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**Technical Assistance Unit** 

Increasing Investment in Climate Change Related Projects at the Sub National Level

Project No. 662

Phase 1: Diagnostic Report: Barriers and Challenges to Implementing Climate Change Projects

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## **Acronyms and Abbreviations**

| AG        | Auditor General   |
|-----------|---|
| BAU       | Business as Usual   |
| внс       | British High Commission   |
| CFO       | Chief Financial Officer   |
| CoGTA     | Cooperative Governance and Traditional Affairs  |
| DPW       | Department of Public Works  |
| GHG       | Greenhouse Gas  |
| IDP       | Integrated Development Plan   |
| LCR       | Low Carbon, Climate Resilient   |
| LUPO      | Land Use Planning Ordinance   |
| MFMA      | Municipal Finance Management Act  |
| NGO       | Non-Governmental Organisation   |
| NGP       | National Growth Path  |
| PFMA      | Public Finance Management Act   |
| PMS       | Performance Management System   |
| PPFA      | Preferential Procurement Framework Act  |
| PPP       | Private Participation Process   |
| RE        | Renewable Energy  |
| SCM       | Supply Chain Management   |
| TAU       | Technical Assistance Unit   |
| TOR       | Terms of Reference  |
| WCG:DEADP | Western Cape Government: Department of Environmental Affairs and Development Planning |
| WWF       | World Wildlife Foundation   |



#### 1 Introduction

#### 1.1 Background

South Africa has committed to reducing carbon emissions by 34% below business as usual (BAU) by 2020 and 42% by 2025 as a signatory to many international environmental conventions. To meet these commitments, the public and private sector should be actively investing in low carbon, climate resilient (LCR) investments. This presents a unique opportunity to transform the country's economic growth towards a more inclusive and sustainable one.

In 2011, Minister Edna Molewa, announced a new National Climate Change Response Policy. She noted that "South Africa's response to climate change has two objectives. The first is to effectively manage the inevitable climate change impacts through interventions that "build and sustain South Africa's social, economic and environmental resilience and emergency response capacity" 1. The second is to make a fair contribution to the global effort to stabilise greenhouse gas concentrations in the atmosphere (Molewa, 2011)". This long-term approach has been strengthened by the National Growth Path (NGP) and other government policies. While government and some provinces and municipalities have commenced programmes to support government's climate change goals and more broadly contribute to a "greener economy", these efforts are largely fragmented and lacking in scale. Various reasons are cited for the slow progress in mainstreaming LCR programmes, leading to little appetite at the local government level to engage in these programmes. The legislative barriers at both the national and local government level, have been cited as the key reasons for this slow uptake in implementing LCR projects.

Despite these challenges a number of projects have been implemented by municipalities and provincial governments. They include energy efficiency projects that focus on retrofitting public sector buildings with energy efficient lighting and air conditioning systems to reduce municipal and provincial energy costs substantially; a waste to energy project, recycling projects at the metro and non-metro level that have created jobs and reduced the stress on land fill sites, renewable energy projects creating a body of technical and institutional experience; climate adaptation projects through reforestation, catchment management projects to reduce water run offs and associated flood damages, and other small environmental management projects.

#### 1.2 Terms of Reference

The Western Cape Government: Department of Environmental Affairs and Development Planning (WCG: DEADP) requested assistance from the TAU to conduct a study to identify the barriers (perceived or real), which hamper government investment in climate change related projects (both mitigation and adaptation), and also to identify innovative financing practices that enable the implementation of financially viable climate change related projects.

The primary objective of the study is to improve the capability and success of financing and implementing climate change related projects<sup>2</sup> by provinces and municipalities across

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<sup>&</sup>lt;sup>1</sup> Press Briefing, Minister Edna Molewa. Accessed on March 2013 at http://www.southafrica.info/about/sustainable/climate 191011.htm#.UVBRlgUznFl#ixzz2OYfaEr00

<sup>191011.</sup>htm#.UVBRlqUznFl#ixzz2OYfaEr00

The authors use the terms climate change related projects/programmes or low carbon, climate resilient growth and development to refer to a broader spectrum of issues which include economic and social resilience.



South Africa, through sharing guidance on innovative practices that may be used to overcome these barriers.

The primary objective of the study has been broken down into three sub-objectives, each of which were investigated in separate phases of the project as is outlined in Figure 1 below. The first sub-objective is an analysis of barriers (perceived or real) that are currently preventing the implementation of climate change related projects by municipalities and provincial governments (covered in phase 1 – this report) and facilitating financial innovation that may assist in project implementation (covered in phase 2, forthcoming).

The second sub-objective is to identify whether current financial models used for implementing specific climate change related projects are working or not and to provide guidance on improved models for financing of projects to overcome these barriers. Phase 2 identifies the reasons for why current financial models used for implementing specific climate change related projects in South Africa are not working and providing guidance on improved models for financing of specific types of projects overcoming these barriers based on emerging best practices.

The third sub-objective is to provide municipalities and provinces with information and learning about successful climate financing and financial innovation in respect of implementing climate change interventions. Phase 3 sees the development of practice notes to facilitate the implementation of climate projects and engagement with municipalities and provinces thereon. This report focuses on the specific legislative and institutional barriers.

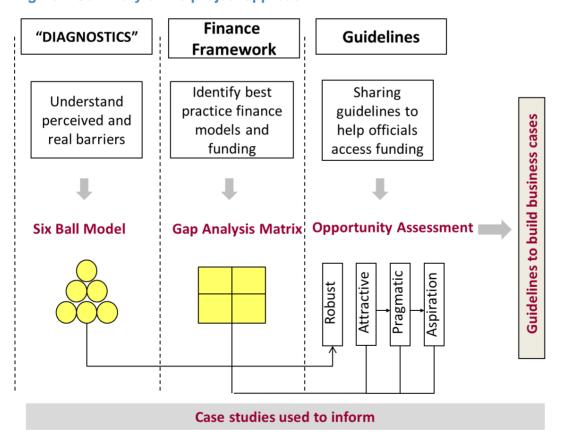


Figure 1 Summary of the project approach

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## 2 Methodology: The Six Ball Model

The preliminary assessment of the barriers impacting on financing and implementing climate change related projects suggests that the current legislation is, in itself, not necessarily a significant barrier, but rather the interpretation of the legislation is. The literature review for this study highlights two specific issues:

- While there are no prohibitive legislative barriers, there are very few successful examples of provincial governments and municipalities implementing climate change related projects, and the appetite to engage in such projects is insignificant except in a few provincial governments and municipalities.
- Despite the severe sanctions provided for in the legislation for non-compliance, the Auditor General report highlights significantly high levels of non-compliance.

Clearly the barriers may include but are not restricted to legislative issues. Based on the findings of the Auditor General (2010), the implementation of climate change related projects will also be impacted by the level of leadership, governance, systems and skills. Hence the team adopted a systems approach to identify and understand the totality of bottlenecks that impede the implementation of climate change related projects which is described in Section 2 below.

The team applied and amended the Andersen six ball model, using a systems thinking lens, to understand the factors influencing a provincial government's and / or municipality's decision to implement climate change related projects. This model allowed the team to make sense of the inner workings of a provincial government and municipality, to group its functions into components and to explore the interaction between components, within the system as a whole and the emergent properties arising from these interactions.

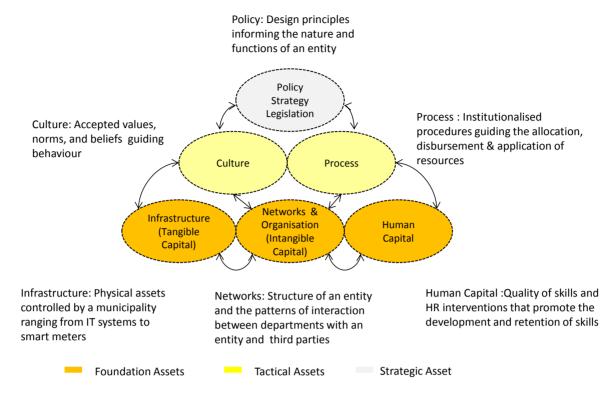
The six ball model has six categories of assets, which are described in the circles of Figure 2. The arrangement of the balls is not random. Balls are strategically placed into a pyramid shape that has a strategic, tactical and operational layer of assets.

The strategic layer gives the system its meaning and purpose and informs the evolution and aims of an entity. The financial management legislation, strategy and related legislation are classified as strategic assets. They give provincial and local government their mandate, which determines the allocation and management of tactical and operational assets (i.e. the other five balls).

Tactical decisions concern provincial and local government's ability to respond proactively to socio-economic, political and technological changes. The tactical layer of the pyramid consists of the culture and process balls (refer Figure 2) because they determine the level of ease and / or difficulty with which operational assets are allocated to projects and hence a provincial government's or municipality's responsiveness to challenges and opportunities. The operational layer of the pyramid comprises tangible and intangible assets that a municipality uses to deliver goods and services.



Figure 2 Summary of the Six Ball Model



Source: Misuka Green Development (2013) adapted from Andersen

The core assumption of the model is that an entity's ability to achieve its goal is determined by the quality of its assets, in general, and the degree of alignment between assets. In other words, the **strategic, tactical and operational layer of assets must be aligned to achieve an entity's goal**. Too few or poor quality assets, such as a lack of skills, make it difficult for an entity to implement its projects successfully, whereas the incorrect mix of assets create bottlenecks that stall the implementation of projects. For example, poor alignment between a municipality's tactical assets (i.e. process and culture) with its strategic and operational assets will make it difficult to implement climate change related projects. The model was therefore used to analyse the quality of a municipality's operational, tactical and strategic assets, and explored the alignment between these assets to trace interdependencies and connections between bottlenecks in the broader system that finances climate change related projects (i.e. understand the emergent properties of a system).

The information to populate the six ball model was gathered in March 2013 from a literature review and in-depth interviews of 22 officials across the three spheres of government (across different provinces) that included environmental scientists and economists. Interviewees were asked a series of open-ended and prepared questions and they were also encouraged to raise issues that they felt were important in the financing of climate change related projects in provincial governments and municipalities.

A semi-structured interview process ensured that the team collected comparable data across the interviews and also gained an understanding of the differences and nuances between municipalities' organisational structure, systems and processes. For example the Durban Municipality is more likely to use by-laws to promote a climate change project than the City of Cape Town. In addition, Renewable Energy (RE) projects at the

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respective municipalities have a different level of power and access to resources, as RE projects are championed by branches that are positioned at different levels of the municipal organisational structure. Municipalities have heterogeneous systems and processes; effective interventions need to understand subtle differences and avoid applying a 'one size fits all approach' to encourage officials to introduce and implement climate change related projects.

Despite differences, common themes and patterns emerged from the interviews. Hence the team identified common barriers that climate change related projects face at the municipal level (refer to Figure 2) by analysing and triangulating information from the interviews.

#### 3 Historical Context and Status

Subnational governments in South Africa have developed and matured since 1994, with minor changes since the adoption of the Constitution in 1996. The constitution prescribes the principles for execution of powers and functions in a transparent, accountable and participatory manner. Often, the legislation and regulations outlines processes that need to be followed to ensure that these constitutional requirements are fulfilled. Section 40(1) of the Constitution creates three spheres of government viz. national, provincial and local that are interdependent. Provincial governments have both concurrent and exclusive powers reflected in Schedule 4 and 5 respectively. However, national government can, under certain conditions, legislate over concurrent functions in Schedule 4. Similarly, Chapter 7 of the constitution sets out the functions of municipalities listed in Part B of Schedule 4 and Part B of Schedule 5. While municipalities have legislative and executive authority over these powers and functions, these bylaws and policies cannot conflict or contradict national and applicable provincial legislation. In addition, municipalities have the right to exercise any power concerning a matter reasonably necessary for, or incidental to, the effective performance of its functions.

Given the distribution of these functions, the bulk of CCR projects are related to national (including SOEs) and municipal functions. Provincial governments can play a significant climate change role in its economic functions (including agriculture), policy development, support of municipalities, and internal resource utilisation (including procurement of goods and services). A substantial part of the study therefore relates to municipal functions.

Many of the stakeholders consulted during the conceptualisation of this study raised, amongst others, the constraints of the Public Finance Management Act (PFMA) and the Municipal Financial Management Act (MFMA). These Acts give effect to the constitutional requirement<sup>3</sup> that enshrines the need for equity, transparency and accountability as well as the need for the public service to act in a responsive and efficient manner<sup>4</sup>.

The PFMA and MFMA are based on modern financial management principles that are consistent with the values enshrined in the constitution.

#### 3.1 The Public Finance Management Act (PFMA)

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<sup>&</sup>lt;sup>3</sup> Refer: Section 215 – 217 for the enactment of the PFMA

<sup>&</sup>lt;sup>4</sup> Constitution Sections 152 and 195



The PFMA replaces the national and provincial Exchequer Acts and the Reporting by Public Entities Act, 93 of 1992, which focused mainly on expenditure control. The Act outlines its objectives as:

- To regulate financial management in the national government and provincial governments;
- To ensure that all revenue, expenditure, assets and liabilities of those governments are managed efficiently and effectively;
- To provide for the responsibilities of persons entrusted with financial management in those governments.

The Act is based on public and private best practices in financial management, and the key elements include improving transparency, entrenching accountability and ensuring the integration of policies (Fourie; 2005: 679). The approach forces managers in government to plan effectively based on strategic outcomes, forecast income and expenditure accurately over three years, and to clearly indicate how products and services have been procured. It further prescribes a culture in which public resources must be effectively managed and accounted for in a transparent manner using generally recognized accounting practices.

A Wildeman and Jogo (2012) review, after a decade of implementation of the PFMA, concludes that "aggregate fiscal discipline has been achieved as a result of the introduction of the MTEF budget system" and allocative efficiency has increased. However improvements in operational efficiency were inadequate. Maude (2007) has strongly argued for increased compliance. While recognizing that effective financial management is about meeting policy objectives, Maude argues for a strong compliance approach by building the strategic capacity of Accounting Officers, and improving capacity of officials to implement the PFMA. Much of the public debate on financial management is based on the poor audit outcomes, and the overall conclusion is to tighten compliance. Thus the focus of senior management is to reproduce expenditure practices that deliver safe audit outcomes.



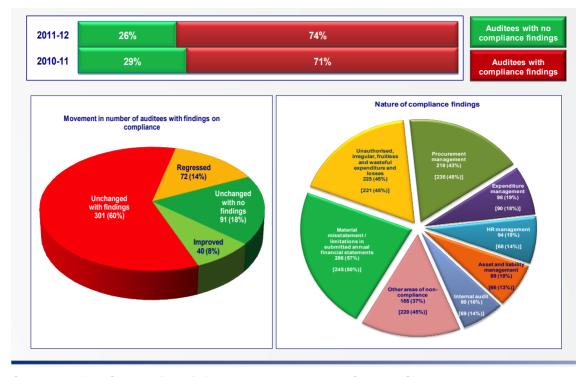


Figure 3 Findings on compliance with laws and regulations

Source: Auditor General (2012), Presentation to National Cabinet, Slide 10

In the October 2012 Presentation to National Cabinet, the Auditor General's presentation illustrates two specific trends, the deteriorating level of compliance, particularly with Provincial departments; and the specific areas of non-compliance. The latter highlighted the procurement, expenditure management, expenditure transgressions and other areas of non-compliance. Against these findings, highlighted by the media as poor governance, the overall view of government is the need to strengthen compliance.

#### 3.2 The Municipal Finance Management Act (MFMA)

The implementation of the MFMA must be understood in the context of the transition of local government from racially based to a non-racial, democratic one. The process was protracted and complex, designed largely to ensure that the transition did not precipitate a collapse of basic service provision. The transition provided for three phases, the Preinterim phase in which combined local authorities were governed by partnership of statutory (representatives of local authorities) and non-statutory (representatives of the civic, trade unions, and the recently unbanned political organisations) stakeholders; an Interim phase which led to elections and the formation of about 850 municipalities and the final phase, based on the 1996 constitution, which rationalized and established three types of municipalities. This final phase was ushered in after the 2000 election, which created new non-racial municipal entities.

The legal framework for municipalities was enshrined in the constitution that provides for an independent sphere of government, with constitutionally assigned powers (in Schedule 4B or Schedule 5B) including the powers to raise particular taxes and service charges. This was followed by the adoption of the Local Government White Paper in 1998, which provided the framework for local government. Between 1998 and 2000 a number of Acts governing municipal structures and operations were adopted by Government. These include The Municipal Demarcation Act (Act 27 of 1998), which defined new municipal boundaries; the Municipal Structures Act of 1998 (Act 117 of 1998), which guided the

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rationalisation of municipal administrations; and the Municipal System Act (Act 32 of 2000), which governs municipal organisational systems, development and operational planning, participatory processes and service delivery systems. The final major piece of legislation is the MFMA (Act 56 of 2003), which prescribes the financial management for municipalities. The implementation of the MFMA was progressively<sup>5</sup> adopted, based on the capacity of municipalities.

Both National and Provincial Treasuries have recognised that the local government transition has created new institutions that require both change management and capacity development to meet its new obligations in the implementation of the MFMA. The phased implementation was coupled with capacity building programmes, and regular releases of MFMA regulations and Treasury Guidelines to facilitate implementation. Despite these supportive measures, the 2010/2011 Auditor General's findings highlight the high levels of non-compliance.

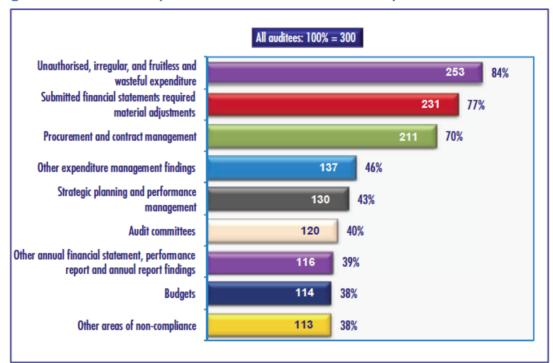


Figure 4 Transversal reported areas of material non-compliance

Source: Auditor General Report (2010), P47

The key areas of non-compliance related to management of municipalities include:

- the inability to prevent unauthorised, irregular, fruitless and wasteful expenditure in 84% of municipalities or municipal entities (total value of R14,5 billion);
- 70% of auditees were in contravention of the supply chain requirements;
- 43% did not have adequate strategic management and performance management systems; and

<sup>&</sup>lt;sup>5</sup> Given the complexity of the Act, the capacity of municipalities, and the time required to get municipalities to adjust their systems to comply with the provisions of the MFMA, National Treasury prescribed dates to phase in sections of the Act. In addition for particular sections, high capacity municipalities were required to comply with these provisions earlier than low capacity municipalities. By 2011 all municipalities were required to comply with all the provisions of the Act. Diagnostic Report: Increasing Investment in Climate Change Related Projects at the Sub National Level



• 38% of auditees have incurred expenditure that is inconsistent with their approved budget, or have not provided adequate reports.

With respect to the supply chain contraventions, the table below highlights the key findings. In addition to awards made to family members, councillors, and state employees an area of greatest concern is the uncompetitive or unfair procurement processes. This occurs when the specifications for the procurement of goods or services are designed to favour particular products or suppliers. The Auditor General believes that in the majority of instances these practices promote anti-competitive behaviours that disadvantage the state, or in some instances, may be a result of corrupt practices.

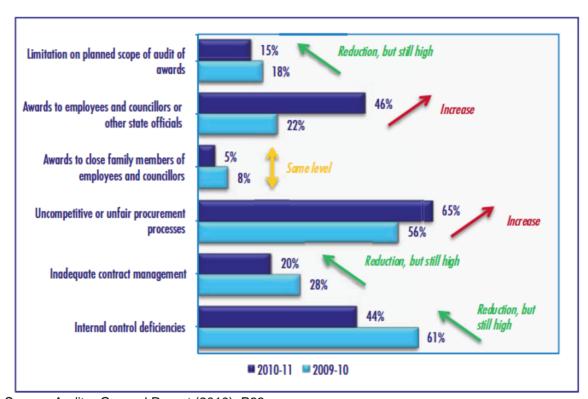


Figure 5 Summary of findings arising from Supply Chain Management audit

Source: Auditor General Report (2010), P63

Table 1 Analysis of fruitless and wasteful expenditure

| Fruitless and wasteful expenditure - type                                   | Number of auditees | Percentage<br>(of auditees<br>reported on) | Amount       |
|---|--------------------|--|--------------|
| Payments for goods and services not received or not required                | 14                 | 5%   | R21 million  |
| Payments to defaulting contractors  | 5                  | 2%   | R9 million   |
| Interest and penalties on the late payment of suppliers' invoices and taxes | 106                | 35%  | R156 million |
| Compensation-related  | 11                 | 4%   | R27 million  |
| Other   | 51                 | 17%  | R47 million  |
| Total   | 187                | 62%  | R260 million |

Source: Auditor General Report (2010), P56

The Auditor General's (AG's) analysis of fruitless and wasteful expenditure is related mainly to poor management. About 17% of incidences described as other are related to non-compliance with various parts of the legislation. Despite the harsh sanctions of civil and criminal liability, the amount of fruitless and wasteful expenditure has increased annually over the last three years.

Despite the extensive measures taken to assist municipalities to comply with the suite of municipal legislation, through MFMA training, information manuals, technical assistance programmes, and expert consultants that have been made available to municipalities, the level of non-compliance is still significantly high. Much of the non-compliance has been attributed to lack of effective leadership, poor internal controls, poor governance and inadequate systems and skills. Thus, public opinion is in favour of tighter regulations and increased sanctions for officials who do not comply with the legislation.

# 4 Key Findings

## 4.1 High-Level Initial Findings

- Process are onerous which acts as a disincentive to implement climate change projects
- Short-term cash flow management & budgeting cycle (less than 3 based because of Section 33)
- Public Participation Process is expensive and time consuming
- Lifecycle costing is not implemented and the benefits of green projects are underestimated.
- Timeframes of the financial and budgeting processes are short-timeframes ( max 5 years but needs to be 20).
- SCM process favours the selection of established technologies.
- SCM process makes it difficult to identify qualified suppliers.
- SCM designed to support large-scale engineering projects, whose inputs can be quantified and specified at the outset of a project
- Budgeting process disincentives branches to create 'operational savings"
- Performance management system rewards people who follows rules and take no calculated risks.
- Income and finance model penalises green investments as potential savings are ignored.
- Complicated electricity tariff structures and poor communication of electricity tariffs to general public.
- Budgeting process excludes a fiscal strategy requirement.
- Poor access to data to quantify the savings from green projects, especially EE projects. Electricity system is designed to be a billing system and not calculate energy usage.

- MFMA: Section 78 (especially for waste management projects).
- MFMA: Section 33 (private cannot gain sufficient access to resources).
- Weak national electricity and water regulation increases the risk profile of green projects, as municipalities' role in is unclear.
- NERSA regulation is ambiguous, complicating relationships, hence a municipality faces enormous problems 'to obtain a generation license'. Also municipalities' relationship with IPPs is unclear.
- MFMA: Criminalisation of wasteful and fruitless expenditure.
- MFMA: Section 33 requires municipalities to initiate a tender process to buy electricity from decentralised producers for each connection.
- MFMA: Easy to appeal the award of tenders which stalls implementation.
- No green procurement policy at the national and local government level.



- Potential investors are obligated to invest their capital to purchase infrastructure required to get involved with green project. (applies to upgrading infrastructure).
- Cautious engineers have disproportionate control and influence over the allocation of capital in municipalities (i.e. hierarchies).
- Environmental Units do not have the clout to push climate change projects through the system.
- Complicated intergovernmental structures / governance mechanisms.

- Risk averse and conservative mind set blocks innovation, especially CFO and leadership.
- Regulation interpreted in the most narrow and strict sense and limited support for projects that produce intangible long-term benefits.
- Limited teamwork between Branches and spheres of government.
- · Short-termism and insular .
- Myth that a reduction in electricity sales will harm the financial health of municipalities.
- Myth that expenditure outside 4A/4B is disallowed (e.g., no mandate to spend on environment).
- SCM and Finance's interpretation of most economically efficient is the cheapest Rand value.
- CFO, branches and Treasury apply a different interpretation of legislation.
- Legal, Finance, SCM do not understand the nature of environmental projects and hence their processes are too rigid and cannot cope with uncertainty.
- Leadership prioritised the delivery of basic services, and climate change projects seen as a 'nice to have'.
- Myth that municipality must purchase cheapest electricity which thereby excluding RE.
- Limited skills to manage the fiscus strategically, create a financial strategy and take calculated risks.
- Limited skills to prioritise expenditure decisions using multi-criteria weighting models.
- Limited entrepreneurial skills (i.e. local government dominated by technical, engineering and monitoring and evaluation skills).



## 4.2 Detailed Initial Findings Based on the Six Ball Methodology

#### 4.2.1 Legislative Barriers

The suite of legislation governing provincial governments and municipalities is comprehensive, and prescribes a set of processes that are designed to provide safeguards to provincial governments, municipalities and their stakeholders, and to ensure the fiscal viability of provincial governments and municipalities. As indicated above, the research suggests that the current legislation is, in itself, not necessarily a significant barrier. In most of the interviews conducted, there is agreement that neither the PFMA nor the MFMA prohibits provincial governments and municipalities from investing in climate change related projects within their mandate. However, they do regulate and prescribe a set of procedures that must be followed for both internal and external service delivery mechanisms that are perceived as being onerous and time consuming. The most significant finding is divergence in the interpretation of the various sections of the legislation. Intra-municipal divergence stems mainly from differences in interpretation between the project sponsors and the financial managers. governmental differences in interpretation are much more complex, and these are related to specific issues or projects.

Conclusion: The legislation is too complex in places, is open to interpretation and/or overly prescriptive in some respects and would benefit from simplification and/or clarification.

## 4.2.1.1 Municipal and Provincial Mandates to Engage in Climate change related projects

Municipal interviewees raised concerns about the mandate to engage in climate change related projects and programmes related to its expressed absence in Schedule 4b and 5b of the constitution<sup>6</sup>. The Gyanda Judgement, of the Durban High Court, 2012 (Gyanda Judgement) ruled that, Schedule 4 & 5 is not an exhaustive list; instead they are areas of exclusive province and/ or areas of concurrent competence.

> "... the functional areas of constitutional competence as set out in Schedules 4 and 5 of the Constitution are not the only provisions dealing with Government responsibilities and duties. Section 24 of the Bill of Rights provides that everyone has the right to have an environment protected, for the benefit of the present and future generations, through reasonable measures that "...."

Further, Section 24 (1) of the Constitution states that everyone has the right to an environment that is not harmful to their health or wellbeing. Read together with Section 7(2) of the Constitution, it provides that "the state (all spheres of government) must respect, protect, promote and fulfil the rights in the Bill of Rights". The Gyanda Judgement<sup>8</sup> provided further clarity "Clearly, the 'State' includes the Local Government in the form of the Municipality".

Section 152 of the constitution defines a municipality's objectives to include promoting a safe and healthy environment. Further Section 152(1)(b) compels municipalities to provide services such as water, sanitation, electricity, solid waste disposal and municipal public transport in a sustainable manner.

In addition the Constitutional Court Judgement in the Maccsand vs City of Cape Town and Others, the 2012 case entrenches the right of municipalities to implement land use planning. This judgement states that "The fact that in this case mining cannot take place

<sup>&</sup>lt;sup>6</sup> Refer to Annexure A for Schedule 4A/4B

<sup>&</sup>lt;sup>7</sup> Gyanda Judgement Durban Court, 2012. P17-18.



until the land in question is appropriately rezoned is therefore permissible in our constitutional order. It is proper for one sphere of government to take a decision whose implementation may not take place until consent is granted by another sphere, within whose area of jurisdiction the decision is to be executed<sup>9</sup>."

Provincial legislative and executive mandates to implement CCR projects are subject to the powers and functions described in Chapter 6 of the constitution, and Schedules 4 and 5. However, some of the provincial interviewees have raised the concern that there are no express fiscal resources assigned to these responsibilities. They have also indicated that the bulk of the climate change impacts are related to national and municipal functions and services.

Conclusion: For municipalities, these judgments, read with the relevant sections of the Constitution, suggests that environmental powers are embedded in numerous critical functions assigned to municipalities. These judgments present a compelling case that municipalities have an important role in mitigating climate change. Further, in the NCCR white paper it is implicit that municipal and provincial government will be responsible for its implementation of CCR programmes. The financing concerns are discussed in the finance paper of this study.

### 4.2.1.2 Establishing Partnerships to Deliver Services

A common finding from the interviews and literature is that the implementation of climate change related projects at the provincial and municipal level of government is relatively new. As a result, provinces and municipalities do not have the capacity, technology or upfront capital to implement climate change related projects in a sustainable manner. Provinces and municipalities have established partnerships with outside agencies to implement climate projects in a bid to address their resource constraints. The establishment of provincial partnerships, is governed by the Public Finance Management Act (1999) and Treasury Regulation 16. While provinces have the experience and have created PPPs for capital projects, there is no appetite to establish PPPs to implement CCR projects. National Treasury has created the PPP unit to assist with the establishment of PPPs.

At the municipal level, where a function is clearly defined as a municipal service, the municipality is also required to comply with Section 76 - 78 of the Municipal Systems Act to establish a partnership. Professor Jaap de Visser's (2012) paper 'From an Excess of Caution' states: "The process towards the signing of a service delivery agreement with a private external service provider is governed by a complex set of rules, detailed in sections 76-78 of the Municipal Systems Act".

The process in the Municipal Systems Act entails four broad steps, namely -

- an initial review of the way in which the municipality currently provides the service;
- a process for considering an external service delivery mechanism (culminating in full council approval):
- a feasibility study;
- and competitive bidding<sup>10</sup>."

These partnerships are regulated by the Local Government: Municipal Systems Act, 2000 ("Municipal Systems Act") the Local Government: Municipal Finance Management Act, 2003 and the Local Government: Municipal Public-Private Partnership Regulations, 2005.

<sup>&</sup>lt;sup>9</sup> Constitutional Court Judgement in the Maccsand vs. City of Cape Town, 2012, p26.

<sup>10</sup> De Visser, J, 2012, FROM an EXCESS OF CAUTION', City of Cape Town, unpublished.



Section 78 of the Municipal Systems Act prescribes the need for an investigative process to determine the most appropriate service delivery mechanism, and if this best mechanism is a partnership. In each instance where a municipality wants to engage an external service delivery mechanism with a partner it is required to conduct a Section 78 investigation. This includes a cost benefit analysis, municipal capacity assessment, impact on the administration including labour, community impact assessment, and an analysis of trends to provide similar services, consultation with organised labour and the community, as well as complying with additional prescribed legislation. Most interviewees indicated that this process is onerous, costly and time consuming. Smaller municipalities indicated that they do not have the capacity to undertake Section 78 investigations.

The MFMA prescribes a set of investigations and consultation processes that must be completed before approval by the full council. For a Public Private Partnership, Section 120 of the MFMA outlines the conditions and the processes required to establish a PPP. Section 120 (4) outlines the specific requirements that must be established in a feasibility study. In addition the PPP must be approved by council after a community participation process, and comments from National Treasury, CoGTA, and other affected departments. Again this process is particularly time consuming and costly.

The establishment of a typical partnership involves a lengthy process (refer Annexures 1 and 2) viz. design the projects or programmes, outcome of a Section 78 investigation for a municipal service that justifies the need for an external partnership, provide the detailed financial analysis (including the ongoing liabilities to the municipality), community participation and approval from relevant national and provincial government departments. Interviewees indicated that this process takes eighteen to twenty months until council approvals are obtained. Interviewees further suggested that the costs of running these investigations and public participation programmes are similar to the costs of developing the IDPs for the municipalities. Once the project has been approved, the procurement process is likely to take an additional six months, if the outcome is not challenged in court.

Where a PPP is envisaged for a municipal service, Chapter 8 of the Municipal Systems Act must be complied with, which includes a Section 78 investigation described above. If the PPP extends beyond three years, Section 33 (described below) of the Municipal Finance Management Act requires compliance. If however, the partnership is for a service that is not defined as a municipal service, Professor de Visser argues that Section 78 of the Municipal System Act does not apply. He states that, "The appointment of a private company (or NGO) to collect and recycle waste on behalf of the municipality (a defined municipal service) is an example of a partnership that needs to be concluded in terms of both the Systems Act and the PPP regulations. If the agreement concerns the performance of any activity within the legal competence of a municipality (which is not a 'municipal service'), the PPP regulations must be complied with, but the requirements of the Systems Act don't apply e.g. A partnership whereby an external (private) party retrieves costs for the installation of solar water heaters via the City's billing system is an example of a partnership that needs to be concluded in terms of the PPP regulations only<sup>11</sup>."

While the legislation does not disallow partnerships to assist municipalities with the implementation of climate change related projects, the processes are complex and time consuming. Senior municipal staff argue that the capacity to manage these processes is limited, and is a clear disincentive to implement such partnerships. In defence of these legislative requirements, finance staff argue that these processes are necessary for all

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De Visser, J, 2012, From an Excess of Caution', City of Cape Town, unpublished Diagnostic Report: Increasing Investment in Climate Change Related Projects at the Sub National Level Page 13 of 43



projects to prevent abuse, ensure that municipalities receive the best value for money, long term financial commitments are affordable and sustainable, and that municipal stakeholders interests are not compromised.

Conclusion: There is inherent tension between providing a service in the most efficient and effective manner on the one hand, and a focus on tightly controlled financial management systems that have no incentive to be creative and encourage innovation in the way the service is delivered on the other hand. While the justification for these processes under certain circumstances is valid, the net consequence of these measures is to deter the implementation of innovative partnerships that have the potential to leverage capacity and capital. Interviewees called for measures to simplify the processes and reduce duplication without affecting the objectives of the legislation.

#### 4.2.1.3 Contractual Commitments Longer than Three Years

Interviewees confirmed that the majority of the climate change case studies reviewed in this assignment (e.g. energy efficiency, ecosystem management, renewable energy, and reforestation) have a pay-back<sup>12</sup> period longer than three years. Raising loans at the Provincial Level must comply with requirements of the Borrowing Powers of Provincial Government Act of 1996 (BPPGA). Long term borrowing of Provinces is restricted to capital expenditure, and requires consultation with a national loan coordinating committee. Long term borrowing by provinces is rare, and provincial interviewees argue that borrowing by provinces for CCR projects are difficult to justify in terms of the Borrowing Powers of Provincial Government Act BPPGA and the limited powers and functions of Provinces that impact on climate change.

Raising long-term or short term debt by municipalities, must comply with Sections 46-50 of the MFMA. For municipalities, if the proposed partnership or contractual engagement commits the municipality for a period greater than three years, Section 33 of the MFMA requires a detailed analysis of the costs, commitments, ability to meet contractual obligations, and a public participation process. In addition the municipality must consult with Provincial and National Treasury before seeking full council approval.

During the interviews, municipal officials stated that the affordability and sustainability of the long-term financial commitments must be established, and that the legislative requirements and processes to establish partnerships with private contractors to implement climate change related projects are costly, onerous and time consuming.

Not only are these requirements to establish such partnerships a disincentive to implement climate change related projects, the opportunity costs of not implementing such projects include the ability to leverage private capital, create employment, drive municipal costs down through efficiency projects, developing innovative climate change solutions and managing demand.

Conclusion: Municipal officials interviewed indicated the need to simplify the contracting process, or find an alternate contracting mechanism, to encourage the implementation of fiscally sound and innovative projects that extend beyond three years.

#### 4.2.1.4 Investing in Private Property

Significant potential energy savings could be realised if middle to high income households installed efficient lighting and water heating technologies (including use of solar heating) (CoCT, 2011: 31 & 48)<sup>13</sup>. Uncertainty regarding the jurisdiction of municipalities and provinces to invest in infrastructure that lies on property belonging to private households has made it difficult to implement energy efficient projects, especially the retrofitting of Solar Water Heaters. It is evident that effective demand side management measures

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<sup>&</sup>lt;sup>12</sup> Financial term used for the number of years to recover the upfront capital investments and costs.

<sup>&</sup>lt;sup>13</sup> City of Cape Town, State of Energy and Energy Futures Report, 2011. P31 and 48.



require some degree of intrusion on private property. For example a significant amount of leakages occur within the boundaries of private households that are unable to fix plumbing leaks, and reducing electricity consumption of high to middle income households by installing smart-meters, energy efficient lighting and solar geysers will require gaining access to private households. Interviewees indicated that the success of such programmes is dependent on financial incentives provided to entice homeowners to take part in the programme, and the public sector actively monitoring the quality and abuses.

Despite the fact that an investment in energy efficient measures at municipal level can be recovered over seven to ten years, or sooner depending on the escalation of electricity prices, the role of the municipality in aggressively investing in retrofitting programmes is impacted by three factors: (a) the perceived prohibition of investing in private property (b) the long term nature of the contract and (c) the question of who is responsible for ownership and maintenance of the investments. While some officials have argued that municipalities are not allowed to invest in private property, others counter-argue that municipalities currently invest in installing electricity and water meters on private property – that there is no distinction in investing in meters or solar geysers on private households, provided that the investments are affordable and financially sound.

Conclusion: There is immense uncertainty about municipal and provincial government jurisdiction over private property for service provision, which has created a near-paralysis regarding climate change related projects related to private property. The City of Cape Town is in the process of securing a legal opinion on this matter from senior council. In the interim, most municipalities have assumed a facilitative role, by supporting private companies and NGOs in the implementation of these retrofit projects.

## 4.2.1.5 Trading and Transfer of Municipal Assets

A useful incentive in engaging in carbon reduction projects is based on the revenue that can be generated through carbon trading. The metropolitan municipalities that we interviewed (City of Cape Town and eThekwini) are exploring the financing of specific climate change related projects from revenue generated through carbon trading. One of the critical challenges interviewees indicated is the process involved in trading carbon credits. However, the carbon credits generated from these projects are considered to be a municipal asset, and therefore trading in carbon assets must comply with the legislative requirements associated with municipal asset disposals.

When a municipality has to dispose of a municipal asset, it must follow Section 14<sup>14</sup> of the MFMA, which prescribes the procedures before the asset is sold. This Section is relevant in instances where a municipality wishes to sell or grant user rights<sup>15</sup>. The process outlined includes determining that disposal of the asset does not impact on the municipality's ability to deliver a minimum level of basic services and this should be disposed of at fair market value in an open and transparent manner.

Two specific instances have been raised where this process had to be followed. The first is granting a private company the right to use land fill sites for the extraction of methane, or for managing solid waste. In these instances the legislation is clear and the processes must be followed. In the second instance, the trading of "Carbon emission reduction credits" has been identified as disposing of a municipal asset. It is unclear whether intangible assets such as "Carbon" should be treated as a municipal asset; and the accounting treatment of the sale of carbon credits is also not clearly defined.

Local Government: Municipal Finance Management Act, 2003: Asset Transfer Regulations GN 878, Government Gazette 31346, 22 August 2008.
 This is defined as granting of rights to use, control or manage municipal capital assets for a period exceeding one

This is defined as granting of rights to use, control or manage municipal capital assets for a period exceeding one calendar month without ceding legal ownership in the asset. Examples mentioned in the regulations are leasing, letting or hiring of municipal assets.

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The objective of the legislation is the protection of municipal assets that are required to provide basic services. These processes were designed to prevent abuses and corrupt practices in the disposal of land and other municipal assets, and to ensure that the municipality receives a fair value for the assets of which it legally disposes. Carbon and carbon credits are specific chemical by-products of municipal operations and derivative trading instruments respectively. It is difficult to argue that these are assets required for the delivery of municipal services.

Conclusion: There is equal uncertainty regarding the right of municipalities to trade in carbon credits. Clarification on this, coupled with a simple process to ensure that the carbon trading instruments do not impose unaffordable financial commitments on the municipality in the short and long term and the development of clearer accounting treatments for trading activities is required.

#### 4.2.1.6 Absence of Overarching Policy at Provincial and Municipal Level

Clear policies that are driven from the legislative and executive arms of government can significantly help to align different departments, their policies and priorities, as well as the institution's approach towards all facets of implementation. Institutions with clear directives are far more successful at meeting their policy objectives because the directives propagate through the entire cross section of the institution directly or indirectly. It provides an institutional compass to evaluate decisions and a safety net to justify decisions.

Interviewees at both the provincial and municipal government levels agreed that a clear and binding low carbon, climate resilient policy would set the correct incentives for coordinated action that addresses climate change. The current context, where policies are either absent, or unclear or not binding, fragments the approach of municipalities. While one department may lobby for climate change related programmes, other departments would choose cheaper and easier programmes that continue to sustain the status quo. Much of these discussions have been reflected in implementing energy efficient projects in government owned buildings. However, any such policy will also require 'implementation teeth' i.e. the enabling regulatory environment as well as the capacity, instruments and incentives to translate policy into implementation, together with consequences if policies aren't implemented.

Conclusion: A clear and binding policy will challenge municipalities to evaluate their programme design, implementation and expenditure against clear environmental targets. This approach, some of the interviewees have argued, will begin to generate more innovative programmes that address the current socio-economic and climate challenges, faced by cities and towns across the country.

#### 4.2.2 Process Barriers

#### 4.2.2.1 Procurement Challenges

Section 217 of the Constitution obliges government to ensure that procurement processes are fair, equitable, transparent, competitive and cost-effective. The supply chain legislation and regulations prescribe processes that need to be followed in fulfillment of these constitutional principles. However, a major concern raised during most of the interviews is that these processes are lengthy and complex. Given the complexity and cutting edge approaches of climate change programmes, the current procurement process is a major bottleneck or is biased towards the cheapest product or service – which in many instances poses a significant implementation risk. The current legislation,



the Preferential Procurement Framework Act (PPPFA) compels a municipality, in the selection criteria, to weight the proposed pricing at 80% or 90%<sup>16</sup>. However, the PPPFA does not allow a provincial government or municipality to value and cost externalities related to the project or programme. Using newer technologies that are more carbon efficient are more expensive in the short-term and scored lower in terms of pricing in this process. Technologies related to climate change type projects are relatively new (even spawning new industries) and often more expensive than resource intense technologies. The PPPFA makes no provision to consider the long term life cycle costs of the project, as the recurrent costs are absorbed by the provincial government's or municipality's operational budget.

Choosing the suppliers that do not have the highest weighting often results in appeals and lengthy litigation processes. Inferior technology and resource intense products, with the lowest upfront costs results in the need for more intense supervision and maintenance, and sometimes results in delivery failure. This reinforces the perception that climate change related projects are risky, and its implementation failures could lead to wasteful and fruitless expenditure.

Other specific challenges raised with procurement are that:

- adequately defining the specifications so that they are not too narrow which could be seen as anticompetitive or too broad that favours old carbon intense and cheaper technology;
- the two stage process for guaranteed savings in energy efficiency projects. Often the supplier identified in the second stage will not accept the potential savings identified in the first phase without doing their own due diligence, and suppliers claim that the process is biased towards the supplier that made the savings assessment in the first stage. The risk is a lengthy process that may not yield the best outcome; and
- finding appropriately skilled transaction advisors through a procurement process that favours the cheapest resource.

Conclusion: A generic procurement policy is inappropriate for climate change related programmes as they do not factor in environmental costs and sustainability over the long term. Government should introduce green procurement policy which may include tightening the functionality hurdles<sup>17</sup>, risk-based evaluation, etc. The thorough industry analysis of suppliers and specifications, and the use of external experts in the evaluation process may assist in reducing the SCM challenges.

#### 4.2.2.2 Performance Management

All municipalities and provinces are required to implement performance management agreements. National public service regulations and the senior management service prescribe performance management requirements that must be implemented by national and provincial administrations. For provinces these are regulated by the Department of Public Services and Administration. The Municipal Performance Management Regulations of 2006 compel municipalities to implement a Municipal Performance Management System (PMS). The overall importance and value of the PMS is acknowledged, while some experts interviewed have argued that the system is out-dated.

Most interviewees argued that the PMS drives the behaviour of the executive and senior managers, where the need to achieve specific outputs and outcomes is paramount. Currently most municipalities and provinces do not place significant priority on climate

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<sup>&</sup>lt;sup>16</sup> Proposals that cost less than one million Rands must apply a weighting of 80% to price and 20% to BBBEE and for prices that are over one million Rands must apply a weighting of 90% to price and 10% to BBBEE.

<sup>&</sup>lt;sup>17</sup> de Visser, J, 2012, 'From an Excess of Caution' prepared for the City of Cape Town, unpublished. Diagnostic Report: Increasing Investment in Climate Change Related Projects at the Sub National Level



change outputs and outcomes. As a result, projects that contribute to achieving the PMS outputs and outcomes are prioritised over climate change related projects that are more difficult to implement, are often caught up in lengthy approval processes, have longer time horizons and are more difficult to cost. The process of getting environmental indicators onto the PMS is incredibly difficult, as the IDP and consultation processes prioritise rapid delivery of basic services and addressing backlogs – often in an unsustainable manner.

Conclusion: The municipal and provincial PMS should be amended to be aligned to provincial and municipal policy (see section 5.2.1.6. above) to include the transition to a low carbon, climate resilient economy and to allow for the cross cutting nature of climate change related projects.

#### 4.2.2.3 **Budgetary Processes**

The imperative to respond to the impacts of a changing climate at the provincial and municipal levels is not embedded in provincial and municipal planning processes. While the legislation explains the criteria, actions and steps to allocate and spend resources, it does not specify that climate change related issues must be incorporated into the planning process nor do the tools and systems exist in a clear and accessible way.

The process of developing and approving the municipal budget is well regulated and driven by time lines. In summary, the municipality draws up an Integrated Development Plan (IDP) with its strategy and priorities after extensive community and intergovernmental consultation. Climate change related priorities are mentioned in the IDP as a part of a shopping list; however their importance is reduced when competing with other service delivery and backlog projects. While the Budget is drawn up in parallel, and should reflect the priorities in the IDP, this is often a trade-off between the community-led service delivery priorities articulated forcefully by councillors and recurrent costs that are adjusted for inflation. This modus operandi is deeply entrenched, reproducing incremental budgets wrapped in the language of outcomes-based budgeting.

A number of concerns were raised by interviewees and experts about the budgetary process:

- With the current resource constraints, and increasing recurrent expenditure, the proportion of capital investment resources is facing considerable downward pressure;
- Tighter fiscal constraints because of ballooning expenditures on grants and basic services have caused Councils to shy away from approving projects that will reduce the revenue of municipalities. In particular programmes that target demand management in electricity and water will reduce the surplus that municipalities will be able recoup from providing these services, thus impacting on the availability of discretionary revenue for investment.
- Additionally, the main focus of municipal expenditure is on providing basic services
  to existing and new communities as part of the priorities expressed during the
  public participation processes of the IDPs. Often, the resources and infrastructure
  required to provide these services to rapidly expanding urbanisation are
  inadequate, increasing the public pressure to invest in providing and addressing
  the backlogs of basic services<sup>18</sup>.
- The budget process is driven according to tight deadlines that places financial staff, especially in smaller municipalities, under enormous pressure. Hence officials have insufficient time to seriously examine expenditure decisions against long-term costs and benefits and as a result the budgeting process becomes a

<sup>&</sup>lt;sup>18</sup> In numerous instances, the community pressure is for the provision of housing where the backlogs are vast, and the approach is biased towards increasing urban sprawl.

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mechanistic instead of a strategic approach to expenditure prioritisation. For example, if a more strategic long-term approach is taken, expenditure in low energy lighting will be more cost effective over incandescent lighting; investment in better management of water catchment areas will increase the yield of rain water and will be cheaper than water from desalination plants.

- Finance staff argued that many climate change related projects that they have seen do not make an adequate case that reflects the opportunity costs of not engaging in these projects, and are unable to reflect the financial costs and benefits satisfactorily. This makes it difficult for finance staff to support these projects.
- Lengthy approval processes delay the implementation of the climate change related projects, and unspent money is moved to projects that are more easily approved with a faster spending profile, such as engineering equipment or construction material.

Conclusion: Climate change related issues are not stipulated in municipal and provincial policy and planning processes and hence are not translated into the budget. Together with the bias towards conventional service delivery projects and a conservative financial culture, this results in climate change related projects receiving little or no priority in municipal and provincial budgets.

#### 4.2.2.4 **Community Participation**

Most of the processes outlined in the legislation require extensive public participation. These public participation processes require simple language, which is focussed on meeting the community's needs. Interviewees claimed that the process of justifying investment in climate change related projects that do not provide short-term benefits at community participation meetings, often in politically charged socio-economic environments, is exceedingly difficult. These investment decisions involve inherent trade-offs between socio-political, environmental, ecological, and economic factors. The inability of the three spheres of government to link climate change needs with local development objectives that has sufficient resonance with local communities, has led to the marginalisation of climate change related projects. Thus, taking a more strategic approach towards determining expenditure priorities is often opposed by communities, councillors and groups with vested interests.

The value of community participation has been acknowledged by numerous interviewees, and the legislative processes to determine the IDP, the budget priorities, service delivery mechanisms, partnerships and long term contractual commitments require community consultations. In this context, a number of interviewees have argued that placing significant focus on the results of the public participation processes favours decisions that have short-term benefits at the expense of long-term benefits, and the space for developing long-term strategic investment priorities are insufficient.

Conclusion: Interviewees have argued the importance of creating a meaningful space for strategic prioritisation of municipal programmes that will consider resource efficiency, and the long-term financial and climate change impact on budgetary and investment decisions.

#### 4.2.3 Institutional Cultural Barriers

#### 4.2.3.1 Risk Averse Management Approach

Senior municipal management and municipal Chief Financial Officers (CFOs) in particular have argued for a more defensive interpretation of the legislation and a more risk averse



approach to financial management. This institutional culture is driven by a number of factors that include:

- The Auditor General's (2010) findings and increasing public sentiment to take sterner action against municipal management that contravene legislative requirements. Interviewees generally argued that compliance with the suite of municipal legislation is onerous given the capacity pressures faced by municipalities. Further, different interpretations of legislative requirements among municipalities, the Auditor General's Office, National Treasury and powerful private interests<sup>19</sup> have created a complex litigious environment for municipal management. Given this environment senior municipal management is most likely to take decisions that they consider as safe and least risky. Often these decisions are based on past practices that were condoned by the Auditor General's office. One of the interviewees indicated that "the time and the energy wasted convincing the AG's office that our interpretation does not contravene the law is simply not worth the effort. In the end you will lose the battle."
- A number of municipal finance staff have argued that the implementation of climate change related projects utilise new techniques and technologies that are not tried and tested in South Africa; CFOs are unwilling to commit resources to projects that may have a risk of failure due to this. They argue that failure will make them accountable for wasteful and fruitless expenditure and therefore liable for civil and/or criminal prosecution, or that they may be the subjected to internal investigation.
- Municipal CFOs have argued that the rapid urbanisation and increasing levels of
  poverty have substantially increased the pressure on municipalities' financial
  resources. A key priority is to ensure the financial health and sustainability of the
  municipalities, and therefore any additional demands on resources that fall outside
  the scope of basic resources are deprioritised. They acknowledge that some good
  projects are sacrificed in the process; however their main priority is institutional
  financial sustainability.
- The criminalisation of mismanagement is a major threat. Jaap de Visser's (2012) paper indicates, "The Law (MFMA) thus criminalises the slightest manifestation of inadequate financial management<sup>20</sup>." He further argues that while the MFMA's language is inappropriate for crafting criminal offences, the mere existence of this provision will foster extreme caution when interpreting legislative requirements. This issue of criminalisation has been consistently raised by numerous interviewees, and acts as a powerful deterrent to implement any innovative project or programmes that is seen as risky.

Conclusion: Implementing climate change related projects will require a more progressive interpretation of the legal requirements and for municipalities to take calculated risks that would impact negatively on the municipality. Municipal management will be unwilling to take any risks given the present legal and political environment.

#### 4.2.3.2 **Short-Term Orientation**

Many of the interviewees have argued that the short-term culture in provincial governments and municipalities does not encourage investments in long-term projects. As illustrated before, this culture is reinforced by the risk averse management approach, unwillingness to engage in lengthy and costly processes to comply with the requirements of PFMA and MFMA for long term commitments, and the pressure to address short term service delivery needs.

<sup>&</sup>lt;sup>19</sup> These include private citizens and developers that often challenge the decisions and powers of municipalities.

<sup>&</sup>lt;sup>20</sup> de Visser, J, 2012, 'From an Excess of Caution' prepared for the City of Cape Town, P32, unpublished.
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Interviewees have pointed out that the opportunity costs of this approach are likely to impact on security of supply particularly of water, electricity and waste management services. Further underinvestment in infrastructure and continued sprawl will increase the future costs of services – impacting on the economic viability of the municipality.

Conclusion: Urgent visionary and strategic leadership is required to break this institutional culture, supported by a more enabling policy environment to encourage long term thinking. Interviewees have pointed to the National Development Plan (NDP) as a strategic rallying point to encourage long-term planning.

#### 4.2.3.3 Widely Accepted Myths

The confusion created by the complex legal environment and cautious behaviour has generated a number of self-sustaining myths of what is sanctioned by provincial and municipal legislation. In the interviews, the project sponsors stated that these myths, reinforced by a cautious management culture, have become the institutional rules. Given the high turnover in senior staff at provincial governments and municipalities, new staff members are inducted into this culture and myths, reinforcing the cautious behaviour across the municipality. Popular myths include:

- municipalities are only responsible for Section 4b and 5b functions and anything outside that is unauthorised expenditure;
- promoting demand side management programmes are likely to bankrupt municipalities;
- municipalities must purchase the cheapest products and services.

Conclusion: Project sponsors interviewed have strongly suggested that the dispelling of these myths and changing of the institutional culture and processes that sustain such are essential to promote innovation.

#### 4.2.3.4 **Divergent Expectations**

The lack of consistent interpretations of the PFMA and MFMA and other municipal legislation is a major concern. Within provincial governments and municipalities, there are distinct differences between the interpretation of project sponsors (often not part of management) and senior finance staff. The latter have taken an approach that is risk averse, and focuses on tried and tested projects driven mainly by conventional engineers. In addition, the drive for clean audits at all costs has favoured an interpretation of the legislation that will be acceptable by the Auditor General. Often, the interpretation is based on the findings of the previous audits and specific non-compliance issues and provincial departments and municipalities that receive clean audits may also use this as endorsement of their risk averse approach. Project sponsors claim that a common approach adopted by management is to address the non-compliance issues by increasing the level of caution across all projects, without analysing the risk of the specific projects. This approach places additional demands on project sponsors to demonstrate how possible risks in the project will be managed and mitigated, invariably delaying decision making and project implementation.

These divergent and conflicting interpretations have generated a high degree of tension between elected officials and provincial / municipal management. Given the political pressure exerted on councillors elected by their constituencies and political parties, councillors place enormous pressure on municipal management to approve programmes without sufficient due diligence consideration<sup>21</sup>. The same would hold true for provincial

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<sup>&</sup>lt;sup>21</sup> Officials interviewed indicate that while the legislation provides protection against interference from councillors, this practice continues. Past attempts to challenge councillor interference has led to undue pressure and witch hunts against the officials. This is a particularly sensitive issue, with the defence mechanism being to consistently interpret the legislation in a very narrow manner. See also De Visser's paper on the political context.



ministers. Where staff oppose projects because they are not sustainable or resource inefficient, these officials are subjected to extraordinary scrutiny and political pressure, often leading to their resignation.

Interviewees have informed us that in numerous instances councillors direct management decisions, leaving officials to account for any poor administrative decisions. This is a particularly critical risk for municipal management who believe that the political context renders them vulnerable. Both municipal officials and researchers interviewed have raised that the criminalisation of financial mismanagement has some unintended consequences. Interviewees argued that the differing interpretation has created fertile grounds to conduct unnecessary investigations against officials who have refused to support unsustainable projects that particular councillors have motivated. Thus officials fear that charges of mismanagement will be fabricated and officials placed on suspension for professional disagreements.

Conclusion: There is a tangible tension between the executive and management on projects that are high-impact/visibility and short term service delivery as opposed to longer term gains related to projects that build low carbon, climate resilient development. The separation of roles and accountabilities, coupled with differing views of the project's legality and/or sustainability have introduced a high degree of tension and mistrust between officials and councillors. Senior managers thus justify their extreme caution towards climate change related and other projects, which have a low level of political return, as a defensive mechanism to protect their jobs and profession.

#### 4.2.4 Systems and Information Barriers

#### 4.2.4.1 Absence of Accurate Data

Numerous interviewees raised the lack of resource consumption and financial data required to build a strong justification for climate change related projects or programmes. The data required to demonstrate current resource consumption levels and potential consumption savings of energy efficiency programmes; or the life cycle costs that include capital costs and projected long term recurrent costs of the current technology against acquiring new energy efficient technology, current level of leakages in the existing water distribution system, and so on is not readily available. Few provincial governments or municipalities have the systems and capability to measure these consumption levels and costs at the required level of detail. It is very difficult to establish forecasts of current consumption levels and of savings that would render the project financially viable in the absence of appropriate data.

As a result, the project sponsors interviewed indicated that the provincial government or municipality is unable to 'crowd in' additional financial resources required for the implementation of energy efficiency projects or water and sanitation infrastructure projects. Without this data they find it difficult to persuade communities and interest groups of the project's viability, and to obtain council approval for the project or programme.

Conclusion: The absence of rigorous resource consumption and financial data severely restricts the ability to build strong justification for climate change related projects and programmes. Appropriate systems to measure such data will assist in such project/programme development, as well as in monitoring such project/programme outcomes to justify investment in similar projects in the future, or as required to claim carbon credits.



#### 4.2.4.2 Capital Intensive Requirements

Interviewees involved in water and sanitation projects, or environmental management programmes stated that the capital requirements of infrastructure projects, to reduce leakages and wastage in the distribution system are substantial, with payback periods in excess of 20 years. The absence of appropriate data (see sub-section 5.2.4.1.above) to justify investments in major infrastructure rehabilitation programmes have contributed to limiting the ability of provincial governments and municipalities to raise finance for large climate change related projects.

Conclusion: Only those provincial governments and municipalities with a strong tax base and healthy balance sheet are able to raise the required capital to undertake large climate change related and other infrastructure projects. At the same time the opportunity costs of not investing in these projects impact on short-term resource costs, resulting in substantial increases in the future maintenance and rehabilitation costs. Further, supply constraints have resulted in limiting growth and development.

#### 4.2.5 Organisational Barriers

#### 4.2.5.1 Institutional Hierarchy

Most of the climate change project champions interviewed are professional staff based in the environmental departments of provincial governments or municipalities. These professionals are removed from the key decision- making structures of the provincial government or municipality; as a result their ability to influence the decisions of the provincial government or municipality in a meaningful way is extremely limited. The environmental departments are lacking in both staff and budget, and their ability to develop and implement sizeable projects is severely constrained.

Compounded by the onerous legislative requirements to establish partnerships, environmental departments are expected to provide the technical designs for the programmes, develop the financial justification, lead the Section 78 investigations, lead the extensive community participation processes and secure the approval at each stage of the processes. Often they do not have a direct seat at the decision-making structures, delaying the decision making. The strong influence of engineering departments with more capacity and larger budgets, and the disproportionate influence in senior management decision-making structures have favoured classical engineering solutions and projects.

This composition of decision making structures often leads to unfettered investment in building more roads, bigger water storage facilities, larger land fill sites, and so on. Insufficient attention is given to projects that facilitate reducing electricity or water consumption, recycling and reducing waste, improving the efficiency of public transport, resource efficiency in infrastructure projects and other climate adaptation and mitigation projects. Interviewees acknowledged that in some instances, roads or buildings damaged by repeated floods could ultimately save the provincial government or municipality future maintenance costs if ways to manage water run-offs are factored into the decision making processes.

Conclusion: The institutional hierarchy is such that environmental sections of municipalities and provincial governments are largely marginalised in terms of their ability to influence decision-making, and classical infrastructure projects are favoured even though they are often unsustainable and a more climate-related approach could ultimately be cheaper in the long run. The findings here also point to the need for leadership to be sensitized and priorities to be shifted.



#### 4.2.5.2 Institutional Disincentives

Climate change related projects require an integrated approach. Effective low carbon, climate resilient decision making requires coordinating structures for joint consideration of the environmental, financial, technological, economic, and sociological implications in selecting the most appropriate solution or project. Hence a multi- disciplinary team should implement climate change related projects, and they should be supported by a multidisciplinary framework to foster project approvals, implementation and monitor outcomes. A number of interviewees have commented on the institutional disincentives as a result of the structure and policies at the provincial and municipal level. A major disincentive is the capacity and costs<sup>22</sup> of complying with the legislative requirements, which is a major deterrent to implementing climate change related projects. In large, well-capacitated metropolitan municipalities and provinces the costs of running extensive investigative and consultative process are both lengthy and high, often without clear conclusions. In smaller municipalities, the capacity is non-existent and the costs of these processes are prohibitive.

Provincial departments have expressed frustration with the silo mentality, where specific departments that lease buildings from the public works departments are unable to get energy efficiency projects approved. In a particular example, a department that utilises a large number of buildings to run a community service decided to invest upfront in energy efficient lighting and appliances. However, the resultant savings in energy costs accrued to the Department of Public Works which did not pass on the savings to the department that incurred the upfront investment costs as expected. Clearly in this instance, where service departments have identified savings, there is a reluctance to proceed with the initiatives because these departments would pay twice – first for the upfront investment and second for the rental costs that remain unchanged despite the savings. Where the buildings are leased from private owners, the ability to recoup cost savings is far more difficult.

Conclusion: Climate change related projects are multi-disciplinary by nature, whereas government institutions and processes are designed to deal with projects in a discrete, well-bounded manner. The silo-based structures and hierarchical nature of municipalities and provincial government (in fact, all of government generally) frustrates any attempt at interdepartmental coordination and innovation – thus reducing the appetite for climate change related projects.

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<sup>&</sup>lt;sup>22</sup> Capacity for compliance – refer to sections 4.2 above and the Annexures 1 and 2 which outline the legal processes for approvals. These include skills technical to design the projects or programmes, provide the detailed financial analysis, design and manage the investigative and community participation processes required for Section 78 of the Municipal Systems Act (interviewees indicated that this usually take about eight months on average), and where this requires a PPP (interviewees indicated that this process takes eighteen to twenty months until council approvals are obtained).

The metropolitan municipalities interviewed indicated that their departments are small with three to four people responsible for these projects, and they struggle to manage these processes as well as oversee the project implementations. Smaller municipalities that were interviewed have a single staff member that is responsible for the environmental function.

Interviewees suggested that the costs of running these investigations and public participation programmes are similar to the costs of developing the IDPs for the municipalities. Once the project has been approved, the procurement process is likely to take an additional six months, if the outcome is not challenged in court.

The metropolitan municipalities interviewed indicated that for some of the projects, they have engaged transaction advisors to assist with the process of designing the TOR, advising on the evaluation and selection criteria, and drafting the contracts. As these services differ from the process of providing basic services, maintenance of municipal infrastructure systems, or standard municipal infrastructure projects; environmental projects are not viewed as core basic services. Hence, capacities for environmental departments are not prioritised given the pressure to provide other basic services.



#### 4.2.6 Human Resource Barriers

#### 4.2.6.1 Inadequate Skills and Poor Capacity

Deloitte's Local Government Unit research work (June 2012) highlighted that the "huge service delivery backlogs, leadership and governance failures, corruption and fraud, poor financial management and insufficient capacity are due to a lack of scarce skills, high vacancy rates, poor performance management and inadequate training". This has been confirmed by CoGTA's own assessments which highlight the high number of vacancies and the critical shortage of engineers, planners and financial staff in South Africa. Most interviewees commented on the shortage of specialist skills in provinces and required to design, manage and implement complex climate change related projects. The scarcity of experienced people with climate change related and multidisciplinary skills severely hampers the ability to develop innovative projects and champion the projects through the decision making chain.

In the provincial governments and municipalities with successful projects, much of the success can be attributed to experienced and strong willed champions who take the initiative and who have been able to:

- Design innovative projects that have captured the imagination of all the stakeholders in the municipality;
- Get sufficient political and/or senior management buy-in to the project;
- Utililise their professional networks to develop excellent relationships with donors (public and private) and raise seed funding;
- Create a sufficient high public and media profile of the projects, that de-risked attempts to thwart the project's implementation;
- Develop partnerships with the private sector, civil society organisations and communities to facilitate a bottoms-up advocacy process both for project approval and social acceptance of the project; and
- Recruit the required skills to manage the project implementation.

In essence these champions have been referred to as "public sector social entrepreneurs" that have the tenacity, endurance, flexibility and determination to succeed. The combination of skills include technical ability as well as the more tacit skills related to political manoeuvring within institutions and the ability to work across sections within provincial governments and municipalities, different spheres of government when necessary and across hierarchy. In most provincial governments and municipalities, this is a critical success factor in implementing any complex and difficult project, not only climate change related initiatives.

In addition to the limited skills, most interviewees have lamented the limited budget and resources available to environmental departments. Attempts to drive an intergovernmental approach to pool resources have met with significant resistance. A common practice has been to cut or reprioritise the department's budget in times of financial crises to meet other provincial or municipal priorities.

Conclusion: There is a general problem of a lack of scarce skills, high vacancy rates, poor performance management and inadequate training across municipalities and provincial governments. The successful climate change related projects have largely been as a result of pioneer leadership i.e. champions who have a multi-disciplinary approach and a wide range of skills that straddle relationship management, networking, public relations and political maneuvering.



#### 4.3 Summary of Key Findings

Evidence gathered from the interviews shows that **regulation and legislation in themselves do not prohibit provincial and local government from implementing climate change related projects**, although the spirit of the MFMA and PFMA does favour tested technologies. Rather, the legislation is broad enough to be open to interpretation, and there are a number of factors which push towards a risk-averse approach to its interpretation. The transaction costs associated with adopting new technologies and / or innovative processes are high, given the legislative requirements. Further, the risk of delivery failure by utilising new technologies or new processes by service providers, or social attitudes towards these new technologies or programmes have resulted in delaying or declining project approval.

Of particular concern is the expenditure mismanagement clause of the MFMA, which holds an official criminally liable for a poor investment decision, even if he/she took a calculated risk and acted in good faith.

Most of the findings relate to the six ball model, which has the findings of the in-depth interviews summarized in the diagram below:

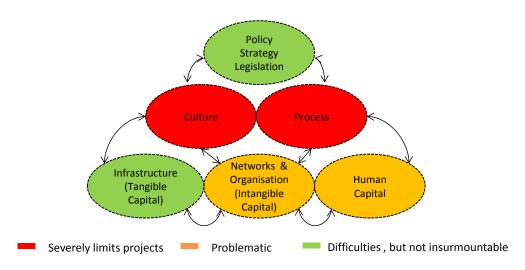


Figure 6: Findings relating to the six ball model

Source: Misuka Green Development (2013)

In addition to the directives provided by the legislative requirements and National Departments, the most significant intra-municipal bottleneck stalling the implementation of climate change related projects at local and provincial government level is their poor tactical decision-making ability.

According to the six ball model above, an organisation's culture and processes influence its ability to make tactical decisions in response to its environment. Hence a conservative risk-averse culture and cumbersome and complicated processes are the most significant factors blocking the implementation of innovative projects (refer to Figure 6 where the culture and process balls are shaded red).

Officials adopt the most conservative interpretation of regulation and legislation. A risk-averse culture, which is encouraged by national, provincial and local government leadership, does not give officials the required comfort to take any calculated risks. The perverse consequence is that innovation and potential financial savings on resource



efficient choices are stifled. Caution is favoured in all the municipalities we interviewed as this provides a degree of safety and comfort to officials, and allows them to justify or mitigate any risk associated with legislative non-compliance. Invariably these cautious behaviours slow down decision-making processes and as a result the flow of resources through the system is blocked.

The level of skills available and the organisational structure also impedes the implementation of climate change related projects (Refer to Figure 6 where the Human Resources and Organisation ball is shaded orange). Most municipalities have a solid base of engineering and technical skills, and hence they can easily implement large-scale, standardised projects where the end point can be accurately quantified in the design phase. Skills to implement climate change related projects, across the value chain of activities from conceptualisation to creating financing models to implementation, are limited at municipalities. Outcomes are uncertain when climate change related projects are initiated due to the diverse nature and materialisation of benefits over the long term.

Climate change related projects need to be implemented by multi-disciplinary teams, whereas the organisational structure of municipalities is silo-biased, and has created divisions between technical experts in different branches. The skills to implement a climate change related project do not neatly fall within a Department or Branch (e.g. for example the skills to implement large infrastructure projects, such as road works, are generally found in an engineering Branch). Creating working relationship between Departments and Branches is also made more difficult by hierarchies, where some Directorates have more influence than others.

The weaknesses in the four balls in Figure 6 i.e. culture, process, networks and organization and human capital, are interrelated and interconnected. A conservative culture which errs on the side of caution in terms of tested technologies and methodologies reinforces the need for skilled champions and supporters to drive the implementation of climate change related projects across the provincial government or municipality. The interviewees indicated that retention of skilled resources for climate change related projects is difficult because they become frustrated by the long lead times and complicated processes that stall their projects. In turn, the limited skills pool is used to justify the reluctance of the provincial and local government leadership to assign more resources to climate change related activities.

As leadership is apprehensive about implementing climate change related projects, they decide to manage their increased risk by applying processes to climate change related projects in a stricter manner than other projects. In turn the stricter application of the rules creates tension between the champions of climate change related projects and experts in other branches. Climate change project leaders feel that they are not supported by the system and other officials decide not to get involved in climate change related projects as they are too time consuming. This creates a reinforcing cycle that supports the reluctance of leadership and the poor implementation record of climate change related projects.

## 5 Conclusion and Next Steps

A literature review of the legislative barriers impacting on financing and implementation of climate change related projects uncovered that the suite of legislation governing provincial governments and municipalities is comprehensive, and prescribes a set of processes that are designed to provide safeguards to provincial governments and municipalities and their stakeholders as well as ensuring the fiscal viability of provinces and municipalities. In other words, legislation does not prohibit innovative practices per se; it requires a higher level of scrutiny given the perceived risks associated with implementing climate change related projects.



Less than 10 percent<sup>23</sup> of municipalities have implemented climate change related projects, and they are generally small-scale 'test' projects (i.e. projects are not part of mainstream service delivery). This limited number of climate change related projects is often successfully driven by a few passionate champions despite the legislative barriers. At the same time the findings of the Auditor General's report (2010), illustrate that even though the legislation has become increasingly stricter the levels of non-compliance found are significantly high. This suggests that legislative barriers on their own cannot explain the reason most officials are reluctant to implement climate change related projects, and that behaviour changes and cultural shifts will require more than legislative changes.

Based on the findings of the interviews, it is likely that relaxing and /or tightening regulatory and legislative policies without attendant interventions will not significantly increase the number of climate change related projects that provincial governments and municipalities implement. Increasing the propensity of officials to drive climate change related projects requires a different approach that addresses barriers related to culture, process and capacity. However that would be a long term effort; in the meantime, the quickest route to encourage the initiation of climate change mitigation and adaptation projects and programmes is to issue clarification notes to provinces and municipalities so that the space for interpretation is narrowed, there is less confusion and greater uniformity in the interpretations and the tensions between environmental and legal and finance sections is reduced.

The need for change has been acknowledged. Interviewees overwhelmingly agreed that the emergence of a new geopolitical order and production-consumption system, at the global level has started to expose the structural rigidities of resource intensive economies. The old resource intensive economic system is breaking down and a different economic system is emerging; one that values resource efficiency and low carbon alternatives of production-consumption. It is likely that, in the interim, the socio-economic system will become increasingly volatile and therefore, it is imperative that local government is empowered to deliver its service delivery objectives under the changing conditions.

Hence all spheres of government need to adopt 'business unusual' practices to create a resilient socio-economy. This is in line with the message of DEA in terms of the National Climate Change White Paper. More specifically, provincial and local government, where the translation of the White Paper into practice will largely sit, require support to mainstream projects that (a) decouple economic growth from resource intensity, (b) acknowledge the value of ecological and environmental services and goods (c) channel social capital into the economy through social entrepreneurship, (d) concentrate on building capacities and not mega- infrastructure, and (d) unleash wealth at the so-called 'bottom of the pyramid'.

Most provincial governments and municipalities face tension between adopting a so-called business unusual practices that is required to create a resilient economy and also adhering to their tightly prescribed legislated functions. Different provincial governments and municipalities have responded to the tension in different ways. Municipalities that implement projects to create a resilient local economy have formed partnerships to influence so-called non-mandate areas that are strategically important. Their style of engagement with partners, especially business, is more entrepreneurial, differentiated and outward orientated. Also, these municipalities' first response to an opportunity has been to understand its benefit to the local economy in terms of productivity, competitiveness and resilience. The second issue is whether the opportunity forms part of their mandate. Hence successful municipalities have managed to combine a 'compliance mindset' with a 'business-opportunity mindset'. Striking a balance between these mindsets allows

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<sup>&</sup>lt;sup>23</sup> interview with WWF, and cannot be verified.



municipalities to build on the locational attributes of their economy and unleash new strengths.

Effective and proactive responses to climate change impacts will require developing social, economic and environmental resilience; as well as institutional capability to build the required level of resilience. Provincial governments and municipalities have a crucial role in implementing these climate change programmes, and its capacity to do so must be bolstered. At minimum, interventions to strengthen municipal capacity for greater CCR planning and project implementation need to:

- i. Make the national legislative context clearer and create a supportive intergovernmental relations framework that will empower provincial governments and municipalities in making more long-term resource efficient decisions;
- ii. Reconfigure the intra-municipal organisation to interact in a manner that will influence cooperative behaviour and outcomes which foster the mainstreaming of climate change related projects and programmes; and
- iii. Encourage provincial governments and municipalities to adopt a model of organisation incorporating flexibility and resilience that would be more supportive to innovation.
- iv. Related to iii above, the key national departments such as National Treasury and COGTA could encourage, reward and develop guidelines for a stronger intergovernmental approach to provincial and municipal policy and planning processes.



## **Appendices**

#### Appendix 1: References

Dostal., E. & Cloete., C. & Jaros., G. (2005) Biomarix: A Systems Approach to Organisational and Societal Change. Third Edition. Imaging Data Solutions, Cape Town.

Public Finance Management Act 1 of 1999 – A Compliance Strategy, SM Maude, Politeia Vol 26 No 3 2007© Unisa Press pp 306–318

The Carbon Economy and Carbon Trading in South Africa Johann Scholtz and Dawid de Villiers www.hsf.org.za/resource-centre/focus-chapters/focus-63.../file)

Constitutional Court Judgment, Maccsand (Pty) LTD vs City of Cape Town and others. 12 April 2012.

High Court Judgement, Le Sueur vs Ethekwini Municipality and others, 14 November 2012.

Audit Outcomes of National and Provincial Government: Financial year ended March 2012. Presentation to Cabinet, Terence Nombembe, Auditor-General. 10 October 2012

CITIES AND CLIMATE CHANGE: EX ABUNDANTI CAUTELA – 'FROM AN EXCESS OF CAUTION'?, Jaap de Visser, Centre for Community Law (UCW). 2012

Municipal Consumer Debt in South Africa, Financial and Fiscal Commission – Submission for the 2012/2013 Division of Revenue Technical Report. Sasha Peters. 2012

CONSOLIDATED GENERAL REPORT on the audit outcomes of LOCAL GOVERNMENT 2010-11, Auditor General, 2012

Implementing the Public Finance Management Act in South Africa: How Far Are We, Wildeman R and Jogo W, IDASA Economic Governance Programme, 2012

Presentation at Climate Change Financing Workshop, de Visser J, Community Law Centre. December 2012

Energy and Climate Change Committe, Committee Report – Recognition and Reinvestment of Energy Savings from Council Retrofits, City of Cape Town, September 2012

Peters S, Municipal Consumer Debt in South Africa, FFC, 2012

Procurement Law: A Comparative Analysis, De La Harpe, S, Public UNISA, 2009

Energy efficiency in municipal buildings – City of Cape Town Case Study, Vivienne Walsh, City of Cape Town, 2012.

Public Finance Management Act, NO. 1 OF 1999, Government Gazette 33059 as amended 1 April, 2010

Municipal Systems Act, No 32 of 2000, Government Gazette 21776.

Municipal Public-Private Partnership Regulations, GNR 309 Government Gazette 27431, 1 April 2005 (PPP Regulations)

Asset Transfer Regulations GN 878, Government Gazette 31346, 22 August 2008

Municipal Supply Chain Management Regulations, GNR.868 Government Gazette 27636, 30 May 2005.

Nico Steytler "The strangulation of local government" (2008) Journal of South African Law 518-535

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Bottlenecks caused through fear of MFMA, Corporate Governance Research Institute. 30 March 2009.

Economics of climate change adaptation at the local scale under conditions of uncertainty and resource constraints: the case of Durban, South Africa, Anton Cartwright, Debra Roberts, James Blignaut, Martin De Wit, Karen Goldberg, Myles Mander and Sean O'Donoghue, Unpublished, 2012

Municipal Clean Audit Efficiency Series: Financial Management. Deloitte, 2012

Renewable Energy and the Role of Local Government. Presentation at SALGA/GIZ Roundtable, Dr. Fritjof Boerstler, November 2012

Programmes in support of transitioning South Africa to a Green Economy, DBSA – Development Planning Division Working Paper Series No. 24. 2011

Preferential Procurement Policy Framework Act, Act 5 of 2000.

Nagooroo, C, The Current State of Local Government – Presentation made to IMFO Conference, Cape Town. September 2011

Thinking globally, acting locally –institutionalizing climate change at the local government level in Durban, South Africa. DEBRA ROBERTS, Environment and Urbanisation Vol 20(2): 521–537. 2008

Towards Shared Management Of Risk In A Changing Environment: Catalyzing Action To Reduce Environmental Risk In Eden, WWF, 2011

Economic Analysis of the City of Cape Town Solar Water Heater Programme

Prepared for: The City of Cape Town Energy and Climate Change Unit, Barry Standish, Antony Boting, Brian Swing, November 2012

Prioritizing climate change adaptation and local level resilience in Durban, South Africa

Debra Roberts. Environment and Urbanisation, Vol 22(2): P 397 – 413, 2012.

Environmental Fiscal Reform: Budgeting for Green Jobs in the 2013 MTREF. INCEPTION REPORT. David Savage, Anton Cartwright, February 2013



## Appendix 2: Republic of South Africa Constitution: Schedule 4

## PART B

The following local government matters to the extent set out in section 15.5 (6) (a) and (7):

- Air pollution
- Building regulations
- Child care facilities
- Electricity and gas reticulation
- Fire fighting services
- Local tourism
- Municipal airports
- Municipal planning
- Municipal health services
- Municipal public transport
- Municipal public works only in respect of the needs of municipalities in the discharge of their responsibilities to administer functions specifically assigned to them under this Constitution or any other law
- Pontoons, ferries, jetties, piers and harbours, excluding the regulation of international and national shipping and matters related thereto
- Stormwater management systems in built-up areas
- Trading regulations
- Water and sanitation services limited to potable water supply systems and domestic waste-water and sewage disposal matters related systems



## Appendix 3: Republic of South Africa Constitution: Schedule 5

## PART B

The following local government matters to the extent set out for provinces in section 155 (6) (0) and (7):

- Beaches and amusement facilities
- Billboards and the display of advertisements in public places
- · Cemeteries, funeral parlours and crematoria
- Cleansing
- Control of public nuisances
- Control of undertakings that sell liquor to the public
- Facilities for the accommodation -are and burial of animals
- Fencing and fences
- Licensing of dogs
- Licensing and control of undertakings that sell food to the public
- Local amenities
- Local sport facilities
- Markets
- Municipal abattoirs
- Municipal parks and recreation
- Municipal roads
- Noise pollution
- Pounds
- Public places
- Refuse removal, refuse dumps and solid waste disposal
- Street trading
- Street lighting
- · Traffic and parking

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# Appendix 4: Municipal Finance Management Act Act No. 32, 2000 Local Government: Municipal Systems Act

Part 2: Provision of services

Mechanisms for provision of services

- 76. A municipality may provide a municipal service in its area or a part of its area through-
- (a) an internal mechanism which may be—
  - (i) a department or other administrative unit within its administration:
  - (ii) any business unit devised by the municipality, provided it operates within the municipality's administration and under the control of the council in accordance with operational and performance criteria determined by the council; or
  - (iii) any other component of its administration; or
- (b) an external mechanism by entering into a service delivery agreement with—
  - (i) a municipal entity;
  - (ii) another municipality;
  - (iii) an organ of state, including
    - (aa) a water committee established in terms of the Water Service Act, 1997 (Act No. 108 Of' 1997):
    - (bb) a licensed service provider registered or recognised in terms of national legislation: and
    - (cc) a traditional authority;
  - (iv) a community based organisation or other non-governmental organisation legally competent to enter into such an agreement: or
  - (v) any other institution, entity or person legally competent to operate a business activity.

Occasions when municipalities must review and decide on mechanisms to provide 20 municipal services

- 77. A municipality must review and decide on the appropriate mechanism to provide a municipal service when—
- (a) preparing or reviewing its integrated development plan;
- (b) a new municipal service is to be provided;



- (c) an existing municipal service is to be significantly upgraded, extended or improved:
- (d) a performance evaluation in terms of Chapter 6 requires a review of the delivery mechanism;
- (e) the municipality is restructured or reorganised in terms of the Municipal 30 Structures Act:
- (f) requested by the local community through mechanisms, processes and procedures established in terms of Chapter 4; or -
- (g) instructed to do so by the provincial executive acting in terms of section 139(I)(a) of the Constitution.

Criteria and process for deciding on mechanisms to provide municipal services.

- 78 (1) When a municipality has in terms of section 77 to decide on a mechanism to provide a municipal service in the municipality or a part of the municipality, or to review any existing mechanism—
- (a) it must first assess
  - (i) the direct and indirect costs and benefits associated with the project if the service is provided by the municipality through an internal mechanism, including the expected effect on the environment and on human health, well-being and safety:
  - (ii) the municipality's capacity and potential future capacity to furnish the 45 skills. expertise and resources necessary for the provision of the service through an internal mechanism mentioned in section 76(a):
  - (iii) the extent to which the re-organisation of its administration and the development of the human resource capacity within that administration as provided for in sections 51 and 68 respectively, could be utilised to provide a service through an internal mechanism mentioned in section 76(a);
  - (iv) the likely impact on development, job creation and employment patterns in the municipality; and
  - (v) the views of organised labour; and
- (b) it may lake into account any developing trends in the sustainable provision of municipal services generally.
- (2) After having applied subsection (I), a municipality may—



- (a) decide on an appropriate internal mechanism to provide the service; or
- (b) before it takes a decision on an appropriate mechanism, explore the possibility of providing the service through an external mechanism mentioned in section 76(b).
- (3) If a municipality decides in terms of subsection (2)(b) to explore the possibility of providing the service through an external mechanism it must—
- (a) give notice to the local community of its intention to explore the provision of the service through an external mechanism; and
- (b) assess the different service delivery options in terms of section 76(b), taking 15 into account—
  - (i) the direct and indirect costs and benefits associated with the project, including the expected effect of any service delivery mechanism on the environment and on human health, well-being and safety;
  - (ii) the capacity and potential future capacity of prospective service 20 providers to furnish the skills, expertise and resources necessary for the provision of the service;
  - (iii) the views of the local community;
  - (iv) the likely impact on development and employment patterns in the municipality; and
  - (v) the views of organised labour.
- (4) After having applied subsection (3), a municipality must decide on an appropriate internal or external mechanism, taking into account the requirements of section 73(2) in achieving the best outcome.
- (5) When applying this section a municipality must comply with—
- (a) any applicable legislation relating to the appointment of a service provider other than the municipality; and
- (b) any additional requirements that may be prescribed by regulation

## Appendix 5: Overview of Interview Findings



| Percentage of interviewees raised issue#              |  |  |  |
|---|--|--|--|
|   |  |  |  |
| ulatory Barriers                                      |  |  |  |
| Over 90%  |  |  |  |
| Over 90%  |  |  |  |
| Over 90%  |  |  |  |
|   |  |  |  |
| 70%-80%   |  |  |  |
| Over 95%  |  |  |  |
| 80%- 90%  |  |  |  |
| rriers  |  |  |  |
| Over 95%  |  |  |  |
| 75%-80%   |  |  |  |
| Over 90%  |  |  |  |
| 85%-90%   |  |  |  |
| ure Barriers  |  |  |  |
| Over 95%  |  |  |  |
| Over 95%  |  |  |  |
| Over 95%  |  |  |  |
| Over 90%  |  |  |  |
| Infrastructure and Systems                            |  |  |  |
| 100% project sponsors and 65%-75% total               |  |  |  |
| sample 60%-70%  |  |  |  |
| Capital requirements 60%-70%  Organisational Barriers |  |  |  |
| 75%-80%   |  |  |  |
| Over 90%  |  |  |  |
| ce Barriers   |  |  |  |
| 80%- 90%  |  |  |  |
|   |  |  |  |

# Note the table indicates the number of interviewees that raised an issue. The table does not provide a weighted average of the seriousness of an issue. For example, an interviewee may have mentioned 10 issues during an interview of which process barriers were indicated to be the most serious barrier compared to the other barriers listed in the table



# Appendix 6: Methodology

The team adopted a systems approach to identify and understand the bottlenecks that impede the implementation of climate change related projects. A municipality is classed as an activity system, which has interconnected components. Each component shapes the activity system in a specific way, and interaction between components is responsible for shaping an activity system, determining its behaviour and destiny. The team adapted the Andersen Business Consulting 'six ball' diagnostic tool to identify the components of a municipality, when it is viewed as an activity system.

Components of an activity system cut across three environments (a) the activity system itself (i.e. internal environment of a municipality) (b) the transaction environment of stakeholders that the activity system can influence by interacting with them, such as suppliers, business, etc. and (b) the contextual environment that the activity system cannot influence, such as technological trends, international protocols, business cycle trends, and global warming.

Applying the six ball model, from a systems thinking perspective, gives the team a systemic understanding of the factors influencing a municipality's decision to implement climate change related projects. The six ball model allowed the team to make sense of the inner workings of a municipality, group its functions into components and to explore the interaction between components within the system as a whole and the emergent properties arising from these interactions.

This iterative approach gave the team a high-level understanding of the dynamics shaping the willingness of municipalities to implement climate change related projects (i.e. unpacked the problem into drivers). The team also analysed the quality of a municipality's assets, on an individual basis; and explored the alignment between assets, across the three environments, to trace interdependencies and connections between bottlenecks in the broader system that finances green projects (i.e. understand the emergent properties of a system).

The six ball model, within a broader systems approach, was used to develop questionnaires, which included the issues factors listed in the Table below, and to structure the interview process to explore interconnections between bottlenecks.

## Scope of interview questions

| Ball explored                    | Questions asked about the ball                                |  |
|----------------------------------|---|--|
| Policy, Strategy and Legislation | Regulatory structure review                                   |  |
| Culture (norms, values and       | Risk language development and initiation                      |  |
| beliefs).                        | Attitude towards risk, willingness to innovate, acceptance of |  |
|                                  | failure and desire to work across branches (i.e team          |  |
|                                  | integration)  |  |
|                                  | Understand risk vs. return analysis influencing decisions     |  |
| Process                          | Risk management strategy development                          |  |
|                                  | Risk analysis and disaggregation /Portfolio and risk          |  |
|                                  | modelling   |  |
|                                  | Valuation & quantification of revenues / costs                |  |
|                                  | Risk & control oversight development                          |  |
|                                  | Budgeting processes including resource allocation, capital    |  |
|                                  | planning & evaluation   |  |
|                                  | Cross-subsidisation policies                                  |  |
|                                  | Supply Chain Management                                       |  |
|                                  | Public Participation and Council approval                     |  |
| Human Capital                    | Recruitment , rewards and remuneration policies               |  |
|                                  | Training & development  |  |
| Networks and Organisation        | Structure & organisational interfaces between branches in a   |  |



| Ball explored       | Questions asked about the ball   |
|---------------------|--|
|                     | <ul> <li>municipality and between a municipality and outside stakeholders (especially service providers)</li> <li>Outsourcing, joint ventures and alliances</li> <li>Intergovernmental relations (relationship between three spheres of government and larger-smaller municipalities)</li> <li>Donor organisations and funding networks</li> </ul>   |
| Hard Infrastructure | <ul> <li>Technology selection &amp; design to deliver services</li> <li>Business architecture design &amp; review</li> <li>IT: Software development</li> <li>Installation &amp; implementation of technologies, from IT to smart electricity meters</li> <li>Technology partners</li> <li>Systems integration, especially billing for services and profiling end-users' consumption</li> <li>Advanced technology support, including training</li> <li>Service infrastructure- grids, road, etc.</li> </ul> |



Appendix 7: MFMA / PFMA Issues

| Issue   | Bottleneck   | Significance   | Analysis and Leading Innovations  |
|---|--|--|---|
| Municipal Mandates: Climate change related projects are outside municipalities' mandate.  | Executive management reject proposed climate change related projects, as they perceive these projects to be outside their mandate or not a priority.   | Important to justify expenditure allocation for climate change related projects and programmes.  | Section 24 of the constitution, a right to a safe environment, applies to all spheres of government.  Section 152 compels municipalities to provide services in a sustainable manner.  The Gyanda and Maccsand vs. City of Cape Town judgements demonstrates that municipalities are responsible for managing their environment in a sustainable manner and hence climate change related projects fall under their mandate.   |
| Investing in Private Property: A municipality cannot make investments in private property that increase the value of that property. | Municipalities do not approve climate change related projects that require them to invest in private property. They argue that the MFMA disallows them from making investments that increase the value of private property and does not address equity.  | Important in retrofitting solar water heaters and more energy efficient appliances in households and rented buildings.   | Issue is still unclear, and senior council opinion is being sought.  The argument that water and electricity meters are installed in private property is provided as a justification for municipalities to invest in solar water heaters.  Others believe that investing in green technologies, such as solar water heaters, will not increase the value of a property and is necessary to recover the costs of services in ALL households.   |
| Trading of<br>Municipal<br>Assets   | Implementation of climate change related projects requires access to municipal's physical and intangible assets. For example, land / facilities for waste management and energy production and distribution, or carbon credit trading. To access these assets is very difficult as the prescribed asset disposal processes is complicated and expensive. | Lengthy processes to allow private sector suppliers easier to access municipal land, facilities, distribution networks, the implementation of climate change related projects delay project implementation, and potential to attract potential investors is difficult.  In addition, trading carbon credits can be a useful co-funding mechanism for projects. Although the trading carbon market is a nascent market, there is a possibility that the market will grow. | In the case of selling or leasing assets to outside parties, processes prescribed in the MFMA and other legislation must be followed.  The City of Cape Town has developed a policy to shorten the process for earmarked sites and services that could be replicated in specific instances.  The trading of municipal assets is unclear. A policy is needed to clarify the issue, in general, and also address the  Use of the distribution infrastructure;  Trading in carbon credits.  The policy must both protect the municipality and facilitate investment. |



| Contracting      | If a municipality wants to engage with an      | Implementing climate change related         | Section 78 investigations that justify the need to engage outside   |
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| third parties to | outside entity to provide a municipal service, | projects requires the knowledge of multi-   | entities are necessary to protect the municipality and its          |
| provide a        | the legislation prescribes processes to        | disciplinary teams, who have specialist     | employees.  |
| municipal        | contract with the supplier and also how these  | knowledge regarding technology, and         |   |
| service (in      | services must be delivered. These              | processes. Municipalities do not have       | For most climate change related projects the intellectual property  |
| other words      | processes are defined in Section 76-78 of      | access to the complete package of skills to | and skills have been developed by private organisations and         |
| municipalities   | the Municipal Systems Act. They involve        | implement projects. Thus they need to       | hence they own the rights to this knowledge                         |
| outside the      | extensive consultation with stakeholders       | engage experts and organisations to         |   |
| provision of     | (labour, communities, civil society) in a      | implement projects.                         | Municipalities require clarity and guidelines regarding a           |
| services that    | sensitive manner. Hence stakeholder            |   | rationalised process to contract third parties, manage intellectual |
| should be        | engagement management is complicated           |   | property issues, and manage stakeholder engagements. The            |
| provided by the  | and protracted, which makes compliance         |   | guidelines should first address identified projects and             |
| municipality).   | expensive.                                     |   | programmes – where municipalities in the short term do not          |
|                  |  |   | have sufficient skills of technical capacity.                       |
| Establish        | Once section 78 processes justify the need     | Partnerships allow municipalities to access | Developing policies and mechanisms that rationalise and             |
| partnerships to  | to establish partnerships, the PPP process     | skills, expertise, technology, resources,   | simplify the processes to establish PPPs are critical.              |
| implement        | must be followed to establish the              | and capital from the private sector (often  |   |
| climate change   | partnership. The PPP process is highly         | required to make the project viable).       | Policies / mechanisms must ensure that the risks facing a           |
| related projects | regulated, long, and expensive because it      | Hence PPP, provided they are designed       | municipality are justified and they are shared with the             |
| and              | requires extensive consultation with           | properly, can reduce a municipality's risk  | private/outside partner   |
| programmes.      | communities and government departments.        | of implementing a climate change related    |   |
|                  |  | projects                                    |   |
| Entering into    | The MFMA is designed to minimise               | The value of climate change related         | Establishing these partnerships is difficult, as a municipality is  |
| supplier         | municipalities' exposure to long-term          | projects is not realised after three years. | required to   |
| contracts        | liabilities.                                   | They require large capital investment at    | conduct a Section 78 investigation (described above)                |
| longer than      |  | the beginning of their life, but their      | <ul> <li>comply with the PPP process (described above)</li> </ul>   |
| three years.     | If a municipality wishes to enter into an      | maintenance costs tend to be lower than     | <ul> <li>comply with Section 33 of the MFMA.</li> </ul>             |
|                  | agreement that will create a long-term         | traditional projects.                       |   |
|                  | liability over a period greater than 3 years,  |   | The above processes are similar and they should be rationalised     |
|                  | the MFMA prescribes a set of processes that    | Hence the three year rule penalises         | to reduce time and costs. The benefit of rationalising the          |
|                  | must be followed (including Section 33 of the  | climate change related projects because     | processes would exceed the cost. Good long-term partnerships        |
|                  | MFMA). These processes are long,               | they have insufficient time to be           | would build the capacity of municipalities to upscale climate       |
|                  | expensive and require extensive consultation   | implemented before savings are              | change related projects and hence long-term partnerships are        |
|                  | with communities and Treasury.                 | generated and other benefits are realised,  | crucial to mainstream climate change related projects.              |
|                  |  | such as providing goods and services that   | Furthermore, the short-term view (of under three years) ignores     |
|                  |  | improve the resilience of the economy.      | future investment risks particularly escalating recurrent costs     |
|                  |  | Also, these projects can unlock significant | and future climate change induced supply shocks.                    |
|                  |  | private capital and private investment.     |   |
| Intergovernme    | Municipalities require approval from National  | If the implementation of a climate change   | The implementation of climate change related projects has been      |
| ntal             | and Provincial departments to                  | project will affect the mandate of other    | more successful where there was a high-level of                     |



| responsibilitie<br>s and approval<br>levels.                    | <ul> <li>engage in production of energy using renewables or waste</li> <li>develop a public transport programme</li> <li>enter into international agreements to protect environmental assets</li> <li>Obtaining approvals or comments from other government departments is a time consuming process. For example interviewees expressed their frustration with the processes, as municipalities must gain approval from NERSA to purchase electricity from local producers.</li> </ul>   | government departments, a municipality must obtain approval from the other departments before the project can begin. These delays are a major disincentive to both public and private investment as they increase uncertainty and risk.  | intergovernmental commitment at the leadership level, supported by a good intergovernmental coordinating and monitoring system. In other instances, old municipal by-laws have been used to solve institutional bottlenecks, a good example is eThekweni.   |
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| Criminalisation<br>of wasteful<br>and fruitless<br>expenditure. | Fear of criminalisation has made officials shy away from implementing projects that use new technology and processes because they perceive these projects' rate of failure to be greater than projects using established technologies/ processes. Officials' risk averse attitude towards climate change related projects has caused these projects to be marginalised - increasing the risks in the future.   | Officials prefer to champion and implement projects that adopt a tried and tested approach, which perpetuates the delivery of services using resource intensive technologies. On a collective basis, the continuous implementation of resource intensive technologies has large opportunity costs for the economy, such as increasing the vulnerability of the municipality to supply shocks, escalating expenditure to maintain infrastructure, and increasing the use of finite resources that are difficult to replace (i.e. drinking water). | The definition of wasteful and fruitless expenditure is widely understood to include delivery failures of new types of projects at the municipal level. Clarifying this definition in the context of addressing climate change is critical, without decreasing both efficiency in municipal expenditure and innovative approaches to address a range of new social, economic and climate change related projects. Substantial work is required to prove to officials that there are no delivery risks in using new approaches and technology. |
| Protecting the security of the institution.                     | Management focusses their attention on service delivery projects. These projects are politically popular as they address immediate needs sometimes at huge environmental costs.  On average, management views climate change related projects with scepticism. By focussing on reducing the consumption of basic services, the income generated from supplying services will be reduced and thus have a negative effect on the municipalities' finances. Second, the outputs of these projects are difficult to project with the required level of assurances thus favouring | Insufficient resources are channelled into climate change related projects because they are marginalised. Climate change related projects are regarded by senior and executive management as "good to have" but not a priority.  | Much of the pressure on sustaining the income and addressing the basic social needs of communities are real, and reinforced through the participatory processes.  Insufficient attention is given to long- term strategic needs and life-cycle costs and/ or Total Costs of Assets, which includes long term recurrent costs. Aligning the NDP, which has long-term objectives, is critical to foster increased investment in climate change related projects.  |



|                       | the implementation of conventional engineering projects with guaranteed yields. Third benefits from climate change will be realised in 10 - 20 year timeframe, which creates the impression that pursing these projects reduces municipality's focus on addressing its immediate service delivery needs and its core business.   |   |  |
|-----------------------|--|---|--|
| MFMA- tender process. | Procurement processes are complicated, and many municipalities are ill equipped to support ecological projects. Processes are designed to support large-scale engineering projects, whose inputs and outputs can be quantified and specified, with a high degree of certainty, at the outset of a project. Applying an engineering mindset to the tender process requires that specifications and evaluation criteria for a climate change project must be clearly defined on a per annum basis at the outset of the project, but the response of ecological systems to an intervention is not precisely known as it depends on a host of factors.  The disjuncture between the engineering need for absolute clarity and the behaviour of ecological systems that cannot be forecasted in discrete timeframes creates tension between both parties and stalls the tender specifications and evaluation processes. In addition, once the tender has been award, it is easy to appeal the award of a tender, adding another layer of complicated, time consuming processes (i.e. green tenders are appealed quite often because the nature of the specs and services needed are less concrete than a typical engineering projects and thus are open to greater interpretation). | The tender process favours old resource- intensive technologies and processes that are cheaper in the short term, but they are more expensive in the long term compared to new technologies. Climate change related projects often require higher upfront costs, with lower resource requirements and have long-term benefits. This short-term versus long-term costs and benefits are the main source of procurement disputes. | Procurement is highly sensitive and non-compliance is seen as the basis of corruption. Given public focus on procurement, as well as the criminal sanctions, compliant municipalities tend to follow the procurement process in a mechanistic manner. However, procuring innovative and new technologies and services that are utilised in climate change related projects is seen as risky and expensive in the short-term. Deviation from established procurement processes to accommodate the requirements of climate change is viewed as highly risky by municipalities that strive for clean audits. Incorporating a long-term approach into the current procurement process is a challenge, and it is important to draw from other emerging best practices to upscale climate change related projects. A national and provincial green procurement policy will assist in valuing the externalities of resource utilisation in procurement processes. |