort of political pressure would force the transnational ruling classes to see the scientific truth of the situation? But let us assume for a second that political elites faced enough pressure to force them to act. What would be the rational first steps to stave off climate chaos?

The watchwords of the climate discussion are *mitigation* and *adaptation* – that is, we must mitigate the causes of climate change while adapting to its effects. Mitigation means drastically cutting our production of CO<sub>2</sub> and other greenhouse gases, such as methane and chlorofluorocarbons, that prevent the sun's heat from radiating back out to space.

Mitigation means moving toward clean energy sources, such as wind, solar, geothermal, and tidal kinetic power. It means closing coal-fired power plants, weaning our economy off fossil fuels, building a smart electrical grid, and making massive investments in carbon-capture and -sequestration technologies. (That last bit of techno-intervention would have to be used not as a justification to keep burning coal, as is its current function, but to strip out atmospheric CO<sub>2</sub> rapidly and get back to 350 ppm and away from the dangerous tipping points.)

Adaptation, on the other hand, means preparing to live with the effects of climatic changes, some of which are already underway and some of which are inevitable. Adaptation is both a technical and a political challenge.

Technical adaptation means transforming our relationship to non-human nature as nature transforms. Examples include building seawalls around vulnerable coastal cities, giving land back to mangroves and everglades so they can act to break tidal surges during giant storms, opening wildlife migration corridors so species can move away from the equator as the climate warms, and developing sustainable forms of agriculture that can function on an industrial scale even as weather patterns gyrate wildly.

Political adaptation, on the other hand, means transforming social relations: devising new ways to contain, avoid, and deescalate the violence that climate change is fueling and will continue to fuel. That will require progressive economic redistribution and more sustainable forms of development. It will also require a new diplomacy of peace building.

Unfortunately, another type of political adaptation is already under way – that of the armed lifeboat. This adaptation responds to climate change by arming, excluding, forgetting, repressing, policing, and killing. The question then becomes how to conceive of adaptation and mitigation as a project of *radical* reform – reforms that achieve qualitative change in the balance of power between the classes.

The core problem in the international effort to cut emissions is fundamentally the intransigence of the United States: it failed to ratify the Kyoto Protocol and has played an obstructionist role at subsequent negotiations. Domestically, progress has been just as frustratingly slow. We have no carbon tax, nor any program of robust investment in clean

technology. Even the minimal production tax credit for clean energy generated by solar, wind, and hydro power has not been locked in as a long-term commitment. This creates uncertainty about prices, and, as a result, private investment in clean tech is stalling.

China, on the other hand, though now the world's second-largest economy and largest greenhouse gas polluter, is moving ahead with a fast-growing clean-tech industry — that is to say, with mitigation. The Chinese wind sector has grown steadily since 2001. “According to new statistics from the China Electricity Council,” reported American Progress senior fellow Joseph Romm, “China’s wind power production actually increased more than coal power production for the first time ever in 2012.” This growth is the result, in part, of robust government support: China has invested \$200.8 billion in stimulus funding for clean tech. Estimates of U.S. stimulus funding for clean technology range from \$50 to \$80 billion.

The European Union is also moving forward to create a €1 trillion regional supergrid. Germany and Portugal in particular are moving aggressively to expand their already quite large clean-tech sectors. Action in the core industrial economies is essential because only they have the infrastructure that can propel the clean-tech revolution and transform the world economy.

### **A De Facto Carbon Tax**

Environmental economists tend to agree that the single most important thing the United States could do to accelerate the shift to clean energy would be to impose a carbon tax. Despite our political sclerosis and fossil fuel fundamentalism, the means to do that already exist.

First and foremost, there is the Environmental Protection Agency, which could achieve significant and immediate emissions reductions using nothing more than existing laws and current technologies. According to Kassie Siegel at the Center for Biological Diversity, “The Clean Air Act can achieve everything we need: a 40 percent reduction of greenhouse gas emissions over 1990 levels by 2020.”

Rather boring in tone and dense with legalistic detail, the ongoing fight over EPA rulemaking is probably the most important environmental battle in a generation. Since 2007, thanks to the pressure and lawsuits of green activists, the EPA has had enormous — but under-utilized — power. That was the year when the Supreme Court ruled, in *Massachusetts v. Environmental Protection Agency*, that the agency should determine whether greenhouse gases threaten human health. In December 2010, the EPA published a science-based “endangerment finding,” which found that CO<sub>2</sub> and five other greenhouse gases are, in fact, dangerous to human life because they cause global warming.

Once the EPA issues an endangerment finding, it is legally bound to promulgate regulations to address the problem. The first of these post-*Massachusetts v. EPA* “tailoring rules” were for “mobile sources.” Between 2011 and 2012, regulations for cars and for trucks went into effect. Then the EPA set strict limits for new power plants in 2012. But other major sources of greenhouse gas pollution — like existing electric power plants (which pump out roughly 40 percent of the nation’s total GHG emissions), oil refineries, cement plants, steel mills, and shipping — have yet to be properly regulated pursuant to *Massachusetts v. EPA*.

If the EPA were to use the Clean Air Act — and do so “with extreme prejudice” — it could impose a de facto carbon tax. Industries would still be free to burn dirty fossil fuels, but they

would have to use very expensive, and in some cases nonexistent, new technology to meet emission standards. Or they would have to pay very steep and mounting fines for their emissions. Such penalties could reach thousands of dollars per day, per violation. Thus, a de facto carbon tax. Then cheap fossil fuel energy would become expensive, driving investment toward carbon-neutral forms of clean energy like wind and solar. For extra measure we could end fossil fuel subsidies. Before long, it would be more profitable to invest in clean energy sources than dangerous and filthy ones.

### **Big Green Buy and U.S. “Shadow Socialism”**

According to clean-tech experts, innovation is now less important than rapid, large-scale implementation. In other words, developing a clean-energy economy is not about new gadgets but about new policies. Most of the energy technologies we need already exist. You know what they are: wind farms, concentrated solar power plants, geothermal and tidal power, all feeding an efficient smart grid that, in turn, powers electric vehicles and radically more energy-efficient buildings.

But leading clean technologies remain slightly more expensive than the old dirty-tech alternatives. This “price gap” is holding back the mass application of clean technology. The simple fact is that capitalist economies will not switch to clean energy until it is cheaper than fossil fuel. The fastest way to close the price gap is to build large clean-tech markets that allow for economies of scale. But what is the fastest way to build those markets? More research grants? More tax credits? More clumsy pilot programs?

No. The fastest, simplest way to do it is to reorient government procurement away from fossil fuel energy and toward clean energy and technology – to use the government’s vast spending

---

*Government procurement is one of the hidden tools of American capitalism’s “shadow socialism.”*

---

power to create a market for green energy. Elsewhere, I have called this the Big Green Buy. Consider this: federal, state, and local government constitute more than 38 percent of our GDP. In more concrete terms, Uncle Sam owns or leases more than 430,000 buildings (mostly large office buildings) and 650,000 vehicles. (Add state and local government activity, and all those numbers grow by about a third again.) The federal government is the world’s largest consumer of energy and vehicles, and the nation’s largest greenhouse gas emitter.

Government procurement is one of the hidden tools of American capitalism’s “shadow socialism.” By shadow socialism I refer to the massively important but often overlooked role of government planning, investment, subsidy, procurement, and ownership in the economic development of American capitalism. A detailed account of that history is offered in Michael Lind’s book *Land of Promise*. From railroads, to telecommunications, and aviation and all the attendant sub-industries of these sectors, government has provided the capital and conditions for fledgling industries to grow large. For example, government didn’t just fund the invention of the microprocessor; it was also the first major consumer of the device. Throughout the 1950s, more than half of IBM’s revenue came from government contracts. Along with money, these contracts provided a guaranteed market and stability for IBM and its suppliers, and thus attracted private investment – all of which helped create the modern computer industry.

Now consider the scale of the problem: our asphalt transportation arteries are clogged with 250 million gasoline-powered vehicles sucking down an annual \$200 to \$300 billion worth of fuel from more than 121,000 filling stations. Add to that the cost of heating and cooling buildings, jet travel, shipping, powering industry, and the energy-gobbling servers and mainframes that are the Internet, and the U.S. energy economy reaches a spectacular annual tab of 1.2 trillion dollars.

A redirection of government purchasing would create massive markets for clean power, electric vehicles, and efficient buildings, as well as for more sustainably produced furniture, paper, cleaning supplies, uniforms, food, and services. If government bought green, it would drive down marketplace prices sufficiently that the momentum toward green tech would become self-reinforcing and spread to the private sector.

Executive Order 13514, which Obama signed in 2009, directed all federal agencies to

increase energy efficiency; measure, report, and reduce their greenhouse gas emissions from direct and indirect activities; conserve and protect water resources through efficiency, reuse, and storm water management; eliminate waste, recycle, and prevent pollution; leverage agency acquisitions to foster markets for sustainable technologies and environmentally preferable materials, products, and services; design, construct, maintain, and operate high performance sustainable buildings in sustainable locations.

The executive order also stipulates that federal agencies immediately start purchasing 95 percent through green-certified programs and achieve a 28 percent greenhouse gas reduction by 2020. But it has not been robustly implemented.

Government has tremendous latitude to leverage green procurement because it requires no new taxes, programs, or spending, nor is it hostage to the holy grail of sixty votes in the Senate. It is simply a matter of changing how the government buys its energy, vehicles, and services. Yes, in many cases clean tech costs more up front, but in most cases, savings arrive soon afterward. And government—because of its size—is a market mover that can leverage money-saving deals if it wishes to.

### **Protest and the “Relative Autonomy” of the State**

Why would the capitalist state move to euthanize the fossil fuel industry, that most powerful fraction of the capitalist class? Or put another way, how can the state regain some of its “relative autonomy” from capital? History indicates that massive, crisis-producing protest is one of the most common reasons a modern state will act against the interests of specific entrenched elites and for the “general interest” of society. When the crisis of protest is bad enough, entrenched elites are forced to take a loss as the state imposes ameliorative action for the greater good of society.

Clearly, we need to build a well-organized, broadly supported, yet tactically and strategically radical movement to demand proper climate policy. For such a movement to be effective it must use myriad tactics, from lawsuits and lobbying to direct action such as tree-sits, road blockades, and occupations aimed at the infrastructure of the fossil fuel industry. Only by disrupting the working of the political and economic system as a whole can we forge a

consensus that ending the fossil fuel sector is essential. (The work of Francis Fox Piven and Richard Cloward is, in my opinion, still among the best in tracing the dynamic of this process of rebellion and reform.)

At question, then, is not just the state's capacity to evolve, but the capacity of the American people to organize and mobilize on a massive scale. Far be it from me to say exactly how such movements could or should be built, other than the way they always have been: by trial and error and with good leadership. Movement building is a mass and organic process.

### **The Rebellion of Nature**

Along with protest, a more organic source of crisis is already underway and may also help scare political elites into confronting big carbon. Climate change is a "rebellion of nature," by which I mean the disruption caused by ecological breakdown. The history of environmental regulation in the West is, in many ways, the story of protest and advocacy combining with the rebellion of nature at the local (urban) scale. Together, they have forced rudimentary regulation in the name of health and sanitation.

By the 1830s, America's industrial cities had become perfect incubators of epidemic disease, particularly cholera and yellow fever. Like climate change today, these diseases hit the poor hardest, but they also sickened and killed the wealthy. Class privilege offered some protection, but it was not a guarantee of safety. And so it was that middle-class "goo-goos" and "mugwumps" began a series of reforms that contained and eventually defeated the urban epidemics.

First, garbage-eating hogs were banned from city streets, then public sanitation programs of refuse collection began, sewers were built, safe public water provided, and housing codes were developed and enforced. Eventually, the epidemics of cholera stopped. Soon other infectious diseases, such as pulmonary tuberculosis, typhus, and typhoid, were largely eliminated. At the scale of the urban, capitalist society solved an environmental crisis through planning and public investment.

Climate change is a problem of an entirely different order of magnitude, but these past solutions to smaller environmental crises offer lessons. Ultimately, solving the climate crisis — like the nineteenth-century victory over urban squalor and epidemic contagions — will require a re-legitimation of the state's role in the economy.

The modern story of local air pollution offers another example of the "rebellion of nature." As Jim McNeil outlines in *Something New Under The Sun*, smog inundations in industrial cities of the United States and Europe used to kill many people. In 1879–1880 smog killed 3,000 Londoners, and in Glasgow a 1909 inversion — where cold air filled with smoke from burning coal was trapped near the ground — killed 1,063. As late as 1952, a pattern of cold and still air killed 4,000 people in London, according to McNeil, and even more according to others. By 1956, the Britons had passed a clean air act that drove coal out of the major cities. In the United States there was a similar process. In 1953, smog in New York killed between 170 and 260 people, and as late as 1966 a smog inversion killed 169 New Yorkers. All of this helped generate pressure for the Clean Air Act of 1970.

Today, a similar process is underway in China. Local air quality is so bad that it is forcing changes to Chinese energy policy. A major World Bank study has estimated that "the combined health and non-health cost of outdoor air and water pollution for China's economy

comes to around \$US 100 billion a year (or about 5.8% of the country's GDP)." People across China are protesting pollution. Foreign executives are turning down positions in Beijing because of the toxic atmospheric stew that western visitors have taken to calling "airpocalypse." The film director Chen Kaige, who won the Palme d'Or for his 1993 film *Farewell My Concubine*, told the world he couldn't think or make films because of the Chinese capital's appallingly bad air.

These local pressures are a large part of what is driving Chinese investment in renewable energy. Last year China added more energy capacity from wind than from the coal sector.

### Capitalism vs. Nature?

Some of the first thinkers to note a conflict between capitalism and non-human nature were Karl Marx and Friedrich Engels. They came to their ecology through examining the local problem of relations between town and country – expressed simultaneously as urban pollution and rural soil depletion. In exploring this question they relied on the pioneering work of soil chemist Justus von Liebig. And from this small-scale problem, they developed the idea of capitalism creating a rift in the metabolism of natural processes.

Here is how Marx explained the dilemma:

Capitalist production collects the population together in great centers, and causes the urban population to achieve an ever-growing preponderance. This has two results. On the one hand it concentrates the historical motive force of society; on the other hand, it disturbs the metabolic interaction between man and the earth, i.e., it prevents the return to the soil of its constituent elements consumed by man in the form of food and clothing; hence it hinders the operation of the eternal natural condition for the lasting fertility of the soil....All progress in capitalist agriculture is a progress in the art, not only of robbing the worker, but of robbing the soil.

And as with "soil robbing," so too concentrations of atmospheric CO<sub>2</sub>: the natural systems are out of sync; their elements are being rearranged and redistributed, ending up as garbage and pollution.

It may well be true that capitalism is incapable of accommodating itself to the limits of the natural world. But that is not the same question as whether or not capitalism can solve the climate crisis. Climate mitigation and adaptation are merely an effort to buy time to address the other larger set of problems that is the whole ecological crisis.

This is both a pessimistic and an optimistic view. Although capitalism has not overcome the fundamental conflict between its infinite growth potential and the finite parameters of the planet's pollution sinks, it has, in the past, addressed *specific* environmental crises.

Anyone who thinks the existing economic system must be totally transformed before we can deal with the impending climate crisis is delusional or in willful denial of the very clear findings of climate science. If the climate system unravels, all bets are off. The many progressive visions born of the Enlightenment will be swallowed and forgotten by the rising seas or smashed to pieces by the wrathful storms of climate chaos.

---

**Christian Parenti** is a professor of sustainable development at the School for International



Training, Graduate Institute. He is a contributing editor to the *Nation* and the author of four books, the most recent being *Tropic of Chaos: Climate Change and the New Geography of Violence* (Nation Books, July 2011).

---

INFO

[About](#)  
[Contact](#)  
[Masthead](#)

SERVICE

[Donate](#)  
[Subscribe](#)

CONNECT

[Facebook](#)  
[Twitter](#)

This website and its content is copyright of Dissent Magazine - © Dissent Magazine 2012. All rights reserved.

data-layout=