

The ‘Green Economy’: A Just and Sustainable Development Path or a ‘Wolf in Sheep’s Clothing’?

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ABSTRACT

This article argues that a transformative model of the green economy could potentially benefit labour and provide an alternative, socially just and ecologically sustainable development path in South Africa. However, realizing this potential depends on an effective challenge to the ‘corporate capture’ of the green economy discourse. This could emerge from the deepening of an embryonic alliance between the labour and environmental movements. While historically relations between the two movements in South Africa have been disconnected – and even antagonistic – attempts by unions to formulate environmental policies and joint action on two issues, ‘climate jobs’ and rising electricity prices, are challenging the ‘jobs-versus-the-environment’ binary and creating new solidarity networks which are promoting radical alternatives.

KEY WORDS

climate change, just transition, labour-environmental alliances, marketization, neo-liberal capitalism

Introduction

The central question this article addresses is whether the ‘green economy’ with its promise of ‘green jobs’, ‘green growth’, expanding markets and technological innovation can benefit labour and provide an alternative, socially just and ecologically sustainable development path in South Africa. It is argued that a transformative model of the green economy has this potential, but depends on an effective challenge to the ‘corporate capture’ of the green economy discourse. This could emerge from the deepening of an embryonic alliance between the labour and environmental movements. While historically relations between the two movements in South Africa have been disconnected – and even antagonistic – attempts by unions to formulate environmental policies, educate their members and engage in joint action on two issues, ‘climate jobs’ and rising electricity prices, are challenging the ‘jobs-versus-the-environment’ binary and creating new solidarity networks which are promoting radical alternatives.

The Significance of the South African Case

South Africa is an embodiment of two global crises: rising inequality and climate change. The complexities of addressing these are evident, for example, in the tensions between the post-apartheid state's commitments to reducing carbon emissions and addressing energy poverty. South Africa has a carbon intense economy with 90 percent of energy derived from coal, but promised in 2009 to reduce carbon emissions by 34 percent and 42 percent relative to a 'business as usual' trajectory by 2020 and 2050 respectively (RSA 2011: 25). At the same time 17 percent of South African households suffer from energy poverty (RSA 2011: 37). They are denied access to electricity either due to the lack of infrastructure or unaffordable pre-paid meters and have to rely on dangerous paraffin stoves and candles, or the collection of firewood. Social justice demands that all households have access to energy; ecological sustainability demands that it should take the form of safe, clean, affordable non-polluting energy. Both requirements depend on a new development path.

The National Development Plan endorsed by the South African government maintains that 'there are good reasons to seek to build a new development path that is more inclusive, less dependent on the exploitation of non-renewable resources and that uses renewable resources more sustainably and strategically (RSA 2011: 17). The South African labour movement has expressed a commitment to a 'just transition' to a new development path. However there are very different understandings of the scale and nature of the changes involved. A just transition could be defensive, involving demands for shallow change focused on protecting vulnerable workers, or alternatively demands for deep, transformative change meaning dramatically different forms of production and consumption.

This alternative development path is sometime framed as a 'green economy'. However at present the 'green economy' is an empty signifier. Nowhere is it precisely defined. Everything depends on who claims it and gets to fill it with meaning.

A Transformative Conception of the 'Green Economy'

Contestations around the meaning of the green economy are grounded in the climate crisis which is 'undoubtedly an important site of ideological struggle where status quo political arrangements have been called into question' (Nugent 2011: 60). Elements of a transformative conception of a green economy are emerging from the labour and environmental movements in South Africa. The central characteristics of such a transformative conception are an integrated approach to climate change, unemployment and inequality, as well as a rejection of market mechanisms to solve these problems. Unlike some other formulations of the green economy, in this model the link between social justice and climate change is acknowledged, and the need for radical, structural change is emphasized. It challenges the 'central argument of ecological modernization... that industrial societies can be made sustainable with modest adjustments and corrections' (Warner 2010: 553).

Other key elements of this model are:

- Ecological sustainability

This implies more than the reduction of carbon emissions and involves a redefined relationship to nature. A difficulty is that the discourse of sustainability has become central to the corporate reliance on manipulative advertising – ‘greenwash’ – while the main concern remains profitability, the awareness that shrinking natural resources could damage it and how ‘green’ measures such as energy efficiency could reduce costs, lessen risks and enhance public images. In a sense the sustainability discourse has been appropriated by neo-liberal capitalism (Cock 2011). For example, the former CEO of Walmart described sustainability as ‘the single biggest business opportunity of the 21st century and the next main source of competitive advantage’ (*Business Day* 2010: 022). In South Africa, Dansereau (2010) has demonstrated how sustainability has been incorporated into the practice of corporate social responsibility to avoid fundamental transformative change. For this reason the principle of ecological sustainability has to be balanced by a second principle: social and environmental justice.

- Social and environmental justice

Ecological sustainability is not only about protecting limited resources but should also ensure that resources are used for the benefit of all and not just for the privileged few. It involves realizing the constitutional right to live in a ‘clean and healthy environment’. For example South Africa is a water scarce country and climate change will worsen this. There is a focus on reducing wastage but far less attention is being paid to the extravagant consumption of the elite with their swimming pools and golf courses, which use on average 1.2 to 3 million litres of water a day. (*Endangered Wildlife* 2006: 44). Many poor households are struggling to survive with unaffordable pre-paid water meters. Yet in one of their programmes in support of ‘transitioning South Africa to a green economy’, the Development Bank of South Africa recommends extending the installation of these water metering systems (DBSA 2012: 22). There is no mention of the wasteful use of water by the elite. This is the kind of policy that results from an emphasis on ecological sustainability that ignores questions of social justice.

- Reducing inequality.

There is an emphasis on the link between climate change and social justice as the poor and powerless are the most affected by environmental pollution and vulnerable to the devastating impacts of climate change in the form of rising food prices, more extreme weather events such as droughts and floods, crop failures and so on. Since 1995 inequality has deepened to make South Africa one of the most unequal of all major countries in the world, with a gini-coefficient of 0.7 (RSA 2012: 17).

- Green jobs

With an unemployment rate of 26 percent (37 percent when the expanded definition which includes discouraged work seekers is included) this is a crucial issue (Labour Force Survey 2013). It is stressed that the provision of green jobs must mean ‘decent’ employment in terms of ILO indicators. The simplest definition of green jobs is ‘those in existing and new sectors which use processes and produce goods and services aimed at alleviating environmental threats’ (UNEP 2008). The likelihood of green jobs being incorporated into a green neo-liberal capitalism driven by the expansion of markets and new technology has promoted a more rigorous alternative formulation of ‘climate jobs’ described below. It is stressed that these should primarily be public sector jobs.

- State intervention

While many activists maintain that energy and natural resources should be brought and kept under public ownership and democratic control with needs as the central determinant, establishing a green economy implies at the least an active state committed to providing the specific enabling conditions.

- Deep and meaningful political participation and democratic control of key sectors such as energy

The significance of these elements is that, as Death has warned, ‘Just as the industrial revolution helped produce today’s deeply unequal world, so might transitions to a green economy produce new power relations of inequality and injustice’ (Death 2013: 1). This is likely to follow the latest neo-liberal formulation of the green economy which attracted much attention at the ‘Rio+20 Conference. This focuses on bringing the efficiency of the market to bear on nature and its reproduction. The emphasis is on providing capital with incentives to change by arguing that economic growth and profits could be even bigger with a green economy. While neo-liberalism is, as Peck (2012) argues, ‘a messy hybrid’, the emphasis on marketization justifies the categorization. As Peck writes, ‘If there is an enduring logic to neoliberalization...It is one of repeated, prosaic and often botched efforts to fix markets, to build quasi markets, and to repair market failure’ (Peck 2012: xiii).

The Neo-liberal Formulation of the Green Economy

A neo-liberal green economy framework pioneered by the United Nations Environment Programme (UNEP) was largely adopted in *The Future we Want* statement issued by the heads of state following Rio+20. Some of the key documents published recently promoting this neo-liberal version are the UNEP’s preparatory report for the Rio+20 conference, *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication* (2011). A lengthy document (630 pages), it has been described as ‘a radically conservative vision’ (Brockington 2012). The three other influential documents are the UNEP’s *The Economics of Ecosystems and Biodiversity (TEEB 2011)*, the

World Bank's report on *Inclusive Green Growth: The Pathway to Sustainable Development* (2012) and the European Commission's *Innovating for Sustainable Growth: A Bioeconomy for Europe* (2012). These form the basis of a campaign by the powerful of the world to persuade us that green neoliberal capitalism, packaged as 'the green economy' can solve both the climate and the economic crises.

The two key features of these documents are:

(i) The promotion of marketisation

All four documents – with different emphases – maintain that markets are the solution to the climate crisis and the means of promoting sustainable development. In the UNEP view the fundamental cause of the current ecological crisis has been 'the misallocation of capital'. 'During the last two decades, much capital was poured into property, fossil fuels and structured financial assets with embedded derivatives, but relatively little in comparison was invested in renewable energy, energy efficiency, public transportation, sustainable agriculture, ecosystem and biodiversity protection, and land and water conservation' (UNEP 2012: 18). These are presented as 'market failures'. Therefore, through providing 'incentives based on the market' it should 'be possible to reorient capital investment in the direction of green investments and green innovations' (Lander 2011: 6).

Similarly TEEB implies that environmental destruction is based on market failure because environmental 'costs' have not been factored into the financial cost of final products (www.teebweb.org). The TEEB solution is to ensure that biodiversity and ecosystem functions (commercially dubbed 'ecosystem services') 'are assigned a financial value with a view to promoting efficiency and ensuring the real costs of environmental damage are recognised and met' (Hall and Zacune 2012: 8).

(ii) Decoupling economic growth from environmental damage

The UNEP argues that it is a myth that there is an inescapable trade off between environmental sustainability and economic growth. The claim is that 'There is now substantial evidence that the greening of economies neither inhibits wealth creation nor employment opportunities. On the contrary, many green sectors provide significant opportunities for investment, growth and jobs' (UNEP 2011: 6). Technology is crucial in this variant of ecological modernization; it asserts that technology can 'dematerialize' economic growth from environmental damage. The connections between ecological modernization and neoliberalism are significant. As Nugent writes, '...the hegemonic power block has drawn on ecological modernization to reaffirm neo-liberalism' – what he terms 'ecoliberalism' (Nugent 2011: 77).

Similarly the World Bank is emphasizing 'a green growth framework' which stresses giving capital incentives to change. 'Green growth is about making growth processes resource-efficient, cleaner and more resilient without necessarily slowing them' (Hallegatte 2011: 3). 'If the environment is considered as productive capital it makes sense to invest in it and environmental

policies can be considered as investment' (Ibid). The importance of 'natural capital' (soil, water, air, flora and fauna) and the ecosystem services resulting from them is stressed.

Clearly this formulation goes much further than the commodification of nature; it includes the 'financialisation' of the functions of nature, 'ecosystem services'. It implies that nature should be measured and valued according to the 'services' it provides (for example, the capacity of wetlands to filter water, the capacity of forests and soil to capture and store carbon and so on). In this way nature's services can be costed, offset, and traded on markets, via credits, similar to carbon trading,

So what is new is that the commodification of nature has combined with a growing historical trend of financialisation of the economy – in other words, drawing into financial circulation aspects of life that previously lay outside it, 'with all the greed and fraud we have seen in financial speculation recently' (Leach 2012). It means the expansion of the market into all aspects of the natural world; an attempt by capital – in the name of protection – to effect the last enclosure of the commons – that of Nature itself.

These features mean that realizing a transformative conception of the green economy in a future South Africa will involve a powerful challenge to the government's commitment to the neo-liberal version of a green economy.

The South African Government Response

Evidence of the support of the South African government for a shift to a green economy is clear in key policy documents such as the New Growth Path (2010), the National Development Plan (2012), the Industrial Policy Action Plan (IPAP2), State of the Nation addresses, government official speeches, the Green Economy Summit (2010) and the Green Economy Accord signed in 2011. In its commitment to a green economy the emphasis of the South African government is on green jobs and green growth.

Currently South Africa has no legislation requiring a reduction in carbon emissions, but the government seems aware of the seriousness of the threat of climate change. The 2011 National Climate Change Response White Paper warns that 'potential impacts on South Africa in the medium to long-term are significant and potentially catastrophic', for 'after 2050 warming is projected to reach around 3 - 4 degrees C along the coast and 6 -7 degrees C in the interior. With these kinds of temperature increases, life as we know it, will change completely' (RSA 2011: 9). However the White Paper fails to engage with the full impact of climate change on the working class – especially in relation to rising food prices, water shortages and crop failures. There is a vague reference to the potential of 'green jobs' (RSA 2011: 15) and the 'new, green economy' (RSA 2011: 32) but these are not defined.

Agreement on reducing carbon emissions is particularly challenging to South Africa, because of the centrality of the 'minerals-energy complex' which revolves around a dependence on fossil-fuel based energy. The government policy document, the New Growth Path (NGP) released in 2010 promised a move away from the stranglehold of the carbon intensity of the minerals-energy complex towards a green economy marked by renewable energy and green jobs. It targets 300,000 additional

direct jobs by 2020 to ‘green the economy’ with 80,000 in manufacturing and the rest in construction, operations and maintenance of new environmentally friendly infrastructure. (NGP 2010: 11). The objective is to create five million jobs and reduce unemployment from the official rate of 25 percent to 15 percent (DED 2010: 6). It is widely acknowledged that these targets will not be met.

Green jobs are defined very loosely as ‘work in agricultural, manufacturing, research and development, administrative and service activities that contribute substantially to preserving or restoring environmental quality’ (Opening address by Deputy Minister of Economic Development, Hlengiwe Mkhize, Economic Development Department Training Workshop on Green Jobs, Johannesburg, 19 November 2012).

While the NGP framework refers to the new ‘green economy’ it is not defined and ‘is short on detail...’ (Trollop and Tyler 2011: 13). The concept is often approached in a very narrow and even technicist sense, as simply meaning a new energy regime. It is frequently viewed as something distinct, as an add-on to the ‘real economy’. Trollop and Tyler point to, ‘...the compartmentalisation of the “Green Economy” as something separate and therefore different or additional to a mainstream future South African economy’ (Trollop and Tyler 2011: 11). The ‘real economy’ remains carbon-intensive and environmentally destructive.

In other documents the approach is very loose and over-generalised. For example, in the discussion document for the Green Economy Summit, it is stated that ‘The Green economy refers to two inter-linked developmental outcomes for the economy of South Africa: growing economic activity (which leads to investment, jobs and competitiveness) in the green industry sector; and a shift in the economy as a whole towards cleaner industries and sectors with a low environmental impact compared to its socio-economic impact’ (DED, 2010: 6).

Furthermore there are some policy documents which endorse the most radical element within the neo-liberal model of the green economy, the commodification and financialisation of ‘ecosystem services’. According to the Development Bank of South Africa the benefits of the Payment for Ecosystem Services Programme are efficiency, sustainability and poverty alleviation (DBSA 2011: 24).

Not only is there ambiguity and ‘implementation deficits’ with these proposals, but overall aspirations towards reducing carbon emissions are contradicted by government practices which involve massively expanded coal-fired and nuclear energy. These practices reflect the continuing power of the ‘minerals-energy complex’, the alliance of the mining and energy sectors which have dominated South Africa’s industrial development. For example, the parastatal Eskom is building more coal-fired power stations, Medupi and Kusile (the world’s third and fourth largest). The World Bank’s \$3.75 billion loan to Eskom to enable it to do this has increased the price of electricity for domestic consumers, worsened our contribution to carbon emissions and climate change and allows continued subsidised supply of the world’s cheapest electricity to large corporations, such as BHP Billiton, and the export of their profits abroad.

The government’s climate change policy is rooted in a ‘green neoliberal capitalism’ which means bringing the efficiency of the market to bear on nature and its reproduction. This includes a

privatized model of renewable energy, technological innovation in expensive, schemes like nuclear energy, developing 'climate smart crops', untested Carbon Capture and Storage underground, as well as expanding markets, while keeping the existing institutions of capitalism intact. Overall, policy and practice displays the continued power of the corporations at the centre of the minerals-energy complex to shape development through energy and capital intensive projects to their own profit-driven interests. Government commitments to reducing carbon emissions are vague and insubstantial; the real commitment is to economic growth. In his 2012 State of the Nation address President Zuma painted a picture of a resource intensive industrial development policy to promote such economic growth. There was no reference to the National Planning Commission's recommendation that 'South Africa needs to move away from the unsustainable use of natural resources' (RSA 2011: 17). This contrasts strongly with the various elements of the transformational model which exist in both the labour and environmental movements in South Africa,

The Response of the Labour Movement

Evidence of the institutional support of the labour movement for 'the green economy' is the signing of the 'Green Economy Accord' in November 2011 which launched a 'green partnership' and binds government, business and labour to creating thousands of jobs by building a green industrial base. An example of the 'social dialogue' approach, it established four principles for the green economy: opportunity, innovation, responsibility and partnership (DED 2011: 3). At the signing the trade union federation, COSATU said, 'We have made a commitment through the NGP to create 5 million jobs in the next ten years. And this agreement on green jobs will make a very critical contribution to the realization of that target' (Vavi, cited in Department of Economic Development [DED] 2011: 5). The emphasis was strongly on new 'green' jobs; areas specified were the installation of one million solar water heating systems, promoting biofuels, promoting clean-coal activities, waste disposal and recycling, electrification of poor communities and promoting energy efficiency throughout the country.

However labour has pointed to several problems in the current formulations of green jobs: firstly many inflated claims are made which are not supported by empirical evidence. Secondly insufficient attention has been paid to the quality of green jobs (in terms of labour standards and wage levels). Decent work means jobs that pay at least a living wage, and offer training opportunities and some measure of economic and social security. In addition the debate on green jobs fails to address the challenge of ensuring decent jobs for the thousands of workers presently employed in energy intensive jobs. Overall insufficient attention has been paid to job losses.

At present green jobs (for example in the privatized renewable energy programme) are driven more by the interests of the market rather than by social needs. On these grounds the National Union of Metalworkers of South Africa (NUMSA) has rejected green jobs as a component of a new green capitalism. The President has pointed out in relation to the renewable energy sector, 'green jobs can be as indecent as blue or brown jobs...It can use cheap labour, exploit women and children, use labour brokers and be dangerous in terms of occupational health and safety' (Cedric Gina,

Opening Address to International Conference on Building a Renewable Energy Sector in South Africa, Johannesburg, 4 February 2012). The likelihood of green jobs being increasingly incorporated into a green capitalism, driven by the expansion of markets and new technology, has promoted a more rigorous, alternative formulation of ‘climate jobs’.

While capital’s view of a green economy emphasizes growth, competitiveness and efficiency, within the labour movement there is a strong commitment to a ‘*just* transition’. However the understandings of this vary and range from simply a ‘paradigm shift’ to a ‘regime change’.

Two broad approaches to this notion of a ‘just transition’ may be identified within the labour movement: a minimalist position emphasizes shallow, reformist change with green jobs, social protection, retraining and consultation. The emphasis is defensive and shows a preoccupation with protecting the interest of vulnerable workers. An alternative notion of a just transition involves transformative change; an alternative growth path and new socialist ways of producing and consuming. This approach is more congruent with the transformative model of a green economy.

The South African labour movement has been heavily influenced by the International Trade Union Confederation (ITUC) and the International Labour Organisation (ILO). The former describes a just transition as ‘a tool the trade union movement shares with the international community aimed at smoothing the shift towards a more sustainable society and providing hope for the capacity of a green economy to sustain decent jobs and livelihoods for all’ (ITUC 2009: 14). The ILO defines a just transition as ‘the conceptual framework in which the labour movement captures the complexities of the transition towards a low-carbon and climate-resilient economy, highlighting public policy needs and aiming to maximize benefits and minimize hardships for workers and their communities in this transformation’ (ILO 2010).

The Central Executive Committee of COSATU in 2011 adopted a Climate Change Policy Framework of 15 principles (COSATU Press statement, August 2011), which was endorsed by all 20 affiliates. The most significant were:

- * Capitalist accumulation is the underlying cause of excessive greenhouse gas emissions, and therefore global warming and climate change

- * A new low carbon development path is needed which addresses the need for decent jobs and the elimination of unemployment

- *Food insecurity must be urgently addressed

- *We reject market mechanisms to reduce carbon emissions

Carbon trading is dismissed as a ‘manifestation of “green capitalism” which is aimed at making profits from climate change not solving it...’

- *A just transition towards a low carbon and climate-resilient society is required

The explanatory note reads, ‘The just transition is a concept that COSATU has supported in the global engagements on climate change that have been led by the ITUC’. The basic demands that

are emphasised are investment in environmentally friendly activities that create decent jobs, social protection, research and skills development. This implies conformity to the minimalist, reformist position but then the note goes on to say, 'As COSATU we need to ensure that the concept of a just transition is developed further to fully incorporate our commitment to a fundamentally transformed society'.

Not only is there some ambiguity within COSATU, there are differences between the 20 affiliated unions. The National Union of Metalworkers (NUMSA) the largest COSATU affiliate representing over 300,000 workers in energy intensive industries emphasises 'ecological imperatives to reduce greenhouse gas emissions' but also stresses public ownership and democratic control' (Numerous speakers at the International Conference on Building a Socially – Owned Renewable Energy Sector, Johannesburg, February 2012).

NUMSA argues that the shift to a low carbon economy, and particularly the development of renewable energy, is being dominated by green capitalism (Interview, NUMSA official Johannesburg 7 February 2012). According to the NUMSA President, '...the language of "just transition" needs a class analysis...It must always be clear that capitalism has caused the crisis of climate change that we see today. There is an urgent need to situate the question of climate change in a class struggle perspective' (Opening address by NUMSA President Cedric Gina to the Numsa International Seminar on Climate Change and Class Struggle, 4 December 2011). NUMSA believes a 'just transition must be based in worker controlled, democratic social ownership of key means of production and means of subsistence...Without this...The just transition will become a capitalist concept, building up a capitalist "green economy"' (Statement from NUMSA Central Committee issued on 14 December 2011). NUMSA's vision is of 'a socially owned renewable energy sector and other forms of community energy enterprises where the full rights for workers are respected...'. (Cloete [NUMSA Deputy General-Secretary] 2012: 2).

A very different perspective informs the National Union of Mineworkers (NUM) representing thousands of workers, including some 80,000 coal miners. This is obviously particularly sensitive to the threat of job losses in the move to a new energy regime and some shop stewards have expressed faith in new technology to reduce carbon emission, especially Carbon Capture and Storage (Statements at NUM workshop Johannesburg, October 2013).

At a recent workshop of the Food and Allied Workers Union (FAWU) delegates expressed support for 'green economy projects and climate jobs in the poultry sector' (Johannesburg: 24 October 2013). Strong support was expressed for a 'class understanding of a just transition to a green economy' on the grounds that as consumers, the working class would be badly affected by the rise in food prices resulting from climate change (Ibid). A desire was expressed for more knowledge on radical alternatives to industrial agriculture, particularly agro-ecology. Some shop stewards were clearly not thinking about the green economy only in terms of job creation and addressing environmental threats, and thought that doing so would perpetuate the present shockingly high levels of hardship, exclusion and social inequality.

In a statement which clearly prioritises political over environmental considerations, Zwelinzima Vavi, the General Secretary of COSATU said recently, 'we will not support any form of

capital accumulation that breeds inequalities – even if those forms of capital accumulation are green’ (Vavi 2012: 2). This hints at a more radical, transformative concept of the green economy as involving not just shallow change with new technology, green jobs, social protection, retraining and consultation, but an alternative growth path with new ways of producing and consuming. This approach is critical of how the green economy is reduced to decarbonisation, to a set of technical issues centered on moving away from coal as our main source of energy, reducing carbon emissions and creating a new energy regime. Instead the emphasis is on the context of crisis to demand total, transformative change.

From this perspective the climate crisis provides the opportunity to demonstrate that the cause is the expansionist logic of the capitalist system and the need for an alternative, anti-capitalist development path. A ‘just transition to a low carbon economy’ could contain the embryo of an alternative eco-socialist social order. Such an alternative social order could involve features such as the collective, democratic control of production, production for social needs rather than profit; the mass roll out of socially owned renewable energy could mean decentralized energy with much greater potential for community control; and the localization of food production in the shift from carbon-intensive industrial agriculture to agro-ecology

Even if the triumphalist claim that the climate crisis means that ‘a moment for the global realization of ecosocialism has arrived’ (Kovel 2007: 258) is unfounded, the ecological and economic restructuring implied by this alternative could win extensive trade union support globally. As Sweeney writes, ‘Unions can be confident that the ecological case for the public ownership and democratic control of carbon-and pollution-intensive industries and services – beginning with power generation and energy-delivery systems – is cast iron. Given the impact of privatization on workers and communities, the social case is similarly strong. The goal should be to expand democratic control over major investment and production decisions and over financial institutions and transactions, while asserting a new set of social and economic conditions on private capital for the good of workers and the environment. This could...drastically slow the rate of ecological damage, while establishing a platform for an even deeper restructuring of economic life over the long term’ (Sweeney 2012: 13).

This kind of thinking could take labour beyond the ‘real world historical options’ of green capitalism ‘where economic growth is de-linked from emissions and environmental destruction generally, or...a suicide capitalism scenario where fossil-fuel corporations and major industry, agriculture, transport and retail interests are successful in maintaining business as usual’ (Sweeney 2011: 9).

In sum, some of the labour movement’s policy prescriptions amount to a serious challenge to the dominant government neo-liberal agenda. But, though there is no consensus, the overall appeal of the green economy to the labour movement is clearly the potential for job creation, whereas for environmentalists the protection of nature is frequently prioritized.

The Response of the Environmental Movement

At present there is no single, collective actor that constitutes the environmental movement in South Africa and no master 'frame' of environmentalism encoded in any blueprint. Environmental struggles have no coherent centre and no tidy margins; they constitute an inchoate sum of multiple, diverse, uncoordinated and fragmented struggles and organizations.

This fragmentation involves a fault line which divides the 'movement' into two main streams: those organized around the discourse of sustainable development (such as the Endangered Wildlife Trust and the World Wildlife Fund), and those organized around the discourse of environmental justice (such as groundwork, Earthlife Africa and the Environmental Monitoring Group). Both of these are powerful discursive strategies, especially in relation to apartheid practices.

During the apartheid regime environmentalism operated effectively as a conservation strategy that neglected social needs. For many black South Africans dispossession was the other side of conservation as they were forcibly removed to create national parks and 'protected areas' and in the process lost the land, and livelihoods which often defined social identity (Walker 2008). The notion of environmental justice represents an important shift away from this traditional authoritarian concept of environmentalism which was mainly concerned with the conservation of threatened plants, animals and wilderness areas, to include urban, health, labour and development issues (Cock 1991, 2006). The discourse of environmental justice provides a radical alternative, both to the traditional view and to the dominant emphasis on sustainable development. It questions the market's ability to bring about social or environmental sustainability.

Within this 'stream' a growing anti-capitalist discourse identifies the neo-liberal green economy as a 'false' solution to the crisis in nature. It is viewed as the driving notion in a green neo-liberal capitalism that is based on privatization, deregulation, free trade, unlimited growth, new technology and supposedly self-regulating markets.

The strongest element in this stream is the climate justice movement. Globally justice is a strong theme among activists who claim that a wide range of activities contribute to an ecological debt owed to countries in the global south: the extraction of natural resources, unequal terms of trade, degradation of land and soil for export crops, loss of biodiversity and so on. Locally it is demonstrated that it is the poor and the powerless who are most negatively affected by pollution, resource depletion, rising food prices and increasing 'land grabs' who bear the brunt of climate change. This grounding is the basis for giving environmentalism a mass appeal.

Overall there are sharp lines of contention around five 'wedge' issues among organizations of different shades of 'green': the role of technology, the value of the UNFCCC process, the expansionist logic of neo-liberal capitalism, how our relationship to nature should change, and – most importantly – the reliance on market mechanisms to address the crisis in nature.

Generally, those organizations with a reform agenda (for example, the World Wildlife Fund) accept market based solutions such as carbon trading, place a heavy reliance on technologies such as Carbon Capture and Storage, and view the United Nations process and the South African government's negotiating position in positive terms. This is the object of intense criticism by those organizations with a transformative agenda (for example Earthlife Africa and Groundwork) who

stress that market based solutions such as carbon trading are one way in which capital is attempting to appropriate the crisis and make climate change a site of capital accumulation. It is from these environmental justice organisations with a transformative agenda that links with the labour movement are emerging.

Emerging Alliances Between Labour and Environmental Activists

Clearly workers and their organisations are an indispensable force for addressing the climate crisis. As Jakopovich (2009) writes, ‘Environmentalists are workers and obviously potential allies in their efforts to advance workplace health and safety, and also to tackle environmental concerns of working class communities: for workers bear the brunt of environmental degradation and destruction, both in terms of health and quality of life issues’ (Jakopovich 2009: 75).

This recognition is at the centre of what Nugent has conceptualized as an emerging ‘labour-environmentalism’. This captures not only the formation of labour-environmental alliances, but ‘also the attempts by unions to develop environmental policies...to engage in internal member education and mobilization around environmental issues’ (Nugent 2011: 59). In South Africa embryonic linkages between the labour and environmental movements are evident in initiatives by unions to formulate environmental politics, to raise awareness on environmental issues among members and in two examples of joint actions: the Climate Jobs Campaign and the recent campaign against increased electricity price. These initiatives could generate a powerful new form of solidarity from which to challenge the neo-liberal version of the green economy.

1. THE CLIMATE JOBS CAMPAIGN

To link the unemployment and ecological crises, and to address the fear that ‘green jobs’ are market driven, progressive forces, largely from the labour and environmental movements, are organizing around the notion of ‘climate jobs’. A ‘million climate jobs campaign’ was launched in 2011 by forty civil society organisations. It is modeled on a British trade union campaign and is aimed ‘primarily at labour unions’ (Terreblanche 2012: 1). It is structured on the argument that if we are to move in a ‘just transition’ to a low carbon economy using renewable energy instead of coal, it will be workers who will have to build wind, wave tide and solar power. It is workers who will have to renovate and insulate our homes and buildings and build new forms of public transport. It is stressed that the lives of working people could improve in the process. Research findings were launched at COP17 which demonstrated that 3.7 million climate jobs could be created to address both the unemployment crisis and the climate crisis in South Africa.

Climate jobs are defined as ‘decent, people and publically driven jobs that reduce the causes and impacts of climate change’. This definition has a number of components:

*addressing the causes means jobs that reduce our dependence on the fossil fuels (coal, oil and gas) which produce the carbon emissions which cause climate change.

*reducing this dependence implies fundamental transformation; it means changing the way we all live, particularly the ways we produce and consume, the ways in which people and nature are exploited and abused.

*the definition of 'decent' jobs includes safe and healthy working conditions, social protection and security as well as fair wages

*climate jobs 'are primarily public jobs because it is the government, driven by the urgency of the demands of climate change that is determining what must be done,' (Rudin 2010: 20). This means active state involvement. For example some jobs could be directly created by the state as in the Expanded Public Works Programme. Others could be the outcome of state intervention in the form of procurement policies, and subsidies for example.

The current campaign for climate jobs is endorsed by both the major trade union federations, COSATU and the National Council of Trade Unions (NACTU) and is a step in moving towards a low carbon economy and the redistribution of power and resources towards meeting the needs of the majority rather than the profit of a few. It aims to exclude attempts by capital to use the climate crisis as an opportunity for accumulation. The organisers claim that 'there is increasing understanding that the private sector proposals centered on "green jobs", cannot solve the dual crises created by over-extraction...and over-consumption' in South Africa' (Terreblanche 2012: 13). The campaign involves more than simply creating a new energy regime. It is involved in 'the rebuilding of the Climate Justice Now campaign and the Coalition for Environmental Justice'. (Terreblanche 2012: 9). It is also initiating a number of prefigurative projects in order to demonstrate the viability of policy proposals underpinning the Million Climate Jobs campaign. Examples involving the labour movement are an agreement with the South African Democratic Teachers Union (SADTU) to retrofit two schools to dramatically reduce energy and water consumption, and with the South African Municipal Workers Union (SAMWU) to provide mass municipal employment in the building of sustainable housing for the poor using alternative labour intensive and climate-adaptable methods.

In the South African context with the crisis of unemployment, there is potential for 'climate job' creation in a number of areas, such as renewable energy and urban agriculture. Renewable energy is a primary focus of the campaign because it reduces substantial amounts of carbon, is capable of creating a large number of jobs and readily lends itself to various forms of public ownership. Studies have shown that 50 percent of all electricity from clean, renewable resources is possible by 2030 and could provide over a million new jobs, for example in the manufacture and installation of solar geysers (Worthington and Tyler 2010). But decent, useful jobs in renewable energy requires state intervention, at least in the form of supportive policies, such as tax rebates, local content criteria, or even regulations making solar water heater installations compulsory. Furthermore the shift to renewable energy would allow for smaller, localized energy production. Because resources such as sun and wind are available at the local level, renewable energy could mean supporting bottom-up, decentralized development. This could even extend to community participation and control. However at present the model being used by the government for

renewable energy is competitive, private sector provision, termed the renewable energy independent power producer procurement programme. This is already proving highly lucrative to capital (*Business Day* 30 October 2013).

The campaign is also mobilizing around the concentration of corporate power in the entire food value chain for example, demonstrating how localization could create nearly half a million new jobs in the Gauteng area alone. A transformative shift to a transformative green economy would involve moving away from industrialized agriculture to agro-ecology. Agro-ecology involves localizing food production to bring consumers and producers closer together thus strengthening food security. Food insecurity will worsen in South Africa as food prices continue to rise because firstly, increases in the price of oil will raise the cost of fertilizer and transport; secondly, climate change, especially the more extreme weather events such as droughts and floods will damage crops, and thirdly the use of arable land for biofuels will divert land from food production. As stated above there is growing interest in this alternative in the labour and environmental movements and the potential for job creation means that there is growing support for a 'green economy' within the South African labour movement.

2. CAMPAIGNS AGAINST ELECTRICITY PRICE INCREASES

Energy is at the centre of debates on a just transition to a low carbon economy. Sweeney has argued that this could mean a 'decisive shift in power towards workers, communities and the public – energy democracy. This can be built around three broad objectives namely the need to **resist** the agenda of the fossil fuel corporations, the need to **reclaim** to the public sphere parts of the energy economy that have been privatized or marketized and the need to **restructure** the global energy system in order to massively scale up renewable energy and other safe low-carbon options, implement energy conservation, and ensure job-creation and true sustainability' (Sweeney, 2012: 2). This is very far from the government's model of competitive, private sector provision.

This model is challenged by the COSATU policy framework on climate change which states, 'All South Africans have the right to energy'. It further insists, 'New and renewable power generation from sources such as wind, solar, hydro and waste needs to be cheap. In order to keep it cheap it must be generated and distributed by entities owned and controlled by government' (NALEDI 2012:55).

Joint campaigning involving both labour and environmental activists for this demand goes back some years. For example in 2009 two environmental justice organisations, Earthlife Africa and Groundwork mobilized opposition to the World Bank's \$3.75 billion loan to Eskom to build more coal-fired power stations. They made connections with labour as well as between organisations in the global North and South and mobilised opposition to the loan from more than two hundred organisations globally (including some trade unions).

In 2013 co-operative action on this issue focused on the request from the state owned electricity provider Eskom for a 16 percent increase in yearly electricity tariffs for the next five years. This is to contribute to the costs of its coal-based power station projects, Medupi and Kusile and

other capital spending projects. NUMSA, FAWU and SACCAWU as well as the environmental justice organisation Earthlife issued a combined press statement that, 'Proposed increases will pose an economic and social disaster, for South Africa as the hikes will lead to job losses, factory closures, and general increases in the cost of consumer goods' (Press Statement issued 28 January 2013). This co-operation draws on research by NUMSA which has established that the price increases would boost the price from 61c per kilowatt-hour to R1.28 per kilowatt-hour, a 110 percent increase (Cited in *Business Report* 20 February 2013). Resistance has involved not only large scale protest actions including picketing the offices of the National Energy Regulator of South Africa (NERSA) and an all-night candlelight vigil. NUMSA had to go to the High Court on an urgent basis to seek an order that declared the planned picket in November 2013 lawful. In addition co-operation between labour and environmental activists was evident in policy engagement in the form of submissions to NERSA. NUMSA attended all the Gauteng provincial hearings that NERSA convened and made oral presentations arguing that the proposed increase could lead to job losses, factory closures, increases in food prices and transport costs.

This co-operation means taking advantage of available political opportunity structures including engagement with the state in what Miraftab (2006) calls the 'invited spaces' of formal political structures as well as the 'invented spaces' of grassroots capacity building and campaigning. More specifically it involves linking four repertoires of action: capacity building workshops with grassroots communities, targeted protest actions, policy interventions and research. The success of this co-operation is evident in NERSA's granting of only an 8 percent electricity tariff increase instead of the 16 percent for which the power utility Eskom had applied.

In addition to these campaigns collaboration is also evident in the establishment of a 'Reference Group' within COSATU which includes representatives from all affiliate trade unions and some key environmental activists and which meets monthly. This group is active in worker education on environmental issues and has conducted workshops for a number of affiliate unions.

This co-operation between labour and environmental activists challenges the jobs-versus the environmental binary of the past. This notion of an unavoidable 'trade off' explains the minimal involvement of organized labour in some important environmental justice struggles such as that against the pollution of the groundwater by a steel mill near Johannesburg (Cock 2007).

However these linkages are new and fragile; nowhere near the levels of coherence and impact of groupings of trade unionists and environmentalists in the North, such as the Appolo Alliance or the Blue-Green Alliance described by Nugent (2011). However the global nature of climate change means that this kind of joint action has important potential for building transnational solidarity networks involving labour and environmental activists. As Nugent writes, 'Realizing climate justice through labour-environmentalism must not only be focused on strengthening the political power of North American unions, but should also support struggles for global environmental justice'. (Nugent 2011: 77).

Developing their potential implies that labour needs to further broaden the conventional focus on jobs and workplace concerns to embrace environmental issues. This could build on the tradition of 'social movement unionism' in South Africa which involved the active engagement of

trade unions in broader social struggles, specifically the struggle against apartheid (Webster 1988, Von Holdt 2002). Similarly, environmentalists need to extend their traditional focus on threatened plants, animals and wilderness areas to address social justice with equal vigour. Such solidarity networks could mount a powerful challenge to the neo-liberal green economy. Adopting it as a developmental goal Susan George warns, will mean the ‘triumph of the Davos class’ (George 2010: 202). There are a number of reasons why we should fight against this triumph.

Critiques of the Neo-liberal Conception of the Green Economy

Powerful interests within this ‘alliance of government leaders, philanthropists and corporate executives who form the “nomadic, powerful and interchangeable” global elite created by capitalist globalization’ (George, 2010: 7) are promoting a version of a green economy as a new formulation of a green neo-liberal capitalism based on expanding markets and new technology. Underlying all capital’s strategies – is the broad process of commodification: the transformation of nature and all social relations into economic relations, subordinated to the logic of the market and the imperatives of profit. The process of financialisation means increasing instability of these relations and will lead to a deepening of the crisis in nature.

‘No serious observer now denies the severity of the environmental crisis, but it is still not widely recognised as a capitalist crisis, that is a crisis arising from and perpetuated by the rule of capital, and hence incapable of resolution within the capitalist framework’ (Wallis 2010: 32). This is changing. The notion of ‘green or sustainable capitalism’ is being subjected to growing criticism rooted in the understanding that *capital’s logic of accumulation* is destroying the ecological conditions which sustain life (Panitch and Leys 2006, Kovel 2001, Foster 2009).

It follows that the neo-liberal green economy is not an alternative development path, but ‘a wolf in sheep’s clothing’, an attempt to avoid fundamental change; ‘a sophisticated effort to demonstrate that it is possible to resolve...the planet’s environmental crises without altering the existing power structures, nor the relations of domination and exploitation’ (Lander 2011: 4). Or, as Conant has written, the Green Economy is ‘the green-tinted regurgitation of a failed and unjust economic system predicated on the expansion of the controversial REDD offset scheme to every square meter of the Earth – including oceans, soils, agriculture and biodiversity’ (Jeff Conant, Global Justice Ecology Project Communications Director, press release 7 December 2011, Durban).

In reducing ‘nature’ to ‘natural capital’ our relationship to nature is further distorted in the neo-liberal green economy. This is happening when the global battle for natural resources – from land, food and water to energy and precious metals – is intensifying. Many are questioning what Naomi Klein calls ‘the expansionist, extractive mindset, which has so long governed our relationship to nature...’ (Klein 2011: 80).

The reliance on new technology is a mark of neo-liberal green capitalism and represents another ‘false solution’. ‘Technological innovation without social critique is likely to reflect prevailing social relations of power’ (Warner 2010: 539). The UNEP report proposes that

governments cut environmentally damaging subsidies and use these funds to invest in new technologies, many of which involve massive, unforeseen consequences.

Conclusion

If we are aspiring, as James Ferguson suggests we should, ‘to link our critical analysis to the world of grounded political struggle – not only to interpret the world in various ways, but also to change it’ – we should move beyond denunciatory analyses to ask ‘what do we want? This is a quite different question (and a far more difficult question) than: what are we against?’ (Ferguson 2012: 167).

This article suggests that a transformative conception of a green economy points to an alternative, just and sustainable development path in South Africa which could provide real benefits for working people. Such a model is at variance with the consolidation of neo-liberal thinking within the South African government. This supports what Bond calls ‘climate-crisis capitalism’, namely, ‘turning a medium/long-term, system-threatening prospect into a short-term source of commodification, speculation and profit’ (Bond 2011: 2). It is evident in the attraction of the green economy for capital in South Africa best expressed in an editorial in their mouthpiece, *Business Day*, ‘If climate change is to be taken seriously, it needs to be made more profitable for firms and countries to abide by carbon-reduction agreements than for them not to’ (*Business Day* 26 November 2012). This sentiment is congruent with the neo-liberal model of the green economy which was promoted with such vigour at Rio+20.

While there is no consensus, there are elements of the transformative model of the green economy within the labour and environmental movements. The central argument of the article is that the embryonic alliance that is developing between these movements is a hopeful site for an effective challenge to the ‘corporate capture’ of the green economy discourse. Such a challenge could also generate a new kind of transnational solidarity, larger, deeper and more powerful than anything we have yet seen. Moving beyond solidarities based on interests or identities, Hyman concludes that ‘the challenge is to reconceptualise solidarity in ways which encompass the local, the national...and the global...For unions to survive and thrive, the principle of solidarity must not only be redefined and reinvented: workers on the ground must be active participants in this redefinition and reinvention’ (Hyman 2011: 27). Most clearly in its warnings of the threat to human survival, the discourse of climate change could be contributing to such a process.

NOTE

This article draws from a wide range of sources: formal interviews, informal conversations, secondary sources and participation in workshops and conferences arising from the author’s involvement in both the labour and environmental movements in South Africa.

REFERENCES

- Bond, P. (2011) *The Politics of Environmental Justice*. Durban: UKZN Press.
- Brockington, D. (2012) 'A Radically Conservative Vision? The challenge of UNEP's *Towards a Green Economy*', *Development and Change* 43(1): 409-422.
- Cloete, K. (2012) 'Energy Transition: Discussion on Union Perspective and Strategies'. Unpublished paper.
- Cock, J. (1991) 'The Politics of Ecology', in M. Ramphela, *Restoring the Land, Environment and Change in Post-Apartheid South Africa* (pp. 13-20). London: Panos.
- Cock, J. (2007) 'Sustainable Development or Environmental Justice: Questions for the South African Labour Movement From the Steel Valley Struggle', *Labour, Capital and Society* 40(1/2): 36-55.
- Cock, J. (2006) 'The Environmental Justice Movement', in R. Ballard et al, *Voices of Protest: Social Movements in Post-Apartheid South Africa* (pp. 203-225). Durban: UKZN Press.
- Cock, J. (2011) 'Green Capitalism or Environmental Justice: A Critique of the Sustainability Discourse', *Focus* 63(November): 45-51.
- Death, C. (2013) 'The Green Economy in South Africa: Global Discourses and Local Politics'. Unpublished paper.
- Department of Economic Development (DED) (2011) *New Growth Path Accord 4. Green Economy Accord*. Pretoria: DED
- Department of Economic Development (DED) (2010) *Green Economy Summit Discussion Document*. Pretoria: DED.
- Development Bank of Southern Africa (DBSA) (2011) *Programmes in Support of Transitioning South Africa to a Green Economy. Working Paper Series no 28*. Johannesburg: DBSA.
- European Commission (2012) *Innovating for Sustainable Growth: A Bioeconomy for Europe*. Brussels: European Commission.
- Dansereau, S. (2010) 'Comparing Dueling Approaches to the Transformation of South African Mining: Corporate Social Responsibility or Labour Restructuring', *Labour, Capital and Society* 43(1): 63-98.

- Ferguson, J. (2012) 'The Uses of Neoliberalism', *Antipode* 41(S1): 167-185.
- George, S. (2010) *Whose Crisis? Whose Future?* Amsterdam: Transnational Institute.
- Giddens, A. (2009) *The Politics of Climate Change*. London: Polity.
- Government of the Republic of South Africa (2011) *National Climate Change Response White Paper*. Pretoria: Government Printer.
- Hall, R. (2011) 'Land Grabbing in Africa and the New Politics of Food', in H. Boll Stiftung, *Perspectives: Food Security in Africa* (pp. 4-9). Cape Town: HBS.
- Hall, R. and Zacune, J. (2012) 'Bio-economics: The EU's Real "Green Economy Agenda"', Transnational Institute paper.
- Hallegatte, S. (2011) 'From Growth to Green Growth'. Policy Research working paper no 5872. Washington: World Bank.
- Hyman, R. (2011) 'Trade Unions, Global Competition and Options for Solidarity', in A. Bieler and I. Lindberg, *Global Restructuring: Labour and the Challenges for Transnational Solidarity* (pp. 16-27). London: Routledge.
- International Labour Organisation (ILO) (2010) *Climate Change and Labour: The Need for a Just Transition*. Geneva: ILO.
- International Trade Union Confederation (ITUC) (2009) *Equity, Justice and Solidarity in the Fight Against Climate Change*. Geneva: ITCU.
- Jakopovich, D. (2009) 'Uniting to Win: Labour Environmental Alliances', *Capitalism, Nature, Socialism* 20(2): 74-96.
- Klein, N. (2011) 'Capitalism Versus the Climate', *The Nation*, 28 November 2011.
- Kovel, J. (2001) *The Enemy of Nature: The End of Capitalism or the End of the World*. London: Zed Books.
- Lander, E. (2011) 'The Green Economy: The Wolf in Sheep's Clothing', paper presented to the Transnational Institute Workshop, Durban, December 2011.

- Leach, M. (2012) 'Green Grabbing: A New Appropriation of Nature'. Unpublished paper.
- Miraftab, F. (2006) 'Feminist Praxis, Citizenship and Informal Politics', *International Feminist Journal of Politics* 8(2): 194-218.
- National Labour and Economic Development Institute (NALEDI) (2012) *A Just Transition to a Low Carbon and Climate Resilient Economy*. Johannesburg: NALEDI.
- Nugent, J.P. (2011) 'Changing the Climate: Ecoliberalism, Green New Dealism, and the Struggle over Green Jobs in Canada', *Labour Studies Journal* 36(1): 58-82.
- Panitch L. and Leyes, C. (2006) *Coming to Terms with Nature*. Socialist Register. Toronto: Palgrave.
- Peck, J. (2012) *Constructions of Neoliberal Reason*. Oxford: Oxford University Press.
- RSA (2011) *National Climate Change Response White Paper*. Pretoria: RSA.
- RSA (2011) *National Development Plan 2030: Our future – Make it Work*. Pretoria: National Planning Commission.
- Rudin, J. (2012) 'The Green Economy Creates Not Counters Climate Change'. Unpublished paper.
- Sweeney, S. (2011) 'How Unions Can Help Secure a Binding Global Climate Agreement in 2011'. Available at: <http://www.sustainlabor.org> [Accessed 3 April 2011].
- Sweeney, S. (2012) *Resist, Reclaim, Restructure: The Unions Struggle for Energy*. Cornell: Global Labour Institute.
- Sustainlabour (2011) 'The Madrid Dialogue Took Off'. Available at: sustainlabour.org. [Accessed 18 April 2011].
- Sustainlabour, UNEP (2008) *Climate Change, its Consequences on Employment and Trade Union Action. A Training Manual for Workers and Trade Unions*. Madrid: sustainlabour.
- Terreblanche, C. (2012) 'Report on the One Million Climate Jobs'. Unpublished paper.
- Trollop, H. and Tyler, E (2011) 'Is South Africa's Economic Policy Aligned with our National Mitigation Policy Direction and a Low Carbon Future'. Paper presented to the National Planning Commission Second Low Carbon Economy Workshop, July 2011.

- United Nations Environmental Programme (UNEP) (2011) *Towards a Green Economy: Pathways to Sustainable Development and Poverty Eradication*. Nairobi: UNEP.
- United Nations (2012) *The Future We Want*. Geneva: UN.
- Vavi, Z. (2012) Keynote Address. COSATU International Policy Conference, Durban.
- VonHoldt, K. (2002) 'Social Movement Unionism: The Case of South Africa', *Work, Employment and Society* 162(2): 283-304.
- Worthington, R. and Tyler, E. (2010) *50% by 2030*. Cape Town: World Wildlife Fund Energy Review.
- Walker, C. (2008) *Landmarked: Land Claims and Land Restitution in South Africa*. Johannesburg: Jacana.
- Wallis, V. (2010) 'Beyond Green Capitalism'. *Monthly Review* 8(February): 32-47.
- Warner, R. (2010), 'Ecological Modernization Theory: Towards a Critical Ecopolitics of Change', *Environmental Politics* 19(4): 538-556.
- Webster, E. (1988) 'The Rise of Social Movement Unionism: The Two Faces of the Black Trade Union Movement in South Africa', in P. Frankel, *State, Resistance and Change in South Africa*. London: Croom Helm.

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