

## Roadmap for National Climate Policy

5 June 2007

1. The potential impacts and risks of unanticipated climate variability and projected climate change are severe. Addressing climate change is one of the critical challenges that can be achieved through integrated government planning, partnerships at the local level and with the private sector and civil society, and a strengthened multilateral regime at the international level. Success in anticipating climate change impacts will also enhance our ability to cope much better with short term climate variability.

2. In support of government's efforts to align policy-making with our climate change challenges, the Inter-Ministerial Committee on Climate Change initiated the Long Term Mitigation Scenario process. This process will outline the range of ambitious but realistic scenarios of future climate action, notably long-term emissions scenarios and their cost implications. In addition, various national departments, provinces and cities are refining their sector plans in line with the national Climate Change Response Strategy. Working closely with industry, Department of Environmental Affairs and Tourism (DEAT) will also be finalising our updated Greenhouse Gas Inventory and SA's National Communication for the United Nations Framework Convention on Climate Change (UNFCCC) early next year.

3. Ultimately, the results of the Long Term Mitigation Scenario process, the sector strategies and our interaction with the best available science, will collectively inform our first ever Long Term National Climate Policy which we intend publishing during 2008/09. This Policy will elaborate on the National Climate Change Response Strategy published during 2004 and the Midrand Plan of Action adopted during the national Climate Change Conference in 2005.

### Developing a National Adaptation Plan

4. Adaptation to the adverse impacts of climate change must occur in parallel to efforts to slow down climate change. In the international community it is likely that funding will

increasingly be made available to sensible, innovative and effective adaptation plans. We in South Africa should position ourselves to be amongst the leaders in these efforts, and to gain from this trend in a way that will yield long term benefits.

5. A number of departments and institutions, not least the Departments of Water Affairs and Forestry, Agriculture, and Science and Technology have made major strides in integrating planning and strategies to adapt to climate change with their research, development and implementation frameworks. Though the Long Term Management Strategy (LTMS) process is primarily mitigation focused, it will also produce a valuable information base that could assist us in taking forward our work on adaptation. DEAT and the South African Weather Service (SAWS) is also up-scaling our efforts on atmospheric monitoring, which will provide invaluable baseline data for future adaptation work.

6. DEAT will build on the outputs of our UNFCCC National Communications (to be completed early next year) and the progress achieved by our partners in other departments and institutions to design a process that will, over the next few years, match our efforts on the mitigation scenario building process. This will eventually lead to the development of a National Adaptation Plan. This process will initially be aimed at integrating and collating the existing work on adaptation and on the basis of this identify a medium term programme to address the gaps in our current knowledge base.

7. Within DEAT's portfolio, a priority area of work in this context deals with the impacts of climate change on key environmental assets. These include especially our natural heritage in the most threatened eco-systems and conservation areas of this country, marine resources and ecosystem goods and services that support so many livelihoods and maintain our environmental health and integrity.

Dealing with the impacts of climate change on key environmental assets

8. Last month, the Intergovernmental Panel on Climate Change confirmed that climate change is emerging as the single greatest driver of biodiversity loss, and as such will by mid-century have a dramatic impact on key eco-systems, conservation areas, marine

resources, and potentially tourism.

9. It stands to reason that tourism could be affected by climate change through a combination of loss of biodiversity, and changes in temperature, humidity and risk climate-sensitive diseases and other invasive organisms. Nature based tourism and wildlife are cited by some 30% of international visitors as key attractions in conservation areas and beyond. With tourism contributing just over eight percent of our Gross Domestic Product (GDP), the economic impact of climate change on tourism could be very large indeed. This does not include the more direct market impacts of climate change, e.g. on agriculture, invasive species, water resources and non-market impacts, e.g. the existence value of biodiversity, the subsistence use of natural resources and the impacts on human health.

10. Globally, by mid century, 20% to 30% of plant and animal species are likely to be at increased risk of extinction as a result of climate change. Closer to home, in sub-Saharan Africa, the Intergovernmental Panel on Climate Change (IPCC) indicated that between 25% and 40% of animal species in national parks will see further increases in threat status. South African Fynbos and the Succulent Karoo ecosystem seem particularly vulnerable and for a mean global temperature increase of between two and three degrees celsius during this century, we stand to lose between 50% and 65% of our unique Fynbos.

11. Potential shifts in the strength and position of the Benguela current upwelling system that supports South Africa's most productive fishery are also indicated.

12. In conservation areas the threats appear to be real and urgent. For example:

\* Kruger National Park: more intense rainfall interspersed with possibly more extended dry spells, changes in the tree cover and grass production, greater competition for water with water users upstream of the park.\* Hluhluwe-Imfolozi Park: aggressive bush encroachment and spread of biodiversity-choking invasive plants such as triffid weed.\* Table Mountain National Park: local extinctions of climate-sensitive fynbos species with possible loss of sensitive habitats such as ancient perennial water seeps, increased frequency of fires, accelerated spread of alien invasive species.\* Addo: greater frequency of intense rainfall

events interspersed with longer droughts\* Isimangaliso Wetland Park: gradual sea level rise leading to increased salinity and species loss in wetlands, and in conjunction with extreme storm events and possible degradation of mangroves that act as natural barriers against storm surges\* Kgalagadi Transfrontier Park: extreme temperature increase leading to die-back of key species such as observed in the desert quiver tree, and even remobilisation of the Kalahari dune system over decades\* Tanqua Karoo National Park and other protected areas of the Succulent Karoo: very likely increased risk of extinction of tens to hundreds of endemic succulent species over the next few decades\* Coastal wetland bird sanctuaries: salinisation and degradation due to sea level rise and storm surges may threaten the integrity of these ecosystems with threats especially for migrant species; greater unpredictability of rainfall may threaten bird species dependent on seasonal water bodies.

13. In order to preserve our magnificent heritage and key environmental assets, and ensure that it is passed on intact to the children and grandchildren of this nation, and indeed the world, we have to recognise that our knowledge base is incomplete. Within DEAT's portfolio, we will focus pro-actively on enhancing research on the impacts of climate change on key environmental assets, and in support of ecosystem planning, biodiversity management (also outside parks), the management of marine resources, park management and climate change adaptive plans. This will be achieved through strong cross-disciplinary approaches and by working closely with the funders of science, such as Department of Science and Technology (DST), and academic institutions.

New international partnerships to enhance domestic implementation

14. Over the past year we have enhanced our capacity for domestic implementation through a number of international partnerships.

India-Brazil-South Africa (IBSA): In December 2006, I agreed with my counterparts from India and Brazil that the initial cooperation framework for the IBSA Climate Change Working Group will focus on strengthening IBSA South \* South cooperation on climate change, and coordination during the negotiations and actions under the UNFCCC and other relevant international initiatives. This will eventually be expanded to include scientific exchange,

student exchange, technology transfer, and technology R&D cooperation.

Australia: South Africa and Australia both need to implement policies and measures in the biodiversity sphere and also in the agricultural sector. Through practical joint activities and mutual learning, we will enrich our respective domestic programmes to adapt to the devastating impacts of climate change with a view to conserving our rich biodiversity, and achieving improved food security. In terms of mitigation, we will share expertise on greenhouse gas emissions reporting and monitoring, and exchange experiences and lessons learned on climate change policies and measures - with a particular focus on clean coal technologies and regulatory and institutional frameworks.

United Kingdom (UK): Under the South Africa-UK High-Level Dialogue on Sustainable Development, which includes cooperation on energy for sustainable development, environmental enforcement, mainstreaming sustainable development, and sustainable consumption and production, we have established a Working Group on Climate Change. The working group on climate change will formulate a full programme including work on the adaptation and impacts. It has already agreed to undertake joint research work on possible forms of long-term global action on climate change.

European Commission: South Africa and the Commission established a formal dialogue and joint cooperation forum on the environment and sustainable development, with a specific working group focusing on issues relating to climate change. This area of work will focus on policy dialogue and implementation of respective commitments under the United Nations Framework Convention on Climate Change, the Kyoto Protocol and other climate change related projects or programmes such as adaptation, renewable energy, energy efficiency, disaster management, research, technology development and deployment.

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