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INVESTING IN THE WASTE AND CIRCULARITY SECTOR IN KENYA

Investment Guide

ABOUT ANDE

The Aspen Network of Development Entrepreneurs (ANDE) is a global network of organizations that propel entrepreneurship in developing economies. ANDE members provide critical financial, educational, and business support services to small and growing businesses (SGBs) based on the conviction that SGBs create jobs, stimulate long-term economic growth, and produce environmental and social benefits.

As the leading global voice of the SGB sector, ANDE believes that SGBs are a powerful, yet underleveraged, tool in addressing social and environmental challenges. Since 2009, ANDE has grown into a trusted network of over 250 collaborative members that operate in nearly every developing economy. ANDE grows the body of knowledge, mobilizes resources, undertakes ecosystem support projects, and connects the institutions that support the small business entrepreneurs who build inclusive prosperity in the developing world. ANDE is part of the Aspen Institute, a global non-profit organization committed to realizing a free, just, and equitable society.

ABOUT KOIS

KOIS is a leading international impact investment and innovative finance advisory firm founded in 2014. KOIS offers consulting services to design, structure, and place a diverse range of innovative impact financing instruments, as well as to help organizations shape strategies to enhance their societal impact. KOIS also deploys return-seeking capital in social enterprises and impact investment funds.

KOIS has demonstrable expertise in co-designing, fundraising, launching and managing impact investment funds, results-based financing instruments and blended finance facilities. KOIS has launched and managed over 10 social and development impact bonds and structured impact investing funds for international corporates. Additionally, KOIS has launched 5 of its own investment funds across Europe and Asia and has cumulative assets under management of over US$600m.

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IKEA Foundation

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ABBREVIATIONS

CapEx: Capital expenditures

DFIs: Development finance institutions

ESOs: Enterprise support organisations

GHG: Greenhouse gas

IoT: Internet of Things

NEMA: National Environment Management Authority

NGOs: Non-governmental organisations

OAB: Output-based aid

OpEx: Operating expenditures

PPPs: Public-private partnerships

R&D: Research and development

SGBs: Small and growing businesses

SMEs: Small and medium enterprises

SPVs: Special purpose vehicles

W&C: Waste management and circularity

DEFINITIONS[1]

1. **Idea stage**
   The business is little more than an unproven idea, so the focus is on testing the idea and identifying a product-market fit.

2. **Start-up stage**
   The business is in the early stages of operations.

3. **Early stage**
   The business may have initial market traction and early revenues but will likely not yet be generating profit.

4. **Growth stage**
   The business demonstrates steady growth or scaling and likely profitability.

5. **Mature stage**
   The business has likely reached stable profits; growth may have slowed.

1. ANDE, Green Entrepreneurship in Kenya, 2023

INTRODUCTION

Kenya's waste management and circularity sector is rapidly emerging as a critical area for sustainable investment. Across the ten sub-sectors and 122 businesses identified within this space in KOIS and ANDE's Introductory Guide to Investing in the Waste and Circularity Sector in Kenya[2], four key sub-sectors have demonstrated particularly high potential for investment. Those sub-sectors are organic waste, plastic waste, wastewater, and integrated waste management.

This investment guide outlines the complex landscape of the sector, highlighting critical financing needs and investment strategies. While detailed deep-dive guides have been developed to explore each of the four key sub-sectors, this guide focuses on the financial dynamics that underpin successful investments. It examines the varying financing needs across the different stages of business maturity and sub-sectors. Moreover, it highlights the key factors of success for waste management and circularity businesses, investment trends, gaps and opportunities for innovative finance solutions that could shape the sector. Finally, this guide provides insights into how investors can strategically position themselves and better catalyse investment to grow the sector.

2. Introductory Guide to Investing in the Waste and Circularity Sector in Kenya, 2024, ANDE.

METHODOLOGY

This study employed a mixed-methods approach, integrating both primary and secondary research methodologies to gather and analyse data. The literature review provided a foundational understanding of the current state of knowledge in this area, informing the assumptions and data gaps that were subsequently explored through the interviews. Primary and secondary research identified 122 small and growing businesses (SGBs) across ten sub-sectors in the waste management and circularity sector in Kenya. Primary and secondary research also helped identify transactions (including grants, debt, equity and blended finance transactions) in the sector.

Primary research was conducted through 25 semi-structured interviews with key stakeholders in the waste management and circularity sector and one focus group discussion with businesses. Interviewees included executives from 15 waste management and circularity businesses, five financiers with investments in the sector, and five enterprise support organisations. These interviews aimed to gather insights on the current state of the waste management and circularity sector, its main business models and their financing needs, and the challenges and opportunities in the space identified or faced by these stakeholders.

This mixed-methods approach enabled the identification of investment opportunities across the sector. Interviews with investors and enterprise support organisations highlighted business models that showed a high potential for scalability. Secondary research on businesses and investment transaction data highlighted business models that attracted capital and follow-up investments and managed to consistently grow revenue.

It is important to note that the transaction data mostly concerns more mature SGBs, who have secured grants or investments, and may not reflect less mature companies in Kenya's waste management and circularity sector. Therefore, the data presented may not accurately reflect the financing modes for smaller, less mature local businesses which often rely on their own funds, loans from family and friends, crowdfunding platforms or incubators and accelerators.

FINANCING NEEDS OF WASTE MANAGEMENT AND CIRCULARITY BUSINESSES IN KENYA

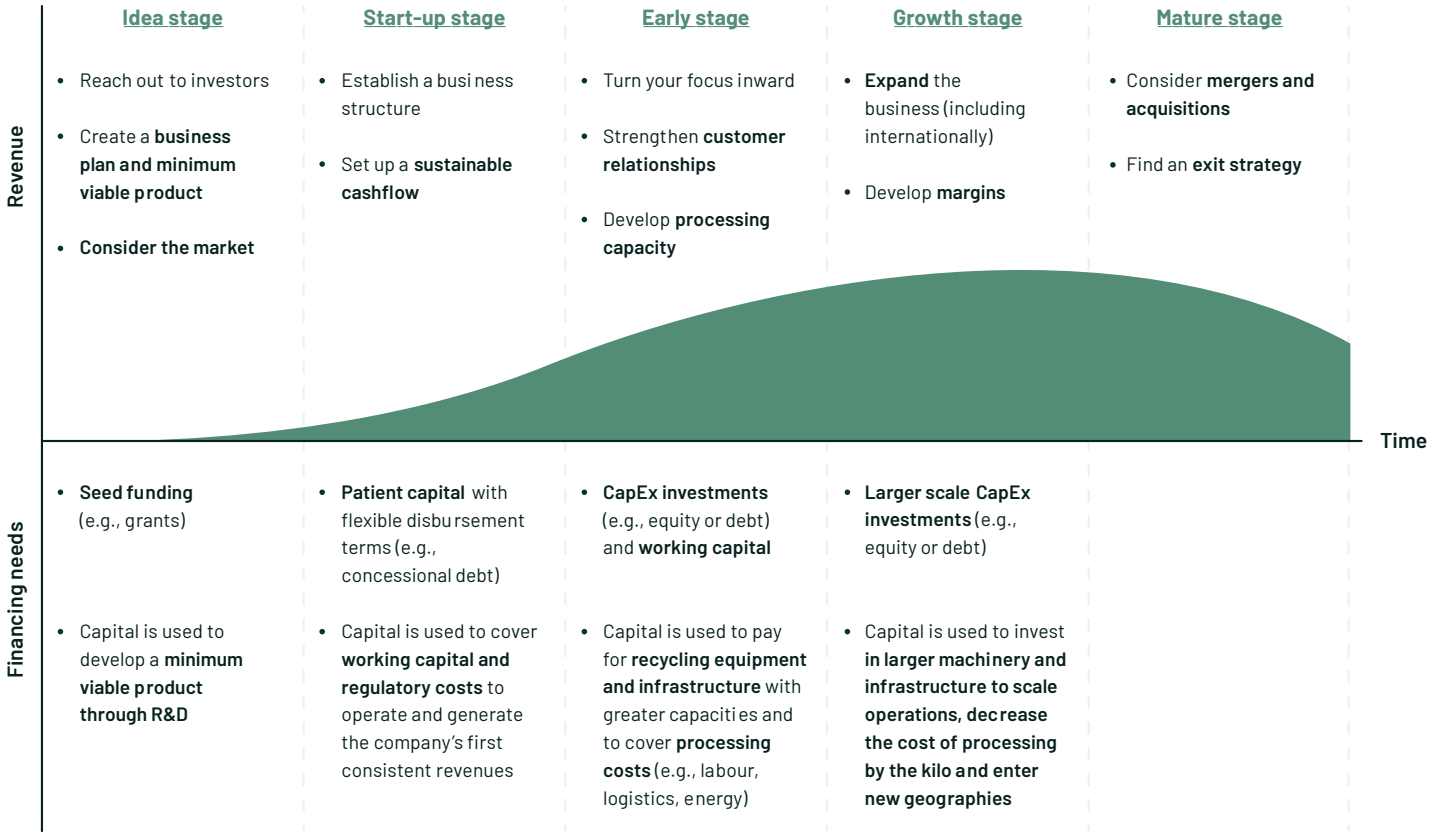
To provide waste management and circularity businesses with the most suitable financing to drive their growth, it is crucial to understand their financing needs. Those needs vary significantly as businesses grow and mature and depend to some extent on the sub-sector in which they are operating. Therefore, the analysis below examines and compares financing needs against those criteria (stage of maturity and sub-sector).

FINANCING NEEDS BY STAGE OF MATURITY

Waste management companies at all stages of maturity generally require significant investments to cover capital expenditures (CapEx). These include investments in infrastructure, equipment and technology to expand recycling and waste management operations. Furthermore, regulatory requirements increase these upfront costs as companies need to obtain licences and pay fees to operate in the sector and expand into new counties.

In addition to investments to cover upfront costs, recycling companies also require significant working capital to operate their business models. Although timelines vary depending on the business model and waste recycling value chain, businesses need about 4–5 months to collect, treat and recycle waste and transport the recycled material to off-takers before receiving payments. Companies therefore need working capital to cover waste sourcing, labour and the overheads that they incur during that period. This need for working capital is particularly important for companies pursuing expansion strategies because variable costs rise as the volumes of waste that they process increase.

Figure 1 – Financing needs by stage of maturity



FINANCING NEEDS BY SUB-SECTOR

The following table shows the main cost drivers and financing needs for each sub-sector based on the needs of the different business models identified in the sub-sector guides.[3]

Figure 2 – Main cost drivers and financing needs by sub-sector

Sub-sector	Organic Waste	Plastic Waste	Wastewater	Integrated Waste
CapEx for Technology and Infrastructure	High CapEx for conversion into energy and fertilizers	High CapEx for recycling and conversion into energy and building materials	High CapEx for wastewater treatment solutions	High CapEx for shops, manufacturing of bins, recycling, and recovery
Regulatory Costs	Licenses for trucks, for breeding and selling insects, and product approval	Licenses for trucks, recycling facilities, and product approval	Licenses for trucks (mechanical emptying) and treatment technology	Licenses for trucks, recycling facilities, and product approval
Research and Development		Complex technologies and machines	Field surveys for flexible wastewater treatment solutions	Complex technologies and machines such as IoT technologies
Working Capital	Delays between cash outflows and inflows		Payment in instalments and other alternative payments for cash-poor customers	
OpEx	Sourcing organic waste	Sourcing and eventually sorting plastic waste and shipping costs for exported products	Labor costs for manual pit emptying	Sourcing and sorting waste and cost of qualified workforce

3. Additional explanations are provided in the sub-sectors deep dives.

KEY SUCCESS FACTORS FOR WASTE MANAGEMENT AND CIRCULARITY BUSINESSES

This research has identified the following key common features of successful businesses. These could represent early indicators of success for young businesses in the waste management and circularity sector.

1 WORKING WITH THE INFORMAL SECTOR

Engaging with the informal sector is crucial for success in Kenya's waste management and circularity sector. The informal sector plays a significant role in waste collection and recycling. Formalising and integrating it can lead to a more efficient and sustainable waste management system by decreasing competition between the formal and informal sectors, allowing businesses to foster a more experienced workforce and providing fair compensation to those workers.

- **Fresh Life by Sanergy:** This business franchises the management of sanitation facilities to local entrepreneurs, providing them with training and resources to run their companies efficiently. By doing so, it not only formalises the informal sector but also creates job opportunities and improves public health through better sanitation.

- **Mr. Green Africa:** This company empowers waste pickers by integrating them into its supply chain. It provides fair prices and support, improving the livelihoods of waste pickers and ensuring a consistent supply of recyclable materials.

- **TakaTaka Solutions:** Operating around dumpsites, TakaTaka Solutions collaborates with informal waste collectors by offering them a price per ton of waste collected. This incentivises waste collection and helps formalise the informal sector.

2 WORKING IN PARTNERSHIP WITH BUSINESSES AND MUNICIPALITIES

Forming strategic partnerships with businesses and municipalities and establishing programme-specific projects that focus on particular environmental or social issues allows businesses to align their goals with broader community and governmental objectives and can thus open avenues for funding and support. Moreover, it enables companies to scale their operations and enhance their impact.

- **Fresh Life by Sanergy:** By partnering with local governments, Fresh Life secures funding and support for expanding its operations. Its programme-specific projects are often aimed at improving public health and hygiene, making it eligible for various grants and subsidies. Moreover, by partnering with Regen Organics, Fresh Life has been able to scale its sanitation services.

- **Sanivation:** Working closely with both municipal authorities and private sector partners, Sanivation develops tailored sanitation solutions that address specific community needs, especially in underserved areas, thereby enhancing its service delivery and impact and attracting funding and support from various stakeholders.

- **TakaTaka Solutions:** Collaborating with municipalities has enabled TakaTaka Solutions to secure access to waste collection points and disposal sites. Moreover, partnering with businesses to recycle other types of waste allows it to be an end-to-end waste management business.

- **Regen Organics from Sanergy:** By joining the Regenerative Agricultural practices for improved Livelihoods and Markets (REALMS) project, which aims to improve the livelihoods of smallholder farmers by promoting the adaptation of regenerative agriculture, Regen Organics was able to significantly extend its customer awareness among targeted customers.

3 SELLING TO INDUSTRIES AND BUSINESSES

Targeting industries and businesses as customers can significantly enhance the profitability and scalability of waste management enterprises. Providing waste management solutions to these sectors ensures a steady demand for services and products, fostering long-term sustainability.

- **Kridha:** Specialising in effluent treatment plants (ETPs), Kridha caters to businesses that need to comply with water quality regulations. Its solutions help industries manage wastewater effectively, aligning with regulatory requirements and promoting environmental sustainability.

- **Mr. Green Africa:** By manufacturing recycled packaging for businesses, Mr. Green Africa taps into the growing demand for sustainable packaging solutions.

- **Novek:** By supporting manufacturers of fast-moving consumer goods to reduce their single-use plastic packaging and offer more flexible product quantities, Novek helps them to increase sales.

4 LEVERAGING TECHNOLOGY TO STREAMLINE PROCESSES

Utilising technology to enhance operational efficiency is a key success factor. Advanced technologies can help with monitoring, data collection and optimising resource allocation, leading to better service delivery and cost savings.

- **Fresh Life:** Employing sensors to estimate fill levels in their toilets, Fresh Life ensures the timely maintenance and emptying of facilities. This not only improves the user experience but also reduces operational costs.

- **Mr. Green Africa:** Leveraging technology for managing and streamlining operations allows Mr. Green Africa to efficiently handle large volumes of recyclable materials. Technology helps in tracking, sorting and processing waste, making the entire operation more effective.

- **Novek:** By using smart dispensers that leverage Internet of Things (IoT) technology to monitor usage and automate refills, Novek helps to reduce waste and optimise the supply chain of fast-moving consumer goods for low-income households.

5 SCALING TO NEW MARKETS

Expanding operations to additional areas is a strong indicator of a business's scalability and adaptability. Successful deployment in new regions demonstrates the robustness of the business model and its potential for wider impact.

- **Sistema.bio:** Originally providing biogas solutions in Mexico, Sistema.bio has successfully expanded to other countries and even continents.

5 IMPACT MEASUREMENT

Having strong impact measurement capabilities allows businesses to achieve certifications, which can attract clients and investors. Moreover, rigorous data collection can help companies acquire an additional source of revenue through the creation of carbon or plastic credits.

- **Regen Organics:** Its impact has been evaluated by three third parties.
- **Sistema.bio:** A certified B Corporation since 2015, it also runs carbon credit programmes.
- **Mr. Green Africa:** A certified B Corporation since 2021.

Figure 3 – Mapping of successful businesses against success factors

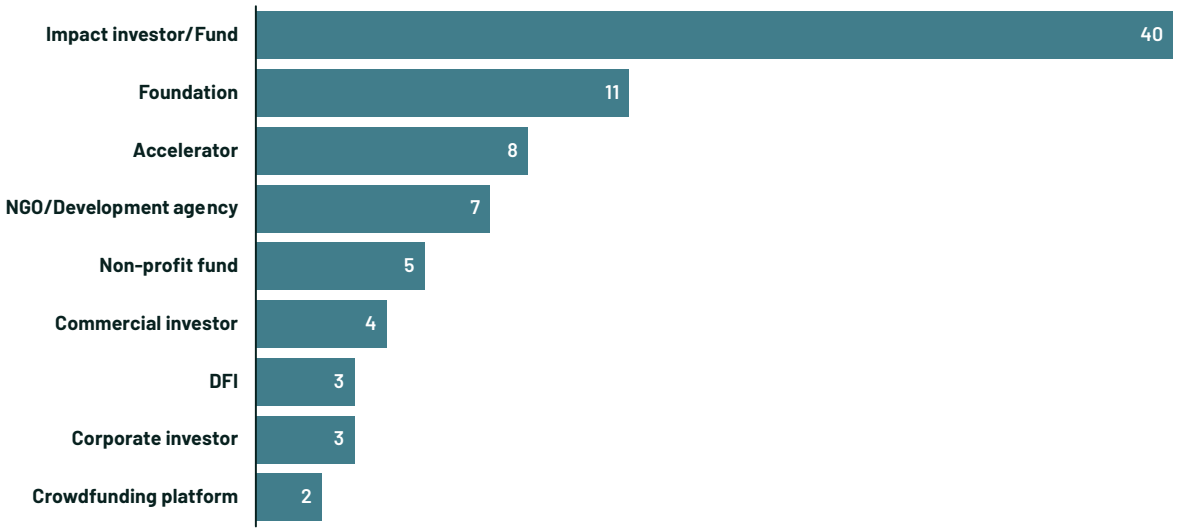
Business	Working with the informal sector	Working in partnership with businesses or municipalities	Selling to industries and businesses	Leveraging technology to streamline the process	Scaling to new markets	Impact measurement
Fresh Life	■	■		■		
Regen Organics		■	■		■	■
Sistema.bio		■	■		■	■
Mr. Green Africa	■	■	■	■		■
Novek		■	■	■		
Sanivation		■	■		■	
Khrida			■		■	
Takataka Solutions	■	■	■	■		

OVERVIEW OF THE INVESTMENT LANDSCAPE

KEY FINANCIERS AND AVAILABLE FUNDING

This study identified 83 active financiers in the waste and circularity sector in Kenya. These financiers encompass commercial investors, corporate investors, impact investors and funds, non-profit funds and organisations, development finance institutions (DFIs), non-governmental organisations (NGOs) and development agencies, foundations, crowdfunding platforms and accelerators.

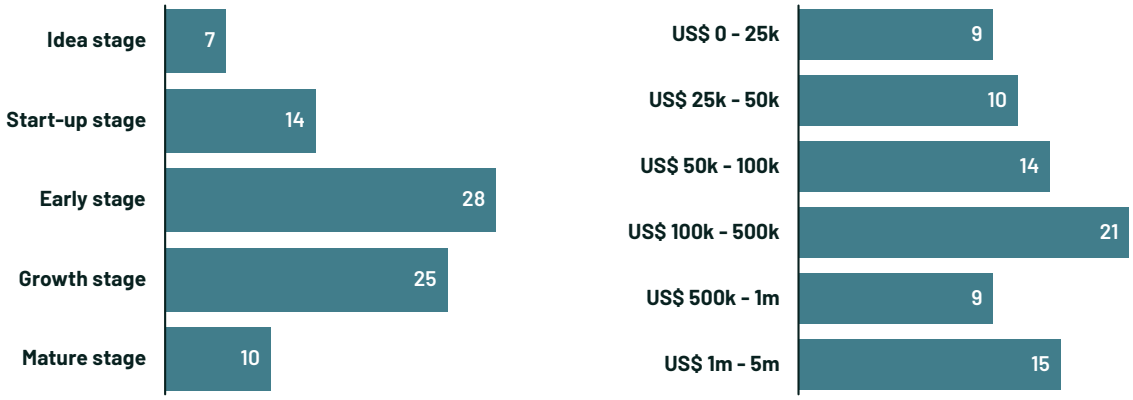
Figure 4 – Financiers identified by type, 2024 [83 financiers]



Most investments in the sector have been provided by impact investors. They are typically willing to provide capital with more concessional terms (often with lower interest rates, longer tenors or flexible disbursement schedules), including to earlier-stage companies, to promote economic, social and/or environmental impact. Foundations' investment arms, DFIs and non-profit investment funds have also played a key role in the development of the sector, providing technical support and patient investments (sometimes combined with grants) to high-impact companies and public projects. DFIs also provide investments via local commercial banks and investment funds to finance small and medium enterprises (SMEs) as the ticket size required by businesses is often too small for direct investments.[4] Commercial investors (including banks) are yet to invest significantly in the sector as they focus on mature businesses with higher liquidity and leverage.

4. Athena Infonomics & Open Capital Advisors, Urban Sanitation Market Overview: Kenya, 2020

Figure 5 – Financiers by stage of business maturity and ticket size offered [83 financiers][5]



There is a higher availability of smaller ticket financing (US$ 50–500k) for early- or growth-stage businesses compared to larger ticket sizes to finance later growth, despite growing demand from businesses. Although 15 investors offering ticket sizes above US$ 1m have already made investments in the sector, transactions of that size have been rare. Only a few companies, such as Olivado, Mr. Green Africa, Sanivation, TakaTaka and Sanergy, have managed to secure investments above US$ 1m. This reflects the high availability of financing for early-stage companies and the larger ticket sizes for growth and mature-stage companies.

This study has not identified any exits in the sector, which shows its relative immaturity.[6] However, it is expected that the first exit will be announced in the coming months.

5. This graph shows the ticket sizes offered by identified financiers that made investments in the sector but does not reflect the amounts they effectively invested in waste and circularity businesses in Kenya. In addition, financiers offering investment amounts encompassing several ticket size ranges are counted in several categories.
6. Key informant interviews with financiers.

Figure 6 – Available financing products for waste management and circularity companies in Kenya[7]

Financing Instrument	Key Financiers in Waste Management by Instrument
Grant – 17 Financiers • Non-repayable grant • Repayable grant • Recoverable grant	Foreign, Commonwealth & Development Office; Kenya Climate Innovation Center; USAID FROM THE AMERICAN PEOPLE; Citi Foundation citi; OPEN ROAD ALLIANCE
Debt – 19 Financiers • Commercial loan • Revenue-based loan • Concessional loan • Subordinated loan • Microloan • Green bond	Acumen; Triodos Bank; lendahand; STICHTING DOEN NATIONALE POSTCODE LOTERIJ; KuaVentures; alphamundi; kiva; OPEN ROAD ALLIANCE
Quasi-equity – 6 Financiers • Convertible loan	KENYA CLIMATE VENTURES KCV; MTI INVESTMENT; BESTSELLER FOUNDATION
Equity – 32 Financiers • Concessional equity	FACTOR[e] VENTURES; WATER UNITE IMPACT; dwb equity; FINCA; unreasonable; KAWISAFI VENTURES
De-risking Instruments – 4 Financiers • Guarantee • First-loss capital	AFRICAN DEVELOPMENT BANK GROUP; The National Treasury & Planning, The National Treasury, REPUBLIC OF KENYA; Aqua for All

ASSESSMENT OF GAPS IN THE INVESTMENT LANDSCAPE

The waste management and circularity sector in Kenya faces significant financing gaps across all business stages.[8] Purely commercial investments have been rare as most of the instruments used to finance the sector have been grants, concessional debt and concessional equity. As it takes a long time for waste management and circularity businesses to reach profitability and scale or repay large CapEx investments, commercial investors with larger ticket

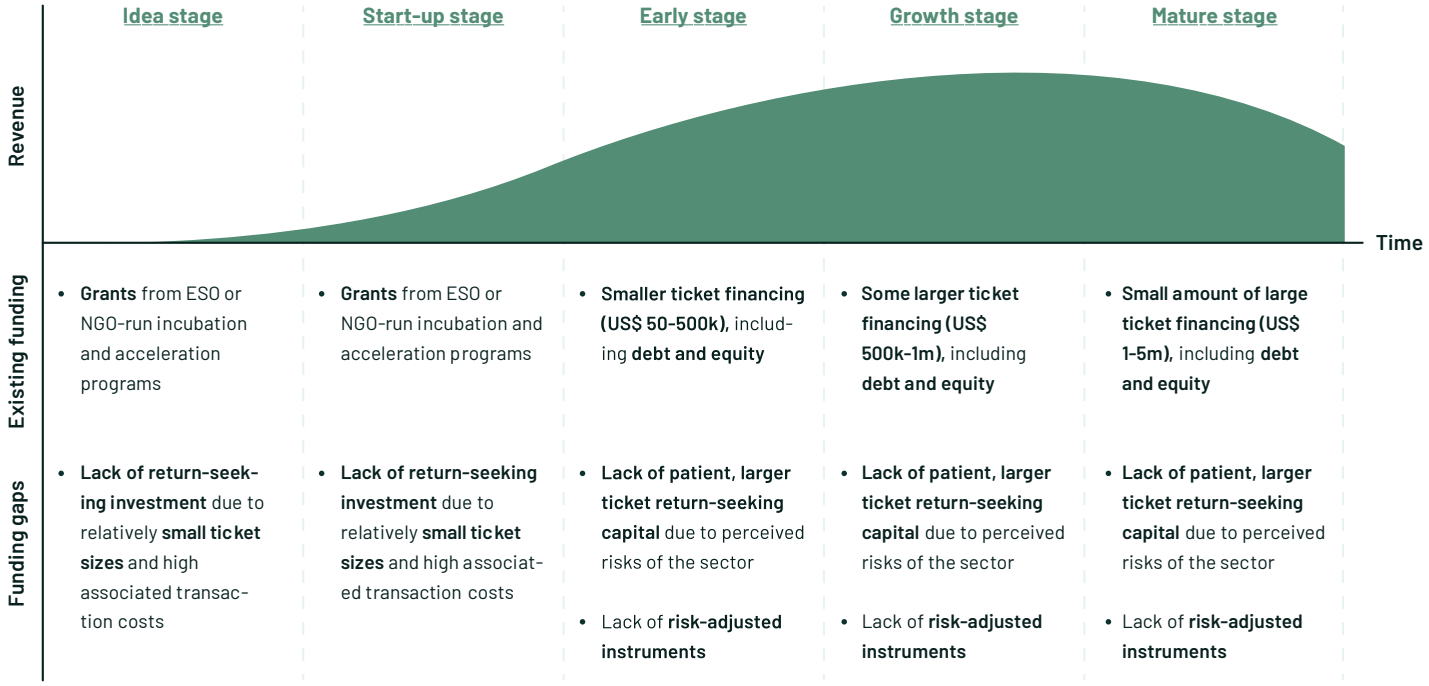
7. The number of financiers for each type of instrument is non-exhaustive as some data were missing. In addition, some financiers offer several types of instruments and are therefore counted in each category.
8. ANDE, Green Entrepreneurship in Kenya, 2023

sizes and higher return expectations have rarely entered the sector. It should also be noted that although circularity-focused funds have been launched in other parts of the globe, no such fund has been established in Kenya.

Traditional investors, whose presence would significantly increase the available pool of funding for waste and circularity businesses, still tend to perceive that investing in the sector carries too much risk. In addition to some of the challenges to entrepreneurship described in the sub-sector guides, investors often do not have enough track record and staff with relevant sectoral experience to understand the various business models and sub-sectors. They are also deterred by the lack of disruptive innovations as businesses often provide similar technologies,[9] the long timeline for businesses to scale and become profitable, issues related to waste workers' rights and protection, and the lack of standardised data and transparency on financial investments and returns. Additionally, the unpredictable policy framework negatively affects investors' trust in the sector.[10]

Finally, it should be noted that most companies that have managed to raise funding are foreign-owned. This gap may be due to locally owned companies' lack of networks and knowledge of investor jargon.[11]

Figure 7 – Mapping of existing funding and funding gaps across businesses' revenue growth stages



9. Athena Infonomics & Open Capital Advisors, Urban Sanitation Market Overview: Kenya, 2020
10. Hagos et al., Investment Climate Assessment for Circular Bioeconomy – Review of National Policies and Strategies in Kenya, 2022
11. Key informant interview with investor.

POLICIES AND LAWS RELATED TO INVESTMENTS IN KENYA

This study identified policies and laws that act as catalysts and barriers to investment in the Kenyan economy.

Figure 8 – Catalysts and barriers to investment in Kenya[12]

Catalysts to Invest in Kenya	
Fully Liberalized	Foreign investors can invest up to 100% ownership, except in sectors that can pose risk to the country. Moreover, there are no restrictions on joint venture.
Fiscal Incentives	There are VAT exemptions granted to donor funded projects and diplomats upon National Treasury recommendation.
Risk Mitigation	There are guarantees from the National Treasury & Economic Planning, a mechanism of shared risks from the Government of Kenya and seven banks (Absa Bank, Cooperative, Bank of Kenya, Credit Bank, Diamond Trust Bank, KCB Bank, NCBA Bank, Stanbic Bank) that aim to help Micro, Small and Medium Enterprises (MSMEs) access credit.
Barriers to Invest in Kenya	
Minimum Ticket Size	Minimum **foreign** investments threshold of US$ 100,000 Minimum **local** investments threshold of US$ 10,000

12. KenInvest, Kenya Investment Policy, 2019; Kenya Investment Authority, n.d.; National Treasury & Economic Planning, n.d.

CASE STUDIES OF SUCCESSFUL INVESTMENT FUNDS

BESTSELLER FOUNDATION – CASE STUDY

BESTSELLER FOUNDATION

Origin: Denmark
Year of foundation: 2015
For-profit impact investor

GENERAL INFORMATION

Impact	Businesses with positive social and environment impact, specifically targeting climate-tech ventures in Sub-Saharan Africa.
Topics	Energy, Transportation, Industry, Built Environment, Food & Land Use, Climate
Stage of Maturity	Early stage (Seed and Pre-Series A)
Instruments	Initially, the Foundation only provided grants, but this was not sustainable. Now, it mainly provides **convertible debt** (for immediate financing needs) and **equity.** The objective is to provide **patient capital** to generate **long-lasting impact.** They also carry out indirect investments through funds.
Ticket Size	US$ 300 to 500k for convertibles debt and equity. US$ 100k convertible debt for technical and financial support through the Waste to Value Accelerator in East Africa in collaboration with Intellecap.
Tenure	Longer timelines, can be more than 10 years
Return Expected	8-12%

MAPPING OF INVESTEES

Business	Sub-sector	Amount Invested (US$)	Instrument Used
Gjenge Makers	Plastic Waste	100k	Convertible Debt
Kubik	Plastic Waste	100k	Convertible Debt
Mr. Green Africa	Plastic Waste	Undisclosed	Undisclosed
Regen Organics	Organic Waste	Undisclosed	Undisclosed
Zijani	Organic Waste	100k	Convertible Debt
Takataka Textile Recycling	Textile Waste	Holds 49%	Equity

INVESTING APPROACH

- **Sourcing approach:**
  - Sector study
  - Country specific studies
  - Focus on climate-tech, including climate adaptation
  - Due diligence
- **Non-financial support to investees:** Financial management, impact management, fundraising strategy, and leadership development
- **Strategy:** Lower return expectation, patient tenure, lobbying banks to implement guarantees

KENYA CLIMATE VENTURES – CASE STUDY

Origin: Kenya
Year of foundation: 2016
For-profit impact investor
About US$ 3.5m invested in the W&C sector

GENERAL INFORMATION

Impact	Accelerate the development of climate smart solutions and have a positive impact on (underserved) communities in Kenya (looking to contribute to several impact goals in each investment).
Topics	Agribusiness, Water, Commercial Forestry, Renewable Energy, and Waste Management.
Stage of Maturity	95% of the portfolio is early stage
Instruments	Debt, convertible debt, equity, and grants. The objective is to provide patient and affordable capital.
Ticket Size	US$ 50 to 200k and in some cases, up to US$ 1m
Tenure	3 to 7 years, on average 5 years
Return Expected	12-16%

MAPPING OF INVESTEES

Business	Sub-sector	Amount Invested (US$)	Instrument Used
Sistema.bio	Organic Waste	330k	Debt
Kings Biofuels	Organic Waste	43k	Debt
Vuma Biofuels	Organic Waste	115k	Convertible Debt
Acacia Innovations	Organic Waste	150k	Equity
Adarsh Polymer	Plastic Waste	46k	Debt

INVESTING APPROACH

- **Sourcing approach:**
  - Build capacity on sector understanding (including policies, etc.) and overcome challenges (including the lack of track records)
  - Source from incubators, accelerators, peer fund managers in related sectors (agriculture, energy, etc.) and source via online platform for applications
  - Due diligence (requiring in-house expertise)
- **Non-financial support to investees:** technical assistance and business development (technology improvements, governance, business planning, financial management, energy efficiency, investor readiness and fundraising, marketing, mainstreaming environmental and social governance, mainstreaming gender lens investing and disability inclusion)
- **Strategy:** longer-term investment horizon, patient disbursements, and flexible repayments terms as waste management and circularity businesses have a lower capital absorption rate
- **Highlights of the waste management and circularity sector:** opportunity to invest in the energy transition of households and smallholder farmers, while investing in the waste management challenge

OPPORTUNITIES FOR INNOVATIVE FINANCE

OVERVIEW OF INNOVATIVE FINANCE MECHANISMS

Due to the limited availability of capital in the sector, risk mitigation and innovative finance instruments could be leveraged to mobilise investments in waste and circularity businesses. Blended finance instruments could reduce the perceived and real risk of the sector to catalyse additional private investment and develop a track record of transactions. Although development funding has been extremely useful for financing waste management projects and growing private sector initiatives, it could be strategically leveraged to crowd-in further investments, particularly to address some of the identified financing gaps.

1 SUPPORT MECHANISMS

Support mechanisms, typically funded through grants, can play a critical role in growing the sector. Support mechanisms include technical assistance funds, design-stage grants and early-stage incubation. These can be used to uncover new business models, particularly in underserved sub-sectors, and build local entrepreneurs' capacity to engage investors and strengthen their business models. Finally, support mechanisms could also be leveraged to foster innovations that formalise the informal sector, which dominates waste management in Kenya.

TECHNICAL ASSISTANCE

E4Impact and Close the Gap have developed acceleration programmes for waste management and circularity businesses, providing them with training.

2 CONCESSIONAL FUNDING

Concessional capital can also be strategically leveraged to transition this sector from grant dependency to commercial investment. Concessional funding includes zero-interest loans or below-market debt and equity. These can help companies shift from grants to returns-based instruments, potentially from DFIs, NGOs and development agencies.

CONVERTIBLE DEBT

The Bestseller Foundation and Intellecap funded the Waste-to-Value acceleration programme for start-ups with US$ 100k convertible debts.

3 RISK MITIGATION MECHANISMS

Risk mitigation instruments could play a pivotal role in de-risking the sector to crowd-in additional commercial capital. Risk mitigation instruments include first-loss capital, guarantees and funds with blended capital structures that help meet the risk-return profiles of different investors, such as DFIs, foundations, pension funds or banks. Such structures can improve the risk-return profile of an investment opportunity for commercial investors, in turn increasing access to capital for early-stage enterprises in the waste and circularity sector in Kenya.

GUARANTEES

Guarantees can be used to de-risk investments and catalyse funding from commercial investors by guaranteeing payments up to a specified amount in the case of default or non-performance. However, some interviewees suggested avoiding direct guarantees to companies as this can create dependence on concessional financing, hinder scalability and decrease investor confidence.

In 2023, the African Guarantee Fund and Aqua for All partnered to provide local private banks (including Sidian Bank and Family Bank) with increased access to guarantees to provide financing to the water and sanitation sector in Africa (including Kenya).

OUTPUT-BASED AID (OBA)

OBA has improved access to infrastructure services for low-income communities by incentivising public water utilities to provide services.

In 2007, the World Bank collaborated with commercial lenders through the Maji ni Maisha programme. Kenya's K-Rep Bank was the commercial lender, financing 80% of the solution through a loan while the community participated at 20% through equity. Once an independent impact evaluator had confirmed the achieved outcomes, the World Bank delivered the OBA subsidy to refinance the loan. The remaining amount was repaid by the community with revenues from the utility.

4 RESULTS-BASED FINANCE

Results-based financing incentivises businesses to achieve pre-agreed, measurable impact targets. It increases the focus on results instead of activities, thereby increasing flexibility in delivery approaches, encouraging innovation and incentivising a continual focus on impact. Mechanisms range from social success notes (whereby investors are paid a premium 'outcome payment' if the business meets predetermined impact metrics) to impact-linked loans (where the loan terms are reduced if impact targets are met).

OUTCOMES-BASED PAYMENTS

In August 2024, outcomes-based payments were used to fund the scaling of Fresh Life, with the Osprey Foundation and Grand Challenges Canada as the funders. The payments will be disbursed on a quarterly basis, based on the achievement of pre-agreed outcomes.

IMPACT BONDS

Unilever Nigeria, Bridges Outcomes Partnerships, and the social enterprise Wecyclers agreed a US$ 2m impact bond on a plastic waste management initiative in Nigeria. The initiative aims to create more than 700 waste-sorter jobs, help collect up to 30,000 tons of plastic waste over five years, and improve the income of thousands of sorters, who will earn 25% more. Based on this project, Société Générale is developing an outcomes fund on plastic waste management.

5 CLIMATE FINANCE

Climate finance is increasingly being leveraged as an additional revenue stream to support waste and circularity businesses. Instruments include plastic, green and blue bonds and carbon and plastic credits. Companies that collect data, notably through IoT-based technologies, can measure precisely the amount of waste collected and treated to facilitate the issuance of these credits.

CARBON CREDITS

Carbon credits serve as enablers to provide projects with additional revenues and ensure successful execution and scaling. Eligibility for carbon credits is governed by Article 6 of the Paris Agreement. Businesses must prove the additionality of their carbon impact by proving that carbon emissions would have been emitted in the absence of their product.

Sistema.bio registered its biogas programme with Gold Standard in 2018.

PLASTIC CREDITS

More recently, plastic credits have been launched. The Plastic Waste Reduction Standard is an innovative finance solution financing projects that improve plastic waste management systems worldwide. The Plastic Standard issues two types of credits: Waste Collection Credits and Waste Recycling Credits, collectively known as Plastic Credits. As with carbon credits, plastic credits can offer a supplementary revenue stream for businesses.

TakaTaka Solutions, a business active in integrated waste management, is already registered at Verra for plastic credits.

GREEN BONDS

Greens bonds have the potential to attract significant capital in the wastewater sub-sector in Kenya. These bonds typically correspond to large investments, which could finance the development of much-needed infrastructure in the country.

Kenya's Green Bond Programme, launched in 2019, aims to mobilise domestic and international capital for environmentally beneficial investments, including water and waste management. The programme provides a legal framework for listed and unlisted green bonds.

PLASTIC BONDS

Plastic bonds have also been a new instrument allowing plastic recycling companies to raise investments. Although these have taken several shapes, they generally combine debt provided to plastic recycling companies by investors and off-take agreements for plastic credits between the recycling companies and corporates.

Citi and the World Bank have established a US$ 100m plastic bond.

BLUE BONDS

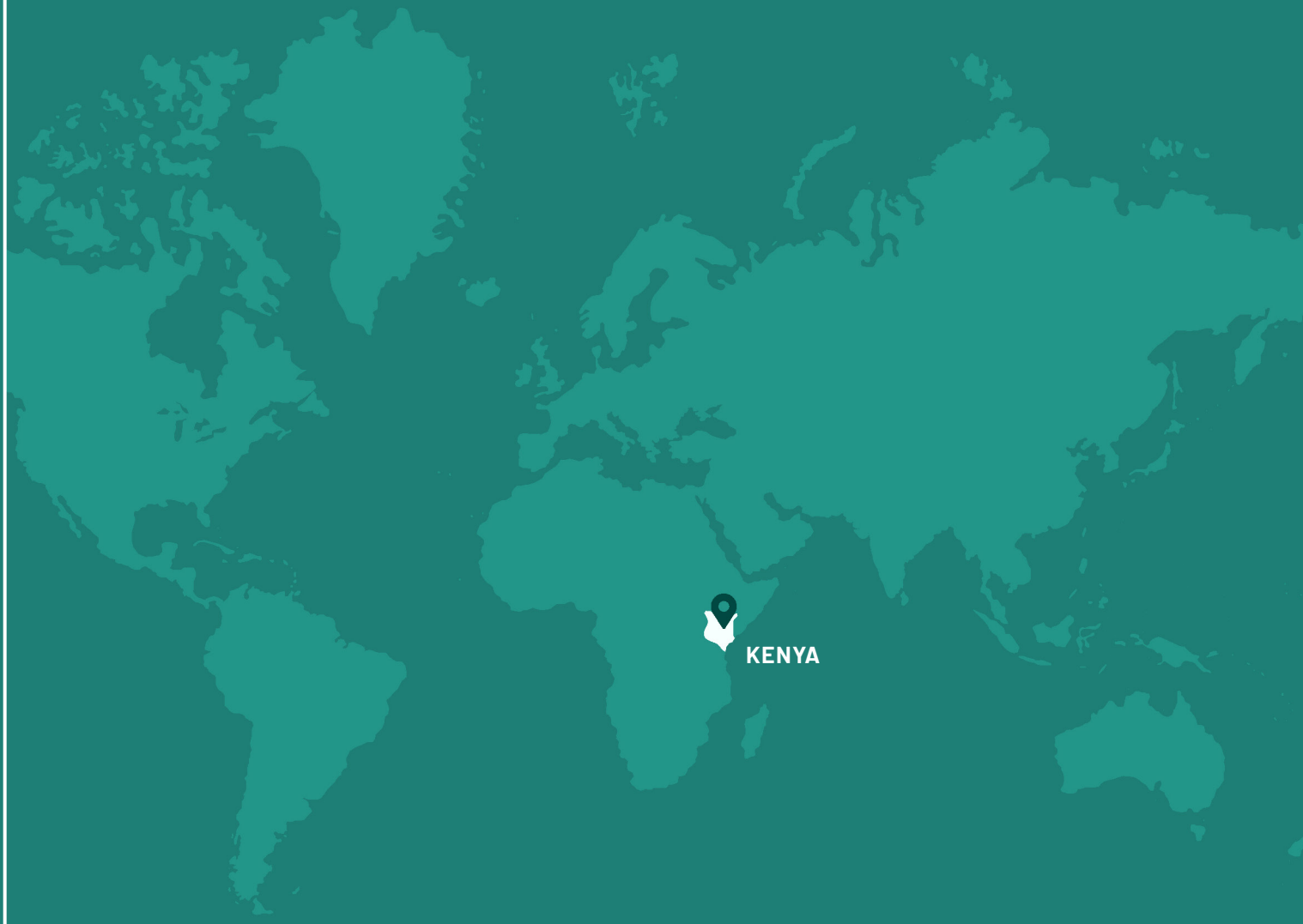
Blue bonds could be leveraged as plastic waste endangers aquatic life. This mechanism is a conventional thematic bond that attracts impact investors.

The World Bank's blue bond launched in April 2019 to address plastic waste pollution in oceans. This bond raised US$ 10m from institutional and individual investors at a fixed rate.

CONCLUSION

Investment in the waste management and circularity sector is still at a nascent stage; nevertheless, despite the challenging entrepreneurial environment, key success factors have been identified and are consistent across sub-sectors. The financing needs of businesses in this sector vary according to their maturity stage and are slightly different across sub-sectors. Investors and entrepreneurs have begun proving the commercial viability of various business models in organic, plastic, wastewater and integrated waste management. While these models may not offer the steep growth curves typically desired by investors, they have nonetheless met the expectations of a growing number of financiers who are eager to provide long-term capital due to the high social and environmental impact potential of these sub-sectors.

However, significant financing gaps persist, especially in early and growth-stage funding. Although the sector's investment track record is improving, further private capital could be catalysed through innovative finance solutions. As demonstrated by several investment funds that have successfully invested in this sector, offering a mix of commercial and concessional capital, and provided technical assistance to these businesses, there is a proven pathway to success in this emerging market. Moreover, risk mitigation mechanisms, results-based finance, and climate finance are highly suitable for these businesses.



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