

KAMPALA



CLIMATE

CHANGE

ACTION



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The team of experts: Sebastien Denis, Anne Musisi, Helen Obuya, Tom Mwebaze, Suaib Lwasa, Revocatus Twinomuhangi, Adam Sebbit, Eve Arquin and Olivier Crouzier.

The KCCA project team: Judith Tukahirwa, Edison Masereka, Patrick Musoke, Robert Kyukyu, Najib Lukooya, John Paul Sajjabi, Peter Kauju, Janet Kajara, Consolate Kiyangi, Jeremy Ntambi, Bernadette Ssanyu, Isaac Mugumbule, Damalie Nyamate, Michael Kirya, Michael Wamakuyu, Richard Ndagijimana

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Kampala Capital City Authority,
P. O. Box 7010 Kampala - Uganda
Tel: 041405810294 / 020 660 000
www.kcca.go.ug

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COMMITMENT

We support the **Kampala Climate Change Action** strategy

We act with our own action plan for mitigation and adaptation

We share our best practices, new ideas and learn from one another

We develop our knowledge about climate change and energy issues

We raise awareness in our organization about climate change and energy issues

We assess our water and energy consumptions, GhG emissions and air quality impacts

We report annually our achievements to the Stakeholders' Forum

We will prioritize

- Energy efficiency
- Waste and waste water
- Mobility
- Buildings and Land use
- Renewable energies
- Biodiversity
- Green Procurement and Investment
- Research and Innovation
- Communication and Participation
- Financing and Project support



PARTNERS



Message from the Minister

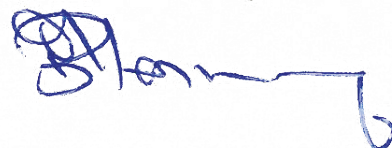
Climate change poses a serious threat to humanity and the environment and the impacts of the global challenge are here with us. The country is experiencing longer droughts and erratic rains. This is threatening lives of millions of Ugandans.

Equally threatened are our cities and municipalities which are attracting large numbers of immigrants and expanding rapidly. As our cities and municipalities, grow they will consume massive amounts of resources such as energy, food, fuel, materials etc. At the same time they will be significant sources of emissions.

As climate change continues to impact the country side, the cities and municipalities will be strained for resources. The rapid expansion of cities is also threatening our environment through unsustainable settlement patterns, inefficient resource use and unsustainable transport modes. Our cities are therefore part of the problem and also part of the solution. Indeed Kampala city has a key role to play by taking a lead in planning, guiding and managing emissions reduction. Kampala should lead in sustainable and innovative solutions for adaptation and enhanced resilience that can be replicated in other municipalities. I therefore commend KCCA for developing the **Kampala Climate Change Action** Strategy that will help to mainstream climate change response in all the City services.

At the national level, government has committed to addressing climate change as outlined in then NDP II, the national climate change policy and strategy, second national communication and INDC. Uganda also signed the Paris Agreement joining other countries to commit to fighting climate change. The **Kampala Climate Change Action** strategy is therefore a welcome initiative that will help not only Kampala City but also Uganda to achieve its targets and make a contribution to the global phenomenon. The strategy demonstrates the benefits that can be realized when governments at all levels (national and subnational) work together on a common goal. The participatory approach in which the strategy was developed and the responsibility for action at all levels is also a commendable innovation in implementing inclusive public policies. A sustainable and resilient Kampala is key to the attainment of Uganda's aspirations in the Vision 2040 and with this climate change action plan, Kampala is positioned to lead this transformation.

I call upon all of us to play our part at individual, community, institutional, business and government levels in order to realize the ambitions we have set for ourselves and make Kampala a truly vibrant, attractive and sustainable city.



Beti Kamywa Turwomwe, Minister for Kampala Affairs

Message from the Lord Mayor

Our city is growing and expanding rapidly as we continue to attract and host people from within and outside the country. While this rapid expansion is a clear indication of the attractiveness and opportunities that the city offers, it is coming with significant social, economic and environmental challenges that are threatening our sustainability as a city.

As the world is confronted with increased climate challenges, we will not be spared either.

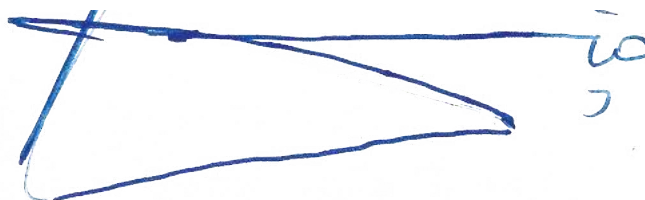
Although our contribution to the cause of global warming and climate change is negligible, we are more vulnerable. And as we grow, we will require more resources like water & energy for our homes and businesses, more energy for our transport systems and industries, more food and other materials for our daily lives. This will make us more exposed to supply and price shocks.

On the other hand as we produce and consume more we will generate significant amounts of waste and emissions. This will increase our carbon footprint. But we can choose a different path. We have the opportunity to learn from the mistakes of our peers and make smarter choices at our different levels. This **Kampala Climate Change Action** Strategy gives us this opportunity.

Therefore we must act now when it is not too late! Building the resilience of our communities is a key priority as we also act on those areas that increase our levels of emissions. We are all affected and we can be part of the solution by changing our daily behaviors for resource use and waste disposal, our choice of transport mode, building practices, and water and energy consumptions patterns. We all have a responsibility to take action.

I call upon my fellow leaders at all levels to support this strategy and lead by example.

By acting now we will not only make Kampala a great city to live for ourselves but also for the future generations.



Erias Lukwago, Lord Mayor, Kampala

Message from the Executive Director

Today Kampala City and its Metropolitan area is home to 3.5 million people. This population is projected to grow to between 8-10 million people over the next 3 decades. The explosion in our city population, if well managed, can be turned into an economic dividend. It will have significant impacts on resources, particularly for climate and environment. Today the world is facing one of the greatest challenges of our generation - **Climate Change!**

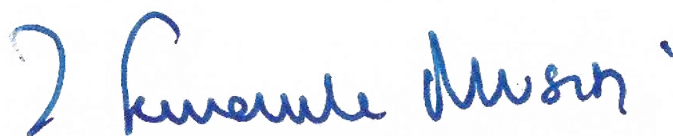
The impacts of climate change are here with us manifesting in various hazards like floods and heat waves. Our rainfall patterns have become erratic and more intense, near surface temperatures are estimated to have increased by 1.5°C between 1950 and 2005 and are projected to further increase by between 1.5°C and 3°C by the end of the century. This situation will be compounded by the urban heat island effect as the built up area increases. The way we build, move around, prepare our food and manage our waste is inefficient, generating lots of greenhouse gas emissions which are not sustainable and affect our health. As the city expands rapidly, these hazards will become severe impacting many more city dwellers particularly the vulnerable urban poor. The costs of coping with the hazards will increase significantly threatening the city's future economic viability, livability and ability to create opportunities for our people to prosper.

The message from our children at the Kampala City Festival of 2015 was loud and clear “***we don't have planet B, but we have plan B.***”

Indeed we have a chance to choose a different path and not repeat the mistakes of the past. And this is the vision of our transformation: *to make Kampala a vibrant, attractive and sustainable city.* The **Kampala Climate Change Action (KCCA)** Strategy is our flagship programme to achieve our sustainability ambition. The strategy has been developed through a consultative and participatory approach and provides a transversal framework for mainstreaming climate response in all our services. It provides shared ambition and responsibility for taking action at all levels as well as giving us the opportunity to take the lead. For Kampala, the strategy addresses three issues: **(i)** the short and long-term adaptation of the city to climate change impacts, **(ii)** charting a low emissions development path for the city and **(iii)** transforming the threat of climate change into an opportunity for Kampala residents. Our ambition is to reduce emissions by 22% from the “business as usual scenario,” reduce the future cost of adaptation and the number of vulnerable communities.

Many actions are being undertaken locally to manage waste, energy efficiency, increase renewable energy and reduce GhG emissions. This will not only help us save money but also hold the potential to create a wide range of business opportunities, health and other quality of life benefits. The actions have been designed to attract new green businesses, create local green jobs, make our businesses more competitive and help communities to thrive.

The **Kampala Climate Change Action** strategy cannot be a document that sits on the shelf. KCCA is committed to act and lead by example but we cannot do it alone. I call upon all Kampala residents, businesses and communities to join us in taking action to make Kampala a great city today and for the future generations.



J Semakula Musisi, PhD(h.c), Executive Director, KCCA



KAMPALA

Kampala is situated on the edge of Lake Victoria and is home to around 1.5 million residents with a daily influx of around 2 million people for business, transit and other activities. Current high rates of urbanization have meant that Kampala, originally built on 7 hills, has expanded to cover the Greater Kampala metropolitan area of 189 square miles, extending to Entebbe, Wakiso and Mukono.

KAMPALA



Industrialization has increased over the years placing demand for land with over 50% of industry located in Kampala. Pollution and waste water control have added pressure on the local natural ecosystems causing environmental degradation and a reduction in air quality. Water drainage during heavy rains through the natural swamp filtering system has been affected by construction practices in wetlands and bad waste disposal habits.

Uganda, including Kampala, is blessed with abundant natural resources but the ever increasing urban population places a burden on their protection, conservation and usage.

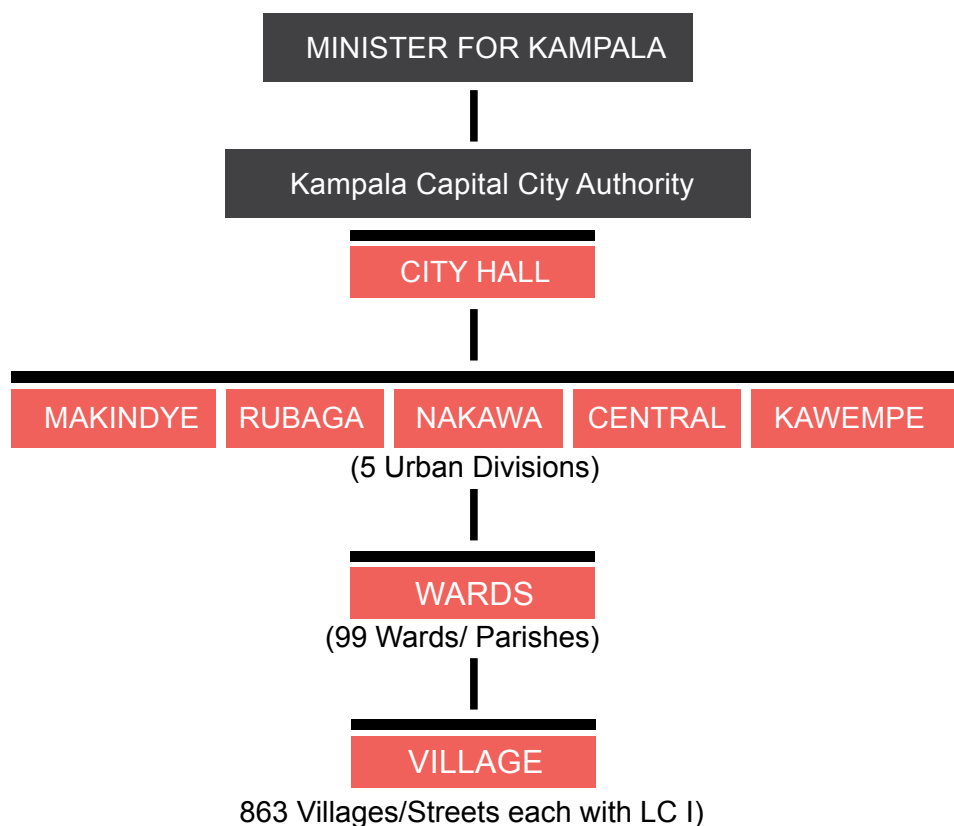
The rise in urban rural migration trends causes stress as people come to the city in search of economic opportunities. Many of these are disadvantaged rural populations who join existing slum dwellers predominantly settled in risk prone areas. Economic activity is dominated by small business and trade based with very few medium and large firms. The city acts as a distribution center for goods within the country and neighboring countries like Democratic Republic of Congo, Rwanda and South Sudan. As a landlocked country all commodity distribution passes through the city which is a major transit hub for import and export trade both locally and regionally.

As the capital city most Government and statutory bodies have their administrative base within the city.



WHO is responsible for Kampala?

KCCA- Kampala Capital City Authority has statutory responsibility for managing the city and is organized as follows:



Kampala is administered by the Kampala Capital City Authority on behalf of the central government. It is divided into five urban divisions, ninety nine wards and eight hundred and sixty three villages. The Greater Kampala Metropolitan area includes KCCA, Entebbe municipality, parts of Wakiso and Mukono districts.

Other **Statutory Providers** of key urban services include:



NEMA for environmental protection and regulation







NWSC for distribution of water and sewage treatment



Electricity regulation, transmission and distribution



Like in all cities in the world, other **stakeholders** are involved in providing services and contributing to development in Kampala.

			
PRIVATE SECTOR	DEVELOPMENT	CIVIL SOCIETY	ACADEMIA
Businesses Service Providers Associations Finance	GoU Agencies Diplomatic Missions Development Agencies NGOs	Community Spiritual / Cultural Leaders Professional Associations Networks	Schools Universities, Colleges Training Institutions Research Centers

WHAT is Kampala Climate Change Action strategy?

KAMPALA



The **Kampala Climate Change Action** strategy is a plan aimed at mainstreaming climate change response in all city services in order to put the city on a low carbon development path. The Kampala Climate Change Action strategy is KCCA's flagship programme for the city to achieve its sustainability ambitions.

The strategy addresses three issues:

- the short and long-term adaptation of the city to climate change impacts
- charting a low emissions development path for the city
- transforming the threat of climate change into an opportunity for residents.

The strategy has been developed through a transversal and participatory approach involving all stakeholders. The guiding principle is that of shared responsibility which ensures that climate change is fully integrated in all development policies and service delivery at all levels whilst supporting citizens to take action.

The **Kampala Climate Change Action** Strategy is aligned to the KCCA 5 year Strategic Plan (www.kcca.go.ug/uploads/KCCA_STRATEGIC_PLAN_2015-2019.pdf) whose vision is to transform Kampala into a vibrant, attractive and Sustainable City. The strategy is also contributing to the goals of the Uganda Vision 2040, the National Development Plan II, the National Climate Change Policy & Strategy and the 2nd National Communication (INDC) and Uganda's commitment to the Paris Agreement.



climatechange@kcca.go.ug



www.kcca.go.ug/climatechange



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Kampala Capital City Authority - KCCA



- ▶ **INTERNATIONAL:**
 - ▶ Adaptation of the “United Nations Framework Convention on Climate Change” (UNFCCC)
 - ▶ Paris Agreement 2015



- ▶ **REGIONAL:**
 - ▶ East African Community (EAC) climate change policy
 - ▶ EAC climate change strategy and master plan



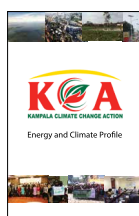
- ▶ **NATIONAL:**
 - ▶ Uganda signed the United Nations Framework Convention on Climate Change on 13th of June 1992 and ratified it on 8th of September 1993
 - ▶ Uganda National Adaptation Programmes of Action (2007)
 - ▶ National Climate Change Policy, 2013
 - ▶ National Strategy and Action Plan to strengthen human resources and skills to advance green, low emission and climate resilient development in Uganda 2013 - 2022
 - ▶ Uganda's Intended Nationally Determined Contribution, UNFCCC 2015



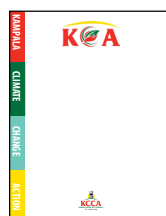
- ▶ **LOCAL:**
 - ▶ KCCA Strategic Plan 2014 - 2019
 - ▶ Kampala Climate Change Action Strategy

The Strategy is a 5 year roadmap outlining the current stakes, the vision to be achieved and required actions to be undertaken. The elaboration of the strategy (see map below) started in February 2015 and has already achieved some milestones like:

- engaging stakeholders
- conducting pilot actions
- adoption of climate smart policies
- Kampala Energy and Climate profile



**Kampala
Energy and
Climate
Profile (2015)**



**Kampala
Climate
Change
Action**



Greater Kampala Metropolitan Area



KAMPALA

Population GKMA

1995



774,241

2015



3.5 MILLION

2035

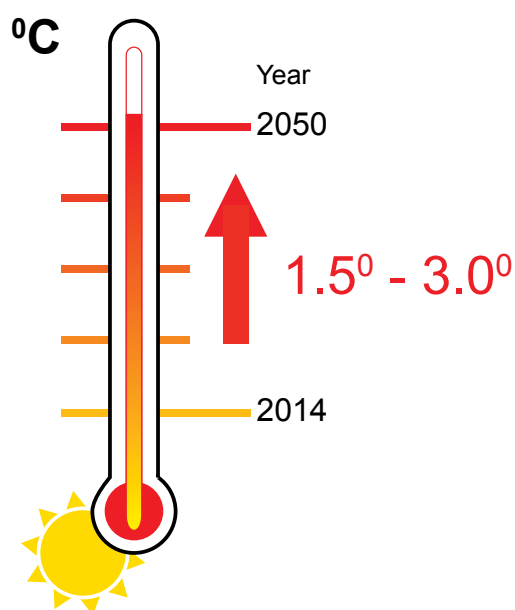


10 MILLION

CLIMATE

WHAT is the problem?

Kampala, like the rest of the world, is experiencing climate changes mostly with increased temperatures and more intense rainy seasons which are less predictable and more erratic leading to flooding and food insecurity. Recorded temperature has increased by 1.5° over the last 50 years. Although the precipitation levels have not changed significantly, the patterns have become more erratic.



Average Annual Rainfall 2000mm

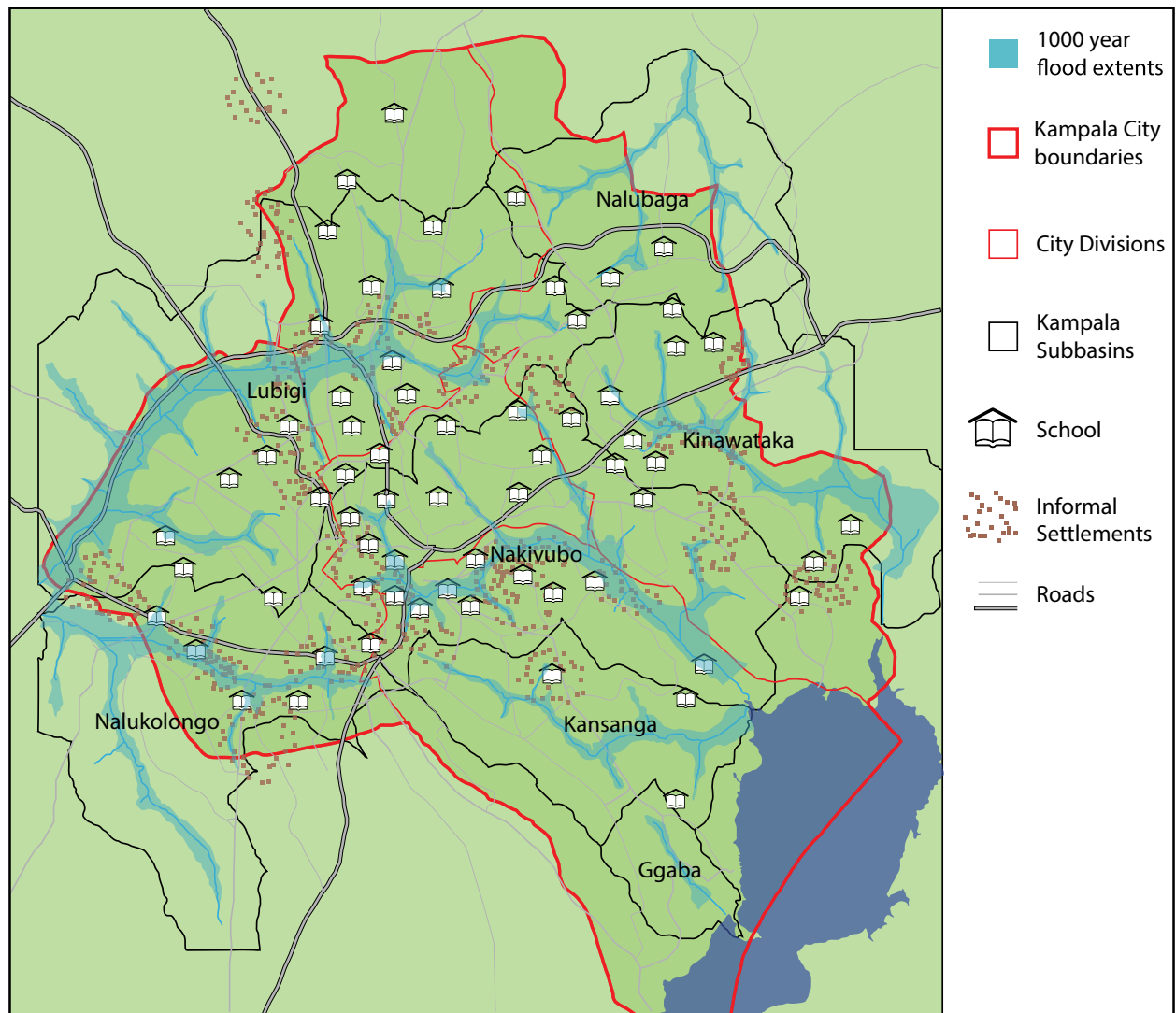
Vulnerabilities

The consequences of climate change mean the city is more exposed to certain risks and disasters such as floods and heat hotspots as temperatures rise. Without control and protection mechanisms for land use and built environment, the problems will worsen. The city will be exposed to severe climate change shocks and stresses that will impact on its functioning and the livelihoods of residents, particularly the vulnerable urban poor.

The flood map opposite shows how services and communities will be affected by increased water surface runoff from climate change if no action is taken.

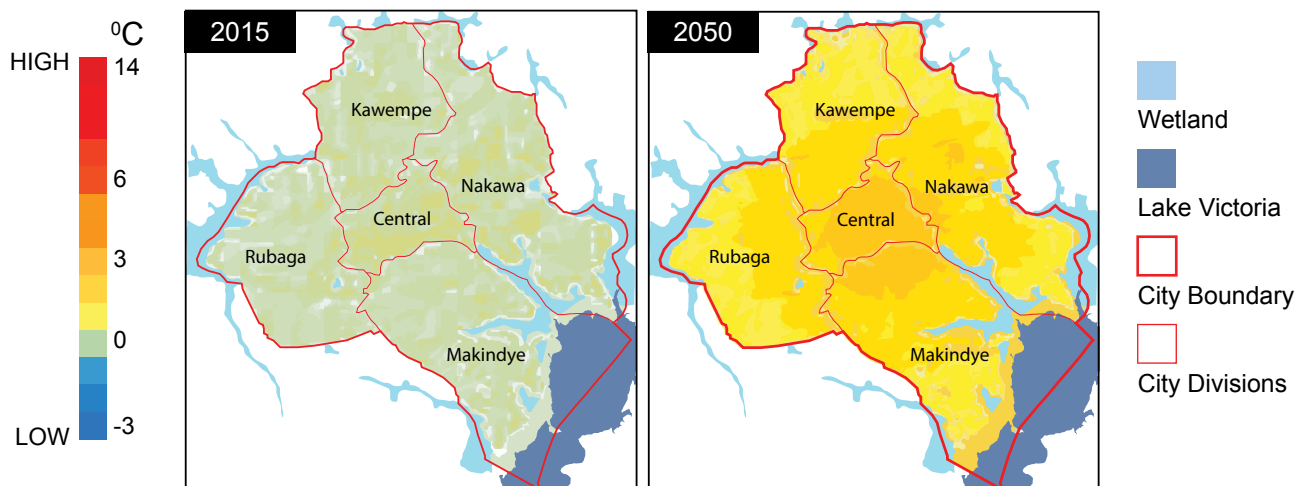
The heat map opposite shows how Kampala will be affected by increased construction and reduction of green spaces thereby increasing the temperature further.

Kampala 1000 Year Modeled Flood Extents



CLIMATE

Kampala Urban Heat Island Estimation





Drivers of vulnerability to heavy rains and flooding

- Land use:
 - Housing on hill tops
 - Settlements in wetlands – leaves no room for rainwater to drain
- Insufficient, poorly designed and poorly maintained drainage channels
- Poor solid waste management practices
- Limited rainwater harvesting

Drivers of vulnerability to heatwaves

- Heavy reliance on Lake Victoria for water supply
- Electricity supply from hydro sources located in areas outside the city which are exposed to droughts
- Poor building practices:
 - Energy inefficient buildings
 - Limited environmental consideration in building designs
 - Limited green cover – inadequate green spaces
 - Impervious surfaces that magnify urban heat island effect



Other drivers of vulnerability

- Heavy reliance on charcoal & firewood for cooking which has significantly reduced tree cover countrywide
- Heavy reliance on imported petroleum products for transportation which is susceptible to price & supply shocks
- Reliance on grid electricity which is susceptible to damages on transmission lines resulting from severe storms
- High levels of unemployment which limits the ability of individuals and communities to cope with the impacts of climate change

Consequences and Impacts

- Loss of property and lives
- Exposure of infrastructure, housing & livelihoods to destruction & damage
- Loss of money
- Lost opportunities

WHAT is the Energy and GhG Profile?

An energy and GhG profile is a quantitative as well as qualitative assessment/inventory of the current energy production & consumptions and the current levels of emissions of greenhouse gasses for the city. The objective of the GhG balance is to identify the different sources of GhG emissions in order to characterize the main stakes, the trends and potential mitigation measures. Because they are related, the GhG balance includes an energy balance that is why it is common to talk about “energy and GhG” balance. The energy balance provides a snapshot of the current as well as the projected sources and uses of energy. On the other hand the GhG balance shows the level and sources of greenhouse gas emissions.

The GhG balance is the first such exercise for Kampala. Until now the GhG balance was only conducted at national level in the context of the ratification of the UNFCCC and the Paris agreement. The Kampala GhG balance exercise is a voluntary and proactive commitment by KCCA to bring local solutions to a global problem working together with the Government.

This first exercise allows KCCA to start the construction of its own inventory system consistent with the national framework. KCCA will improve year after year the elaboration process but also the precision of the assumptions and data. For the current balance, efforts have been made to find the most recent data and to take into account the existing literature. The balances will be updated on a regular basis to assess progress. The emissions were computed using the global protocol for community (GPC) scale GHG emission inventories 2014, consistent with the methodology used at the national level. The default emission factors from the IPCC tables were used. Both direct and indirect emissions were taken into account. The emissions were computed at three levels:

1. **KCCA** - administrative assets, facilities and services
2. **Kampala City** - geographical boundaries of KCCA
3. **Greater Kampala Metropolitan area** - suburbs reaching Mukono and Wakiso districts

To be effective, the Kampala Climate Change Action Strategy should address the whole territory of Kampala and Greater Kampala Metropolitan Area. Therefore the action plan first targets the functioning of the administration, the management of its energy/GhG emissions, the efficiency of its public buildings, car fleet and assets, public procurement etc. Then working with all stakeholders and sister administrations of Entebbe, Mukono and Wakiso address the stakes of the GKMA territory.

WHY is Energy so important?

Energy needs affect all sectors and as demand increases this will be the major player in both systems' efficiency and use of renewable sources. Population growth which has doubled over the last 20 years indicates the need to focus attention in this area to both change human behaviour and create sustainable alternatives.

Likewise transport needs will increase yet infrastructure plans cannot support this rapid growth so alternative responses need to be sought. Waste management is already seeking to maximize efficiency by generating energy and industry regulation will require cost as well as energy efficiency. Industrial growth and development will need to adopt renewable energies to meet the demands. Green energy incentives need to be developed to promote green investment.

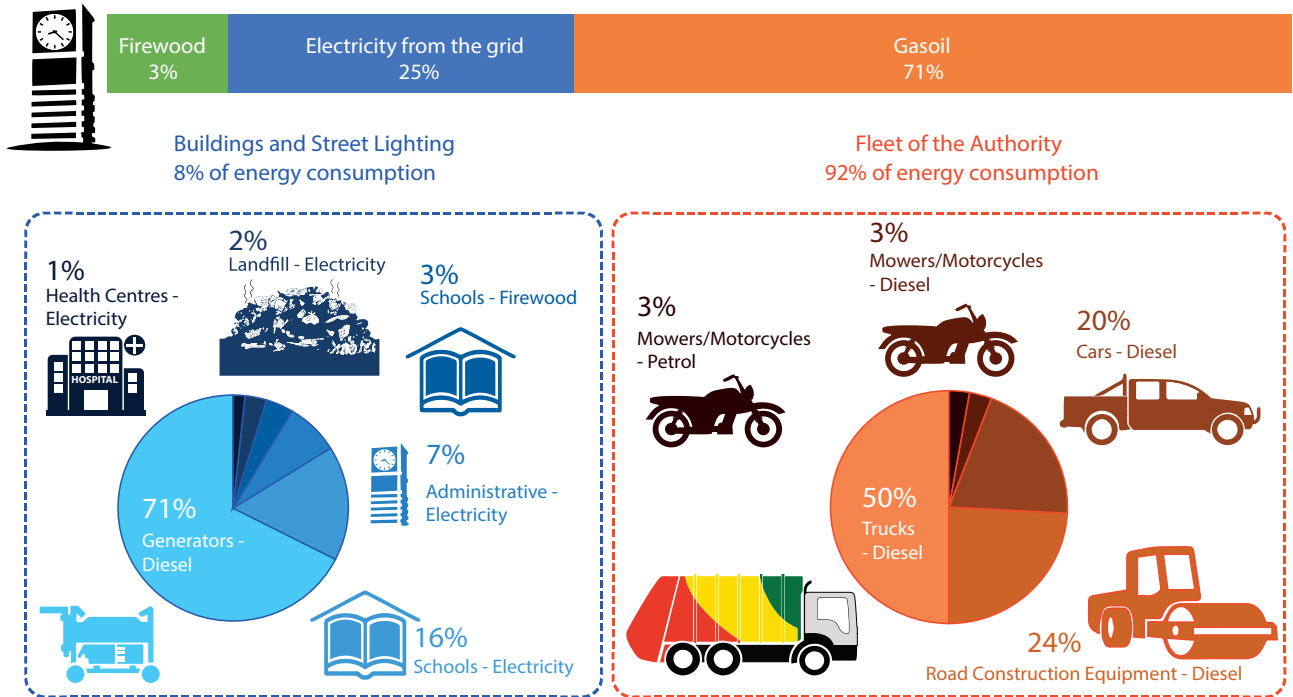
The Energy and GhG balance of KCCA

KCCA represents only 0.28% of the GhG emitted in Kampala and 0.39% of the energy consumed in Kampala which is very low compared to other stakeholders living and working in the city. The GhG emissions per capita reach 2.4tCO₂e/resident in Kampala and 1.75tCO₂e/resident at Greater Kampala level, compared to 1.4tCO₂e/resident at national level - meaning that the city and metropolitan area are the main contributors.

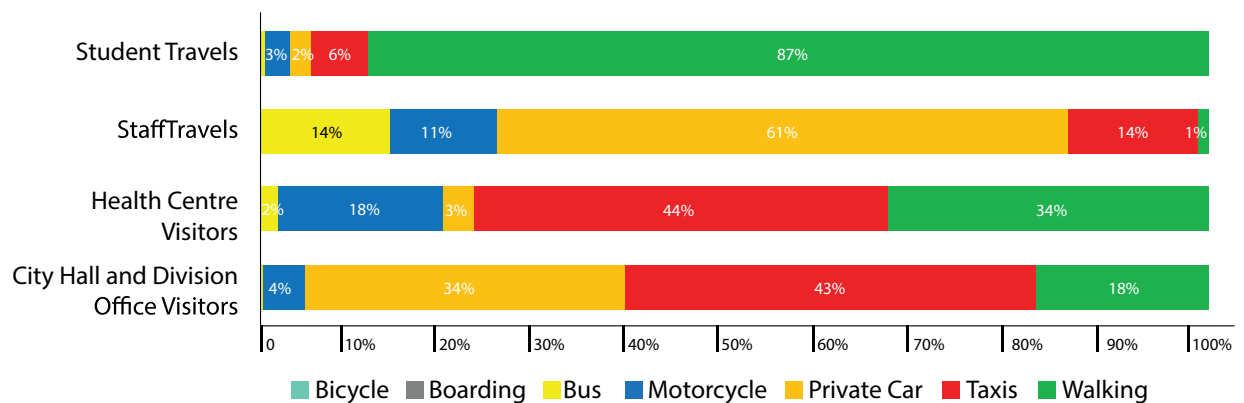
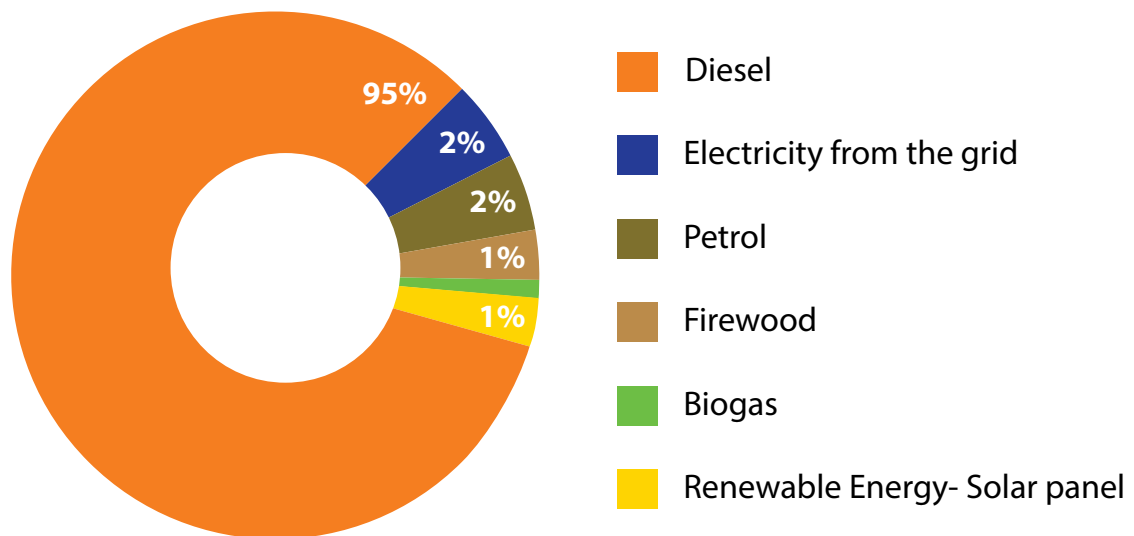
The results present the energy productions, consumptions and GhG emissions associated with the functioning and activities of KCCA. The global volume of GhG emissions for KCCA increased by 9% between 2012 and 2014. It is characterized by a very high proportion of GhG emissions from fuel consumption by the car fleet which represents about 92% of the total energy consumed (50% of fuel consumption is related to waste collection & 24% to road construction activities). The emissions associated with energy consumed by the buildings and street lighting is low thanks to the energy efficiency measures being undertaken by KCCA and use of photovoltaic energy for street lighting. The low use of air conditioning by KCCA has a positive impact on the balance. This is due to the preference by KCCA to use alternative ways such as natural ventilation, renovation and construction of buildings following standards that avoid systematizing AC. For the coming years it is recommended to keep on that path and to formalize this approach in a specific standard guideline for all KCCA buildings.

It is important to note that a significant volume of GhG emissions on the territory is induced by the decisions taken by KCCA for example in the fields of physical planning, management of public transport, mobility planning or waste management. Addressing these services would therefore help to significantly reduce the emissions of the territory.

Energy mix of KCCA



Sources of Current Energy Use

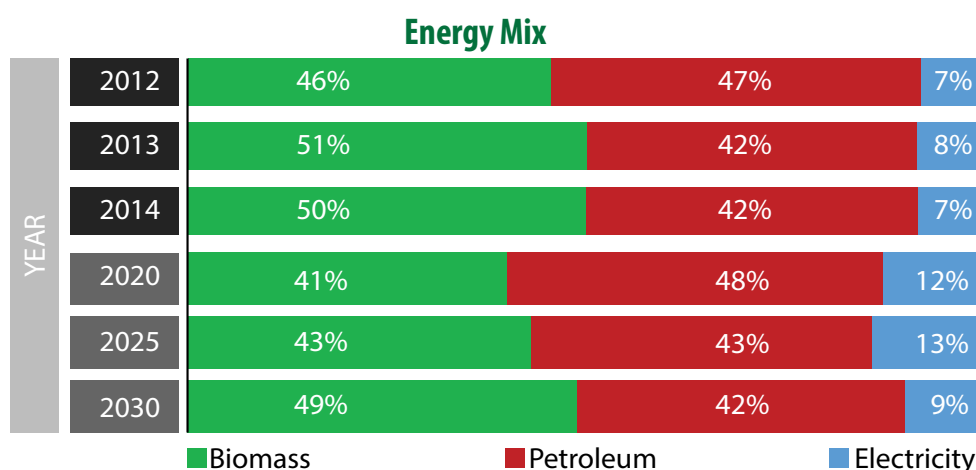


Energy and GHG balances for Kampala & Greater Kampala Metropolitan Area

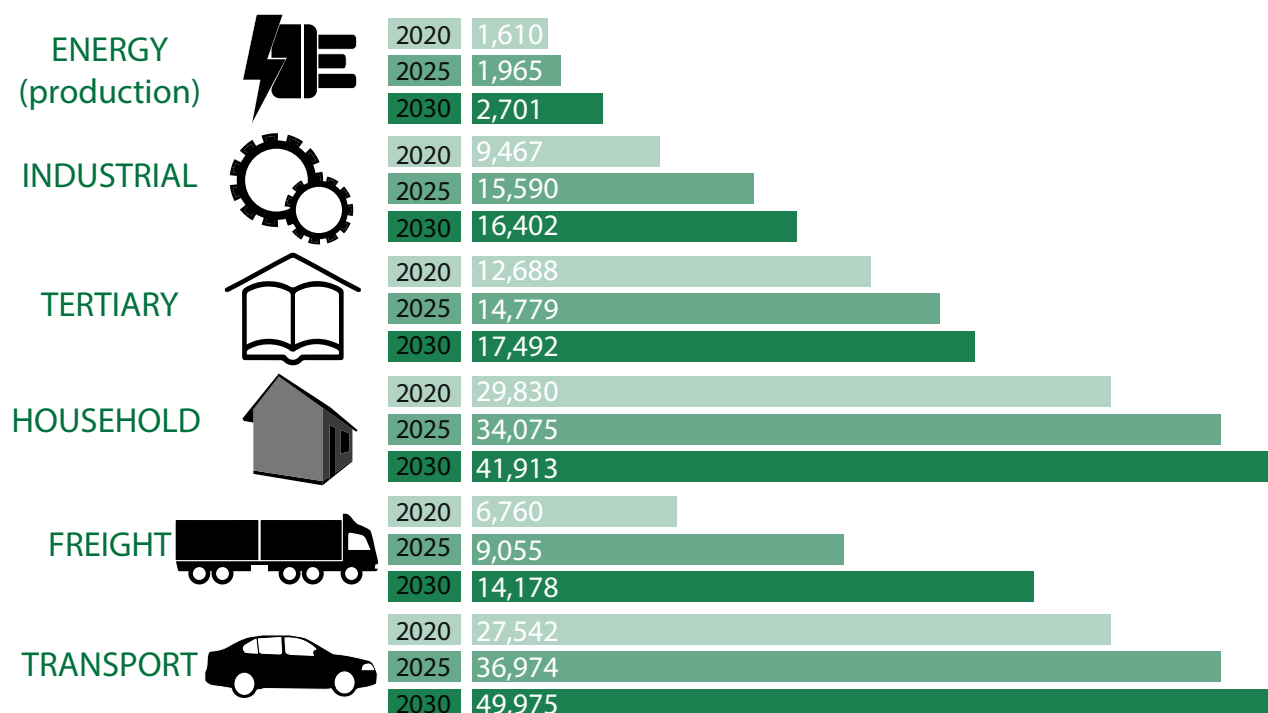
The administration of Kampala is under KCCA. It is composed of 5 divisions with a geographical area of 196km² and a population of 1.516 million inhabitants -2014 census. The number of households is 418,787 and average household size is 3.48 persons. The population growth rate is 2% per annum. The greater Kampala metropolitan area is composed of Kampala city, Entebbe municipality and some areas carved out of Mukono and Wakiso Districts. The GKMA has area coverage of 941.2km² with an estimated population of 3.23 million inhabitants (2014 census). The number of households is 835,422 with a household size of 3.48 persons. The population growth rate is 10% and it is estimated that about 70% of the national GDP is generated within GKMA.

Most modern energy such as petroleum and electricity is consumed in this region, consequently emissions concentration will increase substantially. The main forms of energy used in the GKMA are biomass (charcoal & wood fuel), petroleum products (gasoline, diesel, paraffin, LPG & aviation fuel) and electricity. It is estimated that about 58% of electricity is supplied to this region and about 65% of the vehicles are within GKMA. Biomass is a very important source of energy in GKMA for household cooking; it contributes to 50% of the energy mix. Petroleum and electricity contribute to 42% and 8% of the energy mix.

The main supply sources of biomass and electricity are outside Kampala region. Charcoal is mostly supplied from western, central and northern parts of the country. Hydropower is the dominant source of electricity (90.5%) supplemented with cogeneration from sugar factories (Kinyara & Kakira, 6.7%) and thermal power plants (2.8%). Significant investment is currently underway by the Government of Uganda in Karuma (600MW), Isimba (183MW) and other small mini-hydro stations. GKMA will still be the dominant user of modern energy in foreseeable future with biomass remaining an important component in the energy mix.



Projected Energy Demands in TJ (2020 to 2030)



Emissions in GKMA

The emissions are categorized into 3 scopes:

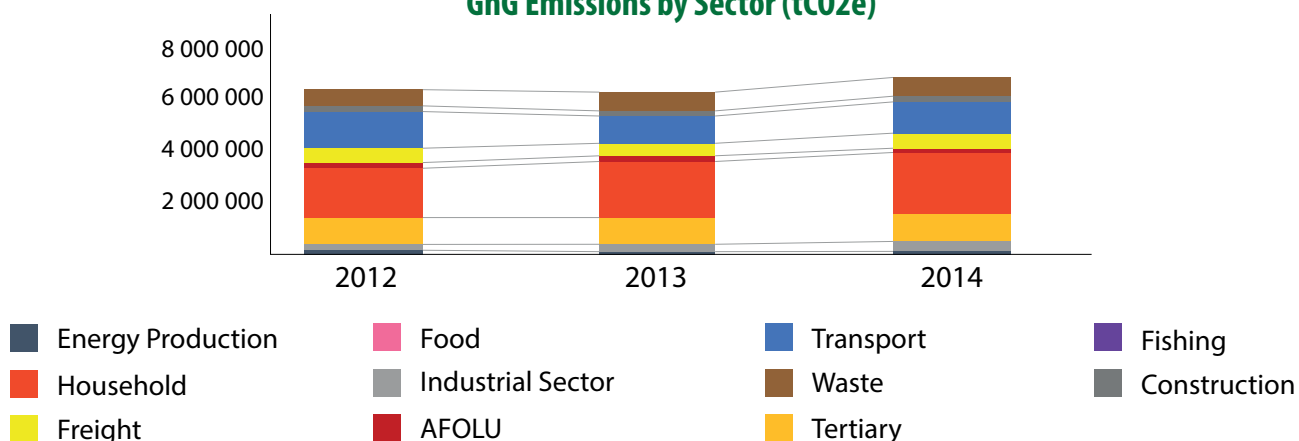
Scope 1 covers emissions that occur within the territorial boundary of the GKMA.

It includes both mobile and stationary combustions in all sectors.

Scope 2 covers indirect emissions related to energy that occur outside of the city boundary as a result of the activities that occur within the boundary eg: power generation from Electro Maxx in Tororo.

Scope 3 covers any other indirect emissions such as emissions from charcoal and cement production. The emissions in GKMA will increase due to increase in population and industrial development. Total emissions increased from 6.5 million tonnes in 2012 to 6.9 million tonnes in 2014, about 6.4% in two years.

GhG Emissions by Sector (tCO₂e)





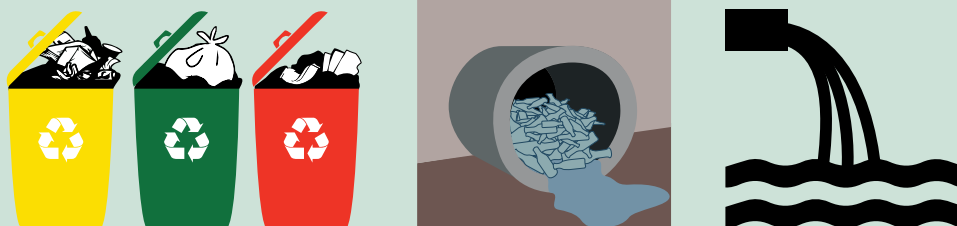
ENERGY

The city's energy supply is dominated by biomass and hydroelectricity for cooking, lighting and industry and fossil oil for transportation. Emissions associated with electricity production are small as over 90% of the electricity is supplied by hydroelectricity. The main source of energy for household cooking is biomass (firewood & charcoal) which are high emitters of GhG but also of particles which seriously affect public health. The use of oil for transportation (diesel) produces the same concerns.



WASTE

Management of the volume of waste and poor disposal practices.



CLIMATE

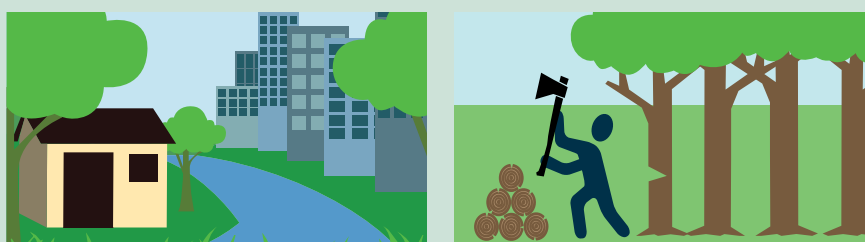
MOBILITY

Use of old vehicles, small omnibuses, congestion and heavy reliance on imported fossil fuels.



LAND USE

Lack of integrated detailed neighborhood plans, poor construction practices, energy inefficient buildings, low use of renewables, few green spaces, environmental degradation.



WHY is it important to do something?

For Kampala, it is estimated that the cost of adaptation to climate change will increase significantly from about US\$ 7.3 million in 2013 to between US\$ 33 – 102 million by 2050 (CDKN). This money can be saved by taking action now:

- **Adaptation** - reduce impacts/ losses/ vulnerability and enhance resilience of communities and key infrastructure (like roads, drainages, electricity supply network), reduce the city's vulnerability to charcoal, fuel, food and water supply shocks, energy security/ renewable energy.
- **Mitigation** - avoid causes by reducing emissions from major contributing sectors
- **Opportunities** from challenges by saving resources, material re-use/ recycling, improved energy efficiency, investing in the green economy and creating green jobs.

Projected emissions

In the business as usual scenario, emissions at GKMA level are projected to increase from 6.9 million tons in 2014 to 9.1 million tones CO₂ eq. in 2020 and 14.6 million in 2030. The overall emissions will increase by 55% from 2020 - 2030. The main contributing sectors include transport, household, freight, waste, tertiary and industrial sectors.

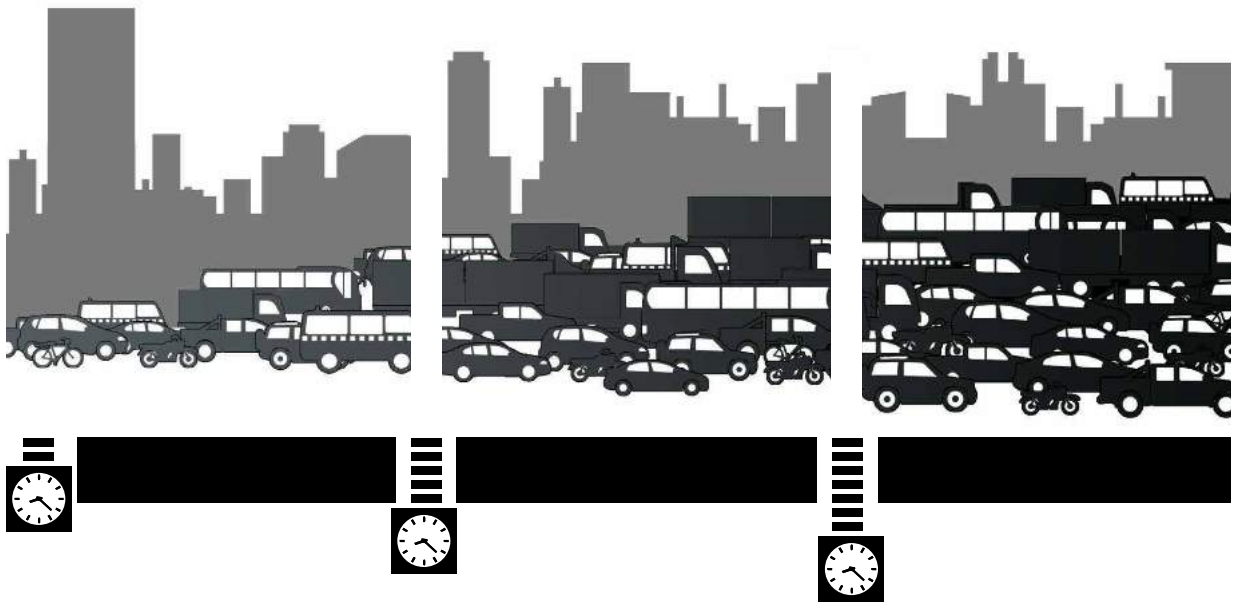
Mitigation options

The best option is to start with energy efficiency in all sectors.

- **Energy cook stoves in institutions and households estimated to reduce energy onsumption by 20-40%**
- **Introduction of alternative cook fuels like briquettes**
- **Improvement in road infrastructure coupled with good driving practices**
- **Restrictions on importation and use of second hand vehicles estimated to reduce energy consumption by 25-30%**
- **Fuel switching to low carbon intensity fuels at households in the long-term**
- **Air quality monitoring system**
- **Improve accessibility, connectivity and transit option in the city**

As biomass will still remain an important source of fuel, there is opportunity to promote forestation and afforestation to supply biomass to the city. In the transport sector fuel switching to blended fuel is feasible. It will reduce gasoline consumption by 5-20% depending on availability of ethanol. The use of biodiesel may be considered for the medium to long term. The use of mass transit systems such as BRT and light rail will also reduce fuel consumption substantially. The government is investing heavily in road and energy infrastructure and the use of thermal power will be limited. There are possibilities of generating energy from waste and solar energy on a large scale with projected capacity of over 10MW.

Traffic congestion and journey times



Time spent stuck in traffic will increase as road infrastructure fails to meet the demand from more cars. This will intensify the volume of particles emitted in the city affecting living and working conditions including schools and public health centres.

CLIMATE

Waste volume and management



Due to the increasing volume of waste the city will require more resources to transport waste to disposal sites. This will involve additional GhG from transportation and increased waste, further impacting traffic congestion and land use designation for landfill sites.

CHANGE

HOW do we envision the change we need?

Our ambition is to reduce our emissions by 22% on the **business as usual** scenario. To achieve this ambition we will focus on a paradigm shift in key sectors including transport, energy, waste, built environment and cross-sectoral pillars of communication, participation, governance, urban planning and resilience.

Adaptation

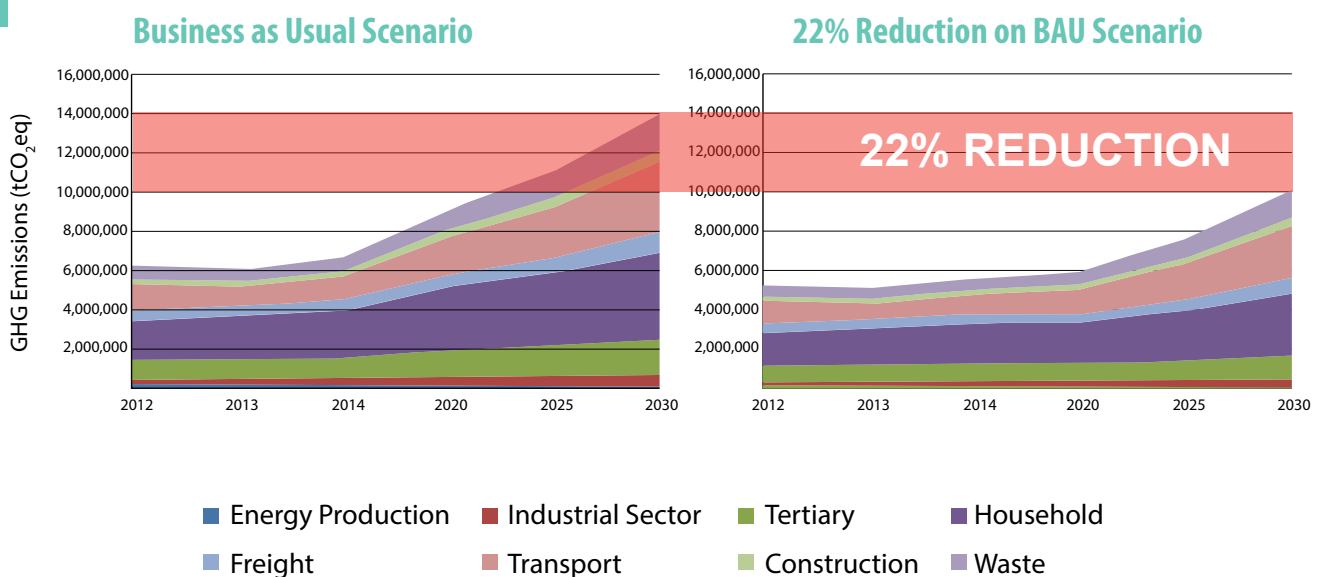
- Reduce the number of people exposed to climate change impacts
- Reduce losses resulting from climate change related hazards
- Well planned and integrated neighborhoods
- Reduced damage to public infrastructure and limited interruptions to city operations
- Revitalized ecosystems and public spaces

Energy

- 10 % of energy demand met from local production (within the territory)
- 20 % of cooking energy generated from renewable alternatives to charcoal

Emissions

Reduce by 22% on the business as usual scenario



HOW will change be put into practice?

The Kampala Climate Change Action strategy is guided by core values which are in line with KCCA's Strategic Plan and include:



Responsible sustainable development

For environmental and economic harmony



Participation and shared responsibility

Together we build a shared value of equal responsibility and a socially inclusive process



Integrated approach

Mainstreaming climate change into everyday life functions for desired behaviour change



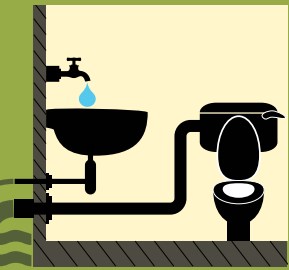



Drainage clearing

STRATEGIES for CHANGE

- ▣ Being an example as a Capital City
- ▣ Communication with and engaging local stakeholders to participate
- ▣ Landscaping a more climate resilient and low carbon Kampala
- ▣ Developing smart utilities and community services
- ▣ Supporting the green economy

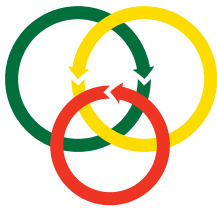
CHANGE

SECTOR	VISION	TARGET	IMPACT
ENERGY	 INCREASE RENEWABLE ENERGY USE	<ul style="list-style-type: none">• Number of EE Audits conducted per year• Improved cook stoves distributed to and purchased by institutions & households• Amount saved as a result of energy audits conducted• 50 Megawatts of renewable energy produced on the territory (solar, waste to energy)• 50% of charcoal (2015 baseline) replaced with alternative cook fuel (briquettes, biogas)• 15 % of the energy mix from renewables	<ul style="list-style-type: none">• Household and institutional savings• Increase in green jobs• Reduction in street lighting costs• Improved air quality• Energy efficiency buildings
MOBILITY	 REDUCE CONGESTION & TRAVEL TIMES INCREASE SUSTAINABLE TRANSPORT SYSTEMS	<ul style="list-style-type: none">• 50% of motorists using mass public transport (Buses & Train)• 20% reduction in average hours of travel• 50% of city roads tarmacked• 25 km of NMT (cycle/Pedestrian) lane length constructed• 15% of new vehicle registrations (Institutional & public transport fleet) using alternative fuel (compressed natural gas, biofuels, all electric)• Alternative fuel dispensing/charging stations established• At least 200,000 motorists using car sharing system annually• 40% of current 14-seater taxis replaced by buses	<ul style="list-style-type: none">• Household savings• Increase in green jobs• Reduced GhG emissions• Improved air quality• Traffic de-congestion
WASTE + WASTE WATER	 INCREASE 3RS	<ul style="list-style-type: none">• 30% of waste recycled• 60% of newly approved buildings with water harvesting units/systems installed• 5 megawatts of electricity generated/supplied from methane capture• Biogas systems installed	<ul style="list-style-type: none">• Green economy job growth• Behaviour change• Improved drainage flows• Waste reduction in households & institutions• Improved health and wellbeing
LAND USE + BUILT ENVIRONMENT	 IMPROVED CONSTRUCTION PRACTICES	<ul style="list-style-type: none">• Integrated green (circular economy) neighborhoods planned/ developed• 300,000 people supported to reduce exposure to climate hazards• 80% of new public investments classified as climate smart• New buildings certified as green buildings• Water harvesting units installed• 500,000 new trees grown (street, park and household)• 30km of drainage channels constructed/improved• Acres of wetlands protected and or restored	<ul style="list-style-type: none">• More eco friendly buildings• Increased green economy• Carbon sequestration• Climate resilient infrastructure• Reduce disaster exposure & lower costs for risk/disaster management• Improved community practices• Increased green spaces and trees in households for improved health & income

*The long term **vision** includes specified **targets** which will **impact** significant change for the city; for business, residents and visitors alike.

HOW will this be done?

We will achieve this through the following approaches:



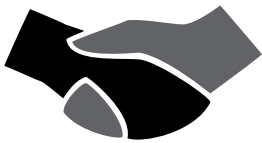
Creating enabling environments

- Policy • Regulations • Incentives
- Community Development Programmes



Leading by example

- Management of our assets, buildings, fleet, facilities
- Climate friendly approaches to service provision
- Role modeling actions
- Demonstration of best practices and eco standards



Partnerships

- Public-private • Government agencies • Community
- Development partners • Academic and other institutions



Communication, participation and support

- Promotion of best practice
- Information and knowledge sharing
- Awareness raising management • Dialogues
- Supporting and encouraging actions by stakeholders and community-led initiatives




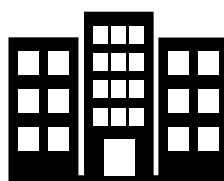


Innovation and technology

- Pilot initiatives using appropriate and alternative technologies
- Research and development
- Staff intranet

WHO is responsible for making the required changes?

As KCCA we will lead by example by addressing the stakes in our scope of reach.

KCCA represents 0.28% of the GhG emitted in Kampala and KCCA represents 0.39% of the energy consumed in Kampala. KCCA buildings and facilities represent a low share of the total emissions of the territory. The decisions taken by KCCA in physical planning, mobility, waste management, education and economy can significantly influence the emissions of the territory. KCCA cannot achieve the ambitions alone. Therefore besides KCCA, everyone has a duty to get involved as all are affected and able to contribute to the solutions as individuals, households, communities and institutions.

RESPONSIBILITY			
STAKEHOLDERS	WHO Responsibility Level	WHAT Behaviour Change	HOW Daily Practices
	INDIVIDUAL Workers Families	<ul style="list-style-type: none">• Transport use• Cooking• Reduce waste• Be role models at home and work	<ul style="list-style-type: none">• Shared or public means• Alternative cook fuel• Separate & recycle waste
	INSTITUTIONAL Organizations Government Schools Hospitals Development partners	<ul style="list-style-type: none">• Provide facilities• Create awareness• Lead by example	<ul style="list-style-type: none">• Energy efficiency• Cooking with renewable fuel• Waste reduction
	CORPORATE Business Green market creation	<ul style="list-style-type: none">• Self-regulation• Provide facilities• Create awareness• Lead by example	<ul style="list-style-type: none">• Energy efficiency• Cooking with renewable fuel• Waste reduction• Compliance to eco standards• Clean production systems• Green investment
	COMMUNITY NGOs CBOS Leaders Groups	<ul style="list-style-type: none">• Promote/ model best practices• Advocacy value chains• Self-regulation	<ul style="list-style-type: none">• Raising awareness• Role modeling actions,• Information dissemination• Networks and partnerships• Lobbying for change champions

HOW shall we measure progress?



PARTICIPATION

- Number of stakeholders reporting on their action
- Diversity of outreach within stakeholders, including multiple sector levels



PRACTICE CHANGES

- Internal and external surveys to assess improved actions
- Numbers of testimonies by staff and stakeholders



INFORMATION SHARING

- Number of platforms used (social media, radio, TV, print)
- Number of people reached (sectors, communities, specific stakeholders)



DOCUMENTATION

- Database categorized by stakeholders and sector actions
- Tools for activity/ event reporting



PILOT REPLICATION

- Uptake of pilot projects by KCCA and other stakeholders
- Sharing and documentation of best practices



TECHNOLOGY TRANSFER AND INNOVATION

- Sharing of lessons learned through project initiatives
- Number of innovative ideas and appropriate technology solutions developed and implemented
- Number of incubation networks and centres supported or active in climate smart solutions

ACTION

WHEN will actions begin?

KCCA has already begun many actions and the strategy has helped to identify specific ones in each sector which will achieve the targets of the long term vision. Several are on-going and require external support whilst others involve key stakeholders in doing daily actions.

The tables below offer guided priority actions with proposed time frames.

(OG = Ongoing, ST = Short Term, MT = Medium Term, LT = Long Term)

AP = KCCA Action Plan Data Sheet)



WASTE

Specific Action	Time	How	Who	AP
Promotion of segregation at source, re-use and composting: internal, public and community	OG		KCCA, schools, media houses, households	W10, S7
Environmental and social safeguards policy	ST		KCCA	PP14, PP15
Training and sensitization in 3Rs practice: internal and external	OG		KCCA, Communities	W1
Updating and formalization of Waste Management strategy	OG		KCCA	W0, W4
Assessment of existing recycling capacities including electronic/ industrial waste for job creation	ST		KCCA, Private sector	W3
Investment potential mapping for waste/recycling sector	MT		KCCA, Private sector	W0, W3
Increase enforcement for non-compliance	OG		KCCA, NWSC, NEMA	W4



ACTION



ENERGY

Specific Action	Time	How	Who	AP
Conversion to all solar street lighting	ST		KCCA	EX8
Create Energy Master Plan: <ul style="list-style-type: none"> • Energy inventory and MIS • Make Department of Energy • Efficiency measures/ equipment and audits • Public assets management policy including standards/renovations • GHG tracking system 	ST		KCCA Ministry of Energy Utility providers Development partners Schools Institutions	EX6, E0, E6, PP7
Renewable energy survey	ST		KCCA	E6,E0
Pilot replication in schools/ markets	MT		KCCA	S4, S2, E4, S8, S3, E5
Financing mechanisms for energy efficiency/ renewable energy/ feed in tariff opportunities	MT		KCCA, GoU, Banks, Development partners, Institutions	E0
Install renewable energy on public buildings	MT		KCCA, Partners	S4, EX8
Promotion of uptake of renewable alternative cooking fuels	OG		KCCA, schools, media houses, households	E4, E5, S3, E1, S0
Survey on charcoal and firewood use by households	ST		UNDP	E6
Clean energy generation investment incentives	MT		KCCA, financial sector, GoU	W3, W0
Waste to energy project from landfills, industrial waste, waste water, sewage	MT		KCCA p/p, Development partners, NWSC	W11, E2, E3
Audit of energy distribution transport system for improve efficiency	MT		KCCA, UMEME, Ministry of Energy	PP7, E0



ACTION

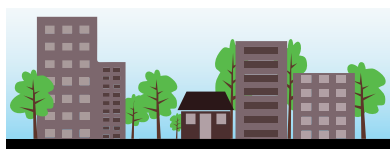


MOBILITY

Specific Action	Time	How	Who	AP
Developing public transport mass systems (BRT/NMT/light rail/cable)	OG		KCCA, Ministry of Works	M3, M4, M5, M6, M10
Integrated Urban Mobility Plan	ST - LT		KCCA, Works, Private Sector	M0, M12, S6
Standard introduction for environmental performance for motor vehicles	ST		KCCA, GoU, Ministry of Works	M9, M11
Develop freight and logistics strategy	MT		KCCA, Ministry of Works	M2
Congestion and pollution control measures and charges	ST		KCCA, Ministry of Works	M11
Encourage businesses and institutions to adopt eco mobility practices	MT		KCCA, SH	M1, S6
Promote car sharing/pooling internal and external	ST		KCCA SH, Schools	M7
Street naming and city map updating	ST		KCCA	M8
Car fleet environmental performance criteria	MT		KCCA	EX2
Introduction of fleet conversion to mixed fuels	MT		KCCA	EX0
Parking policy with shared transport incentives	ST		KCCA	M9
Training in eco driving standards	ST		KCCA	M7

ACTION





LAND USE/ BUILT ENVIRONMENT

Specific Action	Time	How	Who	AP
Integration of Land use (including commercial development) into planning and mobility	OG		KCCA	PP2, PP4, PP6
Zero carbon and positive energy pilot in neighbourhood/village	OG		KCCA, Community	PP13
Data management and integrated GIS system with vulnerability and climate change information	OG		KCCA	PP5, PP9, PP6, COM5, PP17, PP18
Landscape policy	ST		KCCA	PP3
Integration of energy efficiency and renewable energy into building standards with eco guidelines for construction/ renovation / waste and waste water and air quality management	ST		KCCA	PP7
Advisory information services to raise voluntary compliance	ST		KCCA, Architects developers	PP8, PP9
Coordination with national agencies for construction regulatory framework	ST		KCCA, GoU	PP14
Promotion of eco construction practices	OG		KCCA, Communities	PP11, EX7
Integration of climate change, energy efficiency and renewables into environmental impact assessments	ST		KCCA, NEMA	PP15
Wetlands conservation, protection and restoration	MT		KCC, Ministrt of Water, NWSC, NEMA	PP21, PP18
Construction and widening of drainage channels	OG		KCCA, Development partners	PP16
Creation of ecoparks to promote eco tourism and green spaces	MT		KCCA, Ministry of Tourism	PP21, GE3
Conduct tree audit to plan for tree planting and creation of urban sinks	MT		KCCA, GoU, MAK	PP20



ACTION



ECO PRACTISE (Crosscutting Issues)

Specific Action	Time	How	Who	AP
Eco label rating system for schools / retail/ industry/ hospitality	MT		KCCA	S5, COM6, GE5
Green public procurement	MT		KCCA	EX4
Climate Smart services via technology platforms (online payments/ teleconferencing/ intranet)	OG		KCCA	COM4, GE8
Environmental best practices for public events (internal and external)	OG		KCCA Stakeholders	COM2, EX15
Adoption of Environmental Clubs/ officers/ ambassadors/champions for best practice promotion	OG		KCCA schools, businesses, institutions, households, communities	S9
Assessment of green enterprise potential and eco-training availability	MT		KCCA, Institutions, Private sector	GE1, GE6, GE7
Integration of eco skills into Employment Services Bureau	ST		KCCA	GE2, GE5, GE6, GE7, E1, EX1, EX2, EX10
Public/private sector showcasing of eco practices via exhibitions/ info clinics/ demonstrations	ST		KCCA, SH	COM7, GE2
Air quality monitoring system development	MT		KCCA schools, industry, partners, institutions	M11, COM5
Capital Infrastructure Programme climate smart policy	OG		KCCA	GE8, EX5
Go Green including tree planting and creation of green/waste ambassadors	OG		KCCA, Communities	PP19, PP20
Promotion of stakeholders to CC actions via sensitization and dialogue	OG		KCCA Stakeholders	EX15, EX16, PP12, EX9, EX13, EX14
Communication and participation plan integrated into KCCA Work plans for CC actions	OG		KCCA	EX1, EX3, EX10, EX11, PP1, COM1, COM6
Supporting and promoting initiatives between stakeholders and communities	OG		KCCA, MAK students	PP12

ACTION





GREEN ECONOMY

Specific Action	Time	How	Who	AP
Green economy policy definition & branding; Supporting green growth in Kampala by offering an appropriate environment for green business	ST		KCCA, Private Sector	GE1
Eco-business parks and green clusters; Designing and developing eco business parks and green clusters for the city	ST - LT		KCCA, Private Sector	GE2
Green tourism policy; Developing the tourism potential of the city (Lake Front Development)	OG		KCCA, Private Sector	GE3
Urban agriculture; Reinforce the Urban Agriculture policy of KCCA upscaling the existing pilot projects and initiating new ones	OG		KCCA, (NAADS programs), Urban farmers	GE4
Kyanja agricultural, climate and energy resource center	OG		KCCA	GE5
Green business exhibition; organize annual exhibitions to showcase green business activities, services, goods	ST - LT		KCCA, Private Sector	GE6
Green business dialogue platform; creation of a common platform to engage the local business sector in climate change action	ST - MT		KCCA, Private Sector	GE7
Smart city project; A common platform to engage the enhanced use of ICT in service delivery eg; payment solutions, services, transport, etc, Local business sector in climate change action	OG		KCCA	GE8
Eco labelling; Award organic food labels, green business labels and certificates	ST - LT		KCCA, Private Sector	GE9
Bulk warehousing facility at Kyanja; design and build bulk warehousing facility for organic products	ST		KCCA	GE10



ACTION

Go-Green Initiative

Planting Trees



ACTION

WHAT can I do to contribute?

In order to achieve the effective implementation of so many actions by multiple agencies and stakeholders it is essential that certain mechanisms are put in place to ensure smooth operations and maximize coordination. KCCA is already addressing these and therefore requires commitment from partners and stakeholders for successful impact. This means coordination for all stakeholder efforts to promote:



Policy synergy

Policies to be coordinated at Regional, National, City and Community level



Green investment

Financial institutions lead with green capital funds



Project support

Development partners prioritize climate smart initiatives



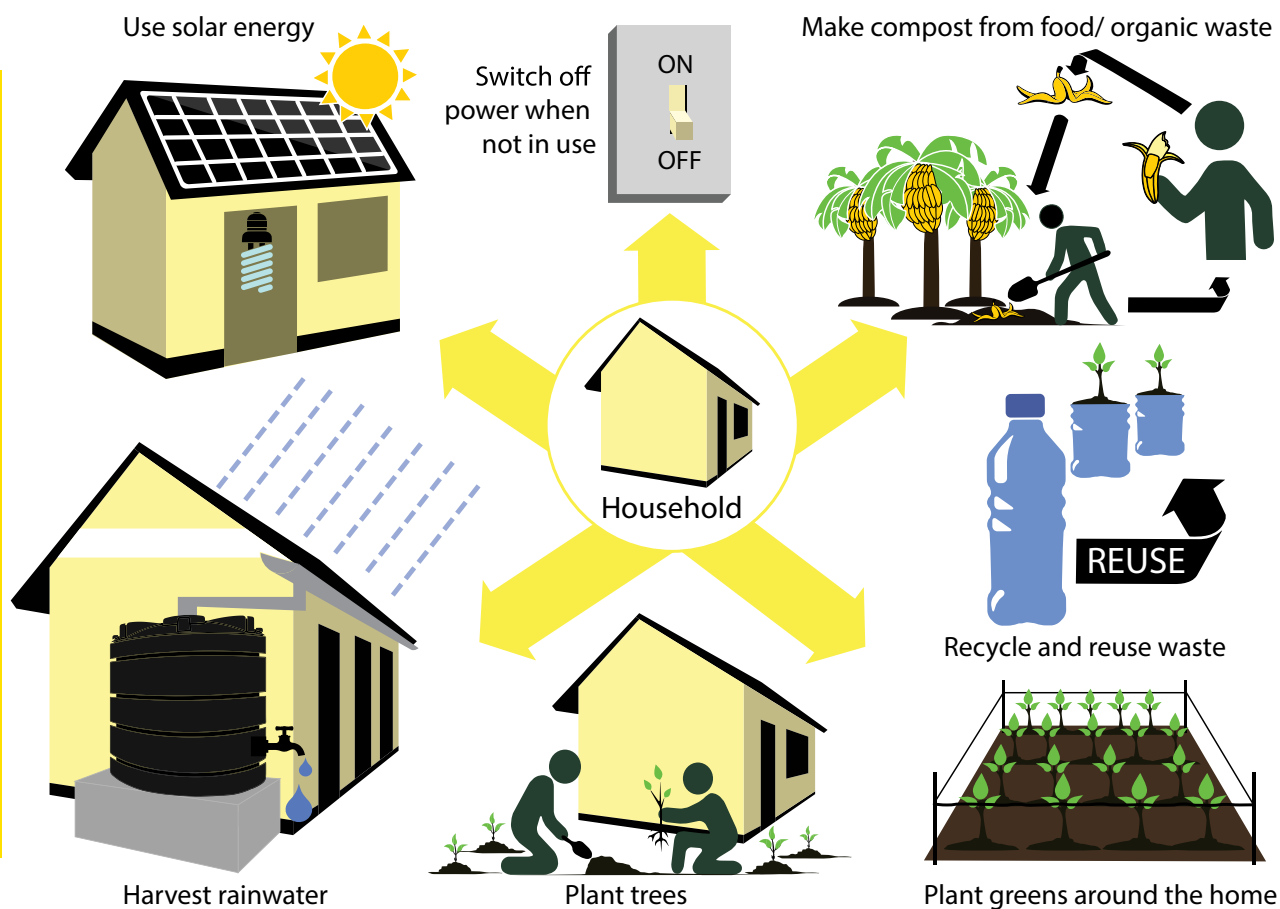
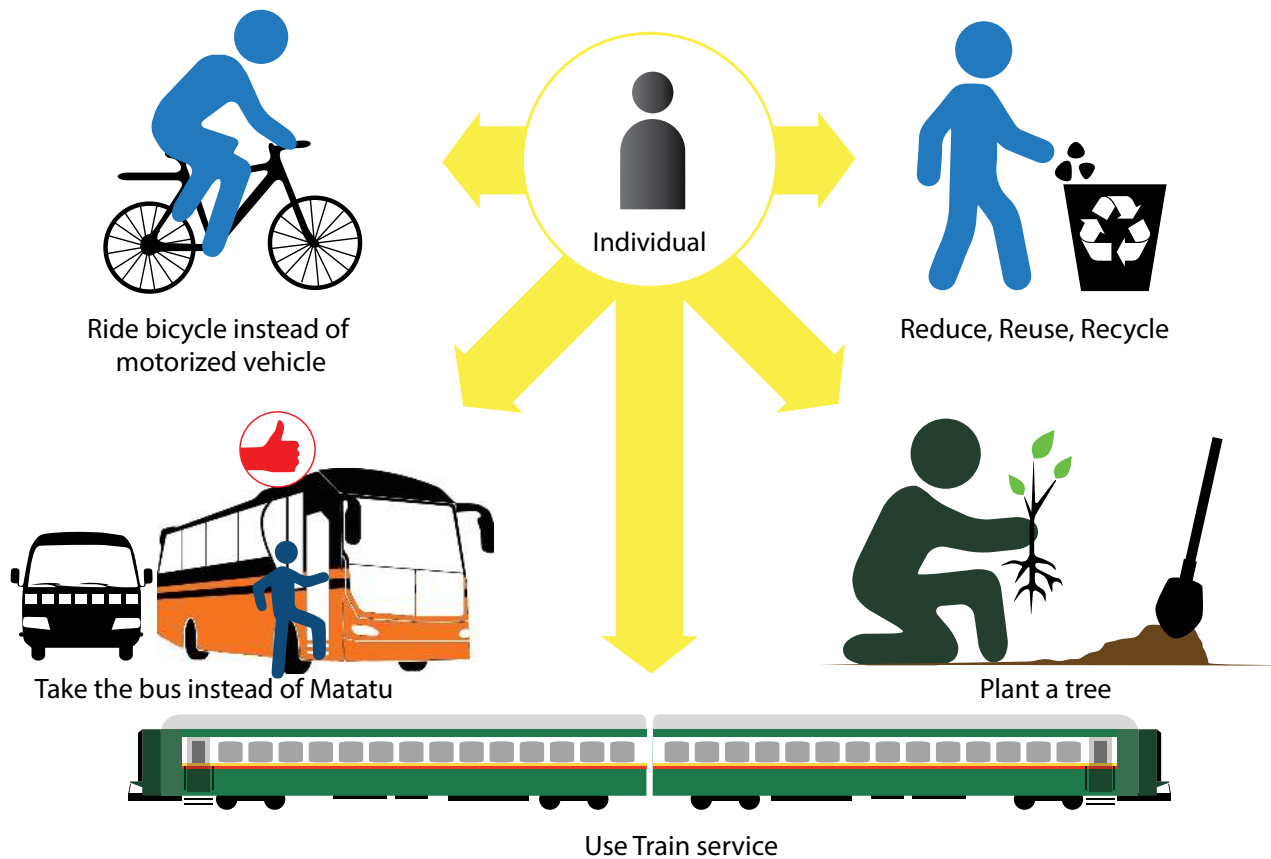
Communication

Maximizing platforms and opportunities to collect and share information



Leading by Example

Everybody walking the talk



ACTION

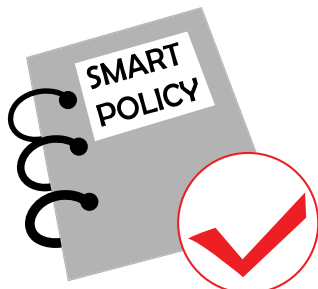




Promote staff awareness



Support the green economy



Develop climate smart policies

BIG BUSINESS

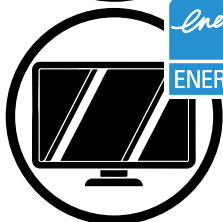


Corporates

SMALL BUSINESS



Conduct energy audit



Use energy efficient equipment

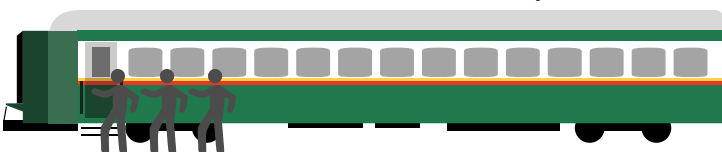


Take your waste to others who can reuse it



Use energy efficient cookstoves or briquettes instead of firewood

Use public transport



ACTION



Hold dialogues to answer questions & find solutions



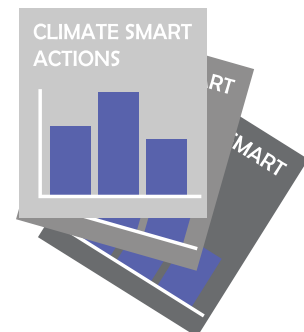
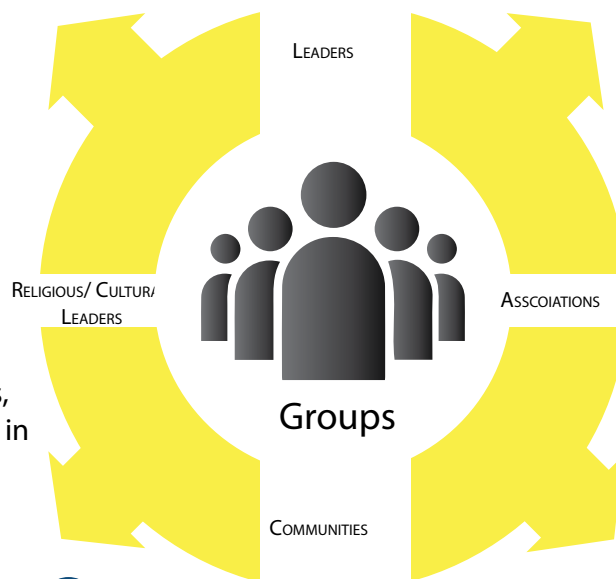
Raise awareness



Advise people on why they need to take action now



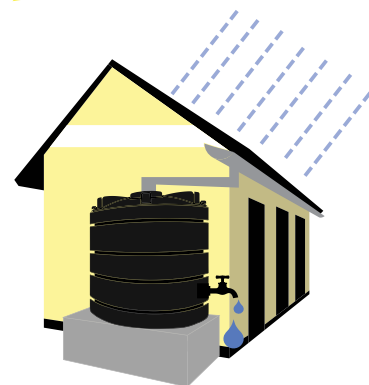
DO recycling projects, get your friends to join in



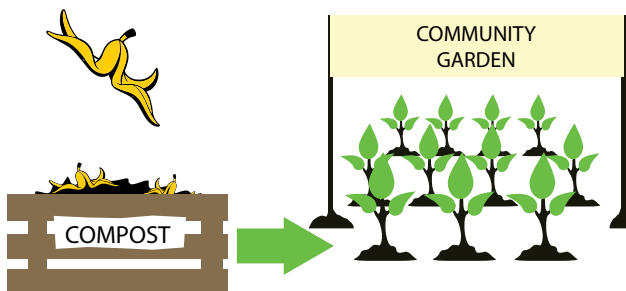
Collect data on climate smart actions in your area



Support local actions eg; cleaning



Harvest rainwater



Compost organic waste to set up community garden



Support local actions eg; planting trees

ACTION

Testimonies



“Keeps me fit, saves me 20,000 UGX per week and reduces the travel time from home to work. It used to be 40 minutes plus but is now only 22. I paid for my bike within 3 months. I no longer have to pay or go to the gym because I get enough exercise riding my bike.”

Richard,
IT Department, KCCA



“Before we got biogas we were using a lot of firewood but now this firewood has reduced up to 50%. This has helped our school expenses.”

Resty,
Kansanga Primary School



“One briquette can cook and keep 4 kilograms of beans for 6 hours with too much fire and no smoke compared to our ordinary charcoal which is more expensive than the kasasilo (waste) briquette.”

Mama Sarah
COVAB Restaurant
Kikoni, Makerere



“Climate change has already started affecting our livelihoods significantly in Uganda. I've decided to put my efforts as a young man to help build a future generation that is empowered with knowledge. I teach climate change to young children in schools, so they can be able to develop mitigation and adaptation solutions and make right decisions.”

Saddam, Makerere University Climate Change Association (MUCCA)



IMPROVE WASTE MANAGEMENT IN THE CITY (DRIVE 3RS ACTIONS - REDUCE, RECYCLE, REUSE)

W0.	INTEGRATED SOLID WASTE MANAGEMENT STRATEGY
STATUS	Initial phases are at collection and transportation
IMPLEMENTERS	Private garbage collectors (PPP)

W2.	COMPONENT 1: COLLECTION & TRANSPORTATION WITHOUT SEGREGATION
Implementing PPPs for collection & transportation to landfills	

W3.	SURVEY ON WASTE RECOVERY POTENTIAL
Encourage waste segregation, Campaign drives to promote segregation at source	

W5.	ELECTRONIC WASTE MANAGEMENT
Potential for recycling and reuse	

W6.	OIL WASTE MANAGEMENT
Car oils, cooking oils, manage disposal, recycle to produce biofuels	

W7.	PLASTIC WASTE MANAGEMENT
Potential for recycling and reuse	

W8.	PAPER WASTE MANAGEMENT
Potential for paper recycling, paper waste reduction measures	

W9.	GREEN WASTE
Energy and compost production potentials – component at Ddundu. Pilot integrated waste recovery project eg: composting, gasification	
IMPLEMENTERS	KCCA, UIRI

W1.	AWARENESS & SENSITIZATION
STATUS	Ongoing, waste reduction campaigns, proper disposal

W4.	LAW ENFORCEMENT AND BYLAWS
Support compliance measures	

ACTION CHARTS

PROMOTE EFFICIENCY AND SUSTAINABILITY IN ENERGY USAGE

PP7.	CITY ENERGY MASTERPLAN
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PP5.	ENERGY GIS
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PP6.	CITY (SOLAR) CADASTRE
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E6.	FUEL POVERTY BAROMETER
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E2.	BIOFUELS PRODUCTION
------------	----------------------------

E7.	ENERGY AUDITS
Conduct energy audits starting with public buildings	
IMPLEMENTERS	Ministry of Energy & Mineral Development

E4.	BRIQUETTES
STATUS	Upscaling briquettes production and uptake including Certification for quality with The target to replace 50% of Wood and charcoal fuel usage
IMPLEMENTERS	Private Sector
PARTNERS	KCCA/CDD grants

EX8.	STANDARDS FOR CONSTRUCTION & RENOVATION
Design & construction aspects for energy efficiency of buildings – Light sensors being installed at City Hall	

W11.	WASTE TO ENERGY
STATUS	Closure of Kitezi landfill, capping gas extraction & energy recovery; design, construction & operation of waste disposal and treatment facility at Ddundu.
IMPLEMENTERS	Private sector

E1.	HOUSEHOLDS SLUDGE AND ENERGY
STATUS	Pilot project to investigate production of pellets from sludge
IMPLEMENTERS	NWSC, SEEK

E3.	WASTEWATER & ENERGY
STATUS	Potential to develop energy recovery at sewage treatment plants
IMPLEMENTERS	NWSC
PARTNERS	KFW, GTZ, EU

EX6.	ENERGY, WATER & GHG QUALITY MANAGEMENT SYSTEM
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EX9.	STREET LIGHTING
STATUS	ongoing – decommissioning old street lights and conversion to solar with a Target of 40,000 units over the next 10 years
IMPLEMENTERS	KCCA, private sector supplier

S1.	ENERGY & WATER MANAGEMENT IN SCHOOLS
Energy and water conservation measures in schools – rain water harvesting and alternative cooking energies	

S4.	SCHOOL SOLARISATION
Installation of solar panels on school buildings - more use of renewable energy	


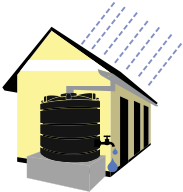
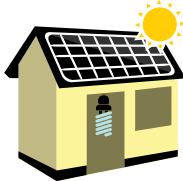
E8.	ASSEMBLY PLANT FOR SOLAR
Establishing an assembly plant for solar panels	

E5.	ECOSTOVES FOR MARKETS
STATUS	Ongoing, installation of eco-stoves in the city markets

E9.	ECOSTOVES FOR HOUSEHOLDS
STATUS	Target to distribute 100,000 units including set up of a participation app and distribution kiosks


S3.	IMPROVED COOKSTOVES IN SCHS
STATUS	To be piloted in 7 KCCA schools
IMPLEMENTERS	KCCA
PARTNERS	Expertise France

PROMOTING ECO PRACTICES IN SCHOOLS

S0. SCHOOL4ENERGY CAMPAIGN Run campaign to promote energy efficiency measures and use of renewable sources of energy in schools. IMPLEMENTERS KCCA schools, GoU	S3. IMPROVED COOK STOVES IN SCHOOLS STATUS To be piloted in 10 KCCA schools to promote more efficient cooking energy IMPLEMENTERS KCCA PARTNERS Expertise France, Simoshi	S6. SCHOOL TRAVEL PLAN Encouraging schools to establish travel plans for their students IMPLEMENTERS KCCA, Schools admin, private sectors
S1. ENERGY & WATER MANAGEMENT Encouraging adoption of energy and water conservation measures in schools for example rainwater harvesting and alternative cooking energies IMPLEMENTERS KCCA, primary schools		S7. WASTE MANAGEMENT IN SCHOOLS Distribution of waste collection containers to encourage segregation and activities to promote proper waste management in schools. IMPLEMENTERS KCCA, schools
	S4. SCHOOL SOLARISATION Proposal to install solar panels on KCCA school buildings – encourage more use of renewable energies 	S8. STUDENTS 4 CLIMATE CAMPAIGN Supporting youth led campaigns & activities to raise awareness on climate change, effects & eco-solutions IMPLEMENTERS Student organisations, school admin PARTNERS KCCA
S2. WASH SCHOOLS, WATER SANITATION HYGIENE Improving access to sustainable sanitation and safe water through investment in innovative climate resilient bio-toilet technology in primary schools in the city. IMPLEMENTERS KCCA PARTNERS GIZ - pilot in Kansanga primary school MTN (Uganda) - to install in 5 more schools	S5. ECO-SCHOOL LABEL CAMPAIGN Encourage adoption of eco practices in public schools who in turn act as ambassadors for sustainable living effort IMPLEMENTERS KCCA, schools	S9. ENVIRONMENT CLUBS AT SCHOOL IN KAMPALA Supporting establishment of environment clubs in schools (public and private) and activities aimed at promoting best practices in environment conservation. IMPLEMENTERS Schools (student body, staff)

ACTION
CHARTS

SUPPORTING THE GREEN ECONOMY – PURSUE A SUSTAINABLE PATH FOR THE CITY'S ECONOMIC GROWTH

GE1. GREEN ECONOMY POLICY DÉFINITION & BRANDING Supporting green growth in Kampala by offering an appropriate environment for green business IMPLEMENTERS KCCA, private sector		
GE2. ECO-BUSINESS PARKS, GREEN CLUSTERS Design and developing eco business parks and green clusters for the city. IMPLEMENTERS KCCA, private sector	GE3. GREEN TOURISM POLICY Developing the tourism potential of the city (Lake Front Development) IMPLEMENTERS KCCA, private sector	GE4. URBAN AGRICULTURE Reinforce the Urban Agriculture Policy of KCCA upscaling the existing pilot projects and initiating new ones IMPLEMENTERS KCCA (NAADS programs), urban farmers
GE5. KYANJA AGRICULTURAL, CLIMATE & ENERGY RESOURCE CENTER STATUS Ongoing... Scale up of activities to training and demonstration purposes which can be extended to energy and climate area IMPLEMENTERS KCCA	GE6. GREEN BUSINESS EXHIBITION Organize annual exhibitions to showcase green business activities, services, goods IMPLEMENTERS KCCA, private sector	GE7. GREEN BUSINESS DIALOGUE PLATFORM Creation of a common platform to engage the local business sector in climate change action IMPLEMENTERS KCCA, private sector
GE8. SMART CITY PROJECT A common platform to engage the enhanced use of ICT in service delivery e.g payment solutions, services, transport, etc. Local business sector in climate change action IMPLEMENTERS KCCA	GE9. ECO LABELLING Award organic food labels, green businesses, labels and certifications.	GE10. BULK WAREHOUSING FACILITY AT KYANJA Design and build bulk warehousing facility for organic products

BEING AN EXAMPLE AS A CAPITAL CITY

EX1. HUMAN RESOURCES	Raising staff awareness on KCCA environmental policy and actions, running orientation Programs for new staff	EX2. STAFF MOBILITY PLAN & CAR FLEET	fleet usage optimisation, parking policy at City Hall, introduction of alternative fuels e.g biofuels for KCCA fleet and incorporating hybrid & electric cars into the fleet	EX3. TRAINING, SENSITIZATION CAPACITY BUILDING	Training programs to build staff knowledge on adaptation and mitigation measures within their specific roles	EX4. GREEN PROCUREMENT POLICY	Eco-friendly approach in KCCA purchases, environmental considerations/requirements for equipment used and contracts.
IMPLEMENTERS	KCCA	IMPLEMENTERS	KCCA	IMPLEMENTERS	KCCA	IMPLEMENTERS	KCCA, contractors
				PARTNERS	MUCCRI		
EX5. BUDGET AND FINANCIAL SCHEME	Budgetary provision for the strategy, leveraging partnerships and climate funds to diversify sources of funding, green funds	EX6. ENERGY, WATER AND GHG MONITORING AND REPORTING SYSTEM		EX7. STANDARDS FOR PUBLIC CONSTRUCTION & RENOVATION	Incorporate energy efficiency measures in KCCA buildings, installing motion sensors at City Hall	EX8. STREET LIGHTING	Ongoing – decommissioning old street lights and conversion to solar
IMPLEMENTERS	KCCA					IMPLEMENTERS	KCCA
PARTNERS	UNDP						
EX9. STRATEGY GOVERNANCE	Establishing a governance structure to support implementation of the strategy	EX10. QUALITY MANAGEMENT SYSTEM & ECO-RESPONSIBILITY APPROACH	developing system to ensure quality management and eco-reponsible approaches in day-to day commission of duties	EX11. FOCAL POINTS AND ANNUAL REVIEW	Developing focal persons within the KCCA directorates to drive strategy actions	IMPLEMENTERS	KCCA
EX15. STAKEHOLDER'S DIALOGUE	Hold an annual stakeholders' dialogue to share experiences, make commitments on actions	EX16. EX16.CC/SD EXPERTS ADVISORY COMMITTEE	Engage expert teams for guidance and technical assistance on action	EX17. ESTABLISH PLATFORMS FOR SHARING EXPERIENCES	Organising, participating in the Cities and Districts of GKMA commitment and Network, East & Central African Cities Development Forum, South to South cities cooperation, South to North city network		
EX18. CLIMATE SMART BUDGETING PROCESS	Implementing the Capital Investment Plan which incorporates climate impacts for KCCA projects	EX19. SMART SERVICES	Adopting ICT usage in service delivery – E-city; Smart Permit; KCCA App – to reduce travel times for KCCA services	EX20. ZERO CARBON/GREEN BUILDING	Construction of zero carbon building for Nakawa division offices as an example for other public buildings	IMPLEMENTERS	KCCA
IMPLEMENTERS	KCCA	IMPLEMENTERS	KCCA				
PARTNERS	World Bank (technical assistance)	PARTNERS	World Bank (technical assistance)				

ACTION CHARTS

COMMUNICATION AND PARTICIPATION

COM1. INTER-DIRECTORATE COMMUNICATION PLAN	Formalized inter-Directorates communication plan
EX13. NGO / COMMUNITY PARTICIPATION	Establishing platform for NGO/ Community participation.
P1. ECO-PAVILLION AT KAMPALA FESTIVAL	Exhibit and display eco activities being undertaken by different stakeholders
P4. TESTIMONIES ON ACTIONS	Including videos, testimonies and reports on action impacts
COM3. COMMUNICATION TOOL BOX	Developing tools and channels of communication such as roll ups, websites, flyer, youtube, video and radio slots
COM4. KNOWLEDGE PLATFORM E-RESOURCES CENTER	Establish knowledge platform e-resource center for knowledge sharing
PP19. KAMPALA GOES GREEN CAMPAIGN	Undertake monthly Go Green events with local community participation
COM5. WEATHER & CLIMATE OBSERVATORY	Establish weather and climate observatory to report on weather and climate conditions
COM6. KCCA PUBLICATIONS	Produce and circulate publications on actions being undertaken
IMPLEMENTERS	KCCA

LANDSCAPING A MORE RESILIENT LOW CARBON KAMPALA (II)

PP3. INTEGRATED LANDSCAPE POLICY

STATUS Developed the Kampala Physical Development Plan(KPDP), actualisation of KPD Framework

IMPLEMENTERS KCCA, Ministry of Lands, Housing and Urban Planning

PP2. URBAN ECOLOGICAL PLANNING, ENGAGING MULTI-LEVEL STAKEHOLDERS

STATUS Advocating for better land use management, integration of planning, mobility and \ infrastructure sectors

PP4. URBAN RESILIENCE STRATEGY

STATUS Conducting a community disaster and risk vulnerability mapping

IMPLEMENTERS KCCA

PP5. GIS

STATUS Updating KCCA GIS unit, enabling large scale city planning

IMPLEMENTERS KCCA

PARTNERS World Bank (KIDP)

PP6. CITY AND SOLAR CADASTRES

Build policy support to landscape policy, identify the solar energy potential areas

PP9. DATA REPOSITORY

Build city database, information collection and storage capacity to aid monitoring activities.

IMPLEMENTERS KCCA

PP11. BUILDING REGULATION, PERMIT ALLOCATION PROCESS

Incorporate environmental & energy efficiency criteria in building codes

IMPLEMENTERS KCCA, Ministry of Lands, Housing and Urban Development, Ministry of Energy & Mineral 4 Development

PP13. NEAR 0 CARBON NEIGHBOURHOOD

Promoting energy efficiency at household level & clean waste management

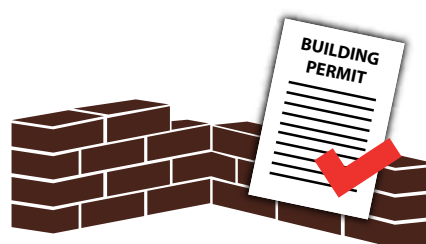
PP14. ECO-GUIDELINES FOR PROMOTERS AND DEVELOPERS

Integrate environment criteria in permit allocation process

PP15. ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

STATUS Required for construction projects as part of permit allocation process

IMPLEMENTERS NEMA



PP16. DRAINAGE MANAGEMENT

STATUS Upgrading, desilting & renovation of drainage channels

IMPLEMENTERS KCCA

PARTNERS WB/LVEMP

PP17. URBAN HEAT ISLANDS

Mapping urban heat islands in the city

PP19. KAMPALA GOES GREEN CAMPAIGN

STATUS Undertaking monthly tree planting and city clean-up activities with local community participation

IMPLEMENTERS KCCA

PARTNERS Private Sector

PP18. BIODIVERSITY, ECOSYSTEM CRITICAL NATURAL ASSETS MAPPING

Land use measures aimed at protection/preservation



PP20. URBAN GREENING - PLANTING TREES, GREEN PARKS, LOWLANDS & HILL TOPS

STATUS Proposed urban forest project to plant over 500,000 trees

IMPLEMENTERS KCCA

PP22. INTEGRATED NEIGHBOURHOOD PLAN

STATUS Develop detailed neighbourhood plans in a phased implementation of the KPDP

IMPLEMENTERS KCCA

PP21. WETLANDS RESTORATION AND CONSERVATION WATER QUALITY & SUPPLY

PP23. STREET NAMING – CITY ADDRESS MODEL

Naming streets, roads and access roads, assigning house numbers to improve service delivery

IMPLEMENTERS KCCA

PARTNERS World Bank (KIIDP)

PP24. SMART PERMIT

Automation of construction plan approvals and permit allocation processes

IMPLEMENTERS KCCA

PARTNERS IFC

REDUCE CONGESTION & TRAVEL TIMES
INCREASE SUSTAINABLE TRANSPORT SYSTEMS
REDUCE EMISSIONS FROM THE TRANSPORT SECTOR

M0.	MULTIMODAL URBAN TRANSPORT MASTER PLAN		
STATUS	Initial phases (feasibility studies) to develop a fully integrated public transport sector for Kampala		
IMPLEMENTERS	KCCA, MoWT	PARTNERS	World Bank (WB)

M2.	STRATEGY TO MANAGE FREIGHT & LOGISTICS
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M3.	BUS RAPID TRANSPORT
STATUS	Feasibility study completed
IMPLEMENTERS	MoWT, KCCA
PARTNERS	WB

M4.	LIGHT RAIL TRANSPORT
STATUS	Leverage Kampala SGR arm -Route design phase
IMPLEMENTERS	MoWT, KCCA

M5.	CABLE CAR
STATUS	Addition to the PT modes, feasibility study completed
IMPLEMENTERS	MoWT, KCCA

M6.	HIRE TAXI
Promoting car sharing and use of green vehicles such as hybrid models & electric cars	
IMPLEMENTERS	Private sector

M7.	PILOT CAR SHARING
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M8.	TRAFFIC CONTROL, STREET NAMING & ORIENTATION
STATUS	Traffic management measures, lights upgrade & signaling junctions
IMPLEMENTERS	KCCA
PARTNERS	WB

M9.	PARKING POLICY
STATUS	Feasibility study on a smart parking system, Building of parking facilities
IMPLEMENTERS	KCCA, private sector

M12.	SUSTAINABLE MOBILITY PLANS
Encourage city companies to implement more efficient staff mobility plans	
IMPLEMENTERS	Private sector

M10.	NON-MOTORIZED TRANSPORT
STATUS	Develop NMT facilities, pilot NMT route along Namirembe road mapped
IMPLEMENTERS	KCCA
PARTNERS	UNEP, UN Habitat

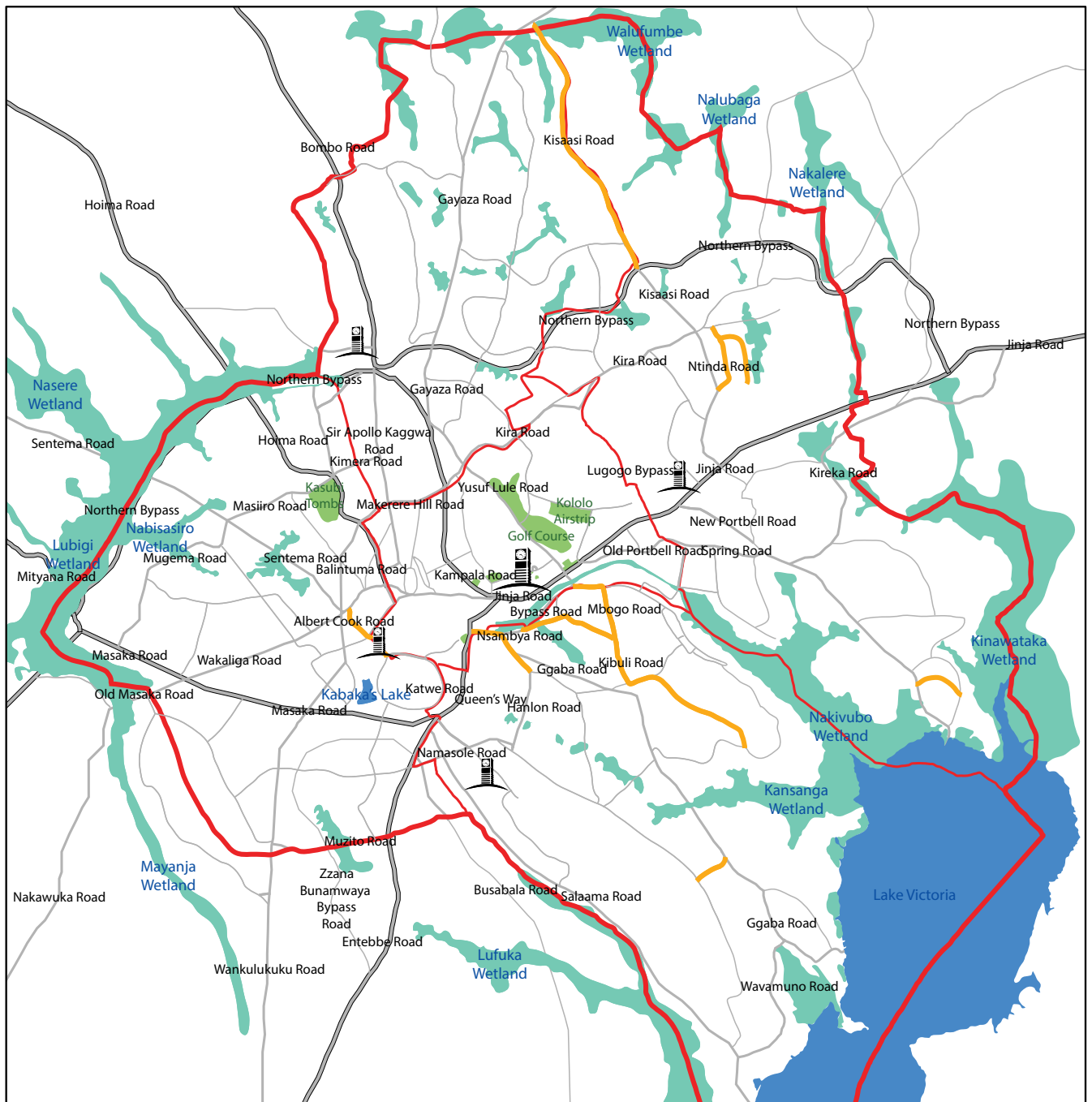
EX2.	STAFF MOBILITY PLAN
Fleet usage Optimisation, parking policy at city level, remote Working solutions	
IMPLEMENTERS	KCCA











S6.	TRAVEL TO SCHOOL
Encouraging schools to establish travel plans for their students	
IMPLEMENTERS	KCCA, Public schools, Private schools



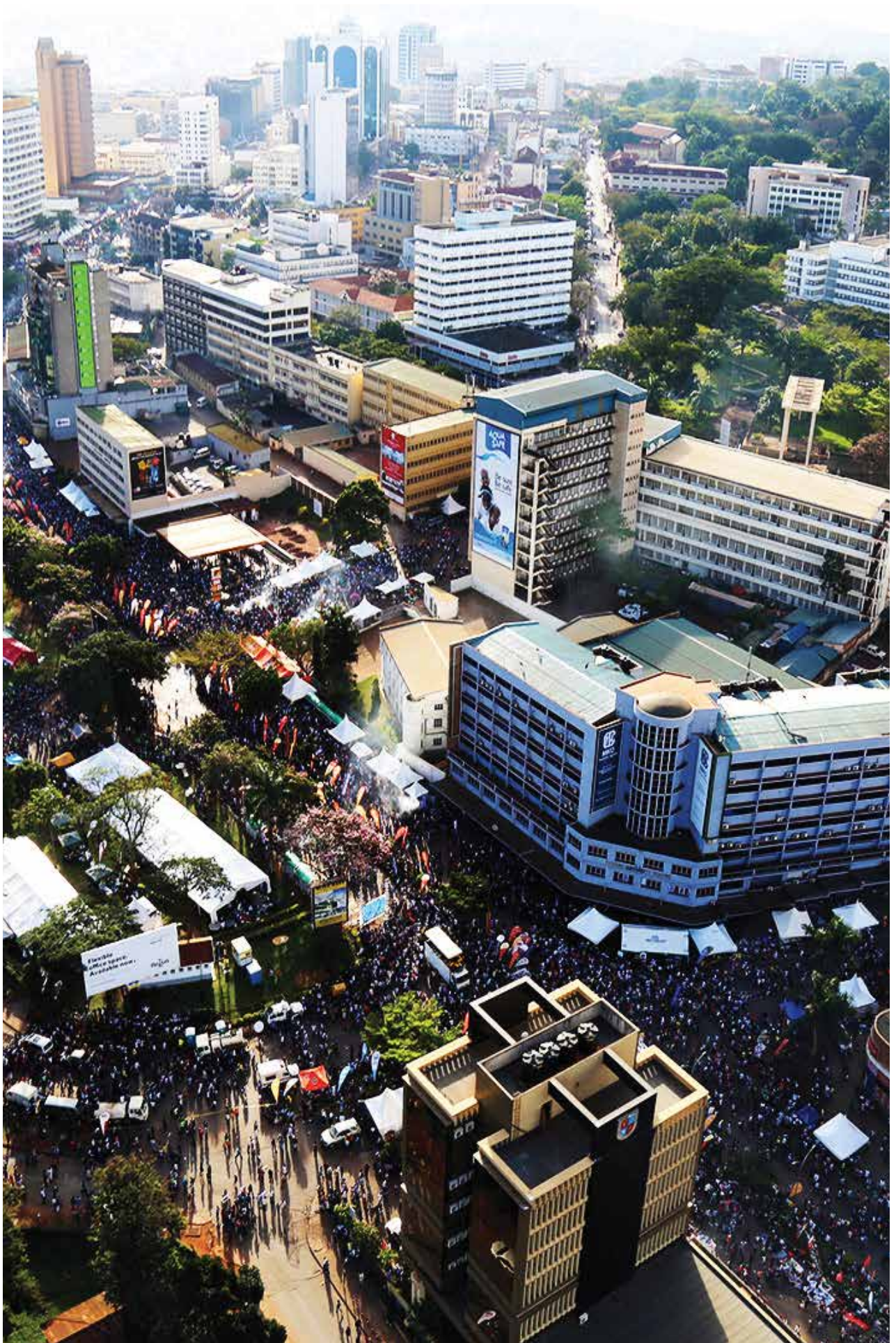
M11.	AIR QUALITY MONITORING
Acquire a city air quality information & data tracking equipment, monitor Climate Change Initiatives' effectiveness on emissions reduction	
M13.	ROAD IMPROVEMENT PROGRAM
KIIDP (Kampala Institutional & Infrastructural Development Programme)- World Bank Government of Uganda Road works	

M1.	SENSITIZATION
Promote adoption of eco-mobility practices	
M14.	COMPULSORY SIX-MONTH VEHICLE TESTING
IMPLEMENTERS	Ministry of Works and Transport



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|---|---------------------|---|---------------------|
|  | Kampala Boundary |  | Wetland |
|  | Street Solar Lights |  | Public Garden |
|  | Primary Road |  | Lake |
|  | Secondary Road |  | Kampala City Office |
|  | Tertiary Road |  | School |







“The solar lights make it so customers feel safe to come and buy at night. That light can help us even when electricity is not around.”

Karid, JIBU Water, Namuwongo



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C

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climatechange@kcca.go.ug



www.kcca.go.ug/climatechange



www.kcca.go.ug/ccvideo



Kampala Capital City Authority - KCCA



#kampalacclimatechangeaction



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