

The 'Green Economy' in South Africa:

A 'symbolic' response to a growing socio-ecological crisis

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Introduction

In 1994, the new African National Congress government, in alliance with the SA Communist Party and the Congress of SA Trade Unions, promised a post-apartheid era of prosperity based on economic growth, jobs for all and the eradication of poverty through the redistribution of wealth and the empowerment of the black majority. By then, however, it had already compromised with the economic elite, embedded in the minerals-energy-financial complex, to pursue redistribution through growth – as opposed to the demand from its trade union allies for growth through redistribution. By 1996 this re-focus had crystallised into a fully-fledged neo-liberal emphasis on a shift away from public investment to achieve socio-economic transformation, to a reliance on the market – through privatisation, foreign investment and liberalised trade. The resistance to privatisation and other aspects of neo-liberal policies, by labour and other social movements, forced a partial retreat by government after 2002, with increased investment in very basic social grants, free water to indigent communities up to a basic level; and subsidised electricity, also at a very low level. Free health care in public hospitals and clinics has also expanded – but within a context of a crumbling public system. While all schools since 1994 charge school fees, the children of poor families pay little or no fees – but many have to endure inferior education in badly equipped schools.

Despite obvious improvements in certain areas, the end result of 20 years of democracy and economic liberalisation is persistent and widespread poverty, unemployment at around 34% and rapidly rising social inequality. In recent years growing global awareness about climate change has forced government to make commitments to reduce carbon emissions significantly, and invest in renewable energy. However, in terms of public perceptions, the social deficit overshadows the ecological deficit, as the drive to create jobs through expanded economic growth (using fossil fuels such as coal, oil, gas and nuclear power) has severely constrained efforts to move towards a genuinely green economy. Instead, indications of policy shifts have been half-hearted, grossly inadequate or symbolic.

This paper will consider these issues within the context of the global poly crisis, and argue that the increasing public discourse about a green economy masks a business-as-usual approach to economic development. With the minerals-energy-financial complex firmly in place, and the growth imperative over-shadowing substantive shifts away from a fossil-fuel based economic system, true ecological sustainability and social justice remain a distant dream. Although various environmental and developmental NGOs and community groups are active and offer alternative perspectives, they are relatively marginalised in public discourse and policy-making. However, the largest social organisations, trade unions, are beginning to add their voice to the green economy debate, in particular the National Union of Metalworkers of SA (Numsa), the largest affiliate of the Congress of SA Trade Unions (Cosatu) that is going against the grain and spearheading a new movement for socialism.

The capitalist poly-crisis

South Africa is a microcosm of the inter-connected economic, ecological and socio-political crises that is rooted in a centuries-long process of 'accumulation by dispossession'. In other words, an industrialisation/urbanisation process that at the one end produces abundance in terms of material goods and services (the accumulation imperative), while at the other end it requires the dispossession of people's land and livelihoods, the commons (including public assets) and the natural environment. The promise of the last two centuries of 'modernisation' and development for all is certainly alluring. It is the aspiration of most governments and peoples mesmerised by the

indisputable benefits of continuously improving technology and the value of things produced from nature . However, this model is now under serious question, as the social and natural/ecological limits to economic growth (whether free market, social-democratic or state-capitalist) becomes increasingly evident. The current phase of neo-liberal hyper-capitalism, which has washed over most other forms of capitalism, has intensified the commodification of all that is valued. Today wealth is measured not in terms of the intrinsic value of things and relationships, or for Karl Marx their use-value to society, but in terms of their exchange value (what they can be bought and sold for – that is, for money – particularly for the few large corporations that straddle the world). It rests on the exploitation of human beings and rapidly depleting fossil fuels, and pollution of various kinds (in particular climate change), along with other forms of environmental damage caused by incessant production, consumption and urbanisation.

The end result of over two centuries of accumulation by dispossession (Harvey, 2005) is a system of uneven development, with rising inequality both at the national level, in general, and at the global level. The core of this world system are the rich, developed countries on the one hand, whose wealth and power rest largely on the under-development of the formerly colonised world – the periphery and semi-periphery. This division occurs within countries, with a core of formalised work and a periphery of informal and unemployed labour, mostly living in urban or peri-urban slums. According to Samir Amin (2008), the proportion of ‘precarious and pauperised’ members of the working classes (broadly defined to include formal and informal workers and the unemployed) has over the past fifty years risen from less than one quarter to more than one half of the global urban population.

Economic globalisation has, since the 1980s, simultaneously enlarged the periphery within the core countries (within increased informalisation of work and unemployment, and a declining social wage), as well as enlarged the core within the periphery and particularly within the semi-periphery (countries such as Brazil, South Africa and India, and increasingly China), as capital moves around globally. However, with a few exceptions such as the now ‘developed’ status of east Asian countries like South Korea, the overall global picture of uneven, enclave development remains intact, at least for the

foreseeable future. This is despite ostentatious claims by national elites, such as in India, that their country will be 'fully developed' within the next thirty to fifty years – conveniently ignoring that 95 per cent of its workforce is informalised labour (Bieler et al, 2008), while in the rural areas 'development' has deepened the misery of rural people, causing a massive increase in farm suicides and the rapid rise of Maoist groups championing the cause of the rural poor in tribal forest areas (Perry, 2010).

These islands of privilege are, of course, modelled on western patterns of consumption – particularly that of the USA. The mainstream US commentator, Thomas Friedman (2008), warns about 'too many Americans' in the world today – meaning too many hyper-consumers, influenced over the past decades by American mass media (particularly films, advertising, television shows and magazines) that celebrate the 'American Dream' of unsustainable consumption based on the creation of incessant wants (as opposed to real needs). Friedman warns against 'America's affluenza', '*an unsustainable addiction to growth*' (2008:54, my emphasis).

The *Americum* is a unit of 350 million people with an income above \$15 000 and a 'growing penchant for consumerism', particularly American-style energy-sapping living spaces, cars, fast foods and levels of un-recycled garbage. Current growth and consumption trends suggest that by 2030 the number of Americums will have increased from two to eight or nine – at least a fourfold increase within the space of between thirty and forty years: in other words, from 700 million people to over 3 billion – half the current world population. Of course the total population will also have also grown (some say to about 7–8 billion by 2030).

If the crisis of accumulation is temporarily arrested, and global growth and 'prosperity' increases as suggested, these 'carbon copies' of American consumerism will threaten the very foundations of that prosperity. It will inevitably run into the natural limits of growth, because the expansion of Americum production and consumption will require the colonisation of at least three more planets.

The ecological consequences of hyper-accumulation, include, in the words of John Bellamy Foster (2002: 12),

global warming, the destruction of the ozone layer, removal of tropical forests, elimination of coral reefs, overfishing, extinction of species, loss of genetic diversity, the increasing toxicity of our environment and our food, desertification, shrinking water supplies, lack of clean air, and radioactive contamination – to name a few. The list is very long and rapidly getting longer, and the spatial scale on which these problems manifest themselves are increasing.

In other words, the inter-related triple threats of rising pollution, the rapid depletion of natural resources and declining biodiversity are increasingly being acknowledged as threats to the survival of the earth as we know it. There is little doubt that human intervention, in the form of industrial (or 'fossil') capitalism, has brought us to this point.ⁱ Despite international efforts such as the Brundtland Commission on environment and development in 1983, the Rio Summit in 1992, the 1997 Kyoto Protocol on climate change and the 2002 UN World Summit on Sustainable Development (or Rio+10) in Johannesburg, amongst many other interventions, the process of environmental degradation in recent decades has accelerated, rather than receded. The notable exception has been the partial restoration of the ozone layer, after international efforts to ban ozone-depleting substances contained amongst others in aerosols and refrigerators.

At the climate change talks in Durban in December 2011, known as the Conference of the Parties (COP) 17, the scepticism that the rich countries of the world, whose corporations over the past two centuries have primarily been responsible for environmental degradation, would agree to significant action to stem the impending disaster, proved to be well-founded. At the Warsaw COP in November 2013 the unwillingness of developed countries to take any meaningful action to reduce their carbon emissions, was even more palpable. Developing countries in turn have adopted the view that they cannot move off the path of rapid fossil fuel-based industrialisation to

'catch up' with the developed world, if the rich countries do not first commit to transforming their own economies (including, for some, the question of 'degrowth' or shrinkage), as well as sufficiently compensate developing countries. It is a question, it seems, of who blinks first – with only a few countries in Latin America, such as Bolivia and to an extent Ecuador, being prepared to make bold moves and grant the Earth constitutional rights (meaning moving towards a more balanced, holistic, sustainable human development path). In the meantime, environmental destruction (including increased carbon emissions) in the world continues unabated, with more talk but little action.

This impasse suits the business-as-usual paradigm, which either denies that there is any real ecological threat, or admits that there are problems, but these will be sorted out by *more* economic growth, which will spur on more technological innovation to resolve environmental problems, and increasing living standards for more people (*Economist* 13/9/13). A variation of this Market Liberal school of thought is that of the Institutionalists (see Clapp and Dauvergne, 2011), who see the necessity of global and national standards and regulations (including taxation) to mitigate the environmental threats caused by the globalised free market, and to create a conducive climate for green innovation and the decoupling of economic growth from resource depletion, pollution and waste (see also Dullien et al, 2011).

Is this Green New Deal perspective a solution to the current crisis, or a symbolic fig-leaf that masks the accumulation imperative of capital, and its trail of destruction for both human society and the natural environment?

South Africa: The Minerals-Energy Complex

In South Africa the minerals-energy complex, which since the discovery of minerals subordinated all economic activity to the needs of mining and energy sectors, remains pivotal to the economy. South Africa is the largest emitter of greenhouse gases in Africa and most of these emissions come from the energy sector and two companies in particular, Eskom's coal fired power stations and Sasol – especially its Secunda coal- to-liquids plant. Eskom, a public entity, is committed to building more coal-fired power

stations. The World Bank's \$3.75 billion loan to Eskom to enable it to do this will increase the price of electricity for poor people, worsen the country's contribution to CO2 emissions and climate change, and allow continued subsidised supply of the world's cheapest electricity to large corporations and the export of their profits to London, Luxembourg and Zurich.

As a result of the pollution and waste caused by mining, smelting, electricity and chemical production, and monocrop high-input agriculture, the country faces enormous problems of water contamination, soil degradation, air pollution, depleted natural forests, contamination of indigenous seed varieties, species extinction and growing poverty levels. The burden of this has fallen more intensively on the poor, especially on poor black people. This phenomenon has often been termed environmental racism or environmental injustice, and has not ended with the downfall of apartheid. Indeed, in many respects it has worsened, as the country intensifies its search for increased economic growth and foreign investment, with the promise that it would create more jobs, and reduce the increased levels of unemployment, rising inequality and persistent poverty since 1994. These social challenges are compounded by the intertwined socio-ecological challenges generated by the minerals-energy complex, as illustrated by the challenges of water and energy provisionⁱⁱ.

The water crisis

Water is an extremely scarce resource, given that South Africa is a semi-arid country, and cannot plant crops on more than 14 per cent of its national surface area. The country devotes around half of its fresh water resources to commercial agriculture, which follows an unsustainable production model. It uses massive quantities of toxic pesticides and herbicides, as well as requiring great inputs of harmful organo-phosphate fertilisers, which seep into the watercourses and deplete the oxygen vital to many freshwater species. South Africa's water law was supposed to allow for catchment management by all affected stakeholders, but there has been a failure of governance, such that these committees have hardly been implemented, negatively affecting the ecological reserve (fresh water set aside to guarantee biodiversity protection) and community supplies. Many municipalities are failing to treat sewerage adequately and

human wastes are being discharged into fresh water sources on a large scale (see MacDonald and Ruiters, 2005; Bond, 2012).

The mining industry has left the legacy of acid mine drainage contaminating the environment in, firstly, the West Rand, and spreading to the East Rand and the central basin - potentially causing land instability and threatening the foundations of buildings in Johannesburg, as Fig (2011), and Sharife and Bond (2011) show.

As Fig (2011) argues, this is a story of over a century of inadequate governance, regulation and corporate accountability, with the current government's efforts possibly fatally flawed by the division of responsibility being spread across multiple institutions which lack political will. The slow response to this impending disaster has already made farming in parts of the West Rand unviable. Parliament's water and environmental affairs committee finally held a hearing on the matter in June 2011, when government experts confirmed the scale of the problem, and also revealed that seismic events in the regions affected have almost doubled since acid mine drainage filled derelict mines in 2008. According to government, the mines chiefly responsible include Rand Uranium, Durban Roodepoort Deep, Mintails, ERPM and Grootvlei mines (*Business Day*, 22/6/11). However, the problem goes beyond Gauteng and includes mines in Mpumalanga, KwaZulu-Natal and the Northern Cape. Persistent public exposure of the problem, as well as compelling scientific evidence, has moved government to finally take action, including the possibility of a new environmental levy on polluting mines to help pay for cleaning up the toxic water, which could run into billions of rands (*The Times*, 23/6/11). To date this problem remains unresolved.

Agriculture and land

Given the shortage of fresh water and arable land, the country remains wedded to supporting large-scale monocrop agriculture at the expense of stimulating small-scale family farmers and peasants, proven in many parts of the world to be more productive per hectare. Using the rationale of modernity, the inclination is to regard high input agriculture as more productive. However, we are not supporting the beneficiaries of land reform to succeed on the land, and so we are failing to realise the potential for multiplying jobs, getting small farmers to produce for the market, and ensuring food

security and sovereignty in rural and peri-urban communities around the country. This would change the pattern of production from one which poisons the land, depletes nutrients in the soil, and pollutes precious water resources, to one which uses organic farming techniques, relies on traditional seed varieties, allows for seed saving and seed security, and diminishes corporate control over the food chain. Climate change is already forcing South Africa to rely on wheat imports, while it grapple with unsustainable solutions to the maize surplus.

Energy and emissions

More than 90 per cent of South Africa's electricity is produced by burning coal. Poor citizens also use coal as a source of heating and cooking in their homes, with the result that the country has some of the highest rates of respiratory diseases in the world, particularly affecting children. The coal burned in power stations is a major contributor to greenhouse gases, and makes SA the thirteenth largest emitter of these gases in the world (between one and two per cent of global emissions, and by far the highest emitter in Africa). We know that these emissions are a major contributor to climate change, affecting the population's health, jobs, livelihoods, food sovereignty, biodiversity, and ultimately our survival on the planet. Unless the country drastically limits the high-carbon economy and much more seriously opts for lower-carbon solutions (including moving away from hydrocarbons in our liquid fuels), global warming will intensify.

During the 2010 World Cup public transport provision trumped the congestion, pollution and negative impact on climate of the private vehicle. However, the state has since talked about public transport, but has done little to provide clean, safe and affordable public transport. Moving freight off the roads and onto rail, sustainably, is and alternatives to short haul air transport have not been seriously considered.

Biodiversity

South Africa is one of the most biologically diverse countries in the world, and conservationists struggle to manage the plant and animal resources to avoid their extinction, so that they can continue to provide present and future generations with a natural research laboratory, a source of nutrients and medication, an inspiration to tourists and a deserved place in our ecological systems. There is a struggle to set aside

financial resources to manage this biodiversity in the face of rapacious mining initiatives and spreading urbanisation, to ensure it remains part of the country's shared natural heritage. The benefits from commercialising various plant species often do not accrue to those communities that have safeguarded the resource over centuries.

These and a range of other socio-ecological challenges have not been sufficiently prioritised, or where policies have been in place, poor governance and enforcement has allowed corporations to continue polluting as before. Whilst some progress was made removing lead from petrol and setting emissions standards, South Africa is far from seriously addressing air pollution and waste caused by its major industries. It also needs to address the question of energy saving and renewable energy on a large scale, as opposed to the construction of further coal-fired power stations. Each new important development requires an environmental impact assessment, yet regulations have been watered down and legal processes bypassed so that assessment is no longer even-handed. Despite having better legislation, the legal system is far from prioritising solutions that are both ecologically just and socially fair.

In recent years, with increased pressure from environmental groups as well as a growing global awareness about the threats of climate change, amongst others, has obliged the South African government to acknowledge the necessity to move towards a 'green economy'. However, the corporate sector, with the mass media on their side, have resisted attempts to move off the current growth path. This contestation, for long ignored by the labour movement, has belatedly seen sections of organised labour enter the fray.

Green economy promises

The Green Economy Summit of May 2010, which led to the New Growth Path (NGP), promised a dramatic move out of the stranglehold of the minerals-energy complex, and towards a 'green economy'. This initiative was led by the minister of Economic Development and former Cosatu unionist Ebrahim Patel. This is a new ministry which the labour movement lobbied hard for after the 2007 victory of the Zuma coalition in the ANC, and before the election of a Zuma-led government in 2009. This ministry was

meant to lead the fight against neo-liberal MEC policies that characterised the previous Mbeki administration. However, while the NGP includes a move towards green manufacturing jobs, it remains within the framework of conservative macro-economic policy. As such proposals to diversify into sustainable manufacturing are ultimately lame attempts in line with global 'green economy' discourses that promise much, but still subordinate environmental concerns to the logic of the economic growth and the treadmills of production and consumption. The NGP was accompanied by the Green Economy Accord between government and various stakeholders, including organized labour, as well as a range of policies such as the Industrial Policy Action Plan 2 (IPAP2 – promoted by Patel's allies in the Department of Trade and Industry) and the National Climate Change Response White Paper. All, however, dance around the primacy of the minerals-energy-financial complex, a tiger the state cannot easily jump off, lest it gets eaten by declining tax revenues and foreign exchange earnings, as well as massive job losses during the transition to a greener economy (Fakir, 2013). The National Climate Change Response Paper still relies on market mechanisms such as carbon trading to reduce emissions, as well as dangerous technologies such as Carbon Capture and Storage, and nuclear energy. While there is a clear shift away from the pure fossil-based neo-liberal policies of the past, in that the dangers of climate disaster are explicitly acknowledged, for some critics these initiatives amount to little more than 'green neo-liberalism' (Satgar, 2013).

However, if the NGP showed signs of moving away from the MEC, the 2012 National Development Plan (NDP) has gone backwards, at least as far as its economic policies are concerned. The NDP is a product of the National Planning Commission, which includes experts from a wide range of disciplines, and chaired by the former minister of Finance under Mbeki, Trevor Manuel, and co-chaired by the now deputy president of the ANC, Cyril Ramaphosa. For a while it seemed that the NGP, along with IPAP2, would become the over-arching policy perspective of government. However, the balance of forces within government have since 2012 tipped back in the favour of Treasury and the MEC, such that the NDP hardly acknowledged the existence of the NGP and IPAP2, and re-inserts the hegemony of neo-liberalism and the MEC. It makes no attempt to address social inequality or the creation of meaningful jobs other than poorly paid jobs in the informal sector. Like Jesus said of the poor, it seems to say: both inequality and poverty

will always be with us (Coleman, 2013). The NDP was adopted by the ANC in December 2012, and since then government announced that it was now the over-arching policy of government (but this has since been contested by Cosatu within the tripartite alliance with the ANC and the SACP)ⁱⁱⁱ.

Proposals around climate change and the green economy start off impressively in the NDP (as they do in the Climate Change White Paper). The problems of inaction are laid out clearly, but they are ultimately undermined by the imperatives of growth within the confines of the MEC. The same applies to the Carbon Tax proposals mooted by government, where all but the biggest polluters are exempted (including the agricultural and waste sectors), and for those that do have to pay, liabilities only eventually amount to 10% of their carbon emissions (Rudin, 2013).

Sustainable development or environmental justice?

The dominant approach in South Africa, as elsewhere, is that of a new ‘sustainable’ or ‘green capitalism’ that brings the efficiency of the market to bear on nature and its reproduction. Critics of this approach argue that the cause of the ecological crisis is the expansionist logic of the capitalist system itself. In its unrelenting pressure to expand in the search for profits, capitalism is inherently eco-destructive which is why Joel Kovel calls it a “suicidal regime” (2006:6). According to John Bellamy Foster, these visions amount to little more than “a renewed strategy for profiting from planetary destruction” (Foster and Clark, 2009:1). The business of ‘sustainability’ in this view is simply “a new frontier for accumulation in which carbon trading is the model scheme” (Foster, 2009:139).

As the NDP seems to argue, the two pillars on which green capitalism rest are technological innovation and expanding markets while keeping the existing institutions of capitalism intact. This is Thomas Friedman’s ‘green revolution’ which relies on linking the two. As he insists, green technology represents “the mother of all markets”. (Friedman, 2008:113). But if the practice of BP is anything to go by, many of these technologies will prioritise risk over the safety of both people and nature. In South Africa the MEC will continue to socialize risk in the pursuit of profit.

Corporations in South Africa have not been slow to jump onto the green economy bandwagon, and have greenwashed their advertising across the board. For example the Nedbank advertisements, “Help combat climate change. Apply for a green affinity card”. New sources of energy such as solar, nuclear and wind are opportunities for new markets which emphasize energy efficiency such as solar powered geysers. The massive development of biofuels, still being debated in SA (see Atwell, 2011) can involve diverting land from food production, while the carbon trading regime enshrined in the Kyoto Protocols involve the commodification of air.

Underlying all these 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. Many of these strategies put the onus of solving climate change on changing individual life styles (Gore, 2006). This individualizing relies heavily on manipulative advertising to persuade citizens of the efficacy of these strategies.

Greenwash is also evident in much corporate sustainability reporting as part of their presentation of a benign image of themselves. The worst corporate polluters in South Africa all now produce lengthy sustainability reports. The empty nature of their claims are especially evident in the case of Sasol (the source of half South Africa’s carbon emissions) and Arcelor Mittal (the largest steel producer in the world with a bad environmental record in the 60 steel mills in the 27 different countries in which it operates) and whose air and water pollution have destroyed the health and livelihoods of a local community (Cock, 2007). Arcelor Mittal was highly rated on the Johannesburg Stock Exchange’s SRI (Socially Responsible Investment) Index introduced to “help crystallize good triple-bottom line and governance policy and practices”. For the JSE “Investing in sustainability makes sense”^{iv}.

Many aspirational claims are made about the employment potential of ‘green jobs.’ Green jobs are at the centre of global debates on how to move away from the ‘fossil fuel regime’ and build a low carbon economy. But much of the literature fails to address the major challenge of ensuring jobs with decent pay and social security for the thousands of workers presently employed in energy intensive jobs in the oil, coal, car, cement, and iron and steel industries. As Vandana Shiva argues, “the same corporate interests that

have created the crisis try to offer the disease as the cure – more fossil fuel based chemical fertilizers” (2008:2).

If capitalism remains the dominant social order we can expect unbearable climate conditions, an intensification of social and ecological crises, and “the spread of the most barbaric forms of class rule, as the imperialist powers fight among themselves and with the global south for continued control of the world’s diminishing resources. At worse human life may not survive” (Angus, 2009:232).

But – at least in the short run – as ecological breakdown accelerates, the dominant classes will survive, living in protected enclaves in what Foster calls a fortress world:

“Fortress World is a planetary apartheid system, gated and maintained by force, in which the gap between global rich and global poor constantly widens and the differential access to environmental resources and amenities increases sharply. It consists of bubbles of privilege amidst oceans of misery.” (Foster, 2009:260).

This retreat into fortified enclaves already exists in South Africa – now the most unequal society in the world – as the powerful and the privileged move into the growing number of gated communities and golf estates. The sustainability discourse has been appropriated by neo-liberal capitalism. The former CEO of Walmart once described sustainability as “the single biggest business opportunity of the 21st century and the next main source of competitive advantage.” (*Business Day*, 2010: 22). The sustainability discourse is driving a key feature of capital’s response to the ecological crisis: the commodification of nature. The immediate outcome is the deepening of both social and environmental injustice.

However the argument that the discourse of sustainability is the ideological anchor of green capitalism, does present significant challenges to a counter-hegemonic project. In this it is necessary to reclaim the notion of sustainability by linking it to considerations of social and environmental justice. At the very least, in the words of Amartya Sen, “the far reaching powers of the market mechanism have to be supplemented by the creation of basic social opportunities for social equity and justice” (1999: 143).

Contrary to those who believe that Marx was ecologically blind, he argued that large-scale capitalist agriculture had created what he called a 'metabolic rift' between human beings and nature, specifically through the loss of soil fertility, which violated the basic conditions of sustainability. Marx thought that capitalism was not capable of such consistent rational action as ecological sustainability but essential for a future society of free producers. He emphasized the need to maintain the earth for "successive generations", and wrote

"Even an entire society, a nation, or all simultaneously existing societies taken together, are not owners of the earth, they are simply its possessors, its beneficiaries and have to bequeath it in an improved state to succeeding generations..." (Capital, vol 3, 1894/1981: 911)).

Thus, as Foster points out, Marx "captured the essence of the contemporary notion of sustainable development" (Foster, 2009:181). However this concept has been perverted and has failed to deliver its earlier promise.

When the concept of sustainable development was launched at the Rio conference in 1992 it held out great potential. By the Johannesburg conference in 2002 the concept had become vacuous and was largely about sustaining economic growth at virtually any ecological cost. The concept of sustainable development says nothing about justice and has been extensively criticised for the vagueness which has enabled it to be incorporated into neo-liberal approaches (Sachs, 2001; Clapp and Dauvergne, 2011). It can mean that environmentalism is emptied of political content and defined as a public concern about environmental deterioration.

There is a danger, in other words, that 'Sustainable development' is more of a slogan than an analytical concept (Giddens, 2009:63) which can be dismissed as "something of an oxymoron" (Giddens, 2009: 68).

The discourse of sustainable development is - of course - an advance on earlier protectionist models of environmentalism in that it is concerned with 'human needs'. However, it is generally marked by technicist, pragmatic and reformist attempts to bring environmental externalities into the marketplace through ecological modernisation. The discourse of environmental justice provides a radical alternative.

As the leading US anti-toxics activist, Louis Gibbs has argued, “the growing environmental justice movement asks the question, ‘What is morally correct?’ instead of ‘What is legally, scientifically and pragmatically possible?’”

This is very relevant to South Africa. During the apartheid regime environmentalism operated effectively as a conservation strategy that neglected social needs (Hallowes 2011). 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. Environmental justice is linked to social justice as an all-encompassing notion that affirms the use value of life, all forms of life, against the interests of wealth, power and technology. Climate change is an issue of environmental and social justice because the worst effects will be in the poorer countries of the global South, rather than the Global North, the main source of carbon dioxide emissions (Cock, 2007)..

Linking this broadened notion of justice to sustainability means the necessity to rethink the notion of economic growth. Growth has come to mean “primarily growth in profits and wealth for a relative few”. (Foster, 2009:23). A transition to sustainability poses profound challenges to capital. There are simply not enough resources for all to enjoy the intensely consumerist and waste-creating lifestyles of the advanced industrial nations. As Wolfgang Sachs (2001) has argued we must abandon talk of ‘poverty alleviation’ and focus on ‘wealth alleviation’ .

Struggles for access to water and electricity

The key question about ecological sustainability is not only to protect limited resources but to ensure that resources are used for the benefit of all, not the privileged few . This means linking sustainability to justice. It is in the name of sustainability and cost recovery that many parts of South Africa have seen the introduction of pre-paid water and electricity meters in recent years. These have had devastating impacts on poor households.

Government has announced plans to reduce the country’s dependence on coal in the long run, but intensifying this dependency in the short run, as the NGP and NDP

indicate. It is also pushing for the further adoption and subsidisation of extremely expensive and dangerous nuclear power, which will not resolve the climate problem. This is instead of championing, as a top priority of the country's developmental vision, the range of renewable energies and subsidising their early implementation. South Africa has declared its target for renewable energy at 10 000 gigawatt-hours by the year of 2013 which is only about 4% of the energy currently generated. Eskom's proposed R385 billion capital expansion – much for coal –fired electricity generation – will dramatically increase carbon emissions. (The two new coal fired power stations – Medupi and Kusile will also be high water users). Medupi will be the world's fourth largest power plant. It will not provide clean, and affordable energy for the poor. Renewable energy remains politically marginalized while our solar potential is said to be the highest in the world (Sharife and Bond, 2011).

In South Africa a quarter of the population lack access to energy either due to the lack of infrastructure or unaffordable pre-paid meters. Justice demands the provision of affordable energy for all. Instead the post-apartheid state is prioritising corporate interests. At present domestic consumption (totaling 16% of the total) is charged 44c a kilowatt hour. Recently a secret dossier revealed that the parastatal Eskom has been supplying electricity to multinationals such as BHB Billiton at 12c a kilowatt hour which is below the cost of electricity production. The free allowance of 70 kilowatt hours per household per month is grossly inadequate. Linking justice and sustainability demands that energy takes the form of not only affordable but clean, and safe energy which means renewable energy (Sharife and Bond, 2011).

Domestic consumption is about 12% of South Africa's water but more than half of that goes to the largely white, affluent suburbs with their gardens, swimming pools and golf courses. The growing number of golf courses use an average of one million litres of water a day. While the Pecanwood Golf Estate near Johannesburg uses 1.5 million litres of water a day, the Pecanwood workers who live in a nearby informal settlement have to walk 5 km to buy water at R3 for 20 litres.

Pre-paid water meters have been installed in many South African townships. They have had devastating impacts on the poor. Poor rural women in KwaZulu Natal had to resort to fetching water from a crocodile infested river leading to several deaths, or from

polluted sources which led to a cholera outbreak. The basic allocation of 6,000 litres of free water monthly works out at 25 litres per person per day in an 8 person household, enough to flush the toilet twice. The amount should be compared to the average household consumption of 45 – 60,000 litres in the predominantly white suburbs (Harvey, 2007).

Access to both energy and water should involve linking sustainability and justice. The problem is the logic of commodification in the form of the cost recovery policies that constitute the foundation of neo-liberal capitalism.

Poor South Africans are not passive victims of this process of commodification of everyday life. Struggles around access to water and energy are intensifying in South Africa driven by a new kind of ‘insurgent citizen’ (Holston, 2008). Much urban, collective action in informal settlements does not only involve demands on the state to deliver substantive social citizenship, but includes insurgent actions such as illegal (and often dangerous) reconnections of the water and electricity supplies of households that have been cut off from the infrastructure.

Linking justice and sustainability would involve a higher free component of water and electricity funded through a sharply rising block tariff, in other words a much higher level of cross-subsidisation between the wealthy and the poor. Such efforts to reduce inequalities are central to eco-socialism, which for an increasing number of community activists is a precondition of ecological sustainability.

Labour’s responses: a just transition?

A range of civil society organizations, including some trade unions, came together in 2011 to form the Climate Jobs Campaign, to address the fear that the transition to ‘green jobs’ will be market driven. Research findings have indicated that jobs in renewable energy sectors, including the building of wind, wave tide and solar power, the renovation and insulation of homes and offices, and the provision of public transport, could create 3.7 million decent jobs based on the principles of ecological sustainability, social justice and state intervention. The campaign has since been focused around the demand for One Million Climate Jobs, as an achievable first step towards a just

transition to fight both unemployment and climate change. Research conducted for the campaign has shown how resources can be diverted towards “decent, people- and publicly driven jobs that reduce the causes and impacts of climate change” (One Million Climate Jobs Campaign, 2013). The around R92 billion needed for a millions climate jobs, the research has shown, can come from a range of sources, where current priorities are shifted, including a tax on idle bank deposits (R48 billion); progressive taxation (R13.5-20 billion); increased financial transaction tax (R48 billion); a carbon tax (R82 billion); halting capital flight (R100 billion a year); re-allocating investments away from coal as well as electricity towards ferrochrome and aluminium industries; a levy on key industrial electricity consumers (R8.5 billion per year); pension funds and prescribed assets (R140 billion in loans); under-utilised UIF surpluses (R6-9 billion per year).

Clearly, there is a growing movement showing how shifted priorities and political will can generate the ideas and resources necessary to create meaningful alternatives. This campaign, however, has yet to take root within the labour movement itself, which may have to do with the peculiar political situation in the country, where Cosatu, the leading labour federation, remains wedded to the tripartite alliance with the ruling party and its close ally, the SACP. As such organized labour has kept a distance from other NGOs and social movements that have a transformative agenda. There are signs, however, that a major re-alignment of forces is in the offing in the near future.

The labour movement has in recent years begun to take environmental issues more seriously. In 2013 Cosatu published a policy paper on the environment, which raises critical issues regarding a just transition from the current economic paradigm, to that of a low carbon economy. However, as Cock (2013) points out, Cosatu is caught between a reformist position - as exemplified by the National Union of Mineworkers (and environmental NGOs such as the World Wildlife Funds) which seeks accommodation within the logic of green capitalism, and market based solutions such as carbon trading, and technologies such as carbon capture and storage - and a transformative position, exemplified by its largest affiliate the National Union of Metalworkers (Numsa) and NGOs such as Earthlife Africa and Groundwork, which stress the need for a class analysis, and the recognition that the capitalist system is at the heart of the crisis of

climate change. Nevertheless, despite these differences within Cosatu, the federation's 2011 Climate Change Policy Framework identifies capitalism as the problem, and rejects market mechanisms to reduce carbon emissions. However, to date Numsa is the only affiliate that has taken climate change and renewable energy seriously, and come up with clear proposals towards a low carbon future.

In contrast the government's market-based proposals around renewable energy, where private companies (Independent Power Producers) take the lead in providing alternatives such as "onshore wind, concentrated solar thermal, solar photovoltaic, biomass, biomass, landfill gas and small hydro" (Numsa, 2012: 1). Numsa instead argues for a "socially-owned" renewable energy sector, public, community and collective ownership of land sites which can produce renewable energy; social ownership of utilities that generate, transmit and distribute energy; social ownership and control of fossil fuel industry, such as coal and synthetic fuel, to harness their revenues and fund renewable alternatives; local content requirements in the building of a renewable energy manufacturing base, in order to create local jobs; the creation of municipal solar and wind parks; the use of workers' pension funds to finance socially-owned renewable companies; the promotion of gender equity at all levels of the occupational ladder in such companies; and the setting up of a RE-bid Watch network, in collaboration with local and international friends of Numsa, to monitor the bidding process around government tenders for the provision of renewable energy (Numsa, 2012).

Numsa makes a conscious distinction between social ownership, which involves maximum democratic participation from below (by workers and citizens) and state ownership, which is bureaucratic control over public resources, increasingly within a framework of market principles where workers are exploited, and domestic consumers fleeced in the interests of large corporations, as is the case of the state-owned power utility Eskom, and the Central Energy Fund (CEF).

Numsa has also provided a detailed response to government's Carbon Tax proposals referred to earlier. It has laid out six conditions for its support for the tax, namely that such a tax must have strong regulatory 'no pass through clauses', to prevent the costs passing through to poor consumers and workers; the protection of locally produced goods from countries that have no carbon taxes, through mechanisms such as border

carbon adjustments (BCAs) or border tax adjustments (BTAs), to mitigate against carbon leakage; the guarantee that there will be no job losses; the ring fencing of carbon tax revenues for investments in renewable energy and the mitigation of existing negative externalities, as well as the creation and promotion of green jobs, local clean technology, energy efficiency and the socially owned renewable sector; the creation of a technology development fund with strong labour and community representation, to promote low carbon innovations; guaranteed re-training of workers in transferable skills, that make the transition from high carbon industries to low carbon ones; and finally the independent and transparent monitoring of compliance with mitigation measures by companies responsible for carbon emissions, including strong penalties for such conduct (Numsa, 2013).

Of course, such conditions are hardly likely to be met by a state that is ostensibly developmental, but in reality remains captive to the minerals-energy-financial complex, foreign investors and local black economic empowerment elites who all champion the benefits (for themselves) of market mechanisms. The state, as the NDP illustrates, has only engaged in symbolic policy initiatives that gives a nod to green jobs, climate mitigation, renewable energy, job creation and the reduction of poverty and inequality – but in reality pursues business-as-usual policies.

As such, genuine and meaningful public investment in the pursuit of sustainability and social justice has been exposed by Numsa and the more transformative environmental groups as being, in the final analysis, virtually non-existent. What the proposals of Numsa do mean, however, is the beginning of a re-alignment of forces within the labour movement, where the largest affiliate of Cosatu has, as before, taken the lead in the development of alternative policies, which will have a major impact on the federation's own policies. The key question, however, is whether the policy influence on the state will occur through the tripartite alliance, or whether Numsa and other more radical affiliates of Cosatu are either pushed out of the federation by those closely aligned to the Zuma-SACP class project, or they become hegemonic.

Conclusion

Corporate-led efforts to 'greenwash' the problems of environmental degradation, and the subordination of 'sustainable development' to economic growth (and corporate profits), continue to dominate global and national discourse and action. Can 'green capitalism' address the needs of all of humanity as well as preserve the planet, or will it lead to the intensification of global inequality, where green gated communities consume an unfair share of increasingly limited resources, while the vast majority of humanity continue to sink deeper into polluted poverty? In the latter scenario, increased social instability will be met by increased state repression, leading to an even more unstable planet.

Unless governments and citizens understand the common roots of environmental threats – incessant industrial growth and rampant consumerism - and take concerted action by subordinating economic growth to social need and ecological sustainability, it is not alarmist to say that we all face a crisis of civilisation.

In South Africa the labour movement has been slow to confront this issue. However, in recent years the National Union of Metalworkers of SA (Numsa) has taken up the challenge, and begun to ask serious questions about the country's green economy approach that subordinated renewable energy needs to the growth imperative of the minerals and energy complex. The labour federation Cosatu has also slowly developed a far reaching policy on the environment. Organised labour, however, have yet to join forces in an substantial sense with other organs of civil society, such as the Million Climate Jobs campaign. Much of this has to do with labour's immersion into the politics of the ruling class, which has prevented imaginative action around green economy issues.

Numsa, however, has broken the mould and decided to leave the alliance with the ruling party, and build a united front of organisations against capitalism, and for socialism. This is a slow building process and will include a wide range of organisations, including environmental groups. Given Numsa's policies around renewable energy, there is every likelihood that this movement will embrace an eco-socialist alternative to fossil capitalism.

ⁱ This does not negate the fact that some climate change is also caused by natural phenomena – however, scientists have pointed to a direct correlation between rising carbon emissions and climate change.

ⁱⁱ Much of the analysis that follows is drawn from a draft unpublished paper *An Eco-Socialist Alternative for South Africa* written primarily by Jacky Cock.

ⁱⁱⁱ The SACP (2013) produced a balanced critique of the NDP that acknowledged positive aspects of the 500 page document, such as the proposals around improving state capacity and spatial development, but agreed with Cosatu that the all-important economics chapter retain the essential features of neo-liberalism. The SACP, however, was only moved to make this assessment (after seeming to fall in line with the ANC's adoption of it) after Numsa campaigned vigorously against its economic policy proposals (much of which became part of Cosatu's critique by mid-2013).

^{iv} This advertisement appeared in the *Business Day* supplement *Earth* in 2010.

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