SANBI
Biodiversity for Life

Comments on the National Climate Change Response White Paper

South African National Biodiversity Institute

Thursday, 20 October 2011

The South African National Biodiversity Institute (SANBI) congratulates the Department of Environmental Affairs (DEA) on the publication of the National Climate Change Response White Paper, notes that this substantive revision of the Green Paper has resulted in significant improvement in terms of content and structure, and welcomes this opportunity to provide further comment. Our comments focus on strengthening some aspects that we feel could be even more coherently addressed, and where we perceive some remaining gaps, focused on the area of adaptation.

SANBI fully supports the revised approach taken in the White Paper, and welcomes the improved focus in various places in the document on the role of healthy natural ecosystems in resilience and adaptation to climate change. This is strongly supported.

In all comments, **square brackets indicate deletions** and **underlining indicates additions**.

Place in document	*Comment*
Adaptation paragraph page 5,	The Executive Summary and the text of the adaptation sector 5 could be better integrated with respect to process and concrete products. Our main suggestion is to reflect the 5-year review process outlined in the Executive Summary in the text on page 15, and to reflect the role of the IGCCC sub-committee in the executive summary. Neither texts refer to a concrete product of the planning process. The Executive Summary also does not capture the long term adaptation perspective reflected in the text of section 5; "to plan flexibly for a wide range of possible responses over the medium- to long-term". The role of the IGCCC suggested here should also be reflected in section 10.2.4 We suggest the following revision in the Executive Summary: "In terms of adaptation, the National Climate Change Response includes a risk-based process guided by the Inter-Governmental Committee on Climate Change to identify and prioritise short- and medium-term adaptation interventions to be addressed in sector plans (i.e. over a five to ten year time frame). The process will also identify the adaptation responses that require coordination between sectors and departments, and will produce a planning document[and it] that will be reviewed every five years. The document will also include a long term (multi-decadal) perspective to guide integrated and flexible planning over the medium- to long-term. For the immediate future, sectors that need particular attention are water, agriculture and forestry, health, biodiversity and human settlements. Resilience to climate variability and climate change-related extreme weather events will be the basis for South Africa"s future approach to disaster management and we will use region-wide approaches where appropriate.

Place in document	*Comment*
Introduction, page 8:	The phenomenon known as "climate change", the focus of this policy, refers to an ongoing trend of changes in the earth"s [general] weather patterns [conditions] as a result of a [an average] rise in the average temperature of the earth"s surface (including the lower atmosphere, land and oceans). This trend, observable since the early 20th century, is also often referred to as global warming. This recent rise in the average global temperature is due, primarily, to the increased concentration of gases known as greenhouse gases (GHGs) in the atmosphere that are emitted by human activities, primarily the burning of fossil fuels and deforestation. These gases intensify a natural phenomenon called the "greenhouse effect" that allows the sun to heat the earth. Additional greenhouse gases enhance [forming an insulating layer in] the absorption and back-reflection of infra-red radiation by the atmosphere and reduce the amount of heat that radiates back into space, with the effect of further warming the lower atmosphere, land and oceans.
Introduction, page 8:	While weather changes on a daily basis, climate represents the statistical distribution of weather patterns over time.[, and] On a global scale, climate has changed [only very] slowly in the past, with a few exceptions. Climatic changes over periods of tens of thousands of years or even millions of years have [which] allowed[s] time for the earth's bio-physical systems to adapt naturally to the changing climatic conditions. Periods of very rapid climatic change in the distant past have often been associated with ecological disruption and species extinctions. [Currently, t]There is a risk that the global climate could change at rates that rival the most rapid ever observed as a result of global warming, leading to effects that include,.....
Introduction, page 8:	Increased industrial activity since the mid-19th century
Introduction, page 8:	Second last para ends with "The protection of biodiversity, habitats and ecosystems is essential to the maintenance of these services, which is a key pillar for sustainable development." Suggest to add another sentence here: "Healthy natural ecosystems therefore have a critical role to play in helping society cope with the impacts of climate change, for example in protecting people and property against the impacts of extreme events."
Page 9, last line of para 2	"eco-system" shouldn't be hyphenated

Place in document	*Comment*
Page 15, after the bullet "The identification of adaptation responses that require coordination between specific sectors and/or departments."	The process will also identify the adaptation responses that require coordination between sectors and departments, and will produce a planning document that will be reviewed every five years. The document will also include a long term (multi-decadal) perspective to guide integrated and flexible planning over the medium- to long-term. Using the results of this analysis, adaptation strategies will be integrated into sectoral plans, including:
Bullet 5.2.4 page 20	Implementing best catchment and water management practices to ensure the greatest degree of water security and resource protection under changing climatic conditions and, in particular, investment in water conservation and water demand management.
Bullet 5.5.4 page 20	"Prioritise climate change research into [marine] aquatic and terrestrial biodiversity and ecosystem services..." – this change is necessary otherwise freshwater ecosystem services (which are among the most vital) are excluded. Another option is to state "marine, inland water and terrestrial" or "marine, freshwater, estuarine and terrestrial".
Bullet 5.5.5, page 20	"Enhance existing programmes to combat the spread of terrestrial and [marine] aquatic alien and invasive species..." – same reasoning as for previous point. Freshwater and estuarine invasives are as much of a problem as terrestrial and marine invasives
Section 5.9, page 24	Need to add to the bulleted list of disaster risk reduction and management responses. Suggested wording for a new bullet: "Maintain and rehabilitate natural ecosystems that provide protection against disasters and mitigate the impact of extreme events on people, settlements and economic activity, such as riparian zones, wetlands, coastal dunes and sandy beaches."

Place in document	*Comment*
Section 8.8 on Adaptation Research Flagship Programme, page 32	This section would benefit from making explicit the linkages with research and funding actors to enable roll-out, links with the 5 year adaptation planning process, as well as a need for learning from implementation of action research and/or pilot projects. The sub-regional aspect could be more achievably viewed in terms of possible integration, including with several processes already underway regionally. We suggest: "Led by the South African National Biodiversity Institute, appropriately resourced and enhanced through engaging national and international partners, the design and roll-out of a national [and regional] research programme to scope sectoral adaptation requirements and costs and identify adaptation strategies with cross-sectoral linkages and benefits, including an assessment of climate change vulnerabilities in the sub-region, with a detailed scenario planning process to define potential national [sub-regional] response strategies and possible sub-regional integration options. Aligning with and informing the five-year adaptation planning process, this programme would include a focus on learning from the implementation of action research and/or pilot adaptation projects.
Section on Adaptation Research Flagship Programme, page 32	We suggest an additional flagship programme dealing with watershed management, especially in high water supply areas. Suggested wording (based on recent SANBI submission to the revision of the National Water Resource Strategy): The Watershed Management Flagship Programme. Led by the Department of Water Affairs, this programme will invest in healthy catchment functioning in priority catchments for water supply. It will be implemented in collaboration with Catchment Management Agencies where these exist, as well as provincial conservation authorities and other key stakeholders. The programme will establish effective catchment stewardship programmes in priority catchments for water supply, and work towards the formal protection of mountain catchment areas (especially those in stressed catchments) in terms of protected area legislation. Incentives for sustainable watershed management will be investigated.

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