

Why We Need a Global Green New Deal

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THE UNITED STATES, AND WITH IT THE REST OF THE WORLD, is experiencing the initial stages of an unprecedented emergency brought on by three intertwined factors: a credit-fueled financial crisis, gyrating energy prices linked to speculation about the future peaking of oil supplies, and an accelerating climate crisis. Although the news has been filled over the last year with reports of the sub-prime mortgage crisis, vertiginously spiking and declining gas prices, and the melting of the polar ice caps, these alarming phenomena are seldom linked to one another. As a result, it is extremely difficult to gain a clear sense of the origins, true character, and gravity of the crisis we face. In addition, since little risk analysis has been done to explore the implications of this triple crisis, public discourse is characterized by remarkable complacency about the future.

Not to say that Americans today aren't alarmed. Indeed, we live in a state of perpetual fear. Yet this anxiety is largely misplaced. While today's War On Terror may be quite lucrative for the fat cats who run what Naomi Klein calls the disaster capitalism complex, it hardly constitutes a viable long-term foundation for global security.[1] The Pentagon's own Office of Net Assessment has in fact identified climate change as a threat that vastly eclipses terrorism.[2] One fifth of the world's population, for example, inhabits coastal zones that are threatened by rising sea levels and climate change-related disasters.[3] Add to the looming crises associated with the displacement of millions of people the depletion of fresh water supplies around the world, desertification, soil erosion, and deforestation, to name only a few of the environmental problems humanity increasingly faces, and it should be clear that we are confronting an unstable world utterly different from that of the fast-receding fossil fuel era.[4]

We are singularly ill prepared to address these unparalleled challenges. Several decades of neo-liberal hegemony have spread a paralyzing sense of economic insecurity and opened up gaping inequalities within and between nations. In addition, neo-liberalism has destroyed our faith, in Pierre Bourdieu's words, in the "collective institutions capable of standing up to the effects of the infernal machine - the forefront of which is the state." [5] In the face of this corrosive neo-liberal cynicism, we must rebuild our sense of collective possibility, and, with it, a state oriented to positive rather than merely punitive ends on a local, national, and global scale.[6] The hour is late; according to a recent report by the New Economics Foundation, as of August 1, 2008, we have less than one hundred months before the planet's natural feedback systems take our destiny out of our hands.[7] In what follows, I outline the program of environmental Keynesianism that I believe offers our best possibility for addressing this emergency.[8]

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ON JUNE 23, 2008, NASA climate scientist James Hansen appeared before a House select committee twenty years to the day since his history-making public announcement of global warming to Congress. Although he repeated his original assertions concerning anthropogenic climate change, one major difference set off this reappearance: Hansen asserted in the starkest language that the world has almost run out of time to prevent the Earth's feedback mechanisms from triggering runaway climate change.[9] According to new research presented by Hansen during his recent testimony, the atmosphere is far more sensitive to carbon dioxide emissions than the most recent work of the International Panel on Climate Change (IPCC) supposed. As a result, according to Hansen, a safe level of carbon dioxide concentration in the atmosphere would be no more than 350 parts per million (ppm). Currently, the CO₂ amount is 385ppm, with a rise of over 2ppm per year. We need, in other words, not simply to freeze carbon dioxide emissions, but to remove significant

amounts from the atmosphere through massive projects such as reforestation. A corollary of Hansen's alarming findings is the fact that the now nearly universally accepted target of maintaining warming below two degrees Celsius above pre-industrial levels is a recipe for disaster rather than salvation.

Needless to say, policymakers have not absorbed these findings adequately. Indeed, one of the British government's chief scientific advisors made headlines some time ago by publicly urging ministers to prepare the nation to adapt to four degrees Celsius of warming.[10] While it clearly makes sense to seek to adapt to the intensified climatic instability already triggered by greenhouse gas emissions, what precisely would it mean to try to adapt to 4° C warming? An answer can be gleaned from recent reports commissioned by tough-minded (and hardly bleeding-heart liberal) entities such as the Pentagon and the European Council.[11] These agencies increasingly view climate change in terms of a threat to collective security rather than simply as an environmental or even humanitarian problem.

For example, in his March 2008 report to the European Council, High Representative Javier Solana lists seven major areas in which climate change is likely to impact European security over this century: conflict over increasingly scarce resources, economic damage and risk to coastal cities and critical infrastructure, loss of territories and border disputes as a result of inundation, environmentally-induced migration, situations of political fragility and radicalization, tensions over energy supply, and, finally, pressure on institutions of international governance.[12] Examples of regional impacts help flesh out Solana's predictions. Forty percent of Asia's population, for instance, lives within sixty kilometers of the sea.[13] If conservative scientific estimates of 25 feet of sea-level increase as a result of the collapse of either the Greenland or the west Antarctic ice shelves prove true, this means that one quarter of humanity is likely to be displaced by the end of this century. At the same time, the disappearance of melt water from the Himalayan glaciers threatens one billion people with drought and famine. The massive migration flows that will be catalyzed by climate change are certain to increase conflicts in both transit and destination areas, resulting in heightened security threats to the developed nations in the form of failed states, political radicalization, and refugee streams to the global North.

In addition, as James Hansen pointed out in his Congressional testimony, the Earth is moving quickly through a series of dangerous tipping points that were not included in the IPCC's calculations concerning global warming. As the planet warms, that is, feedback mechanisms such as the melting of the Arctic ice cap and the release of methane from melting permafrost are likely to push the Earth into runaway cycles of climate change. Recent estimates predict that there will be no ice in the Arctic by the summer of 2013.[14] Perhaps one of the most dramatic but least publicized of these feedback mechanisms is the probable fate of the Amazon rainforest if four degrees of warming take place. Under such conditions, the ecologically delicate rainforest would likely collapse and burn, releasing massive quantities of carbon into the atmosphere in a reversal of the current virtuous patterns in which vegetation and soils absorb significant portions of current annual carbon emissions.[15]

If present levels of greenhouse gas emissions continue unabated, concentrations will pass 400ppm - the level beyond which it will be impossible to limit temperature rises to 2° C - in less than one hundred months.[16] This is why pledges such as that of President Barack Obama to reduce carbon emissions eighty percent by 2050 using a cap-and-trade program are largely meaningless. We have less than ten years to establish a zero-emissions economy. If we allot ourselves forty years to make the necessary reductions, any beneficent behavior on our part that might be provoked by increasingly alarming evidence of climate change toward the end of this span will be too late, given the Earth's feedback mechanisms. We will have passed the point of no return. That is why we need to draft and begin implementing a Green New Deal over the next year.

AS SCIENTISTS SUCH AS JAMES HANSEN have repeatedly pointed out, the impending climate crisis means that we should make a transition to a zero-carbon economy with the greatest possible dispatch. Were it not for the power of the fossil fuel lobby and their formidable PR machine, we might be much further along this road already.[17] The achievements of European nations such as Denmark, whose population enjoys a standard of living that surpasses that of the United States despite the fact that the country has adopted strategies to achieve energy independence, suggests that the obstacles we confront are political rather than technological. But even if we lack the political will to address global warming, we will be compelled to change. Unlike the climate crisis, the effects of which are building up gradually and do not yet represent a threat to most nations' security, the energy crisis will constrain us to transform our behavior over the next decade. This shift in behavior is likely to follow one of two possible paths.

On the one hand, the United States could decide to intensify its current strategy of gaining military control over energy reserves in the Middle East in an attempt to sustain our current habits of hyper-consumption. Such an aggressive, unilateralist policy is likely to provoke increasing opposition from current and developing regional powers such as the EU and China. This would not, however, be the first time in history that elites have elected to pursue such an apparently perilous path. The embrace of aggressive nationalism and imperialism by nineteenth century European powers such as Britain and France resulted from the unwillingness of the bourgeoisie to give up any of their class privileges and engage in a project of social reform and economic redistribution domestically.[18] Such a project might have offered a solution to the crisis of over-accumulation that characterized the period. Refusing such forms of redistribution, however, Victorian-era elites were constrained to turn outwards to find a spatio-temporal fix. The imperial project they elected to pursue cracked open non-capitalist zones of the planet and thereby made available cheap labor power, abundant raw materials, low-cost land, and new opportunities for trade.[19] It also triggered Great Power rivalries that led eventually to the conflagrations of World War I and II. We have progressed a fair distance down a similar road today. As the worldwide opposition generated by the occupation of Iraq has made clear, this strategy is likely to intensify already apparent trends towards the kind of inter-imperialist rivalry that produced the global imperial conflicts of the previous century.

An alternative resolution to the crisis we confront would involve rejecting the racially coded "clash of civilizations" ideology that underlies the current War on Terror in order to forge a new geopolitics for an era of peak oil and climate change. The crisis of financialization we are currently weathering offers us a perfect opportunity for such a move. This crisis stems from the stagnation of the real economy caused by failure to re-invest capital, stagnation which the volatile boom-and-bust cycles of the Finance, Insurance, and Real Estate (FIRE) economy only deepens. In addition, the turn to neo-liberal doctrine over the last several decades has been accompanied by strategies of privatization and debt-fueled "structural adjustment" imposed on poor nations. Such strategies are being met with increasingly radical resistance around the globe, from grassroots movements such as the Global Justice Movement to developing nations such as China and India, which recently torpedoed the World Trade Organization's Doha Round in response to the organization's skewed policies of agricultural liberalization.[20]

Given the fact that we have less than 100 months left before energy depletion and climate change rob us of the capacity for systemic change, we need to take advantage of the current crisis conditions in order to articulate and act on a coordinated and substantial transitional program.[21] Key to this transition will be taking steps to insure global equity. During the heated presidential campaigns of 2008, various think tanks and activist groups tabled a raft of forward thinking environmental proposals. Activists such as Van Jones published calls for a shift to a green collar

economy.[22] Not so surprisingly, most of these proposals tended to concentrate on making positive changes within the US.

While regulation of the economy designed to rein in the speculative power of capital is important in order to address the economic crisis, it must be yoked to a sweeping program of environmental regulation and state-led domestic reinvestment aimed at the swiftest possible transition to a zero-carbon economy. This Keynesian environmentalism would deal with the crisis of financialization by re-directing over-accumulated capital into the creation of green infrastructure and social programs. In order to coordinate such a program, activists need to push for the drafting not simply of a national action plan that evaluates the risks created by the crisis and sketches out the best responses to this crisis. We also need to push for programs which foreground issues of global ecological equity. This will involve evaluating carbon emissions-trading programs with an extremely critical eye.

Instead of forcing countries or companies to cut down their greenhouse gas emissions, for example, the Kyoto Protocol designers gave countries a minimal reduction target of 5 percent from 1990 emissions levels, a target that was to be achieved by 2012. Countries were then allowed to allocate their quota of credits on a nation-wide basis, most commonly by "grandfathering," so that the most polluting industries received the largest share of credits.[23] Countries and companies could then meet their emissions targets in one of three ways: 1) they could reduce their own pollution; 2) they could purchase emission credits from other countries or firms that reduced their own greenhouse gasses beyond their target level; or, 3) they could invest in pollution reduction schemes elsewhere.[24] Credit-earning schemes that took place in countries with no reduction targets - almost by definition non-industrialized countries in the global South - were administered under the World Bank's so-called Clean Development Mechanism (CDM). The CDM hinged on the notion that emissions from a polluting source could be "nullified" through investments in renewable energy or "carbon sinks" such as tree plantations in the developing world.

There are a number of fairly obvious scams associated with the CDM. First of all, there's plenty of evidence to suggest that carbon stored above ground in massive monocultural tree plantations is not equivalent to carbon stored below-ground as fossil fuels. After all, trees eventually fall down and rot, releasing their stored carbon back into the atmosphere, while fossil fuels store their carbon until we dig them up and burn them. So-called carbon sinks are thus nothing more than a temporary solution, which, by suggesting that emissions have been nullified, actually encourage emissions. In addition, as Heidi Bachram explains,

The amount of credits earned by each project is calculated as the difference between the level of emissions with the project and the level of emissions that would occur in an imagined alternative future without the project. With such an imagined alternative future in mind, a corporate polluter can conjure up huge estimates of the emissions that would be supposedly produced without the company's CDM or JI project. This stratagem allows for a high (almost limitless) number of pollution credits that can be earned for each project. It allows the company to pollute more at other sites, to sell its credits to other polluters, or to engage in a combination of these lucrative tactics. Its long-term consequences are (1) increased greenhouse gas emissions and (2) increased corporate profit obtained from their production.[25]

But pollution doesn't just turn into a source of profit for companies under the CDM. In addition, the program plays directly into the hands of global and local elites since "carbon sinks" can qualify for emissions reductions only if they are managed by an entity with official status. This means that

an old-growth rainforest husbanded by an indigenous group for thousands of years is not likely to qualify as "managed" and therefore will not get credits, whereas a massive plantation of eucalyptus trees such as the one operated by the transnational Plantar company in the impoverished Brazilian state of Minas Gerais will qualify.[26] Since the Kyoto Protocol provided for access to over 10 million hectares of land per year to act as carbon sinks, carbon trading encouraged neo-colonial land grabbing by local and foreign elites.

In Britain, in contrast with such globally inequitable carbon trading schemes, environmentalists have for some time been discussing the need for carbon rationing.[27] When and if the international community agrees on a cap for atmospheric carbon concentrations, rationing would allow emissions to be doled out on an equitable basis between and within countries based on their populations. The advantage to such a system lies in its fairness and in its invocation of the collective good. Unlike energy taxes, which will disproportionately affect the poor since they spend a greater percentage of their income on fuel, rationing would constrain everyone to cut their consumption. Rationing could also allow frugal consumers of carbon to sell their excess credits on the open market during an initial phase-in period, and would, therefore, constitute a significant means of redistribution.[28] Similarly, if the government retains sixty percent of the carbon allocation as George Monbiot has suggested, it could auction off carbon emission rights to companies.[29] The proceeds would be used to fund many of the other necessary programs in the Global Green New Deal. Finally, such measures would head off yet another devastating speculative bubble, the kind that would likely be created by a capitalist market in emissions credits such as the one established by the European Union.

ONE OF THE MAJOR BENEFITS of carbon rationing would, of course, be the curbing of energy intensive activities. The more consumption is curbed, the easier it will be to use a greater percentage of renewable energy sources.[30] More than any other nation, the United States is built on the assumption of endless horizons for energy consumption. The national highway system, product of the symbiotic relation of the Cold War national security state and the automobile industry, is a perfect example of the infrastructure of a fast-receding fossil fuel era. The highway-automobile complex of course helped facilitate the suburban and exurban sprawl that has come to characterize most U.S. cities.[31] In addition, these assumptions about endless energy horizons also help explain the global commodity chains that U.S. corporations such as Wal-Mart pioneered during the neo-liberal era. As the nation moves towards a zero-carbon state, production and consumption will have to become far more localized and efficient in order to conserve energy and resources. Cities will need to be re-engineered through careful and coordinated planning in order to emphasize the kind of compact living that makes public transportation viable and facilitates combined heat and power generation arrangements.[32] Our automobile and bus fleet will have to be switched from gasoline to electricity.

In the post-carbon age, it simply will be impossible to move our food, clothes, and other commodities across continents. The doctrine of subsidiarity, which dictates local production for local consumption whenever possible, is likely to be a fundamental aspect of a new ecologically stable and democratic society. Achieving subsidiarity will, however, mean transforming or even dismantling international financial institutions such as the World Bank and the International Monetary Fund, which use the debt burden carried by developing countries since the 1970s to coerce those nations into producing for export markets in order to accumulate capital with which to pay interest on their borrowings. Challenging the unjust aspects of globalization will involve increasing local democratic control over economic and environmental resources, so that developing nations are no longer forced to turn over their land to massive agricultural corporations growing homogeneous crop varieties largely for export to the global North. A Green New Deal for the global South will therefore mean supporting the many peasant groups calling for policies of land redistribution in order to promote re-ruralization and coping with the socially and environmentally unsustainable growth of mega-cities in

which the majority of people eke out a living in the highly unstable informal economy.

One of the major infrastructural tasks to be accomplished by the Green New Deal involves the rebuilding of our nation's aging energy grid. This project must be coordinated on a national level since new technologies of energy transmission and storage will have to be developed and integrated into the new system. Renewable energy sources such as wind, sun, biomass, geothermal, tides, and waves are often intermittent and are obviously not appropriate in every place. Northern states receive relatively limited solar radiation, for example, while wind power is only appropriate in certain parts of the country. High voltage direct current cables offer a solution to the problem of transmitting energy over long distances (alternating current cables lose increasing amounts of power over increasing distances), but such cables need to be hooked into a national grid capable of coordinating storage so that the system doesn't crash during moments of peak demand or slack local power generation.[33]

Despite such national coordination, however, the reengineering of the national energy grid should aim to decentralize and diversify energy sources. As with many other aspects of the Green New Deal, the key is to move away from the centrally controlled energy production systems of the fossil fuel age towards more local, appropriate solutions to energy generation. Of course, rebuilding the energy infrastructure also involves retrofitting U.S. housing stock, which is responsible for at least half of the nation's carbon emissions. There is room for massive improvement in this regard; in Europe, the spread of zero-carbon passive houses offers a source of inspiration and a challenge to the United States. Carrying out all this work will require the creation of a Green Corps, a millions-strong army of workers trained in environmental stewardship and the creation and deployment of green technology.[34] Finally, new energy infrastructure must be global in scope. Developing nations have a right to lift their citizens out of poverty, a prerogative acknowledged in the important Greenhouse Development Rights protocol around which ecological equity activists are beginning to rally.[35]

None of these achievements within the global North will mean much unless the United States also takes the lead in negotiating a meaningful successor to the Kyoto Protocol in Copenhagen in 2009. As the nation most responsible for global carbon emissions, we have the responsibility to forge a just and effective agreement that charts paths to alternative, low-carbon development. The models for such a pact already exist.[36] Interesting recent proposals include reaching agreement on a global cap on emissions that would be applied "upstream" (e.g. at oil refineries or cement factories), with permits to emit up to the cap auctioned off. The proceeds would be used to finance transition measures. The problem lies, then, not in the lack of feasible plans, but in the unwillingness of the world's most advanced countries to adopt such programs. The G8 meeting in June, for example, represented a significant setback for efforts to craft an effective post-Kyoto climate strategy, despite the confusing declarations of good intent that emanated from the gathering.[37] Sustained political pressure similar to the kind of critique and direct action with which the Global Justice Movement has bombarded institutions such as the World Bank and the WTO needs to be brought to bear on the elite summits where climate treaties are negotiated.

Finally, education has a vital role to play in the Green New Deal. In addition to training members of the Green Corps, educators and other public intellectuals must counter the climate change denial industry. The crisis promises to worsen all the major problems currently confronting global society, from the food crisis to state failure, from terrorism to mass migration. Educators must find ways not simply to situate particular instances of peak energy and climate change within a broader narrative, but to communicate in a holistic manner the gravity of the challenge we face. Moreover, we need to play a role in proposing and debating solutions to the crisis; the aim should be to counter the toxic cynicism that has infected public life during the neo-liberal era. Like the original New Deal, an environmental Keynesianism will become a reality only if a broad variety of social movements make

connections between the different aspects of the triple crisis and force through changes on local, national, and global levels. The political odds are truly daunting in this regard. But so was the battle against economic collapse, social dislocation, and fascism during the 1930s. And what alternative do we have but to engage in this greatest of all struggles? We face, after all, a fairly simple choice: a global Green New Deal or an intensification of the present barbarism, leading to the inexorable collapse of life as we know it.

Footnotes

1. Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (New York: Metropolitan, 2007).
2. Oxford Research Group, *Global Responses to Global Threats*, Accessed March 13, 2008.
3. Ian Traynor, "EU Told to Prepare for Flood of Climate Change Migrants," *The Guardian* (March 10, 2008), Accessed March 13, 2008.
4. For an overview of many of these developing environmental stresses, see Lester Brown, *Plan B 2.0* (New York: Norton, 2006).
5. Pierre Bourdieu, *Acts of Resistance: Against the Tyranny of the Market* (New York: New Press, 1998), 102.
6. For further discussion of state theory, see Omar Dahbour, Ashley Dawson, Heather Gautney, and Neil Smith, eds., *Prospects for Democracy* (New York: Routledge, 2009).
7. Andrew Simms, "The Final Countdown," *The Guardian* (August 1, 2008).
8. I am hardly the first to propose some version of a New Deal. Notably, David Harvey proposes some version of a new New Deal in *The New Imperialism* (New York: Oxford University Press, 2003), although he does not touch on environmental issues. Susan George has also pursued this theme recently, highlighting the idea of an environmental Keynesianism. See the interview I conducted with her, "Towards a New Green Deal," archived here. Most recently, the New Economics Foundation published a document called *A New Green Deal* that, in linking the economic, energy, and environmental crises, had a strong impact on my thought.
9. For a text of Hansen's recent testimony before a House committee, see here.
10. James Randerson, "Climate Change: Prepare for Global Temperature Rise of 4C, Warns Top Scientist," *The Guardian* (August 7, 2008).
11. On the controversial report to the Pentagon, for example, see Mark Townsend and Paul Harris, "Now the Pentagon Tells Bush: Climate Change Will Destroy Us," *The Observer* (February 22, 2004). This report is available online here.
12. Javier Solana, "Before the Flood," *The Guardian* (10 March 2008), Accessed March 13, 2008.
13. *Ibid.*
14. Robin McKie, "Meltdown in the Arctic is Speeding Up," *The Observer* (August 10, 2008).
15. Mark Lynas, "Climate Change Catastrophe By Degrees," *The Guardian* (August 7, 2008).

16. Ian Sample, "'100 Months' To Stop Overheating," *The Guardian*, August 1, 2008.
17. For a fascinating history of the fossil fuel lobby's adaptation of techniques used by Big Tobacco to derail public health campaigns against cigarette smoking, see George Monbiot, *Heat: How to Stop the Planet Burning* (London: Allen Lane, 2006): 20-42.
18. On the turn towards liberal imperialism in late 19th century Britain, see David Harvey, *The New Imperialism* (New York: Oxford University Press, 2003), 124-126.
19. *Ibid.*, 139.
20. For analysis of the WTO's contribution to climate change, see Walden Bello, "Derail Doha, Save the Climate".
21. On the 100 month window of opportunity before we reach the point of no return for climate change, see Ian Sample, "100 Months To Stop Overheating," *The Guardian* (August 1, 2008).
22. Van Jones, *Green Collar Economy* (New York: Harper One, 2008).
23. Heidi Bachram, "Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases," *Capitalism Nature Socialism* 15.4 (December 2004): 1-16.
24. *Ibid.*, 3.
25. *Ibid.*, 4.
26. *Ibid.*, 9.
27. This notion was first developed by Mayer Hillman but has been developed in more detail by George Monbiot. See Mayer Hillman, *How To Save the Planet* (London: Penguin, 2004) and George Monbiot, *Heat: How To Stop the Planet Burning* (London: Allen Lane, 2006).
28. For discussion of a carbon tax system that strives for equality, see Peter Barnes in *Who Owns the Sky?: Our Common Assets and the Future of Capitalism* (Washington, D.C.: Island Press, 2001).
29. Monbiot, 45.
30. I do not include nuclear power and "clean" coal among these renewable resources because of concerns about security and disposal in the case of the former and because of the unproven character of the latter. For a discussion of the significant limitations of these energy sources, see Richard Heinberg, *The Party's Over: Oil, War, and the Fate of Industrial Societies* (Gabriola Island, Canada: New Society, 2003).
31. For a withering attack on US suburbia, see James Howard Kunstler, *Geography of Nowhere: The Rise and Decline of America's Man-Made Landscape* (New York: Free Press, 1994).
32. On compact cities, see Herbert Girardet, *Creating Sustainable Cities* (London: Green Books, 1999).
33. For a far more detailed discussion of the problems of generating, storing, and transmitting renewable power, see Monbiot, 101-141.
34. The call for Green Jobs is a central component in national organizations such as the Apollo Alliance, an organization that melds unions and environmental organizations to push for well paying,

environmentally responsible employment and clean energy. See [here](#).

35. On Greenhouse Development Rights, see discussion and publications by the organization Eco-Equity.

36. See, for example, Oliver Tickell, *Kyoto2: How to Manage the Global Greenhouse* (New York: Zed, 2008).

37. Walden Bello, "The Anti-Climate Summit".