

**Comments on the
National Climate Change Response
Green Paper 2010**

ISSUED BY

DEPARTMENT OF ENVIRONMENTAL AFFAIRS

11 February 2011

Comments submitted by
Energy Research Centre
University of Cape Town

Contents

General comments	1
1 INTRODUCTION	1
3 PRINCIPLES	1
4 RESPONSE STRATEGY	1
5 POLICY APPROACHES AND ACTIONS.....	2
6 ROLES AND RESPONSIBILITIES.....	5
7 INSTITUTIONAL FRAMEWORK FOR COORDINATION	6
8 INPUTS AND RESOURCE MOBILISATION	6
9 MONITORING, EVALUATION AND REVIEW.....	6

General comments

The Energy Research Centre at the University of Cape Town ERC welcomes the publication of the National Climate Change Response Green Paper 2010 (Department of Environmental Affairs), and ERC expresses our appreciation to the Department of Environmental Affairs (DEA) for the opportunity to comment.

Section numbering refers to the printed copy of the National Climate Change Response Green Paper 2010 provided at the DEA public consultation in Cape Town, 17th January 2011.

Given our area of expertise in the energy sector, the ERC has focused our comments predominantly on energy related issues. Broadly speaking our comments converged on two concerns: i) the lack of specific quantified targets for emissions reduction, both across the economy and also within each sector – specific targets should be established as minimums for the economy so as not to inhibit the possibility of further ambitious emissions reductions; and ii) the lack of clarity on how the proposed policies and measures align with other national policy spheres.

Specific comments are provided below under the relevant Green Paper heading.

1 Introduction

1. Conceptually the ERC agrees with the scientific impetus for the proposed policy framework, but there are some economic claims which would benefit from further elaboration. Such elaboration would also inform the specific policies developed further below in the Green Paper.
2. Reference to “fair, effective, inclusive multilateralism” should appear consistently throughout the document and replace the term ‘efficient international implementation’.

3 Principles

3. The final policy might further specify the crucial principle of equity.
4. Conceptually, the ERC agrees with the application of the precautionary principle. It is unclear from the text how this principle will be applied in this context, but we assume that climate policy should err on the side of caution, which in this context would imply that mitigation and adaptation measures should be implemented with due recognition that climate impacts may be more severe than current literature indicates, taking into account known uncertainties in the science.
5. The ERC applauds the inclusion of inter-generational rights as this is rooted in the South African constitution.

4 Response strategy

6. The ERC concurs with a balance of adaptation and mitigation interventions.
7. Our existing information base can be further strengthened by improving data collection, dissemination and accessibility, particularly in relation to energy. An improvement in the country’s currently inadequate energy data systems would enhance the country’s ability to develop efficient and effective mitigation policies.

8. The final policy must specify from the outset that the issue of peak, plateau and decline is crucial in framing the mitigation response and must maintain the 2030 deadline as stipulated in the relevant 2008 SA Cabinet statement¹.
9. The ERC would advocate a stronger emphasis on a 'just transition' in relation to the energy-intensive sectors of the South African economy, whilst aligning with national and regional responsibilities (Winkler, Jooste & Marquard 2010).

5 Policy approaches and actions

5.4 Key Mitigation Sector - Energy

10. There is a lack of defined emission reduction targets, particularly at a sectoral level. Emission reduction targets should be set in order to undertake effective Monitoring, Reporting and Verification (MRV) processes. Specific ambitious reduction targets should be specified across the board, and these should be established in a national process in the context of the national emissions reduction target.
11. In relation to section 5.4 Mitigation, the ERC welcomes the government's acknowledgement of South Africa being a significant contributor to Greenhouse Gas (GHG) emissions.
 - a. As a point of clarity, emissions from the energy sector (supply and use) lie at just under 4/5ths of the total rather than "over 80%" of emissions (see page 14)(DEA 2009)
12. The importance of renewable energy is addressed in mitigating GHG emissions, however beyond the reference to the 10,000GWh target by 2013 taken from the renewable energy white paper of 2003 (DME, 2003), other references to renewable energy are vague and undirected.
 - a. The ERC support the need to review and scale up the 10,000 GWh target stated in 5.4.7. as a matter of urgency, and to establish credible and ambitious renewable energy targets in all relevant sectors of the economy, in the context of both the national mitigation target and the integrated energy planning process which the Department of Energy is required to undertake every year.
 - b. Rather than 'develop' a Renewable Energy (RE) policy, the statement should rather read 'Support and Implement Renewable Energy policy.'
 - c. The ERC supports the initiative to establish an enabling environment that supports the development of a local renewable energy industry.
13. The ERC welcomes the inclusion of the Copenhagen targets included in the Green Paper, however
 - a. The document contains insufficient detail on how this target will be met.

¹ http://www.environment.gov.za/NewsMedia/MedStat/2008Jul28_2/28072008-2.html

- b. A ‘mitigation plan for the energy sector’ is proposed. There needs to be an implementable plan following on from this Green Paper to ensure that the energy sector plans include not only the IEP, IRP, but also that plans of major emitters such as Eskom, Sasol and mining houses, are aligned with national emissions reduction targets.
- 14. By contrast to the approach to renewable energy, very specific targets are proposed for nuclear energy in section 5.4.9.
 - a. It is unclear where the nuclear energy numbers in section 5.4.9 come from, i.e. 10 GWh by 2035. There has not been a public discussion concerning a new nuclear programme, as mandated in the 1998 White Paper on Energy, nor any other process which could have rationally set such a target for new nuclear capacity.
 - b. In common with other low-carbon energy supply options, the existence and extent of a nuclear programme should be publicly considered in the context of a national mitigation target, and also in the context of the integrated energy plan.
- 15. In the light of the current construction of two further coal-fired electricity plants in the country, any plans to develop further coal plants, by public or private sector entities, or the development of any other coal-based energy installation, should be approved only if these plans are compatible with the achievement of national emissions targets.
- 16. There is a lack of clarity on how climate goals expressed in the Green Paper will be integrated with other National policy and planning processes such as the Integrated Energy Plan (IEP) and the Intergrated Resource Plan (IRP). Efficient mitigation measures in the energy sector require an integrated approach where the most effective alternatives are considered and matched against other national policy priorities, and the process for undertaking this needs to be clearly stated.
- 17. Future iterations of the electricity plan (i.e. beyond IRP2010) should continue to include reference to the ‘peak, plateau and decline’ trajectory of our GHG emissions, and include a contribution by the electricity supply sector to that national effort which is clearly derived from an economy-wide consideration of the most effective way to meet a national mitigation target.
- 18. Section 5.4.3 makes reference to market based policy measures such as a carbon tax. This needs more clarity in terms of the design of the relevant instrument, with regard to similar policy considerations in the National Treasury, and should consider incorporating a mechanism to adjust the level of the tax, in response to accordance with the responsiveness of the economy in relationship to the national mitigation target.
- 19. The ERC supports the ambitious roll out of research, development and demonstration programmes for key technologies for mitigation and adaptation. This should apply to existing and new technologies and be vigorously pursued. Frequent technology assessments should inform the allocation of resources to these programmes.

20. Greater emphasis needs to be placed on energy efficiency, which was identified as the most cost effective source of emissions reductions by the long-term mitigation scenario process (LTMS).
- a. Despite considerable commitments in the 1998 White Paper on Energy Policy to a demand-side-based energy policy, the country's energy policy is still dominated by supply-side policies and measures, and demand-side measures are underdeveloped.
 - b. The laudible 2005 Energy Efficiency Strategy poses significant challenges to defining a clear and measurable target, since it lacks a clearly-defined baseline. It is thus not clear what progress has been made so far. Implementation of energy efficiency measures has largely been under the umbrella of ESKOM's DSM group and government-led interventions in public buildings, and evidence suggests that the potential for energy efficiency is much greater. Energy efficiency in the vehicles sector has not been seriously considered at all.
 - c. A wider, better resourced and governed approach to energy efficiency has the potential to deliver massive benefits, not only to the environment in terms of lower emissions, but also to the economy in terms of lower investment costs, borrowing requirements and foreign exchange requirements, improved energy security, and the development of associated industries. Energy efficiency in households will also enhance occupants' welfare.
21. There is currently no system in operation that would verify progress in the implementation of energy efficiency measures towards achieving sectoral policy targets (Sebitosi 2008) set out in SA's Energy Efficiency Strategy. This makes Monitoring, Reporting and Verification (MRV) unfeasible at present.
22. Many of the individual 'policy directives' are not sufficiently specified or time-bound. For example, including a carbon tax without specifying a level is almost meaningless. These should be re-drafted to include at least the following components:
- a. Specified actions and clearly time-bound targets;
 - b. Expected outcomes of these actions (Mt CO₂-eq in the case of mitigation; for adaptation, some results may be qualitative);
 - c. Quantify resources required in terms of
 - i. Investment (ZAR millions)
 - ii. Technology requirements
 - iii. Capacity: Institutional and governance requirements for implementation ; and where such capacity exists or needs to be created in government.
 - d. Monitoring, public reporting and verification of individual actions.

23. The question of agency for the ‘Energy’ section of the Green Paper has not been clarified.
24. An area that has not been explored is the role that the Southern African Power Pool (SAPP) can play to help South Africa meet its climate change goals and objectives. Sourcing power from outside our borders and from sources that are not coal-fired based may contribute towards reducing our overall emission levels.
25. The ERC applauds the inclusion of quantified targets in section 5.5.8 (Mining and Mineral Resources) but again, questions the lack of quantified reduction targets across all sectors. It is also not clear what the basis for these targets is.
26. The document as a whole is lacking any reference to the informal economy. Neither mitigation nor adaptation activities are including this important part of the country’s economy which involves a large proportion of the population.
27. The ERC supports the reference in 5.5.3 (Key Mitigation Sector – Industry) to use Section 29 (1) of the Air Quality Act (AQA) to manage the GHG emissions from all significant industrial sources. This should be applied to all sectors.
28. Section 5.8 – Natural Resources Sectors: commercial forestry should not be regarded as a ‘natural resource’. Accounting for forestry emissions (positive or negative) should follow standard IPCC guidelines.

6 Roles and responsibilities

29. The ERC is concerned that the timelines for reviewing and aligning legislation by 2012 and 2014 respectively outlined in 6.1.1 and 6.1.2 leave only six years to reduce emissions by 34% below BAU by 2020. Efforts to review climate and related policies need to start earlier, with annual public reporting on progress.
30. Climate change should be a priority in the development of all policy, and in particular, energy policy. The Green Paper makes reference to a national energy policy without clarifying which department will be responsible for the creation or implementation thereof. So far, energy policy capacity in the country has proved to be very weak, and in order to develop a climate-friendly energy policy, a different and more inclusive energy policy community will be required.
31. The current process for developing climate change policy has not successfully encouraged or facilitated inclusive civil society and public participation, therefore their views are not adequately represented.
 - a. South African Civil society needs to play a stronger role in the development and implementation of climate change policy, and space should be created by government to facilitate such a role.
 - b. Civil society plays an important inclusive role in facilitating outreach to grass roots communities, but this requires sufficient resources from government.

7 Institutional Framework for coordination

32. The ERC supports the creation of an Inter-Ministerial Committee (IMC) on Climate Change as this will provide critical leadership and direction in implementing climate policy. The IMC on Climate Change has the potential to coordinate policy and implementation across government, and also involves the Executive very centrally
33. The success of this climate change response strategy depends on the transparency of the planning processes, and ensuring that these are participatory and accountable; further clarity on the effectiveness of MINMEC and MINTEC as structures linking national, provincial and local processes is required, and a more formal structure is needed to link Cities (in particular metros) to national government on climate policy.
34. There is no reference to the National Planning Commission in planning the transition to a low-carbon and climate-resilient economy and society. There should be more clarity on the role of the NPC in this regard.

8 Inputs and resource mobilisation

35. The ERC supports establishment of a National Climate Change Fund and a Tracking Facility should research the UK Carbon Trust² and other models to see whether that was effective in increasing coordination on Climate Change
36. The classification of ‘hard’ and ‘soft’ technologies is poorly defined in point 8.3. The assumption that ‘hard’ technology is purely associated with mitigation technologies, and ‘soft’ technologies with adaptation technologies is incorrect. Bazilian et al (2008) discuss the various definitions of technology transfer and draw on the International Institute for Applied Systems Analysis (IIASA, 2006) definition where technology transfer is broken down into hardware, software and orgware. Also see International Energy Agency (2001); IPCC (2000); Karani (2001); and Thorne (2008).

9 Monitoring, Evaluation and Review

37. The ERC supports a dedicated section on monitoring, evaluation and review as this critical to ensuring compliance. It is crucial for government to set targets, and report against them regularly, both for mitigation and adaptation. Currently there is a lack of targets in the Green Paper, which precludes effective MRV.
38. The ERC supports the re-iteration of the Peak, Plateau and Decline as well as the Copenhagen targets under section 9.2. It is not clear how the conditionality associated with the Copenhagen targets will affect their domestic implementation.
39. No clear mechanism for MRV on adaptation activities is proposed – section 9.1.
40. The ERC proposes an insertion of the following italicised text in the chapeau to 9.2.3: “In order to monitor, verify and report mitigation progress and the efficacy of South Africa’s mitigation interventions *in response to overall targets and sectoral targets as outlined in section 5*, South Africa will:”

² www.carbontrust.co.uk

41. Point 9.2.5 calls for annual reporting of actual greenhouse gas emissions. The ERC seeks clarity on the steps that will be taken in the event of non-compliance.

42. The ERC proposes the following insertions of italicised text:

- a. Extend point 9.2.5 to include: ‘Publish an annual report comparing actual greenhouse gas emission data against the emission trajectory described above by 2014 *and take appropriate action based on national and sectoral targets*’
- b. Add a point 9.2.7 which reads: “*Consideration needs to be given to promulgating regulation to elaborate the enforcement mechanisms for sectoral and national commitments, and compliance of sectoral commitments with the overall national goal*”

Additional comments

43. Question on process: Will there be an opportunity for public consultation on a draft white paper?

References

- Bazilian, M., DeConinck, H., Radkac, M., Nakhooda, S., Boyd, W., MacGill, I., et al. (November 2008). *Considering Technology within the UN Climate Change Negotiations*. Energy Research Centre of the Netherlands.
- DEA (Department of Environmental Affairs) 2009. Greenhouse gas inventory 2000: National inventory report. Compilation under the United Nations Framework Convention on Climate Change. May 2009. Pretoria.
- Energy Research Centre, , Aligning South African energy and climate change mitigation policy, December 2009
- International Energy Agency. (2001). *Technology without borders; Case studies of successful technology transfer*, Available: <http://www.iea.org/papers/2001/ctifull.pdf>
- IIASA. (June 2006). *What is Technology?* Accessed November 2009, from IIASA -International Institute for Applied Systems Analysis:
<http://www.iiasa.ac.at/Research/TNT/ERCB/Page10120/page10120.html>
- IPCC. (2000). *Special Report Methodological and Technical Issues in Technology Transfer, Working Group III*. <http://www.ipcc.ch/pdf/special-reports/spm/sr11-en.pdf>
- Karani, P. (2001). *Constraints for activities implemented jointly (AIJ) technology transfer in Africa*. Renewable Energy, Volume 22, Issues 1-3, January-March 2001, Pages 229-234
- National Treasury 2010. Reducing greenhouse gas emissions: The carbon tax option. Discussion paper for public comment, December 2010. Pretoria.
<http://www.treasury.gov.za/public%20comments/Discussion%20Paper%20Carbon%20Taxes%2081210.pdf> Accessed 20 December 2010.
- RSA (Republic of South Africa) 2008. Government's vision, strategic direction and framework for climate policy. Presentation by the Minister of Environmental Affairs and Tourism on the July Cabinet *lekgotla*. Cape Town, Department of Environmental Affairs and Tourism.
www.environment.gov.za/NewsMedia/MediaStat/2008Jul28_2/Media%20LTMS%2029July2008.ppt Last accessed 27 April 2009.
- Sebitosi, AB, 2008, Energy Efficiency, Security of supply and the environment in South Africa: Moving beyond the strategy documents, *Energy* 33 (2008)
- Thorne, S. (2008). Towards a framework of clean energy technology receptivity. *Energy Policy* 36, 2831– 2838.
- Winkler, H, Jooste, M & Marquard, A 2010. Structuring approaches to pricing carbon in energy- and trade-intensive sectors in South Africa. *Climate Policy* 10 (5): 527–543.