



V-LED | STIMULATING
URBAN CLIMATE ACTION



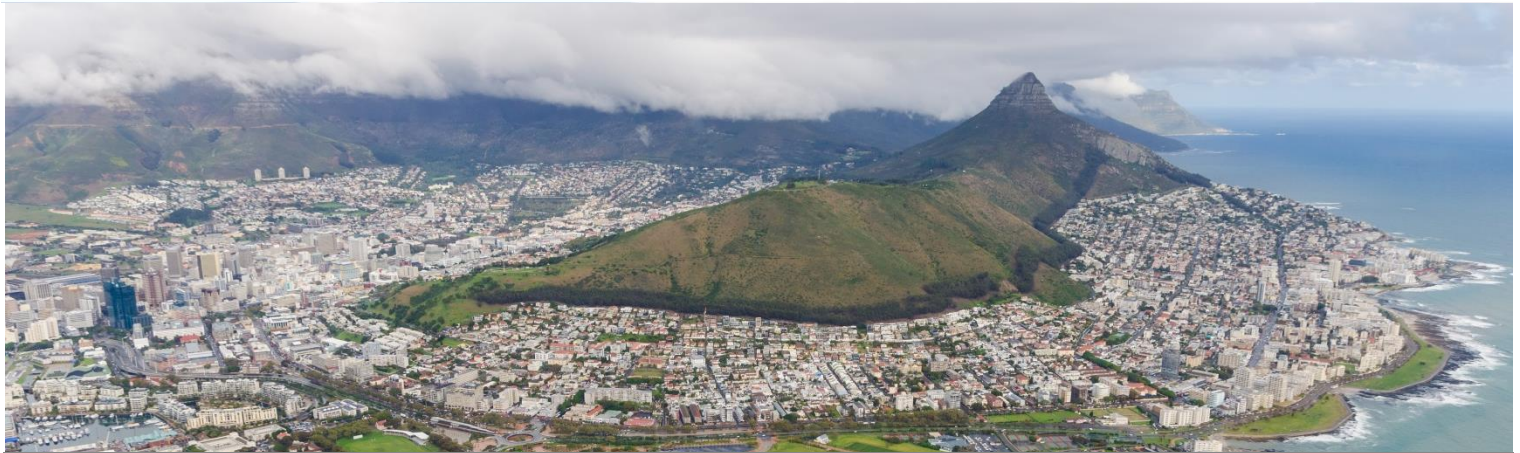
tools

dialogue

learning

research

VERTICAL INTEGRATION AND LEARNING FOR LOW-EMISSION DEVELOPMENT IN AFRICA AND SOUTHEAST ASIA



Input Paper: V-LED Africa Workshop, 23-25 April, 2018

Climate Finance in South Africa

By One World Sustainable Investments, Sustainable Energy Africa and adelphi

Image: City of Cape Town, South Africa @ lenisecalleja.photography - shutterstock.com

Introduction

The V-LED project (Vertical Integration and Learning for Low-Emission Development) aims to strengthen multi-level climate governance processes in Kenya, South Africa, Philippines and Vietnam. The project is part of the International Climate Initiative (IKI) from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and is implemented between 2015 and 2019.

Throughout these four years, the consortium is observing and analysing national climate governance processes in the countries with the aim to understand what factors stimulate climate action at the local level and how coordination across and between government levels can enable local climate action. In South

Africa the study specifically focuses on climate finance.

Towards the end of the project, the consortium will present its research findings in four country studies and one synthesis report. This input paper for the V-LED Regional Workshop Africa shares some of our observations and preliminary findings as a starting point for discussion.

We very much welcome your comments and suggestions – during the workshop or by writing to: v-led.team@adelphi.de.

The V-LED consortium:



Supported by:



based on a decision of the Parliament of the Federal Republic of Germany

Climate change governance in South Africa

Climate impacts and sources of GHG emissions

As a developing country, South Africa is in the relatively unusual position of having to curb its global carbon emissions at the same time as adapting to the impacts of climate change. The country is a high carbon emitter, ranked as the 13th highest emitter in the worldⁱ. The government seeks to limit national emissions over the period 2025–2030, under a Peak Plateau and Decline trajectoryⁱⁱ. At the same time, exposure to climate impacts is high, felt in intensified extreme weather events, water scarcity and food insecurity.

South Africa's Nationally Determined Contribution (NDC) to the UNFCCC under the 2015 Paris Agreement therefore attempts to balance the country's mitigation obligations with its adaptation needs. With this, South Africa seeks the technological and financial capacities to enable the implementation of its climate responses.

South Africa's NDC is predicated by sustainable development objectivesⁱⁱⁱ. The co-benefits of climate action need to underscore mitigation efforts of the country's triple challenges of poverty, equality and employment^{iv, v}. This is largely because climate change has lower priority than other more urgent socio-economic development and environmental matters across all spheres of government.

Climate change is tackled as a stand-alone challenge, with many examples of how climate change action takes place in parallel with mainstream operations. Although widely acknowledged as a development issue, climate change is not being treated as integral to achieving development goals.

The country is committed to transitioning towards a more sustainable and developmental future, but this is a huge task given its energy intensive industrial sector and an economy dependent on coal for 93% of its electricity generation. Key economic sectors such as mining are locked in. Concomitantly,

the energy sector, along with the mining sector, generates a significant portion of the country's jobs. Furthermore, the country's infrastructure and sub-national economies are tied into a coal-driven, highly centralised energy system.

Box 1: South Africa's climate regime

Main climate impacts

- Increase in temperatures and frequency of dry spells. Projected tendency towards decrease in the number of rain days but an increase in heavy rainfall events. Coastal areas affected by heavy waves and storm surge.

Largest sources of GHG emissions

- South Africa's GHG profile is dominated by emissions from the energy sector that is highly dependent on coal.

Key climate policies

- National Strategy for Sustainable Development and Action Plan (NSSD 1 2011-2014)
- The Green Economy Accord (GEA) within the Framework for the New Growth Path
- National Climate Change Response White Paper
- Draft National Adaptation Strategy (NAS)
- A Climate Change Bill is currently being developed

Key climate governance bodies

- The Department of Environmental Affairs (DEA) has the mandate for coordinating South Africa's climate change responses.

Key climate finance mechanisms

- The South African National Biodiversity Institute (SANBI) is accredited to access the Adaptation Fund (AF) and the Green Climate Fund (GCF).
- The Development Bank of South Africa (DBSA) is accredited to access the GCF for larger scale finance

Cities are important to the transition of the country's energy and emissions profile. The country is 64% urbanised and cities are energy intensive nodes. A study by Sustainable Energy Africa (2017) shows that cities, which produce 76% of GDP, consume 40% of national energy and produce 39% of the country's emissions. At the same time, climate impacts are largely felt at sub national levels, with increasing threats to delivering effective, equality-based basic services and enabling socio economic development^{vi}. Climate impacts are acutely felt in water services delivery, sustainable land management and local food security and cities face increased

costs and livelihood losses from extreme weather events.

Reconciling the immediate need to respond to these impacts with emission reduction objectives is a tough call. Climate impacts have tangible and often immediate implications for advancing poverty, employment and equality goals. Thus, while South Africa is evolving its science-policy interface on climate responses, a convincing case as to how climate action resolves the conflict and tension inherent to the transition toward low carbon development, has yet to be made. Job losses and gains are important to resolving the tension. Moreover, climate action can create better quality jobs, through the creation of 'green jobs'^{vii}.

Key climate policies and governance bodies

South Africa's climate policies are framed by its Constitution (Act No. 108 of 1996) stating that "everyone has the right" to an environment that is not harmful to their health or well-being; and to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures".

Informing the NDC, specific climate related policies include the National Strategy for Sustainable Development and Action Plan (NSSD 1 2011-2014), The Green Economy Accord (GEA) within the Framework for the New Growth Path, and the National Climate Change Response White Paper. Apart from the Economic Development Department's leadership of the GEA, all of these policies were developed under the Department of Environmental Affairs (DEA).

DEA has the mandate for coordinating South Africa's climate change responses. The evolving but still Draft National Adaptation Strategy (NAS), along with the proposed Climate Change Bill, aims to articulate the institutional roles and responsibilities of sectors and sub national government for implementing climate responses.

Some provinces and municipalities have developed climate and energy response strategies and action plans. Many of these

specify sustainable energy plans that have the dual objective of promoting clean energy solutions and establishing greater levels of energy independence from the country's highly centralised energy system. Climate resilient water management solutions are increasingly high on the agenda, with cities and provinces facing serious water crises.

To improve local climate action, some national government departments are engaged in city support programmes (CSP), such as the DEA's city support programme within which both the adaptation and mitigation teams are running trainings and support specific to climate change. The National Treasury's (NT) CSP supports the metros to scale up and align adaptation and mitigation strategies with city plans.

Key finance mechanisms

Global climate finance can be accessed through a few South African accredited entities to the global climate funds. The South African National Biodiversity Institute (SANBI), a DEA agency, is accredited to access both the Adaptation Fund (AF) and the Green Climate Fund (GCF), while the Development Bank of South Africa (DBSA) is accredited to access the GCF for larger scale finance.

The national fiscal system, particularly the Intergovernmental Grants (IGGs) which benefit local government, yield a limited but existing flow of climate finance. These are mainly administered under NT, although the Energy Efficiency (EE) IGG is administered by the Department of Energy (DoE). Domestic climate finance is also available through sectoral and municipal development plans submitted periodically to national government for approval and budget allocations.

Apart from the EE IGG, none of the national government transfers or grants relate specifically to energy and climate change mitigation and adaptation. Noting that these transfers are specifically geared towards the poor, with innovative planning and budgeting they can be utilised for climate response purposes if they are directed to alleviating poverty.

Another key source of climate finance is bilateral development partner funding. The European Union, the British High Commission, the German Government, the Government of Flanders and the Danish Energy Agency are among the international partners that regularly support climate change action in South Africa.

Within this broad framework, municipalities receive financing from both the public and private sector which can be drawn on for climate and sustainable energy interventions. Importantly municipalities generate their own, additional revenue from the sale of basic services such as electricity and water and from property rates. This enables them to cross-subsidise services to the poor.

Finally, several instruments, designed to finance climate change action, are in various stages of development or implementation in South Africa. The Carbon Tax Bill is due to be launched in 2019, although at a very low rate for at least the first 2 years. Green Bonds have started to take off, with the City of Johannesburg (CoJ) pioneering a municipal Green Bond in 2014, at a value of approximately 1.4bn ZAR. The Western Cape Government and the City of Cape Town are at an advanced stage of launching something similar. Excitingly, the Johannesburg Stock Exchange (JSE) launched its Green Bond Segment in October 2017, as a platform for companies and other institutions to raise funds ring-fenced for low carbon initiatives and investors to invest social responsibility funds in securities that are truly green.

The climate finance landscape in practice

South African municipalities are pioneering

A few municipalities have demonstrated success in raising climate finance through the various mechanisms described above, many of which yield domestic sources of finance, albeit still at smaller scales.

While these are mostly metros, there is an innovative example in the much smaller **Bergvrierv municipality** in the Western Cape. In 2014 the Municipal Council adopted a

Climate Change Adaption Plan. The establishment of the Bergvrierv Climate Knowledge Network resulted in a successful joint funding application to NT. The funding was used for a complementary currency project, the Fostering Local Well-being (FLOW) programme, rolled out in 2014/15. FLOW focuses on youth in addressing social, economic and environmental issues, and was also implemented in the Greater Kokstad Municipality in KwaZulu-Natal.

eThekwiniv Metropolitan Municipality launched the Durban Climate Change Strategy in 2014, which focuses primarily on climate adaptation and takes a people first approach. This was followed the Municipal Climate Protection Programme initiated in 2004. This governance framework has enabled eThekwiniv to enhance its access to climate finance, for example through increasing its budget from National Treasury for disaster risk reduction and preparedness. On the other hand, the eThekwiniv Energy Office, responsible for climate mitigation efforts, is dependent on over 90% of its funding from international resources.

The City of Johannesburg factors Green Bonds into its climate financing strategy. The Green Bond, issued by the metro in June 2014, is worth ZAR1.5bn (approx. US\$143m) and funds projects across a range of sectors. These include 150 new dual fuel buses and converting 30 buses to biogas. The Green Bond allows the city to demonstrate commitment to environmental stewardship, while receiving a market-related financial return. It has provided the City with a new funding source to improve and expedite the implementation of its climate change mitigation strategy and move Johannesburg towards low carbon infrastructure. Importantly, the City's investment grade credit rating enabled them to take the Bond to market and ensured a positive response.

The City of Cape Town has directly drawn from its energy and climate change policy to enable access to funding. The mayor is strongly advocating for renewable energy and energy efficiency in an attempt to diversify the city's energy mix. One of the metro's policy decisions was to raise a Green Bond with very attractive interest rates of 10.1% over 10

years. This financing will be used for the purchasing of electric buses for the metro bus fleet and strengthening water infrastructure, among other measures. The city is also utilising loan finance from DBSA. The city has identified that they require approximately R680 million for energy efficiency in the built environment and the French Development Agency (AFD) and the German Development (KfW) are keen to step into the space.

The CoJ has further introduced a small levy of 2 cents per kWh of electricity consumed above 500kWh per month. Recently approved by NERSA, the CoJ has managed to raise enough funds through this mechanism to finance the roll out of 78 000 solar water heaters (SWHs) in low income areas. These SWHs were delivered as part of the Free Basic Electricity subsidy element. This is one of CoJ's approaches to gradually convert the overall energy system to a more carbon neutral one.

Ekurhuleni was able to get their Energy and Climate Change Strategy adopted by the municipality which was adopted and approved by the metro and has resulted in domestic budget allocations.

These examples point to the important fact that there is a way to use the existing system to fund and implement climate change projects. Despite the multitude of funding streams, municipalities struggle to access sufficient funds to implement climate action. While much of this is capacity related, a key issue is that climate change response is often seen as separate and stand-alone, unlike reducing employment, building development and poverty alleviation which are encompassed within all government policies.

Perceived constraints continue to hinder scale

While successfully financed climate action examples are increasingly available, scale and mainstream adoption of climate action remains elusive. Perceptions around factors such as a prohibitive regulatory environment, threatened municipal revenues and limited borrowing capacities abound as climate change continues to challenge the status quo and business as usual approaches to development

as well as to delivery of energy, water, waste and transport services. Moreover, traditional financing mechanisms are not 'climate friendly'.

Planning cycles, investments, and regulations

Municipal performance systems are aligned with the timeframes dictated by the regulatory framework, which provides for five-year plans, annual budgeting and regular reporting cycles. For commitments of more than three years, municipalities have to implement specific requirements. Thus, the framework acts as a disincentive for long term planning.

Municipal funding is prioritised for basic service delivery and related operational expenditure (opex). Yet, real progress in climate-smart and resilient development relies on high capital expenditure, for instance for sustainable transport infrastructure. This, coupled with the required long term financial planning to support these investments, causes municipalities to shy away from these decisions^{viii}.

Limitations to raising revenue and borrowing

Municipalities are constrained by a number of factors, ranging from credit ratings suitable for attracting loans and investments, to their ability to raise taxes and incur debt. South African municipalities may not independently seek international loans, with approval required at all times from the Minister of Finance. The approval process is time-consuming and reduces the attractiveness of international loans to municipalities.

Such limitations are increasingly relevant given that municipal business and revenue models are under pressure and need to be reviewed. This is further exacerbated by the growth in small scale embedded generation (SSEG) which continues to impact on the municipal revenue base. Yet many municipalities are introducing a tariff system for this technology.

As outlined by the city-wide mitigation potential study, in order for municipalities to reduce carbon emissions over time, among the key measures needed is the ability to generate their own electricity or buy from IPPs^{ix}. Currently the regulations do not allow for this and electricity generation remains largely under the monopoly of Eskom^x.

A significant challenge for climate finance in developing countries is that there is significantly more external finance available for mitigation than for adaptation activities and likewise, there is much more money available for energy projects than there is for water or ecosystem rehabilitation^{xi}.

Significantly, adaptation and development are intertwined. Although this is also an opportunity, the rules underpinning the current international climate finance architecture require that projects can only be funded entirely by climate finance if they are additional. In other words, funding targeted toward climate action, must clearly differentiate between development action and climate action in monetary terms. Increasingly, funds such as the GCF require that the project rationale presents scientific evidence for climate change action as well as how the project will benefit targeted, vulnerable populations by increasing their resilience^{xii}.

Sources of predictable financial flows remain a barrier to coherent climate action^{xiii, xiv}. The global and domestic climate finance architecture has yet to attain predictable financial flows for climate change, resulting in a 'start-stop' approach to implementing climate responses. Funding often comes on stream too quickly for careful preparation and the obtaining of all necessary authorisations from within the government system. Government planning, authorisation and funding cycles mostly do not align with those of their external funders, placing increasing pressure on capacities and ability to deliver. Consequently, projects are often implemented by local government through external funding in the absence of coherent strategic planning. Nonetheless, few are of the view that accessing finance is a barrier; the question rather is how to do this strategically so that local government is positioned to drive its own climate and development agenda^{xv}.

Scale can be increased through enhanced readiness

It is evident that the quantum of international financial flows for climate action, while extremely helpful as a catalyst for change, is not enough. These flows are also not predictable, making long term planning and

programmatic approaches difficult. Further, they are not geared towards local government action, making them less accessible particularly to smaller municipalities. It is therefore critical that more and more domestic finance is unlocked for local climate action. As seen from the municipal examples provided earlier, domestic sources can be unlocked and with targeted action, these can be scaled up.

The primary entry points lie in improving the structures for climate planning and finance, strengthening climate governance, institutional frameworks and arrangements, and mainstreaming climate into revenue and expenditure models.

Entry points for climate finance

Mainstreaming climate change into development and sectoral plans is critical. More and more municipal officials are of the view that domestic budget that integrates climate and development will fund climate resilient urban development in the future^{xvi}.

Regulatory reform through re-interpretation is key. The provisions of the Municipal Finance Management Act are seen as prohibitive, often causing municipalities to 'stand still'. However, work by NT, OneWorld and SALGA, among others, demonstrates that there are opportunities to interpret its provisions differently. In other words, traditional, often institutionalised interpretation of the provisions, are not the only way of interpreting the Act within legal bounds. Re-interpretation is very important as an overhaul of the regulatory framework, is not well supported and will take a long time.

Longer-term planning needs to improve, with time horizons of up to 20 years. This view is driven by the understanding that the nature of the current and traditional municipal revenue model conflicts with municipalities' mandate to provide sustainable services and negatively affects access to long term finance^{xvii}.

Tracking climate projects and climate finance through robust monitoring, reporting and verification (MRV) and public expenditure

frameworks is likely to increase access to urban climate finance.

Cross sectoral cooperation is central, with a governance structure formalised to review new projects and developments and to assess where and how climate change should be integrated, what support research and skills are needed, how to source these and how the project specifications need to be adjusted to include climate change considerations.

Enhanced partnerships, with academia, NGOs and consultancies, within the climate governance framework, will give access to a wider range of capacities, skills and services needed to enhance and maintain local climate action. Similarly, civil society needs to be clearly positioned as a partner for greater accountability and enhanced community awareness.

Mainstreaming climate change into revenue and expenditure models through adapting low hanging fruits, for example considering climate change criteria in the IGGs. Additional government transfer instruments might also be necessary. The IGGs are integral to the municipal fiscal system. Although are underutilised for financing climate action. The Municipal Infrastructure Grant is an obvious entry point for including criteria that force the development of climate adaptive and resilient infrastructure in cities.

The threat of climate responses for municipal revenue streams needs to be addressed. Municipalities rely heavily on water and electricity tariffs for their revenue base. Independently owned renewable energy installations can dilute these revenues. Municipalities will benefit from quantifying the associated co-benefits, such as enterprises and jobs and reduced maintenance costs, and incorporating these into their revenue modelling.

Conclusion on key learnings

South Africa remains primarily concerned with the triple challenges, notwithstanding the substantial progress seen in the regulatory and institutional framework. Steps are being taken

toward mainstreaming climate and sustainable development in South Africa. The country's overarching planning instrument, the National Development Plan (NDP) includes a chapter on an equitable transition to low carbon and climate resilient development, suggesting that bold strategies can only be contemplated if jobs or competitiveness are not harmed by the transition. However, the NDP locates climate resilience in parallel to the development agenda.

This parallel approach plays itself out in local government. Adaptation efforts are often relegated to environmental services departments, thus not being mainstreamed into fundamental developments such as housing or water infrastructure.

While reducing emissions associated with power production is a long term project largely outside of the direct control of cities, local government has the opportunity to leverage influence over national- and regional-level energy supply and demand decisions. This is where the potential for transformation lies. SEA's city emissions study findings show the extent to which cities can impact on the emissions profile of the country. All interventions modelled are feasible resulting in a lowering of GHG emissions by 38% off a Business as Usual scenario by 2050^{xviii}.

In terms of sustainable development and adaptation objectives, analysis shows that ecosystem-based water management interventions can yield important ecosystem services, such as enhanced water flows, greater agricultural yields and jobs for low income groups^{xix, xx}. These, and other co-benefits of climate responses, along with those arising from the trends seen in SSEG, are giving rise to small enterprise opportunities, with inclusive opportunities in the formal employment sector.

Thus, climate responses can have a positive impact on the triple challenge agenda. The key question to address is to what extent.

ⁱ Global Carbon Project 2016: Global Carbon Atlas. Retrieved 18.04.2018, from <http://www.globalcarbonatlas.org/en/CO2-emissions>

ⁱⁱ According to the NDC 2015, national greenhouse gas emissions will peak between 2020 and 2025, then plateau for approximately a decade, and decline in absolute terms thereafter.

ⁱⁱⁱ OneWorld and SALGA 2016: V-LED Round Table. The contribution of local government in achieving national climate objectives. Cape Town, 08.07.2016.

^{iv} OneWorld and CoJ 2018: V-LED Good Practice Exchange. Climate Resilient Sustainable Development in Integrated Development Planning, Johannesburg, 06.03.2018.

^v United Nations. Economic Commission for Africa. Sub regional Office South Africa (SRO-SA); United Nations Development Programme 2017: Economic growth, inequality and poverty in Southern Africa: issues and policy options. Addis Ababa. © UNECA.

^{vi} OneWorld and CoJ, 2018.

^{vii} Petrie, Belynda 2017: Climate Finance in South Africa. Parliamentary Colloquium on Climate Finance, Cape Town, 28.11.2017.

^{viii} Sustainable Energy Africa 2017a. V-LED dialogue meeting. Accessing Climate Finance at the local level. Johannesburg, 07.11.2017.

^{ix} Sustainable Energy Africa, 2017b. Citywide Mitigation Potential for South Africa. Sustainable Energy Africa, Cape Town, South Africa. Retrieved 17.04.2018, from http://www.cityenergy.org.za/uploads/resource_366.pdf

^x Petrie, Belynda, 2017.

^{xi} OneWorld Sustainable Investments 2017: Skills for Green Jobs. South Africa, an Updated Country Report. International Labour Office, Skills and Employability Department. Geneva: ILO.

^{xii} OneWorld Interview with the Africa Advisor to the GCF, 10.09.2017.

^{xiii} Petrie, Belynda 2015: Advancing Africa's Position on Global Climate Finance. Policy paper prepared on behalf of SAIIA.

^{xiv} Müller, Benito 2015: The Paris Predictability Problem. What to Do about Climate Finance for the 2020 Climate Agreement. Retrieved 17.04.2018, from http://www.oxfordclimatepolicy.org/publications/documents/The_Paris_Predictability_Problem_published.pdf

^{xv} OneWorld interview with local government representatives, 21.12.2016; OneWorld interview with NEPAD finance representative, 14.02.2017.

^{xvi} OneWorld interviews with O'Donnaghue, S. Tooley, G.; Kruger, A.: 2017.

^{xvii} OneWorld interview with Kruger, A., 17.01.2017; OneWorld interview with Kumar, K., 01.12.2016; OneWorld interview with Cartwright, A., 17.01.2017.

^{xviii} Sustainable Energy Africa, 2017b.

^{xix} OneWorld Sustainable Investments, 2017.

^{xx} Petrie, Belynda 2016: Climate Change and Water. National Business Initiative, Johannesburg, March 2016.