

MAINSTREAMING CLIMATE RESPONSIVENESS INTO CITY PLANS, BUDGETS AND GRANT CONDITIONS

Report 3b – Phase 3



Climate Mainstreaming in South African Cities

Opportunities for Strengthening Cities' Access to Climate Finance

31 October 2018

EXECUTIVE SUMMARY

This Report analyses the challenges faced by South African cities in accessing international climate finance as part of a wider study on improving the climate responsiveness of planning and infrastructure project preparation in these cities. As cities conceive, prepare and implement climate responsive plans and projects, climate finance, and in particular funds received from the Green Climate Fund (GCF), can offer significant funds to assist applicants. However, there are a number of challenges for cities to access climate finance, such as the GCF, not least the fact that the GCF itself is encountering difficulties around executing its mandate, differing expectations amongst its stakeholders and perhaps an inevitable disappointment associated with implementing any significant initiative on the complex global stage. This report does not dwell on the difficulties associated with the GCF directly, as these are beyond the ability of any one country to influence; instead it focusses on making recommendations to address the national and city-level challenges in accessing climate finance, using the GCF system as an example.

The recommendations in this report are based on interviews with a variety of stakeholders from national departments, domestic and international development finance institutions and private sector subject matter experts. The interviews have been augmented by reviews of relevant South African policy documents and publications from the GCF.

The report begins by setting out the context of climate change and the challenges it presents to South African cities. It is clear that there is a need to finance investment that addresses the emerging threats posed by climate change. The report provides a short introduction to the GCF and the institutions and procedures necessary to access its resources. It then highlights some of the complexity associated with preparing a proposal for the GCF.

The results of the study interviews are analysed under set of emerging issues which include:

- There is little progress in applying for GCF funds by South African cities.
- Cities are aware of climate finance and are interested in knowing more.
- Successful GCF funding applications are demanding, requiring projects with vision and backed by evidence and strategic thinking.
- Cities require strong capacity, resources and project management skills to prepare successful GCF applications.
- Officials tasked with climate change lack sufficient resources and profile to influence large municipal programmes.
- Cities are not receiving sufficient support to prepare successful, high quality GCF applications
- National tools and frameworks are not optimised or leveraged for the GCF application process.
- Some regulations, although important in mitigating fiscal risk, deter the preparation of GCF applications.
- Cities need to use conditional infrastructure grants more innovatively.
- The structuring of infrastructure grants does not explicitly address climate change.
- Accredited entities do not provide sufficient guidance to support the submission of high quality applications.

- The process and approach to coordinating the preparation of GCF proposals in South Africa requires strengthening.
- The GCF represents a challenging, but viable source of finance for cities including some grants, but most likely loans.
- The GCF is the largest source of climate finance for cities.
- The GCF needs to provide more guidance to countries on its expectations.

These issues suggest that the barriers to access climate finance for cities are complex, requiring multiple interventions to address insufficient knowledge and capacity. Critical gaps include: the need to ensure capital investment plans, such as the Built Environment Performance Plans (BEPPs), include more climate responsive planning and projects; training on practical project management; increased efforts in project preparation; support in understanding what a climate responsive city would like; and capacity building on the detailed technical aspects of climate responsive projects by sector.

One immediate barrier is a supply side problem; there is no pipeline of credible projects for GCF AEs to take up and finance. A solution to this issue must have two dimensions. Firstly, an initial set of city-level climate responsive projects that can support GCF applications needs to be identified and prepared for entry into a South African project pipeline as soon as possible. Secondly, in the longer term, there needs to be a more lasting institutional mechanism that ensures that pipelines of climate responsive projects are regularly augmented and updated as part of the wider city planning processes. To help cut through the complex city landscape in South Africa, a typology of cities and projects is proposed. This should help target the types of climate finance required to different categories of cities.

Finally, recommendations and an high-level implementation plan are proposed to address each of these emerging themes which are outlined in the table below. The recommendations have been classified according to: (i) the need for additional resources; (ii) the need for capacity building guidance and training; (iii) changes and additions to regulations, policies and support tools; and (iv) institutional changes.

Recommendation	Responsibility	Timescale
Additional Resources		
Recommendation 1 – Support the immediate development of a pipeline of projects	National Treasury / DBSA	Immediate
Recommendation 2 – Create a panel of experts to scrutinise and support the maintenance of a pipeline of climate responsive projects	National Treasury / Sector Departments	Within 5 years
Recommendation 12 – Encourage AEs to provide technical assistance to improve access of cities to capital markets	National Treasury / DBSA	Immediate
Recommendation 15 – Encourage cities to apply for other sources of climate finance to help enhance their access to capital markets	National Treasury / DEA	Immediate
Guidance and Capacity Building		
Recommendation 3 – Encourage early consideration of climate responsiveness in city priorities and projects through	National Treasury / Sector Departments	Immediate

Recommendation	Responsibility	Timescale
engagement and revision of BEPP guidelines and support to cities' core planning processes		
Recommendation 4 – Strengthen project management skills for conceiving, preparing and implementing large climate responsive projects	Cities Support Programme, National Treasury	Within 2 years
Recommendation 6 – A programme of support needs to be prepared to encourage and support more climate responsive planning by cities	Cities Support Programme, National Treasury	Immediate
Recommendation 7 – Provide training on preparing projects in different sectors for climate finance	National Treasury / DEA	Within 2 years
Recommendation 8 – Prepare guidance on what a climate responsive South African city looks like	DEA	Within 2 years
Regulatory, Policy, Tools and Funding Changes		
Recommendation 5 – Ensure climate expertise is required in critical decision points in project planning and procurement as well as ongoing infrastructure management and delivery	Cities Support Programme, National Treasury	Within 2 years
Recommendation 11 – Explore opportunities to use conditional grants for the preparation and appraisal of climate responsive options for plans and projects	National Treasury / Sector Departments	Within 2 years
Recommendation 10 – National Treasury to consider providing a rapid turnaround on applications for well-prepared multi-year investment projects seeking climate finance	National Treasury	Immediate
Recommendation 9 – Application procedures for facilities such as the GCF should clarify the use of tools and evidence to support the preparation of climate responsive actions/projects	National Treasury	Within 5 years
Institutions		
Recommendation 13 – Encourage more South African organisations to register as direct access entities to the GCF	DEA	Within 2 years
Recommendation 14 – Sufficient resources and a clear process and set of procedures is needed to enable GCF proposals to be adequately supported, scrutinised and approved	DEA / National Treasury	Immediate
Recommendation 16 – Encourage GCF to provide greater clarity on conditions for access to finance	GCF Focal Point	Within 2 years

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GLOSSARY

AE	Accredited Entity
AFD	<i>Agence Francaise du Developpment</i>
BEPP	Built Environment Performance Plan
CBA	Cost Benefit Assessments
CER	Certified Emissions Reduction
CIDMS	City Infrastructure Delivery and Management System
CIF	Climate Investment Funds
CSP	Cities Support Programme
DBSA	Development Bank of Southern Africa
DEA	Department of Environmental Affairs
DFI	Development Finance Institution
DfID	Department for International Development
DoE	Department of Energy
EIB	European Investment Bank
FP	Focal Points
GCF	Green Climate Fund
GEF	Global Environment Facility
IDP	Integrated Development Plan
ICDG	Integrated City Development Grant
NDA	Nationally Designated Authorities
PPF	Project Preparation Facility
RMF	Results Management Framework
SALGA	South African Local Government Association
SANBI	South African National Biodiversity Institute
SDF	Spatial Development Framework
SME	Small and Medium-Sized Enterprise
UNFCCC	United Nations Framework Convention on Climate Change

1 INTRODUCTION

1.1 THE REPORT

The Cities Support Programme's (CSP's) project, *Mainstreaming Climate Responsiveness into City Plans, Budgets and Grant Conditions*, seeks to develop practical tools to support the integration of climate resilience and responsiveness into municipal infrastructure and planning and budgeting.

The first phase of the project produced two reports: i) a high-level analysis of how climate responsiveness is currently mainstreamed or reflected in city policies and plans, and ii) an estimation of the cost of climate responsiveness, and analysis of actual total city expenditure for all eight metropolitan municipalities as the basis for the development of a framework of analysis.

The second and third phases were run concurrently. The second phase aimed to develop practical guidance and tools to support cities in mainstreaming climate responsiveness into their plans, based on in-depth interviews with city officials and case study analyses.

The third phase has two components: firstly, a review of select national infrastructure grant conditions in order to strengthen climate responsiveness and the associated programmes of support to cities and, secondly, a review of the potential for improving cities' access climate finance to support the implementation of climate responsive interventions. **This report focuses on the latter component; it presents an overview of the available climate finance and then identifies challenges associated with accessing climate finance. These challenges are presented in a series of emerging themes that came out of the key informant interviews with National Government officials. Finally, recommendations have then been made to address these challenges.**

This report currently covers two of the Phase 3 deliverables:

- A briefing to cities on accessing climate finance from the GCF (section 2), and
- An analysis of the barriers cities face in accessing climate finance with recommendations on how these barriers can be overcome (section 3).

1.2 LINKS TO PHASE 1

The earlier report, "Cities Capital Expenditure and Alternative Financing Analysis," concluded that the climate cost fraction of capital expenditure was going to be significant in the future (up to 10% for domestic investment and 40% for overseas development assistance). It found that South Africa's cities' capital expenditure amounted to R31,8 billion in 2016, of which R15,2 billion came from capital grants (representing nearly 50% of their total expenditure). Approximately 23% of the cities' expenditure was funded through borrowings, although only four of the eight metropolitan municipalities used this source of financing in the year under review. The exact composition of the financing varied considerably across the cities, with some smaller cities relying almost entirely on government grants, while larger ones

considerably less so. The terms at which they borrowed also varied. Larger cities with more established income streams are generally judged as lower risk by potential financiers and thus can borrow at lower rates.

For example, both the City of Cape Town and the City of Johannesburg successfully issued green bonds that were oversubscribed. The rates these bonds attracted were between 10% and 11%. Development Finance Institutions (DFIs) that were approached under this project regarding the interest rates offered to South African Cities for climate responsive planning and infrastructure, responded that they were unable to provide this information.

The report also found that, depending on the assumptions used, the future funding gap to improve climate responsiveness at the city level could be between approximately 20% and 180% (as a percentage of capital grants). The report concluded by suggesting the Green Climate Fund (GCF), alongside other sources, was a viable source of funding to investigate to help address this potential gap. The report stated that options for structuring financing for cities priority projects should be modelled to ascertain what was optimal for a given context (project and city) (e.g. governments grants 30%, GCF grants 30%, and GCF concessionary loans 40%).

1.3 CLIMATE CHANGE

In response to the evidence of human-induced global climate change, the international community, through the Paris Agreement¹, has agreed to try and hold global temperature rises below 2° C above pre-industrial levels, and pursue efforts to limit temperature rise even further to 1.5° C². Furthermore, the agreement aims to strengthen countries' ability to adapt to inevitable future climate change. To support these goals, "appropriate financial flows" will be secured to ensure countries are able to act by reducing their emissions and enhancing their resilience.

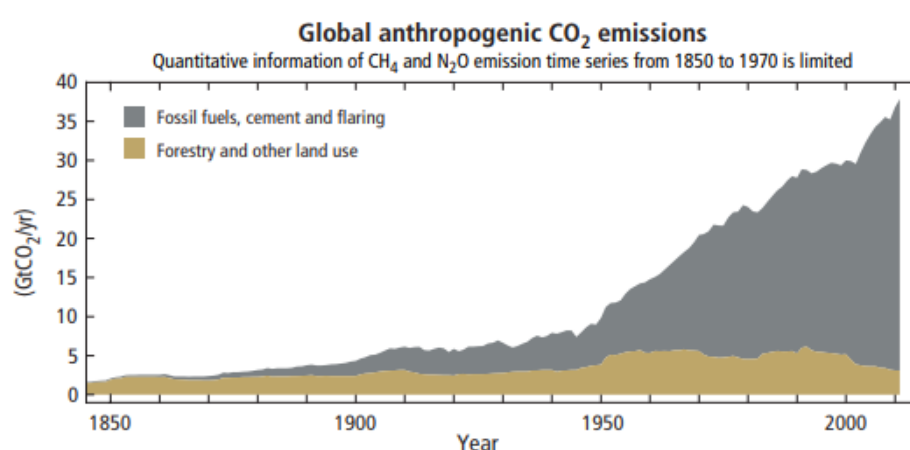


Figure 1: Global Anthropogenic CO₂ Emissions

Globally, cities represent 2% of the world's land mass, but have an outsized impact on climate change. It is estimated that they are responsible for 70% of global CO₂ emissions. They are home to nearly

¹ Online [http://unfccc.int/paris_agreement/items/9485.php]

² The figure opposite is taken from the IPCC 5th Synthesis report [Online: https://www.ipcc.ch/pdf/assessment-report/ar5/syr/SYR_AR5_FINAL_full_wcover.pdf]

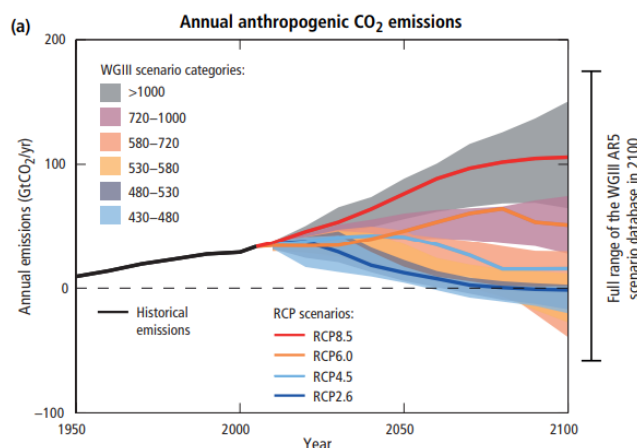


Figure 2: Annual Anthropogenic CO₂ Emissions

a quarter of the world's population³, and the fact that 90% of the world's urban areas are situated on the coast illustrates their vulnerability to the impacts of climate change.⁴

South Africa is the most urbanised country in Southern Africa. Its emissions per capita are above the G20 average⁵. These emissions are largely driven by the 65%⁶ of the population that reside in urban areas.

The vulnerability of South African cities to climate change has been thrown into sharp

relief by the Cape Town drought, where the city's dam levels dropped below 23%⁷ due to a combination of a 1:300/400-year drought⁸, population growth, high per capita consumption, and inadequate planning and management.

In short, it is clear that South African cities are already experiencing climate change related impacts, which are projected to get worse. Furthermore, dedicated international financial support is available to assist South African Cities to directly address the sorts of challenges already being posed by climate change.

³ [Online: http://www.un.org/en/development/desa/population/publications/pdf/urbanization/the_worlds_cities_in_2016_data_booklet.pdf]

⁴ [Online: http://www.c40.org/why_cities]

⁵ [Online: <http://www.climate-transparency.org/g20-climate-performance/g20report2017>]

⁶ [Online: <https://data.worldbank.org/indicator/SP.URB.TOTL.IN.ZS>]

⁷ [Online: <http://www.capetownetc.com/water-crisis/dam-levels-drop-to-22-7/>]

⁸ [Online: <https://www.news24.com/SouthAfrica/News/how-severe-is-cape-towns-drought-a-detailed-look-at-the-data-2018012>]

2 THE GREEN CLIMATE FUND

2.1 OVERVIEW

The Green Climate Fund (GCF) is an international fund for disbursing grants and concessional finance for low emission and climate resilient development. It aims to achieve a balance of disbursements between adaptation and mitigation (50% each) and has a sustained focus on least developed countries, small island states and African countries. Importantly, it has an ambitious mandate to support countries to combat climate change through **transforming their development trajectories** by shifting economic development onto climate resilient and low emission pathways. In 2018, the Fund has USD10,3bn available, and is able to disburse grants and concessional loans.

Although South African cities have not yet successfully applied to the GCF, there have been applications for urban projects from a number of other countries, demonstrating that the GCF is able and willing to fund this category of projects. Four examples of urban development projects already financed by the GCF, elsewhere in the world, are set out in Annexure A to this report.

The Fund consists of: an Executive Board made up equally of donor and recipient countries; a Secretariat to administer the fund's day to day activities and execute the Board's decisions; Accredited Entities that submit full proposals and disburse funding on behalf of the fund; and Nationally Designated Authorities (NDAs) and/or Focal Points within individual countries. NDAs are a country's primary interface with the Fund. They coordinate the development of strategic frameworks that set out the funding priorities, coordinate inputs, and engage a wide range of stakeholders to ensure that ambitious projects supporting the climate resilient transition of a country's economies move forward as planned. In South Africa, the Department of Environment Affairs is the NDA. The Focal Point is generally the head of the government department specified; in South Africa, the Focal Point is the Director General of the Department of Environmental Affairs.

The GCF has published a results management framework (RMF), which sets out its priority eight areas of strategic impact that it seeks to achieve through its disbursement of funds; four concerning low-emission development and four concerning climate resilience (see Box 1). The RMF also has a performance management framework to ensure that progress against the RMF can be tracked and managed.

The GCF defines the NDA's roles and responsibilities as broadly covering five main areas:

Box 1: The Eight Impact Areas of the GCFs RMF

1. Energy Generation and Access
2. Transport
3. Forests and Land Use
4. Building Cities, Industry, and Appliances
5. Health, Food, and Water Security
6. Ecosystems and Ecosystem Services
7. Livelihoods of People and Communities
8. Infrastructure and Build Environment

- Strategic oversight of GCF-funded activities in countries;
- Convening national stakeholders;
- Approval of readiness support;
- No objection letters for projects and programmes; and
- Nominations for direct access.

The allocated functions of the NDA, as well as the sectors it has to cover to drive low emission climate resilient development, imply that it is unlikely that a single institution will retain the breadth of knowledge and the mandate necessary to be able to deliver effectively on its own. Therefore, the creation and management of a country coordination mechanism, managed by the NDA, becomes one of its critical functions.

2.2 ROLE OF ACCREDITED ENTITIES

The GCF has categorised project proposals according to the scale of funding required⁹:



Source: Adapted from GCF infographics

Figure 3: Total Project Costs

To deploy its resources, the GCF works through a range of institutions that channel the finance for projects and programmes. These institutions must be accredited to the GCF to be able to receive funds from it. Once the accreditation process is complete, the institution is known as an Accredited Entity (AE). The accreditation process is designed to assess whether the institution is “capable of strong financial management and of safeguarding funded projects and programmes against any unforeseen environmental or social harm.”

Accredited Entities can be private, public, non-governmental, sub-national, national, regional or international bodies. AEs should be able to demonstrate a set of actionable climate change projects or programmes to the GCF embracing mitigation and adaptation. They must also meet GCF standards covering financial, environmental and social safeguards, and gender representation.

Currently there are 54 entities accredited by the GCF¹⁰ globally, and a further 186 applicants in various stages of the accreditation process. Accredited Entities can be classified by:

⁹ Figure taken from [Online: <https://cdkn.org/wp-content/uploads/2017/06/GCF-project-development-manual.pdf>]

¹⁰ As of December 2017.

- Geography – national AEs and regional AEs, otherwise known as Direct Access Entities (e.g. SANBI and DBSA) or international AEs such as UNDP and the World Bank;
- Size – micro (<10MUSD), small (10-50MUSD), medium (50 – 250MUSD) and large (>250MUSD); and
- Ability to manage risk social and environmental risk– A (High), B (Medium), C (Minimal)¹¹.

Consequently, it is important for a project developer/sponsor – in other words, a city – to select an AE that matches the size of the project, the risk area and the technical scope. Also, all things being equal, a nationally designated AE is preferred, especially if the project is seeking preparation funds. Presently, most AEs are international. To be accredited as a Direct Access Entity, a candidate organisation must be nominated by the country's NDA¹². NDAs ensure that the projects are addressing the country's climate change priorities and oversee the successful implementation of projects in the country.

2.3 SUBMITTING A GCF APPLICATION

There are generally two stages to submitting a proposal to the GCF for funding:

- **Concept note** - a project developer can submit a concept note to the GCF in an approved format, usually accompanied by a prefeasibility study. At this stage, an AE is not essential, but the NDA does need to support the application. The GCF Secretariat will then provide feedback.
- **Full submission** - a full submission with an accompanying feasibility study is then submitted. If successful, it will be announced at one of the Executive Board meetings (held twice a year). This stage must be led by an AE.

To help countries prepare applications for funding from the GCF, there are two key mechanisms:

- **Readiness funding** for national level capacity building and institutional strengthening - money is made available to countries to help enhance country ownership and access to the Fund. The resources are targeted at “strengthening the institutional capacities of NDA or FP¹³ and direct access entities to efficiently engage with the Fund. Resources may be provided in the form of grants or technical assistance”¹⁴. There is up to US\$ 1m p.a. per country, and up to a further once-off US\$ 3m to help prepare adaption plans. Ensuring that there is a strong FP/NDA is critical to ensuring project developers/sponsors can submit applications to the GCF.
- **Project preparation facility** - provides support to AEs in project and programme preparation. It targets direct access entities (national, not international AEs) and micro to small size projects. Each request is capped at US\$ 1,5m.

¹¹ An AE'S risk rating determines what size project they can implement; for example, SANBI has a higher risk rating and thus can only manage smaller projects compared to DBSA (i.e. less than USD 50 million).

¹² For more information [Online:

https://www.greenclimate.fund/documents/20182/194568/GCF_in_Brief__Direct_Access.pdf/8112c210-54a6-44bc-a084-ef25e71dc965]

¹³ Focal points are a country's main contact point with the UNFCCC. They can be the same as the GCF NDA or different.

¹⁴ [Online: <https://www.greenclimate.fund/how-we-work/empowering-countries>]

It is important that the NDA becomes well-versed in, and can manage, the submission process for proposals to the GCF for accessing funding.

Once a proposal is submitted, it undergoes analysis by the GCF secretariat and a recommendation is made. During this period, comments may be received by the NDA from the GCF that need to be addressed. Ultimately, the decision whether to fund a submission is informed by six financing criteria (see Box 2). Once the submission is approved, the legal arrangements must be negotiated and the letter of commitment is then sent by the Fund indicating that financing has been mobilised.

Box 2: GCF Funding Criteria

1. Impact Potential
2. Paradigm Shift Potential
3. Sustainable Development Potential
4. Country Ownership
5. Efficiency and Effectiveness
6. Needs of the Recipient

The figure below summarises the potential process of preparing a GCF application.

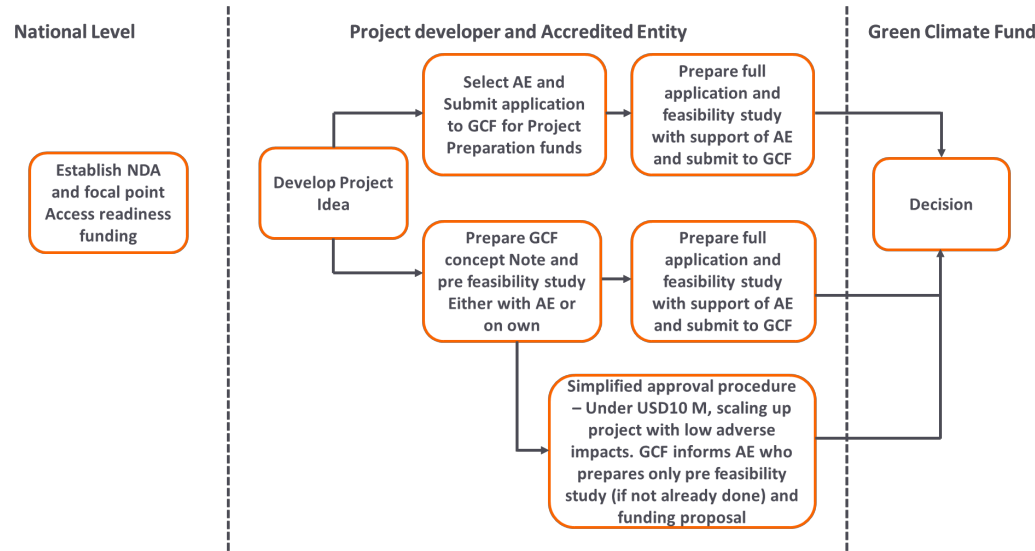


Figure 4: Process of Preparing a GCF Application

3 CHALLENGES AND OPPORTUNITIES FOR CITIES & THE GCF

The Subsidiary Body for Scientific and Technological Advice of the United Nations Framework Convention on Climate Change (UNFCCC) recently published a report entitled *Adaptation in Human Settlements: Key Findings and Way Forward*,¹⁵ as part of the Nairobi work programme on impacts, vulnerability, and adaptation to climate change. The report underlines the difficulties that sub national bodies have in mobilising finance for climate responsiveness; it also highlights the importance of reliable and sufficient transfers of resources.

Cities, towns and regions can struggle to mobilize funding for adaptation and many communities have to rely on local savings groups to cope with disasters. Providing access to financial resources at the local level involves reliable and sufficient fiscal transfers as well as permitting local authorities to collect taxes, fees or charges and/or to develop innovative financing mechanisms such as green bonds. It could also involve setting up a national adaptation fund that could be accessed by local entities through an application process.

To understand how this well-known challenge around financing adaptation manifests itself in South Africa, interviews were conducted with officials in National Treasury and the Department of Environmental Affairs, responsible for liaising between South Africa and the GCF and for promoting the preparation of projects seeking climate finance from the GCF. The interviews were aimed at eliciting information on the current status of South African cities applications to the GCF, the barriers cities face in applying for GCF funding, and recommendations on how to address these barriers.

The findings from the interviews were interpreted in the context of the GCF's operating principles, outlined above, which helped identify a series of emerging themes under the three main aims of the interviews.

The **emerging issues** from these engagements include:

- There is little progress in applying for GCF funds by South African cities.
- Cities are aware of climate finance and are interested in knowing more.
- Successful GCF funding applications are demanding, requiring projects with vision and backed by evidence and strategic thinking.
- Cities require strong capacity, resources and project management skills to prepare successful GCF applications.
- Officials tasked with climate change lack sufficient resources and profile to influence large municipal programmes.
- Cities are not receiving sufficient support to prepare successful, high quality GCF applications
- National tools and frameworks are not optimised or leveraged for the GCF application process.

¹⁵ Subsidiary Body for Scientific and Technological Advice Forty-eighth session Bonn, 30 April to 10 May 2018.

- Some regulations, although important in mitigating fiscal risk, deter the preparation of GCF applications.
- Cities need to use conditional infrastructure grants more innovatively.
- The structuring of infrastructure grants does not explicitly address climate change.
- Accredited entities do not provide sufficient guidance to support the submission of high quality applications.
- The process and approach to coordinating the preparation of GCF proposals in South Africa requires strengthening.
- The GCF represents a challenging, but viable source of finance for cities including some grants, but most likely loans.
- The GCF is the largest source of climate finance for cities.

The GCF needs to provide more guidance to countries on its expectations.

These emerging issues and themes are discussed in more detail below under two categories: whether they **address the current status of GCF applications**, or whether they **highlight a barrier to cities' access to climate finance**.

Current Status of GCF Applications in South Africa

There is little progress in applying for GCF funds by South African cities: No evidence of a completed GCF application was found. However, interviewees mentioned that cities were aware of climate finance, and that they were interested in accessing it. In addition, a small number of municipalities have initiated the application process (E.g. Kwadukuza and Cape Town).

DBSA is currently working on GCF applications, but it is too early for them to have secured funds. For example, the DBSA worked with Cape Town to develop a water resilience project focussed on the water management systems and water service delivery process. The full application is worth ZAR 3bn (Phase 1 would be ZAR 2bn). However, there is still a lack of clarity over the type of finance required. Cape Town has requested a grant, although it is unlikely that the GCF will provide the whole amount as a grant, as the City is in a middle-income country. DBSA hopes that the final application will go to the Executive Board of the GCF in October 2018.

Cities are aware of climate finance and interested in knowing more: Interviewees mentioned that cities are interested in climate finance and regularly attend conferences to learn more. One interviewee pointed out that making cities aware that there is funding available to help raise climate responsiveness ambitions is important.

Barriers to Cities Being Able to Apply for GCF Funding

Successful GCF funding applications are demanding, requiring projects with vision and backed by evidence and strategic thinking: The GCF requires that funding applications for projects demonstrate scale and transformation¹⁶ and the ability to make a national, and even international, impact. A common

¹⁶ What constitutes transformation in the context of a country or city is always going to be context specific, so there is no uniform standard as to what transformation necessarily means in this process.

requirement for applications, particularly from middle income countries such as South Africa, is the potential of a project to mobilise private finance. The DBSA, a South African Direct Access Entity, has stated that it wants to move away from ad hoc single projects, and develop a programme of projects to help demonstrate scale and ability to transform climate responsiveness in cities.

A project also needs to receive broad-based government support if it is to be successful. Consequently, conceiving and designing projects needs to be visionary and transformative, rooted in the local context, and attractive to a range of stakeholders and potentially financiers. A project seeking climate finance needs to have a clearly stated purpose, and a narrative that makes economic sense: responding to climate change should not be undertaken merely for the sake of it, but to enable ongoing, sustainable socio-economic development. Projects seeking climate finance need champions who have the vision, management and leadership skills to collate evidence, develop the narrative, nurture ownership amongst the stakeholders, and drive the application forward. For example, in Nelspruit, a project may look to leapfrog high carbon and less resilient development pathways, whilst in Johannesburg, a project may seek to make existing development more resilient and or less carbon intensive. A potential GCF project should either present:

- An innovative new idea or concept; or
- A large project or programme that is based on an existing small-scale intervention or pilot that has already been proven.

Applications then need to be explicit about asking the following questions:

- What are you trying to do?
- What is your delivery mechanism?
- How are you meeting GCF evaluation criteria?

In terms of accessing the GCF, DEA, as the South African NDA, stated that cities have not tried to further the economic agenda in their conception and scoping of GCF projects. In other words, to secure funds from the GCF, projects must deliver enhanced low carbon and/or climate resilient growth as a consequence of integrating climate responsiveness into a project. However, at the same time the GCF has made it clear that it does not support general economic development programmes, as their funds are targeted at the climate components of a project. Balancing these very specific requirements renders the application process more complicated. Cities have not yet identified new green economic activities that will deliver future sustainable growth. In addressing the challenge of balancing development and climate, it would be informative if cities set out a long term vision of where a city sees itself in 20 years and how it will get there. In other words, cities need to be able to articulate where they are today and what are the levers and catalysts that are needed to reach the vision, and then what is the potential role of the GCF in this. For example: an initiative focussed on scaling up renewables may include options such as:

- Changes to the regulatory environment;

- Increases in the opportunity of SMEs to serve off grid areas – e.g. in informal settlements, the GCF could fund transmission infrastructure. The costs then come down, and a higher return is reached; and
- Increases in storage capacity to stabilise renewables generation.

The questions that need to be asked by cities, is where does the GCF financing sit in this picture. As cities grow, there is a greater demand on resource efficiency. For example, a GCF compatible transport project could look at:

- Avoiding travel or shifting modes and energy sources;
- Building new communities with services integrated within them;
- Electric vehicles, like bikes and minibuses;
- Improving safety emissions and reliability of minibus taxis; and
- Transferring freight from road to rail.

Cities require strong capacity, resources and project management skills to prepare successful GCF applications: Interviews with departments (Transport, Human Settlements, Environment Affairs), as well as the DBSA, reveal a consensus that most cities, particularly smaller ones, lack sufficient capacity to prepare projects to bankability and to prepare a successful GCF applications without drawing in support. Project management capacity is particularly important; as is the ability to develop a vision, drive forward the planning, and ensure appropriate coordination and management of the whole process. Interviewees suggested that cities seemed a way off being able to develop a successful proposal and had not yet completed the first task of identifying a priority list of actions that they must do to be more climate responsive.

The quantum of cities' capital expenditure and the potential future funding gaps, due to the growing need to consider climate responsiveness, is significant enough to warrant cities investing in securing cheaper sources of finance, such as the GCF. Interviewees stated that cities sometimes underspent their grant allocations and thus most, if not all, should have resources to secure additional support as required to help access the GCF. A counter narrative to this is that if they can't spend the money they already have, why should they apply for more. Furthermore, if cities successfully implement the basics in terms of effective and efficient planning, as well as revenue collection, then their options to secure GCF funding would be enhanced.

Officials tasked with climate change lack sufficient resources and profile to influence large municipal programmes: City officials tasked with climate change frequently lack sufficient time to drive or influence climate finance applications. An interview with the designers of the City Infrastructure Delivery and Management System (CIDMS) confirmed that climate specialists were not currently mandated to join critical infrastructure planning meetings. Another example is that the Supply Chain Management Regulations issued in terms of the Municipal Financial Management Act (2003) do not mandate the

inclusion of specific climate change expertise¹⁷ amongst the required technical experts to serve on an infrastructure project's bid adjudication committee.

Cities are not receiving sufficient support to prepare successful, high quality GCF applications: GCF projects by their nature are intersectoral, with many departments, and spheres of government, needing to be involved in their preparation. Strong processes and systems are needed to enable coordination. These, in turn, require clearly designated project management specialists to manage them. One interviewee felt there was a deficit in "mid-level coordination" in the South African public sector, citing the CSP as an exception and an example of what is needed more widely. Currently, there is only generic international material provided by the GCF for all countries available on the internet to support cities as they conceive and scope projects, as well as prepare applications.

There are no dedicated national resources to help guide cities in preparing an application, navigating the potential pitfalls of selecting an appropriate AE, particularly one who has experience in the sector the project is focussed on, as well as navigating the bureaucracy of the GCF. It was mentioned that there was more government support to the private sector, ensuring that they reported on climate change issues than to cities. DEA has developed an investment framework, but it is very high level and there needs to be specialist support and tools tailored to the South African context. In addition, there is no specific technical support from the GCF beyond brief engagements on a project idea.

DEA, as the South African NDA, stated that it does not have capacity to scrutinise and strengthen the detail of an application. It assesses whether the application meets the GCF investment criteria: is it paradigm shifting? what are the co-benefits, like job creation, economic growth and sustainability? do the sponsors have the necessary liquidity and is co-financing in place?

National tools and frameworks are not optimised or leveraged for the GCF application process: For example, there is no agreed vulnerability assessment method in South Africa, so vulnerability assessments may use different starting points and assessment criteria. The effect of this variance could lead the assessor to draw different conclusions. Where national standards are available, these may not be fully enforced.

The situation is however improving as it was mentioned that DEA is developing a national vulnerability assessment framework and national GHG reporting regulations are due to kick, albeit with a focus on private companies. Furthermore, the recently published Draft Climate Change Bill sets out a means to achieve national adaption objectives and emission trajectories. The Bill calls on Provincial Committees to develop implementation plans to address national sectoral emission targets and identify and map risks and vulnerabilities across the ecosystems, communities, and households that are likely to be affected.

¹⁷ Regulation 29(2) states: "A bid adjudication committee must consist of at least four senior managers of the municipality or municipal entity which must include- (i) the chief financial officer or, if the chief financial officer is not available, another manager in the budget and treasury office reporting directly to the chief financial officer and designated by the chief financial officer; (ii) at least one senior supply chain management practitioner who is an official of the municipality or municipal entity; and a technical expert in the relevant field who is an official of the municipality or municipal entity, if the municipality or municipal entity has such an expert."

However, others reported that they felt that the GCF's generic guidelines and tools were sufficient and the lack of South African specific tools was not a barrier to the successful preparation of an application for GCF funding.

What is clear is that South Africa has regulatory requirements, guidelines and grants that could help and support a GCF application (through better planning and ensuring that plans and projects deliver national development goals). The challenge appears to be a lack of understanding and capacity to leverage these specifically for a GCF application.

Whilst some interviews suggest that the generic guidance is useful, there are a number of gaps, including: a lack of awareness at city level of how the South African planning and grant systems could support a GCF application, and a lack of awareness more widely of the potential to access GCF funds.

Some regulations, although important in mitigating fiscal risk, deter the preparation of GCF applications:

For example, Section 33 of the Municipal Finance Management Act requires that a municipal contract that exceeds three years requires full Council approval and the notification of provincial and national government. One interviewee stated that this could potentially discourage cities from signing the longer-term contracts that are typically needed for infrastructure investment that responds to climate risk and vulnerability. Another example is the Energy Efficiency and Demand Management Grant which is based on an annual application to Department of Energy (DoE). One interviewee stated that there are three potential hurdles if they want to persuade the municipality to do something climate related. Firstly, the DoE has to review the technical merit of the application; then the project goes to Treasury for their approval. Finally, there is the stakeholder engagement and social safeguards approval process. The result is that there may be delays in the process, which could discourage applications.

Cities need to use conditional infrastructure grants more innovatively: Because the GCF prefers to provide loans, rather than grants to South Africa (as a middle-income country), cities need to think how they can use their infrastructure grant funds more innovatively to leverage combinations of both grants and loans from the GCF. For example, at the options stage, when considering a new housing development, increasing the level of insulation and energy efficiency in houses, including storm water drainage systems, and ensuring adequate public transport always costs more. Consequently, the difference between standard options and these more climate responsive ones may be eligible for climate finance support. Moreover, the chance of mobilising GCF funds may be increased if infrastructure grant money was deployed to partially cover some of these extra costs. This sort of options analysis and flexibility around the deployment of grant money is important and could be encouraged by either requiring an options analysis and/or technology solution through grant conditions. This should then be supported by appropriate supporting guidance to ensure cities have the expertise to carry out the necessary analysis and design.

The structuring of infrastructure grants does not explicitly address climate change: This is seen to make it difficult for cities to develop climate response projects and programmes, as described above, and also to encourage the more innovative use of grants to help leverage finance from the GCF. Currently, grants are disbursed on the basis of grant conditions prescribed each year in the Division of Revenue Act.

Simply because these conditions do not specifically require climate responsive investment is not a reason not to do it. As long as core grant conditions have been met, there should be the flexibility and the possible use of incentives within grant conditions to maximise the potential to leverage climate finance.

Accredited entities do not provide sufficient guidance to support the submission of high quality applications: South Africa currently has two nationally accredited entities to the GCF: the Development Bank of South Africa (DBSA) and the South African National Biodiversity Institute (SANBI). The most relevant national AE for cities is the DBSA. They have competence in infrastructure financing and a better risk rating, and can implement larger projects than SANBI. SANBI's competence is primarily in biodiversity conservation and management. Interviewees felt that the DBSA could do more to support cities to develop GCF applications. For example:

- DBSA is setting up a GCF capitalised climate change unit. However, their approach of informing cities that they can supply money if the cities can supply the projects, has been described inadequately. At present, there is no narrative around the transformative approach and scale of potential change that is expected by the GCF and which the DBSA hopes to achieve through the facility.
- AEs need to provide the leadership, vision, and capacity to support South African cities in their development of applications.
- A particular challenge for South African project sponsors/developers is the fact they need currency hedging, as the GCF operates in US dollars. This is an issue that DBSA should be able to help cities with.
- Some respondents felt that there needs to be more AEs to inject more competition into the market. For example, there is a hope that some of the commercial banks, such as Nedbank, will become accredited.
- All development banks, such as the DBSA, blend the GCF's money with their own money. This is important for the GCF, as it contributes to their ability to claim leveraged funds. One interviewee stated that the GCF is looking to leverage US\$ 3 for every US\$ 1 it disburses. However, Development Banks lend out the GCF money at much higher rates, alongside their own money. So, ultimately what is originally a cheap source of finance is loaned to a city at a much higher rate. Anecdotally, this means some cities can raise finance in the bond market at a lower rate. This potentially has a significant impact on cities' interest in accessing GCF funds.
- National Treasury does not typically encourage development finance, including climate finance, that subsidises the cost of borrowing for cities, if it crowds out private sector participation. For example, they would prefer climate finance to allow innovation in the structuring of finance, such as being able to encourage longer repayment schedules, rather than simply lead to lower interest rates on a loan. The focus of climate finance on enabling the climate components of a

project should help crowd in private sector finance by taking care of the additional costs associated with climate responsiveness, thus improving the attractiveness of a project.

The DBSA has identified a number of challenges:

- There is a need to raise awareness internally within the DBSA as to the opportunities presented by the GCF and how they can be accessed. Progress has been made on this and there is a growing awareness in the DBSA around climate finance, but it is likely opportunities are still not being maximised.
- There is a lack of capacity in cities to identify and develop a pipeline of projects that would potentially qualify for GCF finance. Cities are not fully aware of the potential of climate finance and thus some opportunities are being missed. For example, access to the PPF to help create scale and then frame and prepare the programmes in a manner that will maximise the potential to access GCF finance, is lacking.

In summary, AEs need to put more resources into both raising awareness internally and assisting cities at the earliest stages to identify and frame potential programmes.

The process and approach to coordinating the preparation of GCF proposals in South Africa requires strengthening: This will grow in importance as the number of applications within South Africa potentially increase. Consequently, the framework and process for reviewing and approving GCF applications needs strengthening. This would enable roles and responsibilities, timescales and appropriate procedures in terms of project scrutiny and approval at the national level to be more clearly defined. Finally, the South African process of identifying and preparing GCF proposals would benefit greatly from a more strategic approach avoiding piecemeal “project by project” approaches. Instead, a consolidated set of urban infrastructure projects that adhere to a clear vision for transformative change in the country is required.

The GCF represents a challenging but viable source of finance for cities, including some grants, but most likely loans: GCF applications come with high transaction costs associated with meeting the criteria set out in the GCF RMF (e.g. the GCF is there to support not just projects, but paradigm shifts to a low carbon climate resilient trajectory). Nevertheless, the GCF still provides potentially very attractive financing rates and has significant amounts of capital, which are due to grow.

For example, we were informed that the GCF will lend at a rate of 2.5% with a 11-year grace and 40-year payback period. Whilst middle income countries such as South Africa are supposed to take loans from the GCF and secure private sector participation in the financing of projects, a small portion of grants was still possible for South Africa, but a strong case is needed if the preference for restricting middle-income countries to loans is to be changed. There are no policies in the GCF on what proportion of grant is available to a middle-income country other than it's not preferred; thus, grants are only likely to be able to be secured on a case by case basis as a part of the total project sum.

It is not straight forward to determine what the quantitative difference might be between borrowing from domestic capital markets and a GCF loan interest rate that might be offered by an AE once USD/rand hedging, management fees and profit have been added on top of the 2.5%. Work done during the first phase of this project found that two cities were able to raise capital, from a recent Green Bond issue with a 10-year maturity at an interest rate of between 10% and 11%. What is clear is that the potential rate holidays (11 years) and long pay back periods (40 years) may suit certain types of capital projects and city circumstances better than the 10-year repayment schedule.

The GCF is the largest source of climate finance for cities: Currently, the GCF has US\$ 10.3bn pledged. Other sources of funds are available, but they are smaller and face diminishing replenishments. For example, the Global Environment Facility (GEF) has seen a 40% reduction in the replenishment of its climate window and it is currently seeking a leverage ratio of 1:8 from middle income countries. However, funds like those from GEF could still be used as a means of financing a pilot, which could then be scaled up with GCF funds. The Adaptation Fund, which has traditionally been funded with 2% of the revenue from certified emissions reduction (CER) purchases, has seen its resources dramatically drop due to the collapse in the price of CERs. Recently, there was an agreement that the Adaptation Fund would be used to service the Paris Agreement, but this was heavily caveated by donor countries. The Climate Investment Funds (CIF) is another prominent climate finance facility, with US\$8.1 bn in pledges/commitments, that works with multi-lateral development banks as implementing agencies.

Bilateral donors have made climate finance available through their development banks and agencies such as KfW, and the UK Department for International Development (DfID)'s International Climate Fund. Also, multilateral development banks such as the European Investment Bank (EIB) have pledged to make sure that 30% of their financing can be classified as a "climate action". However, these funds are smaller than those available through the GCF; development banks, such as the EIB, are also seeking funds from the GCF through their status as accredited entities.

South Africa has been in a relatively strong position compared to other countries in Africa because strong domestic capital markets and emerging green finance capabilities. This provides a significant opportunity for South African GCF proposals to explore innovative ways of financing transformational change. Projects should look at using funds from the GCF to mobilise finance from the South African capital markets.

There are other sources of finance that could leverage funds from the GCF. The DBSA has set up its own facility to help smaller municipalities in South Africa. AFD has TA funding available to help cities prepare spatial plans, and climate change plans, as well as develop programmes of climate resilient infrastructure projects. They are also seeking to develop the green finance sector in South Africa and have resources to help cities structure green bonds and other innovative green finance mechanisms. The DBSA also suggested using funds from GEF to help develop a pipeline of projects across all municipalities to enable a large scale GCF proposal to be prepared by the DBSA.

The GCF needs to provide more guidance to countries on its expectations: Interviewees stated it was unclear what amount of money may be available to South Africa in terms of both grants and loans,

beyond broad a principle of preferring loans and private sector participation from middle income countries like South Africa. In addition, anecdotal evidence suggests that the GCF is struggling to meet the demand for funding with both donors and recipients frustrated at the slow disbursement of funds by the GCF.

4 CONCLUSIONS: LINKING PROJECTS AND CLIMATE FINANCE

The emerging themes discussed in Section 3 suggest that the barriers to access climate finance for cities are multi-faceted and will thus require multiple interventions to address. Insufficient knowledge and capacity to address the complex requirements of the GCF, an insufficiently developed climate-ready project pipeline, as well as a lack of appropriate project management skills are particularly prominent challenges. Correspondingly, there appears to be a need for additional guidance and support from National Government to cities to help address these gaps, including the promotion of a more proactive and city-supportive stance by AEs.

One immediate barrier identified by DBSA is a supply side problem in terms of a pipeline of credible projects for AEs to take up and finance. A solution to this dilemma must have two dimensions. Firstly, an initial set of city-level climate responsive projects that can support GCF applications by DBSA and others need to be identified and prepared for entry into a South African city pipeline as soon as possible. Secondly, in the longer term, there needs to be an institutional mechanism that ensures that pipelines of climate responsive projects are regularly augmented and updated as part of the wider city planning processes.

In order to develop recommendations for increased access to climate finance, it is important to unpack some of the complexity around creating a pipeline for climate responsive projects. The complexity is comprised of:

1) **Types of Cities** - and their finance requirements:

- a. Larger well-resourced and capacitated cities are looking for loans and guarantees and access to the local commercial market on the best possible terms. These larger cities do not require subsidised interest rates, but instead more innovative structuring allowing longer repayment schedules. Some TA support to help them access the commercial market would also be helpful.
- b. Smaller cities with less resources and capacity require TA support, grants and blended concessional finance to enable increased access to the local commercial market.

2) **Types of projects** - require different types of climate specialist inputs:

- a. *Primary Climate Responsive Project*: Specific climate responsive projects whose main purpose and objectives is to increase and promote climate resilience and low carbon development, which must be designed by climate and sector specialists from the outset, e.g. flood protection, renewable energy.
- b. *Inherently Climate Responsive Project*: New infrastructure from different sectors whose main purpose is not climate change *per se* but, because they are planned efficiently and

deliver government objectives such as densification, will inherently help cities become more climate responsive. However, more could be done as it is unlikely to have maximised its potential climate responsiveness. No specialist climate inputs are necessarily required.

- c. *Climate Mainstreamed Project*: New infrastructure that neither has a main purpose nor an inherent climate resilience benefit but could benefit from an early and specific intention to mainstream climate responsiveness. As an example, this would focus on ensuring new housing developments use improved insulation standards and require early inputs from climate specialists.
- d. *Climate Integrated Project*: Projects that have already been designed that could retrospectively have climate responsiveness integrated within them and requires review by climate specialists, e.g. building refurbishment.

3) **Types of lenders** – what they can provide:

- a. DFIs that need to disburse funds to meet targets on climate finance. They can provide TA, grants and innovative financing mechanisms to stimulate local markets.
- b. Local commercial lenders are not particularly interested in climate projects above standard municipal project portfolios other than the fact that they may be better designed with less risk.
- c. The GCF is a large specialist fund that requires demonstrable and significant climate additionality. The GCF needs to show it is mobilising the private sector.

The table below shows how these variables form a typology that could help shape how CSP supports cities to be more climate responsive in the future.

Table 1: Typology for Cities and CSP to Identify Projects with Climate Finance Potential

	Type of Project	Type of Finance	Support
Well-Resourced City	Primary climate responsive project	Mixture of some grants from GCF and some TA from AFD, and primarily loans and guarantee mechanisms for own bond use	Support and capacity building on what a good project looks like, what a low carbon, climate resilient city would be able to access in terms of climate finance, grants, TA, and loans. Explore linkage with ICDG to specifically push climate responsiveness
	Inherently climate responsive project	GCF, development banks loans and guarantees	Support and incentives to encourage greater ambition to maximise potential and become a climate mainstream project
	Climate mainstreamed project	GCF grant and loans, TA and loans support from development banks	Support to ensure climate officers are included in critical decision making

	Climate integrated project	DFI TA support and loans	Ensure that systems and mechanisms require review of projects by climate specialists
Less Well-Resourced City	Primary climate responsive project	TA support and use of consultants to support cities to identify and prepare concept notes on specific climate responsive projects	Help broker and put cities and potential TA providers in contact
	Inherently climate responsive project	Soft loans to be blended with commercial finance. TA support to integrate additional climate responsive elements into projects	Encourage cities to include climate change officers in key decision making over project conception and preparation
	Climate mainstreamed project	Grants and soft loans to offset higher short-term costs of project preparation and implementation	Encourage cities to include climate change officers in key decision making over project conception and preparation
	Climate integrated project	DFI TA support and grants	Ensure that systems and mechanisms require review of projects by climate specialists

This typology could be used for cities and CSP to help identify projects with climate finance potential and integrate additional climate components as appropriate. It should also help structure concept notes for climate finance in terms of the mix of finance required and scope for innovation.

To conceive and prepare climate responsive projects most effectively, interventions are needed early in the project planning process. By the time the Built Environment Performance Plan (BEPPs) are prepared, most of the critical decisions on project planning have already been taken, thus reducing the potential to have a significant influence. In addition, interventions are needed to influence and improve the climate responsiveness of the IDP and SDF processes, which in turn will help ensure that the BEPP process is more climate responsive.

5 RECOMMENDATIONS

Transformational change is required in South Africa to adapt to inevitable climate change, as well as contribute, with the necessary international support, to the global efforts to reduce emissions. It is difficult to quantify the scale of the change required, although it is certainly significant. The current system is not sufficiently driving climate responsive planning in South Africa, nor is it supportive enough of cities' access to sources of climate finance such as the GCF. There are multiple reasons for this, including: issues around city capacity and insight; their preparedness to compile successful applications; direction, coordination and support at the national level; and uncertainty as to how the GCF RMF is interpreted in practical terms.

Applying for GCF funding is complex – as is applying for any substantial infrastructure finance - and cities require support in the application process. In some instances, South African regulations may not be optimal in terms of encouraging GCF applications. Furthermore, there are gaps in the support offered by South Africa's AEs to cities to apply for GCF finance. However, the GCF does have money ideally suited to cities, and, cities are a suitable client for the GCF. Furthermore, the GCF represents a significant source of climate finance. Finally, conditional grants could be better leveraged to strengthen cities' access to climate finance.

Recommendations to address the emerging themes identified through our research are set out below. The key recommendations are then included below each theme.

- *There is little progress in applying for GCF funds by South African cities.*
- **Recommendation 1 - Support the immediate development of a pipeline of projects:** A concerted effort, spearheaded by the NDA, DBSA and National Treasury, is needed to encourage and support South African cities to access the GCF. To address the issue identified by the interviewees that there is no pipeline of suitable projects, as well as the need to move away from a piecemeal project by project approach to a transformative programme, a pipeline of climate responsive projects from a range of cities needs to be prepared. These projects could then be considered by DBSA for their Climate Responsive City Facility . Immediate steps include a once-off project to visit all the cities, identify potential projects that could be appropriate for GCF funding, and develop concept notes for them to be given to DBSA and other AEs. These projects should emerge from the Integrated Development Plan (IDP) & Spatial Development Framework (SDF) and BEPP planning processes with clear linkages to meeting city level as well as national development objectives and a clear demonstration of the climate responsiveness aspects. The projects identified should cover all the categories in the project typology and the concept notes should be informed by the financing typology.
- **Recommendation 2 - Create a panel of experts to scrutinise and support the maintenance of a pipeline of climate responsive projects:** In the longer term, a peer review panel of city-level climate change experts could be established to review draft IDPs, SDFs and

make recommendations on how emerging projects could be “climate-proofed” and/or positioned for the DBSA Climate Responsive City Facility pipeline. The CSP should consider supporting interventions to strengthen cities’ IDP and SDF annual budgeting and planning processes. Cities could also be encouraged to draw in external expertise to prepare GCF applications. Detailed guidance for cities on applying for GCF funds within the South African context is needed.

- *Cities are aware of climate finance and are interested in knowing more.*
- **Recommendation 3 - Encourage early consideration of climate responsiveness in city priorities and projects through engagement and revision of BEPP guidelines and support to cities’ core planning processes:** In the short term, cities could be supported to better prepare themselves to apply for GCF funding by mainstreaming climate responsiveness into their planning, budgeting and project preparation systems, through revised BEPP guidelines. Armed with an understanding of the different types of projects, types of financing and an understanding of cities’ needs, interventions can be made earlier in the planning process to identify potential projects early and influence the mainstreaming of climate responsiveness before critical decisions are fixed.
- *Cities require strong capacity, resources and project management skills to prepare successful GCF applications.*
- **Recommendation 4 - Strengthen project management skills for conceiving, preparing and implementing large climate responsive projects:** Training and capacity building around project management, specifically for conceiving and preparing projects suitable for climate finance and GCF applications could enhance the development of projects and project pipelines. Further work needs to be undertaken on estimating what a typical GCF application requires in terms of skills, resources, experience, so that a cost-based rationale can be provided for cities either strengthening in-house capacity or buying in consultancy services, as appropriate.
- *Officials tasked with climate change lack sufficient resources and profile to influence large municipal programmes.*
- **Recommendation 5 - Ensure climate expertise is required in critical decision points in project planning and procurement as well as ongoing infrastructure management and delivery:** Regulatory provisions that currently do not require the involvement of climate expertise in municipal decision-making and procurement processes (while requiring that other areas of expertise, such as engineering and finance) should be identified and revised¹⁸, so that climate experts and/or evidence pertaining to climate responsiveness, is included in the critical decision making. This recommendation should be extended to all infrastructure planning decisions at the municipal level. To strengthen the consideration of climate responsiveness in

¹⁸ For example, regulation 29 (2) of the Municipal Supply Chain Management Regulations should be amended by Treasury to recommend that climate expertise should be included as part of all infrastructure procurement decisions.

ongoing infrastructure delivery and management, CIDMS guidelines should be updated to require that climate and sustainability expertise be included at specified decision points.

- *Cities are not receiving sufficient support to prepare successful, high quality GCF applications:*
 - **Recommendation 6 - A programme of support needs to be prepared to encourage and support more climate responsive planning by cities.** Changes to BEPP guidelines and possibly to grant conditions need to be accompanied by a comprehensive programme of support (see recommendations 8, 10 and 12 for more details) that includes supporting access to climate finance for infrastructure investments.
 - **Recommendation 7 - Provide technical training on preparing projects in different sectors for climate finance:** Additional training to support cities to conceive and prepare projects, as well as their applications for climate finance is needed. This support should include initial training on how cities should address GCF criteria in their project conception and preparation. It should then provide ongoing support and review as cities to develop their projects and prepare applications. Units, such as DEA's Climate Change Flagship Programme, could consider offering such training, as well as ongoing support and review functions to cities as part of their preparation of GCF applications, with extensions to capacity as needed.
 - **Recommendation 8 -: Prepare guidance on what a climate responsive South African city looks like:** Guidance is needed (including consideration of how this should reflect into IDPs, SDFs and BEPPs) on the principles of a low carbon, climate resilient city. In other words, what would a climate responsive city look like in the South African urban context? It should address the need for innovation and transformation and different visioning/scenario planning techniques. Developing this vision at the city level, and planning according to the guidance, is then left to the city, with national level specialist support available on request.
- *National tools and frameworks are not optimised or leveraged for the GCF application process.*
 - **Recommendation 9 – Application procedures for facilities such as the GCF should clarify the use of tools and evidence to support the preparation of climate responsive actions/projects:** Application procedures should clarify the use of specific tools and standards that will support the preparation of projects that could be eligible for inclusion in GCF applications. Where possible, these should require the use of/alignment with national guidelines, standards and assessment methodologies. Examples include adhering to regulations around building in flood plains, minimum standards in building codes, principles such as densification and transport orientated development, the finalisation of a national framework for vulnerability assessments. Where necessary support should be available to cities to prepare GHG inventories and a baseline suitable for GCF applications. Other useful tools could include climate change risks assessment process, water resource/availability planning guidance, and updated flood management and planning guidance incorporating climate change produced by the Department of Water and Sanitation. These tools should be used to develop

the evidence base to support the development of low carbon, climate resilient infrastructure options, which can then be compared with standard options using a wider cost benefit analysis (CBA) (quantifies market and non-market benefits). Current CBA guidance should be reviewed to see if climate responsiveness can be better integrated, including the potential to incorporate values of some non-market benefits, a social cost of carbon, and appropriate guidance on discount rates for climate related projects. Ultimately, the evidence base and evaluation of options produced as part of a standard approach to planning in South African cities should provide the necessary detail, baseline and rationale for a high quality GCF application. The recently published Climate Change Bill should result in nationally consistent approaches to Climate Vulnerability Assessments and Greenhouse Gas Inventories¹⁹.

- *Successful GCF funding applications are demanding, requiring projects with vision and backed by evidence and strategic thinking.*
- *Some regulations, although important in mitigating fiscal risk, deter the preparation of GCF applications.*
- **Recommendation 10 – National Treasury to consider providing a rapid turnaround on applications for well-prepared multi-year investment projects seeking climate finance:** Reassurance and guidance is needed by city planners, infrastructure specialists and CFOs that Section 33 of the MFMA will not be an obstacle from the Treasury's side to well-prepared multi-year infrastructure investment projects. High level commitments from National Treasury, as well as the National Department of Co-operative Governance, that they will respond to Section 33 requests promptly will go a long way to encouraging cities to do multi-year investment planning and budgeting.
- *Cities need to use conditional infrastructure grants more innovatively.*
- **Recommendation 11 – Explore opportunities to use conditional grants to for the preparation and appraisal of climate responsive options for plans and projects:** Options to use existing conditional grants to for the development and appraisal of low carbon, climate resilient options should be encouraged and clarified, including if necessary, amendment to grant conditions. Where grants already have an incentive component, this could be linked to the selection of low carbon, climate resilient options and the commitment to apply for external funding, such as GCF. Any amendments should be accompanied by capacity building and guidance, as well as ongoing support to ensure that they can be implemented. Amending grant conditions can be seen as part of a broader initiative, as set out in all the recommendations in

¹⁹ The Division of Revenue Act has in the past contained a provision that allows municipalities to pledge their conditional grants. The process of application was set out in MFMA Circular 51. This has not worked out as planned leading to the removal of the grant pledge clause from the 2018/19 financial year. Government took a decision not to bail out municipalities, this is set out in the white paper for local government. Government also cannot offer any guarantees leaving municipal councils to make decisions based their available pool of resources.

this report, to strengthen understanding and capacity to prepare projects and access climate finance in municipalities.

- *The structuring of infrastructure grants does not explicitly address climate change.*
 - **See recommendation 11**
- *Accredited entities do not provide sufficient support to enable the submission of high quality applications.*
 - **Recommendation 12 - Encourage AEs to provide technical assistance to improve access of cities to capital markets:** Extend GCF capacity building grants and concessional loans to cities that have sufficiently favourable terms to raise capital on the domestic capital markets.
 - **Recommendation 13 - Encourage more South African organisations to register as direct access entities to the GCF:** More public and private sector organisations should actively be encouraged to become accredited to the GCF to provide greater access to climate finance. These organisations should have experience in the development of infrastructure programmes and be willing to invest in projects as well as invest in getting to know the GCF.
- *The process and approach to coordinating the preparation of GCF proposals in South Africa requires strengthening:*
 - **Recommendation 14 – Sufficient resources and a clear process and set of procedures is needed to enable GCF proposals to be adequately supported, scrutinised and approved:** The framework, process, procedures and timescale for scrutinising and approving South African proposals to the GCF must be clear, and the roles and responsibilities of the various institutions well defined and understood. There must also be sufficient resources allocated to ensure all proposals are adequately scrutinised and that project sponsors receive the necessary feedback and advice. These protocols need to be agreed with line departments who are asked to comment on applications.
- *The GCF represents a challenging, but viable source of finance for cities including some grants, but most likely loans.*
 - **See all recommendations**
- *The GCF is the largest source of climate finance for cities.*
 - **Recommendation 15 - Encourage cities to apply for other sources of climate finance to help enhance their access to capital markets:** Greater understanding and interest in cities to access other forms of finance to support access to the emerging South African municipal bond market and /or GCF applications is needed. Whilst the GCF is the only large-scale source of climate finance, there are other sources that can be accessed as part of a larger initiative (e.g. access to the bond market or a GCF application). The South African Government does

not offer guarantees to investors in municipalities; furthermore, it wants to stimulate the domestic municipal bond market and is concerned that cheap international concessional climate finance may undermine this emerging market. Consequently, eligible cities could seek international climate finance from DFIs, who have specific interest in sustainable cities, to provide technical assistance to prepare programmes, build capacity, extend the tenure of debt repayments, provide insurance or guarantees, etc²⁰.

- *The GCF needs to provide more guidance to countries on its expectations*
- **Recommendation 16 – Encourage GCF to provide greater clarity on conditions for access to finance:** For example, the GCF could provide more concrete guidance on the availability and conditions for South African Cities access to climate finance. Greater transparency and predictability would enhance cities capacity to submit credible applications to the GCF for South Africa.

5.1 SUMMARY OF RECOMMENDATIONS

We summarise these recommendations in terms of roles and responsibilities and timescales and categorise them in terms of:

- 1) The need for additional resources
- 2) The need for capacity building guidance and training – this covers: the need to alter existing BEPP guidelines; effective project management; good practice in project planning and preparation, and what does a climate responsive city look like, the technical aspects of climate projects by sector – There may be scope to combine some of these into single courses.
- 3) Changes and additions to regulations, policies and support tools
- 4) Institutional changes.

Table 2: Summary of Recommendations

Recommendation	Responsibility	Timescale
Additional Resources		
Recommendation 1 – Support the immediate development of a pipeline of projects	National Treasury / DBSA	Immediate
Recommendation 2 – Create a panel of experts to scrutinise and support the maintenance of a pipeline of climate responsive projects	National Treasury / Sector Departments	Within 5 years
Recommendation 12 – Encourage AEs to provide technical assistance to improve access of cities to capital markets	National Treasury / DBSA	Immediate

²⁰ Under the Municipal Finance Management Act all debt, short-term and long-term may only be incurred in Rand and may not be indexed or affected by fluctuations in the value of the rand against any foreign currency. Moreover, a municipality may only issue a guarantee for the debt of an organ of state when such a guarantee is within the budgetary limits of the municipality. The debt of municipal entity under control of another person can only be guaranteed with the approval of National Treasury and the municipality creates a cash-backed reserve equal to its exposure and maintains an insurance policy to the value of its exposure for the duration of the guarantee. These provisions are meant to protect the municipalities and not expose them to too much risk.

Recommendation	Responsibility	Timescale
Recommendation 15 – Encourage cities to apply for other sources of climate finance to help enhance their access to capital markets	National Treasury / DEA	Immediate
Guidance and Capacity Building		
Recommendation 3 – Encourage early consideration of climate responsiveness in city priorities and projects through engagement and revision of BEPP guidelines and support to cities' core planning processes	National Treasury / Sector Departments	Immediate
Recommendation 4 – Strengthen project management skills for conceiving, preparing and implementing large climate responsive projects	Cities Support Programme, National Treasury	Within 2 years
Recommendation 6 – A programme of support needs to be prepared to encourage and support more climate responsive planning by cities	Cities Support Programme, National Treasury	Immediate
Recommendation 7 – Provide training on preparing projects in different sectors for climate finance	National Treasury / DEA	Within 2 years
Recommendation 8 – Prepare guidance on what a climate responsive South African city looks like	DEA	Within 2 years
Regulatory, Policy, Tools and Funding Changes		
Recommendation 5 – Ensure climate expertise is required in critical decision points in project planning and procurement as well as ongoing infrastructure management and delivery	Cities Support Programme, National Treasury	Within 2 years
Recommendation 11 – Explore opportunities to use conditional grants for the preparation and appraisal of climate responsive options for plans and projects	National Treasury / Sector Departments	Within 2 years
Recommendation 10 – National Treasury to consider providing a rapid turnaround on applications for well-prepared multi-year investment projects seeking climate finance	National Treasury	Immediate
Recommendation 9 – Application procedures for facilities such as the GCF should clarify the use of tools and evidence to support the preparation of climate responsive actions/projects	National Treasury	Within 5 years
Institutions		
Recommendation 13 – Encourage more South African organisations to register as direct access entities to the GCF	DEA	Within 2 years
Recommendation 14 – Sufficient resources and a clear process and set of procedures is needed to enable GCF proposals to be adequately supported, scrutinised and approved	DEA / National Treasury	Immediate
Recommendation 16 – Encourage GCF to provide greater clarity on conditions for access to finance	GCF Focal Point	Within 2 years

A suggested plan to kick start the implementation of the recommendations is set out below. It shows the sequencing of the implementation of the first few recommendations. In short, it emphasises addressing the supply side constraints needs to be combined with capacity building; better communication; appropriate amendments to organisational mandates; and, ultimately, stronger evidence bases to support planning and project preparation.

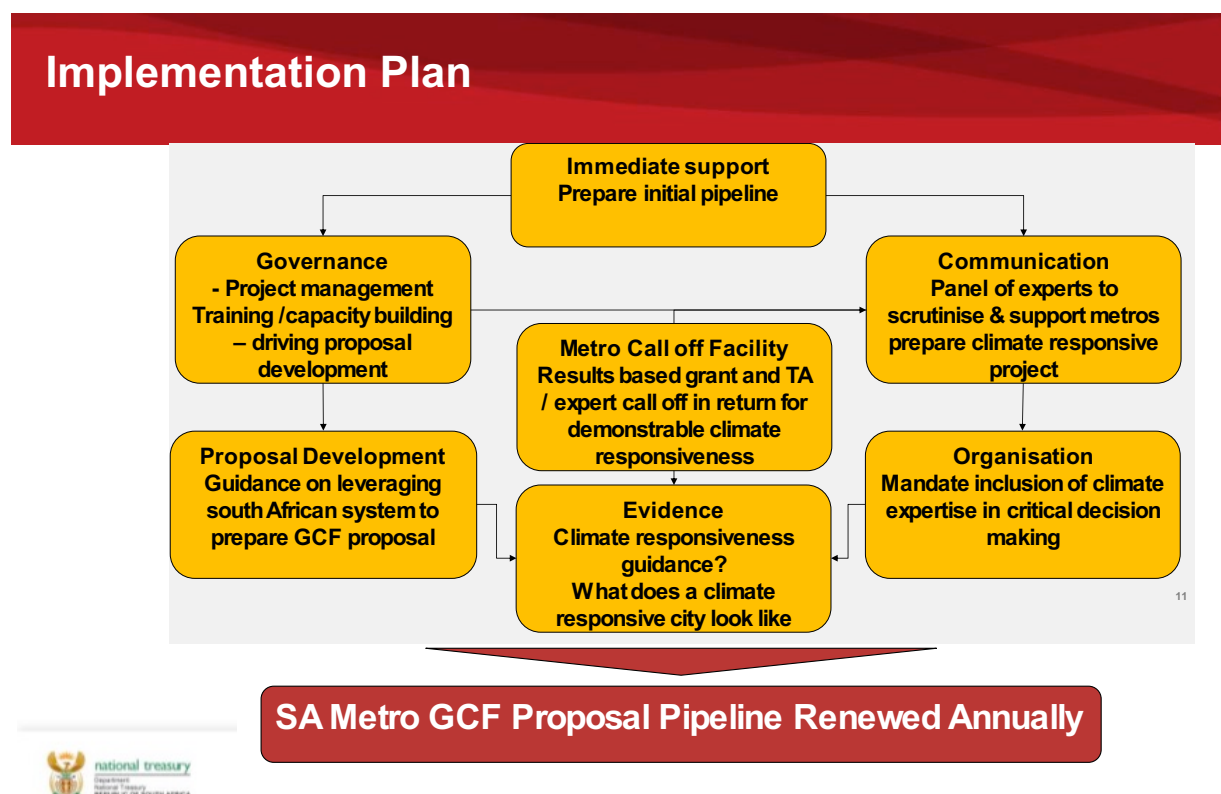


Figure 5: Implementation Plan

ANNEXURE A: AWARDED GCF CITY PROJECTS

Appendix A offers an opportunity to examine at four GCF applications that may be relevant to cities exploring their own application process. In particular, these projects help highlight some key themes:

- **Scale:** Brazil's project entitled, "Financial Instruments for Brazil Energy Efficient Cities (Finbrazeec)," is a 1.3 billion USD investment. This project received a 186M USD loan from the GCF, 9 M USD in GCF grant financing, and the rest of the money through co-financing. Often city-targeted projects are perceived to be smaller in value but looking at projects like this one helps to see the potential financial scale that the GCF can offer.
- **Target:** There are two mitigation projects and two adaptation ones. Seeing city-relevant projects through each of the targets is helpful to potential project planners in understanding what kinds of projects they may develop.
- **Executing Entity:** Bangladesh's project entitled, "Climate-Resilient Infrastructure Mainstreaming in Bangladesh," has selected the Local Government Engineering Department of Bangladesh as its Executing Entity. Given the strong role of local government in South Africa, it may be worth understanding this project's implementing arrangements, as well as the project development process, as a worthwhile case study.
- **Impact Area:** Many of the impact areas of the projects below correspond to the South African cities context. These projects, which look at areas like building increased resilience of vulnerable communities and energy efficient cities, strengthening infrastructure to climate change threats, and increasing generation and use of climate change information, may resonate with the proposals from the Climate Change Flagship Programme and link to the National Climate Change Response Priority Areas and Outcomes.

All information below is provided by the GCF and available on their website.²¹

A.1 PROJECT: FINANCIAL INSTRUMENTS FOR BRAZIL ENERGY EFFICIENT CITIES (FINBRAZEEC)

Responsible Bodies

Accredited Entity: International Bank for Reconstruction and Development and International Development Association (World Bank)

Executing Entity: CAIXA Econômica Federal (CEF)

GCF Results Area: Buildings, cities, industries and appliances

Target: Mitigation

Investment: USD 1.3 billion

GCF Funding: 186M USD (Loan); 9 M USD (Grant)

Co-financing: Private lenders 400M USD, CAIXA Econômica Federal 180M USD, Concessionaires (Equity) 330 M USD, World Bank IPF Contingent Loan (Guarantee) 200 M USD, World Bank (Grant) 1 M USD

²¹ For more information, please visit: <https://www.greenclimate.fund/documents/20182/77885/GCF+-+Project+Fact+Sheets+-+web-ready.pdf/4435ff1f-a3e2-42a7-bab2-8c8aa5115f9d>

Duration: 7 Years; Approved February 2018

Snapshot: Brazil's energy-related emissions have increased 130 percent from 1990-2012, against a Nationally Determined Contribution (NDC) of a 10 percent reduction by 2030. In order to overcome financing barriers and catalyze a significant shift in the trajectory of energy-related emissions, the Financial Instruments for Brazil Energy Efficient Cities (FinBRAZEEC) project, aims to unlock long term private financing for urban energy efficiency projects in Brazil by reducing the credit risk of LEO street lighting (SL) and industrial efficiency projects (IEE) and enhancing their technical quality. The project will create an EE facility hosted at a local public bank, CAIXA Econômica Federal (CEF) and will support CEF in raising private financing for the efficient SL and off-balance sheet financing for IEE by incentivizing local Brazilian lenders to start lending on a "project risk" basis vs the currently dominant "corporate finance."

Project Description: Providing a mix of public and private sector finance to provide funds for reducing energy intensity across Brazil. Brazil has a high potential to achieve energy efficiency at scale given the country's high-energy intensity. Challenges exist, however, in mobilizing government and private investments. These challenges include government constraints caused by fiscal imbalances, and a steep decrease in private sector investment due to a slow recovery from several years of recession. This project focuses on promoting energy efficiency to help Brazil meet its NDC goal by reducing energy demand. It will create a debt facility that catalyses private sector investments and channels loans to help cities adopt a standardized and replicable public-private partnership for street lighting. This will help provide off-balance sheet financing for energy efficiency to the industrial sector.

A.2 PROJECT: SCALING-UP INVESTMENT IN LOW-CARBON PUBLIC BUILDINGS

Responsible Bodies

Accredited Entity: UNDP

Executing Entity: UNDP

GCF results area: Buildings, cities, industries and appliances

Target: Mitigation

Investment: USD 122.6 Million

GCF Funding: USD 17.3M

Co-Financing: Grants—USD 2.3M GEF, USD 2.1M UNDP, USD 8.8M Government of Bosnia and Herzegovina, USD 16.2 M Environmental Funds Loans—32.0 M Government of Bosnia and Herzegovina, 13.5 M Environmental Funds; Environmental Funds (Other) 100K; End-users: 30.3 M (Grant)

Duration: 8 Years; Approved October 2017

Project Description: Reducing emissions from Bosnia-Herzegovina's public sector buildings through better energy efficiency and fuel substitution from fossil fuel to biomass. Bosnia-Herzegovina has a large stock of ageing buildings with high energy consumption and that are heated by high-emission fossil fuels. This is a consequence of neglect and under-investment during and after the Bosnian war (1992-1995), and leaves buildings in urgent need of upgrade. Energy efficiency retrofits and substituting coal and fuel oil to biomass will significantly reduce emissions from public buildings. The project will impact 7-8% of stock, some 360 public buildings. Technical assistance will also help address non-

financial barriers and create supportive policies, regulations, and capacities to support the transformations and encourage replication. The project has an estimated lifespan of 20 years.

A.3 PROJECT: CLIMATE-RESILIENT INFRASTRUCTURE MAINSTREAMING IN BANGLADESH

Responsible Bodies

Accredited Entity: KfW (Kreditanstalt für Wiederaufbau)

Executing Entity: Local Government Engineering Department of Bangladesh

Target: Adaptation

Beneficiaries: 134,350 Direct; 10.4 M Indirect

Investment: USD 80 Million

GCF Funding: USD 40M; Co-Financing: USD 40M (USD 15M German Government Grant via KfW, USD 25M Bangladeshi Government)

Duration: 6 Years (April 2016 - March 2022)

Impacts: Increased resilience of vulnerable communities; Strengthened infrastructure to climate change threats; Increase in generation and use of climate change information

Snapshot: Developing urban infrastructure and safeguarding vulnerable city-dwellers from climate risk. Establishing a national centre of excellence for climate resilience infrastructure, to inform and guide future infrastructure development throughout the country. Providing cyclone shelters and safeguarding critical road access to protect lives in a rural coastal region of Bangladesh.

Project Description: Bangladesh is one of the world's most vulnerable countries to climate risk, notably to cyclones and floods. Coastal districts are particularly at risk from extreme weather, a risk which will be exacerbated by climate change impacts such as increased seasonal variation, higher precipitation levels, and rising sea levels. Three of the country's most vulnerable and poor coastal districts are targeted by the project: Bhola, Barguna, and Satkhira. The project establishes a national centre of excellence to gather, develop, and share climate resilience infrastructure knowledge. Rural infrastructure development will be supported by constructing 45 new cyclone shelters/schools and renovating 20 existing shelters. The shelters built under this project will be used as primary schools in normal times, providing 45 additional shelters/schools and helping educate 18,590 children. The improvement of 80 km of critical access roads to the rural shelters (including bridges and culverts) will also be undertaken, to safeguard access during extreme weather and enhance the adaptive capacities of local communities. Pilot climate-resilient urban infrastructure projects will also be undertaken in the city of Satkhira. Urban projects may include improvements to drainage, flood protection, sanitation, water supply, and transport, with priority given to the most vulnerable such as the inhabitants of city slums.

A.4 PROJECT: FIJI URBAN WATER SUPPLY AND WASTEWATER MANAGEMENT PROJECT

Responsible Bodies

Accredited Entity: Asian Development Bank

Executing Entity: Fiji Ministry of Finance

Target: Adaptation

Beneficiaries: 290,854 (32% of the population)

Investment: USD 222 Million

GCF Funding: USD 31.04M; Co-Financing: USD 190.96M (USD 67.7M ADB Loan, USD 38M EIB Loan, USD 85.26M Fijian Government)

Duration: 7 Years (January 2016 - December 2022)

Impacts: Access to safe, piped water for the Suva City area; Increased sewer coverage and improved WWT capacity at the Kinoya plant; Stronger, more sustainable water management capacity

Snapshot: Building and renovating infrastructure to improve access to safe water and sewerage systems in the greater Suva area of Fiji. Creating a new river water intake station on the River Rewa and improving the Kinoya wastewater treatment plant and associated sewer coverage

Project Description: Over half of Fiji's population is urban with further growth expected, particularly around Suva City, the national capital. Urban infrastructures are vulnerable to extreme droughts and flooding as well as sea level rise, causing threats to the environment, health, and social and economic development. Urban water supply and sanitation are particularly under strain, with service interruptions common during both drought periods and heavy rainfall periods. Existing sewerage infrastructure covers only 36% of the Suva City area. Improving water supply and wastewater management is considered essential to Fiji's sustainable development, but its current debt levels constrain its ability to fund such vital adaptation measures.

The project will strengthen water supply through the design and construction of a new water intake by the River Rewa, with a pumping station, wastewater treatment (WWT) plant, clear water reservoir, and pipeline to increase water production by 30,000 m3 per day. This will improve climate resilience by taking water from further up the river system to avoid salinity. Wastage will be reduced through meter replacement and improved leak detection and repairs. Wastewater management will be strengthened by upgrading and increasing the capacity of the Kinoya WWT plant, improving sewer coverage, and adding new treatment facilities. The project will also strengthen water management and delivery capacity of the responsible institutions.

ANNEXURE B: LIST OF INTERVIEWS

Interviews were held with the following people to inform this report:

- Ms. Reitumetse Molotsoane – Director: Climate Change Response Near-term Priority Flagship Programmes, Department of Environmental Affairs
- Mr. Zaheer Fakir – Chief Policy Advisor: International Governance and Relations, Department of Environmental Affairs
- Ms. Anthea Stephens – Cities Support Programme, National Treasury
- Ms Nomsa Zondi – Climate Change Specialist, Development Bank South Africa
- Carl Bernadac and Camille Chastagnol – Investment Officers, *Agence Francaise de Developpement*
- Mr David Savage: City Support Programme National Treasury
- Mr Steven Kenyon: National Treasury
- Mr Sipho Bhanisi: National Treasury