Kenya Climate Innovation Center



KCIC Investment Summit 2023 Investor Prospectus





Address

Kenya Climate Innovation Center Strathmore University Business School,3rd Floor, Ole Sangale Rd, Madaraka. P.O Box 49162 - 0200, Nairobi.

Email: info@kenyacic.org Web: www.kenyacic.org www.investmentsummit.kenyacic.org Phone: +254 703 034 701

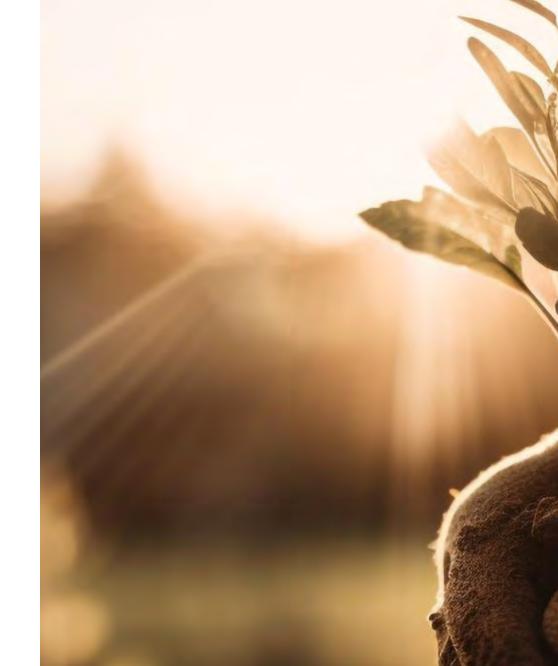


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Percentage of climate financing originating from public sources



Percentage of climate financing contributed by the private sector

Investor Prospectus for Climate Financing Opportunities in Kenya and East Africa

Climate change is no longer a distant concern to be addressed in the future; it has evolved into an immediate global challenge, evident in the unprecedented and widespread shifts in weather patterns. This pressing issue calls for urgent action, as underscored in Article 4.5 of the Paris Accord, which emphasizes the pivotal role of climate financing: "...enhanced financial support for developing country parties will allow for higher ambition in their

actions." Climate financing encompasses both public and private funding, yet recent trends over the past two decades reveal a significant disparity. According to the East Africa Economic Outlook 2023 report from the AfDB, 90% of climate financing originating from public sources, while only 10% is contributed by the private sector.

Kenya Climate Innovation Center (KCIC) is a social impact organization operating in the climate space, and driven by innovation. KCIC provides incubation, acceleration, capacity-building, and innovative financing to entrepreneurs developing innovative solutions to climate change. Over the past decade, KCIC has offered support to over 3,000 enterprises across five thematic areas; Agribusiness, Renewable Energy, Commercial Forestry, Waste Management, and Water Management. Impressive results and impact have so far been witnessed, with critical insights gathered.

More than 2,500 businesses have been incubated, with a commercialization rate of 67%. KCIC has supported these enterprises to leverage external financing to a tune of US\$ 63 million. The enterprises have subsequently been able to sell products worth more than US\$ 83 million. More than 450,000 Tonnes of CO2 has been mitigated as a result of KCIC interventions, and about 73 policy advocacy initiatives have been undertaken. Close to 85,000 people are accessing clean water due to our interventions, and more than 39,000 jobs have been created through supported enterprises, with 56% being women.

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This places KCIC therefore as a pivotal partner when it comes to climate change and enterprise support in Kenya and East Africa, with proven impact on women, youth and the vulnerable in the society. Moreover, KCIC is committed to

harnessing the power of emerging technologies, innovations, cleantech solutions, and sustainable initiatives in an ever-evolving global landscape. KCIC's aim is to assist enterprises in seamlessly integrating these cutting-edge technologies into their operations, thereby actively contributing to the fight against climate change

The upcoming investor summit hosted by KCIC, scheduled for October 4th to 6th and themed "Climate Financing Opportunities for MSMEs Growth," presents an ideal platform for fostering valuable connections among climatefocused enterprises and potential investors. This event will feature engaging deal rooms, informative exhibitions, and much more.



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Outlined below are the summit's objectives in terms of the number of participating enterprises, ticket sizes, and financing requirements:

- 1. Enterprise Engagement: The summit aims to bring over 350 enterprises operating within the climate sector. The goal is to attract a significant number of enterprises, representing various facets of the industry, ensuring a rich and dynamic networking environment.
- 2. Financing Needs: KCIC is dedicated to addressing the financing needs of enterprises at different stages of development. From startups looking for seed funding to established businesses seeking expansion capital, the summit's objective is to facilitate connections with investors who can meet these diverse financing requirements.
- **3. Ticket Sizes:** KCIC envisions a spectrum of investment opportunities, accommodating various ticket sizes to cater to the unique financial capabilities and interests of both enterprises and investors. Whether you're seeking substantial capital infusion (Over USD 1 M) or exploring smaller-scale investments (USD 50,000- USD 250,000) the summit will offer opportunities tailored to your needs.

East Africa's overall climate financing needs, trends and opportunities

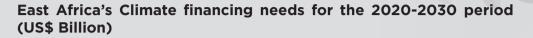
The East Africa Economic Outlook 2023 report from the AfDB highlights key insights regarding climate investments in the region:

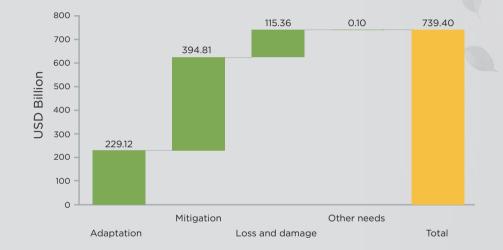
- **Current Investment Landscape:** In 2020, East Africa received a substantial USD 7.6 billion in climate investments, accounting for a significant 26% of Africa's total climate investments. However, the majority, 90%, of these investments originated from public sources, with only a 10% contribution from the private sector.
- Climate Financing Shortfall: Despite these investments, East Africa falls significantly short of its climate-resilient development target of USD 739.4 billion for the decade spanning 2020 to 2030. In 2020, the region managed to cover merely 11% of its estimated annual climate financing needs, amounting to USD 67.2 billion. This created an alarming annual climate finance gap of USD 59.6 billion, underscoring the urgent need for increased investment in green growth and climate resilience.
- **Private Sector Involvement:** To bridge this considerable climate financing gap in East Africa, approximately 50% (USD 29.4 billion annually) will need to come from the private sector. Although governments allocate 11% of their budgets to climate and green growth objectives and developed nations commit to mobilizing climate

finance, these commitments fall significantly short of the overall financing requirements. Therefore, private investment and finance play a pivotal role in advancing climate action and green growth.

- Critical Sectors for Investment: Investments in vital sectors like renewable energy, sustainable agriculture, infrastructure, and commercial forestry hold the potential to steer Kenya and East Africa towards green, sustainable economies. Realizing this potential requires targeted efforts to facilitate innovative financing instruments for private sector involvement in green growth.
- Barriers to Private Sector Financing: Recognized barriers to private sector-led financing for climate action and green growth include limited access to finance, insufficient technical expertise, and weak risk management mechanisms.
- Innovative Mechanisms: At the country level, innovative mechanisms for private sector climate finance include carbon markets, climate risk insurance, climate-related debt swaps, and climate-related bonds (such as Green, Blue, & Sustainability Bonds, or GBS Bonds).

The region's financing can be represented by the figure below:





Adapted from AfDB East Africa Economic Outlook 2023

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Kenya's climate financing needs, trends and opportunities by priority thematic areas



1. Agribusiness

The agriculture sector, with its eco-friendly practices, can be dissected into three key stages:

- 1. Pre-production Stage: This stage encompasses all preparations made before the agricultural production process begins. It involves innovations in agricultural inputs, such as the development of sustainable fertilizers or crop protection products, and the incorporation of innovative technologies like drone mapping and soil testing. These innovations aim to enhance the efficiency and sustainability of farming practices.
- 2. Production Stage: Production involves the core agricultural activities, including sowing, irrigation, weeding, and harvesting. Sustainable agricultural practices, such as intercropping, crop rotation, and vermicomposting, have emerged as effective methods to reduce the environmental impact of these processes. Entrepreneurs in this segment can focus on providing products and services that promote eco-friendly farming practices.



3. Post-production Stage: Post-production processes cover operations such as post-harvest processing, product packaging, storage, transportation, and distribution. Implementing green practices in this stage ensures climate-friendly processing and transportation. Entrepreneurs can explore opportunities to improve sustainability in these areas.

Kenya has introduced various programs and projects aimed at addressing climate change and its repercussions, demonstrating a commitment to environmentally responsible practices within the agribusiness sector. These initiatives encompass a wide range of activities, including climate-resilient agribusiness projects, sustainable livestock initiatives, and the sustainable use of insects as food and feed. Additionally, projects like the Climate Change Resource Centre and the Kenya Climate Information Portal serve as valuable resources for information and support in climate-smart agriculture.

Key sub-sectors	Business segments	Market	Ticket sizes and enterprises
	(opportunities)	opportunity (2022 - 2030)	124 Enterprises \$10,000 - \$50,000
Pre-production and production	Data-driven advisory services	US \$32.6 billion combining all key areas and business segments	\$10,000 - \$30,000
	Green equipment providers		
	Environment-friendly input providers		33 Enterprises
	Innovative production services		\$50,001 - \$100,000
Post-production	Green storage		
	Processing equipment providers		
Sustainable livestock	Data-driven advisory services		
management	Green fodder providers		
	Green equipment providers		3 Enterprises 12 Enterprises
	Animal products marketplaces		\$500,001 - \$750,000 \$100,001 - \$250,000
Cross-cutting activities	Farm to home		5 Enterprises \$250,001 - \$500,000

A summary of participating enterprises and funding sought.



2. Renewable Energy & Energy Efficiency

The adoption of renewable energy plays a pivotal role in Kenya's pursuit of its Nationally Determined Contribution (NDC) target of achieving a complete transition to clean energy by 2030. With an estimated annual growth in electricity demand of 6.7%, it's clear that sustainable energy solutions are essential. Among these, solar energy stands out as a cost-effective and highly efficient renewable energy source, particularly for extending electrification across Kenya. The country has witnessed the emergence of several high-growth enterprises specializing in off-grid solar solutions, including solar home systems (SHS), solar mini-grids, and solar lanterns.

Kenya holds a prominent position in the African market for SHS sales, demonstrating its leadership in this space. Notable companies like Powergen Renewable Energy Ltd and Bboxx Kenya have attracted substantial investments, with Powergen raising \$20.5 million and Bboxx securing over \$100 million. This indicates a strong investor interest in Kenya's off-grid solar energy sector, with contributions from impact investors, development finance institutions (DFIs), foundations, and commercial banks.



In the broader renewable energy sector, Kenya has implemented various initiatives to enhance clean energy access and promote energy efficiency. These projects include:

- Scaling-up Renewable Energy Program (SREP): Focused on expanding renewable energy infrastructure and capacity.
- Kenya Off-grid Solar Access Project (KOSAP): Launched to serve underserved counties, aiming to bring off-grid solar solutions to rural areas.
- Energy Efficiency and Conservation Program (EECP): Designed to enhance energy efficiency and reduce energy consumption.
- **Geothermal Development Company (GDC):** Focused on harnessing geothermal energy for power generation, contributing to the country's clean energy goals.

In addition to these, Kenya is actively promoting biogas as a sustainable and clean cooking fuel for rural households, addressing both energy access and environmental concerns. The country's commitment to these initiatives demonstrates a multi-faceted approach to achieving its clean energy targets while improving access to modern, sustainable energy sources.

Overall, Kenya's dedication to renewable energy and energy efficiency projects underscores its commitment to a more sustainable and environmentally friendly energy landscape, with solar energy playing a prominent role in driving universal electrification and reducing the carbon footprint.

Key sub-sectors	Business segments (opportunities)	Market opportunity (2022 - 2030)	Ticket sizes and enterprises 35 Enterprises	
Energy Efficiency (EE)	Smart energy management providers	US \$2.2 billion	\$10,000 - \$50,000	
	Energy-efficient appliance providers			
Energy Storage	Battery recycling/reuse service providers	US \$43 million	11 Enterpr \$50,001 - \$10	
Solar Energy	Solar consumer products providers	US \$873 million		
	Solar energy system providers			
	Support service providers			
Cleaner fuels	Biogas	US \$1.2 billion		
	Bioethanol		3 Enterprises \$500,001 - \$750,000 4 Enterprises \$100,001 - \$250,000	
	Biodiesel			
	Briquettes and pellets		5 Enterprises \$250,001 - \$500,000	

A summary of participating enterprises and funding sought.

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3. Waste management

Kenya faces a substantial waste management challenge, with daily waste generation surpassing 20,000 tons, equating to approximately 8.8 million tons annually. Notably, around 40% of this waste is generated in urban areas, and as Kenya's urbanization rate is projected to increase, this figure is expected to rise accordingly. Recognizing the environmental impact and climate implications of waste, Kenya has prioritized waste management as a significant climate mitigation sector.

Kenya's waste management strategy revolves around a hierarchical approach, focusing on the following key principles:

- Waste Reduction: The primary goal is to reduce the generation of waste. This entails initiatives to minimize waste at its source, encouraging sustainable consumption and production practices that lead to less waste.
- Material Reuse: Encouraging the reuse of materials is another vital aspect of the strategy. This involves promoting the refurbishment, recycling, and repurposing of items to extend their lifecycle and reduce the need for new resources.
- Local-Level Solutions: Kenya emphasizes the importance of affordable waste management solutions at the local level. This approach ensures that waste management is accessible and feasible for communities across the country.



• Non-Contamination Measures: Rigorous measures are implemented to prevent contamination of waste streams. Separation of recyclables, proper disposal of hazardous waste, and environmentally responsible practices are essential to minimize the negative environmental impacts of waste.

As Kenya's urbanization rate is expected to grow, it becomes increasingly crucial to manage waste effectively to prevent environmental degradation, reduce emissions, and create a cleaner and healthier living environment. Kenya's commitment to this waste management hierarchy demonstrates its dedication to addressing the challenges posed by increasing waste generation while mitigating climate change through sustainable waste practices.

Key sub-sectors	Business segments (opportunities)	Market opportunity (2022 - 2030)	Ticket sizes and enterprises		
			8 Enterprises		
Sustainable waste services	Plastic waste services	US \$53.9 billion covering US \$52.9 billion for sanitation and US \$1.0 billion for solid waste management.	\$10,000 - \$50,000		
	E-waste services				
	Biomedical waste services				
	Hazardous waste services		4 Enterprises		
	Wastewater treatment services		\$50,001 - \$100,000		
	Integrated solid waste management (ISWM) services				
	Waste to value				
	Textile waste services		1 Enterprise 3 Enterprises \$100,001 - \$250,000		
Support services	Technology for waste services		\$500.001 - \$750.000		
	Sustainable packaging providers		2 Enterprises \$250,001 - \$500,000 A summary of participating enterprises and funding sought.		
	Waste equipment providers		A summary of participating enterprises and running sought.		
	Infrastructure providers		KCIC Investor Prospectus 2023		



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4. Water management

Kenya grapples with the pressing issue of water scarcity, characterized by an average national water coverage of approximately 62%, leaving 38% of the population with insufficient access to clean and safe water. Several contributing factors exacerbate this problem:

- Low Water Storage Capacity: Inadequate capacity for storing water, especially during rainy seasons, hinders Kenya's ability to effectively manage and distribute water resources.
- Poor Water Harvesting Infrastructure: The lack of robust infrastructure for capturing and storing rainwater limits the country's ability to harness available water resources efficiently.
- **Deforestation:** The degradation of forests significantly impacts water sources, as trees play a crucial role in maintaining watersheds and regulating water flow.
- **Transboundary Water Resources:** The sharing of rivers, aquifers, and lakes with neighboring countries introduces complexities and competition in managing these vital water sources.
- Growing Water Demand: Increasing demand for water, driven by agriculture, domestic use, and industrial needs, further strains available water resources.



Currently, water usage in Kenya is distributed as follows: 76% for agriculture, 20% for domestic purposes, and 4% for industrial use. Demand across all sectors continues to rise, necessitating urgent action to address water scarcity.

To combat this challenge, Kenya has set ambitious targets, aiming to increase annual per capita water availability to 1,000 cubic meters by 2030. Key interventions proposed by the government to achieve this goal include:

- **Investing in Water Storage Infrastructure:** Enhancing the capacity to store and manage water resources more effectively, particularly during rainy periods.
- **Rainwater Harvesting:** Promoting the capture and storage of rainwater, especially in regions prone to water scarcity.
- **Groundwater Exploration:** Tapping into underground water sources through responsible and sustainable exploration practices.
- Water Treatment: Improving water treatment processes to ensure that available water resources are safe for consumption.
- Water Use Efficiency: Implementing measures to enhance the efficient use of water across all sectors, including agriculture, industry, and domestic consumption.
- **Flood Control:** Developing strategies and infrastructure to manage excess water during periods of heavy rainfall, minimizing flood-related damage.

Kenya's commitment to these interventions demonstrates its dedication to addressing water scarcity and ensuring that its citizens have access to an adequate and sustainable supply of clean water. These efforts are not only vital for meeting immediate needs but also for fostering long-term environmental sustainability and resilience. 19

Key sub-sectors	Business segments (opportunities)	Market opportunity (2022 - 2030)	Ticket sizes and enterprises 3 Enterprises \$10,000 - \$50,000	
Water conservation and restoration	Water harvesting	NA		
	Borehole/water well drilling services		2 Enter	
	Efficient water usage			
Purification and distribution	Water treatment and supply	US\$ 22.3 billion	US\$ 22.3 billion	\$50,
	Water automatic teller machine (ATM) operators			
Technology for water	Smart water management	NA		
	Air to water technologies			

A summary of participating enterprises and funding sought.



5. Commercial forestry

Kenya is taking significant steps toward the sustainable management of its forests, as outlined in its national development plan, Kenya Vision 2030. One of the key objectives of this plan is to achieve a 10% forest cover target by the year 2030. As of 2021, the estimated forest cover in Kenya stood at 8.83% of the total land area, indicating progress but also the need for further action.

To reach the national forest cover goal of 10%, several concerted efforts are required, focusing on reforestation, afforestation, and forest landscape restoration. These efforts can be broadly categorized into three key areas:

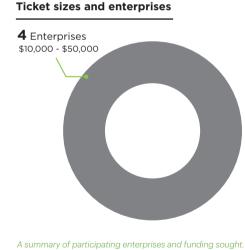
- Agroforestry: Agroforestry practices involve the integration of trees and shrubs into agricultural landscapes. This approach not only enhances soil fertility and crop productivity but also contributes to expanding forest cover. Planting trees alongside crops and using them for various purposes, such as providing shade or producing fruits, supports both food security and forest conservation.
- Non-Timber Forest Products (NTFPs): Sustainable utilization of non-timber forest products, such as medicinal plants, fruits, nuts, and honey, provides an incentive for communities to engage in forest conservation. By promoting the responsible harvesting of these products, Kenya can protect its forests while supporting livelihoods.



Forest Conservation: The preservation and protection of existing forested areas are essential to maintaining and increasing forest cover. This involves efforts to prevent illegal logging, land encroachment, and forest degradation. Conservation measures may include creating protected areas, enforcing forestry regulations, and raising awareness about the importance of forests in mitigating climate change.

Kenya's commitment to achieving a 10% forest cover target by 2030 aligns with global efforts to combat deforestation and promote sustainable land use. By focusing on agroforestry, NTFPs, and forest conservation, Kenya is not only striving to increase its forest cover but also working towards ecological resilience, improved livelihoods for its citizens, and the preservation of vital ecosystems for future generations.

Key sub-sectors	Business segments (opportunities)	Market opportunity (2022 - 2030)	
Agroforestry	Tree seedling production and provision of tree management services	US \$438 million	
	Production of bamboo seedling and bamboo-based products		
Forest conservation	Tree seedling production and provision of tree management services	US \$934 million	
	Production of bamboo seedling and bamboo-based products		
	Production and sale of sustainable wood forest products		
Non-timber forest products	Processing and sale of non- timber forest-based products	US \$2.8 million	



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The KCIC Investment Summit serves as a vital gateway into Kenya's burgeoning green economy while aligning seamlessly with the principles of the Nairobi Declaration by the African, Caribbean, and Pacific (ACP) Group of States. This alignment underscores the summit's global significance in advancing sustainable development and climate action. The Nairobi Declaration prioritizes sustainable economic growth, climate change mitigation, and the promotion of renewable energy solutions, all central themes of the KCIC Investment Summit.

Furthermore, the summit offers an enticing platform to explore Kenya's and East Africa's thriving green economy and unearth investment opportunities spearheaded by innovative green enterprises. In sectors like renewable energy, waste management, agribusiness, and forestry, these enterprises provide sustainable solutions that address pressing environmental challenges while meeting market demands.

By engaging with these dynamic green businesses at the summit, investors can forge collaborations, gain valuable insights into transformative solutions, and witness the reshaping of Kenya's sustainable business landscape. Kenya's supportive policy instruments, such as climate-related risk management and green bonds, amplify the event's significance by navigating the intersection of environmental consciousness, entrepreneurship, and investment.

Your participation in the KCIC Investment Summit not only unveils Kenya's green investment potential but also contributes to the broader international commitment to sustainability and environmental stewardship in alignment with the Nairobi Declaration's vision for a more sustainable future. It's a pivotal step towards fostering a greener, more resilient world.

KCIC looks forward to hosting you.



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