REPORT The State of the Global Carbon Trade Debate

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Introduction

"I can't understand why there aren't rings of young people blocking bulldozers and preventing them from constructing coal-fired power plants."

—Al Gore speaking privately, August 2007

What is the state of the strategic debate over climate change? What kinds of reforms are being contested? Are we in danger of seeing the air itself—one of our last commons—become commodified, reflecting not only the core elite strategy to mitigate global warming, but market-environmentalist acquiescence? And are western financial markets still so dominant in putting boxes around policy debates that even today—suffering unprecedented turbulence and asset devaluation—they retain power as a vehicle for distributing carbon emissions allocations?

The mid-October 2008 response to the financial meltdown by the World Bank was illustrative of the neoliberal hubris. In their hour of greatest shame, Washington financiers bragged that \$6.1 billion were flowing into the Climate Investment Funds. According to the Bank's Kathy Sierra, "One consequence of the present financial crisis could be to spur demand for environmentally sound development as a way to cut costs." The next day, October 16, "nearly all carbon emissions trading registries in the European Union and under the Kyoto Protocol link[ed so as to] allow European companies participating in the EU's Emissions Trading Scheme to import cheaper carbon offsets."

As climate change generates destruction and misery, the people and corporations responsible for these problems—especially in the U.S./E.U.-centered petro-mineral-military complex and associated financial agencies like the World Bank—are renewing their grip on power and simultaneously reasserting their rights to both property and inaction on climate change. And a good many activists once strongly opposed to the corporate elites have been seduced by the idea that we have to tackle the climate crisis one step at a time. Thus they have bought into "reforms" that the establishment can live with—i.e., reforms that claim clever market incentives will leverage substantial cuts in emissions.

Consider four sets of strategies to combat climate change: emissions cap-and-trade options, carbon taxation, command and control of emissions, and alternative grassroots climate change mitigation strategies. The latter two are what will be necessary to save the planet, yet only the former two strategies are considered serious options and worthy of pursuit by the most established forces within the environmental movement.

A scientific consensus now appears unshakable: by 2050, CO₂ emissions must be reduced by 80 percent to prevent tipping the world environment into chaos and unleashing a species-threatening crisis. Yet the options being contemplated in global and national public policy debates to take us to 80 percent reductions are nowhere near what is required for several reasons.

First, the global balance of forces so far prevents the kinds of radical changes required to meet this goal. As a mid-2008 report from Bonn put it,

Another round of talks on the road towards a new global deal on climate change was wrapping up in Germany on Friday, battered by criticism that progress had been negligible. The 12-day haggle under the 192-nation United Nations Framework Convention on Climate Change (UNFCCC) was the second since the accord in Bali, Indonesia, last December that set down a "road map" towards a new planetary treaty... India[n] representative Chandrashekar Dasgupta deplored "the lack of any real progress" in Bonn and "a deafening silence" among industrialized countries, save the European Union.

In this context, the state of debate in 2008 divides those who want the world economy to slowly and painlessly adapt to CO₂ abatement strategies and those who advocate dramatic emissions cuts in a manner that is both redistributive (from rich to poor and North to South, and in the process male to female), and sufficiently shocking to economic structures and markets to cause major transformations in production and consumption.

Harnessing the Market to Fix a Market Imperfection

Some argue that market-based instruments—either a "cap-and-trade" system or carbon tax (or some hybrid)—will have the capacity to rope in the major CO_2 emitters and compel them to reduce greenhouse gases as an economic strategy, a means of using the market to fix a market imperfection. A debate has emerged about how to make mitigation more efficient. As the U.S. Congressional Budget Office explains:

The most efficient approaches to reducing emissions of CO₂ involve giving businesses and households an economic incentive for such reductions. Such an incentive could be provided in various ways, including a tax on emissions, a cap on the total annual level of emissions combined with a system of tradable emission allowances, or a modified cap-and-trade program that includes features to constrain the cost of emission reductions that would be undertaken in an effort to meet the cap.

The "cap" means that each major point source of emissions—usually in the form of a country and a firm within a country—would be granted an emissions permit for each metric ton of CO₂ released into the atmosphere. The cap would gradually reduce to the point that by 2050, the 80 percent target is met. The crucial point is that through the "trade," flexibility can be attained to reduce greenhouse gases further. Those who can make bigger cuts should do so and sell their "hot air"—the emissions saved above and beyond what is required at any given point in time—to those who have a harder time making the required cuts. Such a trading strategy would keep the high-emissions businesses alive until they have time to adapt. Auctioning the permits would give governments a dependable revenue stream which could be used to invest in renewable energy and other innovations. In the U.S., \$300 billion per year is anticipated as feasible income (at \$10-15 per metric ton of CO₂) by reducing emissions 80 percent below 1990 levels by 2050.

Another version of a market-based climate change mitigation system—which either enforces underlying economic dynamics or changes them—is a tax on greenhouse gas emissions. Such a tax would take the production system as given and alter the demand structure. According to an assessment by the U.S. Congressional Budget Office,

A tax on emissions would be the most efficient incentive-based option for reducing emissions and could be relatively easy to implement. If it was coordinated among major emitting countries, it would help minimize the cost of achieving a global target for emissions by providing consistent incentives for reducing emissions around the world. If other major

nations used cap-and-trade programs rather than taxes on emissions, a U.S. tax could still provide roughly comparable incentives for emission reductions if the tax rate each year was set to equal the expected price of allowances under those programs.

The major problems with taxation are that influential industries typically avoid paying their fair share. As noted below, there are ways to design a tax system with a strongly redistributive outcome, and in the process to incentivize transformative economic strategies. However, a dramatic shift in political power is required to achieve that.

A more equitable version of emissions trading advocacy would include a per capita strategy oriented to social justice along North-South lines, combined with trading. The per capita right-to-emit, recognizes both the need for an emergency climate stabilization program and "the right of all people to reach a dignified level of sustainable human development free of the privations of poverty" and has been advocated through "Contraction and Convergence" and "Greenhouse Development Rights" strategies.

The alternatives to such market-based strategies typically fall into state-oriented command-and-control, and activist "direct action." The rationale here is that the application of market incentives—and in the process, the granting of pollution rights—cannot generate the cuts needed to save the species from severe damage due to climate change. Instead, a variety of strategies and tactics that would explicitly cut greenhouse gas emissions is needed. Some of the strategies—a switch to renewable energy, changed consumption patterns, new production and consumption incentives through punitive taxation, and "keep the oil in the soil and the coal in the hole" campaigns—are already being adopted by some activists.

The State of the Debate

In 2008, the most important single site of debate was the U.S. Congress, where a capand-trade law proposed by Senators Joe Lieberman and John Warner was narrowly defeated. Although there were two committed U.S. Presidential candidates in the November 2008 election with aggressive positions on climate change—Ralph Nader (Independent) and Cynthia McKinney (Greens)—their chances of winning were non-existent. One of the two who will set the climate agenda from 2009 onwards are Barack Obama and John McCain, and both support the cap-and-trade concept. The primary difference is that Obama supports an auction, while McCain would give out emissions permits to large CO₂ polluters for free, at least initially.

The NGO, Environmental Defense, argues that core support for cap-and-trade in the U.S. Congress represents an opportunity in 2009 for a major legislative initiative. However, a large number of environmental and other progressive organizations, including Greenpeace, Friends of the Earth, MoveOn.org, CREDO Mobile, and Public Citizen, opposed Lieberman-Warner, because it supported nuclear energy, had an inadequate emissions cap, and adversely affected low-income people. Increasingly, environmental justice organizations are lobbying for a robust and fair carbon tax instead of a cap-and-trade system.

The other main site of debate is Europe, whose Emissions Trading Scheme (ETS) has been hotly contested. The heavy reliance on controversial offsets along with the ETS price crash in April 2006 following the giveaway of a flood of emissions permits casts serious doubt about the ability of the ETS to effectively regulate carbon emissions. Its credibility is further undermined by the fact that under this system, roughly 50 billion euros worth of

pollution rights (measured at 30 euros per tonne) are being transferred to large European CO_2 emitters annually through the ETS (Table 1).

Table 1: Transfers of wealth to polluters by E.U. countries

Source: Jutta Kill

According to Jutta Kill, there are five lessons to be learned from the ETS experience:

- 1. Overallocation of permits due to intensive industry lobbying during the allocation process led to a collapse of ETS permit prices in April 2006, which essentially removed the economic incentive for carbon polluters to reduce their emissions. As a result, few permits that actually achieved emission reductions were traded that year. A similar price collapse due to overallocation occurred in the New South Wales emissions trading scheme in Australia. Lack of a stringent cap continues to undermine the emissions trading scheme. An attempt to correct the failure and price collapse during phase 1 with a slight tightening of the cap for the second phase of the ETS from 2008-2012 has been offset by expanding a loophole in the cap: across the board, companies are allowed to use significantly more offset credits from Clean Development Mechanism (CDM) and Joint Implementation (JI) projects during phase 2 then they were in phase 1 of the ETS. Several reports have shown that 88 to 100 percent of the shortfall of permits resulting from the tightening of the cap in phase 2 will be filled by increased volume of offset credit influx into the ETS.
- 2. Free allocation of emission permits has led to record windfall profits for energy

utilities including some of the highest emitting industry sectors in the E.U. Auctioning 100 percent of the carbon permits in the third phase of the ETS is increasingly considered as the only remedy to salvage the ETS. Capping emissions without 100 percent auctioning discourages immediate investment in long-term structural change. Short-term and uncertain price signals dissuade structural change, cost-spreading deters innovation.

- 3. Any influx of offset credits into the emissions trading scheme will undermine its effectiveness due to the risk of developing a "lemons market." This is of increasing concern given the evidence that up to one-third of CDM projects either already registered or in the process of CDM registration are considered "non-additional" by CDM experts—that is, the entities applying for CDM status would have undertaken the activities that allow them to gain it without that additional incentive.
- 4. There is increasing acknowledgement—including from the private sector—that emissions trading will not provide the incentives and price signals required to trigger significant investments and R&D into zero-carbon and low-carbon technologies, which are needed to achieve the emissions cuts to avert climate chaos.
- 5. There are increasing signs that more effective approaches to switch to zero-carbon economies are being held back for fear of jeopardizing the E.U.'s flagship Emissions Trading Scheme. A leaked U.K. government internal note, for example, reveals a deep concern that achieving the 20 percent renewable energy target itself could present a "major risk" to the E.U.'s emission trading scheme, for which London has become a major center of exchange. Combined with the E.U.'s drive to greater energy efficiency, increasing the share of renewable energy could cause a carbon price collapse and make the ETS "redundant," the note says.

A crucial determinant of the impact of market mechanisms—whether carbon trades or taxes—is the inability to reliably understand carbon price elasticity—i.e., what happens to demand for carbon-related products when their price changes, either in small increments or dramatically. A series of less publicized alternatives are in continual evolution, including the Contraction-and-Convergence and Greenhouse Development Rights strategies for *per capita* emissions rights, which also involve trading. All of these have implications for environmental justice.

In contrast to market-related approaches, command-and-control strategies for emissions reductions have an important history. However, for public policy to evolve in a just and effective way on climate emissions, a much stronger set of measures will be required. These will mix the set of command-and-control strategies associated with prior emissions controls (e.g. chlorofluorocarbons [CFCs] in the 1996 Montreal Protocol and many European regulations of emissions and the Basel ban on toxic trade) and the national state strategy known as "leave the oil in the soil" (and "leave the coal in the hole"), with direct grassroots action against greenhouse gas emission points (such as coal facilities), as advocated by Al Gore in 2007.

Reformist and Non-reformist Reforms

There are intrinsic, deep-level problems in the new emissions markets, both in the markets themselves and with respect to the climate and peoples most vulnerable. What is required is agreement on the strategic orientation and the kinds of alliances that can move

the debate forward. To this end, applied to the debate over market solutions to the climate crisis, consider the late French sociologist Andre Gorz's distinction (in his books *Strategy for Labor* and *Socialism and Revolution*) between "reformist reforms" and "non-reformist reforms":

- 1) Reformist reforms undergird, strengthen, and relegitimize the main institutions and dynamics in the system that cause the climate change problem, and thus weaken and demobilize environmental and social justice advocacy communities through cooption;
- 2) *Non-reformist* reforms undermine, weaken, and delegitimize the climate change system's main institutions and dynamics, and consequently strengthen its critics, giving them momentum and further reason to mobilize.

Four market-based emissions mitigation initiatives along this spectrum can be distinguished:

- 1) Carbon trades without auctions. Under this initiative, pollution permits are grandfathered in, as in the European Trading Scheme. This option is now so widely delegitimized that only U.S. Republican Party presidential candidate John McCain supports them.
- 2) Carbon trades with auctions. This option is expected to increasingly dominate discussions—especially in the U.S. if Barack Obama is elected president—in part because many mainstream commentators and large environmental organizations support them.
- 3) Carbon taxes, which can either be revenue-neutral or raise funds for renewables and socio-economic transformation. Carbon taxes will continue to be seen as the main progressive alternative to carbon trading, even though such taxes do not address more fundamental power relations or achieve the systematic change required to avert climate disaster.
- 4) Greenhouse Development Rights, Contraction-and-Convergence, and other per capita "right to pollute" strategies with a North-South redistributive orientation. This option is also advocated by eloquent environmentalists and some Third World leaders, and entails a trading component and the property right to emit.

Each strategy has major disadvantages by virtue of being located within market-based systems, especially during a period of extreme financial volatility during which energy-related securities (including emissions credits) have been among the most unreliable measures of value. The first two are reformist reforms, and the latter two have non-reformist *possibilities*. Two further non-reformist approaches—command-and-control emissions prohibitions and local supply-side strategies (a kind of command-and-control *from below*)—offer important alternatives.

A central problem is that reformist reforms can be *counterproductive* to mitigating climate change, because an exploitative system can become even stronger in the wake of an eco-social change campaign. If campaigners unwittingly adopt the same logic of the system and turn to the institutions responsible for causing the damage and in the process restore those institutions' credibility, the reforms will likely do more harm than good.

To illustrate, if mainstream environmentalists endorse World Bank strategies to commodify forests through the "Reducing Emissions From Deforestation and Degradation" (REDD) program, their co-optation inevitably strengthens the Bank—an institution responsible for vast climate damage as a major fossil fuel investor—and weakens the work of indigenous people and environmental activists trying to protect the forests. The reformist-reform logic appears in the case of a Brazilian meat-packing plant in the Amazon that coincides with the Bank's investments in forest protection. There are, in such cases, persuasive advocates of reform, such as Dr. Daniel Nepstad of Woods Hole Research Institute, who accept the basic parameters of the system's logic—namely the ongoing exploitation of the Amazon—and who seek to tame that process using World Bank resources:

The irony is that at the same time the World Bank was launching the Forest Carbon Partnership Facility, the International Finance Corporation [a World Bank agency] was making a loan to the Bertin meat-packing plant in the Brazilian Amazon. The loan aims to set up a sustainable supply of beef for an ecological meat-packing facility in Marab in the state of Para. What upset the protestors was the idea that the same institution would be accelerating deforestation by expanding the capacity to process meat in the Amazon region as it creates this mechanism for compensating nations for reducing their emissions.

Our own feeling on this is that there comes a point where we have to acknowledge that the region is undergoing an economic transformation and if we can find a powerful lever for commodifying how this transformation takes place—putting a premium on legal land-use practices, legal deforestation, the gradual elimination of the use of fire—we should take it. For me that trumps the negative consequences of setting up increased capacity in the region. In other words, I really do believe that there are many responsible cattle ranchers and soy farmers in the Amazon who are waiting for some sort of recognition through positive incentives.

The incentive could be a very small mark up—literally a few cents per pound of beef sold—but it would send a signal to these ranchers that if they want to participate in the new beef economy, they better have their legal forest reserve in order or have compensated for it, maintain or be in the process of restoring their riparian zone forests, control erosion, and get their cows out of the streams and into artificial watering tanks. There is a whole range of positive things that can happen once cattle ranchers see that if they do things right they are rewarded. This means that as Brazil moves forward as the world's leading exporter of beef—with tremendous potential to expand—we have a way to shape that expansion as it takes place to reduce the negative ecological impacts.

Such logic is also evident in efforts to reform carbon trading by advocating the auctioning of emissions permits. In opposition to reformist reforms, a coalition of 32 Indigenous Peoples (and environmental allies) lobbied against the REDD program:

Given the threat to Indigenous Peoples' Rights that REDD represents, we call on the United Nations Permanent Forum on Indigenous Issues to recommend strongly to the UNFCCC, the UN Forum of Forests, concerned UN agencies such as UNEP, the World Bank, the Special Rapporteur on Human Rights and Fundamental Freedoms of Indigenous Peoples and nation states that REDD not be considered as a strategy to combat Climate Change but, in fact, is in violation of the UN Declaration on Indigenous Peoples. Moreover, we also urge the Permanent Forum to recommend strongly to the Convention on Biological Diversity that the implementation of the program of work on Forests and biodiversity prohibit REDD. We also further urge that Paragraph 5 be amended to remove "clean development mechanism, the Clean Energy Investment Framework, and the Global Environment Facility." These initiatives do not demonstrate good examples of partnership with indigenous peoples. There are many CDM projects that have human rights violations,

lack of transparency and have failed to recognize the principles of Free, Prior and Informed Consent.

In contrast to reformist reform initiatives such as REDD, non-reformist reforms are generated by campaigns that explicitly reject the underlying logic of climate change, i.e., fossil fuel exploitation. Such reforms legitimate the *opponents* of the system, not the system itself, and lead to further mobilization rather than to the movement's cooptation. An example is the partially successful struggle to "keep the oil in the soil" in the Yasuní National Park waged for several years by the Quito NGO Accion Ecologia and its Oil Watch allies. The campaign advanced rapidly in 2007 when Ecuadoran president Rafael Correa declared his intent to leave \$12 billion worth of oil reserves untouched in perpetuity in exchange for anticipated payments from international sources—not as a carbon offset, but instead to be considered part of the North's repayment of its "ecological debt" to the South.

The aim of the proposal is to provide a creative solution for the threat posed by the extraction of crude oil in the Ishpingo-Tiputini-Tambococha (ITT) oil fields, which are located in the highly vulnerable area of Yasuní National Park. The proposal would contribute to preserving biodiversity, reducing carbon dioxide emissions, and respecting the rights of indigenous peoples and their way of life.

Ecuadorian President Rafael Correa has stated that the country's first option is to maintain the crude oil in the subsoil. The national and international communities would be called on to help the Ecuadorian government implement this costly decision for the country. The government hopes to recover 50 percent of the revenues it would obtain by extracting the oil. The procedure involves the issuing of government bonds for the crude oil that will remain "in situ," with the double commitment of never extracting this oil and of protecting Yasuní National Park. It is important to keep in mind that if Ecuador succeeds in receiving the hoped for amount—estimated at \$350 million annually—it would only be for a period of ten years beginning after the sixth year, since production and potential revenues would progressively decline at the end of that period.

A more promising alternative would be a strategy to provide the government with the 50 percent of resources in such a way as to provide a consistent income for an indefinite period of time. These resources would be channelled towards activities that help to free the country from its dependency on exports and imports and to consolidate food sovereignty. The proposal is framed within the national and international contexts based on the following considerations:

- 1. halt climate change
- 2. stop destruction of biodiversity
- 3. protect the Huaorani people
- 4. economic transformation of the country.

The very notion of an "ecological debt" is also a non-reformist reform, because although it asserts the calculation of the monetary value of nature (certainly a problem in terms of neoliberal logic), the payment required to meet such an obligation would revise such a range of power relationships that massive structural change would inevitably follow. Such linkages between environmental stewardship and social justice provide the only sure way to generate political principles that can inform lasting climate mitigation. Prior to concluding with these movements' most recent call to action, we must quickly review the proposals "in between," and ask whether principles of non-reformist reformism will be adopted by those advocating carbon taxes and per capita emissions rights.

Two crucial questions emerge which will help determine whether the reforms proposed by carbon tax and per capita emissions rights advocates do more harm than good.

The first is whether the kinds of reforms proposed—which entail putting a price on carbon and exposing that price (and all manner of related negotiations) to corporate-dominated national and global-scale "governance" initiatives—can be assured to both genuinely address the climate crisis and also redistribute energy and economic resources from rich to poor. The "devil is in the details" in relation to both a carbon tax and per capita emissions rights, yet the presumptions entailed in taxation (which often has a maldistributive impact, as shown in the British Columbia gas tax) and allocations of property rights will make a constructive outcome unlikely.

Might non-reformist reform opportunities emerge so that a carbon tax redistributes resources to both renewable energy investments and to low-income people who, through no fault of their own, are most vulnerable to the impacts of higher energy prices? Could a per capita rights mechanism be designed and adopted that move forward the agenda of the environmental and social justice movements without falling victim to market distortions? These are not impossible outcomes, but given prevailing power relations are presently quite unlikely.

Strategic Problems for the Environmental Justice Movement

The next question is whether pursuing these sorts of reforms will contribute to the expansion and empowerment of the environmental justice movement. At the December 2007 Bali Conference of Parties, a movement emerged to unite "green" and "red" demands, which includes:

- reduced consumption;
- huge financial transfers from North to South based on historical responsibility and ecological debt for adaptation and mitigation costs to be paid for by redirecting military budgets, implementing innovative taxes, and cancelling debt;
- leaving fossil fuels in the ground and investing in appropriate energy-efficiency and safe, clean, and community-led renewable energy;
- rights-based resource conservation that enforces Indigenous land rights and promotes peoples' sovereignty over energy, forests, land, and water; and
- sustainable family farming and peoples' food sovereignty.

The alternative strategies proposed above do not rely entirely upon command-and-control, for that in turn requires national and ultimately global *state power*, which is not likely to be exercised by environmentally responsible political parties for many years if not decades, notwithstanding encouraging signs from Ecuador. Instead, a new approach to *command-and-control-from-below* is being adopted which takes forward community, labor and environmental strategies to leave resources in the ground, especially fossil fuels and especially in cases where "resource curse" economic power relations prevail. It is in such cases where activists have an unprecedented opportunity.

Because of the failure of elites to properly recognize and address climate change, and because their strategy of commodifying the commons through the Clean Development Mechanism was already a serious threat to numerous local communities across the Third World, the Durban Group for Climate Justice produced a Declaration on Carbon Trading in 2004, which rejected the claim that a carbon market strategy could halt the climate crisis. It insisted that the crisis has been caused more than anything else by the mining of fossil fuels

and the release of their carbon to the oceans, air, soil, and living things.

The Durban Declaration suggested that people need to be made more aware of the threat of carbon trading and actively intervene against it. By August 2005, inspiring citizen activism in Durban's Clare Estate community forced the municipality to withdraw an application to the World Bank for carbon trading finance to include methane extraction from the vast Bisasar Road landfill. (The city instead applied for two relatively tiny suburban dumps). But the heroic battle against Bisasar's CDM status was merely defensive, and the loss of Sajida Khan to cancer in July 2007 was a great blow to the struggle there. Community residents have a proactive agenda to urgently ensure the safe and environmentally sound extraction of methane from the Bisasar Road landfill, even if that means slightly higher rubbish removal bills for those in Durban who are thoughtlessly filling its landfills without recycling their waste.

When the Durban Declaration was drafted in October 2004, only cutting-edge environmental activists and experts understood the dangers of carbon trading. Others—including many well-meaning climate activists—argued that the dangers are not intrinsic in trading, just in the rotting "low hanging fruits" that represent the first and easiest projects to fund at the cheapest carbon price. Since then, however, numerous voices have been raised against carbon colonialism. These voices oppose the notion that through carbon trading, Northern polluters can continue their fossil fuel addiction, drawing down the global atmospheric commons in the process. Rather than foisting destructive schemes like the toxic Bisasar Road dump on the South, the North owes a vast ecological debt.

Direct Action to Protect the Climate Commons

It is here, finally, where the most crucial lesson of the climate debate lies: in confirming the grassroots, coalface and fenceline demand by civil society activists to *leave the oil in the soil, the coal in the hole, the resources in the ground.* This demand emanated in a systemic way at the Kyoto Protocol negotiations in 1997 from the group OilWatch when it was based in Quito, Ecuador, as heroic activists from Accion Ecologia took on struggles such as halting exploitation of the Yasuní oil.

Within a decade, in January 2007 at the World Social Forum in Nairobi, many other groups became aware of this movement thanks to eloquent activists from the Niger Delta, including the Port Harcourt NGO, Environmental Rights Action. (ERA visited Durban in March 2007 to expand the network with excellent allies, such as the South Durban Community Environmental Alliance and the Pietermaritzburg NGO, groundWork, and in turn these groups committed in July 2008 to campaign against the proposed pipeline from Durban to Johannesburg, which would double petrol product flow).

But the legacy of resisting fossil fuel abuse goes back much further and includes Alaskan and Californian environmentalists who halted drilling and even exploration. In Norway, the global justice group, ATTAC, took up the same concerns in an October 2007 conference and began the hard work of persuading wealthy Norwegian Oil Fund managers that they should use the vast proceeds of their North Sea inheritance to repay Ecuadorans some of the ecological debt owed. In Australia, regular blockades of Newcastle coal transport (by rail and sea) by the activist group, Rising Tide, correspond to Al Gore's injunction, noted at the outset. As Gore showed in his August 2008 endorsement of Obama at the Denver

Democratic Convention, the establishment's desire for offsets will require even more intensive activism of this sort.

Canada is another Northern site where activists are hard at work to leave the oil in the soil. At a November 2007 conference in Edmonton, the Parkland Institute of the University of Alberta also addressed the need to halt development of tar sand deposits (which require a liter of oil to be burned for every three extracted, and thus devastate local water, fisheries, and air quality). Institute director Gordon Laxer laid out careful arguments for strict limits on the use of water and greenhouse gas emissions in tar sand extraction; realistic land reclamation plans (including a financial deposit large enough to cover full-cost reclamation up-front); no further subsidies for the production of dirty energy; provisions for energy security for Canadians (since so much of the tar sand extract is exported to the U.S.); and much higher economic rents on dirty energy to fund a clean energy industry (currently Alberta has a very low royalty rate). These kinds of provisions would strictly limit the extraction of fossil fuels and permit oil to leave the soil only under conditions in which much greater socio-ecological and economic benefit is retained by the broader society.

There are many other examples where courageous communities and environmentalists have lobbied successfully to keep nonrenewable resources (not just fossil fuels) in the ground for the sake of the environment, community stability, disincentivizing political corruption, and workforce health and safety. The highest-stake cases in South Africa at present may well be the Limpopo Province platinum fields and Wild Coast titanium finds where communities are resisting foreign companies. The extraction of these resources is incredibly costly in terms of local land use, water extraction, energy consumption, and political corruption, and requires constant surveillance and community solidarity.

In ending this article, I turn for guidance first to George Monbiot, one of the most eloquent contemporary climate analysts, and then to the Climate Justice Now network that has emerged from the most enlightened, militant grassroots and NGO forces to fight the neoliberal climate negotiators. Instead of going to Bali in December 2007 to report on the 13th Conference of the Parties (COP 13) to the United Nations Framework Convention on Climate Change (UNFCCC), Monbiot stayed home in Britain to cause some trouble, writing in his *Guardian* column:

Ladies and gentlemen, I have the answer! Incredible as it might seem, I have stumbled across the single technology which will save us from runaway climate change! From the goodness of my heart I offer it to you for free. No patents, no small print, no hidden clauses. Already this technology, a radical new kind of carbon capture and storage, is causing a stir among scientists. It is cheap, it is efficient and it can be deployed straight away. It is called ... leaving fossil fuels in the ground.

On a filthy day last week, as governments gathered in Bali to prevaricate about climate change, a group of us tried to put this policy into effect. We swarmed into the opencast coal mine being dug at Ffos-y-fran in South Wales and occupied the excavators, shutting down the works for the day. We were motivated by a fact which the wise heads in Bali have somehow missed: if fossil fuels are extracted, they will be used... The coal extracted from Ffos-y-fran alone will produce 29.5 million tonnes of carbon dioxide: equivalent, according to the latest figures from the Intergovernmental Panel on Climate Change, to the sustainable emissions of 55 million people for one year...

Before oil peaks, demand is likely to outstrip supply and the price will soar. The result is that the oil firms will have an even greater incentive to extract the stuff.

Already, encouraged by recent prices, the pollutocrats are pouring billions into unconventional oil. Last week BP announced a massive investment in Canadian tar sands. Oil produced from tar sands creates even more carbon emissions than the extraction of petroleum. There's enough tar and kerogen in North America to cook the planet several times over.

If that runs out they switch to coal, of which there is hundreds of years' supply. Sasol, the South African company founded during the apartheid period (when supplies of oil were blocked) to turn coal into liquid transport fuel, is conducting feasibility studies for new plants in India, China and the U.S.. Neither geology nor market forces is going to save us from climate change.

When you review the plans for fossil fuel extraction, the horrible truth dawns that every carboncutting program on earth is a con. Without supply-side policies, runaway climate change is inevitable, however hard we try to cut demand.

In Bali, however, an extraordinary group of activists did go and put up a fight, including the supply-side, demanding that the oil be kept in the soil, the coal in the hole. The Climate Justice Now! coalition statement is the proper way to end, with respect for the manner in which the global justice movement and radical environmentalism came together, finding unity in opposition to the neoliberal project of fixing the market problem with a supposed market solution.

Climate Justice Now! Coalition Founding statement, Bali, December 14, 2007

Peoples from social organizations and movements from across the globe brought the fight for social, ecological and gender justice into the negotiating rooms and onto the streets during the UN climate summit in Bali. Inside and outside the convention center, activists demanded alternative policies and practices that protect livelihoods and the environment.

In dozens of side events, reports, impromptu protests and press conferences, the false solutions to climate change—such as carbon offsetting, carbon trading for forests, agrofuels, trade liberalization and privatization pushed by governments, financial institutions and multinational corporations—have been exposed.

Affected communities, Indigenous Peoples, women and peasant farmers called for real solutions to the climate crisis, solutions which have failed to capture the attention of political leaders. These genuine solutions include:

- reduced consumption;
- huge financial transfers from North to South based on historical responsibility and ecological debt for adaptation and mitigation costs to be paid for by redirecting military budgets, implementing innovative taxes, and cancelling debt;
- leaving fossil fuels in the ground and investing in appropriate energy-efficiency and safe, clean, and community-led renewable energy;
- rights-based resource conservation that enforces Indigenous land rights and promotes peoples' sovereignty over energy, forests, land, and water; and
- sustainable family farming and peoples' food sovereignty.

Inside the negotiations, the rich industrialized countries have put unjustifiable pressure on Southern governments to commit to emissions reductions. At the same time, they have refused to live up to their own legal and moral obligations to radically cut emissions and support developing countries' efforts to reduce emissions and adapt to climate impacts. Once again, the majority world is being forced to pay for the excesses of the minority.

Compared to the outcomes of the official negotiations, the major success of Bali is the momentum that has been built towards creating a diverse, global movement for climate justice.

We will take our struggle forward not just in the talks, but on the ground and in the streets—Climate Justice Now!