

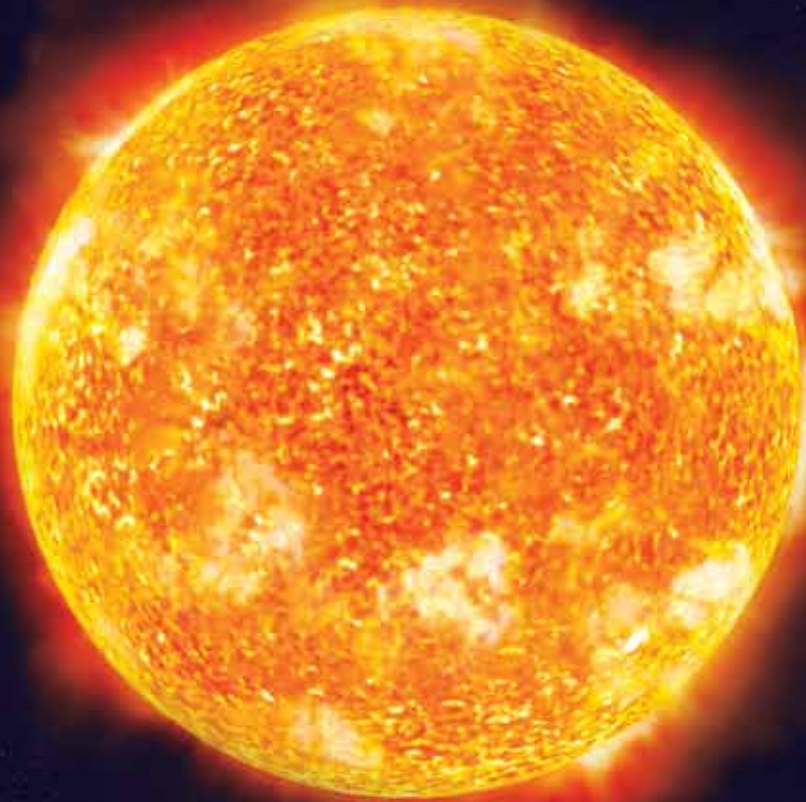


WWF

REPORT

ZA

2011



Living Planet Unit

Towards a Green Economy

Envisaging success at COP17

WWF thanks the following organisations who, through their generous funding and sponsorship, have helped the Green Growth South African project to achieve its goals of furthering a just transition towards a low-carbon economy.

The British High Commission's Prosperity Fund for making the project possible.

The National Business Initiative for partnering with Green Growth South Africa on our events.

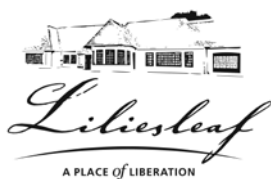
Nedbank for hosting the Pre-COP17 Summit in Johannesburg and the COP17 Side Event in Durban.

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Liliesleaf Conference Venue for hosting our Climate Finance Symposium.



British
High Commission
Pretoria



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WWF is one of the world's largest and most experienced independent conservation organizations, with over five million supporters and a global network active in more than 100 countries.

WWF's mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by: conserving the world's biological diversity, ensuring that the use of renewable natural resources is sustainable, and promoting the reduction of pollution and wasteful consumption.

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FOREWORD

South Africa is lauded for its leadership role in climate change negotiations, yet also denounced, particularly at a national level, for not walking the talk.

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Both perspectives have their truth and are advanced either to prompt greater urgency, or to protect vested and short-term interests. Some commentators insist that South Africa cannot have any significant impact on global emissions trends and that response measures such as a national carbon tax would be ‘economic suicide’, which implicitly assumes the failure of multilateral efforts to address accelerating climate change.

Compared to the USA, South Africa is a bastion against attempts to dismantle legal architecture to prompt a global transition to a low-carbon economy, but in terms of implementation of readily available measures, a myriad of missed opportunities stand out. The construction of 10 GW worth of conventional coal-fired electricity generation, at less than 40% efficiency, and the projected increase in liquid hydrocarbon fuel production and use, strains the credibility of South Africa’s mitigation pledges in international negotiations.

The country’s credibility as a leader has arguably been rescued by the recent promulgation of the National Climate Change Response Policy (NCCRP), which stipulates that a national carbon budget be determined, and largely apportioned, within two years. This will likely require making assumptions about outcomes of the UNFCCC negotiations, which currently do not explicitly address the size of a global carbon budget, nor how rights to its use will be allocated.

This publication reflects some of WWF South Africa’s efforts to articulate the opportunities and benefits of moving beyond current paradigms and to understand the challenges of moving to a low-carbon economy at the pace required. Global ecosystems are still sufficiently resilient to reverse the depletion of natural capital and to provide sufficient food, water and energy for all. This will not remain true if we do not put resource efficiency before economic efficiency and ecosystem health before conspicuous material wealth.

The daunting truth of climate change is still inconvenient for a majority of business dealings, as it refutes perpetual and exponential GDP growth as a measure of economic success.

It is so inopportune for the prospects of profits from our fossil fuel legacy that most evade the necessity of ending our addition to the atmospheric concentration of greenhouse gases. The most pressing business for UN negotiators is not the complexities of interplay between elevated levels of greenhouse gases and the declining rate of the re-absorption of carbon, but rather how we apportion our ‘use’ of the carbon cycle.

In 2009 WWF defined a 'global carbon budget' in a report, commissioned from the mainstream consultancy Ecofys, on a greenhouse gas emissions trajectory with no more than 33% probability of exceeding 2 degrees. The headline conclusion was that humanity should add no more than 870 Gt CO₂e to the atmosphere between 2009 and 2050 - less than 20% of the carbon contained in currently identified fossil fuels reserves (reserves do not include estimated resources such as shale gas in the Karoo). Based on similar modelling, the Chief Executives of Nedbank and AngloGold Ashanti wrote in an opinion piece: "If one assumes SA is allocated 1.5% of the global carbon budget... we have [at recent emissions rates]... less than 23 years before we must cease emitting CO₂." (Mike Brown & Mark Cutifani, 20 October 2011: *Global carbon budget gives all a clear and simple target*)

WWF is arguing for actions at national level that assume that the majority of humanity will succeed in acting collectively to maintain viable ecosystems into the next century. This is perhaps optimistic, in the face of on-going economic and governance failures from the fairly straight-forward market failure of climate change, to the frailties of confidence in the financial sector. Achieving the barely adequate target of minus 80% by 2050 requires rapidly changing market conditions and investment priorities, commensurate with an absolute decline in total emissions starting in the middle of this decade.

We need to envisage success in the near term. While politicians endeavour to manage expectations around the multilateral process by speaking more of what we won't achieve than what is required, civil society needs to insist on solutions, demanding instruments like emissions charges on the largely unregulated 'bunker' fuels used in international travel and trade to generate public finance based on the polluter pays principle. We must work for recognition that climate change response is not about increasing the costs of doing business, but rather ensuring that the very real and enduring costs, currently externalised from business value chains, are carried by the commercial concerns that incur these costs.

We must recognise not only the costs of environmental degradation, increasing water scarcity and addressing human health impacts of pollution, but the impacts of the globalised financial sector. Hence WWF is actively promoting the introduction of Financial Transfers Taxes, both to place a little restraint (at rates of no more than 0.1%) on financial speculation and profit-taking through currency and derivatives trading, and as a source of international public finance to address poverty and climate change. The UNFCCC processes can support, but not institute such measures, so we also look to 'Rio+20' in June 2012 - the 20th meeting of the Commission for Sustainable Development - to drive such rationalisation of global financial management.

The need for international interventions is embraced by organised labour, as expressed by the General Secretary of the International Trades Unions Council (ITUC), Sharan Burrow:

“Governments must realise that unless there is a drastic change in the way the world is governed, there is no chance that social equity or environmental protection will be achieved.”

The simplistic proposition of trade-offs between jobs and environment no longer serve to obscure the maximisation of short-term monetary returns on capital. Perceptions of conflict between development goals and a 'green agenda' are yielding to appreciation of the synergies among productive people, resource efficiency and healthy ecosystems.

However, there is reluctance to unpack the details of the urgent departure from business-as-usual that is required. Science has clearly established that, even if end-of-pipe interventions such as carbon capture and storage succeed at enormous scale, we must forego the burning of more than half of currently identified fossil fuel reserves. Yet governments continue to subsidise exploration for unconventional fossil resources. This also ignores the diminishing returns from fossil fuel use. Both energy returns on financial investment and on energy used in the supply chain - energy return on energy investment (EROEI) - are steadily declining.

While the conspiracy theories invoked to deny human agency in the over-heating of our climate system is now marginal, there is much incredulity regarding our capacity to get emissions to peak in 2015, or even this decade. The WWF vision for 100% renewable energy by 2050 is often labelled 'unrealistic', without any proposition of a more credible approach to assuring food, water and energy for all beyond 2050. Business and industry will have to deliver more than five times the economic value currently derived per unit of greenhouse gas emissions. The realism of any plan to achieve this is contingent not upon prevailing market forces, but rather upon the strength of our resolve to reform market conditions.

It is not only for the sake of our children that we must transform current investment patterns and development plans. Despite massive growth opportunities in low-carbon and resource-efficient technologies, administration of pension funds still puts short-term financial returns before the risks of stranded assets, and portfolio risk assessment is not applied to energy and other infrastructure planning.

How old will you be in 2050?



Dr Morné du Plessis
Chief Executive: WWF South Africa

GREEN GROWTH SOUTH AFRICA

PROJECT OVERVIEW

*Compiled by Richard Worthington
and Firoz Khan*

The Living Planet Unit was originated in WWF South Africa in 2008 and within a year it was clear that the over-all objective should be a just transition to a low-carbon economy. While the domestic opportunities for renewable energy development were, and remain,

the most urgent and socially beneficial avenue for de-linking economic growth from accelerating ecosystem degradation and greenhouse gas emissions, it was equally clear that the very concepts of growth and economic activity require interrogation.

The 'Green Growth South Africa' (GGSA) project compliments on-going streams of work, including an ambitious initiative to conceptualise and elaborate a 'Low Carbon Economy Road Map', consistent with our international advocacy for developing economies to institutionalise LCAPs - Low Carbon Action Plans¹. Within the WWF International Network, this feeds into an Emerging Economies work programme, while for the South Africa National Office much of this effort has been taken forward as input to the National Planning Commission. An initial report focusing on methodology, *Approaching the 'Why, What and How' of Low-Carbon Planning in South Africa*, was published mid-2011.

A grant from the UK Prosperity Fund, administered through the British High Commission in Pretoria, is providing for a nine-month GGSA programme of activities to the end of March 2012, under Programme Coordinator Alexis Scholtz, including four events and a series of briefing papers. The decision to partner on the events with the National Business Initiative (NBI) is based on the common understanding that 'the green economy' is not an add-on or an emerging sector, but an imperative and framework for all economic activity. Similarly, corporate social responsibility must become integral to all decision-making and assessment of success, requiring a reconceptualisation of the basic business case of many enterprises.

Climate Finance Symposium

A Climate Finance Symposium was convened at Liliesleaf Farm on 24 August, informed by three briefing papers [see pages 12 - 14] and with input lead by Minister Trevor Manuel. Under multilateral climate negotiations, Manuel co-chaired the Advisory Group on Finance (AGF) that reported to COP16 in December 2010 on "innovative sources of finance". However, with bank and currency bail-outs becoming commonplace, he noted that this term was already losing favour. Sadly, saving the economy, or rather the current global financial system, and saving the climate are still widely perceived as competing objectives.



"As South Africans we have a fault-line. We don't respond to opportunity, we respond to crisis," Manuel observed at the Finance Symposium. "We can't wait for some cataclysmic event to... ..be prepared to break some eggs in the transition."

¹ The Copenhagen Climate Treaty produced by a range of NGOs through 2008 called for Zero Carbon Action Plans for industrialised countries (a more inclusive list than those noted the Annex 1 of the UNFCCC adopted in 1994), and LCAPs for all developing countries not recognised as Least Developed Countries (LDCs). In international negotiations the preferred language, particularly for requirements of emerging economies, is now: Low Emissions Development Strategies

The most animated of the three afternoon break-away discussions considered putting a price on carbon. WWF South Africa has been advocating for the introduction of an economy-wide carbon tax in February 2012, with a substantial share of revenue directed to off-set price impacts on the poor, as well as providing funding for adaptation projects². One indication of the volatility of views and positioning on global financial issues is the fact that at the symposium the prospects of Financial Transactions Taxes serving as a source of international climate and development finance were largely regarded with scepticism, yet by October the Minister of Finance and President Zuma were explicitly promoting this option.

A second symposium was planned for October, but in light of burgeoning activity and proliferation of COP17-focused events, plans were revised and a briefing document was prepared as input to a similar event convened by the National Planning Commission [see pages 15 - 18]. Efforts were then directed to elevating the third event to a national Summit, taking stock of not only climate negotiation sessions, but also the G20 Summit, rapid evolution of geopolitical leverage and growing pressure for the financial sector to be held accountable.



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"I never imagined I'd be delighted to defer and redesign a major event in deference to somebody else's plans. On the day that invitations for our 'Just Transition Symposium' were being readied for despatch, we learned that the National Planning Commission had scheduled a stakeholder workshop, on the very same date and theme. We will instead convene a symposium in early 2012 to consider the implications - and hopefully opportunities - for a just transition arising from COP17." - Richard Worthington

Pre-COP17 Summit

The project's second event, the WWF NBI Pre-COP17 Summit, allowed the opportunity to address two gaps which were apparent in the events in the run up to the COP17 negotiations. The first was the provision of a multi-stakeholder platform allowing civil, public and private sectors to engage with each other around prospects for COP17 and key approaches offered to drive a just transition towards a low carbon-economy. The second need was to encourage South African stakeholders to engage with the opportunities and challenges presented by a regional approach to addressing climate change and sustainable development.

Participants were welcomed by Judge Thabani Jali, Chief Governance and Compliance Officer of Nedbank, which provided the venue and catering as a donation in kind: "Climate change is not a secondary issue to the imperatives of employment and poverty. 'Green' is not an issue or approach that should be exploited for reputational gain. It is an investment that will deliver lasting returns to every member of society."

Minister of Environmental Affairs Edna Molewa delivered a keynote address that put emphasis on the weight and immediacy of responsibility: "We have the message for COP17 of Saving Tomorrow, Today. It is high noon. Today must be today." The Minister asserted that civil society participation is essential to successful negotiations and that mobilising finance from developed countries remained a central imperative: "We require urgency and determination. We need to see the colour of money, at some stage."

² See our position paper at www.wwf.org.za/carbontax



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Minister of Environmental Affairs Edna Molewa acknowledged the need for South Africa to move to a low-carbon economy.

The Minister noted the challenging and rapidly evolving global economic situation, saying; “we need to work beyond interim measures; we don’t assume this recession will last forever.” She also acknowledged the need for South Africa to move to a low-carbon economy. “Continuation of carbon emissions is not an option for us, as we have often said. We will have to decommission old coal plants - Medupi and Kusile should not be seen as additions to our emissions, but rather as replacement for the old dirty plants we are still running.”

Delegates repeatedly alluded to the crisis in developed countries and the economic and strategic reorganisation of the previous international hierarchy, the cementing of trans-continental alliances and their increasing assertiveness in global governance and the significance of South Africa joining the BRICS emerging economies group - Brazil, Russia, India and China. They also noted regime changes in North Africa and the Middle East, the rise and dominance of sovereign investment funds, the maturing of various African economies that boast the highest return on investment³ and a declining risk profile.

Tasneem Essop, leader of WWF International climate team, opened her presentation by stating “the politics is not matching the science”. Noting a range of reasons why finalisation of a comprehensive agreement is not possible in Durban, she said, “We must have a decision for a second commitment period of the Kyoto Protocol, 2013 to 2017, even if this is a political decision, rather than the complete set of

³ According to UNCTAD’s 2008 World Investment Report, as a result of the commodity price boom, income on inward FDI grew by 31% in 2007, and the rate of return on investment in Africa was the highest among developing regions in 2006 and 2007. A large proportion of FDI in 2007 concentrated on expanding projects related to natural-resource exploitation, partly through reinvested earnings. Consequently, the share of reinvested earnings in total FDI inflows increased to 28%. Among the major natural-resource producers, FDI in natural-resource exploitation contributed to accelerated export growth. Foreign-exchange reserves in the region grew by some 36% in 2007.

legal amendments required before the end of next year.” She then focused on the imperative to build stronger foundations, emphasising that COP17 must secure an explicit mandate to develop a fair and ambitious agreement that is binding on all parties, including the USA, by no later than 2015. This should include a third commitment period from 2018, in which currently emerging economies should be ready to take on legally binding targets.

Summarising WWF’s current climate advocacy objectives (see pages 22 - 25) Essop noted developments at the G20 Summit that, notwithstanding the dominance of the status of the Euro, were encouraging for the prospects of innovative sources of finance. While South Africa’s explicit commitment to a Pioneer Coalition for introducing Financial Transfers Tax would be more pertinent to the Commission on Sustainable Development’s Rio+20 meeting in June, there are real prospects for the Durban COP making decisions on ‘bunkers’ - putting a price on fuels used in international trade and transport - with provisions to ensure no net incidence for developing countries. Operationalising decisions previously made for implementing adaptation is especially urgent to ensure a relevant legacy from this African COP.

There was broad agreement that the ‘Green Economy’ is not a distinct sector, but rather a shift in priorities and practice with great potential to generate employment, transform work and production patterns and deliver sustainable economies and societies. South Africa’s response to climate change, most delegates believed, could be the lever to activate more responsive, socially inclusive and democratic approaches to development. Implementing policies to arrest global warming, including the appropriate pricing of carbon and accounting for other externalised costs, can be an important part of economic recovery.

Business representatives tended to focus on matters of measures, metrics, reporting and projects and to emphasise the importance of individual actions and scaling up efforts already being undertaken, noting that incremental action, while not sufficient, was better than no action. There were concerns that for South Africa, addressing climate change could come at a cost to growing the economy, creating



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Pre-COP17 Summit: Tasneem Essop, Joanne Yawitch and Mmakgoshi Phetla-Lekhethe discussed a regional approach to generating climate finance



Pre-COP17 Summit: Belynda Petrie, Rubina Haroon, Bruce Haase spoke on low-carbon development strategies



Deputy British High Commissioner Martin Reynolds provides a British perspective on prospects for COP17 in South Africa

jobs or boosting international competitiveness. It was nevertheless argued that domestic action should not wait for a fair, ambitious and binding global agreement. Jacoleen Simpson of Nedbank presented analysis of trends showing that green investments deliver a higher return than business as usual.

A labour representative asserted that, against the backdrop of high levels of income and asset inequality and the structural exclusion of the poor, redistribution is a prerequisite for the eradication of poverty and use of the collective resources of society should be for the benefit of all and not the privileged minority. Reservations were voiced about the use of and undue emphasis on the Clean Development Mechanism by the private sector. There was general agreement on the need for accelerated investment in research and development and state support not just for local innovation, but also domestic deployment of local innovations.

Joanne Yawitch, CEO of the NBI, argued that the very nature of private sector activity was geared towards risk management, of which climate change should be a central consideration, prompting far greater business involvement in adaptation research and implementation. Yawitch expressed concern at the proliferation of international frameworks and initiatives, particularly financing mechanisms that largely remain empty vessels. The moral imperative for developed countries to assist developing countries should not inhibit South Africa from planning and investing for the long term.

The first day concluded with screening of a live web broadcast from the UK of a debate with a youth audience involving Secretary of State for Foreign and Commonwealth Affairs William Hague, Secretary of State for Energy and Climate Change Chris Huhne, Chief Executive of the British Council Martin Davidson and South Africa's Ambassador-at-Large for COP17 Nozipho Mxakato-Diseko.

Bruce Haase, WWF International head of Sustainable Business engagement, opened the second day with discussion of the motivators and drivers of private sector investment and how creatively engaging them can leverage opportunities to maximise society-wide environmental gains and benefits. He reported on



Pre-COP17 Summit: Saliem Fakir (chair), Jacoleen Simpson, Steve Nicholls and Envor Barros as Labour weighs in

proceedings and resolutions of the second B4E Conference co-hosted by WWF in London in September, including growing support for more comprehensive, transparent and integrated reporting, a broad range of instruments to rationalise markets, and the need for government intervention and regulation.

A comprehensive review of the UNFCCC negotiating tracks and organisation of issues was provided by Belynda Petrie of One World, as well as a sketch of country groupings and their positioning*. Noting a bias in international cooperation towards supporting mitigation, she called for meeting the challenge of building a case for adaptation, including in the *Low-Carbon Development Strategies* that developing countries have agreed to produce under the Cancun Agreements.

Rubina Haroon, Policy and Partnerships Advisor for WWF Africa, a guest from Nairobi, spoke of both challenges and opportunities for Africa. “We already have many countries, especially the heavily indebted poor countries, in severe crisis. Climate change will increasingly exacerbate on-going desertification and diminishing water availability. However, in many ways Africa is a new frontier, with massive opportunities for innovative development approaches.” Having come from deliberations at the African Preparatory Conference for Rio+20 (the next meeting of the UN Convention on Sustainable Development), Rubina reported some leaders emphasising that Africa can and must scale up, without waiting for the support that is due from industrialised countries. Haroon was encouraged by the Pre-COP17 Summit, reflecting upon its conclusion: “It is great to see a realisation among all stakeholders in South Africa that this affects us all. It is refreshing to have people combining hard-nosed realism with a positive approach to collectively seeking solutions that address both job creation and vulnerability climate change impacts. This event really succeeded in drawing out the linkages between addressing poverty, climate change and sustainable investments.”

* Presentation available at www.wwf.org.za/what_we_do/climate_change/green_growth_south_africa/



The Pre-COP17 Summit team: (from left to right) Richard Worthington, Jaco du Toit, Bulelwa Matiwane, Carol Harrybarran, Rubina Haroon, Firoz Khan, Saliem Fakir, Connie Nagiah, Malango Mughogho, Alexis Scholtz, Bruce Haase, Louise Scholtz, Isaac Chokwe, Laura Tyrer, Tasneem Essop, (In absentia: Morne du Plessis)

COP17 Event

The third event will include the formal launch of this publication, on the second day of COP17 in Durban. A final briefing paper will be commissioned to analyse the COP outcomes and general prospects for an effective multilateral system, including opportunities for progress at the Rio+20 meeting of the Commission on Sustainable Development in June 2012, to inform a multi-stakeholder Post-COP17 Symposium. We hope this may also lead to an extension of the Green Growth South Africa project.

Green Growth

Contestation of terminology is not just the domain of climate negotiators. As Sustainable Development has become tired, not least through abuse in opportunistic marketing, unsupported by verifiable reporting, the lexicon on environmental goods and services is struggling with association with the commodification of public goods, including the carbon-cycling capacity of the planet's climate system. *'Climate Solutions 2'*, a report published by WWF in October 2009, sketched out a scenario for 'low-carbon re-industrialisation' - a phrase intended to avoid suggestions that a low-carbon future must be low-tech or lack sophistication. What it does not capture is the potential for developing countries to learn from the consequences of previous industrialisation pathways, if international cooperation supports the dissemination of best available technologies.



“This new economy will still see growth - but the emphasis should be on ‘social growth’ whereby the number of good jobs increase; the incomes of the poor are raised; the deployment of climate-friendly and other green technologies are advanced; the availability of healthcare becomes more widespread; and security against the risks of job displacement, old age, and disability are enhanced.”

The headline findings of Climate Solutions 2** noted that: 24 critical low-carbon resources and industries will be needed to meet the required emissions target; this implies that schemes such as carbon pricing and trading - which foster development of one technology after another, with least-cost technologies being activated first - are not sufficient by themselves. Instead, international policy is required to simultaneously drive the worldwide ramping up of the full suite of low-carbon industries and practices identified in this report. The good news is that the resources, technologies and industries required for the transformation are all available; the rates of growth are plausible and the trillions of dollars of investment required are within the capacity of the institutional investment sector.

The word *green* is gaining renewed respectability, particularly in light of the spectacular performance of renewable energy industries, while the term *growth* is subject to some overdue scrutiny and qualification. ‘Green Growth’ does not necessarily require increased volume of throughput and is not anathema to a ‘steady state’ economy. Instead it is the antithesis of stagnation. Green Growth is still being characterised and many coherent articulations are emerging, including the following, by our colleagues in organised labour:

The International Transport Workers Federation (ITF) in a 2010 Congress discussion document “Transport Workers and Climate Change: Towards sustainable, low-carbon mobility”, spelt the argument out further. “This new economy *will* still see growth - but the emphasis should be on ‘social growth’ whereby the number of good jobs increase; the incomes of the poor are raised; the deployment of climate-friendly and other green technologies are advanced; the availability of healthcare becomes more widespread; and security against the risks of job displacement, old age, and disability are enhanced. Policies are needed that temper traditional economic growth while improving social and environmental wellbeing - policies establishing, for instance, increased “time wealth” by reducing the number of hours at work and lengthening vacations. For the global South, top priority must be given to providing space for countries to develop their productive forces in an environmentally sustainable way.”

The [social] national project to achieve green growth of the South African ‘economy’, in the most inclusive understanding of economic activity, requires immediate implementation of a range of options that have already been under discussion for years. The GGSA project is but a moment in what will hopefully become a tidal surge of rational behaviour and rapid response to avoid the avoidable, to do the next right thing to improve our odds of averting runaway climate change.

** Publication available on www.panda.org

BRIEFING PAPERS

The first publication was: ***The Regulatory Context for Responsible Investing in South Africa*** - A high-level overview of the legal and self-regulation framework for sustainable investment by institutional investors in South Africa, authored by Aimee Girdwood, which included the following conclusion, here slightly edited:

While the effective implementation of longer-term and more sustainable strategies that integrate environmental, social and governance (ESG) factors into investment decisions remain a work-in-progress, recent developments in South Africa's legal and self-regulation frameworks reflect considerable progress in strengthening market regulation and creating an enabling framework for the greater integration of such factors into the overall investment philosophy of institutional investors.

Regulation 28 to the Pension Fund Act, promulgated in March 2011, recognises that ESG factors must be considered for investors to discharge their fiduciary duties and requires that they be addressed in the investment policy statements of funds. It requires that a fund and its board must, both before making an investment, and while invested in an asset, consider ESG factors and the impact these may have on the long term performance of the investment. It enables major institutional investors to make larger allocations to private equity. It will inform the court's view of the relationship between fiduciary duties and ESG factors.

One of the most effective ways of ensuring the implementation and effectiveness of Regulation 28 is accountability and the reaction of the market. Institutional investors must disclose and be transparent about how ESG considerations underpin their investment decisions and actions. This will enable beneficiaries, asset managers and companies to understand investors' expectations and requirements for ESG factors to be integrated in the conduct of their operations. In this way, a potential basis exists for each party to be held to account for their decisions and actions.

The Code for Responsible Investing in South Africa ("CRISA") is a mechanism through which this accountability is made possible. It requires, *inter alia*, that institutional investors disclose the policies underpinning their investment decisions and actions. Although a non-mandatory mechanism, the fact that CRISA has the backing of a number of key players in the investment industry, including the Government Employees Pension Fund (GEPF), make signing up to and applying the code a good business decision for institutional investors and their asset managers. It is understood that the GEPF would withdraw funds from any investment manager not applying the code.

In addition, other non-mandatory codes like the King Code of Governance for South Africa ("King III", - adopted in 2009 by the Institute of Directors of Southern Africa) and the Principles for Responsible Investment (PRI - launched in 2006 by the United Nations) have placed renewed focus and emphasis on transparency and good corporate governance. These and other recent advances requiring companies to report on performance in terms of both finance and sustainability in an integrated and holistic manner have created an environment in which business is increasingly focused on, and increasingly being held accountable for its impact on the environment and community in which it operates.

What remains to be seen is whether these market-based incentives will prove effective tools for implementing the principles set out in Regulation 28 or whether additional regulatory measures that encourage active institutional investors and generally incentivise "long-termism" thinking by investors will be required.



THE CODE FOR RESPONSIBLE INVESTING IN SOUTH AFRICA REQUIRES THAT INSTITUTIONAL INVESTORS DISCLOSE THE POLICIES UNDERPINNING THEIR INVESTMENT DECISIONS AND ACTIONS

Imperatives for Pricing Carbon - The case for an early start, was authored by Roula Inglesi-Lotz and James N. Blignaut. In a comparative analysis, the paper highlights the advantages and disadvantages of two carbon pricing mechanisms - Cap-and Trade and a Carbon Tax. The following excerpt is taken from the conclusion:

Market prices act as information signals. They tend to reflect society's appetite for a specific good or service. Often, however, that price does not reflect the true cost of producing such a good or a service and it becomes necessary, no - imperative - to internalise those external costs. With respect to carbon there are essentially two major families of policy instruments available to internalise the negative externalities related to the carbon emissions. Although indirect measures such as tax rebates to subsidise cleaner technologies are available, there is a general tendency for more direct interventions in order to put a price on the externality. This paper examined the case of two such direct pricing instruments: carbon tax and a cap-and-trade system for the case of South Africa.

Although the two approaches theoretically offer the same results under certain conditions, the practical differences are important. Carbon tax provides a fixed price for carbon, has the potential for a wider inclusion of participants, is relatively easy to administer, and revenue collection will be relatively easy and stable. Its main disadvantage is that it cannot provide certainty in the achievement of the targeted emissions reduction. On the other hand, cap-and-trade systems can provide a higher certainty of reaching specific emissions targets, but at the expense of more volatile prices and revenues, and possible administrative difficulties.

WWF South Africa is advocating the introduction of an economy-wide carbon tax in 2012. This will not rule out developing a national carbon trading system, either within sectors, or across the economy and potentially linked to international trading schemes, as a hybrid system is possible. However, the work required to establish a ceiling on emissions - setting a national cap within which to trade - is in its infancy.



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Day 2 at the Pre-COP17 Summit: Saliem Fakir, Karin Ireton, Belynda Petrie, Bruce Haase

The following table is adapted from the Briefing Paper: Imperatives for Pricing Carbon **Comparative evaluation of carbon tax and cap-and-trade systems (Advantages A and Disadvantages D)**

Carbon tax	Cap-and-trade
Economic efficiency	
<p>A: Firms allowed greater flexibility to decide the timing of emissions reductions under varying economic conditions. Avoids price volatility.</p> <p>D: Built-in policy adjustments for inflation might affect the economic efficiency of a carbon tax. Participants would have to pay the tax and the costs of low-carbon technologies, but rebates could support the latter.</p>	<p>A: Participants can choose more cost-effective mitigation options available within a market. Provision for price floors and ceilings can contain price volatility.</p> <p>D: An inflexible cap-and-trade system defines the time period in which the participants can change their behaviour even if the economic conditions are not appropriate. The price of credits can vary substantially.</p>
Environmental efficiency	
<p>A: With appropriate revenue recycling choices, a carbon tax can achieve similar results as the cap-and-trade with regards to the reduction of emissions.</p> <p>D: A carbon tax is less certain to achieve specific emissions reductions, especially in the short-run, and can be advantageous to high income users who can afford the tax without changing their behaviour.</p>	<p>A: An inflexible cap-and-trade system should achieve specific emission targets, regardless of the price. This fits better with global agreements on time-bound reductions.</p> <p>D: A low price can be unattractive for market participation. Also, if the cost of credits is small relative to the company's total operating costs, there will be no incentive for improving their emission profile.</p>
Public finance considerations	
<p>A: Carbon tax can raise public revenue directly, in a way that is predictable and relatively stable.</p> <p>D: There is a limit on the revenue a carbon tax will generate, unlike in a cap-and-trade system, where revenue will depend on the amount of credits sold and the price they attract.</p>	<p>A: Cap-and-trade systems can raise revenue by auctioning (part or all) the tradable permits.</p> <p>D: Cap-and-trade systems create a new market for carbon credits. Revenue for the government is only raised if credits are sold to emitters and such revenue will be unpredictable.</p>
Welfare impacts	
<p>A+D: The cost can be carried by producers and/or consumers (passed on through price increases). Use of the revenue will determine the progressive or regressive role of the tax in addressing poverty and inequality.</p>	<p>A+D: The cost of the pricing mechanism can be carried by producers and/or consumers (passed on through price increases). If credits are sold by government, revenues can be used to reduce poverty and inequality.</p>
Administrative complexity	
<p>A: Carbon tax can be implemented based on already established taxation mechanisms, and hence the administrative burden will be relatively low. South Africa's existing taxation system is effective in tackling corruption incidents.</p> <p>D: The administrative complexity of monitoring and verifying the emissions to be taxed is challenging, but is already mandated in legislation. Proxy mechanisms, such as a tax on fossil fuel inputs, can approximate an emissions tax while a regulated emissions reporting system is established.</p>	<p>A: Past applications have shown that the cost can be moderate if the market is included in the mandate of established, effective and independent regulators.</p> <p>D: The administrative complexity of monitoring and verifying the emissions to be credited is challenging and will require a new administrative infrastructure, including an allocation system that will be strongly contested. There is greater scope for corruption in quota-based regimes. Linkage to international trade provides further scope for corruption and undermines environmental efficiency.</p>
Global implementation	
<p>A: While a global tax can be far more transparent than a trading system and differential rates and/or exemption of countries with very low emissions can ensure an equitable approach, political agreement on a carbon tax covering both developed and developing countries is at best a very distant prospect.</p> <p>D: Implementation will be complex due to differences in national taxation systems and shifting currency exchange rates.</p>	<p>A: Cap-and-trade can be and has been implemented in multi-country systems, but the net environmental impact is uncertain and contested and there is very limited (and untried) scope to advance equity.</p> <p>D: An international market tends to create losers and winners among countries and to entrench the status quo. Prospects for political agreement on a global allocation system, with national caps, may be no better than for agreement on a global tax regime.</p>

A JUST TRANSITION TO A LOW-CARBON ECONOMY

A NEW DEVELOPMENTAL APPROACH

(Summation of Briefing Paper)
by Alexis Scholtz

“The argument that the expansion of the economic system as we know it will make it possible for [poor] people to secure their rights is simply not realistic. If the world’s inhabitants generated greenhouse gases at the same rate as some developed countries, we would need nine planets” (UNDP, 2007 in ILO, 2010)

The current global political and economic model of capitalism is at a turning point. Evidence of its dysfunction - like the recent spate of financial crashes - has been excused in the past as an accepted part of the capitalist boom-bust cycle. The full costs of the current capitalist model include:

- a proliferation of economic crashes fuelled by irresponsible financial activity,
- rampant consumption of limited environmental resources in a way that destroys the global ecosystem’s ability to regulate and regenerate itself,
- 20% of the world’s population consume 80% of the world’s resources
- escalating risks of runaway climate change if we do not immediately reduce our emissions.

These true costs indicate that it is no longer possible to justify sustaining the dominant global model of capitalism, nor can we expect it to solve the systemic, compounded social, economic and environmental crises that we find ourselves in today. We can no longer afford to walk on egg shells for fear of the discussion about our future dissolving into an ideological mud-slinging match.

Human rights are at stake in the choice which is currently sanctioned: allowing prosperous individuals the right to excessive consumption, to the detriment of others - both now and in the future. With one of the most progressive constitutions in the world, South Africa has the opportunity and responsibility to lead the way to a new developmental approach that seeks to protect and enhance the human rights of all. In support of a new developmental approach, the Living Planet Unit’s work focuses on more equitable developmental approaches which look to the millennium development goals and not exclusively to Gross Domestic Product (GDP) for measurement of success.

What is a Just Transition?

The Congress of South African Trade Unions (Cosatu) defines a Just transition as:

“changes that do not disadvantage the working class worldwide, that do not disadvantage developing countries, and where the industrialised countries pay for the damage their development has done to the earth’s atmosphere. A just transition provides the opportunity for deeper transformation that includes the redistribution of power and resources towards a more just and equitable social order.”

If South Africa wishes to ensure a decent standard of living and a resilient political economy going forward, it will have to engage in the enormous and urgent task of shifting our current resource intensive, extractive economy to a low-carbon, sustainable model, within the limited window of opportunity we have to ensure that our economy is resilient. In this transition, we have a constitutional obligation to ensure that poor and future generations are able to meet their needs.

What's wrong with 'growth'?

South Africa is one of the most unequal societies in the world. Traditional economic policies insist that 'growth' will get us out of poverty and unemployment. The concept of 'growth' is problematic as, in many cases, the true costs to the planet and people are not incorporated into perceptions of success. Profits are achieved at the expense of downstream and future social, economic and environmental opportunities and impacts.

Growth in itself is not bad. It is the type of economic model which is the issue. Many alternatives exist - social economies which exist on a trade-off between economic and social values, decoupling resources from profits, cooperatives, mutual societies, community-based organisations, private-public partnerships, moving to service-based economies - to name but a few vehicles. Many governments have used the excuse of the risk of job loss as a reason not to enforce more sustainable economic policies. This culture of short-term planning must be overcome in order to ensure a resilient and equitable South Africa. A Just Transition is a supporting mechanism rather than a barrier to climate action. Economic democracy is core because both developmental and climate change agendas aim to address a model that is not geared to afford the majority of the planet the same economic rights and opportunities that it offers a select few. In South Africa, first generation rights refer to the right to franchise and full citizenship. Second generation rights - which include the right to basic services, housing, economic and food security, and safety - are still an aspiration for most South Africans. It is not just climate change that poses a threat to the poor and workers. Water, strategic metals, land, ecosystem services and fuel resources are all in limited supply. Limited resources require determination of who has access. Government policy and implementation to date have not ensured that such resources will be sustained long enough to meet economic democracy goals.

What does a low-carbon economy mean for labour?

The principle of equity requires developed nations¹ to allocate the largest part of the global carbon budget to developing countries, including emerging economies, like South Africa, that are responsible for only a small portion of the emissions that have accumulated in the atmosphere. The logic behind this is that Annex 1 countries have been using the earth's resources, including atmospheric space², to build wealthy and powerful nations.

Moving to a low-carbon economy will take huge financial and technical resources and emerging economies will need to mobilise these resources locally and internationally. As it stands, if emerging economy countries and Annex 1 countries were both required to start absolute emissions reduction, this would leave emerging

¹ Listed in Annex 1 of the Convention and often referred to as Annex 1 countries

² More literally, what has been exhausted is the carbon-cycling capacity of our ecosystem, such that human-induced emissions are accumulating in the atmosphere to the point that the climate system is over-heating and becoming increasingly erratic.

economy countries at a competitive disadvantage. This in turn will affect the poor. The better solution - as opposed to waiting for international pressure - appears to be finding ways to start reducing our emissions now and ensuring a more sustainable use of our country's resources, while using the opportunities to deepen economic democracy. This means going beyond minor tweaks to existing economic mechanisms and policies like inflation and budget deficit. It requires a transition to a new economic model.

This new model will include mitigation and adaptation measures to address climate change impacts and unsustainable resource use. Mitigating measures and mechanisms to mobilise finance, like a financial transfers tax, bunker fuel levy, emissions cap and trade systems and/or carbon taxes, will all have effects on labour. Ensuring that these do not have perverse effects on employment and wealth distribution require that we uphold values of economic democracy in our approach and planning.

Strategies and challenges for a Just Transition

Dominant strategies to deal with climate change could potentially negatively affect a Just Transition. Some key areas are highlighted in this section. These are not reasons for not pursuing a transition, but if we are to plan responsibly and for success, we need to be aware of the complexity of the challenges if we are to address them adequately.



**FOR A JUST
TRANSITION,
GROWTH NEEDS TO BE
MEASURED IN TERMS OF
TARGETS FOR HOUSING,
HEALTH, EDUCATION,
ACCESS TO SERVICES
AND EVEN IN TERMS OF
LEISURE, HAPPINESS AND
WELLBEING
(COSATU, 2011)**

On investment in research and development:

Lack of investment in research and development in climate change mitigation and adaptation means that industries end up using mitigative measures that negatively impact society - reducing production costs, closing factories and sourcing cheaper labour supply elsewhere. Such behaviour needs to be guarded against. Companies need to invest in order to reduce the emissions of their activities.

On market mechanisms:

In its rejection of market mechanisms, Cosatu points out the dangers of fixing problems with the same tools that were used to create them. For example, the space for renewables has been made within a framework of the mineral-energy complex, casting doubt on transformation being taken seriously. This highlights the need to address political power and economic values around accumulation and ownership. The value of market mechanisms should not, however, be ruled out altogether. Properly researched and applied taxes can be used to influence supply and demand of carbon intensive products and processes and can also generate funds for mitigation and adaptation, as well as improving access to basic services.

On government commitment to labour intensive reindustrialisation:

Safeguards must be in place to ensure the "development of new green industries does not become an excuse for lowering wages and social benefits" (Cosatu, 2011). Education and skills need to be developed in conjunction with planning for the development of labour-intensive industry sectors.

On clarity of trade-offs:

At present there is little clarity on what types of trade-offs there are in reducing carbon. With industries like mining and agriculture competing for a scarce water resource base, government needs to develop policies to regulate resource use. Market-led strategies are not sufficient to drive optimal resource efficiency. Arguments for long-term investment should be wary of asserting that avoiding cataclysmic climate change effects is a reward and not a necessity.

On Green Jobs:

As many green job opportunities are in emerging areas of work, steps must be taken to ensure that they conform to the tenets of 'decent work'. The International Labour Organisation Decent Work Agenda includes the four basic attributes:

*adequate pay (equal remuneration), accessibility (upward mobility), accountability (social protection), and advocacy (social dialogue)*ⁱ

Most green jobs are expected to be in the secondary sectors of construction, manufacturing and energy production, where women are significantly under-represented. Men dominate the better paid jobs in engineering, financial and business services, where the bulk of green service positions are likely to be created. Proactive strategies are required to increase skills training and affirmative hiring processes are needed to open up more jobs to women.

The Developmental State: a possible economic model to support a Just Transition

The political economic model of a developmental state requires similar responses, policies and mechanisms as an effective response to climate change. Developmental state models require labour-intensive industrialisation designed to move away from extractive models that do not encourage diversification or beneficiation activities. An important component of this model is greater focus on building a regional economy and industrial strategy, instead of being export-orientated.

Trade policies must take a back seat to an industrial and broader development policy approach featuring state-led interventions that drive and promote sectoral growth and development. It should be noted such strategies do not avoid the common structural dysfunctions which also face capitalist approaches - corruption, lack of education and skills, crime, cronyism and mismanagement of government services.

Measuring the success of a Just Transition:

For a Just Transition, growth needs to be measured in terms of targets for housing, health, education, access to services, and even in terms of leisure, happiness and wellbeing (Cosatu, 2011). If we continue to evaluate the success of our economic policies and management upon a one-dimensional indicator such as GDP, then there is little hope of us having the insight and maturity to achieve a Just Transition. We need a well-planned and supported transition. If we expand our concept of what determines successful 'growth', we can start to assess the decisions and choices required to achieve a Just Transition to a truly sustainable economy, embedded in a healthy society and environment.

ⁱ Stevens, C. 2009. *Green Jobs and Women Workers: Employment, Equity, Equality*, Draft Report by International Labour Foundation for Sustainable Development (Sustainlabour) in Naudé, 2011. Presentation to FEDUSA on Climate Change.

HOW TO ACHIEVE 100% RENEWABLE ENERGY BY 2050

[summary of WWF's Energy Report]

That the world faces an energy crisis is beyond doubt. There is a pressing need to secure a sustainable energy supply as demand for fossil fuels outstrip environmentally and economically sustainable supplies.

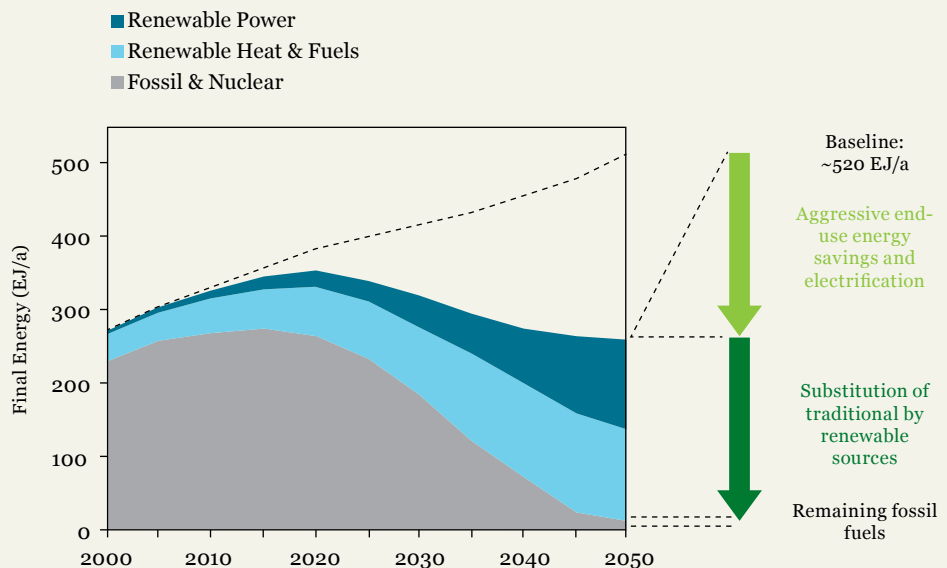
A lack of access to energy is one of the main causes of poverty. On top of this, the world needs to start drastically reducing CO₂ emissions within the next few years if we are to have the best chance of avoiding catastrophic climate change. WWF views the achievement of a world powered by 100% renewable energy as the way to remedy this.

The Energy Report

In an effort to establish the feasibility of a 100% renewable energy vision, WWF commissioned energy consultancy Ecofys to investigate, resulting in the 2010, WWF publication *The Energy Report: 100% Renewable Energy by 2050*. This ambitious, science-based examination of a renewable and clean energy future on a global scale, shows that it is technically possible to achieve almost 100% renewable energy sources within the next four decades.

The Ecofys scenario has at its core two principle energy evolution trends: aggressive energy savings and electrification to reduce demand; and substitution of fossil fuel energy sources with renewable technologies.

Figure 1: Evolution of energy supply in the Energy Scenario, showing the key developments.



SOURCE: The Ecofys Energy Scenario, December 2010.

Why 100% Renewables?

Switching to renewable energy is not just the best choice. It is our only option. The way the world produces and uses energy today is not sustainable.

Access to energy is a question of equity. Currently, 1.4 billion people lack access to reliable electricity or safe cooking energy. More than 2.7 billion rely on traditional bioenergy, such as wood and charcoal for cooking and heating, which comes with serious economic, environmental and health consequences. Renewable sources of energy offer the potential to alleviate energy poverty, without the environmental impacts of deforestation and harmful emissions.

The energy sector is responsible for around two-thirds of global greenhouse gas (GHG) emissions, an amount that is increasing at a faster rate than for any other sector. Coal is the most carbon-intensive fuel and the single largest source of GHGs. If we are to avoid runaway climate change, we will need to reduce our global GHG emissions to at least 80%, based on 1990 figures, by 2050. This could be achieved by the widespread implementation of renewable energy options.

Renewable energy makes long-term economic sense. Our dependence on finite fossil fuels will mean increasingly higher and more volatile energy costs in the future as resource scarcity increases. According to the International Energy Agency, production from known oil and gas reserves will fall by around 40% to 60% by 2030.

As relatively accessible resources such as coal, oil and gas deposits diminish and supply disruptions, accidents and disputes over energy resources continue to challenge energy security, ways to exploit currently unconventional fuels, including deep water oil, shale gas and tar sands, may become more attractive. However, these have even worse environmental impacts than carbon. Nuclear energy options too have negative environmental impacts. In addition to being risky and expensive, the process produces dangerous waste that remains highly toxic for thousands of years. What would we do with 100 000 tons of toxic waste in the next 10 000 years?

Instead, no-regret technologies that are easy to implement and do not have adaptation costs are a much more rational option to meet energy demand.

Challenges

While the report proves the technical feasibility of reaching a 100% renewable energy target, it highlights a number of difficult challenges, including social, environmental, economic and political issues. These are:

- **Energy Conservation:** We need to reduce demand by improving energy efficiency and reducing wasteful use of energy
- **Electrification:** Because electricity, as well as heat, are the forms of energy most easily generated by renewables, we need to maximize the use of electricity and direct heat, with improvements to electricity grids to support this
- **Equity:** A sustainable energy future must be an equitable one. Its impact on people and nature will greatly depend on the way we use our land, seas and water resources. Changes in lifestyle also have a critical role to play
- **Land and Sea Use:** Bioenergy but also other renewable energy sources require land or sea space and need careful planning
- **Lifestyle:** Travel modes and meat consumption are two examples for changes that will need to happen

- **Finance:** Moving to a renewable future will mean rethinking our current finance systems
- **Innovation:** Global expenditure on research and development for renewables and efficiency must double over the next ten years
- **Governance:** Local, national and regional governance will need to be greatly strengthened to secure an equitable energy future. We need international cooperation and collaboration on an unprecedented level to bridge the gap between the energy-rich and energy-poor, both within and between countries.

If we are to avoid the consequences of catastrophic climate change, we as individuals, communities, businesses, investors and politicians, must act immediately and boldly. We must address the challenges and difficult questions and aim for a fully renewable energy supply by the earliest possible date.

10 Recommendations for a 100% RE future

Clean energy: Promote only the most efficient products. Develop existing and new renewable energy sources to provide enough clean energy for all by 2050.

Grids: Share and exchange clean energy through grids and trade, making the best use of sustainable energy resources in different areas.

Access: End energy poverty: provide clean electricity and promote sustainable practices, such as efficient cook stoves, to everyone in developing countries.

Money: Invest in renewable, clean energy and energy-efficient products and buildings.

Food: Stop food waste. Choose food that is sourced in an efficient and sustainable way to free-up land for nature, sustainable forestry and biofuel production. Everyone has an equal right healthy levels of protein in their diet - for this to happen, wealthier people need to eat less meat.

Materials: Reduce, re-use, recycle - to minimise waste and save energy. Develop durable materials. And avoid things we don't need.

Transport: Provide incentives to encourage greater use of public transport, and to reduce the distances people and goods travel. Promote electrification wherever possible, and support research into hydrogen and other alternative fuels for shipping and aviation.

Technology: Develop national, bilateral and multilateral action plans to promote research and development in energy efficiency and renewable energy.

Sustainability: Develop and enforce strict sustainability criteria that ensure renewable energy is compatible with environmental and development goals.

Agreements: Support ambitious climate and energy agreements to provide global guidance and promote global cooperation on renewable energy and efficiency efforts.

WWF EXPECTATIONS FOR THE 17TH CONFERENCE OF THE PARTIES TO THE UNFCCC

COP17 in Durban will be a tipping point in the UN negotiation process on climate change.

Government leaders can either build on the progress achieved at COP16 in Cancun to prevent runaway climate change, or they can allow short-term national interests to set us on a path towards a 3 - 4° C warmer world. If the negotiations continue on the path that they have this year, COP17 is likely to fail.

A key issue is the future of the Kyoto Protocol (KP) - the only binding international commitment to reduce greenhouse gas emissions. Its first commitment period ends in 2012. The EU has offered to continue it if others join, but countries like Japan, Russia and Canada refuse to do so unless developing countries also make commitments. Developing countries maintain that the continuation of the KP is a bottom line for negotiation of a balanced package. However, unless they also signal readiness to take on legally binding commitments in the future, it will be very difficult to find a solution. This stalemate threatens agreements on all of the other issues urgently awaiting decisions at COP17.

The second big issue is long-term finance - to cut emissions and to pay for urgently-needed adaptation to climate impacts. This includes agreements on the management of the UN Green Climate Fund, and the sources for the \$100 billion pledge by developed countries in Copenhagen.

WWF is concerned about the potential for a breakdown in negotiations in Durban. We alert leaders that their negotiation approaches may fail to reach a minimally acceptable agreement. We also urge the South African COP Presidency to provide leadership and set up a process that facilitates agreement.

A BALANCED PACKAGE FOR DURBAN - KEY ELEMENTS

Mitigation

A principled, shared vision aimed at protecting people and ecosystems from the worst impacts of climate change

Governments should produce a Shared Vision that includes global mitigation goals to achieve the Climate Convention's objective of "*stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.*" WWF proposes global goals that include a peak in global emissions by 2015, and a subsequent 2050 emissions reduction goal of at least 80% below 1990 levels.

Laying the basis for ambition to match the science

The 2013-2015 science review in the Cancun Agreements is essential to define the overall needed level of ambition and should be coupled with a review of the overall adequacy of emission reduction actions. This should provide the basis for a mandate to negotiate new targets for the 2018-2022 commitment period.

Closing the "Gigatonne Gap"

A United Nations Environment Programme (UNEP) report last year found that by 2020 there will be a gap of 5-9 gigatonnes of CO₂ between a carbon budget consistent with a "likely" chance of limiting warming to 2°C and the low end of

WWF EXPECTS COP17 TO ACHIEVE TWO MAIN OBJECTIVES:

- Ensure the operationalisation of the Cancun Agreement
- Increase ambition and lay the foundation for a future legally binding agreement

reductions pledged so far by Parties. Over 100 Parties are calling for emissions reductions to the much less dangerous limit of 1.5°C. Developed countries need to bring enhanced pledges to reach the top end of 25-40% reductions between 1990 and 2020, with existing loopholes removed, to inscribe as legally binding targets. In addition, those developing countries that have not yet pledged their Nationally Appropriate Mitigation Actions (NAMAs) or other actions should do so before COP17 in Durban.

Legal Form

Agreement on a second commitment of the Kyoto Protocol with a mandate in the Convention track for a legally binding agreement

The KP provides a clear framework for industrialised country action but its first commitment period expires in 2012. In Durban WWF expects all developed countries in the KP to agree to a second commitment period and inscribe new reduction commitments for 2013-17 therein. The Long-term Cooperative Action (LCA) negotiating track also needs to deliver on the Bali Action Plan and agree on a time-bound *mandate* for a comprehensive, differentiated, legally binding agreement (treaty). This future agreement should respond to the findings of the 1.5°C review, and the Intergovernmental Panel on Climate Change (IPCC)'s 5th Assessment Report, even if these are preliminary. In Durban developed non-KP parties should inscribe comparable emission reduction commitments in a COP agreement. All developing country parties should inscribe voluntary commitments on the basis of the principles of equity and common but differentiated responsibilities and respective capabilities.

Climate Finance

Operationalise the Green Climate Fund (GCF), commit to financing starting in 2013 and make progress on new sources of long-term financing

Parties need to approve the report submitted by the Transitional Committee on the design and operation of the GCF. We expect financing commitments in Durban for the capitalisation of the GCF, to ensure the first flows of funding in 2012. Parties must also adopt a comprehensive decision on sources of finance, sufficient for emission reduction and adaptation actions in developing countries, including commitments for the 2013-15 period.

The existing commitment of \$100 billion per annum by 2020 should be met from predominately public funding, through the GCF, to be used in line with credible assessment of financing needs, and to leverage private sector funding. Durban must deliver a structured work program to prioritise and operationalise a range of innovative sources of reliable public finance under the UNFCCC. Promising sources of such financing include financial transaction taxes (FTT's), special drawing rights, and auctioning of emissions allowances.

WWF has prioritised financing from carbon pricing measures to address emissions from international shipping and aviation, for a decision in Durban. There are good signs of progress concerning a shipping mechanism, in large part due to a WWF-supported proposal to ensure there is "no net incidence" on developing countries, through a rebate mechanism. In Durban, Parties need to give guidance to the International Maritime Organisation (IMO) and International Civil Aviation Organisation (ICAO) on the design and implementation of measures to address "bunker" fuels and generate finance for climate action.

MRV¹

Measurement, Reporting, and Verification (MRV) guidelines should be adopted at COP17 and any outstanding elements dealt with by COP18, so that governments can begin their implementation. MRV components are key to track progress towards achieving the shared vision, and to improve domestic capacity for monitoring and evaluation of the efficacy of actions and expenditure.

Adopt common accounting rules for developed country targets. Kyoto Parties need to agree on the underlying scope and accounting issues related to land use, the carbon markets, the carry-over of 'hot air' and inclusion of any new gases. Issues need to be resolved to account for absolute changes in emissions, both here and under the LCA track, so that the efforts of non-KP countries can be comparable to those of other developed countries.

Biennial reports: Guidelines on the content, timing, structure and relationship between National Communications and biennial progress reports for developed countries and biennial update reports for developing countries need to be approved by COP17. Parties need to prepare these reports as inputs for the 2013-2015 1.5 °C review and for IAR and ICA (see below).

International Assessment and Review (IAR) and International Consultation and Analysis ICA: Parties should begin developing rules for these processes now, and complete work by COP18. The IAR process should empower expert reviewers to signal non-compliance, adjust inventory data and evaluate the adequacy of support. The elements of a common reporting format for climate finance, as agreed in Cancun, need to be defined in Durban.

Adaptation

Implementation of the Cancun Agreements on Adaptation and agreeing on the elements of the work program on Loss and Damage

Parties should agree the work program on the loss and damage due to climate change impacts in developing countries, in order for recommendations to be agreed to by COP18.

Adaptation Committee. Parties should outline and agree on the composition and modalities of, and guidelines for, the Adaptation Committee, to be operationalised in 2012. The Committee's composition should be fair, representative and equitable and should extend beyond government representatives and negotiators, to draw on experts from academia and civil society. The Adaptation Committee should report directly to the COP.

National Adaptation Plans (NAPs). Parties should agree on the guidelines and modalities for the development of National Adaptation Plans (NAPs) identifying medium and long-term adaptation needs of vulnerable developing countries, following a country driven, gender sensitive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems.

Nairobi Work Program (NWP). The NWP should be extended to facilitate the dissemination of adaptation knowledge. Response measures should not be a part of the NWP and should be dealt with separately under Mitigation.

¹ For further information on WWF's positions on MRV, see the submission to the AWG-LCA: <http://unfccc.int/resource/docs/2011/smsn/ngo/340.pdf>

Regional centers and network. Parties should develop a program for 2012 to strengthen or establish regional adaptation centers and networks and to define their role, function and governance in supporting adaptation work in developing countries. These centers will require support from developed country Parties.

Finance: A dedicated Adaptation window is needed under the Green Climate Fund to ensure the flow of new and additional funds for implementation of adaptation action.

REDD+

Enhanced agreements on Reducing Emissions from Deforestation and Forest Degradation (REDD+)

Recent estimations for annual REDD+ finance needs range from 15 to 40 billion USD. A REDD+ window is needed under the GCF.

REDD+ vision/global target: As per the Cancun Agreement, Parties should work on an agreement to halt and reverse forest cover and carbon loss by 2020. Developing countries should define their national REDD+ targets to stimulate long-term, adequate and predictable finance.

Safeguards REDD+ must demonstrably contribute to significant GHG reductions, while respecting and protecting the rights of indigenous peoples and forest dependent communities, and conserving biodiversity. An agreed common framework for information systems on safeguards should be decided in Durban.

Reference levels for Environmental Integrity. RL/REs for estimating emission reductions, should be integrated into MRV guidelines for REDD+. Modalities on setting RL/REs should ensure equity, additionality, transparency, avoid displacement, address the risk of reversals or non-permanence and avoid double-counting, while encouraging countries with low deforestation rates to conserve existing forest carbon stocks.

Low-Carbon Development Strategies and Plans

Elaboration and guidelines for Low-Carbon Development Strategies

Developed country Parties need to fulfill their Cancun agreement to develop low-carbon development strategies. Transitioning to zero carbon economies by 2050 requires planning to ensure the transition is socially, economically, and environmentally just. WWF urges developing countries to also develop nationally appropriate low-carbon development strategies in the context of their plans to eradicate poverty and promote sustainable growth. In Durban Parties need to develop guidelines and principles for Low Carbon Development Strategies and set dates for the first developed countries' plans.

Conclusion

COP17 presents governments with an important opportunity to lay the basis for a transition to a new and ambitious climate regime that meets what the science says is required and reflects a changing world, in which the old distinctions between developing and developed countries are being redefined. Leaders need to use all their political resourcefulness to ensure a successful outcome in Durban. The people of Africa and the world will be watching.

OUT OF THE BUNKERS IN DURBAN

On 5 September 2011 WWF and Oxfam launched a joint briefing paper in Pretoria, during international multi-stakeholder consultations convened by government. The following provides an overview of the paper:

Shipping emissions - or 'bunkers' in the jargon of the UN climate negotiations - are large and growing fast. A single ship can emit more in one year than many small island states. International shipping is already responsible for around three percent of global emissions, equivalent to those of Germany. These emissions are projected to increase by 150-250 per cent by 2050ⁱ. Yet they are not currently regulated under the global climate regime.

Guiding principles for a fair global deal on shipping emissions

Developed countries argue that all ships must be covered by the same regulation, the norm in the International Maritime Organisation (IMO). Most developing countries insist that any regulation respects the principle that developed countries must lead the fight against climate change, known in the UNFCCC as 'common but differentiated responsibilities' (CBDR). Only a global approach that does not unfairly impact on developing countries can break this impasse. In 2011 governments must agree three core principles of such a scheme.

1. Meaningful emissions reductions

A carbon price should be set for emissions from all ships. A recent study found that negative- or low-cost technical measures could reduce emissions by 33 percent from projected levels in 2020.ⁱⁱ

2. No net costs for developing countries

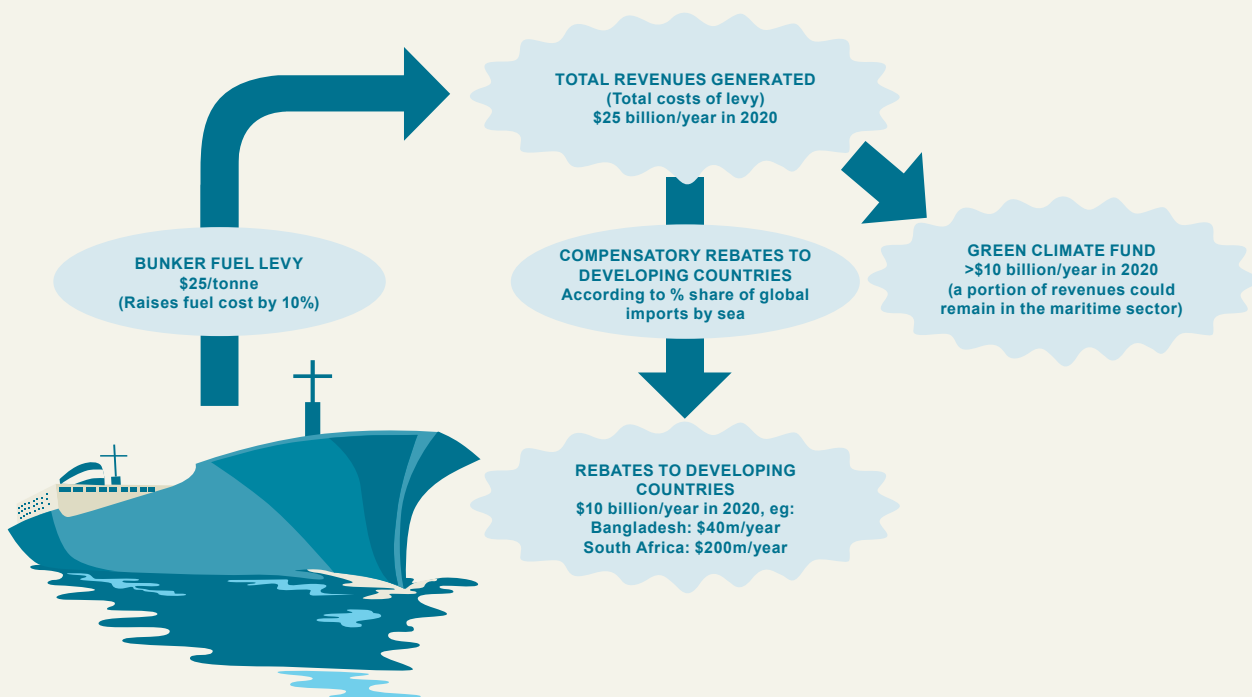
Because shipping emissions cannot practically be attributed to individual countries, a carbon price for ships must be universal. To be consistent with the CBDR principle, part of the revenues generated should be used to provide rebates to developing countries, to compensate for the impacts on their economies.

3. Substantial revenues for the Green Climate Fund

The major share of remaining revenues should be directed to the Green Climate Fund as a continuous source of new and reliable revenues for adaptation and mitigation efforts in developing countries.

ⁱ IMO (2009) 'Second IMO GHG Study 2009'

ⁱⁱ ICCT (2011) 'Reducing Greenhouse Gas Emissions from Ships: Cost Effectiveness of Available Options,' http://www.theicct.org/pubs/ICCT_GHGfromships_jun2011.pdf



This paper shows that setting a carbon price for ships, at around \$25 per tonne, can drive significant maritime emissions cuts. That is likely to increase the cost of shipping by just 0.2 per cent, or \$2 for every \$1000 traded, but would raise \$25bn per year. A new study for this paper estimates the impact of a carbon price on four major categories of imports - food, fuels, minerals, and manufactured goods - based on 2007 trade patterns. The estimated increases in import costs are 0.14 per cent for South Africa and 0.19 per cent for Bangladesh.

Oxfam estimates that prices for staple crops will approximately double by 2030, with around half this increase driven by climate changeⁱⁱⁱ. From July to September 2010, global wheat prices surged by 60 to 80 percent in response to drought-fuelled crop losses in Russia and a subsequent export ban by the government.

Uncapped emissions from ships are likely to have a bigger impact on food prices than a carbon price for shipping.

ⁱⁱⁱ Oxfam (2011) 'Growing a Better Future: Food justice in a resource-constrained world,' <http://www.oxfam.org/sites/www.oxfam.org/files/growing-a-better-future-010611-en.pdf>

FROM POLITICS TO PARADIGM SHIFTS

WHAT WILL REALLY DRIVE THE WORLD'S GREEN FUTURE?

*Kevin Whitfield, Head of Carbon for
Nedbank Capital*

USING CARBON NEUTRALITY TO DRIVE POSITIVE CHANGE

In July 2010, the Nedbank Group became the first financial services institution on the African continent to achieve carbon neutrality. The group's carbon neutral status represents the beginning of a new chapter in its environmental sustainability journey by positioning Nedbank to play a significant role in the establishment of the country, and continent's 'green economy'.

Following a 'reduce first, then offset approach' is key to how Nedbank achieves its neutrality. In keeping with its integrated sustainability commitment Nedbank acquired many of the carbon credits it needed to offset its footprint from the Rukinga Project in Kenya's Kasigau Corridor, which is not only preventing deforestation in the region, but also delivering significant economic, social and cultural benefits to its communities.

While much of the world has undoubtedly come to understand that green is the only viable colour with which to paint a brighter future, the environmental sustainability imperative has sadly not yet resulted in unified, global action.

The truth is, for there to be any real hope of ending climate change, people need to stop thinking about environmental sustainability as a feel-good option, a political opportunity, or a another corporate social responsibility project and start thinking of it as an investment - one that is as vital to the future of the impoverished individuals and communities as it is to the investment manager wanting to grow his client's portfolio.

It is at the corporate level where the most significant shift in green mindset actually needs to occur. Only when investment in environmental sustainability moves from being just another line item on a corporate social upiftment budget to being integral to business and profitability strategies will the world start to see the beginnings of the real global green economy.

Obviously, for those companies who have always viewed 'green' as little more than an environmental PR exercise or social investment vehicle, this change in thinking represents a massive leap of faith. But it's one that has to be taken if they wish to share in the long-term financial and commercial benefits that the green economy will deliver in the coming years.

On the African continent, embracing and promoting this 'green' paradigm shift is an opportunity that few other places on earth enjoy. With its wealth of natural resources, fuels and biodiversity, Africa has the potential to be the driver of the world's transition to a green economy. As the demands of a growing population place increasing pressure on its finite resources, the world is turning to resource-rich Africa to meet its needs. Meanwhile, the attractiveness of much of the developed world as an investment destination is on the decline; while Africa's investment star steadily rises.

There are those who would still argue that the continent's lack of development limits its ability to lead in the area of environmental sustainability. But that fact that Africa is largely under-developed by first world standards is, in fact, advantageous. Apart from the opportunity to learn from the green investment mistakes made elsewhere in the world, Africa's lack of infrastructure gives it a clean slate on which to build its future as a green economy leader and a driver of the paradigm shift required to transform the environmental future of the planet.

The world can no longer afford to wait for political solutions to environmental problems. What is needed now is a generation of people and businesses that are able to think differently about what 'green' really means, and are prepared to make a real investment to realise the resource-efficient, low-carbon, and sustainable future they desire, and deserve.

CLIMATE CHANGE AND THE FOOD- WATER-ENERGY NEXUS

The strategic resources of water, food and energy are central to our existence and the cornerstones of our economy. The dynamic interactions between water, agriculture, the environment, and energy are now more evident than at any other time in human history.

WWF's Living Planet Report demonstrates that in failing to recognise that these resources are connected in fundamental ways and managing them holistically we have exceeded the Earth's carrying capacity. Addressing our overconsumption begins with the recognition that these three resources operate as an increasingly interdependent nexus and that we won't succeed in meeting our food needs unless we recognise the connections to our management of water and energy.

Understanding the nexus between freshwater, food and energy is essential to creating management plans that will ensure the long-term well-being of people and the planet.

Possibly the most powerful force unleashed on our planet, agriculture is dependent on water and energy, using as much as 70% of available water for irrigation, and relying heavily on energy inputs throughout the food chain. In depleting the world's freshwater resource for agricultural irrigation and over extracting from rivers we threaten freshwater fish species further impacting on food sources and the livelihoods of the vulnerable poor.

The process of producing energy from fossil fuels creates demand for finite and fragile water resources. In South Africa freshwater resources are already stretched to the limit, with more than 98% of available freshwater already allocated for use. Food production and water resource management require energy, access to which is central to sustainable development and poverty reduction efforts. At present, 1.4 billion people have inadequate, or erratic, access to reliable energy.

As the world's population rises to an expected 9.2-billion by the middle of the century, securing food, water and energy access faces even greater challenges, challenges that can only be aggravated by climate change.

The cause and effect of climate change

Climate change already impacts negatively on the very ecosystems we depend on for food, water and energy. Conversely, our unchecked exploitation of these ecosystems exacerbates climate change, reinforcing the fact that our survival is dependent on an intricately connected system that is out of balance. As a result, one of the key challenges humanity now faces will be balancing the water, food and energy equation within a climate-constrained future.

Energy and agriculture are currently the biggest contributors to climate change, being responsible for 60% and 30% of greenhouse gas (GHG) emissions respectively, with some overlap in accounting, and both continue to experience increasing demand.

If we are to feed our growing population, agricultural production around the world will have to at least double by the end of the century. The availability of energy services will also have to increase as we try to provide electricity to more people who require it for social and economic development, while at the same time finding a way to reduce our carbon emissions.

Thus, the question society now faces, is how to sustainably, equitably and justly feed 9.2 billion people and preserve planet for future generations. If we are to achieve this, we will need to build resilient ecosystems and adopt sustainable consumption patterns within the context of a transition to a low-carbon world.

UNDERSTANDING THE NEXUS AND THE IMPLICATIONS:

- **Billions of people do not have access to sufficient or acceptable quality food or water or energy or a combination thereof**
- **Demand for all three is growing rapidly**
- **All have resource constraints**
- **All involve international trade and have global implications**
- **All have deep security issues as they are fundamental to the functioning of society**
- **All operate in heavily regulated markets**
- **All require the explicit identification and treatment of risks**
- **All have strong interdependencies with climate change and the environment**

Source:
World Economic Forum

Towards a fair, legally-binding climate regime

WHAT WE NEED FROM DURBAN:

SHARED VISION:

Decision on ambition setting a 2050 global target of -80% emissions reduction (against 1990 levels) and global emissions to peak by 2015

LEGAL FORM:

Agreements for a Kyoto 2nd Commitment Period, with as many developed countries as possible, and a time-bound mandate under the Convention track for a comprehensive legally binding agreement

FINANCE:

Adopt design of the Green Climate Fund and a process for agreement on innovative sources of finance, plus a decision on international transport and commitment to raising finance from maritime 'bunker' fuels, with a rebate mechanism for developing countries

ADAPTATION:

Decide on the composition and procedures of the Adaptation Committee; expand sources of finance for supporting national adaptation plans; adopt a workplan for a mechanism to address 'Loss and Damage'

MRV:

Common accounting rules for emissions and finance and agreement on biennial reports, with International Assessment and Review (IAR) of developed countries and International Consultation and Analysis (ICA) of developing countries' actions


REDD+:

A global target for Reducing Emissions from Deforestation and Degradation, with commensurate financial commitments, and a framework to ensure REDD+ contributes to real emission reductions, while protecting the rights of indigenous peoples and conserving biodiversity



100%
RECYCLED



	<p>Why we are here To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.</p> <p>www.wwf.org.za</p>
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