



# FINANCING CLIMATE AND ENERGY ACTION IN AFRICAN CITIES

Case Studies from 10 cities across Sub-Saharan Africa



This project is funded by the European Union



Covenant of Mayors  
in Sub-Saharan Africa



# ABOUT COM SSA

The Covenant of Mayors in Sub-Saharan Africa (CoM SSA) is an initiative which aims to support Sub-Saharan cities in their fight against climate change. Started in 2015, it is funded by the European Union (EU) and from 2019, co-funded by the German Ministry for Economic Development and Cooperation (BMZ) and the Spanish Agency for International Development Cooperation (AECID).

CoM SSA comprises local authorities in over 34 Sub-Saharan countries who have made voluntary political commitments to implement climate and energy actions in their cities and agree on a long-term vision to tackle three pillars, namely access to energy, climate mitigation and climate adaptation. The initiative is shaped by these authorities to reflect their local context and specifics.

In order to translate the political commitment into practical measures, CoM SSA signatories have committed to produce and implement a Sustainable Energy Access and Climate Action Plan (SEACAP).

For more information visit:

**[www.comssa.org](http://www.comssa.org)**

**[www.facebook.com/comossa](https://www.facebook.com/comossa)**

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**[www.instagram.com/comossafrica](https://www.instagram.com/comossafrica)**

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# INTRODUCTION

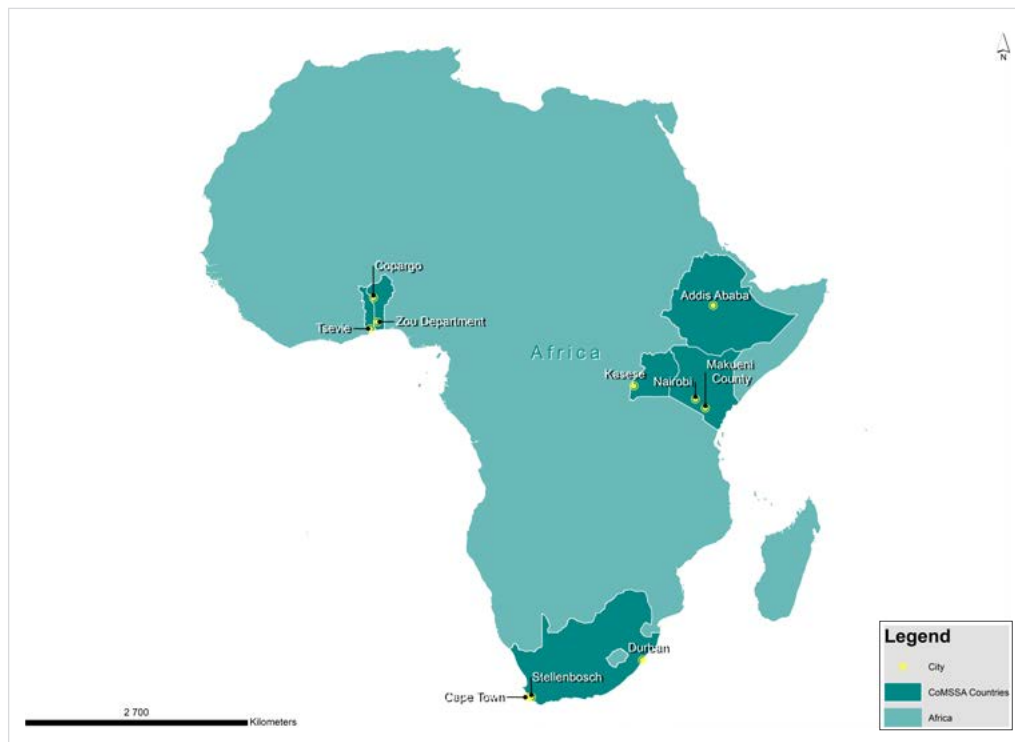
Across the globe, cities have progressively become key actors in the fight against climate change. In Sub-Saharan Africa, they are both critical emitters of Greenhouse Gas (GHG) emissions and places of increasing vulnerability. Two out of every three cities in the region are considered to be “at extreme risk” of the impacts of climate change, which threatens vital local infrastructure and systems. In addition, cities in the region are experiencing considerable growth and change. An important part of this growth is expected to occur in smaller or secondary cities and towns rather than large metropolises.

From 2015 to 2019, CoM SSA supported the development of Sustainable Energy Access and Climate Action Plans (SEACAPs) and the implementation of climate and energy activities in thirteen pilot cities across the continent. The CoM SSA initiative is currently focussing on the implementation of the SEACAPs and supporting local governments to access climate finance. Dedicated SEACAP financing activities, led by ICLEI Africa, have progressively built the capacity of CoM SSA signatory cities to understand the finance landscape, prepare robust climate and energy projects and partner with funders and financiers to implement them.

The CoM SSA initiative is moving from strength to strength, with a team of new implementing partners and additional co-funders. The initiative continues to mature in focus from planning to project implementation and unlocking finance at the local level.

This publication sheds light on solutions developed by cities in Sub-Saharan Africa to: limit the costs associated with the drafting of their SEACAPs (Section 1), develop feasible models to finance their adaptation (Section 2), mitigation (Section 3), energy access projects (Section 4) and develop innovative funding mechanisms to implement their climate and energy projects (Section 5).

## CoM SSA case studies locations



## KEY TERMS AND DEFINITIONS

### Guidebook

A supporting document developed by the European Commission Joint Research Centre (EC-JRC) with the support of CoM SSA partners to assist Sub-Saharan Africa local authorities in preparing their SEACAPs. It provides step-by-step guidance and examples of measures relevant for local authorities in the Sub-Saharan context.

### SEACAP

A Sustainable Energy Access and Climate Action Plan is each city's or region's key document which elaborates its strategies, plans and actions for low carbon, sustainable and resilient development that ensures access to secure, affordable and sustainable energy.

### Pilot city

CoM SSA is open to all Sub-Saharan African cities. However, between 2015 and 2019 thirteen pilot cities were selected to carry out capacity building activities and demonstrative actions. These pilot cities are Bangui (Central African Republic), Bissau (Guinea-Bissau), Bouaké (Côte d'Ivoire), Communauté des Communes de Zou (Benin), Communauté Urbaine de Nouakchott (Mauritania), Dakar (Senegal), Kampala (Uganda), Lubumbashi (DR Congo), Monrovia (Liberia), Pikine (Senegal), Tsévié (Togo), Yaoundé 3 and Yaoundé 4 (both in Cameroon).

# SECTION 1

## ZOU FACTS AND FIGURES



Population

**851 580** (2013)



Signatory since  
2017



Funding volume  
**EUR 860 000**

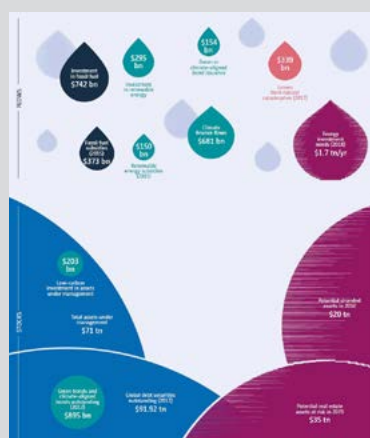


Implementation period  
2017–2019

## REAPING THE BENEFITS OF COLLABORATION

As part of the process of producing SEACAPs, CoM SSA signatories are required to complete three technical documents: a Baseline GHG Emissions Inventory Report, a Risk and Vulnerability Assessment (RVA) and an Energy Access Assessment (EAA) (JRC Guidebook, 2018). These technical exercises and related analyses can be time and resource-intensive. As a result, some CoM SSA cities have harnessed the power of collaboration to limit the costs of producing their SEACAPs.

### CLIMATE FINANCE IN CONTEXT



“Although there has been a clear momentum towards strengthening the global response to the threat of climate change in financial systems and broader financial flows, a sole focus on climate finance flows is insufficient in the post-Paris Agreement world. While climate finance must obviously be scaled up, it is also important to ensure consistency of all flows and stocks.”

Source: UNFCCC Standing Committee on Finance, 2018 Biennial Assessment and Overview of Climate Finance Flows Technical Report

## Communauté des Communes de Zou, Benin

### Joining forces in SEACAP development



The Communauté des Communes de Zou is a group of nine municipalities (Abomey, Agbangnizoun, Bohicon, Cove, Djidja, Ouinhi, Zangnanado, Za-Kpota, Zogbosomey) in the south of Benin. The group, selected as a CoM SSA pilot city, received funding to develop their SEACAP and implement a demonstration project. Since 2017, it has finalised:

- A feasibility study for the implementation of mini-grid solutions in Zou
- A local Baseline GHG Emissions Inventory
- A risk and vulnerability assessment with a study on the integrated management of runoff water in the Zou catchment areas
- An energy audit

The Communauté des Communes de Zou collaborated with each other to develop a joint SEACAP. According to the Guidebook, CoM SSA cities have two options when collaborating to develop a SEACAP. The difference between the two is that signatories commit to either individual or shared emissions reductions.

COVENANT STEPS	OPTION 1	OPTION 2
Country's NDC CO <sub>2</sub> reduction target	Individual	Shared
Submission of the SEACAP template	Individual	1 for the group
Submission of the SEACAP document	>> 1 joint SEACAP <<	
Publication of the accepted SEACAPs in the online catalogue	1 per signatory	1 for the group

Source: JRC Guidebook (2018), extended version, p 14.

This joint SEACAP model is particularly suitable for small or semi-rural communities and has the following advantages:

- Pooling human and financial resources and expertise between several local governments
- Strengthening institutional cooperation between neighbouring local governments
- Facilitating access to finance to implement climate projects, such as drafting joint proposals or implementing projects at scale

Other Sub-Saharan African municipalities, such as the Groupement Intercommunal des Communes in Benin are also developing joint SEACAPs.

## Tsevie, Togo

### Civil society and research institutions as local government allies

The municipality of Tsevie, Tsevie's SEACAP is already well advanced due to the municipality's collaboration with local research institutions and civil society organisations. A strong technical team specialising in energy, climate change, sociology, geographic information systems (GIS), statistics and data analysis oversaw its development. They included professors from the University of Lome, members of local NGOs (including TMSU International, OPED Togo and G2RPA) as well as officials from the municipality.



Roles, responsibilities and ownership were clearly allocated and the following was achieved:

- The local NGOs contributed to data collection at the household level for the GHG inventory, risk and vulnerability assessment and energy diagnostic and energy access assessment
- The senior researchers from the University of Lome cleaned and validated the data and gave regular, strategic advice to the municipality. They also conducted technical data collection training with city officials and NGOs

For local governments in Sub-Saharan Africa, partnerships with universities and local NGOs can reduce SEACAP costs as:

- local governments do not need to hire external consultants to collect, verify and analyse data
- local governments need not appoint additional technical staff, since researchers can build the capacity of municipal staff while the research progresses
- researchers can facilitate cross-learnings and climate change mainstreaming by working with several departments in the municipality.

## TSEVIE FACTS AND FIGURES



Population

**851 580** (2013)



Signatory since  
2017



Funding volume  
**EUR 860 000**



Implementation period  
2017-2019

## SECTION 2

### COPARGO FACTS AND FIGURES



Population  
**70 938**



Signatory since  
2017



**Business model**  
Performance-based climate resilience grant increasing local finance for adaptation by 8.5% in the first cycle



**Funding volume**  
**XOF 25.5 MILLION**  
(approximately  
EUR 40 000 by year)



**Implementation period**  
2014–2016 (phase I);  
onwards from 2016  
(phase II)

## ACCESS TO FINANCE FOR ADAPTATION PROJECTS

An increasing number of funds and financial mechanisms are available for climate change adaptation projects in Africa. However, complex challenges undermine the capacity of local governments to access these. In response, several innovative solutions are emerging, such as co-financing and developing local climate funds.

### Copargo, Benin

#### Preparing for direct access to Green Climate Fund

Northern Benin, where Copargo is located, is a particularly vulnerable agro-ecological area already experiencing the effects of climate change. Copargo, as with all communes in Benin, is both financially and managerially independent.



*A key success of the project was the construction of a water retention basin and a water levee. This infrastructure increased the availability of water for farmers, allowed diversification and contributed greatly to the local economy.*

@LoCAL – UNCDF Photo Joel Bekou

Following the earlier pilot in Asia, the national government of Benin and UN Capital Development Fund (UNCDF) developed a successful mechanism to channel climate finance for local-level climate change adaptation measures under the Local Climate Adaptive Living Facility (LoCAL). The programme developed a Performance-Based Climate Resilience Grant (PBCRG) system with defined access conditions and performance measures. The results determine the annual grant for Copargo and another eight communes. Its transparency fuelled its success in leveraging other national and international funds. The performance based system is designed as a top-up to regular transfers from central government, grants are fungible with other local budget resources and is suitable for investment in small to medium sized projects.

This positive pilot experience secured the backing of the National Fund for Environment and Climate, FNEC (Fonds National pour l'Environnement et le Climat) in 2016. FNEC was nominated as Benin's national implementing entity and accredited to the Green Climate Fund (GCF) in February 2019. The national government of Benin is preparing to replicate the experience of Copargo in half of the country with GCF and UNCDF support.

The LoCAL facility operates in 14 countries and 7 additional counties are preparing to join the mechanism. Its model is recognised by the UNFCCC.

### Makueni County, Kenya

#### Enabling local communities to access climate finance

Kenyan counties (local governments) enjoy a fair degree of independence in diversifying funding for climate activities. The first local climate fund (the County Climate Change Fund or CCCF) was established to finance a pilot project in Isiolo County (2009–2013). Thereafter, it was replicated in the counties of Kitui, Makueni, Wajir and Garissa.

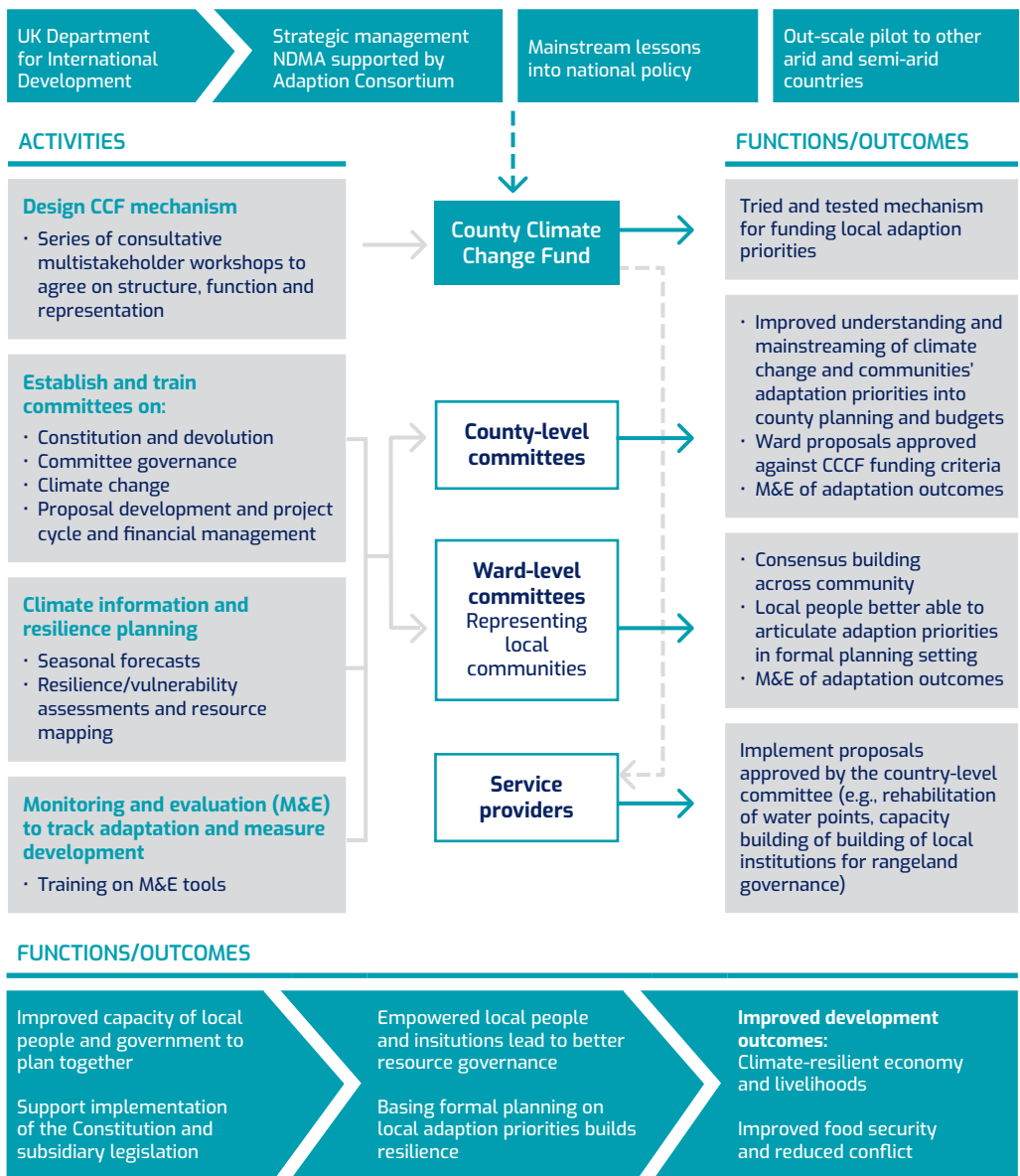


In Makueni, communities identify projects for funding through their ward-level committee. A cross-community/government committee assesses these and where necessary, improves them to meet the funding criteria. To ensure the sustainability of the county climate fund, 2015 legislation provides trust-based mechanisms for accountability and transparency. It requires that the county government sets aside one percent of its annual development budget for climate change. In the 2017/18 fiscal year, this amounted to US\$ 730 000 (approximately EUR 662 000).

The county has thus far rehabilitated and constructed five sand dams, two earth dams, a water pipeline and a rock catchment structure. Sanitation facilities have been built around watering points, walking distances to find water have been shortened and food security has increased, as more arable land now receives micro-irrigation. Lives in the community have vastly improved due to the subsequent decrease in water contamination.

As of March 2017, the counties had implemented 82 community prioritised investments across Kenya. This devolved climate finance approach builds local capacity to develop projects and provides a positive example of managing fiduciary risk at the local level. Local governments in Senegal, Mali and Tanzania have replicated the model.

### The Theory of change is centered on empowering local people and institutions



Source: Orindi, Elhadi & Hesse (2017, p. 256)

### MAKUENI FACTS AND FIGURES



Population  
**884 527**



Signatory since  
Forthcoming  
(pre-engaged)



Business model  
Local climate fund



Funding volume  
One percent of county budget (approximately  
**EUR 662 000**  
for 2017/18)



Implementation period  
2015 – ongoing

## SECTION 3

### KASESE FACTS AND FIGURES



Population  
**800 000**



Signatory since  
2018



Business model  
Green Revolving Fund\*



Funding volume  
**EUR 5.7 MILLION**



Implementation period  
2014–2020



#### Challenges

Low income levels of the local population, limited local technical capacity to design, install and maintain solar home systems and a high bank interest rate



#### Success factors

Government subsidies, community-based organisations, international support, innovative finance mechanism

\* More information on the revolving fund, can be found in the Guidebook

## ACCESS TO FINANCE FOR ENERGY ACCESS

Low rates of electrification, rapid urbanisation and increasing populations make energy access a persisting challenge for Sub-Saharan African cities. Fortunately there are an increasing number of affordable solutions for sustainable energy that allow cities and regions to leapfrog. However, although investment requirements are now more modular, local governments' access to funding remains a barrier. Some have overcome this problem by using their own funds, revolving energy funds and creating and leveraging off Public-Private Partnerships (PPPs).

### Kasese District, Uganda

#### Rural electrification using innovative solar photovoltaic distribution models

The Kasese District in Uganda is characterised by low levels of electricity access and a major part of the population relies on biomass to meet their energy needs. To address this, the District has implemented a project to develop a revolving 'Energy Access Fund'. This capital pool provides residents with affordable payment options to purchase improved cookstoves and solar photovoltaics (PVs).

The success of the fund can be ascribed to three of its characteristics:

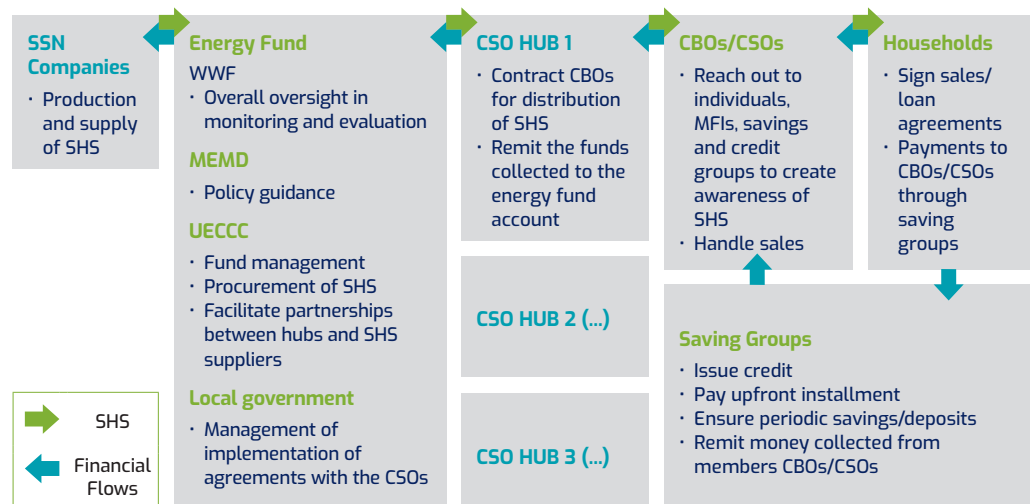
1. Purchasing Solar Home Systems (SHS) in bulk reduces unit costs and partially subsidises each system
2. Allowing residents to repay their SHS over time through micro-finance eliminates high up-front costs
3. As systems are repaid, the fund is replenished and is thus able to finance more SHSs and community-based organisations

The project is funded by the EU and implemented by World Wildlife Fund (WWF) in Kasese and 19 other districts in the Albertine region of Uganda.

Another innovation is pooling risk through community savings groups. This has two distinct benefits:

1. It ensures buyers repay their debt due to group pressure in case of non-payment
2. If a few individuals cannot repay their debt, the group ensures that the fund is mostly replenished by other system owners

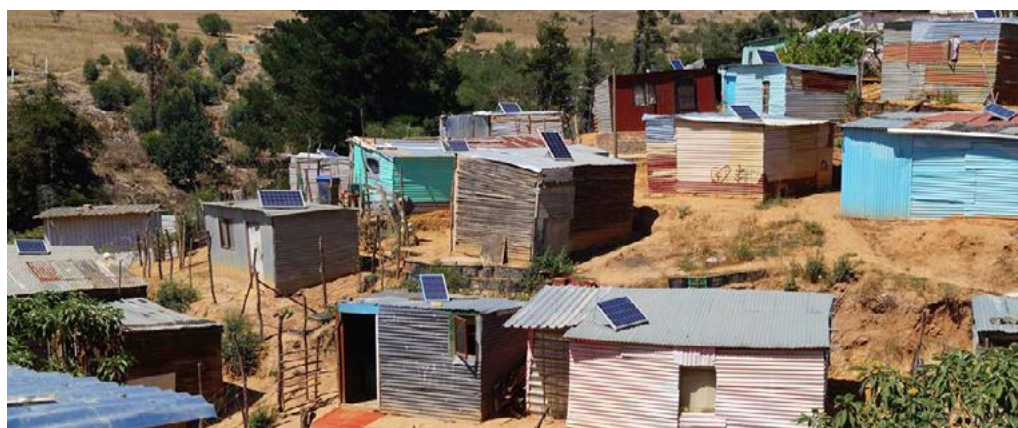
#### Energy Access Fund in Uganda – stakeholders and functions



Source: WWF (2019)

## Stellenbosch municipality, South Africa

An innovative Public-Private Partnership model for the electrification of informal settlements



iShack is a collaborative effort between Stellenbosch University's Sustainability Institute Innovation Lab (SILL), the Department of Public Service and Administration and the local community to provide sustainable energy access to 750 households in the informal settlement of Enkanini.

Initially an academic research project, iShack was funded by a grant from the Bill and Melinda Gates Foundation, the Green Fund and private donors to establish and test the idea. The project demonstrates how incremental energy services can upgrade under-served communities and simultaneously build local enterprising capacity through a financially sustainable public-private partnership.

It evolved into a social enterprise in which SHSs are marketed, installed and maintained by upskilled members of the community – iShack agents. The project's success can be ascribed to its innovative approach in working with local government to change its policy to allow Free Basic Electricity (FBE) subsidies to finance a portion of the SHSs. Consumers pay for energy consumption beyond the subsidised allocation through a digital pay-for-use model, which streamlines payments and minimises costs.

Although SILL is a service provider to the municipality in delivering basic energy, end-users (residents) cover most of the running costs. iShack has since been replicated in the Siqalo informal settlement in Philippi, Cape Town and Longlands in Stellenbosch. Visit <https://www.ishackproject.co.za/> for more information.

**Free Basic Electricity (FBE)** is a government initiative providing 20 – 60kWh free monthly electricity to qualifying low-income households. iShack marks the first time this has been allocated for non-grid energy provision.

### STELLENBOSCH FACTS AND FIGURES



Population  
**155 733**



Business model  
PPP between  
Stellenbosch municipality  
and social enterprise



Funding volume  
**ZAR 17 MILLION**  
(approximately  
EUR 1.1 million)



Implementation period  
2013 – ongoing

## SECTION 4

### ETHEKWINI FACTS AND FIGURES



Population

**595 061**



Signatory since  
2015



Business model  
Municipal-owned project  
using a PPA and  
carbon financing



Funding volume  
**ZAR 127 MILLION**  
(approximately  
EUR 7.85 million)



Implementation period  
1994 – ongoing

## ACCESS TO FINANCE FOR CLIMATE MITIGATION

Although climate change mitigation is considered a priority in the Global North, meeting global climate change targets requires action from both developed and developing countries. For Sub-Saharan African cities, climate change mitigation includes slowing GHG emission increases as incomes rise. Some mitigation measures such as constructing waste to energy plants or implementing sustainable transport systems contribute to their climate and economic development priorities.

### eThekwini, South Africa

#### The effect of carbon markets on the construction of a Waste to Energy power plant



The eThekwini landfill gas to energy project has contributed jobs and invaluable human expertise.

The municipality of eThekwini is home to Durban, South Africa's third most populous city. Due to the size of its large and growing population, landfill sites have approached capacity, polluting surrounding areas with harmful GHG emissions. To mitigate this, the municipality decided to capture landfill gas and convert it into energy. However, at the time, energy prices from the national utility, Eskom, were low and energy from landfill gas was deemed too expensive to sell. To overcome this obstacle, the municipality sold carbon credits to generate an additional revenue stream, thereby reducing the cost of energy from landfill gas to more competitive rates. At these prices, the municipality's Electricity Distribution Utility was able to justify a Power Purchase Agreement (PPA) with the project developers, the eThekwini Cleansing and Solid Waste Department.

As the first of its kind in the country, the project was not without challenges. In 2013, the collapse of the carbon credit market (carbon credits declined from around EUR 14,5 to a few cents per ton of CO<sub>2</sub>) effectively cut off this revenue stream. Compliance with the carbon credit programme (Clean Development Mechanism) added further costs and complexity.

National energy price increases over recent years may, however, improve the business case for landfill gas to energy again. The project proves the advantages of strong political and institutional commitments, a learning-by-doing approach and innovative revenue diversification.

## Addis Ababa, Ethiopia

### Innovative fund design to finance Ethiopia Railway's Transit Oriented Development (TOD)

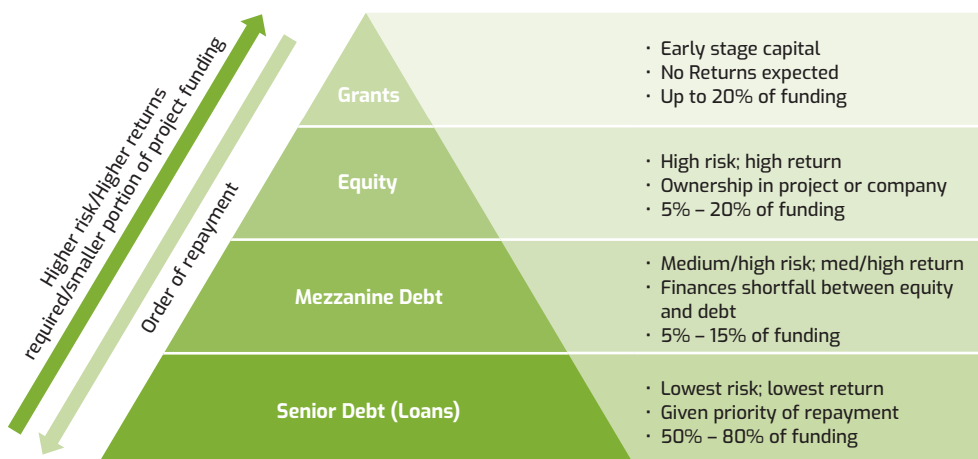


Ethiopia's Climate Resilient Green Growth (CRGE) strategy aims to limit emissions in the transport sector by shifting commuters from road to rail. Accordingly, its Transit Oriented Development (TOD), has developed two railway projects: Addis Ababa's Light Rail Transit (LRT) (pictured above) and the National Railway Network (NRN). TOD promotes economic development via mixed-use public, residential and commercial areas favouring mass- and non-motorised modes of transport and aims to increase transport safety while reducing costs and pollution. By transitioning to electric railway infrastructure, it intends to promote greater adoption of mass public transport and reduced reliance on fossil fuels.

To manage the risk associated with such large investments, the Development Bank of Ethiopia, with the Ministry of Finance and Economic Affairs, created a structured debt fund. This fund pools money from different investors who provide financing according their investment mandates, risk appetite and return expectations. The Government of Ethiopia takes a higher risk position and commercial banks take lower risk positions. If projects are unable to repay their loans, the government takes first losses.

While this is a national level fund, local government is responsible for its successful implementation. For the fund to attract sufficient private investment, local government has to foster investor confidence by showcasing well-articulated development strategies, capable governance and a proven project implementation track record. The only condition for replicating this innovation is strong local government support.

#### Indicative composition of different types of finance for projects



Source: ICLEI Africa

#### ADDIS ABABA FACTS AND FIGURES



Population  
**3.38 MILLION**



Signatory since  
2015



Business model  
Structured Loan Fund



Funding volume  
National Rail Network (NRN)  
**EUR 14.1 BILLION**

Light Rail Transit  
(LRT) – Phase 1  
**EUR 431 MILLION**

Light Rail Transit  
(LRT) – Phase 2  
**EUR 690 MILLION**



Implementation period  
Phase 1: 2012–2015



**Challenges**

- As the first TOD in Ethiopia, proponents lack practical knowledge and experience
- This financing vehicle is unprecedented in the country and may attract less sophisticated investors
  - The TOD may be implemented via a PPP, a co-development structure unprecedented in Ethiopia

## SECTION 5

### CAPE TOWN FACTS AND FIGURES



Population  
**4 MILLION**



Signatory since  
2015



Business model  
Green Bond



Funding volume  
**ZAR 1 BILLION**  
(EUR 59 million)



Implementation period  
2017–2027

## INNOVATIVE CLIMATE FINANCE

As climate finance is developing rapidly due to new business models, financial mechanisms and technologies, local governments around the world are progressively adapting to these prototypes. Although they are emerging more slowly in Africa, they are being pioneered by some local governments, especially in Kenya and South Africa.

### Cape Town, South Africa

#### The local Green Bond



In 2017, the City of Cape Town issued a ZAR 1 billion (EUR 59 million) green bond to attract private sector investment. It was the first such initiative in Africa to be accredited by the Climate Bonds Initiative (CBI) and was awarded a GB 1 rating by international ratings agency Moody's. It won the 'Green Bond of the Year' at the 2018 Environmental Finance Green Bond Awards.

A green bond is effectively a loan: investors buy the bonds and thereby provide funding, but funds are earmarked for climate-related projects and upgrades, in this case a series of water and low-carbon transport projects. The loan is repaid by means of municipal revenues such as water tariffs or transport charges, or other sources, including taxes. Green bonds require additional rigour to qualify as such, and are thus often perceived as better investments. As an example, demand for the City of Cape Town's green bond outstripped supply five times as a result of strong political support and investor confidence in the City's governance. This occurred despite financial market uncertainty in South Africa at the time.

The City is using the proceeds to fund a mix of adaptation and mitigation initiatives aligned with its Climate Change Strategy, with a particular focus on water infrastructure in response to the severe drought of 2017. With US\$ 696 billion international green bonds issued to date, the popularity of these issuances in Africa is expected to increase significantly.

## The different steps identified by the City of Cape Town to structure a green bond



Source: City of Cape Town presentation, Urban-LEDSII Summit, May 2018

## Nairobi, Kenya

### M-Akiba: crowd-based lending for development



M-Akiba is a tax-free retail bond issued by the Government of Kenya that offers investors a coupon rate of 10% repaid over three years. It is listed on the Nairobi Securities Exchange and the proceeds are used to finance infrastructure and developmental projects. Transactions are conducted on the existing M-Pesa platform, a mobile money transfer and borrowing service, which keeps transaction costs low and so maintains low overall cost of capital. With a minimum investment of KSH 3 000 (EUR 27), it enables everyday citizens to participate in capital markets while raising capital at below market rates. In municipalities, this could turn residents into stakeholders to help finance local infrastructure, energy or agriculture as demonstrated in the boxes below.

The bond's success stems from its innovative use of digital platforms to reduce transaction costs and tax-free investments. It reduces the cost of capital for government while providing competitive returns for investors. It follows the same process as a conventional bond aimed at individual investors, the only difference being that it is a technology powered platform.

Despite a lower than expected bond purchase, M-Akiba still stands as the first mobile treasury instrument to be sold in Africa. A post-issuance study has been done that provides key lessons and recommendations. There are significant opportunities to enhance this financing model that could be a game changer for financing at the local level.

### SunExchange

SunExchange, a private company based in South Africa, facilitates crowdfunding of solar PV installations. Selling solar energy to schools, companies or supermarkets generates revenue. Investors can purchase as little as a single solar PV cell, at a cost of about ZAR 80 (EUR 5). System ownership resides with the pool of investors, with each investor repaid according to their share of solar cells. SunExchange takes a marginal fee for installation, maintenance and facilitating payments. Visit <https://thesunexchange.com/>.

### Fedgroup Impact Farming

Fedgroup's Impact Farming venture allows investors to purchase revenue-generating assets via an app. These include blueberry bushes, honey bees or solar panels. The products are sold to generate a return to repay the initial investment and profit. Effectively, this model allows anyone own a share in a farm from as little as ZAR 300 (EUR 19). Visit <https://www.fedgroup.co.za/ventures/impact-farming>

## KEY INSIGHTS

The initiatives described in this publication show not only the magnitude of the challenges posed to cities in the face of climate change, but the immense opportunities for solutions. They also provide the following key insights:

**Cooperation and partnerships** save time and reduce costs. For example, cooperation between local governments in planning processes has the potential to reduce the cost and time to develop SEACAPs. In terms of implementation, PPPs, co-financing, risk pools and cooperatives are valuable vehicles for unlocking finance at the local level.

**Diversifying and unlocking new sources of financing** is critical to project success and **embedding resilience and sustainability in business models**. Unlocking and attracting previously untapped finance sources has proved a major success factor for new models of urban climate and infrastructure development. Such sources include crowdfunding, funds that spread the risk over a number of investors, accessing global and local climate funds, redirecting municipal fiscal allocations, increasing private sector participation and/or accessing local commercial capital markets. The primary benefit of co-financing is that cities are less dependent on financing from any one source. This increases their resilience to financing shortfalls and promotes greater sustainability.

**Empowering local people and communities** is vital for the sustainable financing of projects. The case studies presented in this publication demonstrate a number of options to pool community funds and resources as well as microfinance and community-led committees that determine which climate projects are implemented.

**Technology, as an enabler, is driving significant efficiency gains and cost reductions**, thereby increasing access to resources and fostering greater financial inclusion. The effective use of technological tools by local governments can greatly improve the way climate action is implemented. Digital solutions can help measure, monitor and manage everything from energy and water consumption to facilitating utility or other payments, or enable urban infrastructure investment at a cheaper price than conventional methods. A smaller price tag also makes energy solutions more accessible to people and households who may previously have been unable to afford them.



Copargo, Benin. @LoCAL – UNCDFPhoto Joel Bekou



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