

GOVERNANCE OF CLIMATE CHANGE IN SOUTH AFRICA



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Governance of Climate Change in South Africa

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Foreword

From 3 to 6 March 2009, South Africans from all spheres of life came together for the national Climate Change Summit 2009 in Midrand to initiate a consultative process to develop the South African Climate Change Response Policy. Although the Summit yielded wide-ranging consensus on a number of proposed climate change responses, it also identified various areas of divergence that required further discussion. With this, the Summit agreed, amongst others, that the National Climate Change Response Policy will be developed through a participatory, multi-stakeholder, consultative and iterative process and that issues raised during the Climate Change Summit 2009 must be addressed in a transparent manner and fed into the policy development process.

During the participatory, multi-stakeholder, consultative and iterative policy development process initiated at the Summit, certain specific issues appeared to be raised again and again in various policy development stakeholder engagements. These recurring areas of concern and/or uncertainty included: Climate Finance; Human Resources and Technology; Adaptation; Mitigation; and Governance.

In keeping with the Summit decisions and with a view to informing and enriching the debates around these issues, the Department of Environmental Affairs commissioned focussed research into these focus areas and used the findings of this research to focus and inform discussions in key stakeholder workshops on each of the topics in February and March 2011.

Although the independent research and findings contained in this publication do not necessarily represent the views, opinions and/or position of Government, the department believes that this research is an important addition to the evolving climate change discourse. Hence, the department is happy to make this work publicly available and accessible.

With this, I would like to thank everyone who contributed to the research papers presented in this book as well as everyone who contributed to the various stakeholder workshops on the topics covered by this research.

Finally, I would also like to thank our German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) partners and their local agent, the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), for their generous support for this research and its publication.

Peter Lukey

Acting deputy Director-General: Climate Change Department of Environmental Affairs

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Abbreviations

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| ACC | Adapting to Climate Change Programme |
|-----------------|---|
| ARK | Netherlands' National Programme for Spatial Adaptation to Climate Change |
| BUSA | Business Unity South Africa |
| C40 | C40 Cities Climate Leadership Group |
| ССС | Committee on Climate Change |
| CEC | Committee for Environmental Coordination |
| CO ₂ | Carbon Dioxide |
| COP | Conference of the Parties |
| CPI | Climate Policy Integration |
| CSIRO | Commonwealth Scientific and Industrial Research Organisation |
| DEA | Department of Environmental Affairs |
| DEAT | Department of Environmental Affairs and Tourism |
| DED | Department of Economic Development |
| DG | Director-general |
| DMR | Department of Mineral Resources |
| DoT | Department of Transport |
| DPE | Department of Public Enterprises |
| DPME | Department of Performance Monitoring and Evaluation |
| DTI | Department of Trade and Industry |
| EIA | Environmental Impact Assessment |
| EIP | Environmental Implementation Plan |
| EMP | Environmental Management Plan |
| EPA | United Stated Environmental Protection Agency |
| EPI | Environmental Policy Integration |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| EU | European Union |
| FOSAD | South African Directors-General |
| GCIS | Government Communication and Information System |

| GHG | Greenhouse Gas |
|--------|--|
| HMARF | Horizontal Management, Accountability and Reporting Framework |
| HMG | Her Majesty's Government |
| IDP | Integrated Development Plan |
| IEM | Integrated Environmental Management |
| IGCCC | Intergovernmental Committee on Climate Change |
| IGRA | Intergovernmental Relations Framework Act |
| IMCCC | Inter-Ministerial Committee on Climate Change |
| IMFO | Institute of Municipal Finance Officers |
| LGP | Local Government Project |
| MEC | Member of the Executive Council |
| MFMA | Municipal Finance Management Act |
| NAS | National Adaptation Strategy |
| NCCC | National Climate Change Committee |
| NEAF | National Environmental Advisory Forum |
| NEDLAC | National Economic Development and Labour Council |
| NEMA | National Environmental Management Act |
| NGO | Nongovernmental Organisation |
| NPC | National Planning Commission |
| PMS | Performance Management System |
| PNACC | National Plan for Climate Change Adaptation |
| RCCP | Regional Climate Change Partnerships |
| RIA | Regulatory Impact Assessment |
| RSA | Republic of South Africa |
| SALGA | South African Local Government Association |
| SANBI | South African National Biodiversity Institute |
| UK | United Kingdom |
| UNFCCC | United Nations Framework Convention on Climate Change |
| USAID | United States Agency for International Development |

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Summary

This paper, prepared by the Development Bank of Southern Africa (DBSA), aims to provide informed recommendations for appropriate governance and coordination mechanisms that can support the mainstreaming of climate change within all spheres of government. It does so by outlining national challenges to mainstreaming climate change, which is followed by an assessment of three complementary coordination mechanisms required for successful mainstreaming of climate change and recommendations for enhancing and supporting these mechanisms. It examines and sets out the challenges according to the roles and competences of the three spheres of government in relation to environmental legislation. It then draws lessons both from South African case studies outside the environment field and from international experiences, which might be useful for climate change governance.

The sections below provide an overview of what is contained in the main report.

Challenges of mainstreaming climate change

Climate change is a complex cross-cutting issue. It cannot be the sole prerogative of one government department. Effective integration of adaptation and mitigation measures require the buy-in and prioritisation of climate change within many government departments at all three spheres of government and across the administration as a whole. Challenges regarding mainstreaming climate change into the policy space relate to: a perception that climate change mainstreaming is a constraint to development priorities; the range of definitions that exist regarding what successful mainstreaming; and the highly fragmented environmental policy space into, which climate change needs to be integrated.

Different coordination options

Three different coordination mechanisms are elaborated in this report. They are: horizontal coordination, vertical coordination and stakeholder coordination. Each mechanism is summarised below.

Horizontal Coordination

Horizontal coordination (i.e. coordination within and across the different departments) at the national government level presents enormous challenges. Of the 32 national sector departments, at least 19 should be directly or indirectly involved with mainstreaming climate change. However, institutional and legislation fragmentation pose enormous challenges to horizontal coordination, which is compounded by the fact that none of the departments apart from the Department of Environmental Affairs (DEA) view climate change as a priority for their sector.

While the National Climate Change Response Green Paper (Green Paper) advocates full alignment and suggests building on the Outcomes Approach developed by Department of Performance Monitoring and Evaluation (DPME) in order to address the existing institutional and legislation fragmentation, compliance mechanisms have not been developed to ensure implementation. Furthermore, while two existing centralised mechanisms, namely the Interministerial Committee on Climate Change (IMCCC) and the Forum of South African Directors-General (FOSAD) clusters are endorsed by the Green Paper, this report highlights weaknesses associated with both regarding their ability to move from policy to implementation.

Vertical coordination

Some of the challenges to vertical coordination (i.e. coordination among the different spheres of government) relate directly to the issues climate change and environmental management. However, many of the challenges to vertical coordination are intrinsic to the way the different spheres of government are structured and function. Vertical coordination is therefore an inherent challenge for the South African government and will not be resolved merely by address challenges specifically related to climate-change or environmental governance.

The Green Paper acknowledges the importance of all spheres of government in addressing climate change and recognises the need for collaboration (vertical and horizontal) to ensure that experiences, knowledge and know-how are effectively shared. To this end, the Green Paper suggests utilising existing coordinating structures, namely the Intergovernmental Committee on Climate Change (IGCCC), the extended MINMEC/MINTECH structures as utilised for developing the Outcomes Approach and the South African Local Governments Association (SALGA). This report highlights weaknesses: the IGCCC turns out to be merely an information platform; the MINTECH and MINMEC remains too high level and too sector oriented to facilitate mainstreaming; and SALGA has limited capacity, which constrains its actions.

Stakeholder coordination

A stakeholder approach to addressing climate change in South Africa is in line with international trends. It is widely acknowledged that the success of interventions depends on the pooled resources, energy, and regulatory authority of multiple stakeholders. However, stakeholder engagement within the context of climate change is a complex activity, due to different (and often opposing) interests, ideologies, capacities, as well as varying degrees of political influence of the different stakeholder groupings.

Public participation in cooperative environmental governance is enshrined in South African legislation. The Green Paper indicates an important role for stakeholder coordination calls for the inclusion of the greater population. Two forums for stakeholder engagement are specifically mentioned. These are the National Committee on Climate Change (NCCC) and the National Economic Development and Labour Council (NEDLAC). While the NCCC is the official national platform for continuous stakeholder engagement on climate change, it has no executive power with very poor participation by key ministries such as National Treasury, by and no attendance by key cross-sector departments such as the Presidency. Further, it does not have a proper budget and secretariat, and is a closed forum lacking transparency. The NCCC has done no specific work on mapping or analysing stakeholder engagement. NEDLAC could be the alternative climate change stakeholder coordination mechanism. It is a useful forum where government, organised business, organised labour and organised community groupings partner on a national level. This platform could help to ensure that climate change policy implementation is balanced and meets the needs of all sectors of the economy.

Recommendations

The recommendations for each coordinating mechanism are provided on the table that follows.

Recommendations for all three coordinating mechanisms

| Horizontal coordination | Vertical coordination | Stakeholder coordination |
|---|--|---|
| Building on/revise the Outcomes Approach. This would require | Short-term recommendations | Principles for efficient stakeholder engagement |
| strengthening the associated compliance mechanism. | Emphasise the development on an implementation protocol; | Fairness, accountability, responsibility and transparency needs to be |
| Reforming the IMCCC to include all appropriate ministers, in particular | Resource the IGCCC;Complement the extended | maintained throughout the project cycle; |
| the Minister of Finance and to ensure that mainstreaming climate change into the policy space is a core part of its mandate. | MINMEC/MINTECH process or establish a President's Coordinating Council dedicated to climate change; and | Better understanding of the different types of participation and their relevance for different stakeholders groups; |
| Create an IMCCC Technical Committee to facilitate the operationalisation of the IMCCC and ensure policy coordination and coherence across the FOSAD | Support provincial and local government with information and knowledge exchange, best practice sharing and training. | • Engage with specific areas given the complexity of climate change, and because stakeholders have different areas of concern; |
| Clusters. Strengthen the IMCCCs relationship with parliament to ensure that climate change discussions extend beyond the parliamentary environmental committee. This | | Define relationships and engagement strategy according to each stakeholder grouping's interests and the expected outcomes, with an emphasis on exploring synergies among the different groupings; |
| would, however, require legislative amendments. | | • Eradicate language and access to information barriers; and |
| | | • Ensure consistency of government representation. |

Horizontal coordination

- Integrate climate change into existing or new legislation. Climate change could either be incorporated into the National Environmental Management Act (NEMA) or be the basis for the development of a new Act. In either case, the establishment of a specific implementation protocol on climate change is an important consideration to support effective implementation.
- Create an advisory body that reports to the President or Parliament. This recommendation is supported by national legislation.
- Promote the use of diffuse horizontal coordination instruments such as a carbon tax and appropriate procurement policies.

Vertical coordination

- Develop a clearing house mechanism for facilitating the availability of data and information about local impacts of climate change; and
- Support implementation, especially at a local level, through the integration of climate change into the IDP process and through the possible establishment of astatutory body dedicated to this task.

General recommendations

- Sufficient and appropriate finances are to be provided to province and municipalities to address climate change;
- Political accountability in terms of climate change at provincial and municipal level must be linked to a robust framework and system for monitoring climate change governance; and
- Facilitate improved vertical coordination through horizontal coordination.

Ensure effective allocation of resources for stakeholder coordination at all spheres of government;

stakeholder engagement

Stakeholder coordination

Tools for appropriate

- Develop administrative tools to manage stakeholder engagement;
- Industry scoping exercise and stakeholder mapping to identify concerns, barriers and for identifying stakeholders; and
- Municipal stakeholder analysis should be conducted
- Performance assessment on engagement strategy and practices should be conducted nationally.

Institutional implications

- Capacitate the NCCC with budget and administrative capacity, with the performance assessment for each department including representation at the NCCC; and
- Setting up stakeholder groupings at provincial and municipal levels.

I Introduction

Mainstreaming climate policy is far more crucial for South Africa than is often acknowledged. The state of the economy, mainly the very high level of unemployment, and of the society, the high level of poverty and inequality, demand the development of new economic sectors. Adaptation to climate change and mitigation of greenhouse gas (GHG) emissions offer opportunities to foster a new kind of economic development and improve the distribution of resultant economic gains. This new direction requires, however, that climate policy becomes an integral part of the country's development strategy. While implementation detail is still to come, the New Growth Path (NGP), released by the Department of Economic Development, opens an opportunity in this regard (DED, 2010).

South Africa has set ambitious targets for the reduction of greenhouse gases but is still in the process of designing its climate change policy. While some technical solutions have been developed, they are no substitute for a comprehensive policy and governance framework in ensuring effective implementation. In this respect the link between climate change intervention and development still needs to cascade from South African academics and the Department of Environmental Affairs (DEA) to other sectoral departments and to provincial and local government. An efficient and effective governance system integrating climate change into administration is required.

The main question for South Africa is what climate change governance system should be devised and implemented to ensure the coordination of stakeholders? There is no direct answer to this question for at least three reasons: first, governance is sometimes hard to define; second, although lessons can be drawn from environmental governance, climate change governance is a very new field of work, especially as far as adaptation is concerned. Consequently, there is still no rulebook or agreed best practice in this domain (Meadowcroft, 2009; Jordan and Lenschow, 2010). Finally, because South Africa's existing environmental governance system is fragmented, leading to inefficiencies (Kotzé, 2006; 2009), this suggests that integrating climate change governance will pose considerable challenges.

Specific challenges related to the governance of climate change add to the coordination challenges related to any governance system. These challenges need to be understood and strategies designed to overcome them. Otherwise, the governance system might be inefficient and merely deliver overly ambitious climate change strategies resulting in poor implementation and delayed actions. An important question is how South Africa should address these challenges and whether it could be done through designing a climate change governance system?

This paper seeks to investigate South Africa's governance challenges in relation to mainstreaming climate change within policy making and the implementation processes. It examines and sets out the challenges according to the roles and competences of the three spheres of government in relation to environmental legislation. It draws lessons both from South African case studies outside the environment field, which might be useful for climate change governance, and from international experiences. Finally, it evaluates the governance mechanisms included in the National Climate Change Response Green Paper (DEA 2010a), and provides options to improve the governance of climate change.

1.1 Mainstreaming climate change objectives into other policy sectors

Climate change is a complex cross-cutting issue and cannot be the sole prerogative of one government department. For the effective integration of adaptation and mitigation measures, almost every department in government and the entire administrative system (i.e. including decentralised levels of government and parastatal entities) should mainstream climate change and integrate it into policies and interventions. Furthermore, a multiplicity of actors are intervening and influencing discussions and actions. Policy makers must take these features into account and address the governance of climate change as a complex, cross-cutting, multilevel, multi-actor process that is deeply embedded in local realities.

Most of the work on mainstreaming climate change in the policy space originates from work conducted on sustainable development, what Lafferty and Hovden (2002: 5) define as the "integration of environmental objectives into nonenvironmental policy sectors", or environmental policy integration (EPI). By the same token, climate policy integration (CPI) implies acceptance all sectoral policies must take heed of climate change causes and consequences. Mickwitz et al. (2009b: 3) adapts Lafferty and Hovdens' (2002) EPI definition to provide the following definition of CPI:

- the incorporation of the aims of climate change mitigation and adaptation into all stages of policymaking in other policy sectors
- complemented by an attempt to aggregate expected consequences for climate change mitigation and adaptation into an overall evaluation of policy, and a commitment to minimise contradictions between climate policies and other policies.

Consequently, mainstreaming climate change entails moving away from a situation where climate related objectives tend to be considered as an additional constraint on development policy.

However, the conclusion from Nilsson et al. (2007), that there is no consensus on whether EPI implies that the environment should be considered the most important priority, or should simply mean considering the environment in taking decisions, is likely valid for CPI. Stakeholders supporting the mainstreaming of climate change, including national departments, may take positions ranging from principled prioritisation of climate related issues to making climate change informed decisions. An efficient climate change governance system should deliver a policy making process, which ensures that CPI becomes a reality. The many functional (who should do what) and procedural (how mainstreaming should happen) implications can be divided into three categories:

- Horizontal coordination: this is particularly important as it shapes the decision making process and the implementation of decisions. It should lead to the integration of climate change policy within and across the different departments (Mickwitz and Kivimaa, 2007), notably to curb the silo mentality (or departmentalism), which prevails. However, while win-win opportunities might facilitate CPI, conflicting objectives might hinder it.
- Vertical coordination: decentralisation, entailing the principle of subsidiarity, necessitates that climate policy design and implementation must be coherent across the different tiers of government. Decentralisation comes from the consensus that decisions on a variety of services are better taken locally, especially to accommodate diversity and a low level of economy of scale. However, beyond this general agreement, there is no consensus on how multilevel governance should be structured (Hooghe and Marks, 2003). Consequently, without efficient

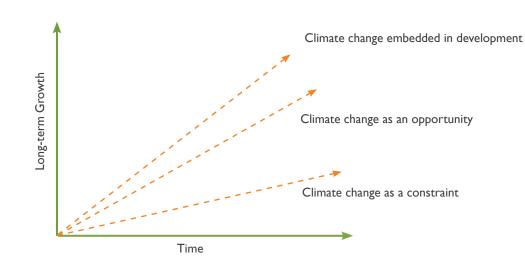


Figure I: Climate change and development

coordination among the three spheres of government CPI might be hampered;

 Stakeholder coordination: a multiplicity of non-state national and trans-national actors – businesses, trade unions, civil society organisations, research institutions – intervene in debates, produce knowledge and implement actions, which might support or undermine government objectives. The relationships between government and non-state actors are acknowledged but the challenge is to integrate them into the governance system, and to coordinate their efforts.

Defining a governance system for effective CPI is an ambitious challenge as "the existing literature identifies few jurisdictions in which policy integration has become an everyday organisational routine (as opposed to a transient political objective) throughout all levels of decision making" (Jordan and Lenschow, 2010: 150). The following sections try to unravel these three coordination dimensions and provide insights for improving the current governance system of climate change. To this end, the following steps are followed:

- understand the coordination challenges
- identify what has been done in other countries, to determine whether new structures or changes in mandate could be required
- examine what the National Climate Change Response Green Paper is proposing compared to existing capacity in South Africa

 propose recommendations to improve the level of coordination (including monitoring, reporting and verification).

This task is especially difficult because environmental governance, of which climate governance is but one dimension, is highly fragmented in South Africa (Kotzé, 2009). This includes:

- horizontal fragmentation with different departments dealing with various environmental issues
- vertical fragmentation with different institutions in the various spheres of government dealing with environmental issues
- legislative fragmentation with national, provincial and local laws, dealing with similar issues
- intersectoral fragmentation where distinct laws empowering different institutions address one issue.

This has led to a fragmented compliance and enforcement regime. According to Kotzé (2009), while compliance and enforcement schemes related to different environmental issues are progressively being integrated into the National Environmental Management Act, No. 107 of 1998 (NEMA) (RSA, 1998), other laws regulating water resources, agriculture, forestry, mining and heritage resources, remain outside it. This fragmentation is responsible for inefficiency and poor implementation. In this context, climate change governance should certainly not contribute to additional fragmentation.

2 Horizontal coordination

National government is traditionally responsible for defining national policy, the strategic direction and approach used, and the regulatory framework for specific areas or sectors. With climate change the situation is far more complex: because of its multi-dimensional, cross-cutting nature a strictly sectoral approach is doomed to fail; all national sectoral departments need to address mitigation or adaptation measures. Transport, water, agriculture, industry, environment, energy, housing, etc might each devise a policy, which limits or increases GHG emissions, or favours or hampers adaptation to climate change. Horizontal coordination deals with the ability to promote CPI across the different departments and, thus, strengthen policy coherence.

The roles of various national departments can be categorised as follows (adapted from Imbewu):

- the DEA is the lead department for climate change;
- Key departments that need to provide strong and immediate support in defining actions to address climate change;
- Supporting departments that assist in addressing climate change, in an indirect manner and/or with a longer time horizon.

At least 21 of the 32 sectoral departments are concerned with climate change. In addition to the lead department, the DEA, 13 departments can be considered as key, and six as supporting departments. The two new ministries in the Presidency fall into the former category: the National Planning Commission has to ensure that its long-term vision is climate resilient because its mission is to "improve government performance in achieving desired outcomes and to improve service delivery through changing the way government works" (DPME, 2010b: 6), the Department of Performance Monitoring and Evaluation (DPME) is directly concerned. Currently none of the key and supporting departments can claim climate change as a priority, far less their most important priority

This institutional fragmentation, accompanied by the high level of legislative fragmentation, highlights the challenge facing horizontal coordination. In order to achieve the required level of coherence and alignment we need to determine how to integrate climate change into relevant public policies across sectors and ministries.

2.1 What makes horizontal coordination so difficult?

Win-win situations stemming from CPI are often emphasised to convince policy makers of the importance of a coherent climate policy. For instance, climate change is likely to increase the number of extreme weather and other natural events and strengthen their intensity. Poor populations are most vulnerable to these events and thus would benefit greatly from programmes mitigating emissions and adapting to climate change. Therefore CPI might support a poverty or vulnerability reduction policy. Departments are unlikely to challenge such win-win situations as long as they are made aware of them and take ownership of them, which presents a challenge in itself.

Nevertheless, beyond these win-win situations, sectoral objectives might conflict with climate policy imperatives and hamper mainstreaming climate change. CPI requires a good understanding of the political economy of climate change, which involves identifying vested interests, lock-in mechanisms and path-dependencies, and ultimately the winners and losers. Power shapes the governance system and reforming it to achieve rapid, efficient and effective actions cannot be achieved adequately without influencing the political balance of power and related competences.

President Zuma's administration has emphasised seven overarching priorities: employment, education, health, rural development, crime, human settlements, local government and public services (Presidency, 2009). These priorities have to be located within a challenging socio-economic context, which notably includes extreme poverty, huge inequality, infrastructure backlogs (including maintenance), the threat to energy security, poor service delivery (water, energy, housing, health and education), natural resource depletion (including water and biodiversity), stalled agrarian and land reform, food insecurity, rural-urban and international migration, and corruption (Giordano et al., 2010). For the departments faced with fixing these development challenges, climate policy might simply appear as an additional constraint in their daily work, and not as something requiring mainstreaming. At least three issues emerge from this context:

Table 1: Key and supporting departments for climate change (Authors based on Imbewu (2011))

| | , | |
|-----------------|--|--|
| | Agriculture, Forestry and Fisheries | Negative impacts of climate change on agriculture and food production (temperature, rain patterns, droughts, floods) require adaptation measures; agriculture also emits GHG emissions and mitigation measures need to be implemented. |
| | Cooperative Governance and Traditional Affairs | Oversight of implementation of climate related measures by local governments and legislative power on climate related issues. Responsible for disaster management. Can make regulations setting specific key performance indicators related to climate policy objectives for inclusion in IDPs and the performance management system (PMS) (Du Plessis, 2011: 14). |
| | Economic Development | Climate change as part of the green economy and of broader development strategy. |
| | Energy | Energy sources and uses are responsible for current GHG emissions. |
| Key departments | National Treasury | Market based instruments (carbon tax, cap and trade) are key tools for mitigation. Sets the budget which shapes the ability of the country to develop and implement mitigation and adaptation measures. |
| par | Mineral Resources | Emitting sector, energy efficiency implementer, energy producer (co-generation). |
| y de | Public Enterprises | Emitting sectors (Eskom, Transnet etc.) |
| Ke | Rural Development and Land Reform | Related to agriculture and industry and services development. |
| | Science and Technology | Responsible for innovation for climate resilience and emission reduction (adaptation and mitigation), technology transfer, adaptation and adoption. |
| | Trade and Industry | Responsible for developing industrial policy as a tool for restructuring the carbon profile of the economy and the development of new technologies. |
| | Transport | Emitting sector with high potential for CO_2 reduction. |
| | The Presidency: National Planning | Includes climate change as part of the long-term development planning process. |
| | The Presidency: Performance Monitoring and Evaluation | The outcomes based approach could be a powerful tool for mitigation and adaptation processes. |
| | Basic Education | Awareness building on climate change is crucial to help people mitigate and adapt. |
| | Health | Responsible for modification in the geographical presence of diseases (human, plants). |
| tments | Higher Education and Training | Responsible for raising awareness, educating students (engineers, town planners etc.) for mitigation and adaptation. |
| <u> </u> | Human Settlements | Ensure that housing and the built environment are resource efficient and climate resilient. |
| Supporting depa | International Relations and Cooperation | President of COP 17. |
| | Public Works | Many public works programmes are related to environmental issues on which climate change has an impact (biodiversity, land, water etc.) and some direct mitigation actions (eg. Working for Fire and Working for Water programmes). |
| | Tourism | The tourism value of many natural sites is related to climate patterns. |
| | | |

13

- The first relates to evaluating the relative importance of sector priorities and climate policy. What process could be used to identify, characterise and manage them? To what extent does a consensus on mainstreaming climate change exist in the current cabinet?
- Once the potential conflicts between sectoral and climate policies are identified, how can they be resolved? What is the most appropriate "political forum and policy making process where conflicting interests and demands can be weighed against democratically derived guidelines and principles?" (Lafferty and Hovden, 2002: 21).
- Once the forum and policy making process is identified, what solutions could be put forward in the forum to move from a potentially conflict-ridden situation to a cooperative one?

Responding to these issues is of utmost importance to ensure CPI. Horizontal coordination ideally facilitates ownership by sectoral departments through win-win situations, addresses conflicting issues and moves towards cooperative solutions.

2.2 Horizontal coordination in other countries

There are at least two different types of horizontal coordination mechanisms: centralised and diffused mechanisms. The two are not exclusive and might complement each other.

Among the centralised mechanisms, the following are probably the most common (Peters, 1997; Meadowcroft, 2009):

- leadership by the head of state through his or her personal office
- designating a senior government minister to take particular responsibility for climate change policy
- assigning responsibility for collaborative initiatives to central departments
- using the cabinet and cabinet committees to manage cross-cutting objectives, which could link climate change with critical areas such as energy, water, etc.

- allocating cross-cutting issues to ministerial briefs
- creating "super ministries" incorporating a wide range of interrelated responsibilities normally distributed across a number of departments. However, "it is more effective to set up various permanent organs and senior official positions supporting horizontal leadership linking ministries than to create a new ministry or to make reforms between ministries" (Mickwitz et al., 2009a: 62);
- establishing agencies or integration units within (central) departments as centres of excellence for cross-cutting themes;
- establishing inter-ministerial committees to manage multi-actor policy areas and initiatives
- commissioning a national task force or parliamentary commissions with a mandate to conduct hearings, investigate issues, educate the public, and report to the government on priorities
- selecting an administrative lead agency on climate change
- establishing an inter-governmental coordinating committee (chaired by the lead agency) to bring together officials from across government working on climate change, and
- introducing regular reporting to parliament on climate change objectives, policy and performance.

Governments use different structures to mainstream climate change. Here are some examples.

- Constitutional recognition of the importance of climate change: for instance, in the Europe Union (EU), Article 2 of the 1997 Amsterdam Treaty (European Communities 1997) requires the integration of environmental considerations into other policies. In South Africa, Section 24 of the Constitution recognises the right to a protected environment.
- A special advisor to the head of state/ government: In Finland, Germany, the United Kingdom and Italy climate change experts support the prime minister. This will only be successful if the head of state/ government takes an active role in mainstreaming climate change (Mickwitz et al., 2009a).

- An inter-ministerial committee on climate change: in many countries (Mickwitz and al., 2009a) such committees are of utmost importance in ensuring efficient CPI.
- A committee on climate change / sustainable development: In Finland, a national commission on sustainable development promotes cooperation between stakeholders. Initially chaired by the prime minister, when the minister of labour took over in 2007 its influence was weakened. The commission comprises several ministers, members of parliament, and representatives from ministries, municipalities, producers', consumers' and economic organisations, trade unions, environmental and citizens' organisations and the scientific community. "The commission has promoted the mainstreaming of climate and in the future can serve as an organ in increasing the coherence of climate policy" (Mickwitz et al., 2009a).
- Canada is setting up a horizontal management, accountability and reporting framework (HMARF) to implement effective administration including reporting and monitoring "throughout the entire administration to evaluate progress on various programmes, to assist in setting priorities and in the redistribution of resources and to develop mechanisms to support coordinated decision making" (Mickwitz et al., 2009a).

More important than the structures themselves are the functions they are responsible for. Because climate change includes many uncertainties, and requires complex analyses based on high quality knowledge and data a coordinating institution is required to fulfil these functions.

Other, more diffuse coordination mechanisms should not be neglected. The most commonly used include:

- Capacity building for officials within the different departments and institutional learning.
- Introducing an environmental policy appraisal (EPA). However, Russel and Jordan (2007) show that in the UK under the Labour government EPA was mainly used to confirm already decided energy policies and not to evaluate what the best policy option would be. Consequently, this tool has to be well managed.

- Using public procurement policy to purchase climatefriendly technologies, and other innovative products and services. Some studies have shown that public procurement stimulates local innovation if good practices are followed (Edler and Georghiou, 2007; Aschhoff and Sofka, 2009).
- Requiring public or private entities to prove "a minimum level of compliance with key environmental law obligations or proven environmental performance" (Du Plessis, 2011: 17) when tendering (an audit certificate for example) to stimulate environmental law compliance.
- Reforming the environmental impact assessment (EIA) to include the carbon footprint or climate resilience of a project. This implies defining a clear methodology to evaluate the carbon content of projects and the climate risks.
- Introducing a carbon tax or a cap and trade mechanism, as in South Africa.

2.3 What is the Green Paper proposing?

2.3.1 Clarifying alignment

The Green Paper acknowledges the existence of conflicting policies and argues that alignment is necessary. It states that "all government departments and all state owned enterprises must:

- By 2012, conduct a review of all policies, strategies, legislation, regulations and plans falling within its jurisdiction or sphere of influence to ensure full alignment with the National Climate Change Response Policy.
- By 2014, ensure that all policies, strategies, legislation, regulations and plans falling within its jurisdiction or sphere of influence are fully aligned with the National Climate Change Response Policy." (DEA, 2010: 31)

This makes compliance with the policy an overarching priority for all departments. The extent of mainstreaming will then depend on the content and compliance requirements of the policy. "Full alignment" and CPI might not be synonymous. Therefore, the main challenge will be to translate this principle into practice, which might be highly challenging unless the following loopholes are closed.

First, full alignment is not clearly defined since there are no concrete specifications defining those areas to, which departments have to align: the Green Paper is unclear as to whether it requires alignment to the objectives of the response, to the principles that guide it or to the strategies and sector priorities. The Green Paper needs to clarify what departments should align to and how they should align.

Secondly, departments' alignment must be reviewed, implying that criteria need to be set, measured and reported on. Depending on alignment targets, qualitative or quantitative objectives must be determined with explicit timelines and indisputable baselines for each department. While the White Paper is not the appropriate tool to define these objectives, it has to specify the process to be used to identify them, and what the monitoring, reporting and verification mechanism might be. A strategic long-term view is required to avoid including lock-in solutions in the NCCRP, which might prevent achievement of the desired outcome.

Consequently, CPI still faces a struggle, especially in relation to the coordination mechanism required to make it a reality. Requirements to achieve this are listed below (adapted from Lafferty and Hovden, 2002; and Mickwitz and Kivimaa, 2007):

- If the alignment process is to lead to any real change measurable objectives or targets have to be defined for the different departments, and/or policy instruments developed. These targets must be adapted to the capacity of the state. Multiple complex objectives might present insurmountable challenges for measuring, reporting and verification;
- A climate action plan with policy instruments must set targets based on qualitative and/or quantitative indicators, which require:
 - suitable data to establish a baseline against, which progress can be measured, and an efficient process to produce new data relevant to future outcomes;

- A short list of carefully selected indicators to avoid having to monitor too many indicators (costly and time-consuming);
- clear timelines for monitoring progress;
- targets must reflect maximum consistency with each other.
- The balance between conflicting objectives has to be weighed, contentious issues resolved where possible and remaining conflicts acknowledged. CPI cannot merely be imposed but as Lafferty and Hovden (2002: 17) argue, "This does not mean ... that the 'mandate' for sustainable development [or in this case climate change] cannot be considerably strengthened within the policy realm of existing sectoral interests."
- Once established, the indicators have to be monitored and reported to assess the outputs and outcomes of procedural integration (Mickwitz and Kivimaa, 2007: 81.) The individual accountability of the different departments for meeting the agreed targets must be clearly stated, and any overlapping responsibility avoided. A clear procedure for monitoring and reporting on the targets and the effectiveness of the instruments must be devised.
- A compliance and enforcement mechanism should be designed to enhance the efficiency of the process. This assumes a clear definition of evaluation guidelines.
- Regular external and independent audits need to be commissioned to verify reported figures. The auditor general could fulfil this role as a component of the standard audit of departments and state owned enterprises (SOEs).
- Reflexivity must be integrated in the review process of outcomes, indicators and targets to allow for the creation of new outcomes as mainstreaming develops, data are produced and indicators identified.

2.3.2 The outcome approach to achieving full alignment

To achieve full alignment, the Green Paper suggests relying on the outcomes approach developed by the DPME: "Monitoring and Evaluation of the country's climate change programme ion

shall be undertaken through the outcomes based system that has been established by the Presidency and shall be reported through the delivery forums" (DEA, 2010: 33).

To assess the ability of the outcomes approach to mainstream climate change, it is necessary to understand how it is constituted. First, the outcomes have been developed "through extensive consultation and discussion at Ministerial and administrative level" (DPME, 2010a: 13) and approved by the January 2010 Cabinet Lekgotla. These outcomes cover cross-cutting issues and cannot be addressed by a stand-alone department. Outcome 10, specifically addresses "Environmental assets and natural resources that are well protected and continually enhanced" (DEA, 2010b: 2). One of the four outputs deals with climate change, namely, "Output 2: reduce greenhouse gas emission, climate change impacts and improved air/ atmospheric quality" (DEA, 2010b: 8). It deals with both mitigation and adaptation and includes five sub-outputs (DEA, 2010b: 18-28):

- reduction of CO₂ emissions
- reduction of atmospheric pollutants
- renewable energy deployments
- adapting to the impacts of climate change
- energy efficiency.

The President has signed performance agreements with his Ministers focusing on the contribution each Minister will make to the 12 outcomes that address government's strategic priorities (DPME, 2010b: 14). It is worth noting that these agreements are a management tool for coordination and learning purposes only; they are neither part of any compliance mechanism to ensure the outcomes, nor are they legally binding. Once the performance agreement is signed, the department coordinating a specific outcome has to produce a delivery agreement: these delivery agreements are "collective agreements that in most cases involved all spheres of government and a range of partners outside of government" (DPME, 2010: 15). A Minister signing a delivery agreement is held accountable by the President. In September 2010, the Minister signed the DEA's delivery agreement for Outcome 10. Delivery agreements involving more than one sphere of government have the legal status of an "implementation protocol" in terms of section 35 of the Intergovernmental Relations Framework Act, No. 13 of 2005 (IGRA).This implies that the agreement must:

- (a) identify any challenges facing the implementation of the policy, the exercise of the statutory power, the performance of the statutory function or the provision of the service and state how these challenges are to be addressed;
- (b) describe the roles and responsibilities of each organ of state in implementing policy, exercising the statutory power, performing the statutory function or providing the service;
- (c) give an outline of the priorities, aims and desired outcomes;
- (d) determine indicators to measure the effective implementation of the protocol;
- (e) provide for oversight mechanisms and procedures for monitoring the effective implementation of the protocol;
- (f) determine the required and available resources to implement the protocol and the resources to be contributed by each organ of state with respect to the roles and responsibilities allocated to it;
- (g) provide for dispute-settlement procedures and mechanisms should disputes arise in the implementation of the protocol;
- (h) determine the duration of the protocol; and
- (i) include any other matters on, which the parties may agree.

These requirements are very similar to those highlighted in the previous section for realising CPI. They are stronger on implementation requirements and mention resource allocation (human and finance resources), but are weaker on compliance and enforcement, and on the process for reviewing and amending outcomes on a regular basis. This principle of reflexivity is crucial as there are many uncertainties both in terms of the impacts of climate change and the best options that could be implemented. According to this rapid analysis, the outcomes approach seems to propose a suitable solution for horizontal coordination. However, several questions need to be raised here, because they might compromise the relevance of including the outcomes approach in the NCCRP if they are not properly addressed.

First, the efficacy of the outcomes system has yet to be tested, even for those outcomes that address the core work of sectoral departments. Therefore assuming that it will be able to facilitate high degrees of horizontal coordination may be optimistic at this stage. The approach could be strengthened by including in NEMA (RSA, 1998) an obligation to develop an implementation protocol for climate change as provided for by the IGRA.

Second, while the outcomes approach defines responsibility for national and provincial departments, it contains no compliance mechanism. Meeting the targets relies on the goodwill of the different departments and provinces and the authority of the President, therefore a compliance mechanism has to be introduced to involve the different spheres of government.

Third, climate change cannot only be addressed through Outcome 10, the DEA also needs to sufficiently influence the other outcomes to make climate change an overarching priority. This task must not be undermined as "departmentalism is arguably more difficult to counteract during policy making as it is strategic in nature and is dominated by the political bargaining related to competing departmental interests" (Russel and Jordan, 2007: 2).

The DEA would need to be sufficiently empowered to include climate related outputs in the different outcomes. There is some debate about whether, as a cross-cutting issue, climate change needs to be moved to a more senior department, or given to an independent agency or to the Presidency. However, there does not seem to be clear evidence of one model being better than the others (Meadowcroft, 2009), nor that leadership is as important an issue as the level of commitment behind it (Russel and Jordan, 2007). Many countries have made departments of environment responsible for CPI since it is an environmental issue and international experience suggests that there is no

good reason to consider changing the lead department. More important for CPI is designing programmes to build capacity and promote learning about climate change to sensitise politicians in all spheres of government, the entire administration, municipalities and communities.

2.4 Institutional structure for horizontal coordination

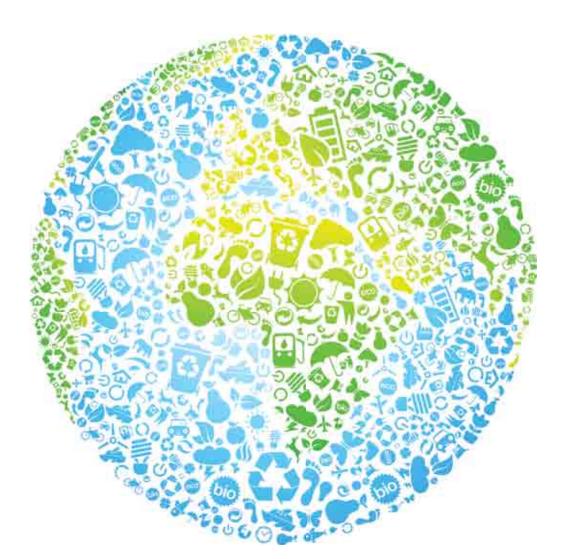
The institutional framework proposed by the Green Paper for horizontal coordination (and vertical coordination, as addressed in the next section) already exists. The structures are described in the delivery agreement (DEA, 2010b: 26-28), which correctly notes that "with the implementation of the policy, and as the transition to a climate resilient and low-carbon economy and society evolves, it may be appropriate to adjust these institutional arrangements accordingly" (DEA, 2010: 28). Two different structures are mentioned to facilitate horizontal coordination:

- The Inter-Ministerial Committee on Climate Change (IMCCC): established by the government in September 2009 consists of six ministers: Water and Environmental Affairs, International Relations and Cooperation, Economic Development, Trade and Industry, Rural Development, and Cooperative Governance and Traditional Affairs. The IMCCC ought "to direct the formulation of a national programme for climate change, and to develop South Africa's final mandate for the UNFCCC" (GCIS 2009). According to the Green Paper, the IMCCC "shall exercise oversight over all aspects of the implementation of [climate] policy" (DEA, 2010: 33).
- Three clusters of directors-general, namely the Economic Sectors and Employment Cluster, the Infrastructure Cluster and the International Cooperation Cluster. These clusters emanate from the Forum of South African Directors-General (FOSAD) established in 1998, and were set up to mirror cabinet committees. The Green Paper states, "The national climate change response actions shall be guided by the relevant FOSAD clusters based on the different elements of their mandate" (DEA, 2010: 33).

These two structures raise different issues about policy making and their ability to effectively manage conflicts and facilitate alignment. Regarding the IMCCC, Mickwitz et al. (2009a: 21) states that "The maintenance and composition of the ministerial working group are important in achieving coherence in policy decisions." While the committee includes six ministers, at least one is missing: the Minister of Finance. Every change in policy stemming from the IMCCC will have to be translated into a budget allocation, giving the National Treasury a central role. Ideally, implementing CPI should entail a long-term, strategic process of reorienting the goals and procedures of public financing towards climate related practices rather than piecemeal additions to the budget (Jordan and Lenschow, 2010). The inclusion of the Minister of Finance in the IMCCC should therefore be considered.

The structure and functioning of FOSAD clusters may militate against their being the appropriate means to ensure the prioritisation of climate change issues. The rationale behind these clusters is to facilitate engagement on emerging policies and legislation in a manner that ensures that the mandates of sector departments are given due consideration. As forums of peers, the clusters have battled to drive overarching priorities in the face of departments' key mandates and multiple contending priorities. These concerns contributed to the adoption of the outcomes approach and suggest that the FOSAD clusters are inappropriate forums for purposes of horizontal integration.

It must also be noted that section 7 of NEMA provided for the creation of a committee for environmental coordination (CEC), similar in some respects to the FOSAD clusters, as members were to be directors-general, but with the inclusion of heads of provincial departments. The purpose was to "promote the integration and coordination of environmental functions by the relevant organs of the State" (RSA, 1998: part 2, section 7). However, the provisions relating to the CEC were repealed in 2009 (RSA, 2009).



3 Vertical coordination

Vertical fragmentation between the three spheres of government, namely national, provincial and local, each with its own environmental departments or line functionaries (Kotzé, 2006), is a direct result of government decentralisation in South Africa. The delegation of environmental functions to the lowest possible level has placed increasing responsibility on local government, and expanded its role from mainly service provision to that of an active development agent (Fakier et al., 2005). This is not unique to South Africa, internationally municipal and provincial government often have considerable authority, sometimes extending to legislation, planning and investment decisions including those related to climate change (Kotzé, 2006). In addition, committed local government can play an important role in supporting behaviour change among its citizens.

NEMA requests the design of environmental implementation plans (EIPs) and environmental management plans (EMPs) by state bodies, including provinces, while Section 46 gives municipalities the power to prepare bylaws to implement the Act. Some municipalities are ahead of national government in regulating climate change impacts with metros like Durban, Cape Town and Johannesburg having climate change programmes. Consequently, the different spheres of government have to be involved as early as possible in the policy making process. Policy changes to combat climate change that do not get buy in from these key players run a high risk of being ineffective.

3.1 What makes vertical coordination so difficult?

The provincial and local spheres of government are regarded as the "implementation arms of the national government" and their resources and skills directly influence the effective and efficient enforcement and implementation of the environmental legislative framework (DEAT, 2006:73; IMFO, 2010: 38-39). Provincial government has an important function in setting provincial norms and standards, and in assisting local governments to meet their obligations including managing and protecting the environment (RSA, 1996: section 100). In turn, national government has an obligation to assist provincial governments in implementing their constitutional and legal executive obligations, functions and missions, which include assisting municipal governments (RSA, 1996: section 139). Provincial and local governments have experienced constraints that "interfere with the countrywide enforcement and implementation of environmental policy" (DEAT, 2006: 73). This highlights the fact that the current institutional structure and the lack of capacity pose a challenge to the delegation and decentralisation of executive environmental functions to the most appropriate level. The main challenge seems to be that "implementation failure at local level limits the effective functioning of the environmental governance framework" (DEAT, 2006: 75).

It is in this institutional context, chiefly framed by the Constitution, NEMA, the IGRA and other Acts related to the functioning of local government, such as the Municipal Financial Management Act, No. 56 of 2003 (MFMA) or the Municipal Systems Act, No 32 of 2000, that the vertical coordination system has to be developed. The fragmentation resulting from this governance structure can be termed "structural fragmentation" a phrase, which describes separate, disjointed line functions in and across all three spheres of government (Kotzé, 2006).

3.2 Factors contributing to vertical fragmentation

Many of the factors that contribute to vertical fragmentation, despite the many provisions made in various acts to enhance coordination, are intrinsic to the governance system rather than being specifically related to climate change or environmental management. They include the following:

- Structural fragmentation: the relationship between district and local municipalities lacks integration and coordination and has become hierarchical and competitive. Communication between district and local councils is poor. District councillors do not have wards to hold them accountable and local councils are usually not represented on district councils (LGP, 2008).
- Lack of capacity at local or provincial levels: with wide differences from one province to another,

and from one municipality to another. In addition to a general lack of human capacity there is a high turnover rate of officials and a lack of succession planning and sharing of skills and information. This leads to mutual lack of confidence in the capacities of provincial and local government.

- Financial inequalities among provinces and municipalities: there is a wide array of situations ranging from municipalities under severe financial constraints to those struggling to spend money despite a low level of service delivery;
- High level of heterogeneity among provinces and municipalities: due to differences in skills and financing this can lead to provinces and local governments having different and sometimes competing priorities making coordination more difficult;
- Lack of horizontal coordination: this feature of national government cascades to both provincial and municipal levels. It perpetuates departmentalism, which is an additional hurdle to vertical coordination.
- Organisational failures: turf protection (between spheres of government and between sectors in each sphere), competition between parallel structures, ineffective subdivision of responsibility, unsuitable organisational behaviour and financial mismanagement are common features of organisations but seem particularly pronounced in the context of lack of skill, financial challenges and distrust.

In addition to these generic features there are challenges to vertical integration that are specific to environmental management. They include:

- **Poor horizontal coordination at national level:** "South Africa does not have a centralised lead agent to directly control environmental matters in an integrated fashion" (Kotzé, 2006). The DEA instead acts as a coordinator by providing framework guidance.
- Service delivery as a priority: the imperative for local governments to deliver services leads to insufficient budgets being allocated to environmental functions. This results in a lack of trained enforcement

officers and failure to incorporate environmental and sustainability principles into local planning processes, and in the level of government closest to the people being particularly weak in environmental management (DEAT, 2006).

- Poor understanding of the environmental framework in local government: legislative complexity leads to confusion over competences listed in Schedules 4 and 5 of the Constitution, resulting in duplication and tension with politicians and senior officials not knowing what their mandate is for environmental management. This can make environmental management at local level "very challenging and complex" (Strydom and King, 2009; Du Plessis, 2009), and might negatively affect implementation of the environmental regulatory framework. According to Kidd (1997) "administrative fragmentation" may also lead to economic inefficiency, duplication of functions, lack of clarity and inaction.
- Poor budget allocation: insufficient budgets and capacity are allocated to environmental functions contributing to the other problems mentioned here.
- Lack of capacity for environmental management: in most provinces staff members with environmental responsibilities are over-committed and there is little capacity for coordinated governance. The situation varies with Gauteng, the Western Cape and KwaZulu-Natal having relatively better human capacity and relatively adequate working budgets (although most provinces have declining environmental budgets). In other provinces, such as the Northern Cape, inadequate staffing makes effective functioning impossible. As a result, implementation failure becomes a critical constraint on the effective functioning of the environmental governance framework (Fakier et al., 2005).
- Differing structures: provincial departments and municipal units responsible for environmental management are structured differently.

Finally, in addition to these generic and environmental management related hurdles to vertical coordination, a last layer of impediments is found in the climate change field itself:

- Lack of understanding and awareness about climate change: politicians, officials and the public do not understand how climate change might impact on provinces and municipalities and influence their development. The diversity of local climate change impacts requires a corresponding diversity of local and provincial needs and priorities. The poverty or absence of local data on climate change contributes to this lack of awareness. As a result, climate change is often dealt with separately for other sustainable development issues.
- Lack of long-term planning: Politicians, especially at local and provincial levels often neglect to plan for the medium- to long-term in their concern to make noticeable, short-term gains in areas like service delivery. Therefore there is often a lack of political will and leadership at the local and provincial levels to address climate change.

The range of factors affecting vertical integration makes it clear that no matter how well-designed vertical coordination for climate change may be, it will never resolve fragmentation issues that are not specific to climate change.

3.3 Vertical coordination in other countries

According to the EU's Green Paper on adaptation, "Multilevel governance is [...] emerging" to achieve better vertical coordination and integration of policy making across levels of government (European Commission, 2007: 11). The relation between local, regional and national government can be enabling or constraining for municipal responses to climate change mitigation, "Two aspects of these relationships have been identified in the literature as particularly important - the extent to which higher tiers of government establish appropriate contexts for municipal action, and the coordination of competencies and resources for addressing climate change" (Bulkeley et al., 2009: 24). Based on a review of the literature on multilevel governance we have identified the following best practices for vertical coordination (see for example Bauer et al. 2011; Kotze 2006; Lockwood et al. 2009; ESCAP 2003).

3.3.1 Strong and supportive national government and lead agency

The role of national government is essential to facilitate effective vertical coordination. It needs to provide clarity, acknowledgement, encouragement and clear guidance on climate change to local and provincial governments. National government support – in the form of stated ambitions to address climate change and enabling policy and planning frameworks – is critical for achieving action within municipalities (Bulkeley et al., 2009). As a consequence, getting horizontal coordination right is probably the first enabler of efficient vertical coordination.

3.3.2 Ensure adequate competences and resources at all levels of government

Vertical coordination of competences and resources to address climate change is also critical (Bulkeley et al., 2009). The provision of dedicated funding for municipal climate initiatives has been a successful strategy in some countries, while in others flexibility over the use of municipal funds has been important in facilitating local action. In Sweden, national government has provided dedicated funds for municipalities; the Netherlands has also given local government funding directly targeted at climate change mitigation. The Klimaatcovenant is a multilevel arrangement involving local government, provinces and several ministries at the national level. Cities are given funding on the basis of their population/ area and in return have to present a comprehensive action plan based on a common methodology.

3.3.3 The need to recognise the role of provinces and municipalities

National government needs to explicitly recognise the contribution that municipal and provincial authorities can make in order to enable action, and could offer guidance on how municipalities could use existing competences to address climate change.

3.3.4 Ensure effective exchange of information, knowledge and best practices

Various countries have established a platform (often virtual) to facilitate information exchange between different spheres of government and their representatives. Often this is a website where each actor reports on specific themes/

agendas and where national government posts information about the latest developments in climate change policy. The website can have all relevant documents (legislation, policy and guidelines), and all action plans including the national one. It should also provide regular information on performance assessments, and recommendations on the way forward.

3.3.5 Ensure effective reporting, monitoring and performance assessment of each government sphere

Horizontal coordination for CPI should normally identify outcomes, outputs, targets and indicators. These elements should cascade to the different levels of government, just as the outcomes approach of the DPME does. The outcomes, outputs, targets and indicators identified for horizontal coordination should apply to all spheres of government and related organs of state (see "clarifying alignment", p15).

3.3.6 Develop strategic partnerships

While horizontal and vertical coordination among state actors is the background for "Type I" multilevel governance, "Type II" multilevel governance involving new governance arrangements, such as networks and partnerships that operate between and across political levels, has also been identified as critical for governing climate change, especially at the municipal level (Hooghe and Marks, 2002). For this, provinces and municipalities participate in the following networks:

- Transnational municipal networks such as Climate Alliance, Energie-cités and C40 have helped drive municipal action on climate change mitigation (Bulkeley et al., 2009).
- Sub-national networks and partnerships can evolve at multiple levels. At regional and local levels, partnerships between state and non-state actors have proved critical in building municipal resources to address climate change (Bulkeley et al., 2009).
- Climate oriented hubs can be important sources of information and contacts.
- Good practice delivery develops a range of bilateral and multisectoral working partnerships to achieve national goals, often with direct funding and other implementation tools.

3.4 Institutional structures and coordination

There are at least three broad approaches for policy making (Beck et al., 2009; Kern, 2010; Corfee-Morlot et al., 2009; Corfee-Morlot et al., 2011). Some countries have adopted a top-down approach to determine policy priorities for climate change. In the UK, Norway, and China national government set mandatory requirements for local climate change policy. However, this might not work in South Africa, where the three spheres of government have independent executive and legislative areas of jurisdiction. Germany used a more collaborative approach organising a conference of provincial and national ministers to define cross-cutting responsibilities. South Africa could use a similar approach to determine concurrent responsibilities of the different spheres of government.

Others countries have opted for a bottom-up approach, including an open consultation process. This approach was suitable for France given the sophistication of the various stakeholders in the participation process. In the South African context, the diversity of municipalities and need for support and capacity building could make this approach particularly difficult.

Japanese has delegated authority to local government. This would normally be the recommended approach for South Africa. However, in the context of climate change this delegation should not take place until provinces and municipalities have the necessary capacity. Municipalities are already struggling to deal with current delegations on environmental management.

A hybrid system has been the development and implementation of multilevel agreements involving local government, provinces, and several national ministries (the Netherlands, Sweden). This approach could be an option for South Africa, with delivery/implementation agreements on specific climate change topics.

3.5 What does the Green Paper propose?

The Green Paper states the following in terms of vertical governance:

- It acknowledges the pivotal role of provinces and municipalities in developing and implementing a climate change response with adaptation and mitigation measures mainly being "integrated into provincial development and spatial plans and into IDPs at municipal level" (DEA, 2010a: 31). However, climate change is a new issue that is not fully understood and most provinces and municipalities require assistance to develop and implement relevant measures.
- The Green Paper recognises the importance of all spheres of government in addressing climate change, and sees the role of national government in supporting provincial and local government as a constitutional duty (DEA, 2010a: 31). It also acknowledges the role of provinces in supporting municipalities. These support functions will be essential in developing and implementing climate change responses.
- In stating that "We should ensure that means are found so that best practice and innovative methodologies are disseminated and replicated" the DEA (2010a: 31) recognises that vertical and horizontal collaboration is essential for effective sharing of experiences, knowledge and know-how. However the "means" to this end remain unclear.

Coordinating structures

To ensure that climate change considerations and the climate change responses outlined in the policy are mainstreamed into the work of the three spheres of government the Green Paper suggests the following coordinating structures:

 The Intergovernmental Committee on Climate Change (IGCCC): The IGCCC was established in 2008 to foster information exchange, consultation, agreement and support among the spheres of government on climate change and government's response to climate change. The IGCCC enables a high level exchange of information on key topics, but does not allow constructive and in-depth discussions and collaboration. As a high level platform it brings together representatives from the national departments of environmental affairs, agriculture, forestry and fisheries, energy, health, human settlements, international relations and cooperation, trade and industry, housing, transport, national treasury, rural development and land reform, science and technology, social development and water affairs, from provincial environment departments and from the South African Local Government Association (SALGA). A limitation is that the Department of Cooperative Governance and Traditional Affairs (COGTA) is not represented. Municipal representation is limited to SALGA representatives. The IGCCC will not provide practical assistance on policy development and implementation and will not develop or improve tools to ensure climate change mainstreaming and policy alignment. It does not have a specific budget or an administrative structure (secretariat), which significantly limits its supporting role (developing guidelines, proposing workshops, maintaining an information sharing network). It was impossible to find minutes and resolutions of the committee. Its importance and effectiveness relies on representatives effectively communicating information from sessions to all relevant persons in their departments. The IGCCC is therefore mainly a structure to keep each sphere of government informed about the latest and most important developments in this area.

Climate change impacts on all levels of government, and a mechanism is required to ensure vertical coordination and policy alignment. The ministerial political (MINMEC) and technical (MINTECH) structures set up through the IGRA facilitate a high level of policy and strategy coherence between the three spheres of government, and should be used to guide climate change work. However, they are highlevel, strategic committees and the same comments made for the IGCCC apply to them. In addition it is important to note that local government is not always represented in their meetings. Furthermore, as sectoral structures they perpetuate a silo mentality. The DPME has used the provision in the IGRA to hold joint MINMEC and MINTECH meetings in developing the outcomes approach and this may be relevant.

- Several technical working groups meet regularly to discuss and advise on issues of biodiversity and heritage, impact management, pollution and waste management, and planning and reporting. The working group that deals with cross-cutting issues (i.e. Working Group 3) would coordinate climate change response. These working groups feed into MINTECH and ultimately MINMEC. It is important to note that such technical groups can be important and relevant. However, their apparent lack of access to financial resources or support from specific experts limits their effectiveness. The fact that they only report back to MINTECH and MINMEC should also be regarded as a limitation. Again, there is no publicly available information, which is another limitation on their effectiveness, as individuals in municipalities and employees in provinces cannot access their work.
- The South African Local Government Association (SALGA) is mandated to support, represent and advise local government action. It actively participates in the intergovernmental system and ensures the integration of climate adaptation and mitigation actions into IDPs, as well as promoting public education, awareness, media and information programmes on climate change. Again, no information on its work on climate change was publicly available, which limits its effectiveness, as individual municipalities and

employees in municipalities cannot access its work. SALGA is a key institution for vertical coordination but limited capacity constrains its actions. Its role in the past seems to have been confined to high-level strategic information sharing.

The Green Paper does not create new institutions; it merely reinforces the roles of the existing ones. While most of them have played a meaningful role in ensuring effective intergovernmental relations, especially in the local government sphere (Sokhela, 2006), their limitations require addressing.

However, the DEA recognises that the extended MINMEC and MINTECH offer some opportunity for moving away from departmentalism and should be able to support the mainstreaming of environmental matters. They further provide for horizontal coordination.

The monitoring and coordination of implementation of deliverables as outlined in the delivery agreement annexes is coordinated through the Intergovernmental Relations mechanism (MINTECH/MINMEC) extended to include key departments, public entities and other partners that contribute to the achievement of outputs. The executive Implementation Forum (extended MINMEC) and technical Implementation Forum (Headcom/extended MINTECH) are therefore used. The MINTECH working groups are aligned per output to coordinate the output activities and report to the technical Implementation Forum that makes recommendations to the executive Implementation Forum (DEA, 2010b: 8).



4 Stakeholder coordination

Public participation in cooperative environmental governance is enshrined in the South African legal framework by specific acts (The Constitution of South Africa, NEMA and others). The Green Paper outlines roles for stakeholders and calls for the inclusion of the wider population.

A stakeholder approach to addressing climate change in South Africa is in line with international trends. It is widely acknowledged that the success of interventions depends on the pooled resources, energy, and regulatory authority of multiple stakeholders. In addition, the philosophy of integrated environmental management (IEM) recognises the fundamental role of stakeholder engagement (Boer et al., 2003).

Stakeholders are defined as all agencies, organisations and individuals that could be affected by decisions made (EPA, 2001). A broad range of stakeholders have begun to demand a role in reviewing or commenting on projects, policy and government actions and decisions that affect the environment *before they are off the drawing board*. The recent public and media outcry against fracking in the Karoo is an example of how people will engage and lobby regardless of whether they have been invited to or not.

Stakeholder engagement seeks to create a comprehensive platform for partnerships and encourage constructive dialogue and action between all parties – even when there is a threat of conflict – so that all sides can listen to and learn from each other, and participate in the decision making process or in policy development and implementation (Boer et al., 2003)

Interventions by the World Bank, USAID, and other international agencies increasingly rely on the ability to engage with and harness rising stakeholder expectations. Over the past ten years, such agencies have adopted farreaching policies on public participation, consultation and transparency. These policies and practices increasingly provide a standard for judging all important projects and approaches in terms of stakeholder engagement – public and private alike (Grimble, 2009). Stakeholders affect, and/or are affected by, the policies, decisions, and actions of a system and can even include the categories of "future generations", the "national interest" and "wider society" (Grimble, 2009).

Stakeholder groupings (figure 3) lead to a better understanding of the objectives and interests of various stakeholders managing and using the environment, the trade-offs there may be between objectives, and the costs and benefits of change and intervention at both macro and micro levels. Incorporating these ideas into environmental planning can improve prediction of outcomes, reduce the risk of unforeseen resistance, and generally facilitate informed policy making (Grimble, 2009).

Forces driving the evolution of environmental stakeholder processes include (Yosie and Herbst, 1998):

- a lack of public confidence and trust in the environmental decision making of many government agencies and corporations
- the increasing transparency of institutions whose decisions affect environmental quality
- greater societal expectations for improved environmental quality
- the enhanced ability of citizens to participate in stakeholder processes
- the growing diffusion of information technology and an associated decentralisation of decision making in large institutions
- policy commitments made by government agencies and industries to expand stakeholder participation in their decision making processes.

The diagram on the next page gives an overview of potential stakeholder groupings, including governmental groupings although this section only deals with engaging stakeholders outside the public sphere.

Figure 2: Stakeholder analysis

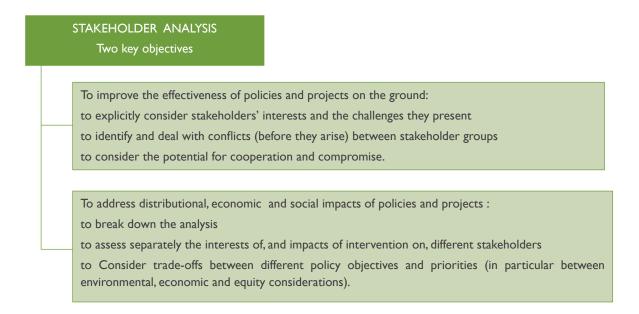




Figure 3: Stakeholders groupings

4.1 What makes stakeholder coordination so difficult?

Stakeholder engagement is a complex activity as it implies involving a range of potentially opposed interest groups, and paying adequate attention to the particular interests of various stakeholders is a challenge (Grimble, 2009). Different stakeholders have different views on climate change given their concerns and biases. The failure of policy makers and planners to recognise differences has often led to local resistance to policies and projects resulting in failure to meet their intended objectives (Grimble, 2009). Excluding activist groups can compound this problem further.

Stakeholder roles and responsibilities should be defined (Yosie and Herbst, 1998) but it is often difficult to plan for active involvement of stakeholders as their availability may fluctuate. The literature suggests that stakeholders are usually only included at certain levels of the project cycle or policy development to avoid slowing the process and additional expense. It is clearly imperative to plan actions that tap into stakeholder synergies and empower them to play a meaningful role in climate change.

It is often easier to include stakeholder groups that the government has experience in working with, such as business. Civil society organisations are often highly critical and difficult to please. Managing perceptions can be challenging – not only for working closely with stakeholders, but also for getting broad based buy in from all sectors across the economic and social spheres.

Although the National Committee on Climate Change (NCCC) strives to allow open and equal access for stakeholders it is likely that the vested interests of some large private and parastatal organisations have greater political influence than those of other stakeholders within the climate policy network. This does not mean that these more influential organisations play a negative role in the NCCC; in many cases they offer important resources and insights, and progressive approaches to addressing climate change concerns. Goldblatt (2007) argues that it is important to take account of the imbalance of power in the climate change policy debate in South Africa when attempting to understand the dynamics of policy development and the likely outcomes.

Stakeholders can potentially make a much more significant contribution towards cooperative environmental governance. However government needs to find ways to overcome the following barriers to success among others:

- different stakeholders react differently to climate change and their various interests can result in discord or polarised viewpoints
- stakeholders often lack understanding of climate change issues
- stakeholders have varied financial and human capacity
- "Generally the public is far too emotionally charged to make informed and unbiased decisions" (Green Times, 2010)
- "With the high degree of actual or perceived corruption at authority level there is little trust by the public who see decisions as based on financial considerations" (Green Times, 2010).

It is also important to understand that stakeholder engagement takes place in each sphere of government and through the various national departments (i.e. environment, energy, agriculture, trade and industry). Stakeholder engagement can also be organised by non government institutions, however, this report focuses on government led stakeholder engagement especially in terms of national climate change policy.

Aligning stakeholder engagement with specific policy issues is essential, as is reaching a right balance in terms of multilevel governance. Due to the many different concerns and the costs of constructive engagement it is important to develop customised approaches to engage all stakeholders but on different levels. To limit costs two approaches are possible: limiting the number of actors who have to be coordinated; or limiting interactions between actors, i.e. splicing competencies into specific units (Hooghe and Marks, 2003). Rather than limit the number of stakeholders or interactions, it is also possible to have different approaches for each group of stakeholders.

4.2 Stakeholder coordination in other countries

According to Yosie and Herbst (1998), the increased and growing use of stakeholder processes represents a societal interest in more interactive forms of decision making. Even industry has recognised that there should be a common goal, not a conflict, between economic development and environmental protection, both now and for future generations (Camarota, 1996).

Civil society has an important role to play in raising people's awareness and increasing participation and social media tools have increased the ability of lobby groups to effectively mobilise people to take action. This is a useful asset for climate change interventions as ultimately, as the Green Paper rightly emphasises, we are all affected by climate change and as a result, society has to find strategies for dealing with it.

Bauer et al. (2011) find that participation of non-state stakeholders, including the general public, in making policy on adaptation to climate change is an important challenge internationally. They cite two reasons for this:

- the knowledge of non-state actors improves the substance of policies
- participation raises awareness and builds capacity.

Countries such as Australia, Austria, Germany, and the Netherlands involve stakeholders in the early phase of formulating adaptation policies while several other countries (for example Spain) have waited until the implementation of adaptation policies and projects (Bauer et al., 2011).

Seven of the ten countries surveyed by Bauer et al. (2011) (table 2) involve stakeholders as fellow experts in temporary coordination bodies (for example in workshops). Spain was the only country to involve non-state stakeholders in an institutionalised coordination body alongside local, regional and national administrators, and only three countries (Australia, the Netherlands and the UK) involve non-state stakeholders in institutionalised consultation bodies with no coordinating function.

Canada, the Netherlands and Norway tend not to practice temporary "stand-alone consultation" addressing the broader public. Their approaches aim at written statements from targeted organisations and individuals, open internet consultations, or public hearings. Different consultation approaches can take place (successively) at various stages of the governance process (Bauer et al., 2011). Canada, Germany, Norway and the UK have established networks and partnerships that bring together policy makers from different levels of government and nonstate stakeholders. The regional collaboratives in Canada and the regional partnerships in the UK are well-known examples that share knowledge among local and regional administrators, and non-state stakeholders. Germany and Norway have smaller partnerships among public administrators and insurance experts mainly concerned with risk evaluation and prevention (Bauer et al., 2011).

Bauer et al (2011) found that the selection of stakeholders is either open (scoping exercises) or guided by established contacts. Although there is often consultation with organised interest groups, such as farmers, forestry or insurance associations, or environmental NGOs, evidence shows that stakeholder participation in decision making tends to rest with policy makers (usually parliament or ministers). However, they contend that this is "neither unusual nor problematic". With the exception of written online consultations, participatory approaches usually facilitate some kind of deliberation among policy makers and non-state actors on a level playing field.

There does not seem to be a generally accepted approach to stakeholder engagement. Countries use different instruments with no apparent criteria to determine the most suitable tools for this. The mix will obviously depend on circumstances and the objectives set by government for the coordination/engagement process. The key questions/ options seem to be the following:

- What is the common goal or vision?
- Open or closed stakeholder engagement: South Africa has mainly used open consultation but has recently organised closed sectoral workshops on climate change with selected stakeholders – a combination seems to be the correct approach.
- Classification of stakeholders groups, and how they can assist.
- Which structure and instruments to use for stakeholder coordination: workshops, conferences, online calls for comments, partnerships, networks, or others.
- Timeline for involvement mainly for policy development and/or implementation – or continuous? Continuous is recommended for South Africa.

| Country | Coordination bodies (temporary or institutionalised) | Institutionalised consultation bodies | Temporary stand- alone consultation (of stakeholders or the public) | Networks and partnerships |
|-------------------|--|--|---|--|
| Australia | Range of workshops | Stakeholder group advising the Department of Climate Change and CSIRO Adaptation Flagship | Consultation in developing National Climate Change Adaptation Framework | |
| Austria | Participation process | | Internet consultation Several consultation rounds (draft of national adaptation strategy (NAS) | |
| Canada | | | | Regional adaptation collaboratives |
| Spain | National Climate Council Sectoral workshops (planned for implementation) | | Public consultation of the National Plan for Climate Change Adaptation (PNACC) | |
| Germany | Stakeholder consultations or dialogues | | Online consultation (Action plan on adaptation – March 2011) | Partnership with German insurance association |
| Denmark | | | NAS presented in public hearing | |
| Finland | Sectoral workshops during formulation of NAS | | | |
| Netherlands | Regional impulse meetings with local authorities and non- state stakeholders Joint fact finding (Delta programme) | Delta subprogrammes installed advisory boards which advise the steering committees | Meetings during elaboration of the NAS (ARK) | |
| Norway | Norwegian Commission on Vulnerability and Adaptation to Climate Change | | | Partnership between county administrators, municipalities and insurance companies |
| United Kingdom | | ACC Partnership Board | Consultation over the adaptation policy framework | Regional Climate Change Partnerships (RCCP) |

Table 2: Types and examples of governance approaches addressing participation (Bauer et al., 2011:21)

4.3 What is the Green Paper proposing?

The green paper indicates that most actions in terms of climate change will take place at the provincial and municipal levels (the traditional implementation spheres of the South African Government). This is empowering for stakeholder groupings as these are the levels of government closest to formal and informal business, civil society and NGO networks.

Regarding social partners (industry and business, organised labour and civil society), the green paper emphasises that climate change has consequences for all South Africans and, if unmitigated, is likely to have serious impacts on our patterns of production and consumption, our livelihoods and the allocation of national resources.

Government calls for large-scale stakeholder interventions so that the climate change strategy will be implemented in partnership with the South African people. Mobilising civil society is crucial to success, implying that responsibilities should be shared and action plans endorsed across interest groups.

Emphasising that civil society is often sceptical about partnering with government and business the green paper notes the need for transparency and information sharing within stakeholder groupings (DEA, 2010). Table 3 sets out the stakeholder groupings outlined in the green paper.

While the green paper lists institutional arrangements as necessary for implementation, it also states that as the

transition to a climate resilient and low-carbon economy and society evolves, it may be appropriate to adjust these institutional arrangements accordingly. The emphasis on municipal and provincial roll-out mechanisms creates a range of opportunities for stakeholder groupings.

Government led stakeholder engagement is taking place in different forms in South Africa as outlined below:

- National Climate Change Conferences: communication by government and limited engagement by stakeholders.
- Call for public comments on policy and legislative documents: stakeholders have already commented on various policy documents related to climate change in addition to the green paper (i.e. climate change strategy, renewable energy and energy efficiency white paper, national communications, discussion document on carbon tax). This approach facilitates communication by government and extended engagement. However, some stakeholders feel it is not useful and that most of the time their comments are not considered. From government's perspective some comments from stakeholders are not helpful or constructive. Some stakeholders are not familiar with the process and do not fully understand government's intentions or its policy documents, and therefore they submit comments that are not appropriate for the process.

| Grouping | Stakeholder roles according to the green paper |
|--|--|
| Business and industry | To increase their levels of energy efficiency; develop and implement climate adaptation and mitigation plans, work in partnership with government to achieve the overall policy objectives, add comments about their interests |
| Civil society, labour and faith communities (vital conduits of information) | To raise public awareness and motivate individuals, institutions and authorities to take actions to reduce greenhouse gas emissions and adapt to the adverse impacts of climate change; to critically evaluate, comment on and respond to the initiatives of government and the private sector, and to provide feedback to the scientific and research sectors |
| Science and research community | To improve projections of climate variability, climate change and their impacts; key vulnerabilities in affected sectors and communities; to explore appropriate mitigation and adaptation responses and their implementation; research and develop technology and its implementation; build South Africa's capacity in climate change science. |

Table 3: Stakeholder groupings according to the green paper

- Workshop and information sessions on specific aspects: government has organised workshops and information sessions to discuss specific matters in detail. Engagements with stakeholders are normally limited to those with specific interests and knowledge on the matters concerned to enable indepth engagement.
- The National Committee on Climate Change (NCCC): this is the official national platform for continuous stakeholder engagement on climate change (details below).
- Business Unity South Africa (BUSA)/ National Economic Development and Labour Council (NEDLAC): provides a forum for organised representatives of business, labour and communities and enables more focused and direct interactions (details below).
- Awareness sessions/events: these are really part of a communication strategy more than engagements.

The green paper sets out coordinating structures to facilitate cooperative governance and broader stakeholder engagement. It also categorically states that the South African government is aware that the objectives set out in the policy can only be fully realised with the full participation of all key stakeholders and civil society organisations. The National Committee on Climate Change (NCCC) has been set up to ensure consultation with stakeholders from key sectors impacted by and/or impacting on climate change. The NCCC advises on matters relating to national responsibilities with respect to climate change, in particular in relation to the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto protocol, and on the implementation of climate change related activities.

The NCCC enables a certain amount of high level communication and engagement with selected stakeholders. It is a closed forum and it is almost impossible to gain access to its agendas and minutes, and to its exact composition. Although the NCCC is a formal structure its composition and operations are relatively fluid. Participants change in accordance with needs and special interest groups are invited as required. The committee also expands and contracts in response to the urgency or importance of current climate change debates. Attendance by at least one representative from each department should be mandatory at all times - regardless of the issue. Attendance by civil society and business stakeholders may vary based on shifting needs and availability. There is reportedly limited participation from the national Departments of Transport and Health with the national Treasury only participating rarely. The Treasury plays a vital role in financing interventions that can improve the capacity of the NCCC to build an effective stakeholder programme. No mention is made of the two Departments of Education yet they are crucial in creating awareness among the youth and communities and in identifying the best strategies for informal, mass focussed learning. The Department of Arts and Culture is similarly absent yet they are the purveyors of culture and are best placed to recognise cultural barriers.

There has been no attendance at NCCC meetings from the Presidency, the Department of Cooperative Governance and Traditional Affairs (COGTA), or the Department of Public Enterprises (DPE). Yet these four are arguably key crosssector departments. Both the national Treasury and the Presidency play important roles in prioritising state actions. COGTA has an important influence on local government actions and the DPE controls or oversees important state assets with significant climate change implications including Eskom and much of the state transport and logistics infrastructure (Goldblatt, 2007).

The NCCC does not have a proper budget and secretariat, which limits its capacity. In addition it is only a consultative body with no executive power. The NCCC has done no specific work on mapping or analysing stakeholder engagement.

Climate change could be a key component of NEDLAC's agenda. NEDLAC is a useful forum where government, organised business, organised labour and organised community groupings partner on a national level. This platform can help to ensure that climate change policy implementation is balanced and meets the needs of all sectors of the economy. In addition, the specific sector capacities identified work in close cooperation with stakeholders in implementing their work.

5 Recommendations

5.1 Recommendations on horizontal coordination

Climate policy integration (CPI) is a new field of research and few best practices have been identified. Consequently, any horizontal coordination mechanism related to climate change should include a high level of flexibility and be able to adapt to the rapidly evolving challenges related to climate change. It should allow trial and error processes in terms of coordination and a learning process to draw lessons and modify the coordination scheme accordingly.

While not a sufficient condition for successful CPI, efficient horizontal coordination is definitely a necessary one. Some principles should be taken into account when designing horizontal coordination schemes. As discussed above, the existing coordination framework provided by the green paper has weaknesses that could compromise its efficacy. In this section, we provide some recommendations for strengthening the role of the DEA on climate change.

5.1.1 Beyond the outcomes approach

The NCCRP should set the scene for prioritising outcomes, while allowing for regular revision. Initial mapping and specification of the major climate related challenges (issues and actors) relevant to each sector, including the identification of benchmark indicators, is required. The outcomes approach developed by the DPME provides an interesting framework for potentially mainstreaming climate change, especially because of the creation of an implementation protocol: it includes the definition of clear outputs and targets to be met by the different national and sub-national departments, as well as an implementation plan.

However, Outcome 10 contains only part of the outputs required for climate change, while some dimensions might be included in other outcomes. There are several possible options:

- revise Outcome 10 to include more outputs and suboutputs related to climate change challenges;
- create a specific outcome on climate change, which could be co-led by the DEA and another or other department(s);
- Create a green economy outcome, which will encompass climate change and could be chaired by the DEA, the Department of Economic Development and the DTI.

Adopting any of these options would still leave the need to strengthen the compliance mechanism within the existing outcomes approach.

5.1.2 Reform the IMCCC

Similar structures to the IMCCC exist in other countries and have been crucial in mainstreaming climate change. However, the current IMCCC is still seen as an ad hoc structure, created only in 2009, that has focused mainly on the international climate change negotiations. Its mandate should be clarified to explicitly include CPI.

As pointed out previously, the composition of the IMCCC is key to its effectiveness. Consequently, its composition should be revised to include at a minimum the key departments identified in Error! Reference source not found. (page 4 of this document), and hence to promote coordination across these departments, and possibly the supporting departments. It is essential that the IMCCC should be expanded to include the Minister of Finance.

5.1.3 Creation of an IMCCC Technical Committee

The efficacy of the Inter-Ministerial Committee on Climate Change (IMCCC) could be enhanced by establishing an IMCCC Technical Committee. Chaired by the directorgeneral (DG) of the DEA or a DG from the Presidency, the Technical Committee would be important in operationalising the IMCCC and ensuring policy coordination and coherence across the FOSAD clusters.

5.1.4 Strengthen the relationship with Parliament

The UK experience is particularly informative here but implies legislative amendments. In 2008, the British government established the Committee on Climate Change (CCC) through the Climate Change Act 2008. The CCC is an independent, statutory, advisory body with the necessary resources to conduct the following tasks (HMG, 2008: pt 2):

- make recommendations to government by reporting to the secretary of state in relation to each budgetary period (long-term trajectory/targets)
- report annually on progress to parliament (independent reporting)
- government must respond formally to parliament following the committee's report.

To be able to fulfil its functions, the CCC has the capacity to:

- gather information and carry out research and analysis
- commission others to carry out such activities, and
- publish the results of these activities.

The CCC helps to mainstream climate change by disseminating the discussion beyond the parliamentary environmental committee and supports the work of the environment portfolio committee.

5.1.5 Include climate change into legislation

For the climate change policy to be effective, it will need to be translated into legislation. Options are to create new legislation or include it in NEMA. To make this effective, establishing a specific implementation protocol on climate change to support the Act would be an important consideration.

5.1.6 Create an advisory council

Many countries have advisory councils that report to the president or parliament (as in the UK). Section 3 of NEMA (2004) provided for establishing a National Environmental Advisory Forum (NEAF) reporting to the Minister of Environmental Affairs. Its role was to:

- (a) inform the Minister of the views of stakeholders regarding the application of the principles set out in Section 2: and
- (b) advise the Minister on-
 - any matter concerning environmental management and governance and specifically the setting and achievement of objectives and priorities for environmental governance; and
 - ii. appropriate methods of monitoring compliance with the principles set out in Section 2.

The first meeting of the NEAF took place eight years after its creation by the Act, but, in the face of tremendous rigidities, it was repealed in September 2009 and replaced as follows (RSA, 2009):

3A. The Minister may by notice in the Gazette -

- (a) establish any fora or advisory body;
- (b) determine its composition and functions; and

(c) determine, in consultation with the Minister of Finance, the basis and extent of the remuneration and payment of expenses of any member of such forum or committee.

Therefore, existing legislation provides for establishing an advisory body that could facilitate CPI. The body would require sufficient capacity and resources to enable it to have the desired impact.

5.1.7 Consider diffuse coordination

A carbon tax is the foremost diffuse instrument to mainstream climate change, especially mitigation, which government has considered. However, others must also be considered, such as public procurement and regulatory impact assessments, for instance:

- using public procurement to create incentives for clean technology
- as mentioned in section 112 of the Local Government: Municipal Finance Management Act, No. 56 of 2003 (MFMA), municipal supply chain management can be used to bar persons from participating in tendering or other bidding processes of a local authority (Du Plessis, 2011)
- developing a regulatory impact assessment (RIA) focused on climate change issues: previous attempts to introduce a RIA have encountered difficulties but the possibility of developing a "light" RIA focused on climate change should be explored. One way of doing this would be to amend the cabinet memorandum template to include a requirement that the impact of proposed new legislation or policies on the environment (including climate change) needs to be evaluated before they are considered.

5.2 Recommendations on vertical coordination

It is important to note that the following recommendations will not be able to "fix" vertical coordination in terms of climate change. Some vertical coordination difficulties are not solely related to climate change, they might be intrinsic to the government and governance structure of South Africa due to the decentralised nature of the state. In the context of climate change, this vertical fragmentation can significantly impair the ability of government spheres to develop, implement, enforce and coordinate an effective policy and regulatory framework for climate change. Therefore, in order to facilitate and improve vertical coordination for climate change in SouthAfrica, the following short and medium- to long-term recommendations should be considered.

5.2.1 Short term recommendations: implications for the White Paper

Emphasise the implementation protocol

The White Paper should clearly indicate that an implementation protocol will be developed for climate change policy and the regulatory framework, and refer to the outcomes approach as a first attempt at this.

An implementation protocol can be a useful tool where the implementation of a policy, the exercise of a statutory power, the performance of a statutory function or the provision of a service depends on the participation of organs of state in different spheres of government, and those organs must coordinate their actions in a manner appropriate to, or required in, the circumstances.

Such protocols should include the following:

- an initial mapping and specification of the major climate related challenges (issues and actors) relevant to each governmental sphere, including the identification of benchmark indicators
- an action plan with policy and legal instruments, quantitative and timeline targets, including a clear identification of responsibility and accountability for each sphere of government.

Resourcing the IGCCC

The Intergovernmental Committee on Climate Change (IGCCC) needs to be better resourced, from a financial and capacity perspective. It should have a specific sub-group to assist with vertical coordination and perhaps some technical groups. Such groups should be financially supported, have specific delivery targets and timeframes, and should report directly to the committee. A group could be created on vertical coordination and mainstreaming of climate change.

In addition, the roles of the IGCCC and of the National Committee on Climate Change (NCCC) in supporting vertical integration could be consolidated, at least in an initial phase, through the allocation of specific roles, functions, capacities and budgets.

Complement the extended MINMEC/MINTECH

Establishing an extended MINMEC/MINTECH appears to be the most appropriate institutional arrangement. This is preferable to a traditional MINMEC/MINTECH, which focuses on one mandate and therefore perpetuates a silo approach. The weakness of the extended process is that it focuses on the extended mandate of government and therefore will be affected by contestation of priorities.

Other institutions might be required to complement the extended MINMEC/MINTECH. The IGRA provides for other possibilities worth mentioning here. A President's Coordinating Council dedicated to climate change established under section 6 of the IGRA could also play the vertical coordination role, similar to the extended MINMEC, but chaired by the President.

To foster coordination between provinces and district/ municipalities establishing a provincial intergovernmental forum for climate change as provided for in Section 21 of the IGRA might be appropriate. This body would seek to "promote and facilitate effective and efficient intergovernmental relations between the province and local governments in the province with respect to that functional area" (RSA, 2005).

Other relevant intergovernmental platforms and instruments, as prescribed by the IGRA, to facilitate vertical coordination for climate change are the premiers' intergovernmental forums, district intergovernmental forums, provincial intergovernmental forums, interprovincial forums, intermunicipality forums, intergovernmental technical support structures and national intergovernmental forums. The Act also provides for implementation protocols, which aim to facilitate the implementation of policy, exercise of statutory power or the provision of a service that depends on the coordination of different organs of state (RSA, 2005).

Supporting local government

Experiences in Durban have shown that without developing a meaningful understanding of the science, climate change and its significance are unlikely to be effectively understood at the local level (Roberts, 2008). The White Paper could propose

a support programme to assist in mainstreaming climate change in all spheres of government, with specific attention to local government. This will demonstrate government's commitment to ensure the effective development and implementation of climate change policy and a regulatory framework in South Africa. The White Paper could also emphasis that national and provincial government need to support local government in addressing climate change. Mainstreaming climate change should not require much additional finance, but the White Paper should indicate that mainstreaming will require specific financial support for an initial phase. A sustainable development (including climate change) department/group at SALGA, with a specific budget to assist local government in dealing with the matter could be an option. SALGA could also provide support through:

- preparing guideline documents for provinces and municipalities
- holding regular thematic workshops on cross-cutting issues raised by climate change (e.g. spatial planning, energy efficiency, water management, disaster prevention, etc.)
- seconding experts with a brief to transfer skills and knowledge
- disseminating regular updates on processes and tools
- preparing template documents covering bylaws, amendments to IDPs, provincial legislation, integration into existing regulatory instruments (such as those related to disaster management, coastal zone management, land use, planning, economic development and environment).

Capacity building could be achieved through:

- implementing pilot projects
- replicating best practices
- running education and training programmes
- developing policy and mainstreaming assistance
- assisting with preparing for and responding to the environmental aspects of emergencies
- assisting with integrating climate change into IDPs.

An inter-provincial forum, which aims to promote and facilitate intergovernmental relations between the

provinces, and intermunicipality forums, which play a similar role at municipal level, could be efficient tools for exchanging information and sharing knowledge on best practice and training.

5.2.2 Medium to long-term recommendations

Develop a climate change institutional matrix

National government in collaboration with the other government spheres and key stakeholders should develop a comprehensive institutional matrix on climate change. The matrix should outline, clearly and in detail, the mandate (implementation versus development of own policy/law), jurisdiction, powers, responsibilities (duties), priorities and functions of each government sphere in terms of climate change. It should outline the various policies, legal and other recommended instruments available to each sphere to develop, implement, enforce and coordinate climate change policy and the regulatory framework. It will identify potential institutional and legal gaps and overlaps between different governmental spheres and set out mechanisms to address them. It will also outline the various mechanisms for cooperative governance and alignment of climate change policy, taking into consideration the guidance provided in the report, especially regarding horizontal and vertical coordination.

Conduct a climate change governance gaps-and-needs analysis

In addition to the legal review and legal alignment process advocated by the Green Paper, it seems essential to conduct a comprehensive gaps-and-needs assessment of the overall governance structure to develop, implement, enforce and coordinate climate change policy and the regulatory framework (taking into consideration the climate change institutional matrix described above). The assessment will identify the gaps and needs of each government sphere in terms of their capacity (including at least financial, legal, technical, human and administrative expertise, and institutional and political capacities); their mandate and power to develop, implement, coordinate and enforce climate change policy and the regulatory framework to address their respective priorities.

The assessment will also analyse the existing coordination bodies in terms of vertical coordination. The DEA should

lead the analysis, but all provinces, municipalities and coordinating entities should be able to participate actively. An approach could be to have a national assessment, and a specific assessment for each national department, province, municipality and coordinating entity. This assessment should also identify municipalities and provinces, which might need specific assistance from other government spheres.

Establish a climate change focal point/champion

This person will have a strategic role in ensuring that climate change becomes part of the municipal/provincial agenda and is mainstreamed. Roberts (2008) highlights the crucial role of a political champion. In the eThekwini case study, the head of the environmental management department studied environmental management in America, significantly increasing his understanding of climate change science and his buy in to climate change projects. Consequently, climate change was incorporated into the municipality's IDP (Roberts, 2008). Similarly, the mayor of eThekwini, motivated by human and infrastructure losses due to serial storms, supported a provincial summit on how government could address climate change impacts and rural development (Roberts, 2010).

Develop a clearing house mechanism

A clearing house mechanism could facilitate the availability of data and information about local impacts of climate change. It should also assist the three spheres of government to discuss and share information, experiences, documents and projects. A clearing house mechanism could be established through an internet platform supported by specific engagement sessions (three times a year). It could contain all relevant documents (legislation, policy and guidelines), copies of all action plans and an overall national action plan. It should also provide regular information on performance assessment and recommendations for the way forward. A similar need has been identified for a national information portal on climate finance and these suggestions should be developed further.

Supporting implementation

Considering the current institutional challenges at the local level, the delegation to local government in terms of environmental management remains limited, except for large municipalities. However, local government has specific obligations and responsibilities for implementing environmental policies, legislation, plans, and programmes of national and provincial government, ensuring the alignment of IDPs and provincial environmental implementation plans (EIPs), and ensuring that IDPs comply with the NEMA principles (DEAT, 2006). Section 25 of the Local Government: Municipal Systems Act, No. 32 of 2000 includes two legal tools: the IDP and the PMS. Du Plessis (2011:12) points out that "An IDP is the key tool for developmental local government and ... aligns the resources and capacity of the municipality with the implementation of the plan and takes into account the legal obligations of the municipality in terms of different national and provincial laws." While climate change should be integral to the IDPs, very few municipalities are able to develop high quality IDPs.

Strong support will be needed to foster implementation. One option would be to create a statutory body dedicated to this task. The South Africa National Biodiversity Institute (SANBI) model as set out in the National Environmental Management: Biodiversity Act, No. 10 of 2004 could be replicated for climate change. SANBI is set up as a framework implementation instrument dedicated to biodiversity and able to work across all spheres of government.

5.2.3 Overall general guidance

The following points are regarded as critical for effective vertical coordination:

- Provinces and municipalities need additional, sufficient and appropriate finances to address climate change and flexibility in how they deployment them. Municipalities depend heavily on financing, and budget allocations by the National Treasury are essential. There are two options: either municipalities should prioritise climate change projects in their IDPs (which are conditional on budget allocations); or, the state budget has a conditional, ring-fenced grant, which municipalities can access for climate change projects;
- Political accountability for climate change at provincial and municipal level must be linked to a robust framework and system for monitoring climate change governance implemented throughout all government sectors and spheres. A commissioner for

climate change could be part of the auditor general's operations to monitor and review sectoral strategies.

 Facilitate improved vertical coordination through horizontal coordination. Ensuring that national sector departments integrate climate change into their mandates and policies will have a positive impact on vertical integration across the three spheres of government.

5.3 Recommendations on stakeholder coordination

The recommendations are organised in three categories namely principles, tools, and institutional implications.

5.3.1 Principles for efficient stakeholder engagement

Fairness, accountability, responsibility and transparency

Adhering to the four principles of co-operative environmental governance – fairness, accountability, responsibility and transparency, results in effective environmental governance. A stakeholder survey by Boer and O'Beirne (2003) indicated that the principles of cooperative environmental governance are relatively well met in the project feasibility phase, but less well in the decision making phase and even less during the implementation phase. Stakeholders therefore experience a significant decrease in adherence to the four principles over the different phases of the project life cycle. This can also be applied to policy development and implementation. Goldblatt and Middleton (2007) argue that we need to move from a policy network to an implementation network.

Better understanding of participation levels and stakeholders groups

In current climate change stakeholder groupings government plays a central role as the major driver of environmental protection and as a vehicle for monitoring and enforcement. However it cannot do this in isolation and requires stakeholder involvement. Yosie and Herbst (1998) point out that the need for involvement will continue to expand, which means that government needs to enhance its policies and practices around stakeholder involvement.

Various indicators identify processes that add value to engagement and create an evidence trail. Table links the types of engagements to stakeholders groups.

| Stakeholder groups and interests | Recommended types of engagement | Preliminary recommendations | Possible tools/ instruments |
|--|---|---|---|
| Business and Industry Impacts on business, risk management, implications for jobs and trade | Communication Engagement Cooperation Collaboration/ Partnership | Business to take ownership of their role in climate change mitigation and adaptation, and collaborate efficiently with government to develop the response Support from both sides, business and government to work together collaboratively, pro-actively and constructively Rewards and incentives for best practice Target large organisations with active polices, programmes and practices promoting beneficial environmental practices – e.g. reducing their carbon footprint, using solar energy etc. These stakeholders are crucial in determining best industry practices, incentives to "go green" and how to promote a vision that will achieve buy in from business | Partnership agreements Strategic and binding action plans NEMA agreements Financial/technology agreements Sectoral forums with financial means (contributed by government and business) and with a proper mandate (research, develop framework for actions, assessment options) Develop collaborative pilot projects – share burden Exchange information Secondments Appoint experts for specific advice: combined funding |

Table 4: Engagement with stakeholder groups

| Stakeholder groups | Recommended types | | |
|--|-----------------------------|--|---|
| and interests | of engagement | Preliminary recommendations | Possible tools/ instruments |
| Civil society, labour and faith communities | Communication Engagement | NGOs need to work collaboratively with government, effectively share information and support each other especially in research, awareness and capacity building | Government can finance NGOs to do specific work Specific research programmes NGO interns in government |
| Health related risks, adaptation, watch dogs, sustainable development | Cooperation | | Collaborative projects Collaborative projects in terms of awareness and capacity projects |
| Science and | Communication | Need: research that unpacks local issues | Research agreements with |
| research community | Engagement | and international trends; development of new technologies; research in adaptation, economic impacts and modelling | independent researchers, and research organisations Secondments |
| Concerned with data analysis, innovation and design | Cooperation | Existing research capacity is limited and confined to a few institutions. Given its importance to the policy network the research network should be expanded and strengthened. | Capacity building programme Clearing house mechanism Appoint experts for specific advice with combined funding |
| | | Recent work at the Department of Science and Technology supports this and is improving the linkage between research and national needs around climate change. | |
| | | Increase participation of academic and civil society to improve integrity and trust in the process. An expanded stakeholder vision is required including representation from other constituencies. | |
| | | Allocate research funding to a range of universities so that regional knowledge is more organised and increases in volume. | |
| Government | Communication | Coordinate action with stakeholders in a | Commit funds |
| Concerned with improving understanding of stakeholder positioning | Engagement | way that ensures fairness, accountability, responsibility and transparency Maximise synergy between government, business and civil society | Implement policies and practices that cement stakeholder participation |
| | Cooperation | | Finance and administer stakeholder communication policy |
| | Collaboration/ | | Performance assessment and continual improvement |
| Wants to enhance | partnership | | Implement legislation effectively |
| consultation processes | | | Common engagement instruments |
| (consensus building) | | | Stakeholder engagement strategy |
| | | | Appoint experts for specific advice with combined funding |

जस्त 19

Engage on specific areas

In the South African context, government may need to engage on specific key areas because of the complexity of climate change and because stakeholders have different areas of concern. Table below outlines such areas and relevant information to be considered in the participation/ engagement strategy.

Define relationships and engagement strategy

Relationships with the various groups of stakeholders should be defined identifying their roles and how they fit into the national vision. For example, it is possible that labour has not been effectively drawn into climate change because no real role and vision has been identified and communicated to it. It is also essential not to isolate

| Key Areas | Key responsible departments | Recommendations |
|---|---|--|
| Adaptation | National departments, provinces, municipalities (land-use, planning and zoning documents, including IDPs and other organs of state | Include independent experts, industry representative, NGOs etc in each key area. Roll out an effective communication strategy to the general population and business (climate affects us all).This can assist in fulfilling a range of outcomes around adaptation, mitigation and monitoring. |
| Mitigation | National government (DEA, DoT, DoE, DoM), provinces and municipalities and other organs of state | |
| Roles, responsibilities and institutional framework | National government (All departments), provinces and municipalities Mainstreaming, use of the IMCCC and IGCCC | Adopt policies that reinforce consistent involvement of external stakeholders who can play an integral part in organising, delivering, monitoring etc. Understand the key interests of each stakeholder group and the best platforms and instruments to engage with specific teams. Working groups might need to be developed and funded to enable cooperation on specific themes. Such groups could be led by the most relevant national government entity for |
| Financial implications | | |
| Measurement, reporting and verification | | |
| Economic impacts and competition | | |
| Technology | | |
| Information | | |
| Education and awareness campaigns | DEA, DTI, DoE, Arts and Culture, provinces, municipalities | |
| Stakeholder coordination | DEA | the theme in question. |

Table 5: Areas for consultation

stakeholders within a grouping but to link their roles to those of other stakeholders. The Department of Economic Development and the DEA should explore synergies with labour within the larger climate change debate.

The government can develop a specific engagement strategy for each group of stakeholders according to their interests and the expected outcomes. A broad range of stakeholder groups helps in formulating creative solutions that may not otherwise emerge. Stakeholders are also crucial for disseminating and popularising information. However, more focused engagement might also be necessary and very useful with specific groups, as outlined in the tables 4 and 5. Establishing a database makes drawing on technical and other expertise easier and quicker.

Emphasis should be placed on exploring synergies between stakeholders and linking interests and capabilities. A more innovative approach to addressing climate change in South Africa is required – one that addresses gender, poverty, infrastructure development, agriculture etc. This innovation can only occur if work between government departments is coordinated in a robust manner. Manikutty and Vinod (2011) found that government policies that positively affect the competitiveness of two industries studied were in "synergetic bundles". For each area of synergy the most relevant level of engagement and platform should be determined.

Such a strategic approach implies (Grimble, 2009):

- Developing strategic alliances: this is essential for buy in from a broader society. These alliances are particularly crucial when debating controversial projects or policies, such as carbon capture and storage.
- **Involving independent experts:** often, government and business lack the credibility to assure a sceptical public that they maintain high environmental standards, are using the most appropriate technology, or have addressed community needs. In such cases, respected academics familiar with the project may be able to provide independent validation. Sometimes, social scientists with field experience can help to get communities to meet or negotiate with company

representatives.All government departments working in sensitive environments should develop a network of such specialists before potential opposition arises.

 Transparency: this is a buzzword throughout the developing world. Essentially, it means providing reasonable and consistent access to information – such as environmental impact studies – even though local regulations or policy may not require (or in some cases may actually discourage) their disclosure. By informing NGOs and other stakeholders, government shows its willingness to engage with potential critics.

A policy and procedure for stakeholder intervention and participation need to be developed. It should emphasise that stakeholder forums are spaces for negotiation, mediation and collaborative learning. A stakeholder grouping should not be used to engineer a united consensus but should be a forum where opposing interests can enter into debate and ensure that actions are based on multiple insights.

An annual, national feedback session should be organised for stakeholders to give their opinions on current practices, tools and platforms for stakeholder coordination and engagement. A questionnaire and structured workshops/ interviews with specific stakeholders could be used.

Eradicate language and access to information barriers

Important government documents such as the green paper that require discussion are available only in English. This puts people from other language groups at a disadvantage as they have to grasp complex issues in a second, third or even fourth language. A member of a women's forum asks, "How do you expect the women from the townships to give a public opinion about the green paper if we don't understand what it is saying? ... When people want votes, they go out and they get those votes. Why don't they use the same strategy with climate change?" (Green Times, 2010).

Ensure consistency of government representation

During engagement sessions the same persons and/or group of persons should represent government. Representatives should hold appropriate positions and should be strategic, diplomatic and adopt a problem-solving approach.

5. Recommendations

5.3.2 Tools for appropriate stakeholder engagement

Ensure effective allocation of resources for stakeholder coordination

Each government spheres should have a specific budget to facilitate stakeholder engagement on climate change.

Develop administrative tools

Government should develop tools to manage stakeholder engagement by investigating stakeholder groups for best practices, efficiency and the ability to stimulate a synergistic approach to policy.

Industry scoping exercise and stakeholder mapping

A scoping exercise should establish the concerns of stakeholders groups and identify barriers to success. This stakeholder mapping can be used to create a database of stakeholders for participation in workshops, forums, and research, and inclusion in working groups to guide policy development and drive interventions.

Stakeholder analysis

Municipalities should conduct detailed stakeholder analysis coordinated from provincial level. Once the key stakeholders and their concerns are understood a detailed stakeholder relations plan can be developed.

Performance assessment on engagement strategy and practices

This assessment should be conducted using specific performance indicators to assess overall engagement levels, outcomes, the extent to which objectives have been reached and the satisfaction of stakeholders. It should

be conducted nationally, but should enable a detailed assessment of stakeholder coordination in the various spheres of government. It should assess the effectiveness of engagement strategies, tools and platforms and suggest recommendations for improvement.

5.3.3 Institutional implications

Capacitate the National Committee on Climate Change

Overall, there appears to be a lack of consistency in how to enact an integrated vision. Some departments attend committee meetings irregularly, while others do not attend at all. This has a negative impact on consistency and on building synergy to solve problems. The NCCC needs its own budget and administrative capacity to manage the ongoing demands of climate change strategy development and implementation (Grimble, 2007). A specific coordinating unit should be tasked with the responsibility of building its capacity. The NCCC should then be able to establish working groups dedicated to specific issues. The performance assessment for each department should include ensuring representation at the NCCC and relevant working groups.

The NCCC needs to have a website with updated information and clearing-house mechanisms accessible to all stakeholders. Minutes of its meetings need to be freely and easily accessible and a performance assessment needs to be conducted annually.

Setting up stakeholder groupings at provincial and municipal levels

There could be a similar committee to the UNFCCC at the provincial and municipal levels.

6 Conclusion

No best practices can be identified for CPI; however some principles need to be taken into account when mainstreaming climate change, key functions have to be carried out, some stemming from traditional governmental coordination, others specifically related to climate considerations. We have tried to highlight them in this report, and would like to recall them here.

Climate change is a long-term phenomenon. Mainstreaming climate change implies constructing a long-term vision of the climate resilient society a government would like to promote. Building this vision is difficult, for lots of uncertainties exist around how climate change will develop and affect specific areas, what its global consequences and local impacts will be and what solutions will have to be implemented to cope with both adaptation and mitigation challenges? These uncertainties can prove bewildering, and lead to wait-and-see tactics. This would be a major mistake as climate change is already happening. Consequently, governments should be proactive in seizing current opportunities and avoiding future costs. For these reasons, mainstreaming climate change into policies implies flexibility and adaptability; learning by trial and error (Mickwitz et al., 2009a: 15). This report outlines what a first attempt to mainstreaming climate change could be. Many others will follow in the coming years.

A climate change white paper should set a forward-looking turnaround strategy. Because of the urgent need for action, this strategy must be ambitious in its objectives, policies, regulations and legislation. Achieving such a strategy presents huge challenges: attitudes, behaviours, production and consumption patterns have to change within all spheres of government, state-owned enterprises, business, civil society and citizens. Policy makers ought to support and sometimes force these changes. To make them happen, government must send the right long-term signals to create policy certainties and partially offset climate change uncertainties. Even then, mainstreaming climate change will face many challenges related to policy coherence, or coordinating actors, before it can reshape sectoral policies.

This report attempted to unravel the coordination challenges related to CPI, to examine what the green paper suggested, and to frame what best principles and

institutional arrangements could progressively mainstream climate change in South Africa. Over the past 15 years, South Africa has built strong legislation to coordinate national departments and local governments to improve delivery. Our approach has been to use the existing institutional options offered by the Constitution and the legislation that regulates relationships between departments, local governments and stakeholders. When deemed necessary, we have suggested modifications to enhance their efficacy. We only proposed new institutions as a last resort solution.

The Inter-Ministerial Committee on Climate Change (IMCCC) is responsible for formulating a national programme for climate change, and overseeing its implementation. However, to increase its effectiveness, its composition needs to be reviewed to include at least the Minister of Finance. Secondly, the creation of an IMCCC technical committee would help to operationalise the body and ensure policy coordination and coherence.

The outcomes approach developed by the Presidency is undoubtedly a first attempt to mainstream climate change in government through outcome 10. The institutional arrangements set up to identify the outcomes and outputs, and for the delivery agreement, are particularly relevant as they call upon bodies included in the legislation but not necessarily mobilised before, such as the creation of an extended MINMEC and MINTECH. In addition, signing performance contracts between the President and each minister, coupled with ministers and MECs signing delivery agreements, provides some clarification of roles and responsibilities. However, the lack of a compliance mechanism could jeopardise the efficiency of the outcomes approach. The creation of an advisory council, advising the minister, attending the IMCCC, and reporting to Parliament could play an important enforcement role. Its creation should be thoroughly investigated.

The outcomes approach could be seen as part of a trial and error process aimed at improving governmental coordination. While it is too soon to determine its efficiency, it certainly merits further testing. Coupled with the IMCCC, it forms a relevant basis for CPI, while the creation of a technical IMCCC would certainly reinforce the coordination process. The stakeholder engagement process remains weak. The National Committee on Climate Change (NCCC) does not play the consultation role it is supposed to fulfil. It needs both human (a secretariat) and financial resources to enable regular and comprehensive engagement. The possibility of creating working groups to tackle specific issues thoroughly must be investigated. Ideally, the NCCC secretariat should have undertaken the consultation process for the green paper.

Crucially lacking is a strong link with the municipalities responsible for implementing mitigation and adaptation actions. Raising awareness, building capacities and providing technical and financial assistance are important actions to undertake to support implementation. Creating an implementation agency, playing a similar role to the one SANBI fulfils on biodiversity, would be an important element of the implementation process. It would have to be adequately resourced.

Consequently, there is some room to manoeuvre in improving the governance system. The horizontal coordination process as set by the outcomes approach offers interesting perspectives. It needs to be assessed regularly and to demonstrate its relevance over time. However, it seems to be the fulcrum for effective vertical coordination, as long as the NCCC is capacitated, and municipalities become fully fledged members of the coordination process. This is where government's endeavours should focus to ensure proper implementation of the delivery agreement. Finally, diffuse coordination should be investigated to stimulate behaviour changes.

CPI can only be achieved if the different departments take ownership of the climate debates and challenges. The National Treasury remains a key player. With the allocation of R800m over three years to green economy initiatives (Gordhan, 2011), the Treasury is adding some piecemeal measures to the budget exercise. This is a first step. The ideal situation would be to integrate climate related objectives into the goals and procedures of the budgetary process. The gap between the two approaches is huge, but it needs to be progressively filled. One strategy would be to grow the climate change objectives, from Output 2, in Outcome 10, currently, to a stand alone outcome and then to an overarching goal, which cannot be confined to a single outcome. The DEA would need to be sufficiently empowered to include climate related outputs in the different outcomes.

7 References

- Aschhoff, B., and Sofka, W.E.J. (2009). Innovation on demand? Can public procurement drive market success of innovations? Research Policy, 38(8), 1235–1247.
- Bauer, A., Feichtinger, J. and Steurer, R. (2011). The governance of climate change adaptation in ten OECD countries: Challenges and approaches. Vienna, Institute of forest, environmental and natural resource policy, Discussion Paper 1-2011. http://www. wiso.boku.ac.at/fileadmin/_/H73/H732/_TEMP_/ InFER_DP_11_1__The_Governance_01.pdf
- Beare, M. and Gumede, N. (2011). A climate change response white paper governance framework. Mimeo.
- Beck, S., Kuhlicke, C. and Gorg, C. (2009). Climate policy integration, coherence, and governance in Germany. PEER Climate change initiative, UFZ-Bericht 01/2009.
- Bekink, B (2006) Principles of South African Local Government Law. Durban, LexisNexis Butterworths.
- Berger, A. and Fischer, D. (2010). Understanding China's road to a green economy: Linking multi-level governance and the global value chain perspectives. Prepared for the 2nd UNITAR-Yale Conference on Environmental Governance and Democracy, 17-19 September, New Haven, USA. http://conference. unitar.org/yale/sites/conference.unitar.org.yale/files/ Paper_Fischer.pdf
- Boer, A., O'Beirne, S. and Greyling, T. (2003).
 The Quest For Co-Operative Environmental Governance Do Stakeholders Have A Consistent Map And Directions. Paper for the International Association for Impact Assessment, South Africa, (IAIASA) annual national conference.
- Bulkeley, H., Schroeder, H., Janda, K., Zhao, J., Armstrong, A., Chu, S.Y and Ghosh, S. (2009). Cities and Climate Change: The role of institutions, governance and urban planning. Report prepared for the 5th Urban Research Symposium on Climate Change, Cities and climate change: responding to an urgent agenda, Marseille, 28-30 June. http://siteresources.worldbank.org/INTURBANDEVELOPMENT/Resources/3363871256566800920/6505269-1268260567624/ Bulkeley.pdf

- Camarota A.G. (1996). Stakeholder Satisfaction: The Key to Understanding ISO 14001. Transformation Stategies, supporting ISO 14000 and environmental management http://www.trst.com/art-ant-cam.htm
- Chatterton, T.J., Longhurst, J.W.S., Leksmono, N.S., Hayes, E.T. and Symons, J.K. (2007). The Importance of Enabling Integrated Governance for Environmental Management in Developing Countries – Using the South African National Framework on Air Quality as a Model. University of the West of England, Air Quality Management Resource Centre. http://www.ddrn. dk/filer/forum/File/The_Importance_of_Enabling_Integrated_Governance_for_Environmental_Management_in_Developing_Countries.pdf
- Corfee-Morlot, J., Cochran, I., Hallegate, S. and Teasdale, P.J. (2011). Multilevel risk governance and urban adaptation policy. Climate Change, 169-197.
- Corfee-Morlot, J., Kamal-Chaoui, L., Donovam, N.G., Cochran, I., Robert, A. and Teasdale, J.P. (2009). Cities, climate change and multilevel governance. Paris, OECD Environmental Working Papers No. 14.
- DEA (2010a) National climate change response green paper. http://www.info.gov.za/view/ DownloadFileAction?id=135920
- DEA (2010b) Outcome 10 delivery agreement. http://www.poa.gov.za/GIA/POA.nsf/0/b10b56bdfa90 7442422577d1002c1893/\$FILE/Outcome%2010%20 Delivery%20Agreement.pdf
- DEAT (2006) South Africa environment outlook: A report of the state of the environment. http://soer. deat.gov.za/documents.html?d=17
- Department of Economic Development (2010) New growth Path. http://www.info.gov.za/speeches/ docs/2010/new-growth-path.pdf
- DPME (2010b) Strategic plan 2011/12 2015/16. http://www.thepresidency.gov.za/MediaLib/Downloads/Home/Ministries/DPME%20Strategic%20 Plan%202011-2016.pdf
- Du Plessis, A. (2009) Fulfilment of South Africa's Constitutional Environmental Right in the Local Government Sphere. Nijmegen, Wolf Legal Publishers.

- Du Plessis, A. (2011) Environmental Compliance and Enforcement Measures: Opportunities and Challenges of Local Authorities in South Africa. Mimeo.
- Economic and Social Commission for Asia and the Pacific (ESCAP), 2003, Coordination between various subnational levels and the national level, Virtual Conference. http://www.unescap.org/drpad/vc/orientation/M4_2.htm
- Edler, J. and Georghiou, L. (2007). Public procurement and innovation – Resurrecting the demand side. *Research Policy*, Vol. 36, 949–963.
- European Commission (2007). Adapting to climate change in Europe – options for EU action. Green Paper from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions, Brussels. http://eurlex.europa.eu/smartapi/cgi/ sga_doc?smartapi!celexplus!prod!DocNumber&lg=en &type _doc=COMfinal&an_doc=2007&nu_doc=354
- European Communities (1997). Treaty of Amsterdam amending the Treaty on European Union, the treaties establishing the European Communities and certain related Acts. Luxembourg: Office for Official Publications of the European Communities. http://www. europarl.europa.eu/topics/treaty/pdf/amst-en.pdf
- Fakier, S., Stephens, A. and Tholin, J. (2005). Environmental governance. Pretoria, background research paper produced for the South Africa Environment Outlook report on behalf of the Department of Environmental Affairs and Tourism. http://soer.deat.gov.za/dm_documents/Environmental_Governance_____Background_Paper_WU45Q.pdf
- Giordano, T., Kruger, R., Cloete, E., Lwanda, G., Neoh,
 S., Patel, S., and Tyani, L. (2010). A green economy
 perspective. Midrand, Development Bank of Southern
 Africa, Internal Document, November, 28 p.
- Goldblatt, M. (2007). Climate policy coherence and institutional coordination for South Africa: an overview of challenges and responses, Paper 14.
 September 2007. Basic project final report, Institute of Development Studies, presentation by Palmer development group. http://www.basic-project.net/ data/final/Paper14South%20Africa%20Overview%20 Paper%20 Climate%20Policy%20Coherenc%85.pdf

- Goldblatt, M., Middleton, J. (2007). Climate policy coherence and institutional coordination: clarifying institutional responsibilities in South Africa, Paper 13. September 2007. Basic project final report, Institute of Development Studies, presentation by Palmer development group. http://www.basic-project.net/ data/final/Paper13South%20Africa%20Climate%20 Policy%20 Coherence%20and%20Instituti%85.pdf
- Gordhan, P. (2011). Budget speech. 23 February 2011.
- Government Communication and Information System (GCIS) (2009). Statement on Cabinet meeting held on 9 September 2009. http://www.gcis.gov.za/ newsroom/releases/cabstate/2009/090909.htm
- Green Times (2010): Youth demand climate action in parliament. Issue 22. http://www.thegreentimes. co.za/index.php?id=0&storyid=921&storyaction=view story&storytype=1
- Grimble, R., Chan, M.K. (2009). Stakeholder analysis for natural resource management in developing countries. *Natural Resources Forum*, May 1995, 19:2, 113–124.
- Grimble, R., Chan, M.K., Aglionby, J. and Quan, J. (1995). Trees and Trade-Offs: A Stakeholder Approach to Natural Resource Management. London, IIED, Gatekeeper series No. 52. http://pubs.iied.org/ pdfs/6066IIED.pdf
- Her Majesty's Government (HMG) (2008). Climate Change Act 2008. http://www.legislation.gov.uk/ ukpga/2008/27/contents
- Hooghe, L. and Marks, G. (2003). Unravelling the Central State, but How? Types of Multi-Level Governance. American Political Science Review, Vol. 97, No. 2, 233-243.
- Imbewu (2011). Report on vertical coordination developed for DBSA. Imbewu sustainability legal specialists.
- Institute of Municipal Finance Officers (IMFO) (2010).
 Benchmarking for excellence in service delivery: lessons for Local Government in South Africa. Official Journal of the Institute of Municipal Finance Officers.
- Jordan, A. and Lenschow, A. (2010). Environmental policy integration: a state of the art review. *Environmental Policy and Governance*, Vol. 20, pp. 147-158.

7. References

- Kern, K. (2010). Climate governance in the EU multi-level system: the role of cities. Paper prepared for presentation at the Fifth Pan-European Conference on EU Politics, University Fernando Pessoa and Faculty of Economics of Porto University, Porto (Portugal), June 23-26.
- Kidd, M. (1997). Environmental Law. Cape Town, Juta and Company Ltd.
- Kotzé, L.J. (2006). Improving unsustainable environmental governance in South Africa: the case for holistic governance. *Potchefstroom Electronic Law Journal*, Vol. 9, No. 1, pp. 1-44. http://www.ajol.info/index.php/pelj/article/viewFile/43452/26987
- Kotzé, L.J. (2007). A Legal Framework for Integrated Environmental Governance in South Africa and the North-West Province. Nijmegen, Wolf Legal Publishers.
- Kotzé, L.J. (2009). Environmental governance. In Paterson A. and Kotzé L.J (eds.). Environmental compliance and enforcement in South Africa: legal perspectives. Cape Town, Juta Law, Chapter 5, 103-126.
- Lafferty, W.M. and Hovden, E. (2002). Environmental policy integration: toward an analytical framework? University of Oslo, Program for research and documentation for a sustainable society, Report No. 7/02, 30 p. http://www.prosus.uio.no/publikasjoner/Rapporter/2002-7/Rapp7.pdf
- LGP (2008) PAPER IV: redefining the political structure of District municipalities, Local Government Project, Community Law Centre, University of the Western Cape, April. http://www.ldphs.org.za/ publications/publications-by-theme/local-governmentin-south-africa/local-governmentelections/Redefining%20The%20Political%20Structure%20Of%20 District%20Municipalities.pdf
- Lockwood, M., Davidson, J., Curtis, A., Stratford, E. and Griffith, R. (2009). Multilevel Environmental Governance: lessons from Australian natural resource management. Australian geographer, Vol. 40, No. 2, 169-186.
- Manikutty, S. and Vinod, K. (2011). Synergy in Government Policies and Global Competitiveness of Two Indian Industries: An Empirical Study. http://ideas. repec.org/p/iim/iimawp/wp01336.html
- Marquet-Pondeville, S., Swaen, V. and De Rongé, Y. (2007). the impact of external environment, stakeholders' pressures and environmental strategy on environmental management control systems. http://www.iae. univ-poitiers.fr/afc07/Programme/PDF/p93.pdf

- Meadowcroft, J. (2009). Climate change governance. World Bank, Background paper to the 2010 World Development Report, Policy Research Working Paper 4941, 40 p. http://wwwwds. worldbank.org/servlet/WDSContentServer/WDSP/ IB/2009/05/19/000158349 _20090519144015/Rendered/PDF/WPS4941.pdf
- Mickwitz, P. and Kivimaa, P. (2007) Evaluating Policy Integration: The Case of Policies for Environmentally Friendlier Technological Innovations. *Evaluation*, Vol. 13, No. 1, 68-86.
- Mickwitz, P., Beck, S., Jensen, A., Branth Pedersen, A., Aix, F., David Carss, D., Ferrand, N., Görg, C., Kivimaa, P., Kuhlicke, C., Kuindersma, W., Máñez, M., Melanen, M., Monni, S., Reinert, H. and van Bommel, S. (2009a). Climate Policy Integration as a Necessity for an Efficient Climate Policy. 2009 Amsterdam Conference on the Human Dimensions of Global Environmental Change, Amsterdam, 2-4 December. http://www.earthsystemgovernance.org/ac2009/papers/AC2009-0173.pdf
- Mickwitz, P., Kivimaa, P., Hildén M., Estlander, A. and Melanen, M. (2009b). Mainstreaming climate policy and policy coherence: a background report for the compiling of the foresight report of Vanhanen's second government. Helsinki, Prime Minister's Office publication No. 21/2009, May, 75. http://www.vnk.fi/julkaisukansio/2009/j2109-mainstreaming-climate/pdf/en.pdf
- Ndlela, L. (2001). A practical guide to local government in South Africa. Institute for Democracy in South Africa, Local Government Centre.
- Nilsson, M., Eckerberg, K, and Person, A. (2007).
 Introduction: EPI agendas and policy responses. In Nilsson, M and Eckerberg, K. (eds.) Environmental policy integration in practice: Shaping institutions for learning. London, EarthScan, I-24.
- Nowotny, H. (2009). How Many Policy Rooms Are There? Evidence-Based and Other Kinds of Science Policies. Science, Technology, and Human Values, Vol. 32, No. 4, 479-490.
- NUMSA (2010) National Climate Change Response Green Paper 2010 - Presentation to the Portfolio Committee on Water and Environmental Affairs 9 March 2011 (PPT Presentation) http://www.pmg.org. za/files/docs/110309numsa_0.ppt

- Nuttall, C., Pesti, B., and Ouarzazi, L. (2010). Tackling climate change at the sub-national level: implementing a paradigm shift. Prepared for the 2nd UNITAR-Yale Conference on Environmental Governance and Democracy, 17-19 September, New Haven, USA, 15. http://conference.unitar.org/yale/sites/conference. unitar.org.yale/files/Paper_Nuttall_0.pdf
- Paterson, A.R. and Kotze, L.J. (eds.) (2009). Environmental Compliance and Enforcement in South Africa: Critical Legal Perspectives. Cape Town, Juta Law.
- Presidency (2009). Medium term strategic framework 2010-2013. Pretoria, July. http://www.thepresidency. gov.za/pebble.asp?relid=359
- Qi, Y., Zhang, H., Li, H., Cai, Q. and Liu, Z. (2009).
 Quand le climat devient l'affaire des provinces chinoises. *In* Jacquet P.And Tubiana L. Regards sur la terre 2009: la gouvernance du développement durable. Paris, les Presses de Sciences Po, 141-152.
- Republic of South Africa (RSA) (1996). Constitution of the Republic of South Africa, No. 108 of 1996, Pretoria, Government Printer.
- Republic of South Africa (RSA) (1998). National Environmental Management Act, No. 107 of 1998.
 Pretoria, Government Printer.
- Republic of South Africa (RSA) (2000). Local Government: Municipal System Act, No. 32 of 2000. Pretoria, Government Printer.
- Republic of South Africa (RSA) (2004). National Environmental Management: Biodiversity Act, No. 10 of 2004. Pretoria: Government Printer.
- Republic of South Africa (RSA) (2005). Intergovernmental Relations Framework Act, No. 13 of 2005.
 Pretoria, Government Printer.
- Republic of South Africa (RSA) (2009). National Environmental Laws Amendment Act, No. 14 of 2009. Pretoria, Government Printer.
- Roberts, D. (2008). Thinking globally, acting locally institutionalizing climate change at the local government level in Durban, South Africa. Environment and Urbanization, Vol. 20, No. 2, 521-537.
- Roberts, D. (2010). Prioritizing climate change adaptation and local level resilience in Durban, South Africa. *Environment and Urbanization*, Vol. 22, No. 2, 397–413.

- Russel, R. and Jordan, A. (2007). Joining-Up or Departmentalism? Coordinating Policy for Sustainable Development in the United Kingdom. Norwich, University of East Anglia, Centre for Social and Economic Research on the Global Environment, CSERGE Working Paper EDM 07-01, 15. http://www.uea. ac.uk/env/cserge/pub/wp/edm/edm_2007_01.pdf
- Simoulin, V. (2007). La gouvernance territorial: dynamiques discursives, stratégiques et opérationnelles.
 Droit et Sociétés, Vol. 44, 15–32.
- Stoker, G. (1998). Governance as Theory: Five Propositions. International Social Science Journal, Vol. 50, No. 1, 17–28.
- Strydom, H.A. and King, N.D. (eds.) (2009). Environmental management in South Africa. Cape Town, Juta Law, Second edition.
- United States Environmental Protection Agency (EPA) (2001). Improved Science-Based Environmental Stakeholder Processes. A commentary by the EPA Science Advisory Board United States Environmental Protection Agency Washington, D.C. 20460 EPA-SAB-EC-COM-001-006, August 22. http://yosemite.epa. gov/sab/sabproduct.nsf/CEE3F362F1A1344E8525718E 004EA078/\$File/eecm01006_report_appna-e.pdf
- Winkler, H. and Marquand, A. (2009). Changing development paths: From an energy-intensive to low-carbon economy in South Africa. *Climate and Development*, Vol. 1, 47–65.
- Winkler, H., Spalding-Fecher, R., Mwakasonda, S. and Davidson, O. (2002) Sustainable development policies and measures: tackling climate change from a development perspective. In Davidson O., Sparks D. (Eds) Developing Energy Solutions for Climate Change: South African Research at EDRC. Energy and Development Research Centre, University of Cape Town, Cape Town, South Africa, 176–198.
- Yossie, T.F. and Herbst, T.D. (1998). Using Stakeholder Processes in Environmental Decision making An Evaluation of Lessons Learned, Key Issues, and Future Challenges, ICF Incorporated. http://www.gdrc.org/ decision/nr98ab01.pdf

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