



Comments by

WWF South Africa

in response to the

National Climate Change Response White Paper

received 13 October 2011 by email from Ms Tyhileka Madubela
Coordinator of the Portfolio Committee on Water and Environmental Affairs

The World Wide Fund for Nature South Africa (WWF-SA) welcomes the National Climate Change Response White Paper (henceforth White Paper), and appreciates the opportunity to make a submission to the Portfolio Committee on Water and Environmental Affairs. The Department of Environmental Affairs and other participant arms of government are to be congratulated on driving this outcome, the culmination of a process first initiated at the initial National Climate Change Summit in 2005. WWF-SA has been involved in commenting on precursor documents since the beginning.

We are pleased that the White Paper has come out before the 17th Congress of the Parties to the UNFCCC (COP17). We believe this will contribute to South Africa's international prestige as host of COP17, and strengthen its integrity in negotiations, providing leadership to other countries. Government's continued commitment to a UNFCCC regime which is fair, ambitious and binding, and to meeting South Africa's own obligations, comes through strongly in the White Paper, the implementation of which in itself will be part of realising this commitment and a great leap forward.

Achievements of the White Paper

The White Paper's key elements in the overall approach to mitigation (section 6.1 'Overall approach to mitigation') are cause for celebration, particularly a **carbon budget** approach; **emission reduction outcomes** (which would imply targets) for each significant sector and sub-sector of the economy; and moving from voluntary to **mandatory mitigation plans**.

The **Flagship Programmes** are generally well-conceived, and should provide focus and acceleration to coordinated government efforts. It is to be welcomed that these Flagship Programmes will get going without waiting upon the full articulation of the measures and architecture of a national climate change response enabled by the White Paper.

An exciting prospect is presented by the **Sector Job Resilience Plans** in the context of growing a 'green economy' which moves employment from a carbon-intensive economy to a low-carbon economy (section 9.2 'Policy instruments'). Work is being done by civil society under the Million Climate Jobs rubric which may be of interest.



A small point in relation to 5.8.5 (section 5.8 ‘Human settlements – Coastal settlements’), which says “Support ongoing research to determine the impacts of climate change on artisanal fishing communities and livelihoods in coastal areas that are directly connected to coastal and marine resources and identify appropriate responses”: it should be noted that it is not only artisanal fishers that are affected in coastal communities, but also certificated fishers working as crew on commercial vessels. Companies have moved their operations due to changes in distribution of small pelagic fish species, leaving many fishing workers in coastal communities out of work.

WWF-SA is pleased by the White Paper’s clear commitment to take account of and **incorporate externalised costs** in commercial value chains (for example in sections 5.3 ‘Agriculture and commercial forestry’ and 10.7.1 ‘Carbon pricing’). One welcome mechanism to do so is the proposed **carbon tax**, supported by ourselves and many other organisations, for example those in the civil society Energy Caucus. As section 10.7.1 ‘Carbon pricing’ of the White Paper promises, this must be implemented with “measures ... either in tax design or through complementary expenditure programmes, to **offset the burden** such a tax will place on poor households.” It is also gratifying that “some form of on-budget funding for specific environmental programmes will be considered.”

It is encouraging that the White Paper provides for **alignment and integration across government**, in terms of policy, regulation and implementation, as the lack thereof has long been recognised as a barrier to an effective national climate change response. Since much of such a response plays out in the local government realm, it is essential that the powers, financial resources and capacity of **local government** are to be aligned with the challenges facing and the demands being placed on this sphere of government, as envisaged by the White Paper (section 10.2.6 ‘Provincial and local government’). It has been a concern that much responsibility was being pushed onto local government without concomitant empowerment.

We welcome the way the White Paper opens the way for “All sectors of the South African society [to] take part in the effort to mainstream climate-resilient development.” The idea of **increasing the functions of the NCCC** and formalising its status as an advisory council with statutory powers and responsibilities (section 10.4.1 ‘National Committee on Climate Change (NCCC)’) is an excellent step in this direction. WWF stands ready to play our part as an actor in our society and such forums, not least by sharing our knowledge of some potential best-practice experiences, from our work within South Africa, across the continent and internationally.



Room for improvement going forward

By raising the following issues, we are not suggesting that the White Paper process be held back in any way. We believe these are perspectives and issues that can be ironed out in taking the White Paper forward.

Ecosystem-based approach

We note that the role of ecosystem services is acknowledged in the principle ‘Economic, social and ecological pillars of sustainable development’ in section 3, and in section 5.5 ‘Biodiversity and ecosystems’ which makes reference to “ecosystem-based adaptation.” An ecosystem-based approach is not only a feature of adaptation, nor just a matter of bolstering faltering ecosystems. We would motivate that biodiversity and ecosystems need to be foregrounded in the country’s approach to climate-resilient development.

Given that “Climate change will compound the pressures on already stressed ecosystems that have resulted from the unsustainable use and inadequate management of many of South Africa’s ecosystems” (section 5.5 ‘Biodiversity and ecosystems’) – indeed, to state it more strongly, that natural systems are clinging on to the brink of disaster – it is incumbent to make every development and mitigation decision with biodiversity and ecosystems in mind. A case in point is found in section 6.3 ‘Mitigation potential’, which makes reference to “the emergence of bio-fuels and a suite of non-energy mitigation options, such as afforestation.” We note that point 5.7.1 (section 5.7 ‘Human settlements – Rural settlements’) makes reference to conservation agricultural practices for subsistence and small-scale farmers, but no such strategy is envisaged for the commercial sector (section 5.3 ‘Agriculture and commercial forestry’).

Instead of Environmental Impact Assessments being treated as a token bureaucratic process, in WWF-SA’s experience there may be win-win solutions when one adopts more holistic ecosystem-based approaches to development. An example is a study *Risk in a changing world: Lessons from the insurance industry*¹, which found that the insurance industry is better served by going up the risk chain and collectively managing the drivers of climate risks with other actors, than by relying solely on ever-finer scale risk assessment, with a view to more accurate risk differentiation and pricing. “A very encouraging outcome of our work was that for each of the risks we studied (wild-fires, floods, and sea-storms), we were able to identify drivers of change in the local landscape that had the same if not greater effect on risk, compared to climatic drivers. Proactive management of these local drivers of risk could, therefore, offset most of the increased risk associated with climate change.”

While “A regulatory framework to support investment in conservation or land rehabilitation as a way of offsetting the environmental impacts of new property developments will be explored” (point 5.5.6 under ‘Biodiversity and ecosystems’) may seem to point in this direction, we are not convinced that expanding the built environment footprint into protected areas, threatened biomes and ecosystems, and the habitats of wild species serves any

¹ WWF-SA’s Deon Nel *et al.*, published 2011 in *Nature* magazine



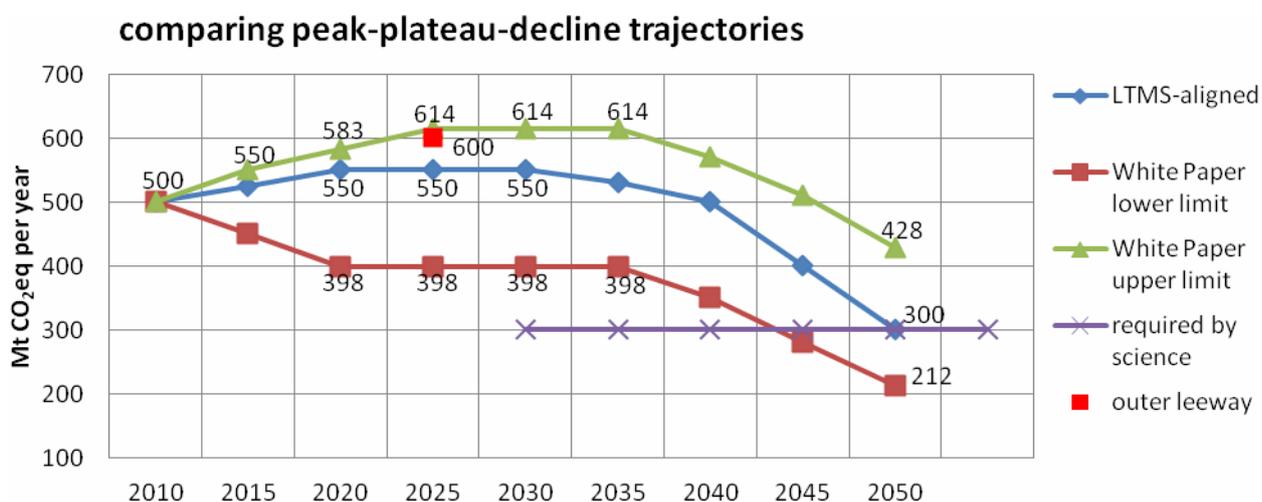
sustainable development agenda, how ever much supposedly offset.

At the very least, ecosystem-based approaches will point the way to ‘least worst’ options when trade-offs are to be made, such as water vs coal, fynbos vs coastal resorts, marine ecosystems vs desalination. What may appear a job-creating enterprise or an enabler of development is often short-sighted in terms of climate-resilient livelihoods and essential ecosystem services in the longer term.

A tangential matter: We suggest that going forward the impacts of disasters on biodiversity be incorporated when considering disaster risk reduction, preparedness and management (section 5.9 ‘Disaster risk reduction and management’).

A benchmark national GHG emissions trajectory (section 6.4)

WWF-SA welcomes this initiative to give greater clarity and long-term signals regarding the national greenhouse gas emissions trajectory that policy will be directed to achieve. We appreciate the opportunity provided by the Department of Environmental Affairs through the NCCC to comment on its document *Defining South Africa’s Peak, Plateau and Decline Greenhouse Gas Emission Trajectory*. WWF-SA provided comment on 9 September 2011, in our *Submission on ‘PPD Definition’ explanatory note*. We support the provision in the White Paper for a two-year process to consider an appropriate national carbon budget over the long term. However, we cannot support any proposal to allow national emissions to exceed 550 megatonnes of greenhouse gases (Mt CO₂eq) at any time, nor any proposal that does not seek to start reducing emissions in absolute terms from about 2025.



The ‘peak, plateau and decline trajectory’ detailed in White Paper point 6.4.2 can be visually summarised as in the graph above. The ‘required by science’ line benchmarks the annual 300 Mt CO₂eq that we should be limited to. The ‘LTMS-aligned’ line reflects the trajectory endorsed by government at the time of the Long-term Mitigation Scenarios. The new ‘trajectory range’ provided in the White Paper is the area between the White Paper upper and lower limit lines. It can be seen that the new ‘trajectory range’ seeks to raise the level of a national emissions ‘peak’ – or rather plateau – to a high of 614 Mt CO₂eq in 2025.



This is later and considerably higher than the level previously under discussion, of 550 Mt per year from 2020. Marked ‘outer leeway’ on the graph, a peak of at most 600 Mt no later than 2025, with a steady decline starting within a few years, would allow South Africa more than enough ‘carbon space’ latitude, allowing for the implementation of the various policy and regulatory initiatives in place and in development. We can surely now be more ambitious than these pre-White Paper initiatives allowed for?

The problem is not just with a much higher peak. The prospect of SA maintaining emissions at a level over 600 Mt per year for ten years from 2025 is of particular concern, since it is the total accumulated emissions in the atmosphere over time that will determine the scale of impacts of climate change and variability. (In this regard, the line graphs above are not helpful because they do not show the accumulation over time, just the emissions per year.)

The postponing to later and later dates of the onset of a declining trajectory, makes later reductions harder and harder to achieve, or achieve in time, while the costs of mitigation and adaptation mount. An emissions plateau such as that suggested by the upper limits of the White Paper range would leave the country with a massive challenge in the third and following decades of this century. In effect the proposed ‘trajectory range’ seeks to defer appropriate response (and therewith many sustainable development and job creation opportunities) in a manner that renounces inter-generational equity. Economist Nicholas Stern has famously calculated that the cost of action now is far lower than what we will later have to pay for inaction now ².

Noting that a global carbon budget is the maximum emissions humanity can afford to emit before we hit untenable climate change; and given that South Africa has adopted a carbon budget approach, and committed to carrying its fair share of global emission reductions taking into account our development status and national circumstances; one can calculate what the country’s carbon budget would be for any particular emissions trajectory. The difference between a ten-year plateau at 600 Mt per year and a trajectory that seeks to bring emissions down to 300–400 Mt/annum in 2035, for example, would constitute at least 10% of a reasonable national carbon budget for the period to 2050. Every gigatonne counts, in the light of climate change escalating faster and sooner than projected by science.

In addition to the geophysical climate consequences of these carbon budget propositions, and the resulting domestic social, economic and environmental impacts, WWF-SA raises concerns that:

- if we make national infrastructure decisions based on an excessively high level of peak emissions, we increase the risk of sitting with stranded assets and being locked in to emissions-intensive long-term investments (as referred to in section 6.3 ‘Mitigation potential’)
- allowing for such high emissions over the coming two and a half decades will have negative impacts on South Africa’s competitiveness in global markets

² *Stern Review on the Economics of Climate Change* of October 2006 by economist Nicholas Stern of the London School of Economics, for the British government: The Review’s main conclusion is that the benefits of strong, early action on climate change considerably outweigh the costs. It proposed that 1% of global GDP per annum is required to be invested in order to avoid the worst effects of climate change, and that failure to do so could risk global GDP being up to 20% lower than it otherwise might be. In June 2008 Stern increased the investment estimate to 2% of GDP to account for faster than expected climate change.



- the costs of required adaptation action are escalating, including the burden that South Africa can expect to bear from deteriorating ecological integrity in neighbouring countries
- our relations within the sub-region and Africa as a whole could be damaged, as it would be easy to make a case that South Africa is seeking to appropriate an excessive share of the available 'carbon space' or carrying capacity of the atmosphere
- the upper limits of the White Paper 'trajectory range' is a questionable interpretation of our international commitments, that will not enhance our credibility as a progressive leader on climate change response or as host of COP17

The process of setting a carbon budget, that is consistent with the imperatives for mitigation and which provides a credible and defensible pathway to truly sustainable development, must not be undermined by alarmist pronouncements and unsubstantiated projections of loss of jobs or business opportunities by vested interests. The responses of some business and industry representatives to date amount to scare-mongering. This should not mislead us into setting an excessive emissions trajectory.

Flagship Programmes

Given that there has been extensive engagement with government by energy experts within civil society and academia, and that a wealth of best practice, technical work and case studies is available, the Renewable Energy Flagship Programme (section 8.3) seems low in ambition, not pushing beyond what is already happening. We hope that higher outcomes will be set for this programme in its implementation. A convincing evidence-based case has repeatedly been made that resources and effort being or to be spent on initiatives with less reward in terms of emissions reduced or avoided and development gains, would be better deployed to renewable energy solutions. Resistance in some quarters to this case seems to be beyond what is rational. The Carbon Capture and Sequestration Flagship Programme (section 8.7) may be one such red herring, that would be better resolved by a swifter just transition to a lower-carbon economy.



Proposals for next steps

The White Paper does well in recognising “the urgency of acting on mitigation and adaptation responses as soon as possible, as well as the fact that many sectors have already researched and have experience in implementing policies and measures to address the challenges of climate change” (section 8), and in giving effect to this urgency and preparedness, in for example the Flagship Programmes.

We are hopeful that this understanding and approach will permeate implementation of other initiatives mandated by the White Paper. While we endorse that “decisions must be based on accurate, current and complete information in order to reduce risk and ensure that interventions are effective” (section 12.1 ‘Monitoring climate change’), we caution that the absence of complete information, fully-functioning institutional arrangements and a Monitoring and Evaluation System should not retard action known to be appropriate. Such delaying tactics may be tried by vested interests.

Indeed, much existing legislation and current initiatives already provide for moving ahead. For example:

- **Air Quality Management Act**

This already covers greenhouse gases in the definition of pollutants harmful to human health, provides the legal framework for reporting on and managing emissions. While the National Ambient Air Quality Standards provide for managing air quality in a general area, a next step would be to promulgate regulations to manage point-source emissions.

- **Energy Efficiency Strategy**

Published in 2005, this is designed to be reviewed every three years. The 2008 review was limited to a bureaucratic process, and the 2011 review has yet to be done. Flowing from this Strategy, a voluntary Energy Efficiency Accord was signed with energy-intensive users. While the Energy Efficiency Strategy made provision for ultimately mandatory measures, these have not become mandatory. Parliament may choose to exercise an oversight role in this regard.

- **Renewable Energy White Paper**

As is the climate change White Paper, the Renewable Energy White Paper is supposed to be reviewed at regular intervals. Such a review has now been outstanding for at least two years.

The White Paper allows for: two years within which to define carbon budgets for significant GHG emitting sectors and/or sub-sectors, within a carbon budget for the country; and a year after that for implementing means by which high-emitting companies can translate the carbon budgets for each relevant sector and/or sub-sector into company level desired emission reduction outcomes (point 6.1.3 under section 6.1 ‘Overall approach to mitigation’). We understand that to avoid pre-empting such a process, many of the concrete targets expressed in the Green Paper, or in submissions on it, have been left out of the White Paper. We suggest that many of these targets could helpfully inform the carbon budgeting process and should be



brought into the process. In parallel with the carbon budgeting process, Parliament may like to consider developing a **Bill**, to be ready to provide a legal form for the carbon budget.

The White Paper commits government to “Create a transitional **climate finance system** to support the implementation of the priority mitigation and adaptation actions identified in sections 5 and 6” (point 11.1.2.c under section 11.1.2 ‘Mobilising finance’). After our submission on the Green Paper, WWF-SA supplied the Portfolio Committee on Water and Environmental Affairs with an audit of various climate-related or environmental funds, the design, strengths and drawbacks of which we could learn from. This ended with considerations for a South African fund, on sources of finance, access to funds, criteria for receiving funding, architecture and governance, which may prove helpful.

Closing remarks

WWF-SA is greatly encouraged by the National Climate Change Response White Paper, and hopes to be afforded the opportunity to present to the Portfolio Committee on Water and Environmental Affairs in the coming public hearings. We would like to focus on best-practice climate-resilient solutions, and carbon budget methodologies.

The White Paper speaks of “a major shift towards sustainable consumption and production patterns, which decouples growth and development from any negative impacts on the environment and society” (section 4.1 ‘Overall approach’). This would seem to us a vision the broadest cross-section of South Africa could unite behind.