Politics of Climate Justice

*Paralysis Above, Movement Below*

Patrick Bond
For Jan and Kati
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## Abbreviations

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<th>Abbreviation</th>
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<tr>
<td>ANC</td>
<td>African National Congress</td>
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<tr>
<td>AU</td>
<td>African Union</td>
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<td>BASIC</td>
<td>Brazil, South Africa, India and China</td>
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<td>BTU</td>
<td>British Thermal Unit</td>
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<td>CDM</td>
<td>Clean Development Mechanism</td>
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<td>CFU</td>
<td>Carbon Finance Unit</td>
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<td>CLEAR</td>
<td>Carbon Limits and Energy for America’s Renewal Act</td>
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<td>$CO_2$</td>
<td>carbon dioxide</td>
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<td>COP</td>
<td>Conference of the Parties</td>
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<td>EPA</td>
<td>Environmental Protection Agency</td>
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<td>ETS</td>
<td>Emissions Trading Scheme</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GDR</td>
<td>Greenhouse Development Rights</td>
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<td>GWC</td>
<td>Growth without Constraint</td>
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<td>IEG</td>
<td>Independent Evaluation Group</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>IPCC</td>
<td>Intergovernmental Panel on Climate Change</td>
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<td>IUCN</td>
<td>International Union for Conservation of Nature</td>
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<tr>
<td>LTMS</td>
<td>Long-Term Mitigation Scenario</td>
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<td>MEC</td>
<td>minerals-energy complex</td>
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<td>MEND</td>
<td>Movement for the Emancipation of the Niger Delta</td>
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<td>NEPA</td>
<td>National Environmental Policy Act</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<tr>
<td>NGO</td>
<td>non-governmental organisation</td>
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<tr>
<td>OAU</td>
<td>Organisation of African Unity</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<tr>
<td>OPEC</td>
<td>Organisation of Petroleum Exporting Countries</td>
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<tr>
<td>REDD</td>
<td>Reducing Emissions from Deforestation and Forest Degradation</td>
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<tr>
<td>REDOIL</td>
<td>Resisting Environmental Destruction on Indigenous Lands</td>
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<tr>
<td>SO$_2$</td>
<td>sulphur dioxide</td>
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<tr>
<td>TAC</td>
<td>Treatment Action Campaign</td>
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<tr>
<td>TRIPS</td>
<td>Trade Related Aspects of Intellectual Property Rights</td>
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<tr>
<td>UBS</td>
<td>Union Bank of Switzerland</td>
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<tr>
<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNFCCC</td>
<td>United Nations Framework Convention on Climate Change</td>
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<td>WBG</td>
<td>World Bank Group</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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Preface

The early summer sea breeze in South Durban meant, according to The Mercury newspaper’s award-winning environment reporter Tony Carnie, that when the oil refinery fire broke out at 11 am on 10 October 2011 during the children’s mid-morning play-time break, ‘white school clothes were stained with blotches of an oily substance carried downwind to the school’. Settlers Primary School already has the world’s highest-recorded asthma rate – 52 per cent of students affected – with no change anticipated a mere six weeks to go before Durban’s glitzy Albert Luthuli International Convention Centre (ICC) hosts the Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC).

No one was killed this time, but as Carnie’s story on the newspaper’s front page the next morning recorded:

More than 100 primary school children were taken to hospital yesterday – some struggling for breath, others with itchy skin and eyes – after being splattered by air-borne droplets of crude oil and a cloud of smoke and soot from another fire at the Engen fuel refinery in South Durban . . . Desmond D’Sa of the South Durban Community Environmental Alliance [SDCEA]
said the latest fire was ‘an indictment against both Engen and government health and safety officials’.

‘We regret any inconvenience or discomfort caused,’ refinery spokesman Herb Payne said.

I read this newspaper account online over a strong coffee brought thousands of miles for me to enjoy, probably with the last leg to the Bean Green Roastery courtesy of Engen-refined petrol, and I write today from a safer space of South Durban. I live in a small flat on the Bluff, near the sunny beachfront a few kilometres north of Settlers, looking out over the azure blue Indian Ocean, but unable to avoid thinking of ongoing race/class segregation that again and again puts darker skins and poorer residential areas in the line of fire, quite literally. We have seen worse fires here, including one at the same facility in November 2007 that burned 58 hours before finally being extinguished.

This old ‘rustbucket’, as locals call the refinery, combines with the nearby Shell/BP Sapref complex as the second largest petrol refining site in Africa (there is a slightly larger one in Algeria). More than 300 000 barrels of oil a day come from these refineries, and the communities nearby so ably represented by D’Sa and SDCEA have long demanded that they be closed, so that the area’s 300 000 residents don’t keep suffering these terrifying mini-Bhopals.

The threat is also just offshore, for South Durban’s Cuttings Beach witnessed a significant 2004 oil spill of five tonnes at the Single Buoy Mooring, the 50-metre deep intake pump that feeds the refineries with 80 per cent of South Africa’s crude oil imports. Sapref’s worst leak so far was 1.5 million litres into the Bluff Nature Reserve and adjoining residences in 2001.

Occasionally, a few times a year, the ill winds float sulphur dioxide and other emissions above the Bluff’s ridge so I, too, smell them, but it is increasingly rare since some scrubbers were installed
to reduce Engen’s most noxious, immediate pollution. Carbon
dioxide is now the main concern, the reason that SDCEA’s call for
‘Not in my backyard!’ has become ‘Not in the planet’s backyard!’

Halfway between Engen and Sapref is a river, the Umlaas, and
sometimes the E. coli and other pollutants that over-populate this
water in amounts many thousands of times higher than considered
safe, will plume northwards from the river mouth, raising the
yellow water-quality alarm cards at Brighton Beach. Occasionally,
a few times a year, the surfers, swimmers and paddlers at Cave
Rock below my flat – a favourite spot for my son Jan and daughter
Kati – get a runny tummy and sore eyes.

Indeed, South Durban’s beautiful beaches, and the sandy reef
providing one of the world’s great right-breaking barrel waves
during winter swells, were nearly completely destroyed a few months
before I moved here. In March 2007, autumn waves stormed up
5 metres high, wrecking the access road for nearly a year and doing
billions of rands worth of damage along the coast. A year and a
half later a tornado ripped up several Bluff residents’ roofs, and
many extreme storms have been recorded nearby, with one in June
2008 generating floods so high as to nearly cut off the entire Bluff,
Wentworth and Clairwood areas from the rest of the city. I am
learning about the politics of climate justice much closer to home
than I realised, and about how little the world’s elites are doing to
address the crisis.

The COP17 Conference of Polluters
Can anything save us from rising seawaters, droughts and floods
and more of the pollutants that leave so many oily splotches on
playing children and the planet itself? I write these words just after
a UNFCCC preparatory meeting in Panama City, from which
Mithika Mwenda, from the Pan African Climate Justice Alliance,
poignantly emailed me,
Everything seems falling. My assessment is that there will be no deal in Durban – and we have agreed as civil society here that we cannot have a deal at any cost. They either agree on a people-centred and responsive agreement or we collapse it WTO-way. The spirit among the developing countries is very impressive, and as we reach the homestretch, we need to keep up the pressure.

The failure of Durban’s COP17 – a veritable ‘Conference of Polluters’ – is certain, but the nuance and spin are also important for the next round of struggle. Binding emissions-cut commitments under the Kyoto Protocol are impossible given Washington’s push for an alternate architecture that is also built upon sand. The devils in the details over climate finance and technology include an extension of private-sector profit-making opportunities at public expense, plus bizarre new technologies that threaten planetary safety.

Politically, it seems as if the overall orientation of global climate policy managers, especially from the US State Department and World Bank, will be to eventually displace the main process to the G20. This requires distraction of our attention from any potential overall UN solution to the climate crisis – which in any case is a zero-possibility in the near future because of the terribly adverse power balance – and to ignore civil society’s varied critiques of market strategies, its campaigns to keep fossil fuels in the ground and its plans for state-subsidised, community-controlled transformative energy, transport, production, consumption and disposal systems.

Recall from the prior COP, in Cancún, that the primary face-saving device at this summit amounted to restoring faith in carbon markets. That worked so poorly that yesterday’s news carries word that one of the largest carbon market firms, Trading Emissions PLC, is unable to pay a dividend. According to Point Carbon news
service, the company’s ‘current market cap at 136 million pounds is almost half’ of the 247 million pounds valuation since January. Prices for offsets generated under the Kyoto protocol have fallen by a third since the start of the year and are currently trading at 7.85 euros in the secondary market.’ Not only have prices fallen because of Clean Development Mechanism credit oversupply by United Nations authorities, but the European Union’s market has been contracting and none of the other anticipated carbon markets in the rich countries have materialised. (Nor should they, as I argue in the coming pages.)

Moreover, immediately after Cancún, all the worst tendencies in world capitalism conjoined to prevent progress on the two main areas of COP17 decisions: financing and technology. The latter includes intellectual property rights barriers that remind us of how militant AIDS treatment activists considered anti-retroviral (ARV) medicines in 2003 at the Doha World Trade Organisation summit. Before that summit, Trade Related Intellectual Property Rights provisions allowed Big Pharma to charge $15 000 per person per year for life-saving ARVs, even though generic drugs cost a fraction of that sum. A similar push to decommodify vital climate technology is needed, but only a few activists have prioritised this struggle given that such infrastructure usually requires substantial state or corporate investment.

Instead, technological processes that threaten the earth have intensified, such as geo-engineering, shale gas fracking, tar sands extraction, and carbon capture and storage schemes aiming to bury greenhouse gases. The Johannesburg company SASOL continues to build up the world’s most carbon dioxide-intensive factory by converting coal and gas to liquid petroleum, for which it constantly requests carbon credits from the United Nations.

And in spite of the Fukushima catastrophe in Japan, the US and South Africa continue a major nuclear energy expansion, with
a trillion-rand tender reported, beginning with a plant next to another of South Africa’s greatest surf spots, Jeffrey’s Bay. In addition, the mad idea of seeding the oceans with iron filings to generate carbon-sequestrating algae blooms continues to get attention. In October 2010, the Convention on Biological Diversity in Nagoya, Japan, called for a halt to geo-engineering, but just a year later, British scientists began experimenting with stratospheric aerosol injections as a way to artificially cool the planet. As technology watchdog Diana Bronson of the ETC Group put it: ‘This so-called Solar Radiation Management could have devastating consequences: altering precipitation patterns, threatening food supplies and public health, destroying ozone and diminishing the effectiveness of solar power, in addition to many other known and unknown impacts.’ The British stopped the Dr Strangelove experiment under pressure but a South African government representative proudly supported the idea at a COP17 provincial preparatory committee at the Albert Luthuli ICC in September 2011.

The financial mechanisms under debate since Cancún are just as dangerous because austerity-minded states in the US and European Union are backtracking on their $100 billion/year promise of a Green Climate Fund to promote carbon trading. Thanks to World Bank pressure, that Fund appears set to re-subsidise carbon markets by ensuring they become the source of revenues, instead of larger flows of direct aid from rich countries, which activists suggest should become a down payment on the North’s ‘climate debt’ to the South. The markets have been foiled by their own internal corruption and contradictions, as well as by left critiques in key sites such as California and Australia, and right-wing climate change denialism in the US Congress. Ongoing world financial chaos means no one can trust the markets to self-correct.

With the trajectory going into Durban, the result will be a cataclysmic 4–5°C rise in temperature over this century, and if
Copenhagen and Cancún promises are broken, as is reasonable to anticipate, 7°C is likely.

After sixteen annual Conferences of the Parties, the power balance within the UNFCCC continues to degenerate. On the other hand, growing awareness of elite paralysis is rising here in Durban, even within a generally uncritical mass media. That means the outside ‘People’s Space’ occupied by activists will be crucial for highlighting extraction campaigns including the Canadian tar sands, West Virginia mountains, Ecuadorian Amazon and Niger Delta – the hottest spots at present – as well as many other African sites of resistance to the resource curse.

But beyond defensive campaigning, we are finding that transformative politics are also crucial, and we are far behind where we need to be. The most robust community politics on display will address sustained popular demands for a better environment in townships, including increased housing, electricity, water and sanitation, waste removal, healthcare and education. Connecting the dots to climate is the challenge for all the movement strategists. The post-apartheid South African government’s lack of progress on renewable energy, public transport and ecologically aware production mirrors its failures in basic service delivery, which in turn have generated amongst the world’s highest rates of social protest – and to link these via the new Durban Climate Justice network will offer a real threat, not of ‘Seattling’ Durban, ‘WTO-way’, but of establishing a counter-power that cannot be ignored.

*Leave the oil in the soil*

We find in the final chapter of this book the beginnings of that climate counter-power, and one reflection from the Amazon – where I snapped the background cover photo for this book – is illustrative. There is no way around it: to solve the worsening
climate crisis requires we must accept both that the vast majority of fossil fuels must now be left underground, and that through democratic planning, we must collectively reboot our energy, transport, agricultural, production, consumption and disposal systems so that by 2050 we experience good living – the Bolivian ‘buen vivir’ including ‘Rights of Nature’ – with less than a quarter of our current levels of greenhouse gas emissions.

That is what science tells our species, and because of flying so much, I am feeling an acute need to identify and contest the full petroleum commodity chain up to the point it not only poisons my South Durban neighbours but generates catastrophic climate change. And regrettably, this search must include Venezuela, Bolivia, Ecuador and Peru (and maybe Cuba as well), for even South America’s most progressive governments are currently extracting and exporting as much oil and gas as they possibly can. We may even be recipients in South Africa if government’s plans to build a massive R80 billion heavy oil refinery near Port Elizabeth come to fruition. A R2.5 billion down payment was announced in the last budget, and full capacity will be 400 000 barrels per day.

From where would this dirty crude come? Two weeks before he was booted from office in September 2008, disgraced South African president Thabo Mbeki signed a heavy oil deal with Hugo Chavez of Venezuela. It appeared to be a last-gasp effort by Mbeki to restore a shred of credibility with the core group to his left – the Congress of South African Trade Unions and South African Communist Party – who successfully conspired to replace him with their own candidate, Jacob Zuma, as ruling party leader nine months earlier. In those last moments of power, Mbeki fancifully claimed he wanted to pursue Bolivarian-type trade deals, and Chavez told Mbeki, ‘It is justice . . . it will be a wonderful day when the first Venezuelan tanker stops by to leave oil for South Africa’. No, this is not justice, for the harsh reality is that the preferred refinery site,
Port Elizabeth's Coega, will probably retain its nickname, the ‘Ghost on the Coast’, and Durban will continue to suffer the bulk of oil imports, as BP now actively campaigns against a new state refinery.

Venezuelan dirty crude is akin to Canadian tar sands, and hopefully sense will prevail in Caracas. There is a fierce battle, however, for hearts and minds in both Bolivia — where movements fighting ‘extractivism’ have held demonstrations against the first indigenous president, Evo Morales, even at the same time his former UN ambassador Pablo Solon bravely led the world climate justice fight within the hopeless arena of UNFCCC negotiations — and Ecuador where Rafael Correa regularly speaks of replacing capitalism with socialism. Both have Rights of Nature in their constitutions — so far untested.

In Quito and Neuva Rocafuerte, deep in the Amazon, in July 2011, I witnessed the most advanced eco-social battle for a nation's hearts and minds underway anywhere, with the extraordinary NGO Acción Ecólogica insisting that Correa's grudging government leaves the oil in Yasuni National Park's soil. Because he was trained in neoclassical economics and has not quite recovered, Correa favours selling Yasuni forests on the carbon markets, which progressive ecologists reject in principle. Acción Ecólogica assembled 40 members of the civil society network Oilwatch — including four others from Africa led by Friends of the Earth International chairperson Nnimmo Bassey from the Niger Delta — first to witness the mess left by Chevron after a quarter century's operations. In February 2011, local courts found the firm responsible for $8.6 billion in damages: cultural destruction including extinction of two indigenous nations, and water and soil pollution and deforestation in the earth's greatest lung — but Chevron's California headquarters refuses to cough up.

The really hopeful part of the visit, however, was Acción Ecólogica's proposal at Yasuni, on the Peruvian border, that
$7–10 billion worth of oil not be drilled. Part of the North’s debt for overuse of the planet’s carbon dioxide carrying capacity must be to compensate Ecuador’s people the $3.5 billion that they would otherwise earn from extracting the oil. Leaving it unexploited in the Amazon is the most reasonable way that industrial and post-industrial countries can make a down payment on their climate debt.

If the United Nation’s Green Climate Fund design team, co-chaired by South African planning minister Trevor Manuel, were serious about spending its promised $100 billion a year by 2020, this project is where they would start, with an announcement on 28 November to put the Durban COP17 climate summit on the right footing. Don’t count on it. Instead, as usual, civil society must push this argument, in the process insisting on leaving oil in the soil everywhere, so that we can eventually rid South Durban, and the world, of these refineries and all they represent.
In the past year of dissent, 2011, how can one not first, in any book about politics, acknowledge the greatest gift, genuine hope, bestowed on the world by courageous Tunisians, Egyptians, Greeks, Spaniards, Syrians, Yemenese and maybe even Occupy Wall Street activists (in so many places) who are trying to shake up and ship out their societies’ venal elites? Replacing ossified, systemic malgovernance and the ‘1 per cent’ in power with a transformed polity, economy and socio-ecological relationship is, quite obviously, achingly difficult. We can only be humbled by the task so many are now taking up, especially because the process of sparking revolutionary sentiments for deep democracy, economic justice and environmental stewardship is utterly unpredictable. Likewise, writing from a South Africa boasting amongst the world’s highest rate of social protests per person, most of us academics frankly do not understand the process of social change, and how to connect the dots between grievances, protest and solutions. But most of us in the middle are learning every day the most valuable lessons from below – and confirming every day the incompetence of those above.

Applied to climate-crisis capitalism, the urgent challenge of understanding then grasping political opportunities is harder still. While working within existing multilateral elite structures generates
only despondency, as the Durban COP17 shows, unfortunately the society-shaking movements for climate justice in all countries—much less at world scale—still require building, in some cases from scratch, and often lasting many years into the future before results can be claimed. Still, the rise of these movements is inevitable, despite an apparent lull as some of the finest cadres turned their primary attention in 2011 to fighting austerity and gluttonous financiers. Meantime, one objective of this book is to link up the analyses of economic and ecological crises, and of exemplary crisis-mongers, in the two middle chapters.

As I plodded away to this end, a great many people helped me work through the empirical information, analyses and political judgements herein, many in the course of passionate campaigning and some in careful scholarly settings.1 Over the long haul, I especially owe several political collectives—the Durban Group for Climate Justice since 2004, the Climate Justice Now! network since 2007, the Climate Justice Alliance in Copenhagen, indy-left South

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African activists (especially in the South Durban Community Environmental Alliance and groundWork) and all the allied activists and scholars who have worked together to construct a global-scale red-green politics over the past decade. These traditions are crucial, for now is a time when anything under the sun – even a fictional world carbon market and Clean Development Mechanism gimmicks in Africa – can be termed climate justice by the unscrupulous, and when the International Monetary Fund claims its work (for example, in Egypt) represents 'social justice'. The core ideas and commitments of progressive environmentalists and principled social movements have helped keep a grounding when trespassers (Chapter 4) tempt us into drifting off.

For those hosting me in universities, climate conferences, research trips, strategy sessions and activist moments during my 2010–11 sabbatical, I cannot thank you enough. These include my too-carbon-intensive but nevertheless very worthwhile visits to several hot frontlines: the Yasuni National Park in the Ecuadoran Amazon with Oilwatch and Acción Ecológica, TIDA-Gaza's broadening of the economic and ecological debate in Palestine, the Can Mas Deu squat in Barcelona, the Montreal ‘Cochabamba+1’ climate conference, the ‘6 Billion Ways’ conference in London, the World Social Forum in Dakar, a Sacramento activist gathering, a conference on Resource Rights in Washington, various alternative spaces during the COP16 global climate summit in Cancún, and the Oslo Social Forum. I also benefited from sharing drafts of this book in seminars and lectures with academic colleagues since August 2010, at universities including the Autonomous University of Barcelona, Bergen, Birzeit, Carleton, California (Berkeley, Davis and Riverside), City University of New York, Eduardo Mondlane, Georgia, Gyeongsang, Institute for Social Studies in The Hague, London School of Oriental and African Studies, Michigan, Newcastle, Oxford, San Francisco, Stanford, Toronto and Trinity
College Dublin. As ever, since doctoral supervision days, David Harvey served as the most profound model for properly mixing political economy and political ecology.

A sabbatical is a wonderful experience, and I must thank not only the University of KwaZulu-Natal for ten months’ leave, but all the amazing people I met while in Berkeley at Cal’s Geography Department (especially Gill) and within the Story of Stuff Project, the legendary Rose Street kompaun, and the Movement for Climate Justice West. A huge debt is owed to Annie and Dewi for everything, including permanent inspiration in search of eco-humanity, community, political impact and life balance. At the University of KwaZulu-Natal’s Centre for Civil Society, the team trying to keep me focused when I am away, or even here, comprised Amisi, Amy, Fidelis, Helen, John, Kanagie, Lungi, MamaDudu, Molefi, Mvuselelo, Orlean, Pamela, Ruth, Sarah, Shauna, Shepherd, Simphiwe, Thando,

2. Amongst institutional sponsors of the plane tickets and research/educational activities, I am grateful to the South African National Research Foundation for student support; the Korean National Research Foundation grant to the Gyeongsang University Institute for Social Sciences (NRF-2010-413-B00027); the Canadian International Development Research Centre’s York University Climate Adaptation project; the European Union-funded ‘Environmental Justice Organisations, Liability and Trade’ project; the Economic and Social Research Council-funded Research Network on Global Governance and the Emerging Global South; the Norwegian Research Foundation’s grant to Bergen University on ‘Climate Change Discourse, Rights, and the Poor’; the UKZN–University of California faculty exchange; the USA for Africa fund; the Wolpe Trust for bringing the most wonderful guests to Durban; the C.S. Mott Foundation for core support to the Centre for Civil Society; and the Rosa Luxemburg Foundation which purchased the first 200 of these books for distribution to their excellent social-change networks.
Trevor, Vishnu and our many School of Development Studies colleagues including Imraan and Julian. So if they did not really succeed, they must just keep trying harder, and so, too, though I try their patience, must my closest South African friends not give up, including Ashwin, Ben, Bobby, Brian, Des, Faith, Khadija, Mercia, Sam and Trevor. And on the homefront, nurturing wonderful children, Odette and Mary deserve far more than thanks for such committed caregiving this last year, especially as Jan, Kati/Cameron and their peers keep moving into this apparently self-destructive society so confidently, demanding the furthest-reaching generational justice.

In much revised form, parts of the chapters below appeared in periodicals, including *African Journal of Science, Technology, Innovation and Development, Antipode, Capitalism Nature Socialism, Human Geography, Journal of Australian Political Economy* (with co-author Michael Dorsey); *Review of Radical Political Economics;* and a set of ezines including *Pambazuka, ZNet, CounterPunch, Links, Amandla, Climate and Capitalism, Canadian Dimension* and my *Mercury* column in Durban. The rigorous editors – especially Dick, Joel, Karen, Salvatore, Firoze, Michael, Jeffrey, Terry, Ian and Venilla – are all thanked for regularly cleaning up my many mistakes. But at UKZN Press, it was up to Sally and Debra to make more coherent this winding manuscript, with their usual care, ably assisted by tough-love reviewers Jackie and David.
From Copenhagen to Cancún to Durban

*Deckchair Shifting on the Climate Titanic*

It was 4 am on 11 December 2010 in balmy Cancún, that ultra-protected, unsustainable bubble of hedonism in a sea of Mexican poverty. The city of 630 000 features a vast lagoon necklaced by a gaudy hotel strip, and was constructed purely as a fly-in resort just 35 years earlier. Its name is appropriately translated as ‘nest of snakes’. But at that moment, champagne corks popped and the victory of enlightened humanity over nature was declared. The 16th Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) finally concluded to thunderous self-applause and elite back-slapping, with high hopes for the COP17 in Durban.

With a sigh of relief, the global climate summit was portrayed by most participants and mainstream journalists as a ‘step forward’, in contrast to the 2009 Copenhagen talks, which were widely recognised as disastrous. The United States State Department lead negotiator Todd Stern bragged (apparently beyond caring about WikiLeaks’ disclosure of Washington’s climate talks bullying tactics two weeks earlier): ‘Ideas that were first of all, skeletal last year, and not approved, are now approved and elaborated.’

Those ideas were largely aimed at resurrecting the legitimacy of what we can term climate-crisis capitalism, namely, turning a medium/long-term humanity-threatening prospect (already responsible for extreme, immediate damage such as witnessed in Pakistan, Russia and China in 2010) into a short-term source of commodification, speculation and profit. The deals done to resurrect market strategies included commodification of nearly everything that could be seen as a carbon sink, especially forests but also agricultural land and even the ocean's capacity to ‘sequester’ (suck in) carbon dioxide (CO$_2$) for photosynthesis via algae. The basic idea behind the European Union’s (EU’s) Emissions Trading Scheme, the Kyoto Protocol’s Clean Development Mechanism and other for-profit climate financing programmes is harnessing and directing capital towards lower-emissions activities, renewable energy and various kinds of sinks. What is the incentive? Those participating, some in mandatory markets and others in voluntary markets, can continue their own business-as-usual practices until they find time and inclination to gradually make the necessary cuts.

As we will see, myriad problems have emerged with this climate management strategy. Markets have simply not performed with any degree of sustained effectiveness – certainly not to the scale required to tackle the biggest crisis humanity has ever faced, and certainly not in a time when financial markets have been so anarchic. By August 2011, even New York University Business School professor Nouriel Roubini remarked to the Wall Street Journal: ‘Karl Marx had it right. At some point, capitalism can destroy itself . . . We thought that markets worked. They’re not working.’

The same month, a senior economic adviser at the Union Bank of Switzerland (UBS), Europe’s largest, cited the ‘pretty shrewd’ observation by Marx that ‘material productive forces of society come into conflict with the existing relations of production’ to demonstrate that the global elites’ reliance upon market-centric
strategy is inadequate. According to UBS’ George Magnus, the recent meltdown

wrecked the financial stability and order that had previously prevailed, leaving us with a mountain of private and public debt to be reduced and restructured, aka the Great De-leveraging. Second, it blew up the economic model based on housing, credit expansion and financial services, not least depriving our governments of substantial tax revenues, and leaving us looking for new output and employment growth drivers. These financial and economic shocks have produced widespread insecurity, and revealed critical weaknesses in our capacity to re-create sustainable growth.³

Though some fanatics – for example, leading US economic policy manager Larry Summers – would nevertheless have us apply the logic of profit to the environment, illustrated by ‘win-win’ trade in toxic waste, the extreme limits of the search for market solutions to market problems are not yet known. But if global elites are intent on exploring these limits, why not try to save forests that are home to animals termed ‘large charismatic species’, via a specific offset fund, as promoted by World Bank president Robert Zoellick on a Cancún platform he shared with gorilla saviour Jane Goodall and the late Kenyan Nobel Peace Prize winner Wangari Maathai (as well as Walmart’s chief executive). Flirtation with zany ideas is nothing new for Zoellick, as we will see, but climate policy elites do still take this seriously, notwithstanding all the evidence to the contrary that continually crashes down – such as the $5 trillion wiped off world stock markets in one week in August 2011.

Such arrogant, unthinking faith in markets was a huge change from one year prior, when near-universal elite despondency was expressed after the non-binding, low target, deliberately vague
Politics of Climate Justice

Copenhagen Accord was signed. The scene on 18 December 2009 at COP15, in a small backroom in that city’s Bella Centre negotiating site, was a table with national leaders and their advisers from the US, China, India, Brazil and South Africa. The response then: howls of criticism from the general public and the collapse of carbon markets.

Thus it became apparent that paralysis, procrastination and more pollution is the preferred political strategy for negotiators who have a place at the power tables in UNFCCC negotiations. This reflects material interests, not lack of knowledge. The outlines of the problem are not debated any longer, aside from a few hardcore reactionaries whose ‘climate denialism’ and ‘climate scepticism’ are beyond the obvious scientific consensus that human-caused greenhouse gas emissions are wreaking havoc in the atmosphere, with far worse to come. There is no question that climate change ensures rising sea levels, submerging coastlines and sinking small islands; extreme droughts and the melting of icepacks and glaciers (hence drying sources of mountain water and then streams and rivers); violent storms and flooding that will overwhelm decrepit stormwater drainage systems; landslides on hilly terrain; geopolitical tension and new waves of ‘climate refugees’ into increasingly xenophobic societies; the disruption of food chains plus famines; and other coming disasters.

The solution is quite short and simple to articulate, but apparently impossible to implement: leave fossil fuels in the soil, halt deforestation and transform socio-economic structures so that renewable energy, public transport and low-carbon production, distribution, consumption and disposal systems replace those currently threatening the planet. The precedent for putting a global cap and then ban on a dangerous pollutant is the 1987 Montreal Protocol, which phased out chlorofluorocarbon gases that widen the ozone hole. The captains of the Climate Titanic lurched from
Kyoto to Copenhagen to Cancún, doing everything possible to avoid this logic, instead heading straight for the icebergs.

**Capital’s negotiators ‘doing their job’**

In Cancún, a mood of optimism was restored for future rounds of global climate negotiations, though everyone knew the deal would not even begin to address the requirements of climate science. Crunch time would come at the next meeting of heads of state and ministers, in steamy Durban in the dog days of a South African summer twelve months later, the penultimate year before the expiry of the Kyoto Protocol’s targets. Though the host government in Pretoria along with the other BASIC countries (Brazil, India and China) insisted on trying to save Kyoto, most observers predicted that the Durban summit would sink the 1997 deal instead of moving to a second, post-2012 stage of broader, deeper commitments.

But in Cancún, spirits rallied for those who promote ‘global governance’ in the form of co-ordinated world agreements to liberalise capitalism, even if only because a shot of adrenalin was pumped into near-lifeless mainstream climate strategies. The elites’ positive spin was based on reaching an international consensus (although Bolivia’s negotiator Pablo Solon formally dissented) and establishing a few new instruments to manage the climate crisis using capitalist techniques. Cancún’s defenders argued that the promised emissions cuts won in voluntary pledge-and-review sessions should be sufficient to keep world temperature increases below 2°C, with consideration to be given in future to lowering the target to 1.5°C. Negotiators also endorsed greater transparency about emissions; a Green Climate Fund led initially (and perhaps permanently) by the World Bank; the introduction of forest-related investments; transfers of technology for renewable energy; capacity building; and a strategy for reaching legally binding protocols in future.⁴
According to UNFCCC head Christiana Figueres, formerly a leading carbon trader: ‘Cancún has done its job. Nations have shown they can work together under a common roof, to reach consensus on a common cause.’ But even though there is now a loose Band-Aid on global governance after Obama ‘blew up the United Nations’ in Copenhagen, to quote 350.org leader Bill McKibben, the pages below argue that Cancún’s ‘common cause’ was climate injustice. Figueras and the Mexican leaders made skilled manoeuvres in a context of diplomatic desperation. But they allowed financiers, industrial capitalists, fossil fuel corporations and states to cement in the kinds of capitalist-crisis climate strategies that will make real solutions that much harder to achieve.

This was the logical extension of the trajectory from the first Earth Summit in Stockholm in 1972, where the idea of ‘common but differentiated responsibilities’ between the wealthier and poorer countries was accepted, including with respect to emissions cuts. The first COP was in 1995 but only on the third try in 1997 was the Kyoto Protocol adopted, and then only ratified by sufficient countries to take effect in 2005, with an expiry on its targets for binding emissions cuts in 2012: an average of 5.2 per cent below 1980s levels. By 2005 in Montreal, the watering down of even these weak provisions included a great many more opportunities for wealthy countries to avoid emissions cuts. In Copenhagen in 2009, the misnamed ‘bottom-up’ strategy of emissions-cut ‘pledge and review’ was introduced by Washington. The Durban COP17 is a showdown for those who would try to retain at least some of the Kyoto residue, for example the varieties of carbon trading and offset mechanisms that are threatened if the entire treaty is simply ditched in favour of the Copenhagen Accord.

What Mike Davis argued for the earlier rounds thus applies even more so to Cancún:
Climate diplomacy based on the Kyoto-Copenhagen template assumes that, once the major actors have accepted the consensus science in the UN Intergovernmental Panel on Climate Change (IPCC) reports, they will recognize an overriding common interest in gaining control over the greenhouse effect. But global warming is not H.G. Wells’ *War of the Worlds*, where invading Martians democratically annihilate humanity without class or ethnic distinction. Climate change, instead, will produce dramatically unequal impacts across regions and social classes, inflicting the greatest damage upon poor countries with the fewest resources for meaningful adaptation. This geographical separation of emission source from environmental consequence undermines pro-active solidarity. As the UN Development Programme has emphasised, global warming is above all a threat to the poor and the unborn, the ‘two constituencies with little or no political voice’. Co-ordinated global action on their behalf thus presupposes either their revolutionary empowerment – a scenario not considered by the IPCC – or the transmutation of the self-interest of rich countries and classes into an enlightened ‘solidarity’ with little precedent in history.

**Cancún: Step forward, status quo or step back?**

Look soberly at what is required to reverse the frightening trajectory of temperature, rainfall and extreme weather dynamics, versus what was actually delivered. Negotiators in Cancún’s luxury Moon Palace hotel complex failed, by any reasonable measure. As Bolivian president Evo Morales complained:

> It’s easy for people in an air-conditioned room to continue with the policies of destruction of Mother Earth. We need instead to put ourselves in the shoes of families in Bolivia and worldwide that lack water and food and suffer misery and hunger. People
here in Cancún have no idea what it is like to be a victim of climate change.\textsuperscript{8}

For Bolivia’s UN ambassador at the time, Pablo Solon, Cancún did ‘not represent a step forward, it is a step backwards’, because non-binding commitments to reduce emissions by around 15 per cent by 2020 simply cannot stabilise temperature at the ‘level which is sustainable for human life and the life of the planet’.\textsuperscript{9} As he later wrote in \textit{The Guardian}: ‘Anyone who has seen the science on climate change knows that the Cancún agreement was irresponsible.’\textsuperscript{10}

The Bolivian team summed up the eight shortcomings of Cancún:

\begin{itemize}
  \item Effectively kills the only binding agreement, Kyoto Protocol, in favour of a completely inadequate bottom-up voluntary approach.
  \item Increases loopholes and flexibilities that allow developed countries to avoid action via an expansion of offsets and continued existence of ‘surplus allowances’ of carbon after 2012 by countries such as Ukraine and Russia, which effectively cancel out any other reductions.
  \item Finance commitments weakened: commitments to ‘provide new and additional financial resources’ to developing countries have been diluted to talking more vaguely about ‘mobilising [resources] jointly’, with expectation that this will mainly be provided by carbon markets.
  \item The World Bank is made trustee of the new Green Climate Fund, which has been strongly opposed by many civil society groups due to the undemocratic make-up of the Bank and its poor environmental record.
  \item No discussion of intellectual property rights, repeatedly raised by many countries, as current rules obstruct transfer of key climate-related technologies to developing countries.
\end{itemize}
• Constant assumption in favour of market mechanisms to resolve climate change even though this perspective is not shared by a number of countries, particularly in Latin America.

• Green light given for the controversial Reducing Emissions from Deforestation and Forest Degradation (REDD) programme, which often ends up perversely rewarding those responsible for deforestation, while dispossessing indigenous and forest dwellers of their land.

• Systematic exclusion of proposals that came from the historic World Peoples’ Conference on Climate Change, including proposals for a Climate Justice Tribunal, full recognition of indigenous rights and rights for nature.\textsuperscript{11}

Similar dismay and anger were expressed in civil society, including by Meena Raman, director of the Malaysia-based Third World Network: ‘The mitigation paradigm has changed from one which is legally binding – the Kyoto Protocol with an aggregate target which is system-based, science based – to one which is voluntary, a pledge-and-review system.’\textsuperscript{12} As El Salvadoran Friends of the Earth leader Ricardo Navarro lamented: ‘What is being discussed at the Moon does not reflect what happens on Earth. The outcome is a Cancúnhagen that we reject.’\textsuperscript{13}

Most specialists agree that even if the unambitious Copenhagen and Cancún promises are kept (a big if), the result will be a cataclysmic 4–5°C rise in temperature over this century, and if they are not kept, 7°C is likely. Even with a rise of 2°C, scientists generally agree, small islands will sink, Andean and Himalayan glaciers will melt, coastal areas such as much of Bangladesh and many port cities will drown and Africa will dry out or in some places flood. In 2009, former United Nations (UN) secretary general Kofi Annan’s Global Humanitarian Forum issued a report worth citing at length, as it reflects at least a degree of elite awareness of
the extent of the challenge. ‘The Anatomy of a Silent Crisis’ provided startling estimates of damages already being experienced, including 315,000 deaths annually:

An estimated 325 million people are seriously affected by climate change every year. This estimate is derived by attributing a 40 percent proportion of the increase in the number of weather-related disasters from 1980 to current to climate change and a 4 percent proportion of the total seriously affected by environmental degradation based on negative health outcomes . . . Application of this proportion projects that more than 300,000 die due to climate change every year – roughly equivalent to having an Indian Ocean tsunami annually. The number of deaths from weather-related disasters and gradual environmental degradation due to climate change – about 315,000 deaths per year – is based on a similar calculation . . . Over 90 percent of the death toll relates to gradual onset of climate change which means deterioration in environmental quality, such as reduction in arable land, desertification and sea level rise, associated with climate change. As for the number of seriously affected, the basis for the estimations of deaths is negative health outcomes.

In its Fourth Assessment Report, the IPCC found that weather patterns have become more extreme, with more frequent and more intense rainfall events and more intense heat waves and prolonged droughts. The rhythm of weather has also become more unpredictable with changes in the timing and location of rainfall. In addition to the increased severity of weather events, the sheer number of weather-related disasters (storms, hurricanes, floods, heat waves, droughts) has more than doubled over the last 20 years. Today, the world experiences over 400 weather-related disasters per year. They leave a frightening toll in their wake: almost 90 million people requiring
immediate assistance due to personal injury, property loss, exposure to epidemics, disease or shortages of food and fresh water. Politicians and environmental officials were warned of this often enough by climate scientists, but they remain beholden to powerful business interests lined up to either promote climate denialism (especially the petro/coal firms), or to generate national-versus-national negotiating blocs racing to gain the most emission rights. As a result, in spite of a Band-Aid set of agreements, the distance between negotiators and the masses of people and the planet grew larger not smaller in Cancún. The experience of African negotiators at Copenhagen was rather revealing, given the prospects for a more progressive outcome harking back to precedents in Seattle in 1999 and Cancún in 2003.

_Africans arm-twisted by Washington, Paris and Pretoria_  
Aside from drowning small island states and drying out the glacier, snow and water supplies of the Andes, Himalayas and other mountains, it is widely understood that the other frontline climate change process is ‘cooking the continent’ of Africa, to cite a forthcoming book of Friends of the Earth International chairperson Nnimmo Bassey. According to UN IPCC director R.K. Pachauri: ‘[C]rop net revenues could fall by as much as 90 percent by 2100.’ Climate damage to Africa will include rapid desertification, more floods and droughts, worse water shortages, increased starvation, floods of climate refugees jamming shanty-packed megalopolises and the spread of malarial and other diseases. The danger is imminent, for eight of the twenty countries that the Centre for Global Development’s David Wheeler expects to be most adversely affected by extreme weather events by 2015 are African: Djibouti, Kenya, Somalia, Mozambique, Ethiopia, Madagascar, Zambia and
Zimbabwe. In the Horn of Africa, those affected are anticipated to include 14 per cent of Djiboutis, 8 per cent of Kenyans, 5 per cent of Ethiopians and 4 per cent of Somalis.\(^{16}\) Ironically, the two relatives of two signatories of the Copenhagen Accord, Barack Obama and Jacob Zuma – the Luo and Zulu in rural Kenya and KwaZulu-Natal, respectively – will be amongst its first victims.

Yet the continent’s main negotiating body, the African Union (AU), was twisted and U-turned from what, in the period June–November 2009, was a militant position, into capitulation. The two facilitators were Zuma and the Ethiopian dictator Meles Zenawi. In September, the latter proclaimed: ‘If need be we are prepared to walk out of any negotiations that threaten to be another rape of our continent.’\(^{17}\)

But Zenawi did not walk out. He walked off his plane in Paris on the way to Copenhagen, into the arms of Nicolas Sarkozy, who persuaded Zenawi to relent.\(^{18}\) The side deal, according to Mithika Mwenda of the Pan-African Climate Justice Alliance, had the effect of ‘undermining the bold positions of our negotiators and ministers represented here, and threatening the very future of Africa’.\(^{19}\) Not only did Zuma and Zenawi surrender on emissions cuts, but also on demanding full payment of the North’s climate debt to the South. ‘Meles wants to sell out the lives and hopes of Africans for a pittance,’ said Mwenda. ‘Every other African country has committed to policy based on the science.’ On 8 December, protesters from the Pan-African Climate Justice Alliance chanted in the main Bella Centre auditorium: ‘Two degrees is suicide! One Africa! One Degree!’\(^{20}\)

In one Copenhagen session, the lead G77 negotiator, Lumumba Di-Aping, ‘sat silently, tears rolling down his face’, according to a South African report. Di-Aping said simply: ‘We have been asked to sign a suicide pact,’ explaining that in his home region, it was ‘better to stand and cry than to walk away’.
Speaking in measured tones, Di-Aping first attacked the 2 degrees C warming maximum that most rich countries currently consider acceptable. Referring continuously to science, in particular parts of the latest IPCC report (which he referenced by page and section) he said that 2 degrees C globally meant 3.5 degrees C for much of Africa. He called global warming of 2 degrees C ‘certain death for Africa’, a type of ‘climate fascism’ imposed on Africa by high carbon emitters. He said Africa was being asked to sign on to an agreement that would allow this warming in exchange for $10 billion, and that Africa was also being asked to ‘celebrate’ this deal.

He then went on to forthrightly address the weakness of many African negotiating delegations, noting that many were unprepared and that some members were either lazy or had been ‘bought off’ by the industrialised nations. He singled out South Africa, saying that some members of that delegation had actively sought to disrupt the unity of the bloc. He said that civil society needed to hold its negotiators to account, but warned of a long and difficult struggle for a fair climate deal (words to the effect of ‘you have no idea of the powers that are arrayed against you’, spoken in the tone of someone who has spent years interacting with these powers).

He said that people all over the world had to be made aware of what a bad climate deal means for Africa (‘I am absolutely convinced that what Western governments are doing is NOT acceptable to Western civil society’). He explained that, by wanting to subvert the established post-Kyoto process, the industrialised nations were effectively wanting to ignore historical emissions, and by locking in deals that would allow each citizen of those countries to carry on emitting a far greater amount of carbon per year than each citizen in poor countries, would prevent many African countries from lifting their people out of
poverty. This was nothing less than a colonization of the sky, he said. ‘$10 billion is not enough to buy us coffins.’

Di-Aping asked, poignantly: ‘What is Obama going to tell his daughters? That their relatives’ lives are not worth anything?’ And agreeing with leading US climate scientist James Hansen that the Copenhagen deal on offer was ‘worse than no deal’, Di-Aping concluded: ‘I would rather die with my dignity than sign a deal that will channel my people into a furnace.’ In the final plenary session, Di-Aping called the Copenhagen Accord ‘an incineration pact in order to maintain the economic dependence of a few countries. It’s a solution based on values that funnelled six million people in Europe into furnaces.’ He was strongly condemned by Europeans, including UK Labour Party politician Ed Miliband, for losing his diplomatic cool.

Given the scenarios faced in his part of the world, and indeed across the G77 – for a quarter of the Chinese people and 12 per cent of Indians will be adversely affected by annual extreme weather events by 2015, according to Wheeler’s estimates – how could Di-Aping not express such anguish? And why won’t other delegates lose their cool, too?

The Seattle model
Had more Africans the courage to speak truth to power as did Di-Aping, Copenhagen might have had a very different outcome than what Zuma and Zenawi ultimately arranged. Going into the COP15 climate summit, political dynamics were reminiscent of the Seattle World Trade Organisation (WTO) fiasco, which taught civil society activists and African leaders two powerful lessons. First, working together, they had the power to disrupt a system of global governance that meets the global North’s short-term interests against both the global South and the longer-term interests of the world’s people and the planet. Second, in the very act of disrupting global
malgovernance, major concessions could be won. The spectacular 30 November 1999 street protest against the WTO summit’s opening ceremony is what most would still recall about Seattle: activists ‘locking down’ to prevent entrance to the conference centre, a barrage of tear gas and pepper spray, a glass sea of broken windows and a municipal police force later prosecuted for violating US citizens’ most basic civil liberties.25

That was outside. Inside the convention centre, negotiations belatedly got underway, and African leaders quickly grew worried that further trade liberalisation would damage their tiny industrial sectors. The damage was well recognised: an Organisation for Economic Co-operation and Development (OECD) study found Africa to be the continent that would suffer the worst net losses from corporate-dominated free trade. The US trade representative, Charlene Barchefsky, repeatedly insulted African elites who raised this point. With the exception of South Africa, which enjoyed Green Room status and hence an insider role to promote self-interest, the delegations from the Organisation of African Unity (OAU, since renamed the African Union) were furious. As OAU deputy director general V.J. McKeen told journalists:

They went out to a dinner in a bus, and then were left out in the cold to walk back. To tell you to the extent that when we went into the room for our African group meeting ... there was no interpretation provided. [A]t least the English and French interpretation should have been there, so one had to improvise. And then even the facilities, the microphone facilities, were switched off.26

Tetteh Hormeku from the African Trade Network of progressive civil society groups reported:
By the second day of the formal negotiations the African and other developing-country delegates had found themselves totally marginalized. This arose mainly from the non-transparent and, some would say, unlawful practices adopted by the powerful countries, supported by the host country and the WTO secretariat.\(^{27}\)

According to a statement issued by Hormeku and others in civil society: ‘African countries were not getting their positions and issues on the table for the simple reason that the table had been shifted away from the place where the negotiations were supposed to be taking place – the working groups – into exclusive Green Room discussions where they had no equal access.’\(^{28}\) Hormeku recalled that his African Trade Network member colleagues began to demand that their Northern NGO counterparts help focus attention on the outrageous practices of their various governments. The first concrete result was a joint press conference by the African Trade Network, Friends of the Earth, South Centre, Oxfam, the World Development Movement, Focus, Consumers International and New Economics Foundation. Here developing-country negotiators like Sir Sonny Ramphal (former Secretary-General of the Commonwealth) joined hands with NGO representatives to denounce the big-power manipulation of the WTO process. Many more African civil society organizations and governments spoke out.\(^{29}\)

At that point, wrote Hormeku: ‘African countries thus joined the other developing-country groups in threatening to withdraw the consensus required to reach a conclusion of the conference. By this time, even the Americans and their supporters in the WTO
secretariat must have woken up to the futility of their “rough tactics”.

This strong will by Africans at least earned major concessions in the next WTO summit in Doha in November 2001. At the same time as the global justice movement began widening into an anti-imperialist movement in the wake of the US’s post-9/11 remilitarisation, African activists were delving deeper into extreme local challenges, such as combating AIDS.

In Doha, African elites joined forces with activists again. For on this rare occasion, the positive catalyst was a South African government law – the 1997 Medicines Act promoted by then health minister Nkosazana Dlamini-Zuma – which permitted the state’s compulsory licensing of patented drugs. In 1998, the Treatment Action Campaign (TAC) was launched to lobby for AIDS drugs, which were prohibitively expensive at $15 000 per person per year. South Africa’s HIV-positive population made up more than 10 per cent of the country’s 50 million residents. That campaign was immediately confronted by the US State Department’s attack on the South African Medicines Act: a ‘full court press’, as State bureaucrats testified to the US Congress. Their aim was to protect intellectual property rights and halt the emergence of a parallel, inexpensive supply of AIDS medicines that would undermine lucrative Western markets. US vice president Al Gore directly intervened with South African government leaders in 1998–9, aiming to revoke the law.

A chance to fight back soon emerged. In mid-1999, Gore launched his 2000 presidential election bid, a campaign generously funded by big pharmaceutical corporations (which in that election cycle provided $2.3 million to the Democratic Party). As an explicit counterweight, TAC’s allies in the US, AIDS Coalition to Unleash Power, began to protest at Gore’s campaign events. The protests ultimately threatened to cost Gore far more in adverse publicity
than he was raising in Big Pharma contributions, so he changed sides.

By 2001, even during the extremist reign of president George W. Bush and trade representative Robert Zoellick (now World Bank president), the WTO’s Trade Related Aspects of Intellectual Property Rights (TRIPS) system was amended to permit generic drugs to be used in medical emergencies, such as AIDS, thus overriding brand monopolies. Doha was one of Africa's most crucial sites of struggle in multilateral negotiations, yet it would have been quite logical for Zoellick to oppose this concession, given the financial and political power of Big Pharma in Washington.

But that was not possible because anthrax attacks on targets in New York and Washington a few weeks earlier – in the immediate aftermath of the 9/11 attacks on the World Trade Centre and Pentagon – required US health authorities to acquire an emergency increase in the availability of an antidote, ciprofloxacin. The owner of the patent, Bayer, ‘could not supply the US government with sufficient supplies of the medicine to meet the stockpiles the medical experts wanted. The US and Canadian governments threatened to override the Bayer patents to buy generic products,’ according to respected analyst James Love. That meant, he continued, that

the US negotiating position in the WTO talks was greatly compromised by its flirting with a compulsory license for anthrax. Millions of persons in developing countries were actually dying from AIDS and other diseases. The outcome of the negotiations was a remarkable seven-paragraph Doha Declaration on TRIPS and Public Health, which declared that patents laws should be implemented in a manner that promotes access to medicine by all. This was endorsed by all WTO members, including the US, in November 2001.32
Even if it happened in part because of terrorism, this was a huge victory for Africa, removing any rationale to continue to deny life-saving medicines to the world’s poorest people. A substantial UN fund to buy generic AIDS medicines for low-income people soon followed (as did a controversial Bush administration initiative that linked drugs access to the imposition of conservative socio-cultural values). Then in 2003, with another WTO deal on the table in Cancún, and 30,000 protesters outside, once again the African leadership withdrew consensus, wrecking the plans of the US and Europe for further liberalisation.

These precedents provided hope that, working together, Africans could cut through the three huge challenges faced in Copenhagen:

• Northern countries should cut emissions by 2020 by at least half through an international, binding agreement;
• they should not rely on carbon markets or offsets when making cuts; and
• they should pay the ecological debt they owe to victims of climate change.

Tragically, the adverse balance of forces currently prevailing did not permit victories on even one, much less all three. There is no question that those most responsible should pay reparations, now that we are aware of the damage being done by rising greenhouse gas emissions, and by the ongoing stubborn refusal by the rich – especially Obama and his people – to cut back. The amounts can be debated, for of course the $65 billion/year sometimes suggested for Africa by 2020 is far too low, given how many incalculably valuable species will be lost, how much devastation to individuals and communities is already underway, how many economies will falter, how much ecology is threatened.

One of the greatest global justice movement gurus, anti-apartheid strategist and poet Dennis Brutus put the challenge quite
frankly just three months before his death in December 2009 at age 85: ‘My own view is that a corrupt deal is being concocted in Copenhagen with the active collaboration of NGOs [non-governmental organisations] who have been bought off by the corporations, especially oil and transport. They may even be well-intentioned but they are barking up the wrong tree.’ Instead of a bad deal, Brutus recommended that activists ‘seattle Copenhagen’, i.e., the AU insiders work with civil society outsiders to prevent the North from doing a deal in their own interests, against Africa’s.

But the spirit of 1999 Seattle and 2003 Cancún was not found inside the AU delegation to Copenhagen in 2009, thanks mainly to Zuma and Zenawi, nor in 2010 in Cancún, mainly because the US had put substantial efforts into bullying support for Copenhagen Accord sign-ons, as we see through WikiLeaks revelations in Chapter 4. An additional problem was the disunity of civil society, largely due to a telling dispute over paying for forest conservation.

The REDD wedge
The REDD programme and the World Bank’s Forestry Carbon Partnership Facility are indicative of the agenda capitalist institutions have for climate management: more ambitious commodification of every living thing. The basic strategy is to draw forests into carbon markets and offset schemes using the argument that their sequestration ability and protection from deforestation are major contributors to mitigating greenhouse gases, and this service deserves being paid for.

But concerns began to be raised at Bali about claims over sequestration – and implications for indigenous peoples’ rights – and the two programmes attracted this criticism from the Durban Group for Climate Justice in Copenhagen in 2009:
Like Clean Development Mechanism credits, they exacerbate climate change by giving industrialised countries and companies incentives to delay undertaking the sweeping structural change away from fossil fuel-dependent systems of production, consumption, transportation that the climate problem demands. They waste years of time that the world doesn’t have. Worse, conserving forests can never be climatically equivalent to keeping fossil fuels in the ground, since carbon dioxide emitted from burning fossil fuels adds to the overall burden of carbon perpetually circulating among the atmosphere, vegetation, soils and oceans, whereas carbon dioxide from deforestation does not. This inequivalence, among many other complexities, makes REDD carbon accounting impossible, allowing carbon traders to inflate the value of REDD carbon credits with impunity and further increasing the use of fossil fuels.37

The impossibility of REDD serving carbon markets – especially the largest, the EU’s Emissions Trading Scheme (ETS) – as a source of genuine emissions reduction was due not only to accounting difficulties. Even the European Commission recognised this fatal flaw, after (according to its website) having ‘analysed the possibility of allowing credits from certain types of land use, land-use change and forestry projects which absorb carbon from the atmosphere. It concluded that doing so could undermine the environmental integrity of the EU ETS.’ Amongst the other reasons were that there is no permanence in emissions reductions from forestry given that trees ultimately die and release carbon, hence ‘uncertainties, non-permanence of carbon storage and potential emissions “leakage” problems arising from such projects’.38

Adding forestry and land-use investments to the ETS ‘would require a quality of monitoring and reporting comparable to the monitoring and reporting of emissions from installations currently
covered by the system. This is not available at present and is likely to incur costs which would substantially reduce the attractiveness of including such projects’ and reduce ‘simplicity, transparency and predictability’. Finally, the Commission confessed, ‘the sheer quantity of potential credits entering the system could undermine the functioning of the carbon market unless their role were limited, in which case their potential benefits would become marginal’. For these reasons, any hopes that Cancún’s REDD breakthroughs would generate revitalised carbon trade were immediately dashed.39

But the political problems associated with REDD deserve even more scrutiny, given the divide-and-conquer potentials involved. According to Tom Goldtooth, director of the Indigenous Environmental Network: ‘Most of the forests of the world are found in Indigenous Peoples’ land. REDD-type projects have already caused land grabs, killings, violent evictions and forced displacement, violations of human rights, threats to cultural survival, militarization and servitude.’40 For example, Goldtooth noted that Papua New Guinea native leader Abilie Wape ‘was forced at gun point to surrender the carbon rights of his tribe’s forest’. Confirms the London-based NGO, Survival International, REDD could leave indigenous peoples ‘with nothing’.41

The danger became even more evident in Cancún. Because of the ‘betrayal’, there was ‘the consequence of an ongoing US diplomatic offensive of backroom deals, arm-twisting and bribery that targeted nations in opposition to the Copenhagen Accord’, alleged Goldtooth. ‘Such strategies have already proved fruitless and have been shown to violate human and Indigenous rights. The agreements implicitly promote carbon markets, offsets, unproven technologies, and land grabs – anything but a commitment to real emissions reductions.’ As for the attraction to other indigenous groups, Goldtooth is scathing: ‘Language “noting” rights is exclusively in the context of market mechanisms, while failing to
guarantee safeguards for the rights of indigenous peoples, such as the full recognition of the UN Declaration on the Rights of Indigenous Peoples, including the standards of free, prior and informed consent.\textsuperscript{42}

As Chris Lang, the founder of watchdog NGO, REDD-Monitor, explained, attempts to reform the system at Cancún failed because, first:

Protecting intact natural forest and restoring degraded natural forest is not a ‘core objective’ of the REDD deal agreed in Cancún. We still don’t have a sensible definition of forests that would exclude industrial tree plantations, to give the most obvious example of how protecting intact natural forest isn’t in there – also ‘sustainable management of forests’ is in there, which translates as logging.

Second, said Lang:

The rights and interests of indigenous peoples and forest communities are not protected in the Cancún REDD deal – they are demoted to an annex, with a note that ‘safeguards’ should be ‘promoted and supported’. That could mean anything governments want it to mean.\textsuperscript{43}

As a statement by chapters of Friends of the Earth from Latin America and the Caribbean concluded: ‘The new texts continue seeing forests as mere carbon reservoirs (sinks) and are geared towards emissions trading.’\textsuperscript{44} In the same way, the Green Climate Fund was promoted by World Bank president Robert Zoellick, whose highest-profile speech to a side conference promised to extend the REDD commodification principle to broader sectors of agriculture and even those ‘large charismatic species’ (tigers,
jaguars, forest elephants, great apes, macaws, birds of paradise, lemurs), in a Wildlife Premium Market Initiative alliance with Russian leader Vladimir Putin.  

On 8 December 2010, protesters demanded that the World Bank be evicted from climate financing, in part because under Zoellick the institution’s annual fossil fuel investments rose from $1.6 billion to $6.3 billion, and in part because the Bank promotes export-led growth, resource extraction, energy privatisation and carbon markets with unshaken neoliberal dogma. According to Grace Garcia from Friends of the Earth Costa Rica: ‘Only a gang of lunatics would think it is a good idea to invite the World Bank to receive climate funds, with their long-standing track-record of financing the world’s dirtiest projects and imposition of death-sentencing conditionalities on our peoples.’  

Unfortunately, however, some indigenous people’s groups and Third World NGOs did buy into REDD, and well-funded Northern allies such as the market-oriented Environmental Defence Fund used divide-and-conquer tactics to widen the gaps. The danger this presents was extreme because the Clean Development Mechanism (CDM) strategy set in place by Al Gore in 1997 – when he mistakenly (and self-interestedly) promised that the US would endorse the Kyoto Protocol if carbon trading was central to the deal – may well continue to fracture climate advocacy. REDD is one of several blackmail tactics from the North, by which small sums are paid for projects, such as tree-planting or forest conservation management. In some cases, as well as through CDMs, such as methane-extraction from landfills, these projects result in displacement of local residents or, in the case of Durban’s main CDM, the ongoing operation of a vast, environmentally racist dump in the black neighbourhood of Bisasar Road, instead of its closure (as Chapter 5 explains). Then the Northern corporations
buying emissions credits can continue business-as-usual without making the major changes needed to solve the crisis.

Temporary cure for post-Copenhagen hangover

The carbon markets simply weren’t working, however, due to crucial structural reasons we seek to understand in the next chapter. Their fatal flaws included rising levels of corruption, periodic chaotic volatility and extremely low prices that were inadequate to attract investment capital into renewable energy and more efficient transport. Such investments minimally would cost the 2011 equivalent of 50 euros/tonne of carbon, but the price of a tonne of carbon on the EU’s ETS fell from 30 euros in 2008 to less than 10 euros in 2009, and though by the end of 2010 it had risen to 15 euros, by August 2011 it was back down to 11 euros, its lowest level in 30 months. This low price and non-existent incentive made it much cheaper for business to keep polluting than to restructure. It was for this reason that the Copenhagen Accord’s delegitimation in December 2009 left advocates of climate justice not despondent – the way to characterise the mainstream environmental movement and world citizenry – but instead relieved that the Kyoto Protocol’s own Achilles heel, emissions trading, had not yet become a permanent affliction.48

The chaotic fiasco in Copenhagen deserves a detailed recall, for the world’s richest leaders continued their fiery fossil fuel party, ignoring requests of global village neighbours to please chill out. Instead of halting the hedonism, Obama cracked open the mansion door to add a few nouveau riche guests from Brazil, South Africa, India and China (the BASIC countries): Lula Inacio da Silva, Jacob Zuma, Manmohan Singh and Wen Jiabao (reportedly the most obnoxious of the lot). By Saturday morning, 19 December, still punch-drunk with power over the planet, these wild and crazy party animals had stumbled back onto their jets and headed home.
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The rest of us remember the killer hangover because, on behalf mainly of white capitalists (who had the most fun of all), the world’s rulers stuck the poor and future generations with vast clean-up charges – and worse: certain death for millions.

The Copenhagen Accord signatories must have known they were endorsing a plan that would leave the earth’s atmosphere with 770 parts per million of CO$_2$ equivalents, or worse, if the promised 15 per cent emissions cuts from 1990 levels to 2020 – which in reality could be a 10 per cent increase once carbon trading and offset loopholes are factored in – were not achieved. The most powerful man at the party was the urbane, Ivy League-educated lawyer who was elected president of the US a year earlier and given the Nobel Peace Prize in neighbouring Norway that very week. The world hoped Obama would exhibit the dignity, humility and compassion behoving the son of Kenyan and US intellectuals. But instead, he not only refused to lead the North to make 45 per cent emissions cuts and offer payment of the climate debt, but then engaged in a process of leadership so flawed that economist Jeffrey Sachs accused Obama of abandoning the UN framework, because it was proving nettlesome to US power and domestic politics. Obama’s decision to declare a phony negotiating victory undermines the UN process by signaling that rich countries will do what they want and must no longer listen to the “pesky” concerns of many smaller and poorer countries.49

The idea that the UN is too unwieldy for climate talks surfaced repeatedly in subsequent weeks. The Accord was ‘insincere, inconsistent, and unconvincing’, Sachs continued, ‘unlikely to accomplish anything real. It is non-binding and will probably strengthen the forces of opposition to emissions reductions.’ Moreover, US Secretary of State Hillary Clinton’s ‘announcements about money a decade from now are mostly empty words. They do not bind the rich countries at all.’50 As Naomi Klein summed up,
the Accord is ‘nothing more than a grubby pact between the world’s biggest emitters: I’ll pretend that you are doing something about climate change if you pretend that I am too. Deal? Deal.’

The signing of the Copenhagen Accord followed extremely harsh police repression against non-violent protesters outside the Bella Centre, and within a year the police were told to compensate millions of dollars worth of penalties to hundreds of people (including journalists) who were illegally ‘kettled’ for hours during a demonstration in the freezing cold. Inside the Centre, Denmark’s conservative ruling party leaders set up a ‘Green Room’ process where 26 countries were cherry-picked to represent the world. When even that small group deadlocked, allegedly due to Chinese intransigence and the overall weak parameters set by the US, the five leaders attempted a face-saving last gasp at planetary hygiene. Obama’s strategy meant the WTO’s divide-and-conquer political style would become the norm for UN climate negotiations. But even setting aside the awful process, the Accord’s content was nearly universally condemned, for four reasons:

- Emissions cuts, which imply a catastrophic 3.5°C increase by the end of the century, were inadequate, and also included options for vague ‘pledge and review’ commitments and, even worse, offsets so that Northern polluters can outsource the cuts.
- There were no clear sources of financing nor explicit commitments to pay the North’s ‘climate debt’ to the South, estimated at $400 billion per year by 2020.\textsuperscript{52} As discussed in Chapter 6, the debt is owed for the North’s taking of too much environmental space and the massive climate damage that resulted.
- The Accord departed from Kyoto Protocol and Bali Action Plan principles, which set out much more ambitious targets for richer countries than poorer countries.
The Accord contained no legally binding components or compliance mechanisms.

By early 2010, the Accord began failing even on its own terms, missing its first deadline, on 31 January, for signing on and declaring cuts for carbon emissions, leaving the then UN climate chief Yvo de Boer to concede that deadlines were ‘soft’. And outrage at the Accord’s destructive impact in the fast-growing emerging markets began to appear. In India, Centre for Science and Environment director Sunita Narain argued that her government’s negotiators are the same people who would stymie any real action on environmental improvement in the country. They will oppose fuel efficiency standards, tax on big cars, or tough penalties for polluters. But they will still talk glibly about low-carbon economies. They will of course, dismiss out of hand, any discussion on the need for ‘radical’ and out-of-the-box solutions for equity and sustainability. These, they will tell you, are mere evangelical thoughts of some fringe activists. The men think and act differently. These are the promoters of the Accord in India. And I believe they do so, because for them, firstly, the Accord provides the perfect solution – talk big about change, but do little at home.

The US has provided a perfect formula – it promises us the right to pollute, because it wants to legitimize its own pollution. Secondly, it promises that we can get a place on the high table of polluters. And as powerful conspirators this will mean that we need to do little ourselves, but instead push the price of change on the less favored – the poor of India or the poor anywhere else in the world. It’s an open offer to protect, not our right to development as we have been demanding – the rich countries pay for our transition to low-carbon economies.
But a simpler proposition: we give you the right to pollute (at least for now). The other proposition is equally seductive. To the countries, which are not yet polluters (from Ethiopia to Maldives), the Copenhagen Accord says we will give money to keep you pliant and agreeable. This is why the Accord promises some fictional money to poor vulnerable countries. It’s a perfect formula, designed to please all. There is only one hitch: we will all have to forget the climate change crisis and the hazards and impacts that will grow.

Judged not only by Copenhagen’s crash but by the rise of the G20 (economics) and BASIC (climate) groupings, the global-scale climate governance ship appeared to be sinking during 2010. So, too, was the climate’s supposed private sector lifeboat, carbon trading. Sitting in first class seats on the Climate Titanic, the elites hoped they could not only shift the deckchairs around to the approval of the masses below, but when the ship sank, be positioned to swim. There was not much thought to those who would drown. So while Cancún rescued the elite fantasy that by slightly modifying business-as-usual they will survive the planetary heat-up, the next vehicle they attempted to construct, carbon trading, was by no means seaworthy.
Aside from being unfair, unambitious and unbinding – ‘not FAB’, as the TckTckTck social-marketing coalition had requested – the Cancún Agreements' fatal flaw was simple: faith in fickle markets. As world negotiators stared into the abyss of failure during the Cancún COP16, climate-crisis capitalism appeared as a lifeline, no matter how frayed in reality. Like a drunken belayer trying to hold a precarious rock climber's dangerously thin rope steady, the World Bank was everywhere in Cancún, staggering into various venues to apply neoliberal economic theory where it had rarely gone before: into new Chinese emissions markets, lurking within tropical forests, burrowing into the topsoils of agricultural land, and even tackling 'charismatic' endangered species. All were sites for extended corporate investments and offsets against planet-threatening emissions, facilitated by Robert Zoellick’s World Bank.

As we will examine (sceptically) in the next chapter, the stated motivation for ‘market solutions to market problems’ is to lower the business costs of transitioning to a post-carbon world, even if a much deeper commodification drive fuelled by crisis-ridden capitalism lies beyond emissions trading. After a cap is placed on total emissions (if ever that occurs), the idea is that high-polluting
corporations and governments can buy ever more costly carbon permits from those that don’t need so many, or from those willing to part with the permits for a higher price than the profits they make in production or energy-generating or transport activities.

In this chapter, the empirical basis for our subsequent theoretical exploration is laid out, beginning with the observations made in 2004 when the Durban Group for Climate Justice gathered.

The Durban Group critique
A global civil society network, the Durban Group for Climate Justice, formed in 2004 as a critical mass opposed to carbon trading’s ‘privatisation of the air’. From the vantage point of an austere Catholic mission on Durban’s highest central hill, the Glenmore Pastoral Centre, a score of the world’s critical thinkers looked out over Africa’s largest port to contemplate the merits of free trade. Despite the fact that the UN had endorsed carbon markets and even though this group was gathered by the Swedish Dag Hammarskjöld Foundation, an increasingly critical tone emerged after the Durban Group for Climate Justice deliberated over the neoliberal climate fix for several days. Participants were worried that the main test case, the EU’s Emissions Trading Scheme (ETS), not only failed to reduce net greenhouse gases there, but suffered extreme volatility, inadequate pricing, the potential for fraud and corruption and the likelihood of the market crowding out other, more appropriate strategies for addressing the climate crisis.

The market fix was also already being tried in the Third World through Clean Development Mechanism (CDM) projects, whereby investment strategies to prevent ‘additional’ pollution also qualified for carbon credits. CDMs reached around 6 per cent of total trading at peak in 2008. There is much more to say in coming pages about the climate justice critique of climate-crisis capitalism, but
the specific concerns about carbon trading, mostly identified at the Durban Group’s initial meeting, can be summarised as follows.

• the idea of inventing a property right to pollute is effectively the ‘privatisation of the air’, a moral problem given the vast and growing differentials in wealth inequalities;

• greenhouse gases are complex and their rising production creates a non-linear impact that cannot be reduced to a commodity exchange relationship (a tonne of CO₂ produced in one place accommodated by reducing a tonne in another, as is the premise of the emissions trade);

• the corporations most guilty of pollution and the World Bank – which is most responsible for fossil fuel financing – are the driving forces behind the market, and can be expected to engage in systemic corruption to attract money into the market even if this prevents genuine emissions reductions;

• many of the offsetting projects – such as monocultural timber plantations, forest ‘protection’ and landfill methane-electricity projects – have devastating impacts on local communities and ecologies, and have been hotly contested in part because the carbon sequestered is far more temporary (since trees die) than the carbon emitted;

• the price of carbon determined in these markets is haywire, having crashed by half in a short period in April 2006 and by two-thirds in 2008, thus making a mockery of the idea that there will be an effective market mechanism to make renewable energy a cost-effective investment;

• there is a serious potential for carbon markets to become an out-of-control, multi-trillion dollar speculative bubble, similar to exotic financial instruments associated with Enron’s 2002 collapse (indeed, many Enron employees populate the carbon markets);
• as a ‘false solution’ to climate change, carbon trading encourages merely small, incremental shifts, and thus distracts us from a wide range of radical changes we need to make in materials extraction, production, distribution, consumption and disposal; and

• the idea of market solutions to market failure (‘externalities’) is an ideology that rarely makes sense, and especially not following the world’s worst-ever financial market failure, and particularly not when the very idea of derivatives – a financial asset whose underlying value is several degrees removed and also subject to extreme variability – was thrown into question.3

With Europe as the base, world emissions trade grew to around $140 billion in 2008, and although markets then went flat due to economic meltdown, increasing corruption investigations and Copenhagen-induced despondency, the trade in air pollution was at one point projected to expand to $3 trillion/year by 2020 if the US were to sign on. The $3 trillion estimate did not even include the danger of a bubbling derivatives market, which might have boosted the figure by a factor of five or more.4

In November 2010, a new estimate of up to $50 billion/year by 2020 in North-South market-related transfers and offsets emerged from a United Nations High-Level Advisory Group on Financing for climate mitigation and adaption, including South African planning minister Trevor Manuel, later a co-chair of the Green Climate Fund.5 World climate managers evidently hope to skimp on grants and instead beg business to push vast monies into CDMs instead.

As discussed in Chapter 5, Durban is an important guinea pig, for at South Africa’s lead CDM pilot, the Bisasar Road landfill, methane from rotting rubbish is converted to electricity. After helping set it up, the World Bank refused in August 2005 to take part in marketing or purchasing Bisasar Road emissions credits.
Local activists say the reason was growing awareness of Durban’s notorious environmental racism. In March 2005, just as the Kyoto Protocol came into force, a Washington Post front-page story revealed how community organiser Sajida Khan suffered cancer from Bisasar Road’s toxic legacy. Back in 1980, the landfill — Africa’s largest — was ploughed in the middle of Durban’s Clare Estate suburb, across the road from Khan’s house, thanks to apartheid insensitivity. Instead of honouring African National Congress (ANC) politicians’ promises to close the dump in 1994, the municipality kept it open when $15 million in emissions financing was dangled. After Khan died in mid-2007 after her second bout with cancer — which she believed was landfill-induced — Clare Estate civic pressure to close Bisasar subsided and Durban began raising 14 euros/tonne for the project from private investors.

As we observed in the last chapter, similar controversy surrounds the Reducing Emissions from Deforestation and Forest Degradation (REDD) programme. In theory, REDD sells investors forest protection. But at Cancún, notwithstanding disagreements in civil society, it was seen as a boon to voracious commercial forestry and a danger to indigenous peoples, given that proper safeguards were not adopted in Cancún. And everyone from EU climate commissioner Connie Hedegaard — the Danish conservative who hosted the 2009 Copenhagen summit — to Greenpeace warned that REDD could wreck fragile carbon markets, not only due to socio-ecological forest controversies but because a fresh glut of credits would again crash the price. As Hedegaard put it, REDD ‘could undermine the entire carbon market’.

In short, the return of market mania to the Cancún climate negotiations was a dangerous diversion from a daunting reality: the US, China, South Africa and most other big emitters came to Cancún to avoid making the binding commitments required to limit the planet’s 2000’s temperature rise, ideally below the 1.5°C that
scientists insist upon. Naturally, the (binding) Kyoto Protocol is a threat to the main emitting countries, which worked hard since early 2010 to replace it with the voluntary, loophole-ridden Copenhagen Accord. And naturally, the North's failure to account for its vast 'climate debt' continued. Pakistan suffered $50 billion in climate-related flood damage alone in 2010, yet the total on offer from the North to the whole world was just $30 billion for 2010–12. And even that was funny money, according to Hedegaard, who, according to WikiLeaks' disclosure of diplomatic cables, fruitlessly complained to US State Department deputy climate negotiator Jonathan Pershing in February 2010 that Tokyo and London bureaucrats were trying to pay their share partly in the form of loan guarantees, not grants.\(^{10}\)

**Washington backs the market**

The Cancún negotiators should have known that carbon trading was a charade that would do nothing to reduce global warming. There was plenty of evidence, and by the time of Copenhagen in December 2009, even US president Barack Obama's strongly neoliberal ideological orientation could not resurrect markets that were in the doldrums. Obama's market-friendly approach to tackling climate change was not surprising, for Wall Street financiers donated substantially more campaign cash to Obama than his Republican Party opponent John McCain. In January 2008 candidate Obama announced:

> We would put a cap-and-trade system in place that is as aggressive, if not more aggressive, than anybody else's out there... So if somebody wants to build a coal-powered plant, they can; it's just that it will bankrupt them because they're going to be charged a huge sum for all that greenhouse gas that's being emitted. That will also generate billions of dollars...
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that we can invest in solar, wind, biodiesel and other alternative energy approaches.¹¹

As Obama claimed two months later: “This market mechanism has worked before and will give all American consumers and businesses the incentives to use their ingenuity to develop economically effective solutions to climate change.”¹² But the 2008–9 financial meltdown crashed so many financial institutions and froze credit markets so quickly that carbon values in the emissions-trading markets plummeted by a quarter during the first weeks of October 2008 alone. The price in July 2008 had been a quarter higher still, at more than 33 euros/tonne, before tumbling to 9 euros in late 2009. The market in Chicago was jolted so badly that it closed entirely in late 2010, especially after it became evident the US Congress would not provide the mandate for national carbon trading.

What was an incentive scheme meant to provide stability and security to clean energy investors had now become the opposite. A low carbon price was useless for stimulating the kind of investment in alternatives needed: for example, an estimated 50 euros/tonne (at minimum) is required to activate private sector investments in ‘carbon capture and storage’, the as yet non-existent (and extremely dangerous) technology by which coal-fired power stations could, theoretically, bury liquefied carbon emitted during power generation. Substantial solar, tidal and wind investments would cost much more. The extreme volatility makes it abundantly clear that market forces cannot be expected to discipline polluters.

The only real winners in emissions markets were speculators, financiers, consultants (including some in the NGO scene) and energy sector hucksters who made billions of dollars in profits on the sale of notional emissions reduction credits. As the air itself became privatised and commodified, poor communities across the world suffered and resources and energy were diverted away from
real solutions. But one of the most powerful set of critiques came from the inside: internal contradictions that created a tendency to repeatedly crash the market and prevent it from carrying out actual emissions reductions.

These problems were sensed, to some extent, by the very founders of the notion of environmental markets. Canadian economist John Dales first justified trading in emissions rights by applying market logic to water pollution in a seminal 1968 essay, ‘Pollution, Property, and Prices’. Waste quotas were imposed along with a market in ‘transferable property rights . . . for the disposal of wastes’, interchangeable amongst firms.\(^\text{13}\) Thirty-three years later, prior to his death in 2007, Dales expressed doubts about carbon markets in an interview: ‘It isn’t a cure-all for everything. There are lots of situations that don’t apply. It is not clear to me how you would enforce a permit system internationally. There are no institutions right now that have that power.’\(^\text{14}\)

Also in the late 1960s, in the US, graduate economics student Thomas Crocker had famously advocated emissions trading for discrete problems, but in 2009 told the Wall Street Journal: ‘I’m skeptical that cap-and-trade is the most effective way to go about regulating carbon.’\(^\text{15}\) And a leading financier with intimate knowledge of financial fraud and market failure, George Soros, argued in 2007 that carbon trading would be ineffective: ‘The cap and trade system of emissions trading is very difficult to control and its effects are diluted . . . It is precisely because I am a market practitioner that I know the flaws in the system.’\(^\text{16}\)

On the other hand, market advocates claimed a degree of success, especially in a US pilot project aimed at tackling acid rain. Emissions trade made progress after the 1980s Reagan/Bush administrations neutered the US government’s ability to prohibit destructive activities, such as sulphur dioxide (SO\(_2\)) emissions. Instead, a 1990 amendment to the Clean Air Act legalised trade in SO\(_2\). A cap was
imposed and polluters gradually reduced to the levels required to mitigate emissions so as to avoid acid rain.

However, on closer examination, this approach was far less successful than parallel European ‘command-and-control’ environmental policies. Critics of emissions trading insist that SO₂ continues to do harm in the US because of the lack of strong regulation, itself a function of power relations in the government-industry nexus. Instead, had command-and-control strategies – such as the 1999 Environmental Protection Agency’s (EPA’s) New Source Review imposition of scrubbers on older plants (with a 95 per cent SO₂ removal record) – been applied, the results would have been far more impressive. Command-and-control strategies in Europe had faster and more decisive results (87 per cent reductions during the 1990s compared to 31 per cent by the SO₂ cap and trade), as they had as well in the US from 1977 (when the Clean Air Act was passed) to 1990. Moreover, by addressing only a part of the SO₂ from high emissions sources (about 43 per cent emissions reduction from 1990–2007), there were ongoing adverse local impacts of co-pollutants (for example, mercury, lead, dioxin, nitrous oxide), especially in geographical areas with high concentrations of people of colour.¹⁷

In spite of the more effective command-and-control alternative, in 1997 the Kyoto Protocol was negotiated to include carbon trading as a core strategy to reduce global emissions. This was because the then US vice president Al Gore threatened that his Congress would only sign up if corporations gained the ability to continue emitting above set limits by paying to buy someone else’s right to pollute. After co-opting critics in Kyoto, the Clinton-Gore administration and Congress did not keep their word and, later, George W. Bush pulled out of Kyoto. But the idea of carbon trading stuck and in Europe the ETS was launched in January 2005.
Emissions trading’s flawed friends

One reason for carbon trading’s acceptance as the primary climate-crisis capitalist management technique was the extraordinary support found in the world’s most powerful circuits of capital: finance. As Goldman Sachs critic Matt Taibbi warned in a *Rolling Stone* article six months before Copenhagen:

Instead of credit derivatives or oil futures or mortgage-backed Credit Default Obligations, the new game in town, the next bubble, is in carbon credits – a booming trillion dollar market that barely even exists yet, but will if the Democratic Party that it gave $4,452,585 to in the last election manages to push into existence a groundbreaking new commodities bubble, disguised as an ‘environmental plan,’ called cap and trade. The new carbon-credit market is a virtual repeat of the commodities-market casino that’s been kind to Goldman, except it has one delicious new wrinkle: If the plan goes forward as expected, the rise in prices will be government-mandated. Goldman won’t even have to rig the game. It will be rigged in advance . . .

Goldman wants this bill. The plan is (1) to get in on the ground floor of paradigm-shifting legislation, (2) make sure that they’re the profit-making slice of that paradigm, and (3) make sure the slice is a big slice. Goldman started pushing hard for cap and trade long ago, but things really ramped up last year when the firm spent $3.5 million to lobby climate issues. (One of their lobbyists at the time was none other than [Mark] Patterson, now Treasury chief of staff) . . . The bank owns a 10 percent stake in the Chicago Climate Exchange, where the carbon credits will be traded. Moreover, Goldman owns a minority stake in Blue Source LLC, a Utah-based firm that sells carbon credits of the type that will be in great demand if the bill passes . . .
Goldman is ahead of the headlines again, just waiting for someone to make it rain in the right spot. Will this market be bigger than the energy-futures market? ‘Oh, it’ll dwarf it,’ says a former staffer on the House energy committee. Well, you might say, who cares? If cap and trade succeeds, won’t we all be saved from the catastrophe of global warming? Maybe – but cap and trade, as envisioned by Goldman, is really just a carbon tax structured so that private interests collect the revenues. Instead of simply imposing a fixed government levy on carbon pollution and forcing unclean energy producers to pay for the mess they make, cap and trade will allow a small tribe of greedy-as-hell Wall Street swine to turn yet another commodities market into a private tax-collection scheme. This is worse than the bailout: It allows the bank to seize taxpayer money before it’s even collected . . .

The moral is the same as for all the other bubbles that Goldman helped create, from 1929 to 2009. In almost every case, the very same bank that behaved recklessly for years, weighing down the system with toxic loans and predatory debt, and accomplishing nothing but massive bonuses for a few bosses, has been rewarded with mountains of virtually free money and government guarantees – while the actual victims in this mess, ordinary taxpayers, are the ones paying for it.18

Illustrative of the imminent failure of emissions trading was the influx of former Enron employees. In an August 2009 report about Enron alumni in the carbon markets, the Financial Times offers not a hint of irony:

‘People who were attracted to Enron and its desire to open new and cutting-edge businesses are also likely to be attracted to the carbon market,’ says Lynda Clemmons, who started the
emissions trading desk at Enron in 1994. It also innovated in the electricity, gas and coal markets, to which carbon is highly correlated, which makes former Enron traders particularly suited to trading carbon. ‘They bring a breadth of cross-product coverage that makes them natural candidates to look at emissions,’ according to one industry insider.19

Europe’s bad example
Mirroring Enron’s 2001 crash, by the end of 2009 it was clear that the ETS had failed in its main objectives. Severe price swings showed how erratic and unreliable these markets can be. Each of at least five major spikes up and down from 2006–9 can be explained by specific factors, such as the extreme 2006 crash when it was revealed that the ETS had over-allocated free permits, or the 2008 onset of both generalised financial chaos and economic recession (hence lower than normal emissions to offset), or the 2009 post-Copenhagen decline.

But even discounting the ETS’ extreme volatility, the more general data began to show an overall trend towards increased emissions. In mid-2009, Grist columnist Gar Lipow explained:

During the three year period where we have verified emissions, emission among traded entities rose by 1.8 percent. During that same period emissions for the EU as a whole fell . . . The overwhelming evidence is that the European Trading Scheme is retarding rather than driving emission drops.20

The failure to cut emissions through ETS contrasts with another factor: economic decline and de-industrialisation in Europe. The continent’s 2008–9 year-on-year Gross Domestic Product (GDP) fall was 4.1 per cent and industrial output was down 12 per cent. The carbon-intensive construction sector was also adversely affected
by the real estate bubble’s burst. Given these economic trends, the medium term outlook for the ETS was grim, with even Lord Adair Turner – chair of the UK Climate Change Committee – admitting, ‘the existing particular form of liberalised market structure has reached the end of its road . . . Prices [will] struggle to reach 20–30 euros/tonne of CO$_2$ by 2020.’ Just a year earlier, Turner’s committee had optimistically assumed a price of 50 euros by 2020, high enough to support many alternative energy projects.$^{21}$

But faith in the ETS was shaken again and again by more than these economic factors. Unending tales of scandals and market mishaps emerged from dismayed financiers and business journalists. The intrinsic problem in setting an artificially generated market price for carbon was revealed with the April 2006 ETS crash, thanks to the over-allocation of pollution rights. The EU had miscalculated on how to set up the market and granted electricity generation firms far too many credits. Carbon lost over half its value in a single day, destroying many carbon offset projects earlier considered viable.

By 2007, the European Commissioner for Energy had admitted the ETS was ‘a failure’. Peter Atherton of Citigroup conceded: ‘ETS has done nothing to curb emissions . . . [and] is a highly regressive tax, falling mostly on poor people.’ Had it achieved its aims? ‘Prices up, emissions up, profits up . . . so, not really.’ Who wins, who loses? ‘All generation-based utilities – winners. Coal and nuclear-based generators – biggest winners. Hedge funds and energy traders – even bigger winners. Losers . . . ahem . . . consumers!’$^{22}$ Even the Wall Street Journal confirmed in March 2007 that emissions trading ‘would make money for some very large corporations, but don’t believe for a minute that this charade would do much about global warming’. In October 2008, with the market crashing, Carl Mortished wrote in The Times of London: ‘The ETS is making a mockery of Europe’s stumbling attempts to lead the world in a
Specific carbon offsets and CDMs fared no better in these investigations. *The Economist* hosted a debate on carbon offsets in December 2008, in which Michael Wara of Stanford and Kevin Smith of Carbon Trade Watch argued the proposition that they ‘undermine the effort to tackle climate change’ – and by a readers’ vote of 55–45, defeated Henry Derwent of the International Emissions Trading Association and carbon trader Mark Trexler. Not only were voluntary offsets increasingly dubious, but verified CDM projects in the Third World were also considered counter-productive. According to a *Newsweek* investigation in March 2007: ‘[I]t isn’t working . . . [and represents] a grossly inefficient way of cutting emissions in the developing world.’ Notorious projects like the Plantar timber monoculture in Brazil secured vast funds, with dreadful consequences for local communities and ecosystems. *Newsweek* called the trade ‘a shell game’, which has already transferred ‘$3 billion to some of the worst carbon polluters in the developing world’. In early 2009, the *London Times* uncovered problems in Mozambican tree planting investments supported by high-profile celebrities (for example, Ronnie Wood of the Rolling Stones and actor Brad Pitt), including that ‘it is almost impossible to guarantee that the trees will survive the length of time needed to offset any significant carbon emissions’. As a TransNational Institute Carbon Trade Watch report remarked:

These failings are not caused by teething problems, but are symptomatic of the extreme difficulties of assessing the value of ‘carbon,’ which is a commodity that bears little relation to any single real world object. More generally, the scheme over-
estimates the capacity of price to achieving structural change in energy production and industrial practice.\textsuperscript{28}

The ETS was delegitimised further in September 2009 when the UN’s main verification contractor was disqualified for repeated procedural violations, and in December 2009 when Europol discovered that up to 90 per cent of trades in some EU countries were flagrant tax scams.\textsuperscript{29} The tide turned further against carbon trading after the Copenhagen fiasco. The failure of the Copenhagen Accord to confirm financing was a major blow to the market, which crashed by 10 per cent from 17–21 December 2009 as it appeared there would be a serious legitimacy deficit. As \textit{The Guardian} reported in January 2010: ‘Banks are pulling out of the carbon-offsetting market after Copenhagen failed to reach agreement on emissions targets.’\textsuperscript{30} Moreover, due to over-allocation of permits and the ongoing economic slump, the ETS would face further declines in price, and so as Anthony Hobley of the law firm Norton Rose reported: ‘We are seeing a freeze in banks’ recruitment plans for the carbon market. It’s not clear at what point this will turn into a cull or a rout.’\textsuperscript{31}

By March 2010, the \textit{New York Times} observed of carbon trading:

The concept is in wide disrepute. Obama dropped all mention of cap and trade from his current budget. And the sponsors of a Senate climate bill likely to be introduced in April, now that Congress is moving past health care, dare not speak its name . . . It was done in by the weak economy, the Wall Street meltdown, determined industry opposition and its own complexity.\textsuperscript{32}

According to senator Maria Cantwell (a Democrat from Washington State who fruitlessly offered her own non-trading alternative bill to Congress), cap and trade was ‘discredited by the Wall Street crisis,
the Enron scandal and the rocky start to a carbon credits trading system in Europe that has been subject to dizzying price fluctuations and widespread fraud.\textsuperscript{35}

Shortly afterwards, yet another example of corruption was the Hungarian government’s resale of carbon credits, which when exposed, drove the price of a tonne from 12 euros down to 1 euro and crashed two emissions exchanges.\textsuperscript{34} In December 2010, even the ordinarily pro-trading World Wild Fund for Nature and Öko-Institut attacked steel producers ThyssenKrupp and Salzgitter as fraudulent carbon profiteers, demanding that ‘the EU put a halt to the use of fake offsets’.\textsuperscript{35} In late January 2011, the EU ETS was suspended for weeks due to theft of emissions reductions credits from the Austrian and Czech governments, with some of the better-functioning market regulators (for example, Finland and Sweden) requiring a full two months before resuming operations.\textsuperscript{36}

To underline the market’s fragility and vulnerability to fraud, the country that has been the biggest supplier of emissions reductions credits, Ukraine, was suspended by the UN from carbon trading in August 2011. The move blocked delivery on more than 78 million units from carbon-reduction projects through 2011, because, according to the ICIS Heron consultancy, Ukraine’s government ‘under-reported its greenhouse gas emissions. Experts advising the enforcement branch said Ukraine had failed to act on earlier warnings it was in non-compliance. The Ukraine argues that many of its actions have stalled due to lack of funding since the recession.’\textsuperscript{37}

By that time, it was obvious that emissions markets were in crisis and many credits now represented ‘zombie carbon’, as Carbon Trade Watch’s Oscar Reyes put it:

Proposed emissions trading schemes in the USA, Japan, and Canada have stalled indefinitely; new markets in Australia and
South Korea face significant delays; and climate justice activists have successfully blocked the start of a planned scheme in California. Trading has become ever more concentrated around the EU ETS, which could well see carbon permit prices drop to zero if the 27-country bloc adopts stricter guidelines on energy efficiency. Overall carbon trading volumes were lower in 2010 than in the previous year. The CDM, the carbon offsetting scheme at the heart of the Kyoto Protocol, has declined for four years running, with fewer credits purchased from new projects than at any time since the Protocol came into force in 2005. The price of CDM credits continues to fall, and they are now ‘the world’s worst performing commodity.’

These flaws did not prevent the new ‘sectoral markets’ from being proposed for Durban. For governments from the EU, Japan, Australia and Canada – those advanced economies meant to reduce emissions most under Kyoto but which largely failed to do so – the ideal outcome of Durban would be retention of the Kyoto Protocol’s carbon trading mechanism without its emissions-reduction targets. But without the US taking a lead on promoting carbon trading in its vast financial markets, the other major emitters would not do so.

With the resurgence of congressional climate denialists in 2010, the US elite debate over the optimal technical fix to climate change ended, aside from California where it was delayed by community activists who argued the state’s Air Resources Board had not considered other (non-trading) options to comply with state climate legislation. But before the debate had died, even pro-trading economists from the Massachusetts Institute of Technology conceded that the US could well repeat Europe’s market and state failures. Denny Ellerman and Paul L. Joskow observed how the ETS’ disastrous mismatches of money, permits and polluters logically follow the EU’s uneven regulations between countries, and
'the differing effects of allocation and auctioning decisions on a partially liberalised electricity sector are likely to be at least as contentious and complicated in the US as they have been in Europe'. The Value-Added Tax fraud was possible by buying and selling permits between jurisdictions and making fake claims.)

In several other areas where the EU ETS remains flawed – political lobbying, inadequate revenue generation, ‘rent-seeking activity’ and high administrative costs – the danger remained that these would be repeated in the US, according to MIT economists Sergey Paltsev, John Reilly, Henry Jacoby and Jennifer F. Holak. For example, some inefficient coal-fired facilities should urgently be closed, but won’t be thanks to EU ETS rules, the economists admitted:

The cheapest abatement option may be to simply shut down some of the highest emitting facilities, but this rule [trading rights for grandfathered permits] in the ETS creates an incentive to keep them operating at a low level, or to install more expensive abatement technology so that they do not have turn back in valuable allowances.

As for dangers associated with the ETS’ Cap and Giveaway of free permits to pollute, the MIT authors warned: ‘If the allocations are distributed on some “grandfathering” principle to firms at the point of regulation [which was the case in the main 2009 US congressional legislation], then these firms receive the asset value or scarcity rent.’ This would mean that the US follows the disastrous EU lead in ‘paying the polluter for past pollution’. Tragically, US legislators and policy-makers knew of such problems in the EU ETS case and yet still promoted a similar scheme, rather than finding an urgent route to cutting emissions directly. The tragedy is
even deeper when one moves to Africa for evidence of faith-based not evidence-based assessment of carbon commodification.

*Africans ‘build faith in the carbon market’*

Notwithstanding the chaos and corruption, the fraud and frequent market failures, there are prominent African supporters of the emissions trade. For some, this can be attributed to substantial conflicts of interest that arose in joint roles as climate cooling advocates and carbon traders. According to critical environmental scholar Michael Dorsey of Dartmouth College:

> After more than a decade of failed politicking [supporting carbon trading], many NGO types . . . are only partially jumping off the sinking ship – so as to work for industries . . . Unfortunately, many continue to influence NGO policy from their current positions, while failing to admit to or even understand obvious conflicts of interest.\(^{42}\)

In the highest-profile African case, Wangari Maathai, the late Kenyan deputy environment minister and Nobel Peace Prize laureate, such conflicts were not a factor. But there were certainly self-interested reasons for Valli Moosa, South Africa’s former environment minister (1999–2004), to promote carbon trading as minister at the critical 2002 World Summit on Sustainable Development. In the latter half of the 2000s, Moosa went on to preside over the International Union for Conservation of Nature (IUCN) and chaired the board of the continent’s largest energy company and CO\(_2\) emitter, Eskom. He became actively involved in the trade as a sideline and then became a climate negotiations adviser to his successor as environment minister, Edna Molewa, in late 2011. However, in March 2010, Moosa was implicated, as a member of the ANC financing committee, in unethically channelling tens of millions of rands in
earnings to the ruling party by signing Eskom purchase orders for Medupi’s new boilers in a way that directly benefited the ANC, which in turn was financed by the controversial World Bank loan. Even the South African government’s Public Protector acknowledged that his role was ‘improper’.43

Moosa’s immediate successor as minister of environment and tourism, Marthinus van Schalkwyk, a youth spy for the white apartheid regime during the 1980s, took control of the National Party in the late 1990s and then dissolved it into the ANC in exchange for the ministerial position. In 2009, he was demoted to tourism minister, where his commitment to reducing emissions was made evident in an April 2011 pledge: to increase the number of foreign travellers to South Africa from 7 million in 2009 to 15 million by 2015.44 That would require yet more carbon trading, and at the International Emissions Trading Association Forum in Washington in 2007, Van Schalkwyk had insisted: ‘An all-encompassing global carbon market regime which includes all developed countries is the first and ultimate aim.’45 At the Nairobi COP in 2006, Van Schalkwyk argued that ‘the 17 CDM projects in the pipeline in Sub-Saharan Africa account for only 1.7 per cent of the total of 990 projects worldwide. To build faith in the carbon market and to ensure that everyone shares in its benefits, we must address the obstacles that African countries face.’46 By 2011 the ratio had slipped to 1.3 per cent, according to the UNFCCC, with nearly all accounted for by just two countries, Egypt and South Africa.47

Before her death in September 2011, following a heroic career advocating both Kenyan democracy and environmental consciousness, Maathai, too, promoted carbon trading through her own Greenbelt Movement in the expectation that CDMs and emerging proposals for REDD would reward tree-planting in her indigenous strategy as well as in monocultural timber plantations. She was also
the leading proponent of the document ‘Africa Speaks up on Climate Change’, which fed into the ‘African Climate Appeal’, a statement that insists on more CDM finance with fewer strings attached, especially for afforestation:

African governments should ensure that there is equity in geographical distribution of CDM projects and that this is entrenched in the international policy process. They should negotiate for the requirement of up front funding of CDM projects to be waived for many African countries who cannot afford it. The appeal calls upon African countries to embark on the development of CDM capacities and projects including capacity building and development of centres of incubation for CDM projects. African governments should explore possibilities of accessing grants to provide upfront funding for CDM projects and also project development and financing through bilateral arrangements.

Maathai criticised three existing funds – the Special Climate Change Fund, the Least Developed Countries Fund and the Bali Adaptation Fund – because these funds have not been able to address concerns of African countries on adaptation, namely:

- access, adequacy and equitable geographical distribution. The funds are largely inadequate and inappropriately structured; currently relying on a 2 per cent levy on CDM projects. Access to the funds has been made difficult, among others, by bureaucratic bottlenecks of the Global Environmental Fund and the World Bank.

One of the continent’s leading CDM pilot cases, the Bisasar Road landfill in Durban, is considered in Chapter 5. But another high-
profile case, investments in Tanzanian forest conservation, was already attracting attention by 2010. According to Blessing Karumbidza:

Green Resources Ltd, a subsidiary of Norway-based Green Resources (formerly Tree Farms), has entrenched itself in the Southern Highlands of Tanzania where it looks to acquire at least 142 000 ha of land and a total of not less than 170 000 ha in Tanzania alone. This will add to its already existing and expanding presence in other African countries such as Uganda, Kenya and Mozambique among others. All this massive land grab to plant exotic trees (varieties of eucalyptus and pine) is for the purpose of selling an expected 400 000 tons of carbon credit to the Norwegian government. This project is supposed to be providing Norway with the reason not to reduce its local carbon emissions while providing development through employment and other benefit to local and impoverished African communities such as Idete in the Iringa district. Studies of the plantation model and its impacts on local economies (Brazil, Equador, South Africa and Swaziland) show that these claims by Green Resources have to be considered carefully. These projects represent a new form of colonialism, land grabs and carbon as well as resource imperialism, for which African countries need to be careful.90

In sum, the emissions markets were the wrong idea (a neoliberal strategy) in the wrong place (financial markets) at the wrong time (the 2000s era of repeated bubbles and bursts). These arguments are confirmed by empirical evidence, as noted above. But there are also eco-socialist theoretical insights into why climate-crisis capitalism could never work, the subject of the next chapter.
Climate-crisis capitalism amplifies the often mind-numbing contradictions associated with the economic system as a whole, including an inability by many of us to see the forest from the trees. That is the ideological challenge tackled in this chapter, for as one of the world’s leading climate scientists, James Hansen, asked plaintively about carbon trading in 2009: ‘Cap-and-trade is the temple of doom. It would lock in disasters for our children and grandchildren. Why do people continue to worship a disastrous approach?’

Why do ‘people’ – or more precisely, the governing and financial elites, many of whom in the US are caught in the Goldman Sachs-Treasury revolving door – along with mainstream environmental allies and even reformist economist, Paul Krugman, worship carbon trading? The answer has to do with several interrelated factors, including the way a longer-term capitalist crisis generated the rise of financial sector power within an ever-more frenetic and geographically ambitious system; the financial markets’ sophistication in establishing new routes for capital across space, through time and into non-market spheres; and the mainstream ideological orientation to solving every market-related problem with a market
solution, which even advocates of a Post-Washington Consensus and Keynesian economic policies share. Yet from these indefensible factors, we will develop theoretical ammunition against that disastrous strategy, emissions trading, favoured by climate-crisis capitalism.

As leading eco-feminist Ariel Salleh explains: “The current financial and climate crises are consciousness-raising opportunities all round, but green new deals designed to revive the faltering international system will delay fundamental change.” In the same spirit, Samir Amin, Africa’s leading political economist, offers this argument about economic theory applied to ecology:

Capture of ecology by vulgar ideology operates on two levels: on the one hand by reducing measurement of use value to an ‘improved’ measurement of exchange value, and on the other by integrating the ecological challenge with the ideology of ‘consensus.’ Both these manoeuvres undermine the clear realization that ecology and capitalism are, by their nature, in opposition.

This capture of ecological measurement by vulgar economics is making huge strides. Thousands of young researchers, in the United States, and, imitating them, in Europe, have been mobilised in this cause. The ‘ecological costs’ are, in this way of thinking, assimilated to external economies. The vulgar method of measuring cost/benefit in terms of exchange value (itself conflated with market price) is then used to define a ‘fair price’ integrating external economies and diseconomies.

For Amin, there are obvious limitations to these sorts of reforms based on actually existing power relations within capitalism:

It goes without saying that the work – reduced to mathematical formulas – done in this traditional area of vulgar economics
does not say how the ‘fair price’ calculated could become that of the actual current market. It is presumed therefore that fiscal and other ‘incentives’ could be sufficiently effective to bring about this convergence. Any proof that this could really be the case is entirely absent.

In fact, as can already be seen, oligopolies have seized hold of ecology to justify the opening up of new fields to their destructive expansion. Francois Houtart provides a conclusive illustration of this in his work on biofuels. Since then, ‘green capitalism’ has been part of the obligatory discourse of men/women in positions of power, on both the Right and the Left, in the Triad (of Europe, North America and Japan), and of the executives of oligopolies.5

Amin faults Joseph Stiglitz for having ‘openly embraced this position’, proposing ‘an auction of the world’s resources (fishing rights, licences to pollute, etc.). A proposal which quite simply comes down to sustaining the oligopolies in their ambition to mortgage further the future of the people of the South.’6 This is the core idea that has come to be known as ‘ecological modernisation’.

If we set aside for the moment the moral challenges Amin raises about the maintainance of unfair North-South power relations, another part of the problem is that the market does not readily map on to natural phenomena that are only now being understood by the world’s leading climate scientists, such as the sequestration of carbon in forests, oceans and grasslands. As David Harvey warns:

[T]he spatio-temporality required to represent energy flows through ecological systems accurately, for example, may not be compatible with that of financial flows through global markets.
Understanding the spatio-temporal rhythms of capital accumulation requires a quite different framework to that required to understand global climate change.7

The increased commodification of nature runs under such constraints of uncertainty into various limits, Harvey is quick to point out, in part because spatio-temporal rhythms of crazed financial markets now drive global-scale public policy, even when it comes to addressing the crucial problem of global climate change.8 Hence there arose the notion in vulgar economic ideology that financial solutions really do exist for the purpose of mitigating greenhouse gas pollution.

Exemplifying vulgarity in the expression of financial market power, there is no one better than Larry Summers, who as a leading US Treasury Department official arranged Wall Street bailouts in 1995 (Mexico), 1997–8 (East Asia) and 2009–10 (across the world but mainly helping Wall Street and the City of London) through extreme devaluations visited upon vulnerable countries and people. This tendency to devalue other people’s lives harks back to December 1991 when, as World Bank chief economist, Summers wrote (or at least signed a memo written by Lant Pritchett) that ‘the economic logic behind dumping a load of toxic waste on the lowest-wage country is impeccable and we should face up to that . . . African countries are vastly underpolluted’.9

The implications of Summers’ analysis and strategy – which extreme as these words sound, in modified form still represent the ecological modernisation philosophy to which the World Bank and its allies adhere – are that the US and other Northern polluters should:

- shift problems associated with environmental market externalities to the South;
• *stall* a genuine solution to the problems by instead opening up the field of pollution-trading for a future market solution, using financialisation techniques, derivatives and imaginary ‘offsets’ ostensibly aimed at building tomorrow’s sinks so as to mop up today’s dangerous forms of Northern pollution; and

• *steal* more of the world’s environmental carrying capacity – especially for greenhouse gas emissions – and perhaps pay a bit back through commodification of the air (resorting to mythical carbon markets and offsets) while denying climate debt responsibilities.

How did the perspective of Summers in commodifying nature and privatising the air through financial markets – i.e., shifting, stalling and stealing – come to be dominant? To answer, we first consider crisis formation in the world economy and the rise of the financiers, especially considering a few specific convulsions that reflected the dialectic of combined power and vulnerability. In short, as financial markets repeatedly demonstrated their tendencies to disequilibrium and indeed economic chaos, they also retained enormous political power, as well as a ‘Too Big to Fail’ blackmail threat.

So in spite of the 2008–9 crash of financial assets, including half the value of stock market shares across the world over a six-month period, followed in August 2011 by another dramatic crash, neoliberalism reasserted itself as the core policy of financial capital, and financial capital reasserted itself as the core fraction of global capital. The Cancún announcement of reborn carbon trading is just one reflection of this tragedy. And yet the core argument in this chapter is that the use of emissions markets as tools for management of economic and ecological crises are attractive (to capital) in principle but *impossible to implement in practice*, largely because of ongoing disputes about how the deeper capitalist crisis is displaced.
**Convulsions within capitalist crisis**

Drawing on Marx’s *Kapital*, Harvey tells us in *The Enigma of Capital*, that a capitalist crisis is:

> a condition in which surplus production and reinvestment are blocked. Growth then stops and there appears to be an excess overaccumulation of capital relative to the opportunities to use capital profitably. If growth does not resume, then the overaccumulated capital is devalued or destroyed. The historical geography of capitalism is littered with examples of such overaccumulation crises.¹⁰

How must the capitalist system ultimately address this underlying tendency to over-accumulate, i.e., to mass more capital in a particular site than can be justified by way of new investment opportunities there? What do the leading business and state managers do when vast gluts of idle factories, machines, workers and financial assets emerge within the context of a stagnant, excessively productive economy? ‘In a general crisis, a lot of capital gets devalued,’ Harvey argues. ‘Devalued capital can exist in many forms: deserted and abandoned factories; empty office and retail spaces; surplus commodities that cannot be sold; money that sits idle earning no rate of return; declining asset values in stocks and shares, land, properties, art objects, etc.’¹¹

But in lieu of sufficient *devaluation* of over-accumulated capital, those responsible for crisis management attempt various other crisis *displacement* tactics. One of these, the rise of carbon trading, can be compellingly understood using a theory of capitalist crisis developed in the tradition of Marxian political economy. The two primary ways Harvey’s book *Limits to Capital* added to Marx’s crisis theory three decades ago were by naming space and time as displacement strategies during a capitalist over-accumulation crisis.
A third strategy, ‘accumulation by dispossession’, he explained in *The New Imperialism*, would allow capital to interact with society and nature on non-capitalist terrain in search of scarce profits. There are a great many examples that Harvey’s *The New Imperialism* traced back to Marx’s idea of ‘primitive accumulation’ (in which the first massing of capital occurred not through apparently equal market exchanges but through coercion), including:

- the commodification and privatisation of land and the forceful expulsion of peasant populations;
- conversion of various forms of property rights (common, collective, state, etc.) into exclusive private property rights;
- suppression of rights to the commons;
- commodification of labour power and the suppression of alternative (indigenous) forms of production and consumption;
- colonial, neocolonial and imperial processes of appropriation of assets (including natural resources);
- monetisation of exchange and taxation (particularly of land);
- slave trade; and
- usury, the national debt and ultimately the credit system as radical means of primitive accumulation.  

From such origins of understanding capitalist/non-capitalist power relations, a theory of imperialism emerged based on accumulation by dispossession. This was perhaps best articulated in terms of crisis-ridden capitalism by Rosa Luxemburg over a century ago:

Accumulation of capital periodically bursts out in crises and spurs capital on to a continual extension of the market. Capital cannot accumulate without the aid of non-capitalist organizations, nor . . . can it tolerate their continued existence side by side with itself. Only the continuous and progressive disintegration of non-capitalist organizations makes accumulation of capital possible.
To illustrate, the way that nineteenth-century mining capitalists abused black southern African native populations so as to generate cheap migrant labour is one of the classic examples, as Luxemburg herself pointed out. This is why ‘uneven and combined development’ is how some describe the way capital approaches the non-market terrain, by drawing it into the commodification process while still permitting retention of ‘non-capitalist’ features, albeit in a now distorted, degenerative form. Bantustans in apartheid South Africa were the perfect rural laboratory for the continuous disintegration of families and especially of women’s welfare in order to supply male workers to urban factories and mines.

These concepts help us to better locate the carbon markets and other emissions trading and offset strategies as vehicles for displacing over-accumulated capital during a period in which capital has ‘burst out’ in an extended crisis. The most recent bout of capitalist crisis is much deeper than the 2008 financial unravelling, and can be tracked by recalling a variety of key convulsions since stagnation and volatility became the contradictory twin faces of world capitalism in the early 1970s:

- In 1973 the Bretton Woods agreement disintegrated when the US unilaterally ended its payment obligations, representing a default of approximately $80 billion. The agreement on Western countries’ fixed exchange rates, by which one ounce of gold was valued at US$35 between 1944 and 1971, had served to anchor other major currencies. As a result of the US move the price of gold rose to $850 per ounce within a decade.
- Also in 1973, several Arab countries led the formation of the Organisation of Petroleum Exporting Countries (OPEC) cartel, which raised the price of petroleum dramatically and in the process transferred and centralised inflows from world oil consumers to their New York bank accounts.
• From 1973 the Santiago ‘Chicago Boys’ of Milton Friedman – a group of Chilean bureaucrats who studied at the University of Chicago – began to reshape Chile in the wake of Augusto Pinochet’s coup against the democratically elected Salvador Allende, representing the birth pangs of neoliberalism.

• In 1976 the International Monetary Fund (IMF) signalled its growing power by forcing austerity on Britain at a point where the ruling Labour Party was desperate for a loan, even prior to Margaret Thatcher’s ascent to power in 1979.

• In 1979 the US Federal Reserve addressed the dollar’s decline and US inflation by dramatically raising interest rates. In turn, this catalysed a severe recession and the Third World debt crisis, especially in Mexico and Poland in 1982, Argentina in 1984, South Africa in 1985 and Brazil in 1987 (in the latter case leading to a default that lasted only six months due to intense pressure on the Brasilia government to repay).

• At the same time, the World Bank shifted from project funding to the imposition of structural adjustment and sectoral adjustment (supported by the IMF and the Paris Club cartel of donors), in order to assure surpluses would be drawn for the purpose of debt repayment, and in the name of making countries more competitive and efficient.

• The over-valuation of the US dollar associated with the US Federal Reserve’s high real interest rates was addressed by formal agreements between five leading governments that devalued the dollar in 1985 (the Louvre Accord). However, with a 51 per cent fall against the yen, this required a revaluation in 1987 (the Plaza Accord).

• Once the Japanese economy overheated during the late 1980s, a stock market crash of 40 per cent and a serious real estate downturn followed from 1990. Indeed, not even negative real interest rates could shake Japan from a long-term series of recessions.
During the late 1980s and early 1990s, Washington adopted a series of financial crisis-management techniques – such as the US Treasury’s Baker and Brady Plans – so as to write off (with tax breaks) part of the $1.3 trillion in potentially dangerous Third World debt due to New York, London, Frankfurt, Zurich and Tokyo banks which were exposed in Latin America, Asia, Africa and Eastern Europe. Notwithstanding the socialisation of the banks’ losses, debt relief was denied to the borrowers.

In late 1987, crashes on the New York and Chicago financial markets (unprecedented since 1929) were immediately averted with a promise of unlimited liquidity by Federal Reserve chairman Alan Greenspan. The promise was based on a philosophy which in turn allowed the bailout of the savings and loan industry and various large commercial banks (including Citibank) in the late 1980s, notwithstanding a recession and serious real estate crash during the early 1990s.

Likewise in 1998, when a New York hedge fund, Long Term Capital Management (founded by Nobel Prize-winning financial economists), was losing billions in bad investments in Russia, the New York Federal Reserve Bank arranged a bailout, on grounds that the world’s financial system was potentially at high risk.

In the wake of the bursting of a vastly over-inflated US economy whose various excesses spectacularly unravelled – in the dot.com stock market (2000–1) and banking and real estate (2007–9) bubbles – there came Federal Reserve emergency ‘Quantitative Easing’ (throwing money at the problem) and then austerity. In part, the sovereign debt meltdowns of European countries can be blamed on their failing banks and debtors (Iceland, Greece, Ireland, Portugal, Spain, Italy and others still to unravel) (2008–11). To some extent, China and India picked up the slack in global materials and consumer demand during the 2000s. However, this occurs not without extreme stresses and contradictions that in coming years will continue to threaten world finances, geopolitical arrangements and environmental sustainability.\(^\text{15}\)

As financial capital was, in the process, deregulated and internationalised, this list of convulsions reflected tensions and partial write-downs, but never genuine resolutions, to the growing overall problems of volatility and rising debt/speculation. The worsening chaos contrasts to a more stable, predictable, prosperous and evenly distributed set of political-economic relations during the immediate post-Second World War quarter-century.

Nevertheless, no one can deny that crisis displacement techniques have not become much more sophisticated since an earlier capitalist crisis process unfolded during the 1930s, including the freezing of financial markets, crash of trade, Great Depression and by 1939 the inter-imperial turn to armed aggression. Those are the kinds of devaluation processes that sociologist Werner Sombart and economist Joseph Schumpeter termed ‘creative destruction’.\(^\text{16}\) By 1936, such conditions had compelled John Maynard Keynes to write his *General Theory*, which advocated much greater state intervention so as to boost purchasing power and rescue capitalism from its most self-destructive tendencies.\(^\text{17}\)
Moving the convulsions around

The difference today is that drastic forms of destruction have been averted, largely through moving devaluation across two dimensions: time (via the credit system) and space. Moreover, capital also draws on non-market spheres (environmental commons, women’s unpaid labour, indigenous economies) for new surpluses by way of extra-economic coercions. The latter range from biopiracy and privatisation to deepened reliance on unpaid women’s labour for household reproduction.

In this context of crisis, no one can deny that the global economy’s vast financial expansion and the use of geographical power have periodically devalued large parts of the Third World and various emerging market sites, as well as some vulnerable markets in the North that have suffered substantial ‘corrections’ in past years. Extra-economic coercion, including gendered and environmental stress, has intensified in the process. Naomi Klein describes a ‘shock doctrine’ that was best articulated by economist Milton Friedman when both diagnosing and prescribing: ‘[O]nly a crisis – actual or perceived – produces real change.’ As Klein concluded: ‘It was the most extreme capitalist makeover ever attempted anywhere’, but subsequently, ‘in the decades since, whenever governments have imposed sweeping free-market programs, the all-at-once shock treatment, or “shock therapy,” has been the method of choice’. Her cases include South Africa’s post-apartheid restructuring, as well as the Malvinas war of 1982 between Argentina and Britain, China’s Tiananmen Square of 1989, Eastern Europe of the 1990s, the September 11 attack on the World Trade Centre and the Pentagon, the follow-up war on Iraq, the 2004 tsunami and 2005 Katrina hurricane. There are, since then, many more good examples especially given the combination of financial/fiscal and ecological catastrophes associated with ‘disaster capitalism’.
The result of all this economic turmoil and deployment of geopolitical power is an economy that concentrates wealth and poverty in more intense ways geographically and brings markets and the non-market spheres of society and nature together in ways adverse to the latter. This phenomenon is sometimes termed uneven and combined development.

In sum, we can discern three central political-economic processes that have generated the contemporary capitalist crisis:

- First, the durable late twentieth century condition of over-accumulation of capital witnessed huge gluts in many markets, declining increases in per capita GDP growth and falling corporate profit rates. This was displaced and mitigated (shifted and stalled geographically and temporally) at the cost of much more severe tensions and potential market volatility in months and years ahead.

- Second, the temporary dampening of crisis conditions through increased credit and financial market activity has resulted in the expansion of ‘fictitious capital’, by which is meant paper representations of capital (derivatives) far beyond the ability of production to meet the rates of returns (profits, interest and dividends) promised through capital’s financial paper.

- Third, geographical shifts in production and finance continue to generate economic volatility and regional geopolitical tensions, contributing to unevenness in currencies and markets as well as pressure to combine market and non-market spheres of society and nature in search of restored profitability.

The interlinked problems of over-accumulation, financialisation and globalisation brought not only pressures for war, as witnessed by the battles for resources especially in the Middle East, Central Asia and Central Africa. The circumstances mainly associated with hyper-expansion of commerce in a context of technological/
transport changes also generated threats of catastrophic climate change.

Explanations of contemporary political economy require us not only to address volatility but also the long slowdown in economic growth. The world’s per capita annual GDP increase fell from 3.6 per cent during the 1960s, to 2.1 per cent during the 1970s, to 1.3 per cent during the 1980s to 1.1 per cent during the 1990s, followed by a rise to 2.5 per cent for the first half of the 2000s.\textsuperscript{19} To be sure, the bundle of goods measured over time has changed. High technology products enjoyed today were not available in the last century. Yet overall, GDP measures are notorious over-estimates, especially since environmental degradation became more extreme from the mid-1970s, the point when a ‘genuine progress indicator’ went into deficit.\textsuperscript{20}

To reiterate, the argument reminds us that capitalism intrinsically externalises costs in its search for profits. The emission of greenhouse gases without regard for their disastrous impact decades – and now just a few years – away is one of the reasons to transcend this mode of production before its intrinsic tendency to crisis threatens the continuation of life in large parts of the planet. And what the theorists referred to above remind us of is that there is no use in simply moving the crisis tendencies around because under present conditions it is evident they are being \textit{amplified}, not solved, by the techniques of shifting, stalling and stealing, especially when this is facilitated by emissions trading.

\textbf{From capitalist crisis to climate-crisis capitalism}

The Kyoto Protocol’s opportunities for profit from the trade in rights to engage in environmental degradation – the emissions market – are considered in \textit{The Ecological Rift}, by John Bellamy Foster, Brett Clark and Richard York:
By the perverse logic of the system, whole new industries and markets aimed at profiting on planetary destruction, such as the waste management industry and carbon trading, are being opened up. These new markets are justified as offering partial, ad hoc ‘solutions’ to the problems generated non-stop by capital's laws of motion . . . Such schemes continue to be advanced despite the fact that experiments in this respect thus far have been a failure – in reducing emissions. Here, the expansion of capital trumps actual public interest in protecting the vital conditions of life. At all times, ruling-class circles actively work to prevent radical structural change in this as in other areas, since any substantial transformation in social-environmental relations would mean challenging the treadmill of production itself, and launching an ecological-cultural revolution. Indeed, from the standpoint of capital accumulation, global warming and desertification are blessings in disguise, increasing the prospects of expanding private riches.\textsuperscript{21}

It is through the double lens of capitalist crisis and, consequently, the more desperate search for profit that we can substantially understand how over-accumulated capital found spatial, temporal and imperialist routes to flow through, over the past three decades, eventually landing in the emissions markets over the last decade.

Financial markets are central to the story, for they exploded in size and reach once the temporal fix began in earnest with liberalisation and a shift to a higher-interest rate regime in the late 1970s. As productive sector profit rates in the North declined and financial returns boomed, financial expansion into various exotic derivative investments permitted virtually any notional value to be marketed as a credit for packaging and onward sale, including emissions of $\text{SO}_2$ in the US in the early 1990s and carbon in Europe by the late 1990s.
With this sort of lubrication, the commodification of the environmental commons proceeded apace, with water privatisation, biopiracy, genetic modification and other processes controlled by multinational corporations generating expectations for what became the world’s largest artificial market, i.e., carbon emissions. But the financial markets over-extended geographically during the 1990s–2000s as investment portfolios diversified into distant, risky areas and sectors. Global and national financial governance proved inadequate, leading to bloated and then busted asset values ranging from subprime housing mortgages to illegitimate emissions credits.

Likewise, geopolitical tensions emerged over which sites would be most vulnerable to suffer devalorisation of over-accumulated capital after 2008, i.e., which regions or countries would bear the brunt of the deep financial sector and real economic downturns. The global political context during the 2000s was a sole military superpower oriented to neoconservative imperialism (especially in relation to US energy needs and hence in-built climate-change denialism), but mitigated somewhat by a global class politics of neoliberalism.

The neoliberal agenda was so dominant that notwithstanding the 2007–9 financial market crashes, the pseudo-Keynesian financial bail-out and public works strategies adopted in late 2008 were reversed in the US just over a year later, as the Obama administration announced a budget freeze and state and municipal governments engaged in drastic spending cuts. Indeed, when one considers the recessionary impact of 50 US states, Washington’s fiscal stimulus amounted to a net neutral role, and the only major state resource transfer was the $12 trillion or so that the US Federal Reserve channelled into the Too Big to Fail banks. By mid-2011, the US government was contributing to economic stagnation through its austerity regime, but even this was not sufficient to prevent one of
the financial industry’s main policemen, Standard & Poor’s, from a downgrade of Washington’s credit rating to AA.

And in the Third World, where the IMF quickly reverted to austerity mode, numerous economic pressures – debt repayments, current account deficits, rapidly slowing Foreign Direct Investment, more erratic portfolio capital flows and stagnant Overseas Development Aid – generated ever-greater desperation for fresh financial capital inflows, including emissions mitigation investments. Although the larger middle-income countries were generating cash reserves – and in some cases such as China and Venezuela, reconsidering their location in the US – by 2011, the IMF had moved into the periphery of Europe, terrifying social policy advocates and ordinary people from Iceland to Greece.

This is why, after discovering in the last chapter that the emissions markets have languished in the doldrums, they should nevertheless not be dismissed. The emissions trade is yet to make further comebacks, not only thanks to Cancún’s (and in late 2011, Durban’s) market revivalism, but because of the broader trajectory of climate-crisis capitalism.

**Shifting, stalling and stealing**

What can we conclude about the dynamics of climate-crisis capitalism? As argued above, the simplest way to express the core process of crisis displacement is via three management techniques corresponding to the way Harvey explains space, time and accumulation by dispossession. The shifting, stalling, stealing strategy is at the heart of contemporary capitalism, which has addressed its deep-rooted problem of over-accumulation, dating to the 1970s, using what Harvey terms the ‘spatial fix’, the ‘temporal fix’ and ‘accumulation by dispossession’. In order to consolidate this theoretical apparatus, recall that these concepts refer, respectively, to:
• globalisation’s ability to shift problems around spatially, without actually solving these problems;
• financialisation’s capacity to stall problems temporally, by generating credit-based techniques – including securitisation of toxic loans – that permit the purchase of products today at the expense of future arrears and defaults when the upside-down pyramid topples; and
• imperialism’s compulsion to steal from weaker territories via extra-economic extractive systems, variously termed ‘articulations of modes of production’, ‘primitive accumulation’, ‘uneven and combined development’, the ‘shock doctrine’, and ‘accumulation by dispossession’.

The management and mismanagement of capitalist crises, most spectacularly in 2008–9, included vast taxpayer bank bailouts when the financial bubbles burst, as well as bouts of ‘Quantitative Easing’ by the US Federal Reserve, to push dollars into the economy as an artificial stimulant. These techniques, in turn, set the stage for another coming round of subprime disasters, including sovereign debt defaults and the more rapid devaluation of the dollar.

In what may be the next bursting bubble, the vast devaluation of energy capital is still ahead. The unusable fossil fuels that society must prevent from being burned will have to be written off the books of large corporations. The City of London consultancy CarbonTracker has estimated that if global climate managers intend on keeping warming to 2°C (with a 20 per cent chance of not succeeding), then from 2010–40 there are only 565 billion tonnes of CO₂ that can be permitted into the atmosphere. But fossil fuel reserves are known to be 2 795 billion tonnes of CO₂, about two thirds of which is coal, 22 per cent oil and 13 per cent gas. According to these calculations – not even aspiring to a lower emissions target – then around 80 per cent of the reserves must stay below ground.
This presents no small dilemma for climate-crisis capital. The largest 100 coal and 100 oil/gas firms – worth $7.4 trillion in stock market valuation in mid-2011 – have reserves of 745 billion tonnes of CO$_2$ already, not including those held by home countries’ governments. Not only are the firms at risk of a price crash once it is clear that their fossil fuel assets are worthless, but according to CarbonTracker, ‘London’s role as a global financial centre is at stake if these assets become unburnable en route to a low carbon economy’. Not aware of the planet’s limits, of course, City of London managers are apparently allowing many new mining houses to list on the stock market ‘with no consideration by the regulators of potential systemic risks to financial markets of the increased exposure to climate change risk’. In turn, these assets feed into the petro-military complex’s dominance in so many societies, and especially the financial-policy power nexus of Washington-London-Brussels-Tokyo.

No matter how much the shifting, stalling and stealing, more is required than US Treasury, the Federal Reserve and European and Japanese authorities have accomplished, as repeated G7 finance minister crisis summits reveal. The limits are now emerging into plain view, but this difficulty in papering over the cracks represents a general problem, as we witnessed by retracing several decades of convulsions. Shifting, stalling, stealing moves are required when capital exhausts traditional options to address longstanding over-accumulation crises, during which can be discerned the shorter-term business cycle eruptions such as 1973–5, 1980–2, 1989–92, 1997–2001 and 2007–9, with more to come judging by the financial instability and debt crises of 2011. These older strategies would include what Marx identified as countervailing tendencies to crisis, such as raising the profit rate through work speed-up and intensity (‘absolute surplus value’) or more efficient, capital-intensive production (‘relative surplus value’). But it is abundantly evident
that the crises cannot be solved in these ways, because over-accumulation stems from excessive productive capacity and gluts of markets, commodity stocks, labour pools and financial assets unable to achieve deployment in a manner that generates acceptable levels of profit.\textsuperscript{23}

As a result, we have seen, the traditional strategies have to be augmented by ever-more frantically shifting the problems around geographically, and building up vast debt and blowing speculative bubbles so as to stall crises until later. At this stage, capital often needs more routes to offset the tendency of the rate of profit to fall, including the appropriation of non-capitalist spheres of society and nature through extra-economic, imperialist techniques.

If the Earth’s atmosphere – specifically, climate and weather patterns that are viable for human life and capital accumulation – is considered to be an element of ‘non-capitalist organisation’, as it should be, then the commodification of the air itself, via the carbon markets, is a way for capital to accumulate on the one hand. Yet on the other hand, at the same time, it is a way for capital to contribute to the ‘continuous and progressive disintegration’ of a liveable climate, because as we again must point out, carbon markets are a false solution to the climate crisis.

Hence Rosa Luxemburg’s framing – ‘only the continuous and progressive disintegration of non-capitalist organizations makes accumulation of capital possible’ – applies here, as it does to so many other facets of the relationship between capital and non-capitalist spheres. Both spheres are necessary to understand uneven and combined development, and as the non-capitalist becomes commodified as a source of profit, it also plays its role in amplifying the crisis when that systemic relationship breaks down. Hence the stress imposed on so many aspects of natural ecological and social conditions to the point of no return.
Ecological financialisation as ‘false solution’

Carbon trading seemed to offer, not only to capitalism in general but to financial markets in particular, an attractive, fast-growing ‘green’ investment, in a context of crashed sovereign debt markets (even in the North, 2008–11), over-priced property (2007–9), speculative stock markets (dot.coms in particular, 2000–1, but half the world’s share values over six months in 2008–9), emerging markets (1997–8) and other exotic, speculative investment outlets.

As British climate change minister Greg Barker explained in 2010: ‘We want the City of London, with its unique expertise in innovative financial products, to lead the world and become the global hub for green growth finance. We need to put the subprime disaster behind us.’

The ‘need’ to circulate excess financial capital into any new subprime market, such as dubious ‘green growth finance’, was patently obvious, given that the over-accumulation problem had not been resolved, just moved around. As a result, the carbon traders’ hope was that the market could generate high returns once global and national public policies aimed at pricing carbon were implemented, a challenge that animated the negotiating elites in Durban in late 2011. The base expectation prior to the Copenhagen COP15 had been $3 trillion in trades by 2020, plus trillions more in the derivatives business.

However, environmental and social consequences invariably arise, alongside the devastating breakdowns that bedevil financial markets as stores of wealth in such turbulent periods. Indeed, financial markets which most acutely combine space and time actually amplify uneven development when they operate more flexibly in geographical and temporal terms under conditions of over-accumulation crisis. As financier George Soros once wrote:

The private sector is ill-suited to allocate international credit. It provides either too little or too much. It does not have the information with which to form a balanced judgment. Moreover,
it is not concerned with maintaining macroeconomic balance in the borrowing countries. Its goals are to maximise profit and minimise risk. This makes it move in a herd-like fashion in both directions. The excess always begins with overexpansion, and the correction is always associated with pain.²⁶

It is an old problem, repeated several times in the two centuries of capitalist world markets. University of Zurich economic historian Christian Suter explained the amplification of North-South unevenness in part through international financial flows within a repetitive ‘debt cycle’ that had previously bottomed out in the 1840s, 1870s and 1930s:

- first, intense core capital exports and corresponding booms in credit raising activity of peripheries;
- second, the occurrence of debt service incapacity among peripheral countries; and
- third, the negotiation of debt settlement agreements between debtors and creditors.²⁷

To some extent the way this repetitive pattern unfolded in the current conjuncture, such that the crash was held at bay during the 1980s–90s, is a consequence of that period’s excessive financial deregulation, especially applied to the ‘commodification of risk’, as Corner House NGO analyst Larry Lohmann puts it.²⁸ In one extreme case, the invention of derivatives for energy-related investments that bear little relation to underlying ‘real’ values was witnessed in the Enron disaster. In the same spirit, carbon trading incentives have permitted new waves of over-investment in risky emissions reduction outlets, followed by crashes. Friends of the Earth researcher Michelle Chan shows how

[the financial crisis was sparked by bad mortgages, and US carbon markets could pose similar problems through the creation]
of ‘bad carbon’ or ‘subprime carbon’. Subprime carbon contracts – called ‘junk carbon’ by traders – are contracts to deliver carbon that carry a relatively high risk of not being fulfilled and may collapse in value.29

The point, ultimately, is that deep-seated contradictions in industrial capitalism invariably bubble up into financial markets, and the emissions trade is not immune. Hence, it is argued below, the emergence of carbon markets represents at best a shifting of the deckchairs on both the climate and economic Titanics. At worst, carbon trading will create major new holes in the ships. Instead of decisively displacing the crises by moving them around, the carbon markets have arisen to attract hundreds of billions of dollars in speculative trades; have been corrupted as vehicles to genuinely solve economic and climate crises; and have now sprung leaks so intimidating that even the US capitalist class has not found a way to patch up the idea of a market solution to a market problem.

Reversion to theory helps us understand this contradictory outcome. In sum, carbon markets offer useful vehicles for shifting, stalling, stealing, since from the standpoint of space, they move the challenge of emissions cuts to the South (hence preventing industrialisation). From the standpoint of time, they permit a financialised futures-market approach – no matter how fanciful – to the supposed prevention of planet-threatening climate change. And from the standpoint of accumulation by dispossession, by ‘privatising the air’ (through carving up the atmosphere to sell as carbon credits) the maintenance of an exploitative relationship between capital and non-capitalist spheres is also crucial.

What are the implications for those trying to contest the climate-management elite’s global policy paralysis? If we take the problems described above seriously, with strategy defined by theory, and if we give up on tweaking of markets as a feasible strategy (something
many NGO reformers of CDMs and REDD have yet to do), then we can agree that coming to grips with the politics of carbon markets requires climate justice organisers to much more aggressively strive to:

- halt elite shifting of the problem, by expanding our own spatial and scalar political lenses from the local to the national and global (as was often accomplished in the 2000s global justice organising and activism);

- halt elite stalling by telescoping long-term climatic processes into the present, but without getting so carried away by urgency that we endorse dubious deals (this is one of our most serious challenges because the most adverse impacts are years away for many, and some of the most opportunistic of false solutions are being imposed through rush-job environmental assessments); and

- halt elite stealing – not only of an unfair share of the planet’s environmental space, but also of multilateral political processes – by asking tough questions about mitigation and adaptation, and about climate justice, stressing North-South and class/race/gender power relationships.

Of course, as is recognised by critics and even some honest proponents of carbon trading, the markets merely work – if ever – only at the margins. To genuinely solve the climate crisis, much more radical, transformative regulations and public investments are required to break through into the new energy, extraction, production, distribution, consumption and disposal systems necessary for the planet’s and all species’ health. Still, it is instructive to understand why even the limited strategy of carbon trading remains in the doldrums as a result of the failure of elite political will, not just the limits of the markets. Documenting yet more ‘paralysis above’ is what we turn to next.
Paralysis Above

Elite paralysis is a crucial element in the politics of climate injustice, and it is therefore worthwhile to examine some leading individual cases of policy decision-making power, financial muscle and capacity for advocacy. The people mentioned in the pages below – a former Irish president and UN Human Rights Commissioner, a leading British economist, frustrated US senators, a World Bank president and the longest-serving Third World finance minister (and former US vice president Al Gore would also fit well in this group) – are all exceptionally accomplished. In their very different ways, they contribute to global elite climate management. Their varying ideologies and specialisations do not, however, differ on the core question whether to invoke market solutions to market problems in a time of climate-crisis capitalism. This is their gospel.

The intent of the criticisms below is not to demonstrate the elites’ incompetence or laziness, but just the opposite: to consider their excessive enthusiasm for mainstream climate management strategies that do not work under contemporary conditions of climate-crisis capitalism. In other words, the highest-profile leaders are not failing because of their own inadequacies (perhaps with the exception of Robert Zoellick), but because of their loyal adherence to systemic
power and their inability to conceptualise or locate political alliances that break out of the box in which they are confined. Hence, although this chapter is about agency, it is profoundly informed by the structural critique offered in the last chapter.

The world elites’ procrastination in grappling effectively with climate can be explained in various ways, mostly associated with national self-interest and the power of the fossil fuel lobby. But one crucial feature is the myth that a market failure of the magnitude of climate change can be solved by yet more markets, and that therefore designing appropriate emissions trading schemes for each local, national and regional setting is the proper incremental strategy. Apparently not considering any possibility of bottom-up movement towards the objectives of climate justice, the elites persevere with a politics of climate capital. This then, is the basis of ‘paralysis above’.

Even though she invokes the words ‘climate justice’, the most eloquent of world leaders advocating this approach is probably Mary Robinson, who at Trinity College, Dublin, established a Mary Robinson Foundation for Climate Justice in 2010 and who now travels the world advocating greater attention to climate change. The United Nations even named her the co-leader of a civil society ‘Climate Justice Forum’ in May 2011, trying to find a reasonable negotiating partner. In an attempt to promote an understanding of climate crisis in socio-economic terms, Robinson wrote a *Mail & Guardian* article for South African readers in March 2011. For Robinson, elite paralysis came from three misunderstandings that persist in the minds of the masses – as if what the masses want from their leaders, they get. The three mistaken perceptions Robinson aims to correct are:

that the negative effects of climate change are a possibility rather than a probability, that they are a threat to the future, not
the present, and that they will affect plants and animals more than humans. The 2006 report by world-renowned economist Nicholas Stern was the first of its kind to chip away at these perceptions.¹

Beyond mere chipping away, the best way to achieve a full mindshift in public awareness, Robinson continued, is to make the case for economic self-interest:

One of the greatest fears of many people is what tackling climate change will do to their economies, and specifically to their chances for employment in these uncertain economic times. But this is where I see the greatest opportunity, not a threat . . . The opportunity to create greener economies is recognised by a growing number of major companies – but the fruits of greening our economies must also go to small businesses, entrepreneurs and workers around the world. As South Africa prepares for COP17 in Durban in December, I believe that the urgency of exploring and adopting the concept of climate justice will help us to build a sustainable bridge across the divides which have beset global climate change negotiations and will lead to a better world for all.

Such market-centric language is seductive, as it invokes a ‘Green Economy’ with new profit-centres, including emissions trading. After all, as Stern argues:

The problem of climate change involves a fundamental failure of markets: those who damage others by emitting greenhouse gases generally do not pay. Climate change is a result of the greatest market failure the world has seen. The evidence on the seriousness of the risks from inaction or delayed action is now
overwhelming. We risk damages on a scale larger than the two world wars of the last century. The problem is global and the response must be a collaboration on a global scale.2

Stern’s global collaboration agenda included aid, technology transfer, emissions cuts and these market strategies: ‘substantial trade between countries, including rich and poor countries, in greenhouse gas emissions’.3 But as observed in Chapter 2, since peaking in 2008, carbon market trade stagnated amidst market chaos, fraud and thievery in 2009–11 and Clean Development Mechanisms (CDMs) have not been reformed, with fewer credits going to Africa in 2011 than when Stern wrote his report. Yet the elites must maintain optimism about the private sector, especially carbon markets. As Stern wrote in a Financial Times editorial with leading South African politician Trevor Manuel: ‘Sound policies in developing countries, a price for carbon, and risk-sharing and co-financing with multilateral development banks and other national and international institutions can yield private flows that are many times the public resources involved in fostering them.’4 As we see in the next chapter, however, this was the thin end of the wedge, to reduce pressure to provide greater Northern aid budgets to pay the climate debt.

And as for the CDM, in spite of all the evidence to the contrary, Robinson argued in a London School of Economics lecture that carbon trading is ‘finally starting to reap dividends for Africa and least developed countries’. She added: “The experience gained through the design and implementation of successful regional cap-and-trade programs is hugely valuable if shared with developing country regional groups.”5 Robinson provided no justification for these claims, and several efforts I made in 2011 to discern what evidence lies behind her optimism came to naught. For Robinson to parade these arguments as being consistent with climate justice is a travesty. Similarly, a decade earlier, in 2001, UN Human Rights
Commissioner Robinson – acting as chairperson of the World Conference Against Racism (WCAR) – walked out of the major international NGO conference to the sound of loud boos. She refused to bring to the WCAR a conference statement that, in part, condemned Israel's occupation of Palestine. The highly controversial silencing act, added to the distortion of the words 'climate justice', left Robinson ill-equipped to command civil society respect at the Durban COP17. Yet, the UN named her, with no apparent consultation process, co-chair of a civil society initiative for the summit.

Even while wallowing in such professional doldrums, paralysed elites do require some conceptual route forward. According to International Emissions Trading Association officials and members I spoke with during their December 2010 Cancún side event, the expansion of commodification opportunities led by World Bank president Robert Zoellick – even into the realm of 'large charismatic animal species' – represented a rebirth opportunity for emissions trading. Yet, there are still such serious limits to the privatisation of the air that technically it is nearly impossible to imagine a global regime working well, with sufficiently stable, efficient financial markets and the uncorruptable regulators required to carry it off. The crucial missing element – which the Green Climate Fund may address, if Stern and Fund co-chair Manuel have their way – is a much more sustained public subsidy system for emissions trading.

Even more pressing than the adverse logistical and economic factors that have stymied carbon trading are the political ones. Two illustrations of this are at the global scale and in the country most responsible for historic climate damage, the US. There, a 'climate denialism' brainwashing project of well-funded anti-scientific reactionaries and fossil fuel tycoons runs rampant, especially after the mid-term 2010 election that put Republicans in charge of
the House of Representatives. This is not merely the Tea Party influence, but the sustained US elite arrogance about multilateral responsibilities.

Indeed, a much bigger challenge was thus revealed, for on every occasion since the 1987 Montreal Protocol had capped and banned chlorofluorocarbons in order to close the ozone hole, global-scale elite political will was insufficient to address world crises and to give multilateral institutions the power to solve problems, whether through state action or markets. Consider a series of examples. The failure to take forward the 1997 Kyoto Protocol’s weak ambitions in subsequent Conferences of the Parties added to the overall malaise in global forums as well as more discrete gatherings such as the G8 and G20. The WTO could not follow through with its Doha Agenda after what seemed in 2001 a potential deal. The Bretton Woods Institutions and 2002 Monterrey Financing for Development process did not succeed in lubricating flows to the South or shoring up a volatile world banking system, as events in 2008–11 proved. The UN itself became irrelevant when it came to geopolitical tensions, nor could it even reform the UN Security Council to consider, since 2005, proposed membership for India, Japan, Germany, Brazil, South Africa and Nigeria.

All this evidence of fruitless global-scale co-ordination reflected the internecine struggle of capitals, especially the power of recalcitrant fractions within US capital, at the centre of world power.6 As frank-talking Sudanese diplomat Lumumba Di-Aping concluded in 2009: ‘Developed countries have a massive leadership deficit. It’s now up to their leaders to intervene and give a direction to the negotiations rather than waste everyone’s time.’7 They did not provide a direction, aside from Bolivia’s Don Quixote stance, in part because some of those fractions’ interests lay in disputing the climate disaster already unfolding.
Climate denialism
In November 2009, just two weeks before Copenhagen began, a diversion emerged: hackers possibly associated with Rupert Murdoch’s notorious *News of the World* bugging team, published embarrassing emails from the University of East Anglia’s Climate Research Unit. The affair unveiled the personalistic agendas of these university researchers, their unethical practices and the destructive capacities of right-wing fossil-corporate scandal mongers. Three conclusions could be drawn from the episode:

- the University of East Anglia researchers were ultra-competitive academics who were at times sloppy – an occupational hazard true of most of us, only in this case there is a huge amount at stake so their egocentrism was amplified;
- a few academics who are silly about their work ethos do not reverse the universal understanding that scientists have regarding climate change; and
- people who want to distract the world from getting to the root of the climate crisis may well be empowered and have a field day with the University of East Anglia emails scandal, which should in turn compel the rest of us to redouble our efforts.

The unapologetic University of East Anglia researcher Phil Jones seemed to think that because climate denialists represented a thorn in his side since 2001, it was okay to hide scientific data paid for by taxpayers and to avoid wasting valuable time addressing the loonies’ arguments: ‘Initially at the beginning I did try to respond to them in the hope I might convince them but I soon realised it was a forlorn hope and broke off communication.’

One might sympathise. In Durban, we have had experience with two kinds of life-threatening denialisms: apartheid and AIDS:
- dating back many decades, apartheid-denialists who founded and reproduced the ‘Natal Colony’ attitude (Britain’s last outpost)
Paralysis Above

insisted that black South Africans had it better than anywhere else in Africa, that anti-apartheid sanctions would only hurt blacks and not foster change, and that if blacks took over the government it would be the ruination of South Africa, with whites having all their wealth expropriated; and

- from around 1999 (and still to this day), AIDS denialists very vocally insisted that HIV and AIDS were not related, that AIDS medicines were toxic and would do no good, and that the activists’ lobby for the medicines was merely a front for the CIA and Big Pharma (denialist-in-chief Thabo Mbeki was widely cited for genocide involving 300 000 unnecessary deaths due to his presidency’s withholding of AIDS medicines).

In both cases, as with the climate, the denialists’ role was to entrench the status quo forces of state and capital. In both cases they were defeated, thanks to vigorous social activism:

- Fighting against apartheid-denialism, during the 1980s, the United Democratic Front, ANC and other liberation forces found that the denialists’ main damage was opposing sanctions/disinvestment pressure. So they intensified their efforts and by August 1985 won the necessary breakthrough when New York banks withdrew lines of credit to Pretoria, thus forcing a split between Afrikaner state rulers and white English-speaking capitalists. Within a few days, the latter travelled to Lusaka to meet the exiled ANC leadership, and then over the next eight years helped shake loose Afrikaner nationalism’s hold on the state, and indeed today in South Africa you will search long and hard to find a white person who admits they ever defended apartheid.

- As for AIDS, the Treatment Action Campaign found that a mix of local and internationalist activism was sufficiently strong to pry open Big Pharma’s monopoly on intellectual property
rights and also overthrow opposition by the US and South African governments. In short, by 2003, the coterie of AIDS denialists surrounding Mbeki lost to street heat, ridicule and legal critique, so today more than a million South Africans and millions more elsewhere have access to the medicines.¹¹

We will one day look back at the climate denialists and judge them as merely a momentary quirk in human rationality, ultimately not in the least influential in scientific terms. The real danger comes from fossil fuel firms which, like Big Tobacco decades ago, know full well the lethal potential of their product. Their objective is to place a grain of doubt in our minds, and so climate denialists are rather useful. The fossil fuel firms – especially BP, Shell, Chevron and ExxonMobil – not only fund denialist think tanks and ‘astroturf’ (fake grass) advocacy (such as the Global Climate Coalition).¹² They support members of the US Congress – such as Rick Boucher from Virginia (‘cap-and-trade strengthens the case for utilities to continue to use coal’)¹³ – who energetically sabotage legislation aimed at capping emissions. The proposed offsets, carbon trading and other distraction gimmicks in the 2009–10 congressional bills would have meant there would be no net US cuts after all until the late 2030s. And they also work with mainstream ‘green’ groups to halt environmental progress.

These corporations are far more insidious than the email hackers, in part because they have perfected the art of ‘astroturf’ opinion-influencing on the web.¹⁴ The University of East Anglia affair is quite probably a quickly forgotten little episode of dirty academic laundry, and the solution to problems of this sort is simply to make climate activism stronger, more transparent, more rigorous, more democratic and much more militant in trying to defeat the fossil fuel industry.
A much bigger problem than far-right denialism looms: the failure of global elites to arrange a genuine solution to the climate crisis, and, as a result, their turn to the false solution of markets and offsets. Fortunately, they have not yet succeeded, for the balance of forces in Washington is best described as gridlocked.

**Washington gridlock**

John Bellamy Foster and his colleagues have accurately described how the climate legislation mess in Washington began with a pro-market bill proposed by Democratic representatives Henry Waxman and Edward Markey:

The whole huge masquerade associated with the dominant response to global warming was dramatically revealed in the comprehensive climate bill passed by the US House of Representatives in late June 2009 (only to be killed by the US Senate a little over a year later). The climate bill was ostensibly aimed at reducing greenhouse gas emissions by 17 percent relative to 2005 levels by 2020, which would have translated into 4–5 percent less US global warming pollution than in 1990. This fell far short of the target level of a 6–8 percent cut (relative to 1990) for wealthy countries that the Kyoto Accord set for 2012, and that was supposed to have been only a minor, first step in dealing with global warming – at a time when the problem was seen as much less severe and action less pressing.

But the small print in the House climate bill made achieving even this meager target unrealistic. The coal industry was given until 2025 to comply with the bill's pollution reduction mandates, with possible extensions afterward. As climate scientist James Hansen exclaimed, the bill actually built 'in [the] approval of new coal-fired power plants!' Agribusiness, which accounts for
a quarter of US greenhouse gas emissions, was to be entirely exempt from the mandated reductions. The cap and trade provisions of the legislation would have given annual carbon dioxide emission allowances to some 7,400 facilities across the United States, most of them handed out for free. These pollution allowances were to increase up through 2016, and companies would have been permitted to ‘bank’ them indefinitely for future use. Corporations exceeding their allowances could have fulfilled their entire set of obligations by buying offsets associated with pollution control projects until 2027.15

The details are obscure but interesting, suggesting how little the political elites have done to prepare their citizenries for climate legislation, even of the pro-market variety. The main 2009 poll of popular support for carbon trading (by Hart Research Associates in August 2009) found only 27 per cent of the 1,000 people surveyed in support, half as much as a direct tax. As *Energy and Environment Daily* reported:

When both concepts are explained, voters of all political affiliations and backgrounds favor the tax proposal by a significant margin. Sixty-six percent of Democrats prefer the carbon tax, as do 58 percent of independents and 46 percent of Republicans. Overall, 57 percent of those surveyed say they would favor a carbon tax, while 37 percent are opposed . . . The poll’s designers say support for the carbon tax proposal stems from a belief that it is far simpler than cap and trade, provides a revenue stream for tax refunds to offset consumer costs of the tax, offers a more direct incentive for businesses and consumers, and is less likely to be corrupted by loopholes for certain interests.16
Financial Times climate finance reporter Kate Mackenzie explained:

Most people just don’t like the idea of carbon cap-and-trade schemes. Whether they object because it’s like a tax, or because it’s not like a tax, or because it only benefits those crooked financial types, or because it’s too bureaucratic and expensive, or because they hate offsets, or free allowance giveaways to polluters . . . there’s an objection for almost everyone. A pretty powerful constituency however does like cap-and-trade: (some) economists, financial industry types, policy wonks, and some big businesses.\(^\text{17}\)

And yet that constituency was not strong enough to buck climate denialists, other critics and a sceptical public. This became acutely evident after the bad taste left in Copenhagen. And by January 2010, the special Senate election of Republican Scott Brown to replace the late Ted Kennedy was a clincher for legislative paralysis on climate. The upset victory was in part due to Brown’s critique of Obama’s climate advocacy in Copenhagen. Ironically, showing the whimsical nature of US political manoeuvres, Brown had originally been a supporter of the Regional Greenhouse Gas Initiative in Massachusetts and nine other northeastern US states, which in 2009 was valued at $2.5 billion, about 2 per cent of the world market, but with prices of just 2.35 euros/tonne (compared with Europe’s 13 euros/tonne at that point).

In this context, two Foreign Policy writers, Ted Nordhaus and Michael Shellenberger, anticipated that a climate bill would fail because for legislators it harked back to an earlier controversy over regulating energy via British Thermal Unit (BTU) consumption:

[I]t will be déjà vu all over again. In 1994 they went out on a limb and voted for an energy tax (known as the BTU tax)
pushed by then-Vice President Al Gore and President Bill Clinton’s White House only to see the Senate reject such a measure. Having been ‘BTUed’ by two Democratic administrations, twice-fooled Democrats are unlikely to sign up for more of the same in the next Congress.16

The mid-2010 death of the climate bill occurred within weeks of BP’s massive Gulf Oil spill, which left sponsors John Kerry, Joe Lieberman and Lindsay Graham unable to stitch together both energy and climate concessions sufficiently generous for the coalition of capitals required to move legislation through the Senate. At a larger level, this elite failure reflected internecine battles over spatio-temporal fixes, and whether parts of the US – both economically and geographically – would suffer localised devaluation of capital as the cost of climate crisis management began to become significant. The overall view of US capitalists seemed to be clear: continue to pass the costs directly to the environment and thus to those parts of the world that will be most adversely affected by climate change.

Somewhat less objectionable than Waxman, Markey, Kerry, Lieberman and Graham’s efforts on behalf of the fossil fuel and financial industries, was a bill introduced by senators Maria Cantwell and Sue Collins in late 2009, which progressive US climate activists led by Bill McKibben actively supported. Yet, this effort, the Carbon Limits and Energy for America’s Renewal Act (CLEAR), was also fatally flawed because of inadequate emissions cuts (around 8 per cent from 1990–2020), the lingering presence of carbon trading and offsets, the lack of revenues earmarked to pay the US’ fair share of the climate debt, its inadequate strengthening of the command-and-control regulatory mechanisms and mandates for the Environmental Protection Agency (EPA), utility boards and planning commissions, and its non-existent mandate to assure
economic transformation so as to generate new production, consumption, transport, energy and related systems. ¹⁹

Also, if CLEAR had passed the Senate, the likelihood was that the House would insist on many of the objectionable features of Waxman and Markey (offsets, carbon trading, oil/nuke/agro subsidies, EPA neutering, etc.). This is important because not only did philanthropists and foundations dump $300 million into legislative advocacy with zero result (of which a tiny fraction went to supporting CLEAR), but many otherwise militant activists were distracted unnecessarily into the national legislative quagmire, instead of promoting more immediate and fruitful strategies. We return to this point in the final chapter.

At the global scale, the political paralysis can be explained only partly by the failure of US elites to bring domestic legislation to the international negotiating table. After all, as the Centre for Biological Diversity argued in the paper ‘Yes He Can’, Obama had the power to negotiate deep emissions cuts in Copenhagen in December 2009, thanks to the US EPA’s ‘endangerment’ declaration that greenhouse gases are pollutants. ²⁰ But because of the prevailing balance of forces, Obama did not use that power, and the EPA itself became the subject of increasing protests in 2010. By mid-2011, Obama was even considering allowing the EPA to be partially defunded, as part of the overall concessions he was making to Republican Tea Party budget cutters. There were few compromises Obama appeared unwilling to consider, as it appeared he would lose the support of his varied progressive constituencies and become a one-term president. His likely replacement from the Republican Party, it appeared in mid-2011, was Texas governor Rick Perry, a hard-core climate denialisist.

Even without the extreme right’s rising influence, any explanation of Obama’s international priorities rests on the domestic business constituency his administration was attempting to please. This was
witnessed, for instance, in WikiLeaks’ disclosure of US State Department spying tasks in many countries, where financial liberalisation, intellectual property rights, adoption of biotech and genetic modification and even the frequent-flier numbers of leaders were all deemed important. As we see next, WikiLeaks also identified how the Copenhagen Accord could be imposed across the Third World by hook or by crook.

**WikiLeaks and climate bribery**

WikiLeaks provided revelations of US State Department secret cables in late 2010, just as the Cancún COP got underway. Several million dollars of US aid funding to Bolivia and Ecuador was withdrawn earlier in the year due to their leaders’ opposition to the Copenhagen Accord, and small governments were ‘bullied, hustled around, lured with petty bribes, called names and coerced into accepting the games of the rich and emerging-rich nations’, observed Soumya Dutta of the South Asian Dialogues on Ecological Democracy:

> Many debt-ridden small African nations are seeing the money that they might get through the scheming designs of Reduced Emissions from Deforestation and Forest Degradation, and have capitulated under the attack of this REDD brigade. It’s a win-win situation, both for the rich nations, as well as for the rich of the poor nations. The real poor are a burden in any case, to be kept at arms length – if not further.²¹

Lead US negotiator Todd Stern and his State Department colleagues bribed or financially punished Third World governments, which at Copenhagen were the most vocal critics of Northern climate posturing. This strategy became common knowledge thanks to disclosures of US diplomatic cables from February 2010. On
11 February, EU climate action commissioner Connie Hedegaard told the US that the Alliance of Small Island States “could be our best allies,” given their need for financing. A few months earlier, just before Copenhagen, the Maldives helped lead the campaign against the North’s low emissions targets with a memorable photo stunt: an underwater cabinet meeting with leaders decked out in diving gear. But surprisingly, the Maldives leaders reversed course, apparently because of a $50 million aid package arranged by US deputy climate change envoy Jonathan Pershing. According to a 23 February cable, Pershing met the Maldives’ US ambassador, Abdul Ghafoor Mohamed, who told him that if ‘tangible assistance’ were given to his country, then other countries would realise ‘the advantages to be gained by compliance’ with Washington’s climate agenda.

The promised money is, however, in doubt. Hedegaard also noted with concern that some of the $30 billion in pledged North-South climate-related aid from 2010–12 — for example, from Tokyo and London — would come in the form of loan guarantees, not grants. Pershing was not opposed to this practice because ‘donors have to balance the political need to provide real financing with the practical constraints of tight budgets’. Even while observing Washington’s tendency to break financial promises, Ethiopian prime minister Meles Zenawi, the leading African head of state on climate, was also unveiled by WikiLeaks as a convert to the Copenhagen Accord. This appeared to be the outcome of pressure applied by the US State Department, according to a cable from 2 February 2010, when Zenawi asked for more North-South resources in return, while also defending his tyrannical rule to the State Department’s Johnnie Carson.

Washington legislative gridlock was not the only factor in the demise of the Kyoto Protocol in 2009–10. As the WikiLeaks cables demonstrate, there was also active sabotage by the Obama
administration. Indeed, the disdain with which the US State Department and Sarkozy’s government held international treaties was revealed in another February 2010 cable released by WikiLeaks. Instead of respecting binding treaties like Kyoto, the Copenhagen signatories merely committed these weasel words: ‘We should cooperate in achieving the peaking of global and national emissions as soon as possible.’

To illustrate the mindset at work, Ambassador Charles Rivkin cabled to his Washington State Department bosses that French environment minister Jean-Louis Borloo believes that ‘the key to advancing climate negotiations is to drop the notion of a legally binding treaty in favor of a system of national commitments’. As Rivkin puts it:

Borloo insisted that UNFCCC COP negotiators did not have the ability to close a deal after years of ongoing negotiations. It was now up to the major heads of state. He suggested a group of eight or ten: Germany and France for Europe, the United States, China, India, Brazil, Algeria and Ethiopia (and possibly South Africa). Once these leaders, working through their sherpas or personal representatives agree on an implementation plan for Copenhagen, it will be largely acceptable to, and accepted by, the rest of the world, and can then be returned to a UN forum to be finalized.

According to Rivkin, Borloo’s view was that the final climate deal ‘would include tradable emissions quotas (with linked carbon markets), a forestry mechanism (REDD Plus), and financing, including innovative financing and a fast start mechanism’. He commented that China would agree to such a system as far preferable to a US and EU carbon border tax or tariff arrangement. As for support from elites representing the main climate victims, Borloo

suggested that ‘most of Africa’ and ‘three quarters of the island states’ were in the bag.26

Nothing that occurred in Cancún reflected a diversion from the Franco-American agenda of Kyoto sabotage. Even better for Washington and Paris, Japan also signed on. Political choices of this sort, made by Obama, Clinton and their allies and underlings have a great deal to do with why Washington’s domestic gridlock was repeated at global scale, via the Copenhagen Accord, and why at the same time, the paralysed elites must continue to have faith in carbon trading, no matter how many incidents of market failure and apparently ingrained emissions-trade corruption are uncovered. Any global negotiations aimed at a fair, ambitious and binding deal are obviously destined to fail under these circumstances.

An even more challenging problem emerged at the same time: the rise of the World Bank in the guise of a ‘Green Bank’ aiming to consolidate vast climate financing powers. After all, the amounts of money discussed in WikiLeaks cables from February 2010 – a few million dollars denied to Bolivia and Ecuador, and a few tens of millions in aid bribes to officials of the Maldives – pale in comparison to the tens of billions lent out each year by the World Bank and its affiliates. A central cause of gridlocked global climate negotiations can be traced to the Bank’s vanguardist agenda and the contradictions to be found therein. Some of the paralysis is due to the way the institution has been directed, by a leader intent on becoming the main financier of climate change, and simultaneously taking over as the main financier of the supposed market-centric solution to climate change, Robert Zoellick.

**World Bank zealotry**

We have established that both market failure and national state failure are evident under conditions of contemporary neoliberalism. Likewise, another crucial factor in the demise of multilateral
negotiating processes is the flawed institutional nature of global governance. Behind the paralysis of major institutions can often be found inappropriate leadership. There is probably no better case of a hyperactive yet exceptionally dubious global leader in the twenty-first century than World Bank president Robert Zoellick.27

This became clear to many in the business world in November 2010, when at the G20 meeting in Seoul, Zoellick argued that a way out of the ongoing international financial crisis was to partially root the global monetary system in gold. The metal was, he claimed, an ‘elephant in the room’ and if recognised as a valid investment market for currency stabilisation, gold might play a constructive role in reducing speculative turbulence and structural imbalances. In reality, the fast-rising gold price was merely a speculative bubble based on financial industry fears that authorities, especially the US Federal Reserve’s Ben Bernanke (who had promised to push another $600 billion into the anaemic US economy that same week, which was one of the factors that began to drive down the US credit rating), could no longer perform their jobs in the ways that bankers wanted.

The bankers began searching for stability, no matter where, and for Zoellick’s former colleague Jim O’Neill, chairperson of Goldman Sachs Asset Management, ‘Bob Zoellick not only has got a lot of historical perspective, but he also understands the global dynamics better than most’.28 Zoellick has a certain perspective, to be sure, fusing neo-conservatism and neoliberalism, but did he really understand the way the world works? Zoellick’s background included so many politically, socially, economically and environmentally destructive episodes, that endangering the world economy and global climate were only natural at the pinnacle of his Peter Principle career, illustrating the old adage that ‘in a hierarchy every employee tends to rise to their level of incompetence’.
Zoellick replaced the disgraced Paul Wolfowitz, who in 2007 was forced to resign the Bank presidency after just two years, due to nepotism and numerous other managerial disasters. But in the same spirit as his predecessor, ‘Zoellick was perhaps the first Bush associate to introduce the concept of evil into the construct of Bush’s radical overhaul of US grand strategy’, according to US foreign policy analyst Tom Barry. Ideologically, Zoellick stood hand in hand with Dick Cheney, Donald Rumsfeld, Richard Perle, Wolfowitz, John Bolton, John Negroponte and the other neo-conservatives, recalled Barry, for in 1999, Zoellick wrote: ‘A modern Republican foreign policy recognizes that there is still evil in the world – people who hate America and the ideas for which it stands’.

Zoellick is of interest to the ‘evil’ climate justice movement not only as a neoconservative (given the relationship of militarism to climate change), but because he represents a global trend of empire in crisis since the millennium, featuring at least three traits which he brings to climate negotiations. First, as if imitating the star of the Woody Allen film *Zelig*, consider Zoellick’s ideological fusion of neoconservatism and neoliberalism, which he shared with Wolfowitz. Both strains are bankrupt, by any reasonable accounting, given the failure of the Bush petro-militarist agenda of imposing ‘democracy’ and the financial meltdown catalysed by decades of neoliberal deregulation.

Representing the former, Zoellick was at the outset a member of the original neoconservative Project for a New American Century, as early as January 1998, going on record in a letter co-authored with a score of other leading right-wingers to then president Bill Clinton to argue that Iraq should be illegally overthrown. The petro-military complex is a major contributor to climate change via direct emissions and promotion of fake solutions (such as carbon trading and coal capture and storage), has a strong interest in the
invasion and imperial policing of territories with fossil fuel resources, and has been the key source for financing climate denialism. It is, therefore, crucial for the climate justice movement to more actively reach out to a global anti-imperialist network that, notwithstanding failures to halt the US and allied invasions of Iraq and Afghanistan, did manage the world’s largest-ever anti-war protest, on 15 February 2003, when more than 15 million participated.

As for the latter ideology, the neoliberal Washington Consensus, Zoellick had long advocated and practiced the core strategy of financial deregulation, no matter its devastating consequences. The extension of financial securitisation into the climate, via carbon markets, was as prone to volatility and outright failure as the packaging of real estate loans and associated instruments, as we have seen. As a result, after the 2007–8 meltdown of securitised home mortgages in the US undermined neoliberalism’s ideological hegemony, Zoellick and IMF managing director Dominique Strauss-Kahn spent 2009 beating a hasty retreat from the austerity-oriented economics their institutions intrinsically favour, so as to maintain global effective demand with crony-Keynesianism during the capitalist crisis.

Yet, by 2010, it was evident in sites as formerly wealthy as California, Greece, Ireland and Britain, that the Washington Consensus was only temporarily in retreat. Austerity proved to be just as vicious when applied in the North – and specifically, by Strauss-Kahn in Greece and Ireland prior to his May 2011 fall from power – as it is in the South. Moreover, it was Zoellick’s embrace of eco-neoliberalism that would maintain Bank promotion of carbon markets, notwithstanding his attempts to disguise the financial agenda with triumphal 2010 speeches about ‘Democratizing Development Economics’ and ‘The End of the Third World’.

Neoliberal economic policy is strongest when it locks in – ‘There is No Alternative’ – financialisation and the resulting strategy
of austerity. To do that requires removing policy authority from democratically elected politicians whenever these might pose a threat (as in Iceland, for example). It was, therefore, not out of character for Zoellick to promote ‘gold as an international reference point of market expectations about inflation, deflation and future currency values . . . Although textbooks may view gold as the old money, markets are using gold as an alternative monetary asset today.’³³ New York Times columnist (and Nobel Economics Prize laureate) Paul Krugman replied: ‘The descent into a Dark Age of economics continues.’³⁴ According to University of California economist Brad DeLong, a Clinton-era Treasury official with Keynesian leanings, Zoellick’s gold kite-fly was a ‘play for the stupidest man alive crown’, because *the last thing that the world economy needs right now is another source of deflation in a financial crisis. And attaching the world economy’s price level to an anchor that central banks cannot augment at need is another source of deflation. We learned that in the 15 years after World War I.*³⁵

The second trait of interest to climate justice politics is Zoellick’s inability to arrange the global-scale deals required to either solve climate crises or gracefully manage the US empire’s smooth dismantling. This was witnessed in the WTO’s demise, mainly on his 2001–5 watch as the US trade representative. Zoellick’s inability to forge consensus for capital’s larger agenda was on display at the Cancún ministerial summit in 2003 in disputes with the EU over the US genetic engineering fetish. Zoellick’s insistence upon bilateral and regional alternatives to multilateralism generated durable anti-Washington economic sentiment across Latin America. Those bilateral deals actually rolled back multilateralism, such as in
increasing the access to AIDS medicine won at the Doha summit in November 2001, according to Paul Zeitz of the Global AIDS Alliance. In 2007, Zeitz expressed dismay at Zoellick’s promotion to Bank president: ‘He has been a close friend to the brand-name pharmaceutical industry, and the bilateral trade agreements he has negotiated effectively block access to generic medication for millions of people. This is terrible for AIDS patients, most of whom cannot afford brand-name prices.’

Then, as one of the most senior Bush administration officials in 2005–6, second-in-command at the State Department, Zoellick achieved practically no improvement to Washington’s wrecked image abroad. And as Bank president, appointed after Wolfowitz’s fall by Bush, Zoellick’s efforts during the 2008–9 G20 deliberations on the world economy and at the December 2009 UN Copenhagen climate summit were equally unsuccessful. If Zoellick continues clinging to the core financialisation agenda of the US empire, the discarding of carbon markets in favour of genuine solutions to the climate crisis will take much longer.

The third trait, at a more profound level, was Zoellick’s tendency to deal with economic and ecological crises by shifting and stalling them, while stealing from those least able to defend. As discussed in Chapter 3, capital exhausts the options it usually has to address economic crises through traditional means: work speed-up (absolute surplus value), replacing workers with machines (relative surplus value), shifting the problems around geographically (the ‘spatial fix’), and building up vast debt and blowing speculative bubbles so as to stall crises until later (the ‘temporal fix’). To shift, stall, steal in his various positions since achieving international prominence in 2001, Zoellick’s neoconservative-neoliberal worldview provided cover, yet only up to a point, which we now appear to be reaching. That point comes sooner than later in part because the institutions needed to keep the game in play are cracking up.
To illustrate this problem of institutional incapacity, consider the fate of several major US financiers: Fannie Mae, Enron, Alliance Capital and Goldman Sachs. These were all crucial US imperial financial institutions, instrumental in generating the fictitious capital in real estate, energy and other sectors which proved so vital to the Clinton-Bush era’s internal displacement but eventual amplification of crises. First, Fannie Mae was led by Zoellick – its 1993–8 executive vice president – into dangerous real estate circuitry after his stint as a senior aide in James Baker’s Treasury. Zoellick had served as deputy assistant secretary for Financial Institutions Policy just prior to the 1988–90 Savings and Loan crisis, itself a function of the financial-deregulatory era that gave us mortgage-backed securities. Fannie Mae was soon so far in the red due to subprime lending through those securities that it went bankrupt and a massive state bailout was needed in 2008.

Enron, the second of these financial firms, which cracked in 2002, boasted Zoellick as a senior political and economic adviser in 1999. Records are not available as to how implicated Zoellick was in Enron’s gambles, so painful to Californians (subject to extreme electricity price manipulations) and investors (who suffered Kenneth Lay’s illegal share price manipulation). However, working for the third firm, Alliance Capital, Zoellick, as one of two board members on the audit committee, was party to late 1990s oversight of its investments in Enron (it was the firm’s largest single investor by the time of the crash), which led to multiple fraud lawsuits and vast losses for Alliance’s clients in 2001, including the state of Florida, led by Jeb Bush. Alliance later lost 75 per cent of its share value over the course of a few weeks in late 2008, one of the most exposed institutions to the global financial meltdown.

The fourth bank, Goldman Sachs, which Zoellick served as a leading international official in 2006–7, did well through the crisis
because of morally questionable and allegedly illegal deals, followed by crony-suffused bailouts linking Bush/Obama administration officials Hank Paulson, Ben Bernanke, Tim Geithner and Larry Summers. For the climate justice movement this is important, because ‘[t]he world’s most powerful investment bank is a great vampire squid wrapped around the face of humanity, relentlessly jamming its blood funnel into anything that smells like money’, as Matt Taibbi put it, and, as discussed in Chapter 2, that included priming the carbon markets alongside the World Bank.37

Under Zoellick, the World Bank remains the most important multilateral fixer of broken carbon markets, continuing to invest billions and spin-doctor the obvious flaws in the system. Zoellick announced the expansion of carbon markets into ‘charismatic species’ and REDD commodification deals in late 2010. Yet simultaneously, internal World Bank Group (WBG) sources actively criticised and challenged the legitimacy of the institution’s role in the carbon marketplace, and as a report from the Bank’s own Independent Evaluation Group (IEG) poignantly reveals:

The World Bank’s Carbon Finance Unit (CFU) has led, through its extensive activities in Clean Development Mechanism markets, to expanding the role of, and the infrastructure for, carbon trading between developed and developing nations. However, there has been criticism of the environmental quality of many projects that the WBG has supported, including industrial gases, hydro-power, and fossil (gas and coal) power plants, which may well have been either profitable in themselves or were pursued primarily for the purpose of national energy diversification and security policies. In addition, although the CFU was promoted as a market maker that could act as a carbon offset buyer until the private market flourished, the
WBG continued to build up its trading after that private market was fully established. Finally, as a vehicle for catalytic finance and technology transfer, the IEG finds the CFU’s record is at best mixed. The Panel suggests that the WBG has a public responsibility to ensure that its behavior advances the quality of international institutions that regulate carbon finance markets, rather than acting principally as a pure market player profiting from expanding market scale.\textsuperscript{38}

Partly as a result of these kinds of findings (well known years earlier in the climate justice movement), in November 2010 four global civil society organisations – Jubilee South, Friends of the Earth International, ActionAid and LDC Watch – along with dozens of regional and national organisations reacted to Zoellick’s management of the environment with a full-fledged international campaign to ban the Bank from climate financing:

Many northern country governments and the World Bank itself have been actively pushing for the World Bank to be given the mandate to be ‘THE’ global climate institution, or for it to play a central role in setting up and eventually managing the governance and operations of a new global climate fund. At the June United Nations Framework Convention on Climate Change (UNFCCC) inter-sessional negotiations in Bonn, Germany, the United States submitted a proposal naming the World Bank as the ‘Trustee’ for the formation of the Global Climate Fund. On June 25th, on the eve of the G20 meeting in Toronto, the World Bank appointed a World Bank Special Envoy for Climate Change. The World Bank also recently hired Daniel Kamman as their clean energy czar. These are some of the latest of a series of moves since 2008 to secure this important
mandate for the World Bank. Also included is the establishment of the World Bank-managed Climate Investment Funds, at the behest of the UK, US, and Japan. Regional development banks are also part of the governance and management system of these Climate Investment Funds.39

In short, argue Jubilee South and others, there should be no World Bank role in climate finance, for reasons that bring together several aspects of climate justice politics:

Financing must be public in nature, obligatory, predictable, additional, and adequate, must not come with or be used to impose conditionalities, should not be in the form of loans or other debt-creating instruments. Instruments for raising finance should not cause harm to people and the environment. These should not promote or reinforce false solutions. These mechanisms and instruments should also have a transformational effect on the economy and environment. A new Global Climate Fund is an essential institutional channel for north to south climate finance flows and ensuring equitable, fair, and appropriate distribution among countries of the South. Such an institution should have democratic governance and management structures with majority representation from South countries, gender balance, and seats for civil society organizations.40

The problem, however, with more representation from South countries is that there is an occasional representative with formidable elite – and also grassroots – credibility, who simply continues in the traditions of elite paralysis from above. The finest example is South Africa’s long-serving minister Trevor Manuel.
**Southern elite shortcomings**

South Africa’s most vocal neoliberal politician was selected as co-chair of the Green Climate Fund in late April 2011 in Mexico City, even though he did not attend the Fund’s meeting due to electoral responsibilities in South Africa. At that point, the ANC ran as mayoral candidate in Trevor Manuel’s home city, Cape Town, a popular leftist labour leader, Tony Ehrenreich, who regularly disagreed with Manuel on economic policy. But no amount of ANC campaigning support in the ‘Coloured’ (mixed race) neighbourhoods where Manuel learned politics 35 years earlier as a young community organiser could sway the voters to the ANC, away from the white-led Democratic Alliance with its equally populist Coloured mayoral candidate, Patricia de Lille. So Manuel’s stay home came to naught aside from demonstrating an acute loyalty to local politics even at a time of enormous global-elite opportunity.

Manuel’s choice as Fund co-chair, joined by Mexican and Norwegian officials, reflected the negotiating power South Africa wielded in such venues the year it hosted COP17. From April 2011, world climate managers began to design the world’s biggest-ever replenishing pool of aid money: a promised $100 billion of annual grants by 2020, more than the IMF, World Bank and allied regional banks put together. Yet, instead of being the source of concessionary finance which could serve as a Northern climate debt down payment, as discussed in the next chapter, the Green Climate Fund was already the subject of delegimisation by the climate justice lobby. As a network of 90 progressive organisations wrote to the UN: “The integrity and potential of a truly just and effective climate fund has already been compromised by the 2010 Cancún decisions to involve the World Bank as interim trustee.” A Friends of the Earth International study in April 2011 attacked the Bank for increased coal financing, especially $3.75 billion loaned to South Africa’s Eskom just a year earlier.
The Green Climate Fund needed a powerful leadership to regenerate legitimacy and maintain global elite confidence. There was no one better equipped than Manuel, who had chaired the Bank/IMF Board of Governors in 2000, as well as the Bank's Development Committee from 2001–5. He was one of two United Nations Special Envoys to the 2002 Monterrey Financing for Development summit, a member of Tony Blair's 2004–5 Commission for Africa and chair of the 2007 G20 summit. Manuel was appointed UN Special Envoy for Development Finance in 2008, headed a 2009 IMF committee that successfully advocated a $750 billion capital increase and served on the UN's High Level Advisory Group on Climate Change Finance in 2010. Within the latter, he and Nick Stern suggested that $30–50 billion be sourced from the private sector, not aid budgets.43

No one from the Third World has such experience, nor has anyone in these circuits such a formidable anti-colonial political pedigree, including several 1980s police detentions as one of Cape Town's most important anti-apartheid activists. Despite occasional rhetorical attacks on 'Washington Consensus' economic policies – part of South Africa's 'talk left, walk right' tradition – since the mid-1990s Manuel has been an exemplary neoliberal elite. Even before taking power in 1994, he was considered a World Economic Forum 'Global Leader for Tomorrow', and in 1997 and 2007 Euromoney magazine named him African Finance Minister of the Year. No wonder, as in late 1993 he had agreed to repay apartheid-era commercial bank debt against all logic, and negotiated an $850 million IMF loan that straitjacketed Nelson Mandela.44

With Manuel as trade minister from 1994–6, liberalisation demolished the clothing, textile, footwear, appliance, electronics and other vulnerable manufacturing sectors, as he drove tariffs below what even the WTO demanded. After moving to the finance ministry in 1996, Manuel imposed the 'non-negotiable' Growth,
Employment and Redistribution policy (co-authored by World Bank staff), which by the time of its 2001 demise had not achieved a single target aside from inflation. Manuel also cut the primary corporate tax rate from 48 per cent in 1994 to 30 per cent five years later, and then allowed the country’s biggest corporations to move their financial headquarters to London, which ballooned the current account deficit. That in turn required Manuel to arrange such vast financing inflows that the foreign debt soared from the $25 billion inherited at apartheid’s close to $80 billion when he left the finance ministry in May 2009.45

A few weeks earlier, with the world economy teetering, The Economist magazine named South Africa the most risky of the seventeen main emerging markets, and the South African government released data conceding that the country was much more economically divided than in 1994, overtaking Brazil as the world’s most unequal major country. ‘We are not in recession,’ Manuel quickly declared in February 2009. ‘Although it sometimes feels in people’s minds that the economy is in recession, as of now we are looking at positive growth.’ At that very moment, it turned out, the South African economy was shrinking by a stunning 6.4 per cent (annualised), and indeed had been in recession for several months prior. More than 1.2 million jobs were lost in the subsequent year, as unemployment soared to around 40 per cent (including those who gave up looking). But in October 2008, just as IMF managing director Strauss-Kahn told the rest of the world to try quick-fix state deficit spending, Manuel sent the opposite message to his impoverished constituents: ‘We need to disabuse people of the notion that we will have a mighty powerful developmental state capable of planning and creating all manner of employment.’47

This echoed his 2001 statement to a local Sunday newspaper: ‘I want someone to tell me how the government is going to create jobs. It’s a terrible admission, but governments around the world
are impotent when it comes to creating jobs." Governments under the neoliberal thumb are also impotent when it comes to service delivery, and thanks partly to his fiscal conservatism, municipal state failure characterises all of South Africa, resulting in more protests per capita against local government in Manuel's latter years as finance minister than nearly anywhere in the world (the police count at peak was more than 10 000/year). Ironically, said Manuel in his miserly 2004 budget speech: "The privilege we have in a democratic South Africa is that the poor are unbelievably tolerant." In 2008, when an opposition politician begged that food vouchers be made available, Manuel replied that there was no way to ensure 'vouchers will be distributed and used for food only, and not to buy alcohol or other things'. Disgust for poor people extended to AIDS medicines, which in December 2001 aligned Manuel with his AIDS-denialist president Thabo Mbeki in refusing access: "The little I know about anti-retrovirals is that unless you maintain a very strict regime . . . they can pump you full of anti-retrovirals, sadly, all that you're going to do, because you are erratic, is to develop a series of drug-resistant diseases inside your body."

Instead of delivering sufficient medicines, money and post-neoliberal policy to the health system, schools and municipalities, Manuel promoted privatisation, even at the Monterrey global finance summit: 'Public-private partnerships are important win-win tools for governments and the private sector, as they provide an innovative way of delivering public services in a cost-effective manner.' He not only supported privatisation in principle, as finance minister Manuel put enormous pressure (equivalent to IMF conditionality) on municipalities – especially Johannesburg in 1999 – to impose commodification on the citizenry. In one of the world's most important early twenty-first century water wars, residents of Soweto rebelled and the French firm Suez was eventually evicted from
managing Johannesburg’s water in 2006. Water privatisation was Washington Consensus advice, and as Manuel once put it: ‘Our relationship with the World Bank is generally structured around the reservoir of knowledge in the Bank’—with South Africa a guinea pig for the late 1990s Knowledge Bank strategy. Virtually without exception, Bank missions and neoliberal policy support in fields such as water, land reform, housing, public works, healthcare and macroeconomics failed to deliver.

In spite of neoliberal ideology’s disgrace, president Jacob Zuma retained Manuel and his policies in 2009. In September that year, the Congress of South African Trade Unions’ president Sdumo Dlamini called Manuel the ‘shop steward of business’ because of his ‘outrageous’ plea to the World Economic Forum’s Cape Town summit that business fight harder against workers. The mine-workers’ union termed Manuel’s challenge ‘bile, totally irresponsible . . . To say that business crumbles too easily is to reinforce business arrogance.’ Manuel also disappointed feminists for his persistent failure to keep budgeting promises, even transparency. ‘How do you measure government’s commitment to gender equality if you don’t know where the money’s going?’ asked the Institute for Democracy in South Africa’s Penny Parenzee. Former ruling party politician Pregs Govender helped develop gender budgeting in 1994 but within a decade complained that Manuel reduced it to a ‘public relations exercise’.

As for a commitment to internationalism, in early 2009 when Pretoria revoked a visitor’s visa for the Dalai Lama on Beijing’s orders, Manuel defended the ban on the exiled Tibetan leader: ‘To say anything against the Dalai Lama is, in some quarters, equivalent to trying to shoot Bambi.’ At the same moment, Manuel was sabotaging Zimbabwe’s recovery strategy, chosen by the new government of national unity, by insisting that Harare first repay $1 billion in arrears to the World Bank and IMF, otherwise ‘there
was no way the plan could work’. Zimbabwean economist Eddie Cross complained: ‘In fact the IMF specifically told us to put the issue of debt management on the back burner . . . The South Africans on the other hand have reversed that proposal – I do not know on whose authority, but they are not being helpful at all.’

Given his biases and his record, many within South Africa’s community, labour, environment, women’s, solidarity and AIDS-treatment movements would be happy to see the back of Manuel. His own career predilections may be decisive. Often suggested as a candidate for the top job at the Bank or IMF, Manuel recently confirmed anger at the way local politics evolved after Zuma booted Mbeki from the South African presidency. In an open public letter in March, for example, Manuel told Zuma’s main spokesperson, Jimmy Manyi, ‘your behaviour is of the worst-order racist’ after a (year-old) incident in which Manyi, then lead labour department official, claimed there were too many Coloured workers in the Western Cape in relation to other parts of South Africa. Manyi had earlier offered a half-baked apology, but suffered no punishment. Once a political titan, Manuel soon appeared as a has-been gadfly. In mid-2011, along with his finance ministry successor Pravin Gordhan, Manuel was rebuffed by the Cabinet for making statements the unions complained were supportive of drastic labour market deregulation.

Manuel’s disillusionment apparently began in December 2007, just prior to Mbeki’s defeat in the ANC leadership election. After his finance ministry job was threatened by Zuma assistant Mo Shaik’s offhanded comments, Manuel penned another enraged open letter: ‘Your conduct is certainly not something in the tradition of the ANC . . . You have no right to turn this organisation into something that serves your ego.’ In May 2009, Shaik, whose brother Schabir was convicted of corrupting Zuma during the infamous $6 billion arms deal, was made director of the South African
intelligence service. Manuel was downgraded to a resource-scarce, do-little planning ministry.

It is easy to sympathise with Manuel’s frustrating struggle against ethnicism and cronyism, especially after his opponents’ apparent victories. However, former ANC member of parliament Andrew Feinstein records that the finance minister knew of arms-deal bribes solicited by the late defence minister Joe Modise. In court, Feinstein testified (without challenge) that in late 2000, Manuel surreptitiously advised him over lunch: ‘It’s possible there was some shit in the deal. But if there was, no one will ever uncover it. They’re not that stupid. Just let it lie.’ Remarked Terry Crawford-Browne of Economists Allied for Arms Reduction: ‘By actively blocking thorough investigation of bribery payments, Manuel facilitated such crimes.’ In September 2011, as a result mainly of Crawford-Browne’s pressure, an official commission was appointed to investigate further.

Nevertheless, the myth of Manuel’s financial wizardry and integrity continues, in part thanks to a 600-page puff-piece biography, *Choice not Fate* (2008) by his former spokesperson Pippa Green, subsidised by BHP Billiton, Anglo American, Total Oil and Rand Merchant Bank. And after all, recent politico-moral and economic scandals by World Bank presidents Robert Zoellick and Paul Wolfowitz (whom in 2005 Manuel welcomed to the job as ‘a wonderful individual . . . perfectly capable’) confirm that global elites are already scraping the bottom of the financial leadership barrel. Yet it is still tragic that as host to 2011’s world climate summit, South Africa leads (non-petroleum countries) in carbon emissions/GDP/capita, twenty times higher than even the US. Even more tragic: Manuel’s final budget countenanced more than $100 billion for additional coal-fired and nuclear power plants in coming years.

In sum, Manuel’s leadership of the Green Climate Fund adds a new quantum of global-scale risk. His long history of collaboration
with Washington-London raises prospects for ‘default’ by the industrialised North on payment of climate debt to the impoverished South. Indeed, if Pretoria’s main link to the Bretton Woods Institutions, Manuel, co-chairs the fund and gives the Bank more influence, then expect new forms of subprime financing and blunt neoliberal economic weapons potentially fatal to climate change mitigation and adaptation.

Under the prevailing power relations and with the kinds of climate-crisis capitalist strategies under consideration, we can only conclude, then, that more paralysis from above is actually a good thing. At the global scale, the balance of forces is so adverse that, as Hansen argued it in late 2009, ‘no deal is better than a bad deal’ based on carbon trading, which ‘actually perpetuates the pollution it is supposed to eliminate’. 62

If elites are failing to generate a coherent set of emissions markets and other climate funds, what then is the appropriate way to finance climate change mitigation and adaptation – and the broader, deeper transformation that our societies need? The next chapter considers the concept of ‘climate debt’, and how best to pay it.
Politics of Climate Finance

There is probably nothing more important nor more simultaneously alienating in the twenty-first century than financial markets and fiscal policies. Both appear to be broken and broke, all over the world. And for the world’s greatest-ever market failure, climate change, the development of diverse forms of finance to address the crisis has become a complicated field, full of acronyms and new institutions, mixing public and private sources as well as beneficiaries. All manner of scams have emerged. Hoped-for innovations – a $100 billion/year Green Climate Fund, well-functioning emissions markets and transparent offsets – have not materialised as anticipated. The profit motive appears certain to replace considerations of basic morality, such as paying victims the ‘climate debt’, and, in the process, ensuring the funds go to poor people not venal elites, as well as ensuring a society emancipated from our current fossil fuel dependency.

Since Chapters 2 and 3 laid out the case against providing climate finance via market-centric emissions trading, this chapter sums up the three basic challenges associated with climate debt:

- defining and counting the debt that industrialised and high-emissions societies owe to non-industrialised sites for using too
much greenhouse gas emissions space (and relying on tropical rainforests for CO₂ sequestration) and for contributing to climate destruction;

- the elusive search for unity and coherence in the African delegations’ climate debt demands, given the power of the US State Department and EU to co-opt, bully and bribe their way through negotiations; and

- the opportunity for new public and community finance strategies to ensure victims of climate change are compensated, that appropriate mitigation and technology-transfer efforts can be financed and facilitated in semi-industrialised economies, and that a transformed set of energy, transport, production, consumption, disposal and extraction systems are established for a new age of human development that is not reliant on fossil fuels.

The argument is necessarily nuanced. Within the broader problem of elite paralysis on emissions cuts, Northern-dominated capitalism will continue to do enormous damage to the South, and within the North and South there are differential contributions to and victims of climate change. This behoves us to focus attention more carefully on the Green Climate Fund because two major problems arose in 2011: how the Green Climate Fund would raise money and what it would spend funds on.

First, with respect to raising revenues, elites are attempting to give more weight to carbon trading inflows and less to Northern publicly derived sources. The World Bank’s October 2011 paper on ‘Mobilizing Climate Finance’, for instance, proposed to G20 finance ministers that existing and future ‘climate aid’ money should go, according to The Guardian environmental journalist John Vidal,
towards the propping up [of] ailing carbon markets . . . [because] there is little likelihood that in the current economic climate, public money will be available for raising the $30 billion rich countries have pledged for the 2010–2012 period, and the $100 billion a year that must be found by 2020. Instead, says the paper, ‘the large financial flows required for climate stabilization and adaptation will, in the long run, be mainly private in composition . . . Governments could make innovative uses of climate finance to sustain momentum in the market while new initiatives are being developed.’

As noted in Chapter 2, carbon markets were failing throughout the world as the Bank made its argument to prop up the emissions trade. The paper acknowledges that ‘the primary offset market fell sharply in 2009 and 2010, amid uncertainties about future mitigation targets and market mechanisms after 2012’. From a peak of $7.4 billion in 2007, the primary Clean Development Mechanism (CDM) market was down to $1.5 billion in 2011. But ever hopeful, the Bank posited that ‘under the Copenhagen Accord and Cancun Agreement, offset market flows could range from $5–40 billion per year in 2020’ and a ‘much higher level of ambition, could stimulate offset flows in excess of $100 billion’. If so, no public money would be needed – except up-front in order to subsidise the sick markets. The Bank admits that the 21 carbon funds run by multilateral development banks have $4.2 billion investment in carbon markets, and are ‘bringing continuity by purchasing credits beyond 2012’, another indication of desperation.

And second, as for outflows, there will also be a regrettable tendency to both reward allied Southern elites and invest in further false solutions. Reinforcing these problems, the Transitional Committee’s September 2011 paper, ‘Reflections of the Co-chairs, Vice-chairs and Co-facilitators on Design Issues’, ignored civil society
inputs and instead focused on how the Fund would ‘engage the private sector through a private sector facility; advisory committee of private sector actors and non-voting members of the Board’.

Advocates of climate justice must therefore carefully consider the origins and trajectory of the concept of climate debt, given the huge stakes that have arisen, and the tendency for directing advocacy efforts astray. And more attention must be given to an alternative strategy for spending the funds, and for ensuring some sort of resource transfer to those most adversely affected is quickly but surely established: a Basic Income Grant for adapting to climate crisis, for instance. These are the most appropriate strategies I have come across, at this early stage of the climate justice movement’s rise, genuinely aiming to confront climate-crisis capitalism.

From Clean Development Mechanisms to climate debt

First, consider a few seminal ideas about what is termed ‘climate debt’, dating to the Rio Earth Summit in 1992:

‘The largest share of historical and current global emissions of greenhouse gases has originated in developed countries . . . [and should be redressed] on the basis of equity and in accordance with their common but differentiated responsibilities.’ – United Nations Framework Convention on Climate Change, 1992

‘The sense of guilt or culpability or reparations – I just categorically reject that.’ – Chief US climate negotiator Todd Stern on being asked about climate debt, December 2009

‘We are not assigning guilt, merely responsibility. As they say in the US, if you break it, you buy it.’ – Bolivian ambassador to the United Nations Pablo Solon, December 2009
In November 2010, South Africa’s Trevor Manuel had served on a UN panel that helped sketch out how a Green Climate Fund could generate the $100 billion/year promise made by US Secretary of State Hillary Clinton at the 2009 Copenhagen climate summit, but in the context of a revival of market ideology that was pronounced at the 2010 Cancún climate summit. So while the Green Climate Fund is potentially a source of payments from North to South – ‘if you break it, you buy it’ – in reality it is likely that we will view it as yet another source of public subsidy to financial markets, another example of venal politicians in league with destructive financiers, especially the World Bank.

Though small island nations gone forever or destroyed rainforests unable to cope with higher temperature stress or mountainous regions that lose their snowpack are also worthy of consideration, the problems facing Africa in particular are the focus of this chapter. These manifestations of climate crisis will represent damage on the scale of slavery and colonialism, utterly disruptive to hard-won survival systems. But as we saw earlier, instead of ‘the polluter pays’ as the basis for a way forward, even some Africans of great stature (such as Manuel and the late Kenyan environmental icon Wangari Maathai) convinced themselves that it is acceptable to pay the polluter, and to use financial markets for this task, even though they are demonstrably out of control.

By all accounts, climate change damage in Africa will include more rapid desertification, more floods and droughts, worse water shortages, increased starvation, floods of climate refugees jamming shanty-packed megalopolises, and the spread of malarial and other diseases.

By any moral logic, or simply in terms of polluter-pays disincentivisation according to ecological-modernist arguments, there is no question that those most responsible should pay reparations. There is, after all, near-universal awareness of the damage being
done by rising greenhouse gas emissions, and of the ongoing stubborn refusal by the rich to cut back. In 1997 at the Kyoto Protocol negotiations, the global North offered to assist Africa financially through CDM projects, in a context of declining overseas development aid associated with the end of the Cold War. Many African elites agreed, along with once reluctant environmental groups. Popular movements were unaware and uninvolved, and expert opinion was mixed about the efficacy and moral implications. The proponents of carbon trading argued that this would be the least painful—and least resisted—means of capping greenhouse gas emissions and allowing economies to adapt to new carbon constraints. However, given the dubious prospects for carbon trading already evident in myriad EU Emissions Trading Scheme credibility crises and extreme price volatility (mainly downwards), the question emerged in Africa in 2009: how to get the North to pay its fair share of the costs of Africa’s adaptation bill?

Two answers followed: first, stick with CDMs (just demand more); and second, add climate debt demands. The two approaches are not necessarily mutually exclusive, when advanced by African elites, but they do reflect a distinct divergence in analyses, strategies, tactics and alliances. As we observed in Chapter 2, the first answer was most vociferously articulated by high-profile Africans. But in mid-2009, the Ethiopian leader of the AU’s climate team, Meles Zenawi, began to pursue the latter strategy, insisting on at least $67 billion/year from the North to Africa to compensate for anticipated damages to Africa alone.

Many in African civil society joined the call for the North’s payment—through grants not loans or emissions trading and offset gimmicks—of its climate debt to the South for excess use of environmental space and for the problems caused in many ecosystems already, and in future when vast eco-social crises are anticipated,
especially in Africa. But with men like Zenawi driving the process, it was crucial to more precisely define the character of ecological debt, especially the climate debt.

**Counting the climate debt**

According to one of the most persuasive civil society groups, Quito-based Acción Ecológica: ‘[E]cological debt is the debt accumulated by Northern, industrial countries toward Third World countries on account of resource plundering, environmental damages, and the free occupation of environmental space to deposit wastes, such as greenhouse gases, from the industrial countries.’

The term came into professional use at the Earth Summit of the UN in Rio de Janeiro in 1992, as forward-looking NGOs promoted the concept through an ‘Alternative Treaty’. Although the strategy entails making a rough calculation for the ‘value’ associated with ecological processes, this does not prevent climate debt advocates from also advocating ‘Rights of Nature’. The latter idea implies that we should avoid an approach to environment that accepts nature as a ‘resource’ to be appropriated. Even so, since damage is being done, it is appropriate to count it as a form of disincentive.

An initial voice was the Institute of Political Ecology in Santiago, Chile, a group which contributed to world consciousness about chlorofluorocarbon damage to the ozone layer. A Colombian lawyer, José María Borrero, wrote a book in 1994 on ecological debt, and further research and advocacy was provided by the Foundation for Research on the Protection of the Environment, and then Jubilee South. By 1999, Friends of the Earth International and Christian Aid agreed to campaign against ecological debt, especially in relation to climate damage.

In Africa, amongst the main advocates of ecological debt repayment were churches, notably the Economic Justice Network...
of Southern Africa. Other regional initiatives continued, moving to the global stage by 2009. The World Development Movement and Jubilee Debt Campaign (UK) produced a major campaign document in late 2009, at the same time as an influential article by Canadian journalist and campaigner Naomi Klein in *Rolling Stone* magazine. Her husband Avi Lewis used Bolivia as a backdrop for an Al Jazeera documentary on the subject.

The leading scientist in the field, Autonomous University of Barcelona’s Joan Martinez-Alier, calculates ecological debt in many forms, including:

- nutrients in exports including virtual water, the oil and minerals no longer available, the biodiversity destroyed, sulfur dioxide emitted by copper smelters, the mine tailings, the harms to health from flower exports, the pollution of water by mining, the commercial use of information and knowledge on genetic resources, when they have been appropriated gratis (‘biopiracy’), and agricultural genetic resources.

As for the North’s ‘lack of payment for environmental services or for the disproportionate use of Environmental Space’, Martinez-Alier criticises ‘imports of solid or liquid toxic waste, and free disposal of gas residues (carbon dioxide, CFCs, etc.)’. According to Martinez-Alier:

The notion of an Ecological Debt is not particularly radical. Think of the environmental liabilities incurred by firms (under the United States Superfund legislation), or of the engineering field called ‘restoration ecology’, or the proposals by the Swedish government in the early 1990s to calculate the country’s environmental debt.
The sums involved are potentially vast. As Martinez-Alier puts it: ‘Tropical rainforests used for wood exports have an extraordinary past we will never know and ongoing biodiversity whose destruction we cannot begin to value.’ However, ‘although it is not possible to make an exact accounting, it is necessary to establish the principal categories and certain orders of magnitude in order to stimulate discussion . . . If we take the present human-made emissions of carbon, [this represents] a total annual subsidy of $75 billion is forthcoming from South to North.’

Leading eco-feminist Vandana Shiva and former South Centre director Yash Tandon estimate that wild seed varieties alone account for $66 billion in annual biopiracy benefits to the US. There are dozens of examples of biopiracy in Africa, according to a 2005 study commissioned by the Edmonds Institute and African Centre for Biosafety.

A partial ecological debt accounting was published by environmental scientists in early 2008, and counted $1.8 trillion in concrete damages over several decades. Co-author Richard Norgaard, ecological economist at the University of California, Berkeley, generated a crucial finding: ‘At least to some extent, the rich nations have developed at the expense of the poor, and, in effect, there is a debt to the poor.’ The study included factors such as greenhouse gas emissions, ozone layer depletion, agriculture, deforestation, over-fishing, and the conversion of mangrove swamps into shrimp farms, but did not (so far) succeed in calculating other damages, for example, excessive freshwater withdrawals, destruction of coral reefs, biodiversity loss, invasive species and war.

Another route into the intellectual challenge of calculating ecological debt was taken by the World Bank in its estimates of tangible wealth, in the 2006 book *Where is the Wealth of Nations?* In addition to resource depletion and rent outflows, there are also other subsoil assets, timber resources, non-timber forest resources, protected areas, cropland and pastureland to account for. The
‘produced capital’ normally captured in GDP accounting is added to the tangible wealth, but the result of a ‘genuine wealth’ accounting leaves vast negative adjustments to every African country. With the sole exceptions of Botswana, Mauritius, Namibia, Seychelles and Swaziland, all others have explicitly negative net year-on-year changes once environmental corrections to GDP are made (using 2000 as a sample year). In sum, notwithstanding the World Bank’s conservative counting bias, Africa shows evidence of net per capita ‘wealth’ reduction, largely traceable to the extraction of non-renewable resources that is not counter-balanced by capital investment from firms doing the extraction.

In this context of systemised looting of resources (as acknowledged even by the World Bank), the Bolivian government at least began the process of making climate debt a concept more broadly understood within the international discourse. That country’s submission to the United Nations Framework Convention on Climate Change (UNFCCC) in 2009 made the demand explicitly:

The climate debt of developed countries must be repaid, and this payment must begin with the outcomes to be agreed in Copenhagen. Developing countries are not seeking economic handouts to solve a problem we did not cause. What we call for is full payment of the debt owed to us by developed countries for threatening the integrity of the Earth’s climate system, for over-consuming a shared resource that belongs fairly and equally to all people, and for maintaining lifestyles that continue to threaten the lives and livelihoods of the poor majority of the planet’s population... Any solution that does not ensure an equitable distribution of the Earth’s limited capacity to absorb greenhouse gases, as well as the costs of mitigating and adapting to climate change, is destined to fail.
In addition to Bolivia, the Cumana Declaration was signed by Cuba, Dominica, Honduras (prior to the coup), Nicaragua and Venezuela, and included the argument:

[D]eveloped countries are in an environmental debt to the world because they are responsible for 70 percent of historical carbon emissions into the atmosphere since 1750. Developed countries should pay off their debt to humankind and the planet; they should provide significant resources to a fund so that developing countries can embark upon a growth model which does not repeat the serious impacts of the capitalist industrialization.20

Africa united then divided on climate debt
How did African governments react to the new narrative around ecological debt? In general, the post-colonial leadership of African states has co-operated with those institutions doing the resource extraction and over-utilising Africa’s ecological space, in spite of persistent complaints by exploited communities, by workers subject to safety/health violations and exploitation, by environmentalists and by patriotic nationalists. However, finally in mid-2009, the African Union’s (AU’s) leadership on climate issues became a force to be reckoned with, even if temporarily.

One impulse came in a statement by Lesotho, chair of the Least Developed Countries’ group, at the Bonn negotiations in June 2009: ‘Failure to combat climate change will increase poverty and hardship in our nations, and increase the debts owed to us for excessive emissions by the developed countries.’ Within a few weeks, the same arguments were being very vocally articulated by Zenawi, who also chaired the New Partnership for Africa’s Development and thus was invited to G20 gatherings along with the South African government. Zenawi’s record of service to US security
interests, ideological zigzagging, contradictory signalling and repression of local civil society activists suggested that it might ultimately be counter-productive for the Ethiopian tyrant to lead the climate debt campaign. Still, someone from Africa was compelled to express the extreme costs to the continent of the debt, so prior to December 2009, Zenawi played that role.

As noted in Chapter 2, the African elites could marshall an implied threat: repeating their performance in Seattle in 1999 and Cancún in 2003, when denial of consent in WTO negotiations were the proximate cause of the summits’ collapse on both occasions. To gather sufficient power, Zenawi established the Conference of African Heads of State and Government on Climate Change: chairpersons of the AU and the AU Commission, representatives of Ethiopia, Algeria, the Democratic Republic of Congo, Kenya, Mauritius, Mozambique, Nigeria, Uganda, chairpersons of the African Ministerial Conference on Environment and Technical Negotiators on climate change from all member states. They met at the AU Summit in Muammar Gaddafi’s hometown of Sirte, Libya, in July 2009, agreeing that Africa would have a sole delegation to Copenhagen with a united front and demands for compensation.

According to AU official Abebe Hailegabriel: ‘Trillions of dollars might not be enough in compensation. Thus there must be an assessment of the impact before the figure.’ Added AU head Jean Ping: ‘Africa’s development aspirations are at stake unless urgent steps are taken to address the problems of climate change. Climate change will fundamentally affect productivity, increase the prevalence of disease and poverty . . . and trigger conflict and war.’

The most important African negotiator – and largest CO₂ emitter (responsible for around 40 per cent of the continent’s CO₂) – is South Africa. Aside from ostensibly preventing climate change that could have an especially devastating impact at home, Pretoria’s
climate negotiators have two conflicting agendas, as described in more detail in Chapter 6: first, increasing Northern payments to Africa (a longstanding objective of the New Partnership for Africa’s Development, when during the early 2000s Thabo Mbeki unsuccessfully requested $64 billion per annum in aid and investment concessions); and second, increasing South Africa’s own rates of CO₂ outputs to a peak around 2030–5, when the Long-Term Mitigation Scenario – South Africa’s official (albeit non-binding) climate strategy – would come into effect. Only then are absolute emissions declines offered as a scenario. In the meantime, Pretoria earmarked more than $100 billion for emissions-intensive coal and nuclear-fired electricity generation plants due to be constructed through 2015, which would exacerbate Africa’s climate crisis, requiring more resources from the North for adaptation.

Ironically, South African elites viewed themselves as deserving a climate debt payment from the North, and without that withheld a commitment to make the mild emissions cuts that Pretoria mooted in late 2009. Thus far, South Africa does not, officially, see itself as a climate creditor, in spite of climate debt advocacy by Climate Justice Now! South Africa activists, especially in February–April 2010 when the World Bank considered and then granted a $3.75 billion loan to Eskom primarily for the construction of the world’s fourth-largest coal-fired power plant. As explained by the then environment minister, Buyelwa Sonjica, in September 2009: ‘We expect money. We need money to be made available . . . we need money as of yesterday for adaptation and mitigation.’ Manuel repeated this sentiment in August 2011 when he suggested the Green Climate Fund should give Pretoria between $1 and $2 billion each year. South African negotiators have also led the G77, and are on record from August 2009 demanding that ‘at least 1 per cent of global GDP should be set aside by rich nations’ in order to
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help developing countries conduct research, improve flood control, protect their coastlines, create seed banks and take other steps to cope with the severe storms and droughts linked to climate change. The money also could help poor countries obtain technology to reduce their carbon emissions. Alf Wills, a top South African environmental official, summed up the position going into Copenhagen: ‘No money, no deal’.26

The effect of this rhetoric appeared to entail some immediate concessions. In September 2009, the EU announced it would begin paying its climate debt, but only up to $22 billion annually to fund adaptation, roughly 1/7th of what EU environment commissioner Stavros Dimas observed would be required by 2020 ($145 billion). Some of that would be subtracted from existing aid. The EU damage estimates were considered far too conservative, as China’s mitigation and adaptation costs alone would be $438 billion annually by 2030, according to Beijing. The EU view was that emissions trading should be the basis of ‘much of the shortfall’: ‘The international carbon market, if designed properly, will create an increasing financial flow to developing countries and could potentially deliver as much as 38 billion euros per year in 2020’.27

Because this offer was widely judged as inadequate, Zenawi carried out a trial run of his walk-out threat just prior to Copenhagen, in November 2009 at a Barcelona UNFCCC meeting. Sufficient concessions were not being offered by the Northern industrial powers, so his technical negotiators registered a protest. But at the crucial moment in Copenhagen, during the final week when heads of state would arrive to negotiate a new protocol, Zenawi diverted his own flight from Addis Ababa to Paris, where he met French premier Nicolas Sarkozy. Shortly thereafter, he announced the halving of Africa’s climate debt demands.28

According to Mithika Mwenda of the Pan-African Climate Justice
Alliance: ‘Meles wants to sell out the lives and hopes of Africans for a pittance.’

Then on 17 December, US Secretary of State Hillary Clinton made an offer:

\[
\text{...in the context of a strong accord in which all major economies stand behind meaningful mitigation actions and provide full transparency as to their implementation, the United States is prepared to work with other countries toward a goal of jointly mobilizing $100 billion a year by 2020 to address the climate change needs of developing countries. We expect this funding will come from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources of finance.}\]

Clinton’s announcement was mainly double-talk because there was no firm line-item in the US budget to this end, just a promise. The US had regularly broken similar aid promises in the past, and, at the same time, Obama was cutting back AIDS medicine funding to Africa. Soon he would reverse the 2008–9 stimulus and agree with Republican Party opponents to embark upon drastic budget-cutting, no matter the weak health of the US economy.

Moreover, the public funding was in question because keeping within Clinton’s vague formulation, private sources of finances alone could easily exceed $100 billion, with CDMs at the time in excess of 6 per cent of the $125 billion emissions markets. If, as was predicted by many experts in Copenhagen, the size of the 2020 carbon market reached $3 trillion, it would take just 3.3 per cent dedicated to CDMs to reach the $100 billion target. So given the private sourcing and likelihoods of loans not grants, Clinton’s offer could readily be rejected as meaningless.
Several countries had insisted on climate debt as a negotiating framework even before Copenhagen, including Venezuela, Paraguay, Malaysia and Sri Lanka. But in Africa, only Sudan stood out, partly because its UN Ambassador, Lumumba Di-Aping, had such a visible role as G77 chief negotiator, as noted in Chapter 2. But as Di-Aping concluded: ‘It is unfortunate that after 500 years-plus of interaction with the West we [Africans] are still considered “disposables”’.  

Civil society ups the ante
Against malevolent states and industries addicted to fossil fuels, there usually arises opposition from civil society. From 2009, increasing numbers of social movements led by indigenous peoples explicitly demanded climate debt repayment. The Anchorage Declaration by indigenous people from the Arctic, North America, Asia, Pacific, Latin America, Africa, the Caribbean and Russia issued a statement calling ‘on the UNFCCC to recognize the historical and ecological debt of the Annex 1 countries in contributing to greenhouse gas emissions. We call on these countries to pay this historical debt’.  

A major Trade Union Conference of the Americas (albeit without participation from the US and Canada) insisted that ‘climate justice will only be reached when the Rich States of the North recognize this environmental debt, which also entails a drastic and urgent reduction of their contaminating emissions, the provision of funds for poor countries for climate change mitigation and adaptation processes, and the transfer of “clean” technologies to the global South for the development of environmentally sustainable productive processes’.  

And in Kenya, the Pan-African Climate Justice Alliance of 63 NGOs argued:

For their disproportionate contribution to the causes of climate change – denying developing countries their fair share of
atmospheric space – the developed countries have run up an ‘emissions debt’. These excessive emissions, in turn, are the principal cause of the current adverse effects experienced by developing countries, particularly in Africa. For their dispropor-
tionate contribution to the effects of climate change – causing rising costs and damage in our countries that must now adapt to climate change – the developed countries have run up an ‘adaptation debt’. Together the sum of these debts – emissions debt and adaptation debt – constitutes the climate debt.

Proposals by developed countries in the climate negotiations, on both mitigation and adaptation, are inadequate. They seek to pass on the costs of adaptation and mitigation, avoiding their responsibility to finance climate change response efforts in Africa. They also seek to write-off rather than reduce their emissions and continue their high per-capita emissions. This would deepen their debt and deny atmospheric space to the developing countries like ours, which would be asked to crowd into a small and shrinking remainder. We therefore call on developed countries to fully, effectively and immediately repay the climate debt they owe to African countries.34

Also in Nairobi at the same time, the Africa Peoples Movement on Climate Change pronounced:

. . . The people of Africa, as well as other developing nations are creditors of a massive ecological debt;
This ecological debt continues to accrue today through the continued plunder and exploitation of Africa’s resources, its people, labour, and economies;
. . . We reject the principle and application of Carbon Trading, which is a false solution based on inventing a perverse property right to pollute. A property right to air;
... We support the call by African leaders for reparations on Climate Change and support the initiative of the upcoming AU ministers of environment meeting and call for African governments to embrace more people centred alternatives for the African peoples.\textsuperscript{35}

Another node of ecological debt organising was the World Council of Churches, whose Central Committee was lobbied for years by a senior staffer (and former Tanzanian Council of Churches secretary) Rogate Mshana, and finally adopted a formal statement in September 2009 on the North’s ‘deep moral obligation to promote ecological justice by addressing our debts to peoples most affected by ecological destruction and to the earth itself’. It is useful to consider the World Council of Churches’ analysis because it does not stop at the debt, but attacks the mode of production itself:

We call for the recognition, repayment and restitution of ecological debt in various ways, including non-market ways of compensation and reparation, that go beyond the market’s limited ability to measure and distribute... This warrants a re-ordering of economic paradigms from consumerist, exploitive models to models that are respectful of localized economies, indigenous cultures and spiritualities, the earth’s reproductive limits, as well as the right of other life forms to blossom. And this begins with the recognition of ecological debt.\textsuperscript{36}

The most extensive statement from civil society had more than 230 supporters, and was circulated by ActionAid, Africa Action and the Third World Network during 2009. Excerpts included these demands:
For their disproportionate contribution to the causes and consequences of climate change, developed countries owe a two-fold climate debt to the poor majority:

For their excessive historical and current per person emissions – denying developing countries their fair share of atmospheric space – they have run up an ‘emissions debt’ to developing countries; and

For their disproportionate contribution to the effects of climate change – requiring developing countries to adapt to rising climate impacts and damage – they have run up an ‘adaptation debt’ to developing countries.

Together the sum of these debts – emissions debt and adaptation debt – constitutes their climate debt, which is part of a larger ecological, social and economic debt owed by the rich industrialized world to the poor majority.

Honoring these obligations is not only right; it is the basis of a fair and effective solution to climate change. Those who benefited most in the course of causing climate change must compensate those who contributed least but bear its adverse effects. They must compensate developing countries for the two-fold barrier to their development – mitigating and adapting to climate change – which were not present for developed countries during the course of their development but which they have caused . . .

As the basis of a fair and effective climate outcome we therefore call on developed countries to acknowledge and repay the full measure of their climate debt to developing countries commencing in Copenhagen. We demand they:

• Repay their adaptation debt to developing countries by committing to full financing and compensation for the adverse effects of climate change on all affected countries, groups and people;
• Repay their emissions debt to developing countries through the deepest possible domestic reductions, and by committing to assigned amounts of emissions that reflect the full measure of their historical and continued excessive contributions to climate change; and

• Make available to developing countries the financing and technology required to cover the additional costs of mitigating and adapting to climate change, in accordance with the Climate Convention.\(^{37}\)

These demands were largely ignored (or explicitly rejected) by state officials, of course, as epitomised by Todd Stern’s reaction, as observed previously. Hence, the Copenhagen summit’s delegitimised accord was, from many of the civil society groups’ perspective, not actually a disastrous outcome, since they arrived with no viable expectations of progress on either emissions cuts, decommissioning the carbon markets or achieving climate debt repayments. Instead, it represented a chance to firm up demands for future negotiations, including bilaterals. The process of civil society consolidation also entailed making a distinct break from the emerging market economies whose own fossil fuel expansion strategies would challenge the physical limits of carbon sinks.

As a result, the BASIC (Brazil, South Africa, India and China) climate signatories soon faced opposition from within. For example in India, Centre for Science and Environment director Sunita Narain argues that her government’s negotiators are the same people who would stymie any real action on environmental improvement in the country. They will oppose fuel efficiency standards, tax on big cars, or tough penalties for polluters. But they will still talk glibly about low-carbon economies.
They will of course, dismiss out of hand, any discussion on the need for ‘radical’ and out-of-the-box solutions for equity and sustainability. These, they will tell you, are mere evangelical thoughts of some fringe activists. The men think and act differently. These are the promoters of the Accord in India. And I believe they do so, because for them, firstly, the Accord provides the perfect solution – talk big about change, but do little at home.

The US has provided a perfect formula – it promises us the right to pollute, because it wants to legitimize its own pollution. Secondly, it promises that we can get a place on the high table of polluters. And as powerful conspirators this will mean that we need to do little ourselves, but instead push the price of change on the less favored – the poor of India or the poor anywhere else in the world.

It’s an open offer to protect, not our right to development as we have been demanding – the rich countries pay for our transition to low-carbon economies. But a simpler proposition: we give you the right to pollute (at least for now). The other proposition is equally seductive.

To the countries, which are not yet polluters (from Ethiopia to Maldives), the Copenhagen Accord says we will give money to keep you pliant and agreeable. This is why the Accord promises some fictional money to poor vulnerable countries.

It’s a perfect formula, designed to please all. There is only one hitch: we will all have to forget the climate change crisis and the hazards and impacts that will grow.38

Ethiopia and the Maldives were bribed into supporting the Copenhagen Accord, as WikiLeaks revealed and as discussed in Chapter 2. Meanwhile, South African critics such as groundWork
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and Earthlife Africa made similar statements about Pretoria’s delegation. The crucial conflict was over South Africa’s vaguely promised 34 per cent emissions cut below anticipated 2020 levels, as noted in the next chapter.39

In contrast to the BASIC countries and the erratic AU, civil society groups committed to climate debt found they had an extremely enthusiastic ally in the Bolivian government. Evo Morales insisted, to widespread applause, that two additional factors be added to the existing three components of climate debt calculations (the costs of emissions, of foregone development and of adaptation to climate damage): the notions of a ‘migration debt’ and a debt to nature. As Nicola Bullard of Focus on the Global South recounts, this would be compensated by dropping restrictive migration practices and treating all humans with dignity, and finally, the debt to Mother Earth . . . Ultimately, the only way that the debt can be repaid is by ensuring that the historic relations of inequality are broken once and for all and that no ‘new’ debt will accumulate. This requires system change, both in the North and in the South. That’s why climate debt is such a subversive idea.40

The Bolivians’ main proposals were a Universal Declaration of Mother Earth Rights (with a binding Climate Justice Tribunal to punish violators), a formal compensation mechanism for climate debt, and a World People’s Referendum on Climate Change to short-circuit the multilateral fora which were clearly dysfunctional. Some of the details subsequently worked out in conjunction with civil society in late April 2010 drove the debate forward in significant ways. The Working Group on Climate Debt argued as follows:
Climate debt is an obligation of compensation that is generated because of the damage done to Mother Earth by the irrational emissions of greenhouse gases. The primary responsible for these irrational emissions are the so-called ‘developed countries’, inhabited by only 20 percent of the world population, and which emitted 75 percent of historical emissions of greenhouse gases.

These states, which stimulated the capitalist development model, are responsible for climate debt, but we shouldn’t forget that within these states, there live poor and indigenous peoples which are also affected by this debt . . .

The responsibility for the climate debt of each developed country is established in relation to the level of emissions, taking into account the historically emitted amount of tons of carbon per capita.\(^{41}\)

Cochabamba’s Climate Debt Working Group made suggestions for payment as follows:

- the re-absorption [of emissions] and cleaning the atmosphere by developed countries;
- payment in technology (eliminating patents) and in knowledge according to our worldview for both clean development and for adaptation to developing countries;
- financing;
- changes in immigration laws that allow us to offer a new home for all climate migrants; and
- the adoption of the Declaration on the Mother Earth’s Rights.

An additional Cochabamba Working Group on Climate Finance provided a document with further details and demands:
The scale of existing financial resources currently allocated to developing countries parties for addressing climate change plus the Copenhagen Accord proposal to mobilize (US$10 billion per year between 2010 and 2012, and up to US$100 billion by 2020 annually – which represents only 0.8 percent to 8 percent of developed countries’ national defense budgets, respectively) is grossly inadequate.

Developed country parties must commit at least 6 percent of their annual GDP for climate finance in developing countries. The viability of mobilizing this amount of finance is evident – developed countries spend an equivalent amount each year on national defense. In addition, developed countries have mobilized trillions of dollars (equivalent to 5 times the 6 percent GDP proposed) to bail out failed banks and speculators. This is a question of political will, and the priority given to effectively combating climate change and protecting Mother Earth.

The finance required must be provided from public sources, and must be new and additional to official development assistance, to bilateral assistance, and to funds flowing outside the UNFCCC. Any funding provided outside the UNFCCC will not be regarded as meeting the commitments of developed country parties under the Convention.

The carbon market shall be eliminated as a source of financing, because its capitalist logic promotes the paradox that those actors who will benefit most, are the same actors who have most harmed the environment. In addition, market mechanisms allow developed countries to evade their commitments to reduce emissions, while at the same time benefitting economically from the climate crisis. Moreover, this model impedes the equitable distribution of resources, cannot guarantee a predictability flow of resources at scale, nor the timely availability or direct access to financing for those most affected.
Financing for climate change must be delivered as grants, understood as a part of the reparations for climate debt between parties. Loans cannot be considered as fulfillment of financial commitments. In the same way climate financing does not signify a donor/recipient relationship between developed and developing countries.

All Annex 1 funding allocated to military purposes and subsidies for fossil fuel producers shall be redirected to climate change.\textsuperscript{42}

The Working Group also called for funding to be routed through the UNFCCC, ‘replacing the Global Environment Facility and its intermediaries such as the World Bank and the Regional Development Banks’. A further suggestion was that ‘the financial mechanism must respect the sovereign control of each country to determine the definition, design, implementation of policy and programmatic approaches to climate change’. As for timing, ‘[t]he financial mechanism shall be defined and approved at COP16, and be made operational at COP17’.\textsuperscript{43}

These documents were based upon visionary, radical civil society demands that had emerged over the prior months and years. Some earlier, very ambitious demands – such as the end of apartheid or access to AIDS medicines – were only won after years of struggle, after initially appearing equally audacious and unrealistic. The short term, however, did not offer any genuine potential for the North paying its climate debt. Moreover, because of the influence of big capital and pro-market ideology on Northern governments in the Kyoto process to date, not only will emissions continue rising, carbon trading will not be dropped as a central EU and US strategy. As a result, critique of establishment strategies will become more common, and in turn will force serious advocates of environmental
justice to raise important strategic issues about how to get the North to repay the climate debt.

Repaying the debt?
Assuming it was possible to wring a commitment from wealthier states, existing North-South redistributive processes have proven to be ineffectual. Northern foreign aid to the South goes only a small way towards ecological debt repayment. It is a far lower sum (and falling) than military spending (which is rising), and in any case 60 per cent is ‘phantom aid’, according to the Johannesburg-based agency ActionAid.44 Aid is also a tool of imperialism. Other North-South payments to Africa are yet more dubious, including the debt relief promised in 2005. In spite of enormous hype at the Gleneagles G8 meeting, the IMF calculates that while lowest-income African countries’ debt stock fell in recent years, their actual debt repayments remained stable from 2006–8 and then increased 50 per cent in 2009 as a percentage of export earnings.45 So although there was a bit of debt cancellation, it was on debt that could be considered unrepayable. Meanwhile, debilitating debt servicing charges for low-income African countries still prevented both local capital accumulation and provision of social services, much less financing for climate change adaptation.

There are important debates about who should pay what share. But in general, it is noteworthy that ecological debt results from the unsustainable production and consumption systems adopted by elites in the Northern countries, which are to some extent generalised across the Northern populations. Hence, even poor and working-class people in the North, often through no fault of their own, are tied into systems of auto-centric transport or conspicuous consumption, which mean that they consume far more of the Earth’s resources than do working-class people of the South.
As a result, some (including the Heinrich Boell Stiftung of Germany’s Green Party) have called for Greenhouse Development Rights (GDRs) as a solution, including a per capita ‘right to pollute’ – and, controversially, then to trade pollution rights if, like most Africans, you are not using your fair share. But the bigger questions which GDRs fail to pose are whether environmental justice can be measured merely in terms of formal ‘equality’; whether environmental justice is instead historical, political-economic and grounded in social struggles of those adversely affected; and in turn, whether environmental justice should not aim higher, for a broader, deeper eco-social transformation? The GDR approach may foreclose these questions by reducing the challenge to incremental reformism. When it comes specifically to GDRs as a methodology for calculating debt liabilities and beneficiaries, Larry Lohmann of the Corner House (a British development institute) critiques the model’s tacit endorsement of a long-discredited concept of ‘development’ that condescendingly sees ‘resilience’ as ‘far beyond the grasp of the billions of people that are still mired in poverty’, and that singles out for special climate blame ‘subsistence farming, fuel wood harvesting, grazing, and timber extraction’ by ‘poor communities’ awaiting Northern tutelage in capital flows, social networking, carbon trading and methods for holding policymakers accountable. Is a GDR-style rights-based approach to environmental services appropriate as a narrative and strategy for demanding and properly redistributing ecological debt payments from North to South? In spite of an exceptional South African Constitution which gives not just first but some ‘second generation’ socio-economic rights, the government’s promises of ‘Free Basic Services’ (including water and electricity) were not delivered. This, in turn, was why the
country has amongst the highest per capita social unrest in the world. But rights-based attempts to gain justice for Soweto residents deprived of water, via taking water pricing through the court system – which went as high as the Constitutional Court in October 2009 – proved extremely frustrating.47

Juridical approaches to ecological debt may not be optimal, although precedents have emerged. In June 2009, Shell Oil agreed in a US Alien Tort Claims Act lawsuit to an out-of-court settlement with reparations payments of $15.5 million. Although representing just four hours’ worth of Shell profits, it was considered a crucial step in establishing liability and disincentivising corporate exploitation of people and nature. In February 2011, an $8.2 billion judgment against Texaco was won by Ecuadorans in local courts due to decades of Amazon oil pollution, which then doubled because of the failure of the firm’s owner Chevron to immediately apologise. Chevron refused to recognise the judgment and filed a countersuit of racketeering against the plaintiffs’ lawyers.48

Beyond these kinds of tort actions, will courts start declaring climate-related ecological debt a valid concept? The Ecuadoran court system is one site for exploring constitutional rights to nature, and Bolivia may follow. An international climate tribunal is one of the climate justice movement’s objectives, similar to the International Criminal Court in The Hague.

But in the hostile northern hemisphere’s judiciary, matters are more difficult. Environmental rights to protection from climate change were explored in a court case filed by Friends of the Earth, Greenpeace and the cities of Boulder, Colorado, Arcata, Santa Monica and Oakland in California against the US Export-Import Bank and Overseas Private Investment Corporation, which had invested, loaned or insured $32 billion in fossil fuel projects from 1990–2003 without regard to the US National Environmental Policy Act (NEPA). At present, only US cities have formal standing to sue
for damages from climate change under NEPA, in the wake of a 2005 federal ruling. The out-of-court-settlement in February 2009 meant that the defendants will in future incorporate CO\textsubscript{2} emissions into planning, but there are prospects for further suits that extend into identification and payment of damages.\textsuperscript{49}

There are quite obvious limits to prospects for court relief under the Alien Tort Claims Act or NEPA, the two most advanced areas. Hence, it would be consistent for climate justice activists to also proceed with more immediate strategies and tactics, and the move to civil disobedience in 2011 was one hopeful sign of extra-legal tactics.

**How to repay the climate debt?**

Finally, there arises a question of how, if either legal or direct action pressure permits climate debt to become part of Northern climate concessions, the debt repayments might be best distributed. It became clear to many civil society groups in recent decades that post-colonial African governments were too easily corrupted, just as were UN and aid (and even international NGO) bureaucracies. As one reflection, Zenawi in July 2011 announced the purchase of 200 tanks from Ukraine for over $100 million even while climate change caused the worst drought in 60 years, leaving millions of his subjects hungry. When demands for democracy and human rights soon emerged, he jailed more opposition party leaders and expelled Amnesty International, and was caught by BBC using development aid as a reward for impoverished citizens’ political loyalty, penalising non-members of his party by denying them food.\textsuperscript{50}

Reacting to a similar case, in which King Mswati received a $300 million loan offer in August 2011 from South African finance minister Pravin Gordhan, the Swaziland Solidarity Network condemned Gordhan’s
error of judgment a few days after our sources revealed to us that the bulk of the SA Custom Union’s last quarterly payments to the country ended up in royal hands. King Mswati has apparently sworn that should the economy crumble, thus leading to an uprising in the country, he will have amassed enough wealth to last him a lifetime. This is the same head of state who in 2008 instructed his appointee and long serving minister of finance, Majozi Sithole, to invest $100 million in South Africa without the knowledge of cabinet, parliament nor the Central Bank of Swaziland. The South African government is well aware of all this wanton siphoning of public resources in Africa’s last absolute monarchy.\textsuperscript{51}

As the Network put it: ‘South Africa has chosen to give away tax payers’ money to a money drain, an evil despot.’ The Congress of South African Trade Unions protested that Gordhan ‘fails to acknowledge that this crisis has arisen because of the looting of the economy by the royal family and a small elite so they can maintain their luxurious lifestyle, while the cost of this crisis has fallen on the shoulders of the workers and the poor’.\textsuperscript{52} These are not isolated cases, for it is hard to imagine that tyrants across Africa would gain support from civil society for managing vast new inflows of climate debt payments, given their regular abuses of resources, often to intensify repression against their societies and further pilage their environments.

But if not through state elites and the corrupted aid system, what options are there? The solution to the payment distribution problem appeared in 2009: the idea of simply passing along a monthly grant – universal in amount and access, with no means-testing or other qualifications – to each African citizen via an individual Basic Income Program payment. According to \textit{Der Spiegel}
correspondent Dialika Krahe, the village of Otjivero, Namibia, is an exceptionally successful pilot for this form of redistribution:

It sounds like a communist utopia, but a basic income program pioneered by German aid workers has helped alleviate poverty in a Nambian village. Crime is down and children can finally attend school. Only the local white farmers are unhappy . . .

‘This country is a time bomb,’ says Dirk Haarmann, reaching for his black laptop. ‘There is no time to lose,’ he says, opening documents that contain numbers he hopes will support his case. Haarmann and his wife Claudia, both of them economists and theologians from Mettmann in western Germany, were the ones who calculated the basic income for Namibia. And both are convinced that ‘this is the only way out of poverty’ . . .

‘The basic income scheme,’ says Haarmann, ‘doesn’t work like charity, but like a constitutional right.’ Under the plan, every citizen, rich or poor, would be entitled to it starting at birth. There would be no poverty test, no conditions and, therefore, no social bureaucracy. And no one would be told what he or she is permitted to do with the money.

The concept is being discussed in many countries of the world. In Germany, it has gained the support of politicians across the political spectrum, including Dieter Althaus, the conservative governor of the eastern state of Thuringia, and businessmen like drugstore chain owner Götz Werner. More than 50,000 German citizens have signed a petition to the German parliament, the Bundestag.

In a country like Namibia, says Haarmann, a basic income would achieve what conventional development aid could never do: provide a broad basis for human development, both personal and economic.53
The first priority would be to supply a Basic Income Program to Africans who live in areas most adversely affected by droughts, floods or other extreme weather events. Logistically, the use of Post Office Savings Banks or rapidly introduced Automated Teller Machines would be sensible, although currency distortions, security and other such challenges would differ from place to place. The Namibian case has much to recommend it, in part because it is amongst the driest sites in Africa.

Such a strategy would be just an emergency salve on a burning problem: how to ensure that the greenhouse gas ‘polluters pay’ in a manner that first, compensates their climate change victims; that second, permits transformation of African energy, transport, extraction, production, distribution, consumption and disposal systems; and that third, in the process assures the ‘right to development’ for Africa in a future world economy constrained by emissions caps. Extremely radical changes will be required in all these activities in order not only to ensure the safety of the species and planet, but also that Africans are at the front of the queue for long- overdue ecological and economic compensation, given the North’s direct role in Africa’s environmental damage. The contemporary argument for climate debt to be paid is simply the first step in a long process, akin to decolonisation, in which the master – the polluting global North (South Africa included) – must know that not only is it time to halt the reliance on fossil fuels, but having ‘broken’ the climate, it is his responsibility to foot the clean-up bill.
South African Climate Injustice

One of the world’s most extreme cases of climate injustice happens to be the site for the Conference of the Parties 17 (COP17) climate summit in November–December 2011. According to the South African government’s 2010 National Climate Change Response Green Paper: ‘Should multilateral international action not effectively limit the average global temperature increase to below at least 2°C above pre-industrial levels, the potential impacts on South Africa in the medium- to long-term are significant and potentially catastrophic.’ The paper warned that under conservative assumptions, ‘after 2050, warming is projected to reach around 3–4°C along the coast, and 6–7°C in the interior’.¹

If President Jacob Zuma’s government really cared about climate and about his closest historical constituencies in rural KwaZulu-Natal villages, who are amongst those most adversely affected by worsening droughts and floods, then it would not only halt the $21 billion worth of electricity generators at Medupi being built at the time of the Durban COP by state power company Eskom, and cancel Kusile; South Africa would also deny approval to the 40 new mines in Mpumalanga, Limpopo and KwaZulu-Natal allegedly needed to supply the plants and export markets with coal in coming
years, on grounds that just as at the Cradle of Humankind northwest of Johannesburg, suffering threats of debilitating acid mine drainage, and in West Virginia, whose creeks were destroyed by mountaintop removal – these mines will cause permanent contamination of rivers and water tables, increased mercury residues and global warming.

In addition to the damage potentially done to the Cradle’s artifacts and as yet unearthed ancient fossilised records of early human ids, abundant evidence of the Witwatersrand’s degradation comes from tireless water campaigner Mariette Liefferink, who counts 270 tailings dams in a 400 square kilometre mining zone. With gold nearly depleted, as Liefferink told a Johannesburg newspaper in early 2011, uranium is an eco-social activist target: ‘Nowhere in the world do you see these mountains of uranium and people living in and among them. You have people living on hazardous toxic waste and of course some areas are also high in radioactivity.’ The toxic tailings dams are typically unlined, unvegetated and unable to contain the mines’ prolific air, water and soil pollution. Other long-term anti-mining struggles continue in South African locales: against platinum in the North West and Limpopo provinces, against titanium on the Eastern Cape’s Wild Coast and against coal in the area bordering Zimbabwe known as Mapungubwe where relics from a priceless ancient civilisation will be destroyed unless mining is halted (as even the government agrees).

As both victim and villain, here are some reasons why South Africa is a poster-child for elite mismanagement of the climate threat:

- South Africa’s vast CO₂ emissions can be measured in relative terms, and if so, a good measure of the economy’s addiction to fossil fuels corrected for population size – its carbon intensity per capita unit of GDP output – is amongst the world’s highest, far worse than even the US.
The main sources of this pollution are two activities that reflect continuity, not change, from apartheid: the coal-burning power plants of the parastatal Eskom and the coal/gas-to-oil conversions of Sasol, formerly a parastatal mandated to foil the apartheid-era petroleum embargo, and then privatised and listed on the New York Stock Exchange.

An insignificant contribution to the grid (less than 4 per cent in 2010) comes from South Africa’s incredible renewable energy potential in solar, tidal and wind sources.

The electricity produced by burning coal is cross-subsidised so that it is the cheapest available anywhere in the world for the world’s largest mining and metals corporations, BHP Billiton and Anglo American Corporation, which were revealed in 2010 to be paying less than US$0.02/kilowatt-hour of electricity for smelter consumption, thanks to apartheid-era, four-decade ‘Special Pricing Agreement’ deals (other large corporations received electricity in 2009 at US$0.05, still below cost, and although prices rose dramatically on average, the lowest increases were imposed on the biggest firms).

The two main metals/mining firms, plus most other major beneficiaries of cheap electricity, such as ArcelorMittal and Xstrata, export their profits both through illegal transfer pricing and through straight repatriation of dividends to shareholders in London and Melbourne, and the downstream consumption of their metals product is minimal due to notorious local over-pricing.

Meanwhile, millions of poor people are regularly disconnected or denied access to the grid due to extreme poverty, and, because of dirty household energy, the passage is often rapid from HIV-positive to full-blown AIDS status via respiratory-related opportunistic infections, including the raging TB epidemic.
Corruption is built into energy-intensive mining and industry, ranging from controversial ruling-party deal-making in the sector, Black Economic Empowerment shakedowns for well-connected tycoons and corporate malfeasance in climate deals, such as Sasol and Eskom attempts to secure Clean Development Mechanism (CDM) subsidies for destructive projects.\(^3\)

But in addition to these factors, explored in more detail below, there is an even more durable way in which the ANC government in Pretoria contributes to climate injustice: its stance in global climate politics. With the US, four BASIC countries – Brazil, South Africa, India and China – co-sponsored the Copenhagen Accord in December 2009, even though Pretoria’s then environment minister Buyelwa Sonjica (ineffectual and hence relieved of duties in late 2010) officially expressed ‘disappointment’ at what was on offer.\(^4\) The Copenhagen gambit meant that the WTO’s notorious divide-and-rule politics – which were controversially endorsed by South Africa’s trade minister Alec Erwin at the 1999 Seattle, 2001 Doha and 2003 Cancún summits but vetoed by the African delegation at the first and third\(^5\) – would become the norm for UN climate negotiations.

Another UN process, the High-Level Advisory Group on Finance, which reported to Ban Ki-moon in November 2010, included South African planning minister Trevor Manuel as an active commission member. It was no surprise when extremely conservative recommendations resulted, such as up to half the North-South climate financing to be made available by 2020 packaged by carbon markets in the form of CDMs.\(^6\) Nor was it a surprise that Manuel became co-chair of the Transitional Committee that designed the Green Climate Fund in late March 2011, even though he did not bother to attend the Mexico City meeting.
Three case studies provide explicit evidence of the problems South Africans face on the front lines of climate and energy injustice: first, the Medupi coal-fired power plant financed by the World Bank in 2010 with its largest-ever project loan; second, the pilot CDM deal in Durban at Bisasar Road; and third, the struggle over access to electricity waged from below, specifically in Soweto. After introductory critiques of South Africa’s political economy and as a climate negotiator, these are each considered in turn.

**A political ecology of South African neoliberalism**

While local and international elites made out like bandits during the transition from racial to class apartheid, most South Africans suffered from neoliberal policies imposed by the governments of Nelson Mandela (1994–9), Thabo Mbeki (1999–2008), Kgalema Motlanthe (2008–9) and Jacob Zuma (2009–present). The results included an immediate rise in income inequality, with the Gini coefficient soaring from below 0.6 in 1994 to 0.72 by 2006 (0.8 if welfare spending is excluded). The official unemployment rate doubled from 16 per cent in 1994 to around 32 per cent by the early 2000s, falling to 23 per cent by the late 2000s when in 2009–10 another 1.3 million jobs were lost – but by counting those who gave up looking for work, the realistic rate is closer to 40 per cent. The long-term explanations for the employment massacre were increased imports in labour-intensive sectors and imported machines to exacerbate capital-intensive production techniques. Meanwhile, ecological problems became far worse, according to the government’s 2006 Environmental Outlook research report, which noted ‘a general decline in the state of the environment’.

Social unrest and the rise of social movements reflect the discontent: there were thousands of protests recorded by the police each year. Matters will not improve, in part because of macro-economic trends. The most severe problem is the vulnerability that
South Africa faces in hostile global financial markets, given the danger presented by various statistical measures: amongst the highest current account deficits (exceeding 7 per cent of GDP at peak in 2009) due to outflows of profits and dividends; after Greece, the world's second highest interest rate amongst major economies in 2011; and exacerbating this pressure, a soaring foreign debt that rose from $25 billion in 1994 to $80 billion in 2009 and more than $100 billion by early 2011. The new debt includes part of the $3.75 billion World Bank loan for Medupi, an amount destined to rise as further tranches are taken. As a percentage of national electronic output, the debt would soon reach levels last seen during the mid-1980s foreign debt crisis that helped end apartheid, according to Rand Merchant Bank's projections.

Electricity generation shortfalls during January–March 2008 led to consistent surprise ‘load shedding’ in which entire metropolitan areas were taken off the electricity grid. These were due partly to a lack of new capacity built by national power generator Eskom since the early 1990s (when excess capacity had risen to more than 30 per cent), the running down of coal supplies and rain damage to incoming coal. But the main reason was the increased electricity consumption of metals smelters due to the 2002–8 speculative uptick in commodity prices. Indeed, even earlier, the economy's five-fold increase in CO$_2$ emissions since 1950, and 20 per cent increase during the 1990s, can largely be blamed upon supply of the subsidised electricity by Eskom to multinational corporate mining houses and metals smelters.

South African capital's reliance upon fossil fuels for energy is scandalous. Not only are vast carbon-based profits fleeing to the mining houses' offshore financial headquarters but, despite consuming huge amounts of electricity, the smelters create very few jobs. Instead of cutting back on these sorts of projects, and turning the subsidies to renewables, the ANC government attempted to
augment coal-fired generation with, first, dangerous new pebble bed nuclear technology (rejected by German nuclear producers in the 1990s and finally in 2010 defunded by finance minister Pravin Gordhan in frustration) and then with dangerous existing-technology nuclear reactors. Renewable sources like wind, solar, wave, tidal and biomass are the most obvious ways forward for this century’s energy system, but still get only a tiny pittance of government support.

Behind the gluttonous and reckless consumption of electricity is a long history of cheap energy for big capital made possible by the availability of large amounts of poor quality coal and an incestuous relationship between the coal mines, gold industry and Eskom. A history of state intervention in securing the energy needs of the mines, agriculture and industry established the principle of keeping electricity as cheap as possible for big capital. The ANC government did not change this arrangement, which helps explain why its posture at recent climate summits has been in defence of the world emissions status quo.

The new government was as co-opted as the old regime by the minerals-energy complex (MEC), the phrase that captures the fusion of state, mining houses and heavy industry, especially in beneficiating metallic and mineral products through smelting. As Ben Fine and Zav Rustomjee showed in their 1996 book *The Political Economy of South Africa*, throughout the twentieth century, mining, petro-chemicals, metals and related activities, which historically accounted for around a quarter of GDP, typically consumed 40 per cent of all electricity, at extremely low rates. David McDonald updated and regionalised the concept a decade onwards in his edited collection, *Electric Capitalism*, discovering an ‘MEC-plus’:

Mining is South Africa’s largest industry in the primary economic sector and the country has the world’s largest reserves of
platinum-group metals (87.7 per cent of world totals), manganese (80 per cent), chromium (72.4 per cent), gold (40.1 per cent) and alumino-silicates (34.4 per cent) . . . South Africa’s appetite for electricity has created something of a scramble for the continent’s electricity resources, with the transmission lines of today comparable to the colonial railway lines of the late 1800s and early 1900s, physically and symbolically.14

Eskom fostered a debilitating dependence on the (declining) mining industry, causing a Dutch disease, in memory of the damage done to Holland’s economic balance by its cheap North Sea oil, which in South Africa’s case is cheap but very dirty coal. As a study by the Energy for Development Research Centre found, South Africa

• is ‘the most vulnerable fossil fuel exporting country in the world’ if the Kyoto Protocol is fully extended, according to an International Energy Agency report (because of the need to make deep cuts);
• scores extremely poorly on the indicators for carbon emissions per capita and energy intensity;
• has a ‘heavy reliance’ on energy-intensive industries;
• suffers a ‘high dependence’ on coal for primary energy;
• offers ‘low energy prices to large corporate consumers and high-income households’, which in part is responsible for poor energy efficiency of individual sectors; and
• risks developing a ‘competitive disadvantage’ by virtue of ‘continued high energy intensity’, which in the event of energy price rises ‘can increase the cost of production’.15

As a result, when corrected for income and population size, South Africa’s emissions are higher than even the energy sector of the US, by a factor of twenty.16 To deal with this legacy, the government adopted a Long-Term Mitigation Scenario (LTMS) in mid-2008, to
great fanfare. But the LTMS plans for absolute cuts in CO$_2$ to only start in the period 2030–5, after a post-2020 plateau. Meantime, the rollout of at least a hundred billion dollars worth of new coal-fired and nuclear plants ensued. As for renewable energy investments, it amounted to what a World Bank consultant confessed was a ‘figleaf’ to help sell the Medupi coal-fired power plant loan.17 And tellingly, the 2004 National Climate Change Response Strategy endorsed carbon trading, declaring ‘up-front that CDM primarily presents a range of commercial opportunities, both big and small’.18 Finally, in late 2010, an official policy document emerged that brought these kinds of policies into a coherent, high-carbon whole.

**Government’s ‘Green’ Paper**

The greenwashing language of the National Climate Change Response Green Paper is inadequate to distract critical readers concerned about:

- more imminent multi-billion dollar financing decisions on Eskom coal-fired mega power plants (with more price increases for the masses);
- the conclusion of the energy ministry’s multi-decade resource planning exercise, which is run by a committee dominated by electricity-guzzling corporations; and
- South Africa’s contributions to four global climate debates: President Jacob Zuma’s co-chairing of a UN Sustainable Development Commission, Planning Minister Trevor Manuel’s role within the UN Advisory Group on Climate Finance seeking $100 billion/year in North-South flows, the G8-G20 meetings in France and the COP17 preparatory committee meetings.

Many recall from the 2002 World Summit on Sustainable Development preparatory committees how pressure rose on negotiators to be as unambitious and non-binding as possible. At that Johannesburg
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summit, climate change was completely ignored and the main host politicians – President Thabo Mbeki, Foreign Minister Nkosozana Dlamini-Zuma and Environment Minister Valli Moosa – were criticised for, as Martin Khor (now head of the South Centre) put it, ‘the utter lack of transparency and procedure of the political declaration process. Some delegates, familiar with the World Trade Organisation, remarked in frustration that the infamous WTO Green Room process had now crossed over to the usually open and participatory UN system.’

At the Durban COP, their successors Zuma, Maite Nkoana-Mashabane and Edna Molewa would almost certainly surrender democratic principles and let secretive Green Room deal-making sites proliferate. Two authors of the Green Paper were environment officials Joanne Yawitch and Peter Lukey, both from struggle-era backgrounds in land and environmental NGOs, and once dedicated to far-reaching social change. But in early 2011, Yawitch moved to the National Business Initiative, following the path through the state-capital revolving door so many before her also trod. At the Copenhagen COP in December 2009, lead G77 negotiator Lumumba Di-Aping accused Yawitch of having ‘actively sought to disrupt the unity of the Africa bloc’, a charge she forced him to publicly apologise for, even though within days Zuma proved it irrefutably true by signing the Africa-frying Copenhagen Accord.

Right from the Green Paper’s initial premise – ‘South Africa is both a contributor to, and potential victim of, global climate change given that it has an energy-intensive, fossil-fuel powered economy and is also highly vulnerable to the impacts of climate variability and change’ – this document seems to fit within an all too predictable Pretoria formula: talking left, so as to more rapidly walk right. As a result, the Green Paper claims, with a straight face: ‘South Africa, as a responsible global citizen, is committed to reducing its own greenhouse gas emissions in order to successfully facilitate the
agreement and implementation of an effective and binding global agreement.’ More appropriate would be this reality-based rephrasing:

South Africa, as an irresponsible global citizen, is committed to rapidly increasing its own greenhouse gas emissions by building the third- and fourth-largest coal-fired power plants in the world (Kusile and Medupi), mainly for the benefit of BHP Billiton and Anglo American which get the world’s cheapest electricity thanks to apartheid-era discount deals that last decades, and to successfully facilitate the agreement and implementation of an ineffective and non-binding global agreement – the Copenhagen Accord – which is receiving support from other countries only because of coercion, bullying and bribery by the US State Department, as WikiLeaks has revealed.

Consistent with Washington’s irresponsible climate agenda, Pretoria’s Green Paper suggests we ‘limit the average global temperature increase to at least below 2°C above pre-industrial levels’, yet this target is so weak that scientists predict nine out of ten African farmers will lose their ability to grow crops by the end of the century. In contrast, the 2010 Cochabamba People’s Agreement demanded no more than a 1–1.5°C rise. This is a vast difference when it comes to emissions cuts needed to reach back from present levels of close to 400 parts per million of CO₂ equivalents in our atmosphere to the 300 parts per million that science requires and that the Cochabamba conference demanded.\(^{21}\)

Failing that, the Green Paper acknowledges (using even conservative assumptions): ‘After 2050, warming is projected to reach around 3–4°C along the coast, and 6–7°C in the interior. With these kinds of temperature increases, life as we know it will change completely.’ As one example: ‘[T]he frequency of storm-flow events and dry spells is projected to increase over much of
the country, especially in the east, over much of the Eastern Cape and KwaZulu-Natal, including some of the most crucial source regions of stream-flows in southern Africa such as the Lesotho highlands.’ In the COP17 host city itself, Durban’s sea-level rise is anticipated to be nearly double as fast – close to 3 mm/year – as the South African south coast’s in the immediate future, but new research models suggest several more metres of seawater height are possible by the end of the century, swamping central Durban.

Another sure hit to Durban is via the port, Africa’s biggest, because of a growing ‘reluctance to trade in goods with a high carbon footprint’, the Green Paper admits. The term food miles is used to refer to the distance food is transported from the point of production to the point of consumption, and is increasingly being used as a carbon emission label for food products.’ Further ‘economic risks’ include ‘the impacts of climate change regulation, the application of trade barriers, a shift in consumer preferences, and a shift in investor priorities’. Already, Europe’s ‘directive on aviation and moves to bring maritime emissions into an international emissions reduction regime could significantly impact’ South African air freight and shipping.

‘Tourism is not just a potential victim of climate change, it also contributes to the causes of climate change,’ the Green Paper observes ominously. ‘South Africa is a carbon intensive destination, and relies extensively on long haul flights from key international tourism markets.’ New air taxes to slow climate change thus create significant risk to South African tourism. Yet even though they were warned of this a decade earlier, Transport Ministers Jeff Radebe and his successor Sbu Ndebele pushed through an unnecessary new $1.1 billion airport 40 kilometres north of Durban, entirely lacking public transport access, even while the Airports Company of South Africa confirmed that South Durban’s airport could easily have managed the incremental expansion for another decade.
Durban’s maniacal pro-growth planners still exuberantly promote massively subsidised economic development strategies based on revived beach tourism (notwithstanding loss of coveted ‘Blue Flag’ status signifying cleanliness); mega sports events to fill the 70 000-seater 2010 World Cup stadium (the Moses Mabhida Stadium is widely understood to be a White Elephant notwithstanding a likely 2024 Olympics Bid); a dramatic port entrance widening/deepening and plans for a $15 billion new dug-out harbour at the old airport site; a competing new Dube trade port next to the King Shaka Airport; new long-distance air routes; expansion of South Durban’s hated petrochemical complex; and a massive new Durban-Johannesburg oil pipeline.

That oil will pass through South Durban refineries, which are amongst Africa’s most notorious sources of pollution. At Cuttings Beach, the nearby black community suffered a 2004 oil spill of 5 tonnes from the Single Buoy Mooring, the 50-metre deep intake pump that feeds the refineries with 80 per cent of South Africa’s crude oil imports. Onshore, corporate pollution standards are so lax that the rust-bucket structures regularly spring disastrous leaks and explode. Daily, poisons are flared onto thousands of neighbouring residents. The black (Indian, Coloured and African) communities suffer the world’s highest-ever recorded asthma rate in a school (52 per cent of the children), as Settlers Primary sits next to the country’s largest paper mill (Mondi) and between two refineries: one run by Engen, Chevron and Total; and the other, called Sapref, by BP, Shell and Thebe Investments. Sapref’s worst leak so far was 1.5 million litres into the Bluff Nature Reserve and adjoining residences in 2001. Together these refineries can process 300 000 barrels of oil a day, more than any other single site in Africa aside from an Algerian mega refinery. A new 705 km pipeline from the Durban refineries to Johannesburg – running through the black residential areas of South Durban instead of the normal
route near white residences – will double the existing pumping capacity, an invitation for much more damage here. Delayed by two years, the government pipeline project's cost overrun went from $1.4 billion announced in 2005 to $3.4 billion today. South Durban's petrochemical armpit gets smellier, as soaring financial costs add to the social and environmental calamities.

Worse, there is also the prospect of Durban soon becoming a source of oil. In May 2011, the Petroleum Agency of South Africa began authorising seismic oil surveying by a dubious Singapore-registered company, Silver Wave Energy, in water depths ranging from 30 metres to 2 kilometres. By comparison, BP's Deepwater Horizon platform in the much calmer Gulf of Mexico drilled 1.5 km down to the seafloor surface. Silver Wave Energy's primary owner is Burmese businessman Min Min Aung, who is tight with the junta that still rules there, according to reliable reports. Aung received PetroSA's endorsement to explore 8 000 square kilometres stretching from Durban to South Africa's main aluminum-smelting city, Richards Bay. Silver Wave's environmental impact document includes a description of the notorious Agulhas Current, which begins at the Mozambique border: 'Compared to other western boundary currents the Agulhas Current adjacent to southern Africa's East Coast exhibits a remarkable stability.' In reality, the Natal Pulse races down the Agulhas a half-dozen times each year, pushing 20 km per day. It is one reason Durban's coastline hosts more than 50 major ship carcasses. Creating havoc further south on the Wild Coast, the Pulse contributes to the rogue waves that have sunk 1 000 more vessels in what is considered one of the world's most dangerous shipping corridors. Susan Casey's book *The Wave* pays Agulhas this respect:

> Crude, diesel, jet fuel, liquefied natural gas: oil in all its forms was a heartbreaking, infuriating and all-too-common sight in
the ocean. Supertankers, behemoths that couldn’t make it through the Suez Canal, swung down from the Middle East, took their chances hopping a ride in the Agulhas, and met their share of disasters. Salvagers used every tool at their disposal to prevent the damaged tankers from gushing out their contents, especially in fragile near-shore environments, but sometimes the battle was lost.

The expansion of oil processing and potential drilling is yet more serious because the Green Paper passes the buck to local officials: ‘Most of our climate adaptation and much of the mitigation efforts will take place at provincial and municipal levels.’ Durban’s dubious carbon market and offset deals – such as at the controversial Bisasar Road landfill in Clare Estate – dominate municipal climate policy. The Green Paper repeatedly endorsed ‘market-based policy measures’, including carbon trading and offsets, at a time, in early 2011, that Europe’s Emissions Trading Scheme completely collapsed due to internal fraud, external hacking and an extremely volatile carbon price, and the main US carbon market in Chicago had all but died. Towards a Low Carbon City, the Academy of Science of South Africa’s book about Durban’s efforts to promote such offsets, not only missed the crash of carbon markets, but also ignored all the above high-carbon Durban initiatives and thus deserves to be considered as not science but instead ‘greenwash’.23

Likewise, South Africa’s Green Paper authors obviously were not paying attention to the markets, in arguing: ‘Limited availability of international finance for large scale fossil fuel infrastructure in developing countries is emerging as a potential risk for South Africa’s future plans for development of new coal fired power stations.’ If so, then why did Pretoria borrow $3.75 billion from the World Bank, with around $1 billion more expected in 2011–12 from the US Export-Import Bank and $1.75 billion raised from
international bond markets? Indeed by March 2011, Eskom announced its $40 billion financing portfolio was secure, because both South Africa and the North’s financiers continued to be as short-sighted about coal investments as they were about credit derivatives, real estate, dot.coms, emerging markets and the carbon markets.

The Green Paper is also laced with false solutions. For example, attempting to ‘kick-start and stimulate the renewable energy industry’ requires CDM projects. Yet the miniscule 14 euros/tonne currently being paid to the Durban methane-electricity conversion at three local landfills shows the futility of the CDM, not to mention the historic injustice of keeping Bisasar Road’s vast dump open in spite of resident objections to environmental racism. Similarly dubious policy ideas include ‘a nuclear power station fleet with a potential of up to 10 gigawatts by 2035 with the first reactors being commissioned from 2022’ and, just as dangerously, a convoluted waste incineration strategy that aims to ‘facilitate energy recovery’ through ‘negotiation of appropriate carbon-offset funding’.

Together, these kinds of commitments made South Africa an extremely dangerous threat to humanity and the planet whenever its representatives appeared in UN climate fora.

**South Africa at the COPs**

At the COPs in both Copenhagen and Cancún, as well as at prior meetings such as Nairobi in November 2006, South African leaders regularly let down their African colleagues as well as the global environment. Since South Africa is not listed as a country that must cut emissions in the first (1997–2012) stage of the Kyoto Protocol, the only binding global climate agreement, there was little resistance in Pretoria to signing on. When it came to the second stage, however, Pretoria has been part of the contradictory movement of large emerging economies that want to both retain
Kyoto’s North-South differentiation of responsibility to cut emissions, and to either gut Kyoto’s binding targets or establish complicated offsets and carbon trades which would have the same effect.

The Nairobi summit helped set the tone because Pretoria’s environment minister at the time was Marthinus van Schalkwyk. A new Adaptation Fund was established in Nairobi, but its resources were reliant upon CDM revenues, and Africa received a tiny fraction of these. But because of COP politicians’ and CDM officials’ increasing embrace of biofuels and genetically engineered (GE) timber, activists from the Gaia Foundation, Global Forest Coalition, the Global Justice Ecology Project, Large Scale Biofuels Action Group, the STOP GE Trees Campaign and World Rainforest Movement condemned the Nairobi summit. Van Schalkwyk wrote in Business Day newspaper that South Africa achieved its key Nairobi objectives, including kick-starting the CDM in Africa, and welcomed UN support for more ‘equitable distribution of CDM projects’, concluding that this work sends a clear signal to carbon markets of our common resolve to secure the future of the Kyoto regime.

As if to disprove any intent on joining Kyoto’s emissions cuts, just days later Van Schalkwyk’s Cabinet colleagues confirmed the largest industrial subsidies in African history – entailing a vast increase in coal-fired electricity – for the proposed Coega smelter and export processing zone near Port Elizabeth in the Eastern Cape. Just over a year later, as electricity supplies suffered extensive load-shedding, the project ultimately failed in 2008, but the long-standing plan was for Rio Tinto to build a $2.5 billion aluminium smelter with highly subsidised electricity, and then to apply for CDM financing to subsidise the vast power input even further. As one of South Africa’s leading climate scientists, Richard Fuggle, expressed it in his 2006 University of Cape Town retirement lecture:
It is rather pathetic that Van Schalkwyk has expounded the virtues of South Africa’s 13 small projects to garner carbon credits under the Kyoto Protocol’s CDM, but has not expressed dismay at Eskom selling 1360 megawatts a year of coal-derived electricity to a foreign aluminium company. We already have one of the world’s highest rates of carbon emissions per dollar of GDP. Adding the carbon that will be emitted to supply power to this single factory will make us number one on this dubious league table.27

Given this background, it is telling that Van Schalkwyk became, in March 2010, a leading candidate to run the United Nations Framework Convention on Climate Change (UNFCCC).28 My own view, as quoted in the press, was that ‘[t]he UNFCCC post must be headed by someone of integrity, and that’s not a characteristic associated with Van Schalkwyk, thanks to his chequered career as an apartheid student spy and a man who sold out his political party for a junior cabinet seat’. And ‘[i]f Van Schalkwyk was a world-class climate diplomat, why did Zuma demote him by removing his environment duties last year?’29

Earthlife Africa argued that as environment minister, Van Schalkwyk ‘did not have a good record in cutting carbon emissions’.30 Indeed, judging by Van Schalkwyk’s silence when Eskom proposed huge new coal-fired plants and when bountiful cheap-electricity deals were offered to multinational corporations, he was demonstrably unfit to tackle the other big global polluters. It would have been an ironic, dysfunctional appointment in any case, because as tourism minister Van Schalkwyk was blithely promoting more air travel to South Africa – and yet the UNFCCC will soon have to start taking the lead of European countries and put carbon taxes on planes, and ultimately also on South African exports, as responsible shoppers are doing. On the last occasion he stood on the world
climate stage, in 2007, Van Schalkwyk enthusiastically promoted a global carbon market in Washington at the International Emissions Trading Association meeting, which in a just world would have disqualified him from further international climate work.31

Although he was not rewarded by the UN, as Costa Rican carbon trader Christiana Figueres leapfrogged him at the last moment in May 2010 to get the job, Van Schalkwyk did have strong supporters. According to an industry analysis:

A climate official from an unspecified government said that as a candidate, van Schalkwyk ‘would be acceptable to most people, so he should definitely be counted as a favourite’. Greenpeace Africa was ‘pleased to know Minister Van Schalkwyk is being considered and would be very confident that he would be equal to the task of replacing Mr de Boer . . . By all accounts, he has an excellent standing as a negotiator, and has earned a great deal of respect for being very engaged and informed . . . If he is appointed, developing countries, in particular, will have better access to him because he’s coming from a developing country.’32

After Van Schalkwyk came Sonjica as environment minister, and then in late 2010, her replacement Edna Molewa. In Cancún, Molewa slowed progress on getting binding emissions cuts, because ‘[w]e believe that it is quite important that as developing countries we also get an opportunity to allow development to happen because of poverty. We need to allow space for us to actually introduce those emissions [reductions] over time, because developed countries have gone through the processes.’33 The ruse here was that South Africa’s extremely high emissions contributed to poverty-reduction, rather than the opposite, as a result of big business over-consuming scarce electricity and driving up the price beyond poor people’s ability to pay.
It was also regrettable that Pretoria negotiators went to both Copenhagen and Cancún empowered by endorsements from the World Wildlife Fund and Greenpeace – alongside gullible climate journalists – who took at face value a vaguely promised 34 per cent emissions cut below anticipated 2020 levels. World Wildlife Fund called Sonjica’s Copenhagen strategy ‘very progressive’.\textsuperscript{34} Michelle Ntab Ndiaye, the Africa director of Greenpeace, termed South Africa a star of Copenhagen.\textsuperscript{35} In January 2010, according to Themba Linden of Greenpeace Africa, ‘[t]he BASIC countries have to lead the world in light of no leadership from the developed world’ – yet it was the BASIC countries that legitimised the Copenhagen Accord.\textsuperscript{36} And in November 2010, in a Cancún warm-up negotiation session in China, Greenpeace’s Melita Steele remarked that Pretoria has a ‘fairly progressive [position] in the negotiations . . . quite an ambitious emissions reduction pledge’.\textsuperscript{37}

Even an NGO with the reputation of Greenpeace is prone to posturing in front of power. The reality was different, however. Tristen Taylor of Earthlife Africa begged Pretoria for details about the 34 per cent pledge, and, after two weeks of delays, learned that Yawitch’s estimates were from a Growth without Constraint (GWC) scenario within the LTMS. According to Taylor: ‘GWC is fantasy, essentially an academic exercise to see how much carbon South Africa would produce given unlimited resources and cheap energy prices.’ Officials had already conceded GWC was ‘neither robust nor plausible’ eighteen months ago, leading Taylor to conclude that ‘[t]he SA government has pulled a public relations stunt’.\textsuperscript{38} After all, emissions cuts promised in the LTMS would not prevent the 2010–20 construction of the world’s fourth and third largest coal-fired powerplants, respectively, Medupi and Kusile.

Did Zuma know what he was doing, acting in Copenhagen on behalf of major mining/metals corporations, which keep South Africa’s ruling party lubricated with cash, ‘black economic
empowerment’ deals and jobs for cronies, and which need higher South African carbon emissions so as to continue receiving extremely inexpensive electricity, and which then export their profits to London and Melbourne? Perhaps, but on the other hand, two other explanations – ignorance and cowardice – were, eight years earlier, Zuma’s plausible defences for promoting AIDS denialism. He helped Mbeki during the period in which more than 300 000 South Africans died unnecessarily due to Pretoria’s refusal to supply anti-retroviral medicines (as a Harvard Public Health School study showed).39

To his credit, Zuma reversed course by 2003 (late in the day) and endorsed public supply of AIDS medicines, as public pressure arose from the Treatment Action Campaign (TAC) and its international allies. TAC continued to condemn Zuma, however, on grounds associated with his notorious sexual politics, including misogyny during his 2006 rape trial.40 But it is that sort of intensive pressure that the main local activist network, Climate Justice Now! South Africa, must repeat, or otherwise permit Zuma to remain a signatory to a far greater genocide. Unfortunately, rising activist pressure in early 2010 failed in a similar mission: to prevent financing and construction of the world’s fourth-largest coal-fired power plant, Medupi.

**Medupi coal corruption**

We learn a great deal about South African climate politics by examining a crucial campaign – unsuccessful in the short term – which entailed fighting the World Bank’s fast-growing coal portfolio. On 8 April 2010, after nearly two months of strenuous lobbying against more fossil fuel credits, the Bank Board approved a $3.75 billion loan to the South African electricity utility company Eskom. Its main purpose (for which $3.1 billion was allocated) was construction of a power station that will pump 25–30 megatonnes of CO₂ into the atmosphere annually, more than the output of
115 countries. Paying for Medupi will require a 127 per cent real price increase from 2007–12 for South African household electricity consumers (to nearly $0.15/kilowatt-hour).\textsuperscript{41}

The loan was a last-minute request, as the 2008–9 global financial turmoil dried up Eskom’s potential private sector financing. As a result, it was only in December 2009 that South African civil society activated local and global networks against the loan, starting with a groundWork/Earthlife briefing document in that month. Within three months, more than 200 organisations across the world had endorsed a critique of the loan.\textsuperscript{42}

South Durban activists launched the local public campaign on 16 February 2010 with a spirited protest at Eskom’s main local branch. South Durban was an epicentre of protest against fossil fuels, given that it hosted amongst the largest and least responsible petro-chemical firms south of the Niger Delta. With electricity prices soaring, many more residents in South Durban were being disconnected. They often reconnect illegally and as Eskom and the municipality clamped down, the result was more social strife in a country with what is probably the world’s highest rate of community protest.\textsuperscript{43} To establish a campaign against an obscure World Bank loan so quickly, with the purpose of generating a crisis of confidence at the World Bank and in Pretoria, required clarity of message, an explicit demand (stop Medupi financing) and a variety of issue-linkages to pull various constituencies into a coalition.

As always, the question is who wins and who loses? First, the source areas of the coal for Medupi are highly contaminated by mercury and acid mine drainage, with air, land, vegetables, animals and people’s health at much greater risk. Forty new coal mines in impoverished areas of Limpopo, Mpumalanga and KwaZulu-Natal provinces will be opened to provide inputs to Medupi and its successor, Kusile, as well as for exports. This will create a few coal sector jobs (hence receiving endorsement from the National Union
of Mineworkers), but a great many jobs in agriculture and tourism will be lost as a result of the invasive mining activity and downstream degradation. Medupi itself will be built in a water-scarce area where communities are already confronting extreme mining pollution and, even though an air-cooled model (Africa’s first) was chosen, the cost of providing an additional water-cooling supply amounted to hundreds of millions of dollars, given the long transport and pumping costs.

Once the coal is burned and electricity generated, the winners and losers become even more divergent. Medupi’s main beneficiaries will be the world’s largest metals and mining corporations, especially BHP Billiton (Melbourne based) and various Anglo American subsidiaries (most reporting to London), which already receive the world’s cheapest electricity thanks to multi-decade deals. Anger soon grew about the huge discounts made when the secret, 40-year sweetheart deals were offered by Eskom during late apartheid. At the time, the firm had a third too much excess capacity due to the long South African economic decline and needed huge smelters to mop it up. These agreements were finally leaked in March 2010, and disclosed that BHP Billiton and Anglo were receiving electric power at less than $0.02/kilowatt-hour, whereas the overall corporate price was around $0.05/kilowatt-hour, still the cheapest available anywhere, and the consumer price was around $0.10/kilowatt-hour. In early April, just before the Bank decision, Eskom announced that a small modification was made to BHP Billiton’s contract price but it was reportedly to the firm’s ‘advantage’. Finally, however, the Australian-based mining house was sufficiently intimidated by the glare of publicity that in October 2010 Deutsche Bank mining analysts predicted BHP would dispose of Richards Bay assets. According to Business Day: “The reason for selling the aluminium smelters would be the scrutiny under which BHP’s electricity contracts have come amid demands for resource companies to use less power.”
An additional problem with BHP and Anglo as beneficiaries is the outflow of profits to Melbourne and London, at a time South Africa’s current account deficit made it the world’s most risky middle-income country, according to *The Economist* on 25 February 2009. Moreover, South Africa had an existing $75 billion foreign debt, which would escalate by 5 per cent with the Bank loan. The 1994 foreign debt was just $25 billion, and First National Bank projected that the ratio of foreign debt to GDP would by 2011 rise to the same level as was reached in 1985, when a debt crisis compelled a default (on $13 billion).\(^4\) That was the signal, incidentally, that business and banking were finally breaking ranks with the apartheid regime.\(^4\)

Another controversial aspect of the loan was the Bank’s articulation of the privatisation agenda. The confirmation that Eskom would offer private generating capacity to independent power producers was established in loan documentation in relation to the renewable component. In the process, this advanced Eskom’s desire to privatise 30 per cent of generating capacity, including a 49 per cent private share in Kusile, although no private interest had been expressed before it received its financing support. This component of Eskom’s strategy, replacing an earlier attempt to fragment assets and sell the pieces, attracted explicit opposition from trade unions – especially the National Union of Metalworkers of South Africa – and consumers.\(^4\)

Corruption was another feature that generated critiques of the World Bank by South African opposition political parties (especially the centre-left Independent Democrats and liberal Democratic Alliance, which subsequently merged) and the influential liberal *Business Day* newspaper.\(^4\) These organisations opposed the loan because, contrary to supposed Bank anti-corruption policies, it will directly fund ANC ruling party coffers. Medupi will be built with Hitachi boilers that in turn kick back between $10 and $100 million...
As the Eskom-Hitachi deal was signed, the Eskom chairperson (and former environment minister), Valli Moosa, was also a member of the ANC’s finance committee. A government investigation released in March 2010 found his conduct in this conflict of interest to be ‘improper’. The ANC promised to sell the investment stake, but this dragged on and in late 2010 was still not complete. Ironically, in February 2010, the Bank had issued a major statement alongside its annual African Development Indicators, entitled ‘Quiet Corruption’, in which it blamed African teachers and healthcare workers for moonlighting (a result of Bank structural adjustment policies). Were there justice in the Bank, the Medupi loan could have been a core case study.

Ironically, in December 2010, the World Bank’s website headlined news about the ‘Corruption Hunters’ conference, with Robert Zoellick pronouncing, ‘[s]talking is bad enough, ripping off the poor is disgusting’. Quite. An aside on the Bank’s hunt for corruption is therefore tempting because it was perfectly logical for Zoellick to have hired as the head of his anti-corruption unit a top political operator for South Africa’s machiavellian former president Mbeki. Leonard McCarthy was involved in an apparently illegal conspiracy to undermine the subsequent president, Zuma (also apparently very corrupt), simply to play politics.

And in relation to the Bank in South Africa, the matter of historic racial injustice could not be ignored. The World Bank’s financing of apartheid began just three years after the 1948 election of the Afrikaners’ National Party, lasting through 1967, and included $100 million for Eskom. During that period, the Bank financed the supply of electricity to no black households (who only began receiving electricity in 1980), and instead empowered only white businesses and residences.
Curiously, South African finance minister Pravin Gordhan argued, on 1 April 2010 (appropriately enough), that ‘South Africa, in sixteen years of democracy, never has had to take any loans from the World Bank . . . This is an opportunity for the World Bank to build a relationship with South Africa.’ Yet the Bank’s 1999 and 2008 ‘Country Assistance Strategy’ documents show conclusively that Medupi is the fifteenth credit from the World Bank Group since 1994. As for ‘building a relationship’, Gordhan also neglected that the Bank co-authored the 1996 Growth, Employment and Redistribution (homegrown structural adjustment) programme, whose orthodox strategies failed and which led South Africa to overtake Brazil as the world’s most unequal major country, not to mention more than a dozen other major interventions in social and economic policy.

Indeed, the Bank itself regularly bragged about its ‘Knowledge Bank’ role in South Africa, and in 1999, for example, after Bank economist John Roome suggested to then water minister Kader Asmal that the government impose ‘a credible threat of cutting service to people who could not afford water at the supplier’s cost, the Bank’s Country Assistance Strategy reported that its “market-related” pricing advice was “instrumental” in facilitating a radical revision in SA’s approach’. As a result, the cholera epidemic the following year – catalysed by water disconnections near Richards Bay – killed hundreds. Predictions are easy to make, given the huge price increases faced by electricity customers, that parallel misery will follow the Bank’s Medupi loan.

*The Bisasar Road Clean Development Mechanism*

One of the most obvious strategic orientations of the South African government is carbon trading. To illustrate the controversies, in April 2010 the Medupi power plant was proposed by Eskom officials as a potential CDM project, in spite of the enormous eco-social
resistance that arose to its financing by a World Bank loan. In the same spirit, in 2009, an attempt by Sasol to claim that a gas pipeline investment was ‘additional’ to existing plans (hence deserving emissions reductions credits) was ridiculed by the Johannesburg activist group Earthlife Africa, and did not pass muster in the UN vetting process.

But the most controversial was South Africa’s single largest CDM project at the time, a methane-electricity conversion at Bisasar Road dump in Durban’s Clare Estate residential neighborhood, which processes 5 000 tonnes of solid waste a day. The struggle of Sajida Khan (1952–2007), a self-taught ecologist, is instructive for any of us worried about the climate. Attempting to shut the dump that ultimately killed her, Khan dedicated half her life to a contest with the World Bank and heartless municipal bureaucrats.

She was raised in what was the traditionally Indian neighbourhood within Clare Estate, astride a nature reserve that spanned a small valley. In 1980, when Khan was 28, her surroundings were suddenly destroyed by apartheid officials. The peaceful reserve became an unending, stinking heap of rubbish, which until the late 1990s also included a medical waste incinerator. Khan believed that the neighborhood’s involuntary receipt of overwhelmingly wealthy white Durbanites’ droppings was the root cause of her two cancer cases, the latter of which was fatal. The reason that Bisasar Road dump was not closed in the early 2000s, notwithstanding a very substantial pressure campaign by Khan and 6 000 residents, was a commitment by the World Bank to invest a potential $14.4 million grant in a CDM project to convert landfill methane emissions into electricity.

With at least another fifteen years of life left in the dump before it reached its maximum possible height, Durban officials (white men) celebrated the Bank’s interest at the 2002 World Summit on Sustainable Development by ignoring the clamour (mainly by
black women) to close it. The officials aimed to draw out the methane, burn it so as to power turbines and link the resulting electricity back into the municipal grid, and flare the residue (with associated incineration hazards). The supposedly win-win strategy to capture the dump’s escaping methane – a greenhouse gas at least twenty times more potent than CO\textsubscript{2} – would require the CDM subsidy in order to compete with South Africa’s cheap coal-fired national electricity grid.

Community opposition to the Bank’s CDM and demands for Bisasar Road’s closure were not universal. Apartheid segregated South Africa’s four main race groups into different areas. In addition to people of Indian origin like Khan, Clare Estate also hosts thousands of poor ‘African’ and working-class Coloured residents. The Khan family built their middle-class house in the 1950s on Clare Road. Some members of the family still reside in the house overlooking (to the west) the dump, directly in the path of prevailing winds which continually coat the area with light landfill dust and disease-carrying flies. As logical as the closure demand is, given the history of environmental racism, there are nevertheless conflicting opinions about how to handle this menacing neighbour. Starting in early 2005, the Abahlali baseMjondolo shack dwellers’ movement of Kennedy Road – also directly adjoining the landfill, to the north – did an extraordinary job struggling against adverse conditions and police repression (until in September 2009 when many of the leaders were driven away after violent attacks). But, throughout the 2000s, the Kennedy Road shack dwellers welcomed the opportunity to have several dozen of their members pick rubbish and informally recycle it while on the dump. Scores more shack dwellers once informally picked materials from the dump, until the municipality’s Durban Solid Waste limited access due to safety and health dangers.

There was no unity in this community, for Kennedy Road leaders accused Khan of threatening livelihoods and sabotaging the
city’s offer of a handful of jobs and bursaries (in Uganda) in the event the CDM project got off the ground. Khan had used the word ‘informals’ to describe the shack settlement residents and once advocated that they be compensated and moved to areas nearby (as she herself desired for her family), sufficiently far from the dump (she recommended a buffer for all residents of 800 metres) to be safe from the windswept dust. At the nearby clinic, health workers confirmed that Kennedy Road residents suffer severely from asthma, sinusitis, pneumonia and even tuberculosis. The toxic body load is unknown, but the Cancer Society of South Africa deemed the area a ‘cancer hotspot’ because of the heavy metals and other dangerous substances that penetrate the water, air and shifting soils. Khan had a profound empathy for people in the same proximity exposed to cancer-causing and respiratory disease particulates, as she noted in an interview: ‘Recently a woman was buried alive. She died on the site [picking rubbish, killed by a dump truck offloading], I could have saved her life.’

In contrast, for John Parkin, deputy head of engineering at Durban Solid Waste: ‘What makes [the Bisasar Road CDM project] worthwhile is the revenue that can be earned from carbon credits, estimated at 3.1 million certified emissions reduction credits, worth about $15 million, along with some 6–8 megawatts of electricity over a 20 year lifespan.’ In late 2006, the French Development Agency pledged long-term loans of $8 million to Durban’s landfill gas projects (Bisasar is by far the largest of three), alongside the $1.3 million extended by South Africa’s Department of Trade and Industry.

The World Bank had backed off in 2005 when Khan’s fame was at her height — for example, the lead paragraph in the Washington Post’s analysis of the Kyoto Protocol when it came into effect that year was about Khan’s battle against CDMs — but the Bank still billed itself as a potential financer for the project. In 2008, however,
the Bank was replaced by an investment company, Tradings Emissions, which acquired the right to purchase one million emissions reduction credits. The firm’s investment adviser Simon Shaw termed Bisasar and the other two landfills ‘an important project, it is operational, it has a long term future and we anticipate registration shortly. These credits will be a useful addition to our portfolio.’ In March 2009, the municipality registered it on the United Nations list of CDM projects, as active through at least 2014.67

The 4 million cubic metres of potential Bisasar Road rubbish that is today’s remaining capacity – on top of 19 million cubic metres in the dump that are already exuding methane – will allow extraction of methane and damaging on-site conversion of electricity for many years to come. Khan believed that the gas should indeed be removed, but through nearby gas pipes, not burned and flared on site. Khan’s goal of Bisasar Road’s immediate closure with conversion of the gas for industrial use a long way from residential areas could have been achieved were there better financing systems available than the unstable carbon market.

Khan’s surviving relatives are bitter about their multiple losses, and miss her energy for and love of resistance to environmental injustice. Sometimes accused of waging her battle because of a selfish interest, her family’s declining property value, Khan rebutted: ‘No, no. It’s to do with pollution, and it transcends race and colour.’68 Yet, there were certainly class and, to some extent, race and gender power relations at play – all of which were shaped by capital accumulation at municipal, national and global scales.

For example, as Khan struggled for life, the toxic economy of Bisasar Road was being rebuilt by the Durban municipality with the global capitalist master’s CDM tool. The campaign to close apartheid’s dump may ultimately fail as a result of the various post-apartheid forces whose interaction now generates overlapping,
interlocking, eco-social and personal tragedies. Still, if inhaling status quo pollution meant paying dearly with her health for so many years, Khan died knowing she had been partially successful: at least temporarily preventing a major World Bank investment and raising local/global consciousness.

Most importantly, she left us with a drive to transcend the inherited conditions and mindsets into which apartheid categories have cemented infrastructures and people. But pessimistically, and realistically, without Khan’s energy and talent, it was infeasible for Clare Estate residents from different and sometimes opposed race/class backgrounds to forge more effective alliances against the municipality, at least not in the short term. It was only a matter of time before global capitalist processes rolled over citizen opposition to Bisasar Road, facilitated by the money-hungry, neoliberal municipality, joined by Pretoria and Paris.

**Power to the people**

The ordinary Sowetan working-class electricity consumer offers us a good case study of climate politics due to extraordinary political mobilisations that have occurred in the Johannesburg South Western Townships (Soweto), including the student uprising of 1976. In the same spirit, using the same rhetoric and songs, a new movement against extreme electricity price increases arose in 2000, the Soweto Electricity Crisis Committee. The potential for Soweto civics to address issues beyond their immediate community by tracing the production of a basic need – such as water from Lesotho dams to privatised municipal water to substandard sewage systems – has been remarked upon often. But the particular conditions of electricity commodification in relation to climate have enormous potential.

Sowetans experienced high price increases due to a huge reduction in central-local state subsidies during the 1990s, 85 per
cent in real terms according to the Financial and Fiscal Commis-

70 As the subsidies ebbed and as Eskom followed its mandate for ‘cost-reflexive tariffs’, an estimated 10 million people were

71 victims of electricity disconnections after apartheid, and in the early 2000s, the rate increased dramatically. 

This process of electricity commodification was first posed in an apartheid-era (1986) White Paper on Energy Policy, which called

72 for the ‘highest measure of freedom for the operation of market forces, the involvement of the private sector, a shift to a market- oriented system with a minimum of state control and involvement, and deregulation of pricing, marketing and production’. After

73 apartheid was replaced in 1994, similar language was found in the Urban Development Strategy (1995), the Municipal Infrastructure Investment Framework (1997 and 2001) and the Energy White Paper (1998). The latter called for ‘cost-reflective’ electricity tariffs so as to limit any potential subsidy from industry to consumers.

Asking why cross-subsidisation of electricity prices to benefit the poor was not being considered, Chippy Olver, the state’s leading infrastructure-services official explained: ‘If we increase the price of electricity to users like Alusaf [a major aluminum exporter owned by BHP Billiton], their products will become uncompetitive and that will affect our balance of payments.’

BHP Billiton was actually cross-subsidised by retail consumers. Nor did anyone factor in the ecological price of cheap power at the site of production and in the coal-gathering and burning process.

Rising electricity prices across South African townships had a negative impact during the late 1990s, evident in declining use of electricity despite an increase in the number of connections. According to Statistics South Africa, households using electricity for lighting increased from 63.5 per cent in 1995 to 69.8 per cent in 1999. However, households using electricity for cooking declined from 55.4 per cent to 53.0 per cent, and households using electricity
for heating dropped from 53.8 per cent in 1995 to just 48.0 per cent in 1999. The state agency conceded a significant link between decreasing usage and the increasing price of electricity.  

Most poor South Africans still rely for a large part of their lighting, cooking and heating energy needs upon paraffin (with its burn-related health risks), coal (with high levels of domestic household and township-wide air pollution) and wood (with dire consequences for deforestation). The use of dirty sources of energy has negative consequences, especially for women’s health, leading to respiratory diseases and eye problems. This is because women are traditionally responsible for managing the home; they are more affected by the high cost of electricity and spend greater time and resources searching for alternative energy. Ecologically sensitive energy sources, such as solar, wind and tidal, have barely begun to be explored, notwithstanding the enormous damage done by South Africa’s addiction to fossil fuel consumption.

Neoliberal pricing principles and the consequent policy of mass disconnections prevented the widespread redistribution required to make Eskom’s mass electrification feasible. As protests began in earnest from 1997 and the ANC witnessed rising voting apathy before the 2000 municipal elections, the ruling party introduced a ‘Free Basic Services’ monthly package of 50 kilowatts of electricity per household, but Eskom delayed implementation and the amount proved far too little, and disconnections increased.

Eskom continued to be a target of criticism, especially from environmentalists who complained that coal-burning plants lack sufficient sulfur scrubbing equipment and that alternative renewable energy investments have been negligible.

Moreover, labour opposition to Eskom mounted. Having fired more than 40 000 of its 85 000 employees during the early 1990s, as a result of mechanisation and over-capacity, the utility tried to outsource and corporatise several key operations, resulting in periodic
national anti-privatisation strikes by the trade union federation. Both the National Union of Mineworkers and the National Union of Metalworkers of South Africa held repeated wage strikes, often gaining above-inflation increases. A national strike against Eskom price increases threatened by the Congress of South African Trade Unions in 2010 never materialised.

It was in Soweto that the resistance became world famous and internationally networked. In 2001, domestic consumers paid an average price to Eskom of US$0.03 cents per kilowatt, while the manufacturing and mining sectors paid only half that amount. Two years earlier, in 1999, Soweto residents had experienced three increases – amounting to 47 per cent – in a short period as Eskom brought tariffs in line with other areas. This reflected the move towards ‘cost reflectivity’ and away from regulated price increases, in order to reduce and eventually eliminate subsidies, so as to achieve ‘market-related returns sufficient to attract new investors into the industry’, said Eskom.

When prices became unaffordable and payment arrears began to mount, Eskom’s first strategy was disconnection and repression. Eskom decided in 2001 to disconnect households whose arrears were more than $800, with payment more than 120 days overdue. An anticipated 131 000 households in Soweto were to be cut off due to non-payment, according to Eskom, even though the company had only 126 000 recorded consumers in the township. Johannesburg Metro authorities decided, in an act of solidarity, to cut off water and began evictions, selling off residents’ houses in order to recoup the debts owed in an attempt to pressure people to pay Eskom arrears. A survey of Soweto residents found that 61 per cent of households had experienced electricity disconnections, of whom 45 per cent had been cut off for more than one month. A random, stratified national survey conducted by the Municipal Services Project and Human Sciences Research Council found that
10 million people across South Africa had experienced electricity cutoffs. The impact of disconnections can be fatal. One indication of the health implications of electricity denial and of supply cuts was the upsurge in tuberculosis rates, as respiratory illnesses are carried by particulates associated with smoke from wood, coal and paraffin. As a result of climate and congestion, respiratory diseases are particularly common in Soweto. In a 1998 survey, two in five Sowetans reportedly suffered from respiratory problems. Survey respondents reported numerous fires in the neighbourhood, often caused by paraffin stoves, many of which were harmful to children. Eskom’s disconnection procedures often resulted in electricity cables lying loose in the streets. Residents were unhappy not only about the high reconnection fees charged but the fact that Eskom used outsourced companies that earned $10 per household disconnection. No notification was given that supply would be cut off, and residents were not given time to rectify payment problems. Eskom can disconnect entire blocks at a time by removing circuit breakers, penalising those who do pay their bills along with those who don’t.

All these grievances provided the raw material from which the Soweto Electricity Crisis Committee and its Operation Khanyisa emerged, a point we take up in the final chapter, along with a critical look at the way more explicit climate justice movement-building from below has worked in some of the main sites of struggle.

Reforming climate policy for the Durban COP?
South Africa’s interlinked climate-energy-economic travesties can only be reversed by grassroots and labour activism. At the Durban COP17, we should not expect a global deal that can save the planet, given prevailing adverse power relations. Instead of relying
Politics of Climate Justice

on paralysed politicians and lazy bureaucrats, South Africa’s environmental, community, women’s, youth and labour voices will be demanding serious action to address the greatest crisis of our times:

- major investments in Green Jobs would let metalworkers weld millions of solar-powered geysers, for example, thus allowing Eskom to switch off power to BHP Billiton’s aluminum smelters and to halt new power plant construction without net job loss;
- new public transport subsidies should reconfigure apartheid-era urban design and pull us willingly from single-occupant cars;
- an employment-rich zero-waste strategy would recycle nearly everything and compost organic waste so as to eliminate methane emissions at the remaining landfills;
- more direct-action protests against major emissions point sources – Eskom, Sasol, the Engen refinery in South Durban and the new Durban-Johannesburg oil mega pipeline, for instance – should better link micro-environmental struggles over local air, water and land quality to climate change;
- more ambitious Air Quality Act regulations would label – and then phase out – CO$_2$, methane and other greenhouse gas ‘pollutants’, as with the US Clean Air Act;
- government planning and utility board decisions would halt willy-nilly suburbanisation and ungreen maldevelopment; and
- instead of North-South financing via destructive carbon markets, the demand for climate debt repayment would permit the flow of strings-free, non-corrupt and effective adaptation funds.

Through urgent adoption of genuine post-carbon strategies like these, by the time of the COP17 in November 2011, the world might have seen in Durban a state and society committed to reversing climate change. But for a variety of reasons, it was not to be.
One crucial problem was the limited development of South Africa’s climate justice movement, and its watering down in the run-up to the Durban COP17. In January 2011, climate justice activists considered a process of common action with Climate Action Network members whose highest-profile local members were the branch of the conservative World Wildlife Fund (a group on record favouring both the South African negotiating position and carbon trading) and the rather fluid, self-interested Greenpeace, led by Durban-born Kumi Naidoo. The latter, a supporter of carbon trading (‘a necessary evil’), is an exceptionally skilled communicator and his commitment to civil disobedience on behalf of the cause of halting climate change, as witnessed in the freezing Greenland waters against an offshore oil rig in June 2011, boosted awareness in Durban. However, the COP17 is beset by internal contradictions, resignations and lack of communication with the international climate activist community.

Comparisons to the prior two hosts are interesting, in part because of prospects for climate justice movement building that rose in Denmark in 2009 but retreated in Mexico in 2010, largely due to a politically splintered and geographically fragmented oppositional terrain. Civil society looked forward to the South African host function because of the need to publicise and change so many local policies, practices and projects, as well as to revitalise a cadreship of activists whose last summit protest experiences were at the 2001 World Conference Against Racism in Durban and the 2002 World Summit on Sustainable Development in Johannesburg.

But compared to the two prior events, there were some important differences that would shape the COP given its South African context. First, unlike in Denmark, the Pretoria government would attempt to funnel civilised society into an area immediately adjacent to the Durban International Convention Centre where
delegates would face extreme, badge-based access controls to negotiations (unlike Copenhagen’s Bella Centre managers, who allowed in registered civil society groups until three days before the climax, but then U-turned and rejected even the Climate Action Network’s presence).

Of course, that space proximate to the International Convention Centre would be tamed. The South African government’s idea of civil society is highly regulated civilised society, or loyalist civil society, and when protests about the environment and local socio-economic grievances emerge, the South African government regularly villifies – and sometimes represses – the critics (or just ignores them). For example, Durban municipality officials regularly reject – with banal explanations – civil society applications for mass protest marches, although to be balanced, it must be said that the South African police have never shown the capacity to ‘kettle’ or break up large marches, as witnessed in Copenhagen, or to successfully infiltrate leading activist groups (as was revealed in Britain when National Public Order Intelligence Unit spy Mark Kennedy caught the ‘Stockholm Syndrome’ and sympathised with the UK Climate Camp members he was meant to be monitoring, thus ruining the police case against them in early 2011).

As we have seen already, while perfecting the crucial narrative art of ‘talk left in order to walk right’ (as Frantz Fanon showed is so typical of African nationalism in *The Wretched of the Earth*), South Africa’s government typically hosts major summits – the World Conference Against Racism and World Summit on Sustainable Development are the main comparative examples – in ways that amplify the world elites’ most conservative power relations (for example, lining up pro-Zionist and anti-reparations in 2001 and pro-privatisation in 2002). Thus, they are also the target of local protesters. As a result, the society’s view of the UNFCCC – and the UN role in general – is far less hopeful than Denmark’s was, in
part because global-governance strategies (with the exception of exempting AIDS medicines from WTO control at Doha in 2001) are generally understood to complement not contradict Western imperialism, especially in relation to Africa. But this tends to be impressionistic, not at the level of detailed anger expressed by citizenries at the Copenhagen Accord signing in December 2009. At the level of broader society, while a substantial share of Copenhagen residents, Danes and nearby Europeans, especially youth, realised what was at stake and joined the proceedings, in both South Africa and Mexico, the levels of popular participation in climate debates (and knowledge of the crisis) are much lower.

Instead, there is more desperate fury in these sites at the degeneration of state services, hence South Africa’s pride of place amongst the highest protest rates in the world. Given that Pretoria has imposed an extreme local climate/energy crisis on its subjects – massive coal-fired plants generating power for large aluminium and mining firms with exploitative electricity price increases to the under-accessed poor – and makes only token efforts to develop renewable energy and practically no efforts (except an elite fast train) at improving public transport, the Durban COP would not be a friendly place.

Local activists’ modus operandi include building mass mobilisations with very radical rhetoric and substantial marches and demonstrations (albeit not as many as were gathered in Copenhagen in December 2009), as well as more surgical policy critiques. But local organisations lack either the symbolic orientation of European NGOs’ banner hangs, flash mobs and other media-savvy tactics, or, on the other end of the spectrum, the black bloc of militant anarchist/autonomist groups. Because of that, the movement below is critically important in this setting, in a way it was not in Copenhagen or Cancún. One important example was a Johannesburg protest march conducted by Earthlife South Africa in September
2011, with a reported 1 500 activists targeting Eskom and BHP Billiton offices. One demand was for Eskom to cease having representation on South Africa’s negotiating team, and another was for a final disclosure of the price charged to the giant aluminium smelters, still considered a state secret. Though not victorious, the groups raised consciousness in the run-up to the COP17, as did Durban activists who repeatedly targeted the US Consular building.

After all, paralysis above was anticipated to continue. The hyped expectations of ‘Hopenhagen’ were no longer a factor since no one had any sense that Durban would either extend Kyoto or give the Copenhagen Accord sufficient teeth to address the crisis properly. Even the man with most to win or lose from perceived progress in Durban, UN Secretary General Ban Ki-moon, shifted focus to a potential 2012 deal at the Rio+20 gathering in Brazil. According to his assistant Robert Orr: ‘It is very evident that there will not be a single grand deal at any point in the near future.’ The possibility of the Kyoto Protocol being extended into a second commitment period beyond 2012 was always a stated goal of South African negotiators, but by August 2011, officials in Pretoria were openly acknowledging that ‘the Durban conference would not likely produce this outcome.’

At the level of Durban’s fine detail, no one would justifiably expect the North to deliver a useful funding mechanism and actual binding commitments, given the reactionary character of all the key governments, plus the rising capacity of the BRICS – Brazil, Russia, India, China and South Africa – to foil cutback commitments. One of the crucial functions of Cancún was to re-legitimise emissions trading. This was done in theory but not in practice, as witnessed by ongoing chaos in the European Emissions Trading Scheme. The carbon markets and various other offset schemes were still incapable of performing the UNFCCC negotiators’ desired feats, of which the most urgent in coming years would be paying
for forest conservation and transferring half the $100 billion/year of adaptation funds to the South by 2020 as promised in Copenhagen.

Moreover, since 2010 the world had become more acutely aware of the devastating roles of the two main Washington institutions that would dominate Durban: the World Bank, thanks to the Medupi loan; and the US State Department, thanks to WikiLeaks’ 250,000 embarrassing diplomatic cables. As for hosting responsibilities, the South African government could be expected to repeat the Danes’ inept, inexperienced and ideologically confused facilitation, inadequate to the task of bridging vast political divides. One indication was the 2 September 2011 diplomatic incident in which COP17 host presiding officer Nkoana-Mashabane refused to put her handbag through a Norwegian airport X-ray scanner on the way from Oslo to a meeting in Bulgaria. All other dignitaries, aside from heads of state and royalty, are subject to such scans there, but instead of complying, Nkoana-Mashabane and her entourage engaged in a shouting match and then walked out of the airport and hired an executive charter jet costing more than $30,000 to make the trip. They missed several meetings due to the delays.

It was a strong signal regarding the degree to which frivolity and irresponsibility would take precedence over carbon reductions three months later. For as in 2001 at the World Conference Against Racism and in 2002 at the World Summit on Sustainable Development, Pretoria had readied itself to kowtow to Washington’s whims and global business rhetoric, especially via exclusionary Green Room politicking. And then, as if to demonstrate a kowtowing balance, just six weeks before the conference began, Nkoana-Mashabane and her officials delayed – and hence denied – the Dalai Lama another visa. This was to attend Archbishop Desmond Tutu’s 80th birthday celebrations and deliver speeches in the main cities. Upon
hearing the news, Tutu accused Nkoana-Mashabane of being ‘very economical with the truth’ and announced:

Our government is worse than the apartheid government, because at least you were expecting it from the apartheid government. We were expecting we would have a government that was sensitive to sentiments of our Constitution . . . Hey Mr Zuma, you and your government don't represent me. You represent your own interests. I am warning you out of love. I am warning you like I warned the nationalists that one day we will start praying for the defeat of the ANC government. You are disgraceful.85

The ‘own interests’ of the COP17 hosts are grounded in the minerals-energy complex, in which Zuma’s own family has been dabbling albeit with spectacular lack of success (in the process exhibiting extreme environmental irresponsibility, as seen by the role of the president’s nephew in the Aurora mining saga which exacerbated acid mine drainage). Although Pretoria claimed a desire for the Kyoto Protocol’s extension after 2012, this line was a rhetorical gambit of the South African leaders. It was blatantly evident that the business-as-usual posture of the hosts of the COP17 would satisfy both Washington and Beijing, thus ensuring South Africa remained on the trajectory to planet-threatening climate change.

Given that there was no chance for the global balance of forces to permit a deal that might be celebrated as genuinely useful, as a result the activist discussions centred on how to best delegitimise the elites. The strengths and weaknesses they would bring to this task in Durban and subsequently in Korea in 2012, are the subject of the final chapter.
Climate justice is the name of the new movement that best fuses a variety of progressive political-economic and political-ecological currents to combat the most serious threat humanity and most other species face in the twenty-first century. The time is opportune partly because of the ongoing fracturing of elite power – including acquiescence by large environmental NGOs – in an era of extreme global state failure and market failure. As shown in prior pages, the inability of global elite actors to solve major environmental, geopolitical, social and economic problems puts added emphasis on the need for a climate justice philosophy and ideology, principles, strategies and tactics.

One challenge along that route is to consider the emerging climate justice narratives, and identify what gaps exist in potential climate justice constituencies, and which alliances are moving climate justice politics forward. Climate justice only arrived on the international scene as a coherent political approach in the wake of the failure of a more collaborative strategy between major environmental NGOs and the global capitalist managerial class. The first efforts to generate a climate advocacy movement in global civil society became the Climate Action Network. But from
1997, Climate Action Network adopted as a core strategy what proved to be a ‘false solution’, namely an emphasis on regular UN interstate negotiations aiming at minor, incremental emissions reductions augmented by carbon trading and related offsets. The cul-de-sac of Climate Action Network’s commitment to carbon trading was confirmed when Friends of the Earth International broke away in 2010, but already by the time of the December 2009 Copenhagen COP15, Climate Action Network’s critics in the climate justice community were able to make the case for an alternative strategy with sufficient force that they gained half the space reserved for non-governmental delegations in Copenhagen’s Bella Centre.

Climate justice activists had entered this terrain with demands that the global establishment would simply not meet: a 50 per cent greenhouse gas emissions cut by 2020 and 90 per cent commitment for 2050; payment of a rapidly rising climate debt; the decommissioning of the carbon markets so favoured by elites; and massive investments in renewable energy, public transport and other transformative infrastructure.

As a result, it soon became evident that the next stage of the climate justice struggle was necessarily to retreat from a naively over-ambitious global reform agenda (politely asking UNFCCC delegates to save the planet) and instead to pick up direct action inspirations from several sites across the world – Nigerian and Ecuadorian oilfields, Australia’s main coal port, Britain’s coal-fired power stations and main airport, Canada’s tar sands, and US coalfields and corporate headquarters – where climate justice was being seeded deep within society.

Before exploring the demands, strategies, tactics and alliances, the first challenge is specifying the trajectory by which climate justice politics emerged over the past two decades, in part to sort out ‘justice’ from competing kinds of climate advocacy. To do so requires scanning a wide variety of concrete actions by leading climate justice activists.
Climate justice political traditions

The climate justice lineage includes a variety of traditions, in overlapping chronological order:

• 1990s anti-racist environmentalism which first conclusively linked social justice to ecological problems;
• 1990s advocacy by Acción Ecológica (from Quito in Equador) leading up to the Kyoto Protocol negotiations;
• the late 1990s Jubilee movement against Northern financial domination of the South;
• the 2000s global justice movement (which came to the fore with the December 1999 Seattle WTO protest);
• an Amsterdam conference of CorpWatch specifically on the theme of climate justice;
• environmentalists and corporate critics who in 2004 started the Durban Group for Climate Justice;
• the 2007 founding of the Climate Justice Now! network;
• the 2009 rise of the European left’s Climate Justice Alliance in advance of the Copenhagen COP;
• the ongoing role of Malaysia-based Third World Network in amplifying the critique by both South states and radical civil society in COP and related negotiations;
• the renewed direct-action initiatives that from 30 November 2009 generated the Mobilization for Climate Justice in the US and in 2010 drew in more mainstream groups like Greenpeace, Rainforest Action Network and 350.org; and
• maybe most portentously, the Bolivian government-sponsored (but civil society-dominated) April 2010 Peoples’ World Conference on Climate Change and the Rights of Mother Earth in Cochabamba.

Shortly after the confirmation of a climate justice identity in Cochabamba, the Detroit Social Forum began to consolidate US
networking, featuring climate-related struggles led by people of colour. Reacting in part to the challenge of the more mainstream organisations – for example on 10 October 2010 (10/10/10) the 350.org network arranged an impressively broad ‘global work party’ which, while not invoking climate justice politics, contributed to a sense of interlinkedness on the issue – the grassroots activists amplified their voices to claim more power than they were normally given credit for. Movement Generation in Oakland provided an impressive list of direct action events and resulting community organising victories in the US over several prior months and years:

- **Stopping King Coal with community organising:** The Navajo Nation, led by a Navajo and Hopi grassroots youth movement, forced the cancellation of a Life of Mine permit on Black Mesa, for the world’s largest coal company – Peabody Energy. Elsewhere in the US, community-based groups in Appalachia galvanised the youth climate movement in their campaigns to stop mountaintop removal coal mining, and similar groups in the Powder River Basin have united farmers and ranchers against the expansion of some of the world’s largest coal deposits.

- **Derailing the build-out of coal power:** Nearly two thirds of the 151 new coal power plant proposals from the Bush Energy Plan have been cancelled, abandoned or stalled since 2007 – largely due to community-led opposition. A recent example of this success is the grassroots campaign of Dine local citizen groups in the Burnham area of eastern Navajo Nation, New Mexico, that have prevented the creation of the Desert Rock coal plant, which would have been the third such polluting monolith in this small, rural community. Community-based networks such as the Indigenous Environmental Network, the Energy Justice Network and the Western Mining Action Network have played a major role in supporting these efforts to keep the world’s most climate polluting industry at bay.
• Preventing the proliferation of inciners: In the last twelve years, no new waste incinerators (which are more carbon-intensive than coal and one of the leading sources of cancer-causing dioxins) have been built in the US, and hundreds of proposals have been defeated by community organizing. In 2009 alone, members of the Global Alliance for Incinerator Alternatives prevented dozens of municipal waste incinerators, toxic waste incinerators, tyre incinerators and biomass incinerators from being built, and forced Massachusetts to adopt a moratorium on incineration.

• Defeating Big Oil in our own backyards: A community-led coalition in Richmond, California, has stopped the permitting of Chevron’s refinery expansion in local courts. This expansion of the largest oil refinery on the west coast is part of a massive oil and gas sector expansion focused on importing heavy, high-carbon intensive crude oil from places like Canada’s tar sands. This victory demonstrates that with limited resources, community-led campaigns can prevail over multi-million dollar public relations and lobby campaigns deployed by oil companies such as Chevron, when these strategies are rooted in organizing resistance in our own backyards. REDOIL (Resisting Environmental Destruction on Indigenous Lands), an Alaskan native grassroots network, has been effective at ensuring the native community-based voice is in the forefront of protecting the Chukchi and Beaufort Seas. Together with allies, REDOIL has also prevented Shell from leasing the Alaska outer continental shelf for offshore oil exploration and drilling. Advancing recognition of culture, subsistence and food sovereignty rights of Alaskan natives within a diverse and threatened aquatic ecosystem has been at the heart of their strategy.

• Stopping false solutions like mega hydro: Indigenous communities along the Klamath River forced Pacifcorp Power
company to agree to ‘Undam the Klamath’ by the year 2020 in order to restore the river’s natural ecosystems, salmon runs and traditional land-use capacity. For decades, indigenous communities have been calling out false solutions – pointing to the fact that energy technologies that compromise traditional land-use, public health and local economies cannot be considered climate solutions.

- Building resilient communities through local action: In communities all over the US, frontline communities are successfully winning campaigns linking climate justice to basic survival. In San Antonio, Texas, the Southwest Workers Union led the fight to divert $20 billion dollars from nuclear energy into renewable energy and energy efficiency. In addition, they launched a free weatherisation programme for low-income families and a community-run organic farm. In Oakland, California, the Oakland Climate Action Coalition is leading the fight for an aggressive Climate Energy and Action Plan that both addresses climate disruption and local equity issues.¹

Across the Atlantic Ocean, on 12 October 2010 (to counteract what in the US is known as ‘Columbus Day’ but represents European invasion of the hemisphere), the European-based Climate Justice Action network co-ordinated direct-action protests against climate-related targets in two dozen locales. And in Cancún from 28 November–11 December 2010, at least two sets of climate justice activists – in Klimaforum and Via Campesina – drew in international allies, although fragmentation along geographical and political lines limited their effectiveness. This would not be the case, it seemed, at the Durban COP17. Prior events to inspire climate activists included the 1 252 arrests at the White House in August–September 2011 by protesters opposed to the import of tar sands oil through the Keystone XL pipeline; solidarity rallies
were held in Durban at the US Consulate and many other sites across the US and world. Although not successful, the civil disobedience was a ratcheting up of climate activist commitments to opposing fossil fuel.

In 2011, there were a few spectacular victories by climate justice activists, such as the Environmental Protection Agency’s (EPA) January ruling against a major West Virgina mountaintop coal removal operation as a violation of the Clean Water Act, and the Ecuadoran court’s $8.2 billion judgment against Chevron-Texaco in February. These two proved pyrrhic, it might be argued. The EPA backtracked on fossil fuel regulations, suffered defunding during the mid-2011 budget cuts, and to the extent Barack Obama intervened in EPA director Lisa Jackson’s work, it was on behalf of big polluters, as in September 2011 when he ordered that the Bush administration’s rollback of ozone-related emissions regulations be continued. And Chevron refused to accept responsibility for Ecuador and indeed filed a ludicrous racketeering lawsuit against the plaintiffs and their lawyers.

Worse, Barack Obama refused to back down on US State Department support for importing Canadian tar sands oil to the US. The Keystone XL pipeline from the world’s largest industrial project was judged by Hillary Clinton’s staff to be environmentally acceptable, in spite of more than 1250 arrests at the White House in mid-2011 followed by 200 in Ottawa. One of the main networks involved in this fight, 350.org, also held a variety of other actions that suggested a turn to sustained militancy, linking with the Occupy Wall Street movement in October 2011. The tar sands protest was tracked by solidarity activists in Durban who took to irregular protests at the US Consulate a block west of City Hall.

In addition, across the world, the struggle against Big Coal led to several important advances during 2011, according to the submovement’s lead chronicler, Ted Nace: “Sustained and passionate
grassroots activism is challenging the idea that fossil fuels are the only option. Many governments have backtracked or shelved plans in response to political pressure or legal actions.\(^3\) A partial list from Nace’s impressive network includes intense battles with implications for climate justice:

- In April, 1 500 people convened on a beach in Malaysia to savour a victory that had been judged impossible just two years earlier: the defeat of a 300-megawatt coal plant in the Malaysian state of Sabah, located on the northeast side of the island of Borneo . . .

- In the township of Phulbari (Bangladesh), as many as 220 000 people would be displaced by a proposed 15-million-ton-per-year coal mine and a 500-megawatt coal plant. Community opposition reached a crescendo in 2006, when paramilitary forces fired on a protest rally of as many as 70 000 people, killing three people and injuring 200. In the wake of these deaths, nationwide protests and strikes closed down the country for four days. They were brought to an end only when the government signed an agreement to ban open pit mining and permanently expel the project’s London-based financier, Asia Energy Corporation (now Global Coal Management Resources Plc or GCM). Although demonstrators burned down the company’s project information office and its personnel were forced to flee the country, GCM has since returned, with backing from New York-based financier Christian Leone and US Ambassador James Moriarty. During recent demonstrations, the Bangladeshi government has deployed its Rapid Action Battalion, notorious for torture and for the deaths of persons in its custody. The repression has failed.

- Andhra Pradesh, India: The 2 640-megawatt Sompeta plant proposed by Nagarjuna Construction Company and the 2 640-megawatt Bhavanapadu plant proposed by East Coast Energy
have both provoked large non-violent protests that have ended in police attacks, including four deaths of local residents. Following coverage of the police action on Indian television, investigations revealed a pattern of ‘crony capitalism’ among the permitting agencies and corporate sponsors. As of May 2011, the Sompeta plant had been cancelled and the Bhavanapadu plant had been placed on hold by officials, with corruption investigations continuing.

• Nakhon Si Thammarat Province, Thailand: On 24 February 2011, 10,000 people formed a human chain in this province in Thailand to protest a coal-fired power plant planned by the Electricity Generating Authority of Thailand. This protest followed a decade of organising and protesting by the Eastern People’s Network focusing on the coastal Thai town of Rayong. The protests delayed operations of the massive Map Ta Phut industrial park, including a 1,400-megawatt coal plant.

• Konkan Coast of Maharashtra, India: Concerned by the pollution and displacement entailed by the massive proposals, farmers have targeted some of the largest projects. One of these is the 4,000-megawatt Girye Ultra Mega Power Project, which prompted mango farmers and others to stage marches, hunger strikes and other non-violent actions. They successfully forced the project to seek a new location as protests barred the government from acquiring the needed land.

• In the Philippines, grassroots protests against new coal plants and open-pit coal mining have taken place across the country. In the coastal town of Maasim on the southern island of Mindanao, local fishermen organised a flotilla of outrigger boats in November 2010 to protest the proposed 200-megawatt Kamanga power station, while 800 people formed a human banner spelling out ‘No to Coal’ on the grounds of a local elementary school. Supporters of the efforts included the local
Catholic church, leaders of indigenous groups, foreign divers and Greenpeace. At a separate demonstration, students at Mindanao State University, dressed as Na’vi from the film Avatar, marched on the fenced property of the proposed plant site. In April 2011, South Cotabato province, also on Mindanao, adopted an ordinance that would ban open pit mining in the region.

When fused as climate justice and when transcending ‘not in my backyard’ sentiments, these interrelated and often overlapping (although sometimes conflicting) traditions are mainly aimed at building a mass-based popular movement, bringing together ‘green’ and ‘red’ (or in the US, ‘blue-green’) politics. This entails articulating not only the urgency of reducing greenhouse gas emissions but also the need to transform our inherited systems of materials extraction, transport and distribution, energy-generation, production of goods and services, consumption, disposal and financing. While lacking 350.org’s mass activism and consciousness-raising capacity, the climate justice organisations and networks offer great potential to fuse issue-specific progressive environmental and social activists, many of which have strong roots in oppressed communities.

As considered in more detail below, some activists and visionaries (for example, those associated with the journals Capitalism Nature Socialism and Monthly Review) anticipate that the linkage of red and green struggles under the climate justice banner will require society moving from a fossil fuel dependent capitalism to eco-socialism. This will entail, as Joel Kovel and Michael Lowy explain:

- a transformation of needs, and a profound shift toward the qualitative dimension and away from the quantitative . . . a withering away of the dependency upon fossil fuels integral to industrial capitalism. And this in turn can provide the material
point of release of the lands subjugated by oil imperialism, while enabling the containment of global warming, along with other afflictions of the ecological crisis . . . The generalization of ecological production under socialist conditions can provide the ground for the overcoming of the present crises. A society of freely associated producers does not stop at its own democratization. It must, rather, insist on the freeing of all beings as its ground and goal.⁴

Before such a vision can be properly articulated, several critical missing elements must be accounted for, including, amongst others:

- a stronger labour input, particularly given the potential for ‘green jobs’ to make up for existing shortfalls (British eco-socialists have taken the lead with demands for a million green jobs);⁵
- a connection between climate justice and anti-war movements, given that military activity is not only disproportionately concerned with supplies of oil and gas (Iraq and Afghanistan) but also uses vast amounts of CO₂ in the prosecution of war;⁶ and
- a stronger presence of both environmentalists and socialists in many high emissions sites not yet suffused with grassroots climate justice movements, from China to the Arab oil world to petro-socialist Venezuela.

However, against eco-socialist orientations of the sort proposed by Kovel and Lowy, not only are climate justice movement anarchists suspicious of central planning, but a bottom-up socialism would preferably generate manifesto statements from actual practice – such as the efforts described briefly above – and from generalised movement sensibility and demands, as opposed to top-down pronouncements. The forging of unity in movements that address
climate and social justice from below is especially important during times (such as at present) of apparently intractable conflict and division, which may even disrupt and distract the immediate future of climate justice politics.

**Climate controversies and wedge issues**

There are at least five ideological positions that have variously sought to claim climate justice but that are not oriented (first and foremost) to movement-building:

- the Greenhouse Development Rights technical calculation of per capita greenhouse gas emissions (by the NGO Ecoequity, with echoes in Contraction and Convergence expansions/reductions and greenhouse gas ‘budget-sharing’) which, in the spirit of the late Harvard liberal philosopher John Rawls, aims to distribute the ‘right to pollute’ (and then let under-polluters sell their surplus rights via some form of carbon trading);  
  
- an emphasis on South-North justice primarily within interstate diplomatic negotiations over climate, as advanced especially by the South Centre and Third World Network, as well as the Bolivian government, albeit with an awareness that the April 2010 Cochabamba meeting made demands on world elites far beyond their willingness to concede;  

- an orientation to the semi-periphery’s right/need to industrialise, via the United Nations Department of Economic and Social Affairs;  

- the use of climate justice rhetoric by former UN Human Rights Commission director and Irish president Mary Robinson, whose agenda for a new Dublin foundation appears solely situated within the elite circuitry of global governance and international NGOs (as discussed in Chapter 4); and  

- attempts to incorporate within climate justice politics a commitment to carbon markets, especially through the Reducing
Emissions from Deforestation and Forest Degradation (REDD) projects.

It may be premature to judge, but these latter strands, drawing upon varying degrees of technicist-redistributionist, Third Worldist, Keynesian, or global-elitist experiences and aspirations, do not hold out much opportunity for success. There is a simple reason: the adverse balance of forces at the world scale. Most of these latter five climate justice projects’ ambitions play out at elite levels, primarily within UN negotiations. Nevertheless, for some eco-neoliberal specialists who carry out climate or development advocacy mainly within multilateral institutions or from international NGOs, especially in New York, Washington, London and Geneva, commitments to top-down approaches are held with an almost religious fervour. Unsurprisingly, the aforementioned five approaches to climate justice are at times advanced directly at odds with grassroots forces, which are tired of the futility of global-scale reform.

In February 2010, for example, a controversy broke out in civil society regarding one civil society group whose initial desire for a negotiating stance in Geneva included a petition with several controversial positions: promotion of the Kyoto Protocol (due to its common but differentiated responsibilities position) notwithstanding the treaty’s very weak emissions cuts; a 2°C (not 1°C) temperature rise (considered unacceptable within the climate justice movement); and an implicit endorsement of offsets and other private sector financing arrangements in spite of the failures of private offset arrangements and the broader emissions market. The petition was changed after an uproar within the Climate Justice Now! network.10

By April 2010, the demands of climate justice activists had strengthened. The Cochabamba conference adopted several that were anathema to mainstream climate politics, and the Bolivian
government struggled to put these (and a few others) into official UN texts:

- 50 per cent reduction of greenhouse gas emissions by 2017;
- stabilising temperature rises to 1°C and 300 parts per million;
- acknowledging the climate debt owed by developed countries;
- full respect for human rights and the inherent rights of indigenous people;
- universal declaration of rights of Mother Earth to ensure harmony with nature;
- establishment of an International Court of Climate Justice;
- rejection of carbon markets and commodification of nature and forests through the REDD programme;
- promotion of measures that change the consumption patterns of developed countries;
- end of intellectual property rights for technologies useful for mitigating climate change; and
- payment of 6 per cent of developed countries’ GDP to addressing climate change.11

REDD proved amongst the most important wedge issues within the climate justice community, for late in 2010, sharp controversies emerged over forest preservation as major US environmental foundations attempted to resurrect market strategies. The seeds of the controversy were sown in late 2009 and in the aftermath of Copenhagen, as discussed in Chapter 1. More such divisions could be anticipated in Durban in relation to carbon markets, given Greenpeace’s support for emissions trading as well as the substantial increase of CDM activities to more than 150 projects by 2011, many of which attracted small NGO or community-based support. (The proportion of CDM funding for Africa as a share of the world total was actually falling, however.) But to illustrate how flimsy this support could be, Durban’s Abahlali baseMjondolo was
once a staunch backer of the Bisasar Road CDM on grounds that it would deliver jobs and bursaries, but the Durban Solid Waste (and World Bank) promises did not materialise and since 2006 there has been no public CDM advocacy from the group. Only the large foreign environmental NGOs and a few local green financing specialist institutions were open civil society advocates of carbon trading, within a relatively small South African Climate Action Network whose main profile came through aggressive World Wildlife Fund advocacy.

In the US, tensions between the climate justice approach and the group of NGOs comprising the Climate Action Network and 1Sky continued over whether legislative lobbying, social marketing and top-down co-ordination of consciousness-raising activities without further strategic substance (for example, the climate-conscious social marketing network TckTckTck in 2009) are more appropriate advocacy methodologies than bottom-up linkage of organic climate activism. In a letter to 1Sky in October 2010, a coalition self-described as ‘grassroots’ and allied organisations representing racial justice, indigenous rights, economic justice, immigrant rights, youth organising and environmental justice communities criticised the vast expenditures on congressional lobbying, at the expense of movement building:

A decade of advocacy work, however well intentioned, migrated towards false solutions that hurt communities and compromised on key issues such as carbon markets and giveaways to polluters. These compromises sold out poor communities in exchange for weak targets and more smokestacks that actually prevent us from getting anywhere close to what the science – and common sense – tells us is required.12
Such strategic controversies and divergent funding strategies are logical to expect at a time when huge, intractable pressures are mounting. North-South and environment-development tensions are often extreme. Neoliberal financial forces continue to dominate the mainstream elite framework. And climate justice movements across the world have not solidified a coherent set of tactics, much less strategy, principles, ideology and foundational philosophy. Suffice to say that in the meantime the wedge between most of the movement-oriented climate justice activities and those from the five other climate justice approaches noted above, as well as with Climate Action Network, could continue to grow. This likelihood is greater at any given scale of struggle.

**Climate justice scale politics**

The particular sites of struggle illustrate the different strategies and tactics deployed within climate justice, in comparison to other environmental traditions. We have already explored the terribly adverse balance of forces associated with global governance processes from Kyoto to Copenhagen to Cancún. The process of finding genuine solutions starts elsewhere, in unlikely places like Charleston, West Virginia, where the scale-challenge has taken groups such as Coal River Mountain Watch and Climate Ground Zero from localised mountaintop removal protests – including tree-sit microsites – to the state capital, where they locked down at the West Virginia Department of Environmental Protection in June 2009. Their demand was a handover of responsibility from local bureaucrats captured by Big Coal, to the national Environmental Protection Agency (EPA).

But simultaneously, the same agency became the subject of intense climate protest, especially in March 2010, because of the EPA’s slovenly attitude towards the West Virginia mountaintop removal. Activists blockaded the Washington headquarters entrance,
and within days, the EPA issued such a tough ruling – based on water law – that it appears West Virginia mountaintop coal removal may become a practice of the past. Indeed, the most decisive beheading of King Coal in West Virginia occurred nine days after the 3 January 2011 cancer death of heroic eco-warrior Judy Bonds. The EPA overturned the Army Corps of Engineers’ prior approval of Spruce No. 1 mine, the world’s largest-ever mountaintop removal operation, where in order to rip out a tonne of fossil fuel, they dumped 16 tonnes of rubble into the adjoining valleys. After an avalanche of pressure by mountain communities and environmentalists, the EPA finally issued a ruling against the ‘unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas’. According to leading US climatologist James Hansen, quoted in Bonds’ New York Times obituary: ‘There are many things we ought to do to deal with climate change, but stopping mountaintop removal is the place to start. Coal contributes the most carbon dioxide of any energy source.’

The EPA also took a stance in December 2010 to belatedly begin regulating greenhouse gas emissions. Yet the agency needs more direct action to reverse EPA administrator Lisa Jackson’s announcement that her agency would delay substantive implementation of its 2009 ‘endangerment’ finding on coal until 2013 (curiously timed to avoid the Obama re-election campaign). Indeed, it is in national state regulation (in the US and every other country) that climate accountability has been most obviously missing. Direct regulation of emissions sources – far beyond current EPA plans for imposition of better coal-burning technology – must be higher on the agenda in coming years. With Obama authorising Jackson to hold back on ozone-related emissions by oil companies in September 2011, at the very time mass arrests were underway at the White House against the import of Canadian tar sands, the obvious
conclusion was that more street heat against his administration would be necessary to offset the power of Big Oil.

Pressure on the US executive appeared the only route for US national climate activism given the adverse legislative balance of forces in Washington. In contrast to the Capitol Hill quicksand, California provides more radical grassroots insights into jumping space and scale, with Chevron headquarters a special target of the vibrant Movement for Climate Justice-West (the most active group of climate justice activists in the US), Amazon Watch and Global Exchange. Californians and Alaskans who have previously fought to ‘leave the oil in the soil’ – halting offshore drilling and tundra destruction, respectively – will obviously need to remobilise against Obama. Amidst eco-catastrophe from Florida through Texas and beyond, British Petroleum’s April 2010 Gulf of Mexico oil spill was one potential consciousness-raising opportunity for the climate justice movement to address the utterly captive character of regulation. The California carbon trading legislation, Assembly Bill 32, was also the subject of an intense fight in 2010–11, with anti-racism organisations slowing down the adoption of an emissions market and offset clause that would do damage in low-income communities of colour where pollution would continue, as well as in sites like Chiapas in Mexico, which would be subject to more REDD pressure if the California system is eventually established after 2012.

What these examples show is that everywhere, organisers can find excellent local climate change targets to raise consciousness and effect emissions cuts, with direct action against major greenhouse gas sources or large-scale corporate fossil fuel consumers. Two particularly good sites for climate activists are, first, the public utility commissions, which control pricing and electricity generation techniques (and hence coal-fired and nuclear power plants); and second, the municipal or regional planning commissions, which
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give the go-ahead to suburban sprawl and all manner of other climate-threatening projects.

This brings us to the global scale, where at the landmark conference in Cochabamba, Bolivia, from 19–22 April 2010 (Earth Day), more than 30,000 Bolivarians led by host Evo Morales and grassroots indigenous, community, feminist and environmental movements were joined by genuinely solidaristic environmental, social, labour and NGO forces. This meeting set in motion a much more serious transnational climate justice approach, based not upon the illusion that the UN will address the climate crisis anytime soon, but instead upon more serious, pragmatic strategies. These can come only from a much richer merging of social and ecological rights discourses (for what such narratives are worth), and choices of unifying targets (such as fossil fuel companies, carbon traders and the World Bank).

Meanwhile, a contradiction should be faced up to squarely: how to relate to the region’s petro-socialists (for example, Hugo Chavez) and petro-Keynesians (for example, Rafael Correa). At issue is whether the latter can face up to contradictions in their own political ecologies because in one of the world’s most important sites of struggle, Ecuador’s Yasuni National Park in the Amazon, an official presidential threat has been made that oil drilling would commence unless countervailing pressure by the Confederation of Indigenous Nationalities of Ecuador and Acción Ecológica is successful.

The situation elsewhere in Africa is similar, since so many of the extractive industries are the sole beneficiaries of electricity grid expansion. Red-green campaigns aim to leave the oil in the soil and the coal in the hole, exemplified in Nigeria where Delta activists have intimidated oil companies through both non-violent and armed struggle. In the former category, Environmental Rights Action in Port Harcourt insists on an end to extraction and exploration on
grounds of the climate threat, and the descendants of Ken Saro-Wiwa and eight of his Ogoni movement comrades won a precedent-setting out-of-court-settlement with Shell in June 2009 that may scare off other oil firms. In the latter category, even after an amnesty in 2009 had a divide-and-conquer effect, the Movement for the Emancipation of the Niger Delta (MEND) continued to kidnap foreign oil workers, demanding they vacate the Delta for good.

After a combined struggle of this type, Shell was evicted from Ogoniland in June 2008, thirteen years after the company arranged for Saro-Wiwa's execution, and a year later, Saro-Wiwa’s family (and those of eight others executed at the same time) won $15.5 million from Shell in an Alien Tort Claims Act case settled out of court, a large amount of which was recommitted to movement building. An estimated 1.5 million tonnes of oil have spilled since Delta drilling began in the late 1950s, the equivalent of an Exxon Valdez spill each year, costing more than $5 billion in annual environmental damage. In his closing statement at the trial prior to his execution, Saro-Wiwa demanded that Shell vacate the area: ‘The military dictatorship holds down oil-producing areas such as Ogoni by military decrees and the threat or actual use of physical violence so that Shell can wage its ecological war without hindrance.’ At the time, Shell executives met with the Nigerian High Commission in London, stating that if the ‘Ogoni virus spreads to other areas in the Delta it would be the end of the oil business’. In court, the plaintiffs had alleged that Shell hired Nigerian police for internal security; that Shell purchased vehicles and arms for the military; that Shell requested military support to build a pipeline through Ogoniland; that Shell assisted and financed the Nigerian military to repress the resistance of the Ogoni people; and that the firm participated in the arrest of Saro-Wiwa and others on fake murder charges and bribed witnesses to produce
false testimony. The exposure by WikiLeaks of Shell’s ongoing influence in Lagos politics suggests that the Ogoni virus must spread far faster if Nigeria is to be free, and if both the Niger Delta’s ecology and the climate are to be spared.

Indeed, most remarkably, rather than letting such destruction rest at the scale of the local, Environmental Rights Action led the climate justice movement in Nigeria, West Africa, and globally at Copenhagen to a much deeper critique of ecological responsibility. In opposition to the shifting, stalling and stealing that characterises economic and environmental commodification in their own region, and in relation to world financial and oil markets, Environmental Rights Action and its visionary leader Nimmo Bassey jumped scale to demand that the oil be left in the soil and under the Gulf of Guinea water, given the threat to the planet.

MEND is a variegated force, including some who are apparently opportunistically self-seeking in mere financial terms, with purely criminal backgrounds. But whatever their motives, they are effective, for in 1997, *Nigeria Business* estimated that 20 per cent of the Niger Delta’s oil’s extraction was disrupted the year before, just as MEND started operations. According to a US-based ezine, *TerroristPlanet.com*, by February 2010, even after an amnesty was implemented by the central government, MEND was a formidable insurgency:

Since it first emerged in early 2006 MEND, which says it is fighting for a larger share of southern Nigeria’s oil revenue to go to local people, has cut Nigeria’s oil production by more than one quarter.

Swarm-based maneuvers: Guerrillas are using speed boats in the Niger Delta’s swamps to quickly attack targets in succession. Multiple, highly maneuverable units have kept the
government and Shell’s defensive systems off-balance defending the sprawling network. Radically improved firepower and combat training: allowing guerrillas to overpower a combination of Shell’s Western-trained private military guards and elite Nigerian units in several engagements. (One of Shell’s private military operators was captured as a hostage.) Effective use of system disruption: Targets have been systematically and accurately selected to completely shut down production and delay and/or halt repairs, and the guerrillas are making effective use of Shell’s hostages to coerce both the government and the company.\(^6\)

Returning to the non-violent strategy of keeping fossil fuels in the ground and jumping to the global scale, the Climate Justice Now! network has shown a conceptual ability to confront world capitalism’s shifting, stalling and stealing with demands for Northern account-ability for emissions, for decommissioned carbon markets in order to avoid the stalling of emission cuts, and for climate debt payments to reimburse the stealing associated with the North’s externalisation of its emissions. Recall the five demands made in Bali, in December 2007:

- reduced consumption;
- huge financial transfers from North to South based on historical responsibility and ecological debt for adaptation and mitigation costs paid for by redirecting military budgets, innovative taxes and debt cancellation;
- 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, fishing and peoples’ food sovereignty.17

No matter that the Climate Justice Now!’s component movements are disparate; so too are the forces that moved from sophisticated critique of carbon trading in South Africa to a broad-based campaign against the World Bank’s largest project loan that shook the energy establishment. The most portentous is probably the idea of ‘One Million Climate Jobs!’ that emerged in South Africa after a similar British campaign. From Cape Town, the Alternative Information and Development Centre hosted a campaign involving leading progressive labour officials from the metalworkers, transport workers and municipal workers unions, fusing with community activists and environmentalists. As their website explained:

Climate jobs are decent, primarily publicly driven jobs that directly reduce the causes and impacts of climate change. Climate jobs involve:
• the building of renewable energy power stations such as wind, solar, wave and tidal;
• the building of public transport networks that would reduce the need for private cars and fossil fuel intensive trucks;
• energy efficiency in construction and housing, including retrofitting;
• transforming industrial agriculture;
• reforming production and consumption; and
• addressing the energy intensification of the economy.

Significant jobs would be created in the related areas of research, education and training, to ensure the country has the skills to undertake the transition to a low carbon, labour absorbing and socially developed sustainable future economy. By linking climate change to the transition to a sustainable, low-carbon economy
that provides meaningful mitigation opportunities, the Campaign will stimulate the interest of many sectors of South African society who do not realise the immediate relevance of climate change.¹⁸

These are the kinds of organisations and arguments that link spatio-temporal resistances amongst diverse eco-social forces during a period of austerity, civil society weakness and repression. The agents of social and environmental change can take advantage of neoliberalism’s still-discredited ideological status and demand from the next global and national negotiations a strategy for justice, not one based upon commodifying carbon.

But to do so the climate justice activists still need to generalise an innovative critique, one that emerged over time as the global emissions trading strategy rose from birth in 1997, peaked in 2008, and attempts a last-gasp resurrection after the economic crisis and climate negotiations breakdown. The frenzied failure of elite climate politics should make bottom-up alternatives much easier to advocate, including globally co-ordinated actions against destructive projects (such as international credits for South African coal).

From the wider, deeper and increasingly common critique of the Kyoto-Copenhagen-Cancún cul-de-sac, will come more confidence in the types of analyses, strategies, tactics and alliances associated with climate justice politics. The challenge is to aggregate experiences from the grassroots so as to move into alignment with the Cochabamba conference, and, in turn, to generate a formidable red-green force uniting radical governments and the popular movements that will keep them accountable within global-left initiatives. In South Africa, the experiences of national interactions in global climate negotiations reinforce a sense of how politics of scale and space can be distorted, so that policies patently against the interests of a country’s mass-popular constituencies are adopted.
But likewise, South African climate justice politics from below suggest ways forward that, while not yet sufficiently strong to declare victory, really do offer the only hope for the future. For the kinds of politics linking the fight against the Bisasar Road Clean Development Mechanism to the Medupi coal loan to Sowetans’ struggle for free electricity to cohere and mature, a stronger ideological orientation is required. While racism has not been defeated in South Africa (as is abundantly clear from those three case studies), the core identity struggle of apartheid was addressed. What South Africa and the world must yet grapple with is the fusion of eco-feminist and eco-socialist ideological imperatives, within a revitalised climate justice politics.

Eco-feminist and eco-socialist directions

Once again drawing on South Africa for our source material, it is enlightening to contextualise eco-feminist insights into climate politics within a concrete case study in which class, race and environmental oppressions are inextricably intertwined with gender. During the 1960s to 1970s, it was common cause amongst radical South Africans that the apartheid system’s systematic discrimination against black people was rooted in the corporations’ need for migrant labour, fusing race-class oppression. Behind the typical black man who laboured in the mines throughout the first century of organised mining and plantation agriculture, prior to Nelson Mandela’s election in 1994, was a woman. She provided three hidden and un-costed subsidies within the ‘care economy’, responsible for labour power’s cheap reproduction.

First, in rural Bantustans – the ecologically degraded apartheid ‘homelands’ – women raised the migrant worker through childhood as the state was non-existent or merely a religious mission station. Household reproduction was never subsidised, unlike urban residents who in many cases had access to state childcare and school systems.
Second, rural women were compelled to look after sick workers who were tossed back home until they recovered, due to the lack of health insurance as offered by states and companies in the West after workers battled long and hard. Finally, when the male worker was too old to work and returned to the Bantustans without adequate pension support, the women again took on the responsibility for care-giving.  

Of course, it is not just a matter of apartheid capitalism. The reproduction of global labour power has been universally subsidised by women’s unpaid work. But these days, matters look more like the extreme South African system, with state and capital lowering the ‘social wage’ and dismantling social policy gains that have been achieved through decades of struggle. This process extends as well into reproductive health and rights that feminist movements have consistently advocated.

Neoliberal policies and corporate power have resulted in labour outsourcing, casualisation and informalisation. With life more precarious as a result, women are the safety net for household reproduction, in addition to being the most vulnerable and disposable of all labour sectors. But they have also been the driving force in resisting this process, overcoming micropatriarchy within communities and leading most of South Africa’s grassroots campaigns on issues such as water decommodification, access to AIDS medicines and other successful strategies to enlarge or defend the commons and sustain life.

As recession spreads, global capitalism is becoming much more like apartheid: predatory against women and the environment. Drawing on evidence from southern Africa, Rosa Luxemburg demonstrated this tendency in her own analysis of imperialism back in 1913: ‘Accumulation of capital periodically bursts out in crises and spurs capital on to a continual extension of the market. Capital cannot accumulate without the aid of non-capitalist
organizations.’ Increasingly, such non-capitalist life arrangements rely upon women and the communities that they guide. And yet on the other hand, Luxemburg continued, capitalism cannot ‘tolerate their continued existence side by side with itself. Only the continuous and progressive disintegration of non-capitalist organizations makes accumulation of capital possible.

Luxemburg would not have been surprised at how the destructive force of capital drives men into migrancy, spreads HIV/AIDS and causes rising domestic violence. Such disintegration is always contested by women’s personal strengths and mutual aid systems as well as other anti-/non-capitalist reactions, plus campaigns – successful in South Africa (unique on the continent) – to guarantee reproductive healthcare, including the right to a safe abortion. But increasingly, with climate-related migration, the challenge is more formidable because the progressive disintegration of the natural world by capitalist expansion and emissions is what makes the next round of accumulation possible, in the short term, but entirely dubious over the medium and long term.

Teresa Brennan made the link from the household scale to climate change, the biggest crisis women will face in the coming decades. She argued that, like the need to end Bantustan migrant labour systems, rearranging spatial and re/production arrangements is crucial to ending the unfair role of women in subsidising capitalism’s destructive irrationality. In her 2003 book, *Globalization and its Terrors: Daily Life in the West*, Brennan wrote: “The closer to home one’s energy and raw material sources are, the more one’s reproduction costs stay in line: paid and domestic labour will be less exploited, the environment less depleted.” The need now to limit the ‘distance over which natural resources can be obtained’ is obvious given how shipping, trucking and air transport contribute to carbon emissions.
This is one of the insights an eco-feminist political economy gives climate strategists such as Nicola Bullard of Focus on the Global South. A typical debate with neoliberals is over whether globalisation of industry has helped break up feudal-patriarchal relations, drawing women out of oppression into Mexican maquiladoras or Bangkok sweatshops. Such export-led growth is now an increasingly untenable ‘development’ strategy, and in any case always generated extremely uneven development, drawing on the women’s care economy for its hidden subsidies.

Bullard likens the climate negotiations to those of the WTO: ‘By and large, countries are defending their narrow economic interests and the rich countries in particular are trying to grab the last slice of the atmospheric pie.’ Although the Kyoto Protocol is deeply flawed, especially the low targets and reliance on market mechanisms, Bullard asserted that attempts by the US to get rid of Kyoto are dangerous. ‘It is critical to retain the rich countries’ legally binding commitment in any future agreement and any alternative that could emerge at this stage would be much worse.’

Bullard breaks down the climate policy narrative into three discourses: business as usual, catastrophism and climate justice. The first comes from business and most Northern governments while the second is advanced by some smaller and vulnerable countries as well as many NGOs. Catastrophism also ‘leads to dangerous last-gasp strategies such as geo-engineering, nuclear and carbon markets’. Third, climate justice is supported by a widespread civil society movement launched in 2007 at the Bali negotiations, but which subsequently came to include at least one Latin American government, Bolivia.

Feminists working on climate change are connecting the dots between these various oppressions, to warn how, in times of crisis, their opponents are emboldened. In a report, ‘Looking Both Ways’, the group Asian Communities for Reproductive Justice document
Hurricane Katrina’s deeper political damage: ‘Following a disaster, women of colour – particularly African American women, low-income women and immigrant women – are routinely targeted as burdens of the state and the cause of overpopulation, environmental degradation, poverty, crime and economic instability. And more than for men, ending women’s economic instability is a vital component of the struggle for justice.

It has never been more important to draw together eco-feminist and eco-socialist insights to link issues, analyses, challenges and alliance-building efforts. Is eco-socialism on the agenda? The short answer is no, there is not a sufficient cadreship and network of organisations capable of connecting the dots, globally or in any national setting. But such a movement will have to emerge if we are to survive, so the following are some ways that this challenge might be viewed.

Red-green organisations are networking and expressing eco-socialist sentiments. The components of the eco-socialist movement are thousands of organisations in all parts of the world whose own assumptions about fighting environmental degradation are increasingly anti-capitalist. This is abundantly evident from the manifestos, analyses, press releases, demands, leaflets, slogans and other expressions of voice that they have generated in recent years.

The networks are typically single issue and do not sufficiently link across subsectors of environmental justice. The biggest intellectual problem these movements face is linking their concerns across other sectors. This is often because the networks come together around specific targets, and because their funding sources or major in-house intellectual resources are extremely deep within the single issue they address, but unable to move beyond it.

The networks’ analysis is sometimes delimited by the specific problem they are addressing. As single issue networks, the organisations generally view the attack by capitalism on nature as a problem that they may
not be in a position to name, much less propose sweeping large-scale solutions to. That has generated a void, not only insofar as naming the problem (an environmentally voracious capitalism), but also naming a global-scale socialist solution — with, of course, profound respect for difference and the uneven development of both capitalism and the movements against it. A further problem is that most such manifestos by these movements have not been particularly conscious of gender. The compelling idea of ‘Rights of Nature’ is, similarly, a powerful challenge to many of us who have been excessively anthropocentric. And finally, the other kinds of interlocking and overlapping oppressions and resistances — along lines of race, indigenous heritage, different ableness, sexual preference, generation and other divisions — are not sufficiently respected to generate a strong enough critique to tackle capital with maximum unity.

*The networks hunger to continue building links.* The obvious next step for groups like Climate Justice Now! is to make common cause with other movements addressing environmental issues where similar analysis, strategies, tactics, enemies and allies can be found. There is a huge gap, though, in information about each other, since with a few exceptions (for example, the World Social Forum or protests at major world summits or meetings of well-networked organisations such as Friends of the Earth International), these activists have no opportunities to get together in a systematic way. And yet it is inexorable that these links will become ever stronger, and it seems inexorable, too, that to properly address the challenge we face, nothing less than planetary and species survival, we encounter the overarching power of patriarchal, racially divisive, uneven capitalist ‘development’. Climate justice will require nothing less.
Notes

Chapter 1
33. Apparently the man who was found to have mailed the anthrax envelopes was a mentally disturbed US government official, Bruce Edwards Ivins, but ironically, the first ‘person of interest’ identified by the US
government in the case was a man who worked for the Rhodesian secret police (users of anthrax against black people and their cattle), who, after Zimbabwe won independence in 1980, moved to South Africa where he attended meetings of the Afrikaner Weerstands-beweging, the fascist group headed by the late Eugene Terre’blanche. See Tony Weaver, ‘AWB Sympathiser Quizzed over Anthrax Killings‘, Daily News (South Africa), 1 July 2002.


41. Durban Group for Environmental Justice, ‘No REDD!’. 


44. Friends of the Earth International, ‘Report from Copenhagen’.

Friends of the Earth International, ‘Report from Copenhagen’.


The Kyoto Protocol allowed ‘Annex 1’ countries – wealthier states accepting binding constraints – to buy emissions credits if their emissions were higher than their share of the modest target of a 5.2 per cent reduction on 1990 emissions levels by 2012. This allowed the sale of the ‘hot air’ – excess permits – that Eastern Europe enjoyed because their industrial economies were reduced by 40 per cent after 1990, during the transition to capitalism, and in turn allowed the Protocol to come into effect in 2005 after it was ratified by Russia (‘Prototype Carbon Fund’, 2005, p. 45).

In addition to a general carbon trading framework, which got its start in the EU’s Emissions Trading Scheme (ETS), two techniques were added to improve financing capacity for particular emissions-reducing projects: Joint Implementation between Annex 1 countries (with exceptions in the EU), and the Clean Development Mechanism (CDM) for Annex 1 country investors to fund emissions reduction or sequestration projects in non-Annex 1 countries. The crucial assumptions are that those projects demonstrably require ‘additional’ finance beyond what can be done on a profitable basis without the CDM subsidy, and that they will result in lower emissions than business-as-usual. Both are extremely difficult to prove convincingly and even the US Government Accountability Office issued a February 2011 report to Congress warning that additionality ‘is difficult because it involves determining what
emissions would have been without the incentives provided by the offset program. Studies suggest that existing programs have awarded offsets that were not additional’. As for measuring, ‘it is challenging to estimate the amount of carbon stored and to manage the risk that carbon may later be released by, for example, fires or changes in land management’. And verification is a challenge because ‘project developers and offset buyers may have few incentives to report information accurately or to investigate offset quality’. Government Accounting Office, ‘Options for Addressing Challenges to Carbon Offset Quality’, Report to the Chairman, Committee on Oversight and Government Reform, House of Representatives, Washington, February 2011.


Chapter 2


15. Hilsenrath, ‘Cap-and-Trade’s Unlikely Critics’.
17. The coal industry initially succeeded in grandfathering in plants built before 1977 so as to avoid CAA [Civil Aviation Authority] regulation, and these old plants were later brought into the cap and trade arrangement. Hence they were allowed to stay open longer by virtue of buying pollution allowances from more efficient plants. Activists at the US Public Interest Research Group and Clear the Air showed how ongoing environmental health hazards from these beneficiaries of SO₂
cap and trade have a class/race bias. Howard Ehrman, listserve correspondence, 22 January 2010.
33. Broder, “‘Cap and Trade’ Loses its Standing as Energy Policy of Choice”.
Notes to Chapters 2 and 3


Chapter 3

Notes to Chapters 3 and 4


25. Harvey, The Limits to Capital.


Chapter 4


5. Mary Robinson, ‘Protecting the Most Vulnerable’, Speech at the London School of Economics Centre for the Study of Human Rights, London, 10 March 2011, http://www.mrfcj.org/news_centre/2011/mary_robinson_lecture_lse.html. Robinson’s speech came at a difficult time for the institution, which had just been humiliated for having provided a doctorate to Saif al-Islam Gaddafi, though his work included material written by the Monitor Group in Boston and there was much evidence of plagiarism. Gaddafi had paid handsomely for his LSE connection, with David Held’s Centre for Global Governance getting a donation of £1.5 million from the Gaddafi International Charity and Development Foundation. This proximity to Libya’s dictatorship compelled the resignation of LSE Director Martin Davies, ruined the reputations of Held and former LSE director Anthony Giddens, and
Notes to Chapter 4

gave the British establishment momentary pause about their friendships with Third World authoritarians. And, at the same time, Robinson also supported Muhammed Yunus in a parallel case of elite crash-and-burn, as head of the Friends of Grameen group that was managed by the notorious public relations firm Bursen Marstellar, the PR corporation for the Three Mile Island nuclear operator after its meltdown, the US tobacco industry (to organise the ‘National Smoker’s Alliance’), the Argentine military dictatorship which killed 35,000, the Indonesian regime which committed massacres in East Timor, Nigeria’s military, Union Carbide against residents of Bhopal, the late Romanian president Nicolae Ceausescu and the Saudi royal family. In short, Robinson’s orientation to justice and women’s empowerment is thus complicated by her support for market-centric development and environmental strategies. See Patrick Bond, ‘A Run on Grameen Bank’s Integrity, as Founder’s Career Ends in Disgrace’, Himal, May 2011; and other reports at http://ccs.ukzn.ac.za/default.asp?2,68,3,2292.


8. Patrick Bond, ‘From Climate Denialism to Activist Alliances in Memory of Seattle’, ZNet, 30 November 2009.


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30. Allen chose as a human chameleon the 1920s character Leonard Zelig.


40. Jubilee South, ‘Concept Note’.
41. Letter to Patricia Espinosa, Mexican Secretary of Foreign Affairs and Christiana Figueres, UNFCCC Executive Secretary, from NGOs, 5 April 2011, http://canadians.org/energy/documents/climatejustice/letter-WB-0411.pdf.
43. Manuel and Stern, ‘Funding the Low-Carbon Revolution’.
54. Bond, Elite Transition.

Chapter 5

11. Martinez-Alier, ‘Marxism, Social Metabolism and Ecologically Unequal Exchange’.
14. They include:
   • three dozen cases of African resources—worth many billions of dollars—captured by firms for resale without adequate ‘Access and Benefit Sharing’ agreements between producers and the people who first used the natural products;
   • diabetes drug produced by a Kenyan microbe and Libyan/Ethiopian treatment;
   • antibiotics from Gambian termite hill and giant West African land snails;
   • antifungal from Namibian giraffe and nematocidal fungi from Burkina Faso;
   • infection-fighting amoeba from Mauritius;
   • Congo (Brazzaville) treatment for impotence;
• vaccines from Egyptian microbes;
• South African and Namibian indigenous appetite suppressant Hoodia;
• drug addiction treatments, multipurpose kombo butter from Central and West Africa;
• beauty, healing treatment from Okoumé resin in Central Africa;
• skin and hair care from the argan tree in Morocco, Egyptian ‘Pharaoh’s Wheat’, bambara groundnut and ‘resurrection plant’;
• endophytes and improved fescues from Algeria and Morocco;
• groundnuts from Malawi, Senegal, Mozambique, Sudan and Nigeria;
• Tanzanian impatiens; and
• molluscicides from the Horn of Africa.


18. The Bank’s estimates are conservative for at least three reasons: a minimalist definition based upon international pricing in 2000 (not potential future values when scarcity becomes a more crucial factor, especially in the oil industry); the partial calculation of damages to the local environment, to workers’ health/safety, and especially to women in communities around mines; and the Bank’s use of average – not marginal – cost resource rents also probably leads to underestimations of the depletion costs.

Notes to Chapter 5

36. World Council of Churches Central Committee, ‘Statement on Eco-

climate-debt/.

38. Sunita Narain, ‘Move Over Boys and Girls, the Men are Here:
The Future of Climate Negotiations and Why India Wants the
indiaenvironmentportal.org.in/blog/move-over-boys-and-girls-men-are-

Johannesburg, 10 December 2009.

40. Nicola Bullard, ‘Por un nuevo amanecer para la Madre Tierra’ América
Latina en Movimiento, 454, Abril 2010.

41. Working Group on Climate Debt, ‘We Demand the Enforcement of
the Payment of Climate Debt’, World Conference of Peoples on Climate
Change and the Rights of Mother Earth, Cochabamba, 22 April 2009.

42. Working Group on Climate Finance, ‘Document Debated and Approved
in the Working Group on Climate Finance, During the World Conference
of Peoples on Climate Change and the Rights of Mother Earth’,
Cochabamba, April 2009.


44. ActionAid, ‘Real Aid: An Agenda for Making Aid Work’, Johannesburg,
2005.

45. International Monetary Fund, ‘The Implications of Global Financial


47. Patrick Bond, ‘South Africa’s “Rights Culture” of Water Consumption:
Breaking out of the Liberal Box and into the Commons?’ in B. Johnston,
L. Hiwasaki, I. Klaver and V. Strang (eds), Water, Cultural Diversity and
Global Environmental Change: Emerging Trends, Sustainable Futures?, Berlin,

48. D. Edwards, ‘Chevron Sues Ecuadorians who Stood up to Toxic Con-
14/chevron-sues-ecuadorians-who-stood-up-to-toxic-contamination/.

49. Friends of the Earth, ‘Landmark Global Warming Lawsuit Settled’,
Washington, DC, 6 February 2009.


Chapter 6


2. Patrick Bond, ‘Dethroning King Coal in 2011, from West Virginia to Durban’, ZNet, 30 January 2011.


Notes to Chapter 6

17. The debate with William Moomaw where he makes this admission is available at http://www.ecuentro5.org/home/node/141.

22. The Burma connection is worrying on various grounds. Exploitation of oil and gas in Burma’s Andaman Sea has long been controversial (my grandfather was deputy warden there during brutal colonial times), and when Unocal — now Chevron — built a pipeline to Thailand, it did such enormous damage to people and the environment that local villagers, supported by EarthRights International, successfully sued the firm for $30 million. Since 2007, the Arakan Island on Burma’s Bay of Bengal coast have been the main site of intense conflict, as Arakan Oil Watch has been documenting, and again Min Min Aung is a key player. Silver Wave has also been exploring dubious extraction projects in Russia, Sudan, Guinea-Conakry, Indonesia and Iraq. At the time the Durban exploration was revealed, Silver Wave simultaneously announced a $100 million oil search in the fragile Hukaung Valley in northeastern Burma, and if the company carries out its initial plans, this will threaten local villagers as well as endangered tigers, Himalayan bears, elephants and leopards. Although the area contains the world’s largest tiger reserve, according to reporter Thomas Maung Shwe of Mizzima news service, ‘the Burmese regime has encouraged logging, gold mining, large scale farms and the building of factories inside’. As the scandal grew, Silver Wave denied what its own press release had announced, but conceded it would drill near the reserve.


26. Patrick Bond and Molefi Ndlovu, ‘When Mega Projects Crowd Out Development: Coega and Lesotho Dams’ in Bill Freund and

27. Richard Fuggle, ‘We are Still Indifferent About the State of Our Environment’, Cape Times, 6 December 2006.


30. Mbanjwa, ‘Marthinus “Not the Man”’.


64. Interview with Rehana Dada, 25 September 2005.

65. Interview with Khadija Sharife, 10 October 2009.


68. Khan Interview with Rehana Dada.

69. Bond, *Unsustainable South Africa*. 
Notes to Chapter 6

73. Mail & Guardian, 22 November 1996.
75. Bond, Unsustainable South Africa.
82. In a shack settlement outside Cato Manor in Durban, this problem caused the death of eleven children in 2001 (Mail & Guardian, 16–22 March 2001).
Chapter 7


2. In addition to civil disobedience, one encouraging sign was the decision by radical journalist Naomi Klein to join the board of 350.org, because of ‘a breakthrough moment in the history of the climate movement, recognition that the struggles for economic justice, real democracy and a livable climate are all profoundly interconnected. As 350.org founder Bill McKibben puts it: unless we go after the ‘money pollution,’ no campaign against real pollution stands a chance.’ See Klein’s website, http://www.naomiklein.org/articles/2011/04/joining-350-org-next-phase. On the other hand, a few activists expressed mistrust in the group’s links to liberal capital. See Cory Morningstar, ‘The Climate Cartel: 1Sky, 350.org and Rockefeller Brothers’, Countercurrents, 11 July 2011, http://www.countercurrents.org/morningstar110711.htm.


10. Communications on the Climate Justice Now! listserve, culminating 1 March.

Notes to Chapter 7