Market Report

CLIMATE TECH VENTURE LANDSCAPE IN SUB-SAHARAN AFRICA

Seeing the trees through the forest



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CATAL157

CATAL1.5°T [kæt l st] is an initiative funded by the Green Climate Fund (GCF) and the German Federal Ministry for Economic Cooperation and Development (BMZ). It aims at empowering early startups ventures addressing the impacts of climate change in developing and emerging markets with a focus on Latin America and Francophone West Africa. The initiative centers on a Pre-Acceleration and Acceleration Programme that offers financial and technical support to start-ups and young businesses with highest climate mitigation impact and growth potential, aiming to help mobilize further private capital.

The CATAL1.5°T team also collaborates with incubators, accelerators, venture capitalists, policymakers and other stakeholders to boost investments, drive dialogue and foster resilient local climate innovation ecosystems.

In West Africa, CATAL1.5°T is implemented by the following organisation:





GIZ - Make-IT in Africa: a pan-African digital and tech entrepreneurship initiative implemented by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit). It supports the growth of inclusive and sustainable innovation ecosystems by strengthening the capacities of entrepreneurs, ecosystem builders, and policy makers.



Investisseurs & Partenaires (I&P): an impact investment group dedicated to supporting small and growing businesses in Sub-Saharan Africa. Through tailored financing and strategic support, I&P promotes inclusive growth and local entrepreneurship with strong social and environmental impact.



Climate KIC: Europe's leading climate innovation agency and community, creating climate-resilient communities and fighting climate breakdown by mobilising systems change in countries, regions, cities, and businesses. Together with partners across the globe, Climate KIC orchestrates solutions and facilitates learning to bridge the gap between climate commitments and current reality, driving faster and more ambitious action.







Other collaborators:



GIZ - developpe Ventures: a funding program implemented by GIZ. It supports young, innovative companies with high development impact by providing matching funds to help scale their business models in emerging and developing markets.



Briter is a leading business intelligence company focused on fast-growing economies across emerging markets and beyond. Briter data covers 10,000+ companies and investment data across Africa, Latin America and the Caribbean, and Asia, and provides data insights to corporates, development finance institutions, governments, and investors globally. Briter has been the research partner of CATAL1.5°T in conducting this study.

Contributors











































****** Abbreviations

BII	British International Investment	
CVC	Corporate Venture Capital	
DFI	Development Finance Institution	
ESG	Environmental, Social, and Governance (implied)	
ESO	Ecosystem Support Organisation	
FMO	Dutch Entrepreneurial Development Bank	
GCIC	Ghana Climate Innovation Centre	
GCF	Green Climate Fund	
IMF	International Monetary Fund	
IPCC	Intergovernmental Panel on Climate Change	
KCIC	Kenya Climate Innovation Centre	
LP	Limited Partner	
NDC	Nationally Determined Contribution	
PAYG	Pay-As-You-Go	
SAFE	Simple Agreement for Future Equity	
SME	Small and Medium-sized Enterprise	
SPV	Special Purpose Vehicle	
SSA	Sub-Saharan Africa	
TA	Technical Assistance	
UNFCCC	United Nations Framework Convention on Climate Change	
UNEP	United Nations Environment Programme	
USAID	United States Agency for International Development	
VC	Venture Capital	
WASH	Water, Sanitation, and Hygiene	









CLIMATE TECH VENTURES LANDSCAPE IN SUB-SAHARAN AFRICA (SSA): DATA-DRIVEN ASSESSMENT OF THE CLIMATE TECH ECOSYSTEM IN SSA

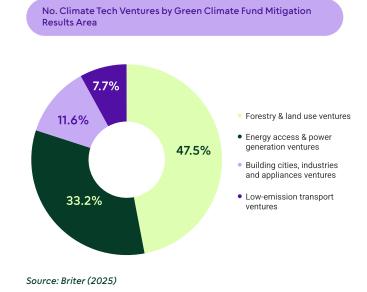
eveloping climate tech and innovations to address the effects of climate change is becoming increasingly important in Sub-Saharan Africa (SSA). The climate tech venture ecosystem has been growing over the last decade, driven by increased investment in the renewables and climate-smart agrifood tech. Successful business models have emerged to address local problems such as decentralised renewable energy and circular waste management solutions. A diverse set of global networks of investors, donors, and DFIs are supporting the development of emerging climate techs in the region. While a few successful climate tech ventures showcase the potential in the market, other climateimpact sectors, such as circular economy and sustainable cities, are still at a nascent stage. And these nascent ecosystems require more support

from incubators, business angels, investors and policy makers to grow further.

This market report explores the state of climate tech innovation across eight SSA countries: Ghana, Kenya, Côte d'Ivoire, Nigeria, Tanzania, Senegal, South Africa, and Zambia. The study draws on data on 500+ climate tech ventures and interviews with 15 ecosystem players, including investors, entrepreneurs, and ecosystem support organisations (ESOs). This market report utilises data and insights to paint the picture of the overall market trends and dive deeper to analyse the nascent ecosystem. The aim of the report is to provide actionable insights into the gaps and opportunities for climate tech ventures and the types of funding models and support that can contribute to developing the ecosystem.

State of the Ecosystem: Climate Tech Ventures is growing in SSA

- The sector has been growing consistently over the last decade, first driven by renewables and climate-smart agrifood tech, and diversifying in innovations.
- Kenya, Nigeria, and South Africa lead the market growth as regional hubs with deeper capital markets, but Ghana, Tanzania, and Zambia are growing alongside their neighbours.
- Francophone West Africa is a more nascent ecosystem but with a greater mix of small and medium-sized enterprises (SMEs) and startups.
- The ESO support is very global as the majority of ESO programmes come from outside of SSA, and are a major supporter of the earlystage ventures.











Funding landscape

- \$3B+intotalfunding has gone into the climate tech ecosystem over the past decade.
- This growth is disproportionate. 70% of the overall funding in the ecosystem is raised by 20 companies, mostly in renewable energy or agri-food tech and based in Kenya.
- Investments drop-off significantly after the support from ESOs ends, but for those that make it, they are capturing investor attention. This shows a strong need for ESOs to connect grant-funded climate tech ventures to the follow-on capital.
- Impact investors and commercial investors are visible in the ecosystem but are not as active at the pre-seed stage where there is a greater need.
- Many of the funding instruments remain conventional (equity, grant, debt), with a few innovative models coming out through blended finance structures such as Special Purpose Vehicle (SPV) for carbon credit or guarantees or first-loss arrangements to derisk commercial investors. These models are not yet mainstreamed and need to be utilised further.

Roadblocks

- Overall lack of funding is apparent in the market. The current drop in venture capital investments and mismatches between highimpact areas and investment flow require further efforts to continue the sectors' necessary rapid growth.
- Investors need more convincing to invest in climate techs. Climate tech ventures often face unique hurdles, such as capitalintensive business models, extended timelines to maturity, and limited potential for exponential growth compared to, e.g., software-focused businesses. These factors make climate tech a tougher proposition for investors accustomed to different risk-return
- Regulatory and policy barriers. Clearer and more supportive regulations are necessary to align investments with climate goals.
- Data and standards gap. Consistent, easyto-apply, global climate-related disclosure and standards investment taxonomies are needed to align financial markets with climate targets.

Funding flow in Climate Tech Ventures (2015-2024)



Source: Briter (2025)

Opportunities & Action Items

For climate tech ventures

- Validate the business model, not just the tech. Use pilot stages at incubators and accelerators to test margins, customer fit, and scalability.
- Plan funding pathways early. Align business structure with grant, equity, debt, and carbon finance opportunities as finding the right type of funding is a key business sustainability strategy.
- climate metrics and storytelling into the pitch. Be fluent in the measurable adaptation and mitigation outcomes that investors want to see.





CATAL151

For Ecosystem Support Organisations (ESOs)

- Focus on business model validation. Ventures need to test their business model in the existing value chain and solidify their business case. Support ventures to test pricing, margins, and customer fit, not just pitch decks.
- **Embed climate metrics & readiness.** Help ventures measure their adaptation and mitigation impact, and help them develop a good storyline for investors.
- Support grant-to-investment transition.
 Prepare founders to move from grant dependency to blended or commercial funding.

For Investors

- Invest early, activate markets. \$50K-\$500K ticket size is missing and needs to be activated. Business angels and impact investors should be leveraged more to build the future pipeline.
- **Use blended finance tools.** Work with existing government and DFI interest to create scalable capital stacks. Think blended finance models.
- Provide capacity, not just capital. Partner with ESOs, venture studios, and technical assistance (TA) providers for business model validation and impact validation.







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1 Introduction: Unlocking Climate Tech for the Resilient Future in Sub-Saharan **Africa**

Sub-Saharan Africa (SSA) stands at the frontline of the global climate crisis. According to the IPCC¹, West, East, and Central Africa are among the world's most vulnerable regions to climate change, with rising temperatures, erratic rainfall, and extreme weather events already threatening food systems, water security, and public health². Even if the global temperature does not rise above 2°C, the UN Environment Programme estimates that adaptation costs across Africa could reach \$50 billion annually by 20503.

Despite contributing the least to global greenhouse gas emissions, where the average CO2 emission per capita remains at 0.8 metric tonne per person compared to the global average of 3.9 tonne per person⁴, African countries face the greatest climate risks. In response, many have outlined bold aspirations for low-carbon, climate-resilient economies in their Nationally Determined Contributions (NDCs) under the Paris Agreement⁵. Yet translating these commitments into impact remains a challenge as climate action requires significant financing, policy enablement, and robust technology transfer. Economies in the SSA region are expected to grow in the next decade⁶, and this growth should incorporate climate-oriented efforts that can make the growing economy and population more climate resilient.

This moment demands urgent investment in both homegrown and transferable climate tech and innovations that are locally-adapted, scalable, and capable of supporting inclusive development across both rural and urban areas. In recent years, climate innovation in



- 1 Intergovernmental Panel on Climate Change (IPCC). (2022). Sixth Assessment Report: Working Group II: Chapter 9. https://www.ipcc.ch/report/ ar6/wg2/chapter/chapter-9/
- 2 Intergovernmental Panel on Climate Change (IPCC). (2021). Sixth assessment report: Working Group I: Regional fact sheet Africa. https://www. ipcc.ch/report/ar6/wg1/downloads/factsheets/IPCC_AR6_WGI_Regional_Fact_Sheet_Africa.pdf
- 3 United Nations Environment Programme (UNEP). (2015). Africa adaptation gap II: Bridging the gap Mobilising sources. https://www.unep.org/ resources/report/africas-adaptation-gap-2-bridging-gap-mobilising-sources
- 4 United Nations Framework Convention on Climate Change (UNFCCC). (2006). Africa fact sheet. https://unfccc.int/files/press/backgrounders/ application/pdf/factsheet_africa.pdf
- 5 United Nations Framework Convention on Climate Change (UNFCCC). (2024). NDC registry. https://www4.unfccc.int/sites/NDCStaging/Pages/
- 6 International Monetary Fund (IMF). (2025). Real GDP growth. https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/ **WEOWORLD**

SSA has grown from a renewable-dominant sector into a thematic vertical that addresses diverse problems arising from climate change. Climate tech ventures continue to leverage data, connectivity, and the proliferation of low-carbon energy sources to unlock resilience and opportunity.

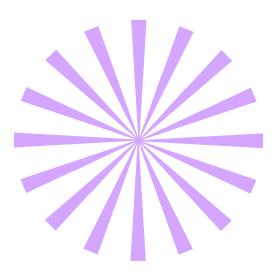
However, climate tech ventures still face challenges in developing novel technologies and scaling them. Climate techs require a lot



of resources and time to develop new solutions and commercialise them to consumers that are often price-sensitive and may already have a preference for an existing solution. This requires a lot of private sector investment but the private sector alone does not drive the market development for climate techs. Significant involvement from the public and impact actors is required to create incentives to adopt more climate tech in existing infrastructure and SME value chains, and to create market demand at the consumer level. Enabling these innovators at an early stage is vital to developing more sustainable economic activities that can have a lasting impact.

This study showcases the potential and the gaps in the climate tech venture ecosystem through data and expert insights. This study maps the evolving landscape of climate tech ventures across 8 countries in SSA: Ghana, Kenya, Côte d'Ivoire, Nigeria, Tanzania, Senegal, South Africa, and Zambia. The report incorporates data from 450+ ventures, a decade of funding trends, and insights from 15 ecosystem leaders. The goal of this data-driven approach is to provide practical information to climate tech funders, ESOs, investors, donors, and policymakers to make more informed decisions about innovations that foster sustainability, climate resilience, and economic growth.

The first chapter offers a market diagnostic of the climate tech vertical, presenting a snapshot of the climate tech ecosystem. Then, the second chapter analyses the changing landscape of the climate tech venture ecosystem in the last decade. The third and final chapter presents the challenges and growth opportunities for stakeholders engaging in the space to consider.





2 | Overview of climate tech venture landscape in Sub-Saharan Africa

2.1. Climate Tech Ventures

Figure 1 | Summary of Climate Tech Landscape

No. Ventures

No. Funded Ventures

Count of Funding

491

820+

No. Total **Funding Size** **Median Size** of Funding

No. Funders (Investors & ESOs)

S3.3B+

\$600,000

503

Local and simple technologies present a clear opportunity in Sub-Saharan Africa affordability, (SSA), where accessibility, and adaptability matter most. These are not complex technologies requiring significant time, money, or expertise to develop. Instead, they are practical tools designed to address local challenges using available resources. Innovations such as household biodigesters. bacterial conversion of waste into fish feed, and solar-powered cold storage in rural areas avoid the high costs and risks associated with importing advanced technology (e.g., solar panels) and have demonstrated strong user adoption. Ventures that focus on modular. easy-to-maintain technologies built from the ground up may be better positioned to scale over time than complex systems requiring years of R&D. Simplifying solutions also helps keep technology costs more predictable, especially when reliant on imported components¹¹. The preference for simpler tech reflects the limited resources available for long-term research and development in the climate tech space.



What is climate tech?

The climate tech venture ecosystem is a thematic vertical that includes technologies and innovations across multiple sectors. that includes agriculture, energy, mobility, construction, and sanitation sectors. Climate tech is "Technology built with the intent to mitigate or adapt to the negative impacts of climate change". It encompasses a wide array of technologies & innovations designed to combat climate change by reducing greenhouse gas (GHG) emissions, adapting to its impacts, and enhancing climate resilience7. A CLIMATE TECH VENTURE is a startup or company that develops, and scales solutions aimed at addressing climate change, reducing GHG emissions, or enhancing climate resilience8.

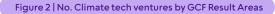
Climate Tech Venture Taxonomy: baseline taxonomy used in this report is developed from the Green Climate Fund (GCF) mitigation result area, as mitigation is the focus of the CATAL1.5°T programme. Each climate tech venture is organised under one of the GCF mitigation results areas. Climate tech ventures in mitigation provide solutions that reduce greenhouse gas (GHG) emissions and increase carbon sinks, such as renewable energy and carbon capture technology9. Climate tech ventures in adaptation provide solutions that increase climate resilience and reduce the impact of climate change, such as crop insurance, early warning systems, and circular economy services¹⁰. Some climate tech ventures touch both mitigation and adaptation (e.g., co-benefit), such as climate-smart agrifood techs generating carbon credits through carbon reduction practices (e.g., solar irrigation), and later add in adaptation services to their consumers (e.g., crop insurance). These co-benefit climate tech ventures are grouped as either adaptation or mitigation for the study.

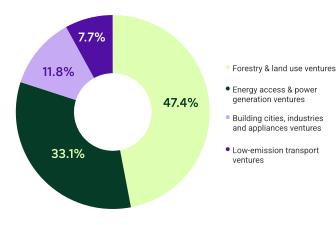
See Annexe A for a further breakdown of the products and sectors.

- 7 General sources on Climate Tech & Climate Tech Ventures: (Chaudhury & Wyne, 2023); (PwC, 2023); (European Commission,
- 8 CATAL1.5T. (2025) Briefing Document Forum on climate tech investments
- 9 Green Climate Fund. (n.d.). Mitigation. greenclimate.fund/theme/mitigationn.d.)
- 10 Green Climate Fund. (n.d.). Adaptation. https://www. greenclimate.fund/theme/adaptation

While the distinction between SMEs and startups is often blurred in SSA's climate tech sector, startups typically lead with a technological component, whereas SMEs are more service or production-based. Although they operate in similar sectors, startups and SMEs can offer complementary solutions by differing in their business models. For instance, SMEs like Agribanana (which transforms agricultural waste into eco-friendly products), Dr. Sett of Senegal (which collects biohazard materials), and Coliba of Côte d'Ivoire (which partners with women to collect and upcycle plastic waste) require heavier capital expenditure to build and maintain production facilities and distribution networks. In contrast, startups such as TrashSmart (Ghana), which offers a waste collection service app, and Scrapays (Nigeria), which formalises scrap collection using mobile payments and data tracking, focus on connecting consumer nodes and optimising existing systems. This blurred line between startups and SMEs means that support strategies must accommodate the needs and growth trajectories of both.

Climate tech ventures have scaled by responding to local challenges specific to the SSA context. Whether it's asset-heavy waste management or agile solar power banks for home use, these ventures succeed by addressing real and immediate needs. The first wave of growth centred on decentralised energy access via abundant solar resources. The second wave saw expansion in climate-smart agrifood techs like drip irrigation and crop insurance. Today, a third wave is diversifying into sectors such as biotech, the circular economy, and e-mobility as demand for cleaner, climate-resilient solutions grows across the region.





Source: Briter (2025)

Data Scope

The report covers 8 countries across Western, Eastern, and Southern Africa to produce a broader regional landscape and to compare the differences across the regions. The 8 countries covered in the report are Ghana, Kenya, Côte d'Ivoire, Nigeria, Tanzania, Senegal, South Africa, and Zambia. The report aims to provide a regional ecosystem analysis and draw comparisons across the different regions within Sub-Saharan Africa. This report also draws out learnings relevant for the CATAL1.5°T programmes' activities in the West African countries of Togo, Benin, Burkina, Niger, Côte d'Ivoire, Senegal, Mauritania, Guinea.

The quantitative data in the report captures climate tech ventures and ecosystem actors with a published online presence. Their online presence includes creating their own website and social media pages, being featured on thirdparty websites (such as those of investors and accelerators), and having media coverage through published articles and deal announcements. Most of the information is gathered from their disclosed information, but some are supplemented by the data from the application to the CATAL1.5°T programme. This in turn also means that the data cannot capture very early-stage startups that do not yet have some "debut" activities online or activities that are at university labs without disclosed information

This study also draws insights from interviews with 15 experts across the ecosystem, including investors, entrepreneurial support organisations, advisory service providers, and climate tech ventures. Qualitative data from engagements supplement

shared to the public.

Solar energy has been the primary driver of SSA's climate tech ecosystem. Energy access and power generation account for one-third of all active climate tech ventures in the region. Eight out of the ten most funded companies operate in solar or broader renewable energy, including Sun King, CrossBoundary, d.Light, Zola, Bboxx, Lumos, Husk Power Systems, and Daystar Power. These ventures collectively raised about 70% of total disclosed climate tech funding. Larger players like Zola and Daystar Power function almost as infrastructure companies, securing significant investments, offtake agreements, and project finance through development finance institutions (DFIs). Consumer-facing companies like Sun King and d.Light have scaled rapidly by embedding payment solutions such as pay-as-you-go (PAYG) and upselling valueadded services to existing users. Many of these solar providers now serve millions of off-grid customers.

However, solar is no longer the only growth engine. Agri-food tech has emerged as a strong second pillar of the climate tech ecosystem. Forestry and land use ventures now account for nearly half of all active ventures. The rise of precision agriculture (e.g., Aerobotics), crop insurance (e.g., Pula), and bundled advisory and market access services (e.g., Farmerline) has propelled the sector's growth. Climateresilient technologies like solar irrigation (e.g., SunCulture) have further fuelled momentum.

Innovations in food processing and upcycling are also gaining traction. Ventures like Koa Impact (upcycled cocoa products) and Oyster Agribusiness (post-harvest processing for smallholder farmers) are expanding access to value chains. Waste management solutions such as Wecyclers and Scrapays are thriving in urban areas, offering logistics and digital platforms for recycling and circular economy operations.

Agri-food tech is heavily concentrated in larger markets like Kenya and Nigeria, where donors and development partners actively support climatesmart agrifood tech. Yet, strong ventures such as Chanzi, Oyster Agribusiness, YYTZ, Ignitia, and Koa Impact are emerging in Ghana and Tanzania as well.

the quantitative data. For more information on the interviewees, see Annexe.

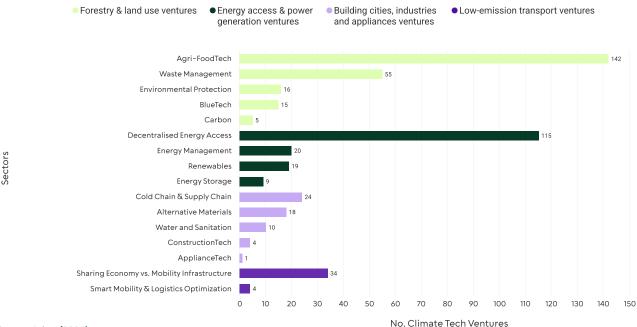
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The report tracks activities in the climate tech venture ecosystem through funding and in-kind assistance activities. The funding data includes the last ten years of disclosed funding records that can be captured through published sources. includes both commercial and non-commercial funding such as grants and competition prizes. In order to capture early-stage support activity, the data also captures records of non-monetary support schemes, such as in-kind assistance at an incubator and accelerator stage.

5

Climate tech ventures in the data include startups, Small and Medium Enterprises (SMEs), and scaleups. Startups are earlystage ventures centred around climate technology innovation and have product offerings with scalable models aimed at crossborder expansion. SMEs also develop climate technology but the growth and scaling are focused in a particular market. They can be digitally enabled but digital services are not the core of their product. Scaleups are more mature ventures that began as startups but now operate at a larger scale with more formal governance and have scaled either regionally or cross-border. Some startups are on the pathway to scaleups, but the ecosystem is still at an early stage in SSA, and instead, infrastructure developers in the energy sector are active.

Figure 3 | No. Climate tech ventures by Sectors



Source: Briter (2025)

The "Building Cities, Industries, and Appliances" result area currently represents a smaller share of ventures but is growing in importance as urbanisation accelerates. Ventures in this space are focused on decarbonising construction, manufacturing, and supply chains. Many (over 40%) focus on cold chain logistics. Companies like Koolboks (Nigeria) and Keep IT Cool integrate solar into cold storage to reduce food loss and stabilise pharmaceutical supply chains in rural areas. Others, like Gjenge Makers in Kenya, are developing sustainable construction materials by repurposing plastic waste, demonstrating the potential of circular economy approaches to offset emissions-heavy industries.

Low-emission transport remains the smallest segment but is increasingly relevant for urban logistics and SME supply chains. This sector includes shared e-mobility startups such as BasiGo (Kenya) and MAX (Nigeria), as well as

smart fleet management ventures like GoMetro and Fleeti. Electric vehicles (EVs) make up 65% of transport-focused ventures. Companies like ROAM (Kenya) are developing locally manufactured EVs suited to African roads, while charging infrastructure startups such as Zimi Charge (South Africa) and OpenCharge (Kenya) aim to fill the infrastructure gap, which currently limits broader EV adoption.

Sub-Saharan Africa's climate tech sector is evolving through locally grounded, practical innovations that prioritise affordability and adaptability. As ventures scale solutions in energy, agriculture, waste, and mobility, success increasingly hinges on building models that are both commercially viable and resilient to regional constraints. This progress is unfolding alongside a dynamic shift in the investment landscape.

2.2. Entrepreneur Support Organisations (ESO) active in the Climate Tech Ecosystem

Entrepreneur Support Organisations (ESOs) continue to serve as an important entry point for climate ventures across Sub-Saharan Africa, particularly at the earliest stages of growth. From

accelerators and incubators to venture builders and innovation hubs all visible in the ecosystem. Out of the over 240 ESOs identified as active only a subset are directly supporting climatealigned ventures. About 10% of these have an explicit climate focus¹² and include organisations like the <u>GSMA Innovation Fund for Climate</u> Resilience, Kenya Climate Innovation Center

(KCIC), and <u>Katapult Africa Accelerator</u>, which have mandates tied to clean energy, sustainable agritech or climate resilience.

Figure 4 | ESOs working with climate tech ventures in SSA

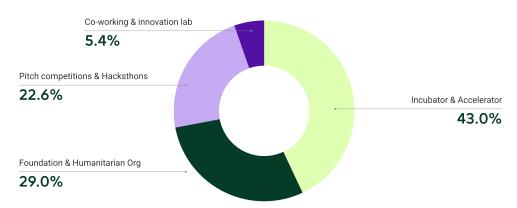


12 Source: Briter data (2025). Briter identified 246 ESOs from a broader mapping exercise. Out of them about 110 ESOs have included at least 1 climate tech venture in their cohorts. Out of them, 24 ESOs, or about 10%, had climate-focused programmes.

Climate innovations often require tailored technical assistance, patient capital pathways, and regulatory fluency. Since most climate startups are navigating generalist ESO programs, this points to a broader gap of non-specialisation within the support ecosystem that remains limited. In practice, this implies that early-stage support is often shaped around standardised tech accelerator models rather than to offer specialised programmes for climatetechs.

Sector agnostic ESOs are able to provide generalised business development support but not specialised contextual support that reflects the operational realities or networks relevant for climate tech sector. For example, climate tech ventures usually take 2 or more years to develop technologies, and accelerator programmes that are designed for shorter product-to-market fit cycle of SaaS products may not be able to support climate techs at their testing phase.

Figure 5 | ESOs Type Breakdown

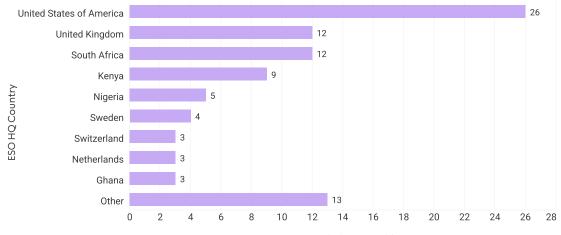


Source: Briter (2025) ** Note: these include ESOs that have worked with at least 1 climate tech ventures in the last 10 years.

The majority around 55% of active ESOs programs and those with relevant climate-relevant counts in the dataset are headquartered outside SSA. Mainly based in Europe or North America and are accompanied by multilateral ties or partnership structures, with at least five ESOs linked to UN or donor-funded programming such as UNICEF Startup Lab, GCIP by UNIDO and NINJA Accelerator by JICA. This reflects a wider trend of climate program design globalisation with many program designers and backers increasingly focusing on where impact can be delivered,

rather than where the capital originates. As a result, SSA is drawing in more internationally-led climate support initiatives, a positive signal for capital availability and cross-market knowledge transfer. It is however important that organisations understand that while global alignment matters, programs should refrain from carrying assumptions shaped by other ecosystem innovation contexts thereby creating friction for startups navigating unique African policy, infrastructure, and consumer realities.

Figure 6 | HQ of ESOs working with Climate Tech Ventures in SSA



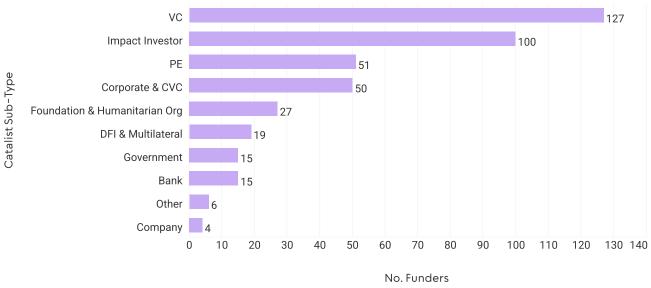
Source: Briter (2025)

Funders

The climate tech investment landscape in SSA is driven by a diverse mix of venture capital firms, impact investors, development finance institutions (DFIs), and a smaller group of corporate and institutional investors. VC and impact investors represent the most active segment, accounting for over half of all identified funders in the region. Almost all of them have DFI or concessional funders as their Limited Partners (LPs). These investors typically

enter at early to growth stages, favouring scalable business models or measurable impact outcomes. DFIs, on the other hand, often support larger infrastructure projects or blended finance structures, using concessional capital to derisk private investment. Corporate actors and banks remain more limited in their participation, though some engage through innovation challenges, strategic partnerships, or pilot cofunding.

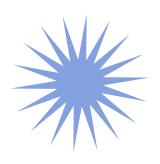
Figure 7: Funder Type Breakdwon



Source: Briter (2025)

Much of the funders in climate tech ventures in SSA originate from outside the continent, and are supported by global public finance. A significant share of commercial funders operating in the region are backed by international donors and DFIs. Even many impact and venture capital funds that are perceived as private or market-based, count institutions like USAID, BII, and FMO among their funders. On one hand, this signals a global commitment to boost climate tech in SSA;

on the other, it raises important questions about how well global funding priorities reflect local needs, and how the influx of capital build long-term domestic investment capacity. The current landscape shows that global momentum has not yet translated to a local network of committed investors who are climate-focused and risk-taking. But the ecosystem is still at an early stage and further partnerships and spillover effects can be expected once the market develops further.



Source: Briter (2025)

Local angel investors, family offices, and corporate venture capital arms remain limited in the ecosystem. These groups are critical in bridging the gap between grant-funded pilots and institutional capital. But the majority of investors of SSA climate tech ventures have been from Global North, mainly from the US, and Europe. While there are local investors emerging

in the space, they are not yet as engaged in the climate tech ecosystem. While global interest in the climate tech still benefits the overall goal of reducing the impacts of climate change at large, local funders still need to be activated to give more localised investor knowledge sharing to the burgeoning climate techs in the region.





Funders in SSA

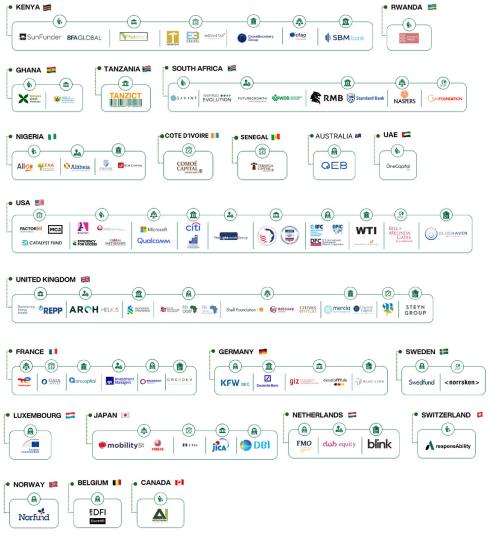
KEYS

- Impact Investor
- **Development Finance** Institution (DFI)
- Venture Capital
- **Private Equity**
- **Investment Firm**
- Government
- ·M· Corporate
- Foundation
- ड़ी Bank
- **Family Office**



Source: Briter (2025)

CATALIST

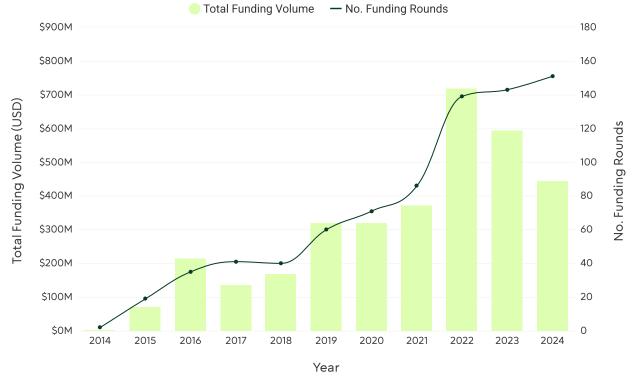




4 | Funding Landscape of Climate **Tech Ventures**

ver the past decade, climate tech ventures 'in Sub-Saharan Africa (SSA) have raised over \$3 billion in disclosed funding. The funding landscape has followed a clear upward trajectory, particularly from 2019 onwards, peaking in 2022-2023. This boom was driven largely by increased investment in solar energy and agritech solutions. Since then, climate tech ventures have continued to attract growing volumes of capital, particularly at the early stage, reflecting increased visibility among both concessional and development-oriented investors, as well as a rising interest from commercial backers.

Figure 10 | Climate Tech Venture Funding Volume (2015-2024



Source: Briter (2025)

Renewable energy ventures have led this growth, benefiting from early donor support and infrastructure financing. This earlier on support has lead to more pipeline of renewable companies and follow on investment interest in the overall sector. These ventures remain attractive to investors due to their clear mitigation outcomes, proven technologies (e.g., solar panels), and the presence of tangible, collateralisable assets. The maturity of several solar and energy ventures, some of which have reached Series C or beyond, demonstrates a viable pathway for scaling climate tech in the region. E-mobility ventures such as BasiGo,

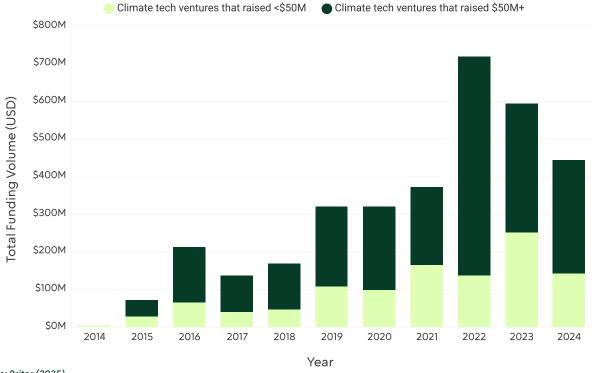
Spiro, and Moove are beginning to follow a similar trajectory. Additionally, agri-food tech ventures that have integrated renewable energy such as solar irrigation and solar-powered cold chains are gaining momentum.

However, funding is highly concentrated. Seventy percent of all capital raised over the past decade went to just 17 ventures, each of whom secured over \$50 million. These "big raisers" are primarily active in decentralised energy (e.g., Azuri Technology, Candi Solar, d.Light, Bboxx), with a few in agri-food tech (e.g., SunCulture, Apollo Agriculture), mobility (e.g., BasiGo),

and environmental protection (e.g., Komaza¹³). Traction in the renewable sector is influenced by clear mitigation results and donor interest. Many of the fund managers in the climate tech sector are mostly funded by development finance

institutions and public funding, and hence are less risk-taking. Investors tend to go for ventures with strong business cases and impact stories. And renewable companies fit those criteria.

FIGURE 11 | Big raisers vs Other Climate Techs Funding



Source: Briter (2025)

This donor-led climate tech sector development shows up in the geographies where climate tech ventures are gaining traction. Most of these ventures that have raised above \$50M are based in Kenya, where many of the donor and DFI-funded investors are located. Kenya benefits from a relatively deeper pool of capital including blended capital and innovative catalytic capital. Climate ventures that manage to navigate the complex network funders by proving a strong impact and business cases have been able to scale and capture a larger subset of consumers while accessing capital to keep the price affordable for consumers.

These ventures have created market proof points for others, offering early success stories in a nascent space. Their experiences offer valuable lessons. For example, SunCulture used concessional capital and strategic partnerships to refine its product, eventually integrating

carbon credits into its pricing model to keep products affordable. BasiGo leveraged a payas-you-go (PAYG) model tailored for bus drivers, which reduced upfront costs and incentivised adoption. The company also aligned with Kenya's government targets for clean public transport. However, such innovative models remain largely inaccessible to smaller or earlier-stage ventures without tools such as guarantees, asset-backed financing, or access to large customer bases. The broader ecosystem remains undercapitalised and underdeveloped.





There's a growing appetite for climate technologies, especially ones solving clear local problems. But the pace is uneven, and funding is still concentrated.



Ayoub Derabi,Regional Innovation Lead, Climate-KIC





SunCulture - Unlocking Scale Through Innovative Finance

Product Offering:

Solar irrigation systems bundled with installation, maintenance, financing, and other products and services such as soil testing and health insurance.

Primary Market: Kenya, with direct expansion into Uganda and a joint venture in Ivory Coast. SunCulture also sells through distributor partners in several other SSA markets.

SunCulture's story to scaling¹⁴: SunCulture bridges the gap between the need for high-quality solar irrigation systems and affordability for smallholder farmers through a vertically integrated business model and innovative financing instruments. Their vertical integration across product design, sourcing, distribution, servicing, and financing helps keep high quality end-to-end services. In order to keep these products and services affordable for end users while maintaining business sustainability, SunCulture leverages carbon credit monetization. British International Investment (BII) and Shell Foundation partnered to design and finance an innovative facility that harnesses the future value of carbon credits in order to reduce upfront costs to end-users, and in turn, dramatically increase the addressable market. This facility is then repaid through the sale of carbon credits, with BII absorbing the risk of future carbon credit pricing, allowing SunCulture to confidently extend maximum up-front discounts to low-income farmers. Due to the initial success of this ~\$2m investment, BII further invested another ~\$4m into the facility.

Lesson Learned: SunCulture's model illustrates the importance of aligning capital strategy with product economics. Through a credible blended finance model anchored in carbon revenues it manages to keep solutions affordable while maintaining high-quality solutions and sustainable unit economics.



^{14 &}lt;a href="https://shellfoundation.org/news/bii-shell-foundation-and-sunculture-pilot-innovative-carbon-financing-to-accelerate-access-to-solar-irrigation-systems-for-kenyan-farmers/">https://shellfoundation.org/news/bii-shell-foundation-and-sunculture-pilot-innovative-carbon-financing-to-accelerate-access-to-solar-irrigation-systems-for-kenyan-farmers/



We need to utilize all the tools in our funding toolbox: Carbon Special Purpose Vehicles (SPVs), results-based financing, commercial and concessionary investment, credit guarantees, everything. That's how we've managed to scale – an excellent product fit for purpose isn't enough without addressing affordability. Carbon, coupled with results-based financing, is what allows us to reduce our overall pricing, but traditional asset finance is what makes our Pay-As-You-Grow model viable for low-income, smallholder farmers.



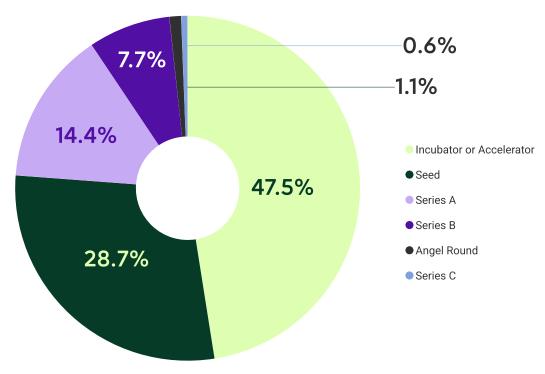
Mikayla Czajkowski, Chief of Staff & Director of Corporate Affairs, SunCulture



When these high-profile examples are taken out, the ecosystem is much smaller and at the early stage. 50% of funding and in-kind assistance to climate techs are at through ESOs,

and an additional quarter of all funding is at the seed stage. A limited number of them climate tech ventures are proving their market fit and are raising at Series A or later stages.

FIGURE 12 | No. Funding by Stages for Ventures that raised less than \$50M



Source: Briter (2025)

The transition from ESO or grant funding to larger capital rounds is challenging. Most funding under \$500,000 comes from grants and ESO support, with some follow-on investment from impact funds. However, there is a sharp dropoff at the \$500K-\$1M mark, which are typical tickets for the pre-seed stage. Contributing factors include the lack of visible angel investors

in the \$50K-\$500K range and the fact that most climate tech investors are headquartered outside Africa, making these smaller ticket sizes less attractive. Grants provided through ESOs can help ventures establish themselves but grants can also stall companies as grantpreneurs if they are not paired with longer-term capital strategies¹⁵.



Many accelerated ventures struggle to find local follow-on funding after graduation. Because of this, they often go quiet after seed round.

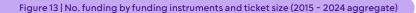


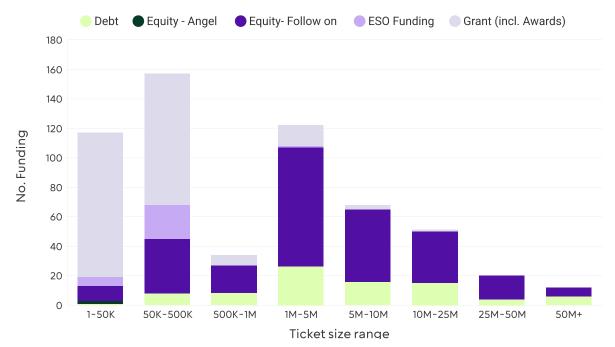
Bankole Olonruntuba, CEO & Lead, Nigeria Climate Innovation Center



ESOs report that many of their cohort companies struggle to attract follow-on funding post-programme¹⁶. Ventures often need several years to develop a viable product, and investors are reluctant to back companies that have not

yet demonstrated a clear business case. Many ventures stall at this stage, unable to raise sufficient funds for product development or to navigate the costs associated with shifting consumer behaviour.





Source: Briter (2025)

¹⁵ Interview 15

¹⁶ Interview 7, Interview 13, Interview 6

Conventional funding instruments such as grants, equity, and debt still dominate the landscape. A few innovative models have emerged, including carbon-financed SPVs, DFI-backed guarantees, and impact-first investors taking first-loss positions to de-risk commercial capital. However, these remain the exception,

not the rule. There is a need for wider adoption of such structures and greater awareness among ventures and ESOs on how to tailor capital strategies to their stage and model. Below box lays out some examples of innovative financing instruments that could be utilised in the climate tech ecosystem.

Viable Blended Finance Mechanisms for Climate Tech Ventures in Sub-Saharan Africa

First-loss capital from public or philanthropic sources to de-risk early investment: Public actors, DFIs, and foundations can provide first-loss capital within a blended capital stack to absorb initial losses. This structure helps de-risk investments in early-stage climate ventures operating in nascent or informal markets. It is especially useful in sectors like decentralised energy or circular economy, where perceived risk remains high, and financial track records are often limited.

Revenue-based financing (RBF) suited to irregular or seasonal cash flows:

RBF enables ventures to repay investors through a fixed percentage of revenue until a capped return is achieved. This model is well suited to SSA climate ventures with unpredictable income streams such as agri-techs facing seasonal cycles, or PAYG solar companies. RBF allows them to raise capital without dilutive equity or rigid loan repayments.

Convertible or recoverable grants tied to clear milestones:

These instruments allow ventures to access early catalytic funding with a performance-based repayment condition. Grants convert into equity or repayable debt only if the venture achieves specified impact or financial milestones. This model is particularly relevant for ventures transitioning from donor funding to market-based finance, helping bridge the "grant-to-investment" gap.

Anchor investments from DFIs and catalytic funds to crowd in commercial coinvestors:

Early commitments from institutions such as BII, Proparco, or Norfund help validate ventures and signal reduced risk to private investors. Anchor investments are especially effective in capital-intensive sectors like energy, cold chain logistics, or waste processing, where long development timelines deter purely commercial capital.

Special Purpose Vehicles (SPVs) linked to carbon revenue streams:

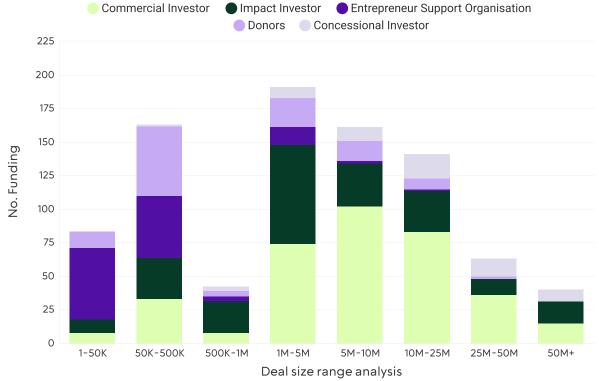
SPVs structured around future carbon credit revenue can provide a viable pathway for climate tech ventures in reforestation, solar irrigation, and regenerative agriculture. Examples like SunCulture in Kenya are beginning to leverage this model, but wider adoption is limited by the volatility of voluntary carbon markets and the technical complexity of structuring such facilities. More accessible toolkits and shared playbooks are needed to make this approach scalable in the region.



Impact investors are beginning to fill the \$500K-\$1M gap, while commercial investor participation remains limited. Some accelerators linked to VC funds, such as Catalyst Fund and venture studios, are providing follow-on capital to select ventures. Angel investor networks also present an untapped opportunity—if

supported with better deal access and simplified instruments such as SAFE notes. Moreover, SME funders and microfinance providers could play a pivotal role by offering working capital to ventures that are ready to commercialise but not yet attractive to larger investors.





Source: Briter (2025)

For this early-stage segment to thrive, ESOs and early-stage investors must actively coordinate with later-stage investors to showcase and support the emerging pipeline. While the top-line funding figures may suggest a maturing ecosystem, capital and support remain

disproportionately concentrated. To unlock the next generation of climate solutions, targeted market-building efforts and catalytic early-stage funding will be essential in bridging the gap from promising ideas to scalable impact.



5 | Breakdown from regional blocks: Big markets, up-and-coming markets, and francophone markets

Sub-Saharan Africa's climate tech ecosystem is diverse and uneven, shaped by varying policy frameworks, innovation clusters, and capital market depths. Common themes arising from the prominence of early-stage ventures such as donor involvement and infrastructure constraints are common across the continent. But there are important lessons that can be drawn from distinct regional blocks. This chapter explores

three such blocks: the "lead" markets of Kenya, Nigeria, and South Africa; the "up-and-coming" ecosystems of Ghana, Tanzania, and Zambia; and the emerging landscape in Francophone West Africa. By examining what has enabled or inhibited climate venture growth in each, we gain insight into where future investment and ecosystem-building efforts are most needed.

Figure 15 | Overview of the three regional blocks

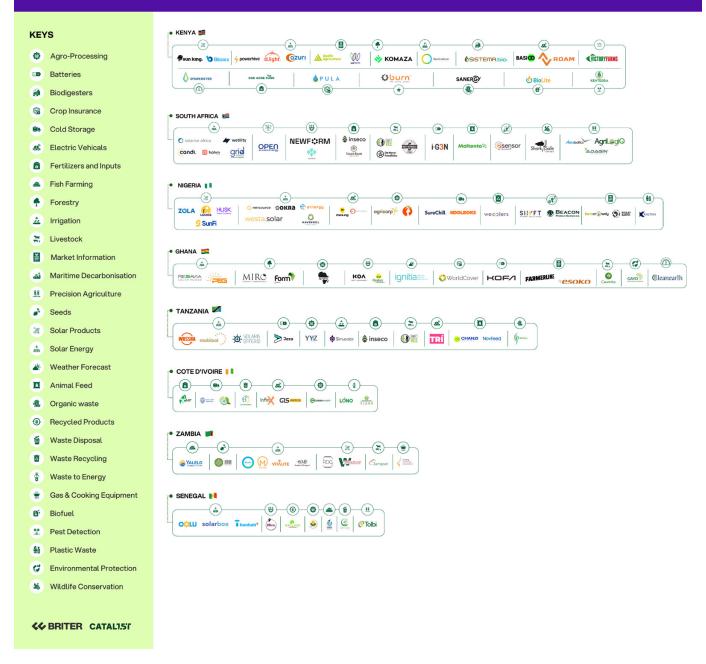
Big Markets (Kenya, Nigeria, South Africa)		Up-and-Coming (Tanzania, Zambia, Ghana)					
No. Ventures	No. Funding 620+	Total Funding Raised \$3.0B+	Median Size \$674,000	No. Ventures	No. Funding	Total Funding Raised \$311M+	Median Size \$500,000
	Francophone West Africa (Côte d'Ivoire and Senegal)						
No. Ventures		No. Funding		Total Funding	g Raised	Median Size \$382,000	•

Figure below maps out top funded climate tech ventures that have raised disclosed funding between 2015 and 2024. Kenya leds in both scale and investment, with the toal funding size at \$1.6B raised. Kenya has the highest number of climate ventures (146) with funded companies (132), and is home to 6 of the 10 most capitalised climate ventures in the region. These include giants like Sun King, d.light, and Apollo Agriculture. It positions itself not only as a hub where ventures not only pilot but raise significant funding but also a model ecosystem where other countries can replicate. Nigeria and South Africa follow closely. Up and coming countries like Ghana and

Tanzania have fewer ventures but have diverse sector and product such as forestry in Ghana, animal feed in Tanzania. These markets could position themselves as strategic entry points for adaptation-focused innovation where local community needs intersect with global climate priorities. The Francophone West Africa shows a smaller ecosystem with some early stage funding, but the ecosystem is very nascent with an array of entrepreneurs emerging.



Top Funded Climate Tech Ventures in SSA



Source: Briter (2025)

The Leads: Kenya, Nigeria, and South Africa

Kenya, Nigeria, and South Africa collectively attract the bulk of climate tech investment in Africa. These countries are home to many of the region's most well-capitalised ventures, the highest concentration of ecosystem support organisations (ESOs), and a comparatively mature investor network. Each country has

developed sectoral strengths: Kenya is known for decentralised energy access and agri-tech innovation, Nigeria for fintech-integrated climate models and waste-to-cash solutions, and South Africa for infrastructure-heavy solutions in mobility, energy, and cold chain logistics.

What distinguishes these markets is not just capital availability, but the density of support ecosystems and a track record of scale¹⁷. In Kenya, for example, the presence of early-stage incubators, DFI-backed projects, and donor engagement has helped build a reliable pipeline of investable ventures. Nigeria has demonstrated

strong consumer adoption for low-margin, high-volume models, particularly those enabled by mobile payments. South Africa, with relatively more advanced regulatory frameworks, has fostered larger infrastructure players, especially in the renewable energy and mobility sectors.



Success isn't about unicorns. It's about embedded innovation that creates jobs and survives the long term.



Bankole Olonruntuba, CEO & Lead, Nigeria Climate Innovation Center



At the same time, these markets reveal the limits of current capital dynamics. Many late-stage climate ventures are foreign-led, largely due to their access to global capital. Local startups, even with strong products, often hit funding ceilings at the growth stage because local VC and angel networks remain underdeveloped.

Furthermore, most innovation remains urbancentric, concentrated in cities like Nairobi, Lagos, and Cape Town. Future scaling should expand beyond adapting business models that work in urban markets for rural markets; and into developing localised hubs outside current hubs that can help address local challenges.

The Up-and-Coming: Ghana, Tanzania, and Zambia

Ghana, Tanzania, and Zambia represent promising ecosystems that are beginning to gain traction in the climate tech space. Although smaller and less mature than the lead markets, they are home to increasing numbers of ventures, particularly in sectors like solar energy, agri-tech, and circular economy solutions. These countries benefit from vibrant entrepreneurial communities, a growing number of ESO programmes, and early-stage policy support, such as import duty waivers for solar products and green enterprise schemes.

However, several constraints limit their potential to scale. Investment infrastructure remains thin, with relatively few local VC funds or climate-focused angel networks¹⁸. Blended finance remains underutilised, and ventures often face difficulties navigating bureaucratic hurdles or securing working capital. Infrastructure remains

a recurring challenge, particularly in logistics, energy access, and cold chain development.

Despite these limitations, innovation emerging. Entrepreneurs in these markets tend to favour practical, low-cost solutions that respond directly to market demand that is price sensitive. Entrepreneursare focused on developing affordable and accessible solutions that can withstand limited resources (e.g., infrastructure or enabling environment or financing) and limited purchasing power. This is referred to as frugal innovation¹⁹. In climate tech, frugal innovations often appear as low-tech, modular, or decentralised solutions such as solar lanterns, biodigesters, mobile-based irrigation systems, or pay-as-you-go energy models. Frugal innovation has proven more viable than deep tech, particularly given the time and resources required for product development

¹⁸ Interview 2

¹⁸ Interview 5

¹⁹ Radjou, N., Prabhu, J., & Ahuja, S. (2012). Jugaad Innovation: Think Frugal, Be Flexible, Generate Breakthrough Growth. Jossey-Bass.

and commercialisation. ESOs in these countries have played a critical role in building early-stage pipelines. However, they often lack the resources

to support ventures beyond proof of concept, resulting in a steep drop-off when it comes to follow-on investment.



In Ghana, we need to stop chasing the outliers and focus on helping more small and medium-sized businesses stay in business by adopting climate-smart solutions. Success isn't about flash, it's about accessible innovation, affordable technology, and business models that work in real contexts. That means building stronger maker spaces for product development, tailoring support to regional needs like agriculture in the north and waste management in the south and helping stakeholders see the business opportunity in climate action. It's not about copy-paste solutions; it's about creating the right conditions for responsible, locally-rooted growth.



Ruka Sanusi,Executive Director, Ghana Climate Innovation Centre



Scaling innovation in these markets requires a more localised approach. General-purpose accelerators often fail to meet the technical needs of climate ventures. Emerging models like venture studios, which combine capital with hands-on product development, show promise

in addressing this gap. There is also a pressing need to transition from donor-dependence to more commercially anchored models, enabling ventures to gradually rely on paying customers and investment capital, rather than short-term grants.

Francophone West Africa: Senegal and Côte d'Ivoire

Francophone West Africa remains one of the underrepresented regions in Africa's climate tech ecosystem with a small number of climate tech companies emerging and reaching growth stage. Senegal and Côte d'Ivoire are two of the ecosystems that are beginning to show activation. Many of the climate techs are digitally-enabled SMEs addressing local challenges of desertification, need for privatised waste recycling, and cold chain solutions for post-harvest goods.

Public support for climate conscious future is taking shape but it is too early to see the effect of implementation. Senegal's ban on singleuse plastic in 2020²⁰ and Côte d'Ivoire's VAT exemption on equipments designed to produce solar energy in 2024²¹ both showcase the public sector's introduction of their focus themes and market incentives²². But further study is needed in the near future to see if those incentives translated to a market response.

²⁰ https://g20mpl.org/partners/senegal

^{21 &}lt;a href="https://taxsummaries.pwc.com/ivory-coast/corporate/other-taxes">https://taxsummaries.pwc.com/ivory-coast/corporate/other-taxes

²² Interview 7



The climate tech ecosystem has been developing due to the increasing need for climate action. Funding came subsequently and it's triggering more structured support.



Charlie Guerin,
Bond'Innov



Language and visibility barriers compound these challenges. French-speaking ventures are often excluded from pan-African initiatives that are dominated by Anglophone partners. Because SMEs tend to have less presence online and do not usually work with VC funding, the data visibility of francophone West African climate ventures is lower than their anglophone peers. Incubators, accelerators, and investors need to make their portfolio companies more visible to other investors in order to showcase that the region has a growing pipeline of climate techs. Accessing international capital, joining global accelerator cohorts, or pitching to multinational investors can be difficult without bilingual platforms or intermediaries. The first step in bridging the gap between the anglophone and francophone countries is connecting the ecosystem actors to exchange the learnings and build stronger networks. One example of a more connected network is the CATAL1.5°T initiative, which is helping to build a regional community of ESOs aiming to position themselves within the climate tech space.

Additionally, the ESO support for climate techs is often sector agnostic rather than specialised to climate because the climate tech sector is activating in Francophone West Africa. Specialised support for climate techs includes better technical support for earlystage companies and preparation for climate impact narrative, in order to develop a pipeline that is better prepared for demanding investor expectations. CATAL1.5°T initiative provides more tailored technical assistance for climate techs to ESOs that are operating across West Africa. Their implementation partners such as Bond'Innov and Teranga Capital are strengthening their knowledge of accelerating and investing in climate tech ventures.



There are strong local solutions, but visibility is a challenge. We need to build tools and expertise tailored for this region.



Adrienne Ndong, Teranga Capital



The region's next phase of development will depend on more targeted investment in climate-specialised support infrastructure. Building local technical assistance programmes, improving access to blended finance, and enabling public co-investment in ecosystem builders will be

essential²³. Collaboration between Francophone and Anglophone actors through bilingual accelerator partnerships, cross-border investor matchmaking, and peer learning will help ensure this region establishes its place in SSA's climate transition.

5| Unpacking the Key Challenges

The climate tech sector in Sub-Saharan Africa is not a monolith. Each ecosystem reflects distinct trajectories. Yet across all regions, common themes emerge: Ventures face early-stage funding constraints, limited local capital, and a lack of tailored support for scaling solutions. Key takeaways on why climate tech ventures are not getting the funding are as follows:

A big portion of renewable energy and hardware ventures need to import much of their components. The high reliance on imports drives up their cost and the risk due to unstable exchange rates. This means that climate tech ventures need to become very innovative in their business models, and even then bear too high a risk for many investors who have alternative investment opportunities.

The time expectation of dilutive funders to see market traction and scaling is much shorter than what most climate tech ventures can offer. Climate tech ventures, especially those developing deeptech or hardware solutions take years to develop the solution and take to market. Many dilutive funders want to see traction in a shorter period of time, do not back climate tech ventures.

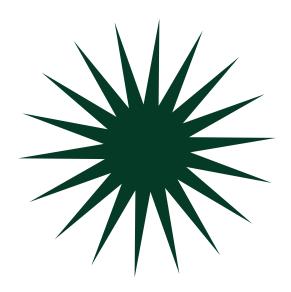
In the absence of dilutive funders, many of the climate tech ecosystems are funded by non-dilutive funders or dilutive investors backed by non-commercial funders. Their incentive is more about generating impact, and many climate tech ventures, in the absence of other

funders, fit their business model to meet impact expectations rather than return on investments. This in turn creates a misalignment between non-dilutive and dilutive funders that have not yet derisked or mobilised additional commercial funding into the space.

Debt funding remains very limited. Most institution's lenders are not familiar with climate tech ventures' business models and will require unattainable collateral or guarantee requirements to consider backing them. Early stage climate tech ventures simply do not meet the requirement to access working capital loans.

Multiple ventures focus on similar customer segments (e.g. solar PAYG models for rural households or digital waste apps for urban areas). This favours companies that already have scaled enough to access those market segments that can bundle their products. The smaller companies struggle to compete to a few scaled winners and fail to prove their business case before seeking scale-up capital.

Angel investors, family offices, and corporate venture arms who are often key actors in mature ecosystems are under-engaged in the SSA climate tech ecosystem. These groups are often risk-averse and prefer to invest in familiar industries and lack exposure to climate sectors. Their absence deprives ventures of not only early-stage capital, but also strategic partnerships, mentorship, and local market access. Activating the local investors remains a key challenge.





6 | Next Steps: Opportunities and **Next Steps**

The past decade has laid the groundwork for climate tech in Sub-Saharan Africa. A growing pipeline of ventures, increasingly active investors, and the slow but steady maturation of ecosystem support structures all signal momentum in the making. Yet, as this report has shown, much of the growth remains fragmented, with capital concentrated in a few markets and sectors, and many promising innovations still struggling to scale. If climate tech is to play a transformative role in the region's sustainable development, all ecosystem actors must align their strategies to grow innovation that can make scaled impacts.

For Climate Tech Ventures

The first and most urgent lesson for climate tech ventures is that solving a climate challenge is not enough. Business model viability is equally critical in order for the ventures to grow. Ventures must move beyond proving the technical soundness of their solutions and use pilot stages within incubators or accelerator programmes to rigorously test pricing, margins, customer behaviour, and scalability. A well-designed product that cannot demonstrate commercial traction will struggle to attract investment, no matter how climate-positive it is.

Equally important is planning the funding pathway early on. Too many climate ventures fall into the missing middle gap at 50K-500K because they fail to align their business structures with the right type of capital. From grant funding and equity to concessional debt and carbon

finance, founders must understand which financial instruments fit their growth stage and capital needs. Strategic financial planning is not a luxury. It is fundamental to long-term survival in resource-constrained ecosystems.

Moreover, climate finance as becomes increasingly outcomes-driven, ventures must embed impact metrics into their narratives. Investors are looking for measurable adaptation and mitigation outcomes, and ventures that can clearly articulate their climate impact will stand out. Storytelling should not be reduced to broad sustainability claims; instead, it must be grounded in credible, verifiable data aligned to emerging taxonomies and frameworks. The ability to speak fluently about climate impact is fast becoming a core fundraising skill.



For Ecosystem Support Organisations

For ESOs, the next chapter of support must move beyond generic training and pitch preparation to real-world business model validation. Many ventures enter ESOs with promising concepts but leave without having tested their value proposition in an actual market context. Incubators and accelerators must create space for ventures to pilot products with real customers, stress-test revenue assumptions, and refine their pricing strategies.

ESOs need to provide more targeted and specialised technical assistance to climate tech ventures. ESOs need to be equipped with climate-specific experts and knowledge to provide relevant support for climate tech ventures. In addition, ESOs need to customise their programme to help their climate tech pipeline become more investment-ready by structuring customer acquisition strategies based on the market conditions and define business logic that reflects the market conditions.

ESOs should help ventures build climate credibility. Supporting founders to quantify adaptation and mitigation outcomes not only enhances investor confidence but also strengthens ventures' ability to compete for funding tied to climate results. Metrics such as tonnes of CO₂ avoided, improved agricultural yield under climate stress, or increased energy access should be woven into both impact frameworks and storytelling approaches.

Another critical gap is the transition from grants to investment. ESOs should prepare founders to move beyond donor dependency by building their financial readiness. It is crucial to help them understand blended finance, investor expectations, and how to approach co-investment structures. More importantly, ESOs need to stay engaged post-programme, helping graduates access follow-on funding and navigate the challenges of scaling in fragmented markets.

For Investors

Investors, particularly early-stage and impact-focused investors, hold the key to unlocking broader climate innovation across the region. A funding challenge exists at the \$50K-\$500K level, where promising ventures often stall due to the absence of appropriate capital. Angel investors, family offices, and early-stage funds must be activated to fill this space. This also requires helping local investors better understand the opportunities and risks in climate tech, especially for models that may be unfamiliar or capital-intensive in the early stages.

The use of blended finance tools must become a more common practice. DFIs and philanthropic institutions already play a significant role, but more can be done to combine concessional funding, guarantees, and catalytic capital in ways that crowd in commercial investment. Investors should work with governments and development partners to co-create investment stacks that lower risk and improve return profiles, especially in frontier markets and underserved sectors.

Conclusion

The climate tech sector in Sub-Saharan Africa stands at a crossroads. Momentum is building, with promising ventures, increasing capital flows, and widening policy attention. But without intentional strategies to address gaps in capital, capability, and coordination, much of these potential risks remain unrealised.

What emerges from this report is not only a picture of growth but a call to action. **Climate tech ventures must be designed with market realities**

in mind. ESOs must support the transition from prototype to product. Investors must seed early ideas with the same seriousness as they back proven models. And the public sector must play a catalytic role in de-risking innovation and strengthening ecosystem infrastructure.

If these actors can move in concert, Sub-Saharan Africa has the opportunity not only to build resilience against climate risks most need to be addressed in the region.

Annexe

I. List of Interviewees

- 1. Abbe, Brigitte, Responsible Finance Manager, Camoé Capital
- 2. Adoléhoumé, Barbara, Climate acceleration programme manager, Investisseurs et Partenaires (I⊗P)
- 3. Boukari, Issaka Adamou, Climate acceleration manager, Sinergi Niger
- 4. Czajkowski, Mikayla, Chief of Staff & Director of Corporate Affairs, SunCulture
- 5. Daubrey, Marc, President, Green Invest Africa
- 6. Derdabi, Ayoub, Regional innovation lead, Africa, Climate-KIC
- 7. Guerin, Charlie, Manager Afrique and Urbain Aguemon, Programme Manager, Bond'Innov
- 8. Juglard, Aude, Co-founder & managing director, Mstudio
- 9. Koivogui, Zézé. Senior Investment manager, Gola Capital
- 10. Ndong, Adrienne, Seed investment manager, Teranga Capital
- 11. Oloruntoba, Bankole, CEO / Lead, Nigeria Climate Innovation Center
- 12. Ouedraogo, Alida, Seed funding manager, Sinergi Burkina
- 13. Sanusi, Ruka, Executive director, Ghana Climate Innovation Centre (GCIC)
- 14. Yong, Erick, Co-founder & CEO, Zeitec (formerly GreenTec Capital)
- 15. Vaudin, Yann, Investment associate, Katapult Africa

II. Data Methodology

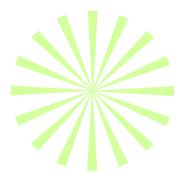
This research covers data on climate tech ventures, their historical funding data, and the funders involved in those funding rounds. The data covers climate tech ventures with office presence in the following 8 countries across Sub-Saharan Africa: Senegal, Côte d'Ivoire, Ghana, Kenya, Nigeria, Tanzania, South Africa and Zambia.

Climate tech venture data is collected from publicly available secondary sources, including but not limited to company websites, published articles, social media pages, press releases, and founders' social media pages. Collected information is verified by Briter before being added to the database.

Historical funding data is collected from publicly available secondary sources, including but not

limited to fundraising releases by the company, press releases, published articles, the company website, funder website, and social media pages. Undisclosed funding such as friends and family, debt from financial institutions, undisclosed equity fund rounds is excluded from this database. Collected information is verified and cleaned by Briter before being added to the database.

Funder data is collected from the historical funding data. The database only includes funders with disclosed funding records in climate tech ventures. Funder information is collected from publicly available secondary sources, including but not limited to the funder website, published articles, and social media pages.



III. Definitions and Taxonomy

II. A. Climate Tech Ventures

This study defines climate tech ventures as companies that provide technology-driven products and services that contribute to climate sustainability. This definition includes startups and high-growth SMEs with the parameter that these companies are building or being enabled by climate tech and innovations as a core part of their product offering. Climate tech ventures cut across multiple sectors, and includes solutions from the following sectors: Agri-Food, Appliances, Construction, Cold Chain & Supply Chain, Construction, Energy & Renewables, Mobility, Waste Management. Climate tech ventures also include technologies from technology or theme-driven groups such as Bluetech, Carbon technology, and Water, Sanitation, and Hygiene (WASH). Together, these solutions create a holistic ecosystem of technologies that contribute to climate mitigation and adaptation.

GCF Result Area	CATAL1.5°T Climate Sector	Description	Products
Energy access & powergeneration ventures	Renewable Energy Development	Climate ventures focused on developing, deploying, and scaling energy solutions that use renewable and sustainable sources	Biodigester, Waste to Energy, Hydropower, Wind Energy, Geothermal, Hydrogen
	Decentralised Energy Access	Climate ventures that enable decentralised and small scale access to renewable energy.	Solar Home Kit, Solar Products, Solar Kiosks, Pay-As-You-Go Energy(PAYG), Biofuel, Gas & Cooking Equipment
	Energy Management	Climate ventures that provide services to effectively manage, track, and optimize energy usage.	Smart Metering, Energy Management
	Energy Storage	Storage energy startups in Africa are companies dedicated to developing and implementing technologies and solutions for storing energy, such as batteries and other systems, to enhance energy reliability and efficiency across the continent's power grids and off-grid systems.	Batteries, Energy Storage Units

Low-emission transport ventures	Sharing Economy vs. Mobility Infrastructure	Climate Tech ventures that develop sustainable transportation vehicles, necessary infrastructure for the vehicles, and the sharing economy platforms to reduce carbon emissions and enhance environmental sustainability.	Electric Vehicles, Charging, Carpooling, Ridesharing
	Smart Mobility & Logistics Optimisation	Climate Tech ventures that develop software-oriented solutions to connect different mobility infrastructures and optimise their system.	Smart Traffic Management, Smart Mobility Platforms
Building cities, industries and appliances ventures	Alternative Materials	Innovations that develop and use sustainable materials as alternatives to existing materials, including biomaterial and other sustainable materials. These materials are designed to reduce environmental impact and meet consumer demand for more sustainable products.	Biomaterial, Additive manufacturing, Materials Innovation, Recycled Products
	Construction Tech	Startups that provide innovative solutions to improve sustainability and climate positive in the construction space	Smart Building, CivilTech, Sustainable Housing, Construction
	Appliance Tech	Appliance technologies that can help reduce carbon emission in household activities or monitor environmental and climate affect in household or urban settings.	Air Filtration

	Cold Chain & Supply Chain Water and Sanitation	Technologies and companies that enable cold supply chain across sectors (agri-food, pharmaceutical etc) to reduce waste in the logistics system. Innovative companies providing access to clean water and sanitation practices, including disposal of water and waste.	Cold Chain, Cold Storage Water Access, Sanitation, Fecal Sludge Management
Forestry & land use ventures	Agri-Food Tech	Food systems startups in Africa focused on mitigating and adapting to climate change are enterprises that develop and implement sustainable agricultural practices, technologies, and supply chain innovations aimed at reducing the environmental impact of food production while enhancing resilience to climate-related challenges.	Agro- Processing, Animal Care, Animal Feed, Apiculture, Farm Management, Fertilisers and Inputs, Food Production, Horticulture, Hydroponics, Irrigation, Livestock, Pest Detection, Precision Agriculture, Seeds, Soil Testing, Weather Forecast, Urban farming, Vertical farming, Crop insurance, Storage, Alternative Protein
	Blue Tech	Startups that work with improving the climate impact of ocean and freshwater systems through usage of ocean and freshwater or creating technologies adapting to ocean and freshwater systems.	Fish Farming, Aquaculture (including algae farming), Wave energy, Tidal Energy, Maritime decarbonisation

Environmental Protection	Startups that contribute to monitoring, protecting, and restoring environmental systems including land, air, water, and flora and fauna.	Bioremediation, Environmental protection, Forestry, Wildlife conservation, Climate data & forecasting
Waste Management	Circular economy startups in Africa focused on mitigating and adapting to climate change are innovative businesses that promote the reuse, recycling, and sustainable management of resources to reduce waste and carbon emissions while fostering resilience and economic growth in the face of climate challenges.	E-Waste, Organic Waste, Waste Disposal, Waste Recycling, Plastic Waste
Carbon	Startups operating in carbon markets in Africa are companies that develop platforms, projects, or services to facilitate the capturing, storage trading, verification, and management of carbon credits, aimed at reducing greenhouse gas emissions and driving investment in sustainable environmental initiatives	Carbon Capture and Storage, Carbon Credit Marketplaces, Carbon Accounting and Reporting

II. B. Funders and Entrepreneurial Support Organisations

This study maps ecosystem actors that support climate tech ventures both monetarily and otherwise. The types of funders and ESOs covered in the study are below

Organisation Type	Definition
Funders	
Angel	Individuals who invest their money in companies. They often invest in very early stage companies and provide guidance and support in addition to the funding.
Angel Syndicate	Groups composed of angel investors. They often pool angel investors together to share information among the member angel investors in their network.
Investment Management Firm	Investment management firms are professional asset management service providers whose main goal is to meet specified investment goals for the benefit of investors. They often manage a wide range of assets including shares, bonds (debt), real estates, and project finance, and the sources of investments can also come from a wide group of investors.
Bank	Banks are financial institutions that take deposits from the public (including individuals, companies, and governments) and lend the deposited money.
Corporate	Corporates are a large company or a group of companies (conglomerate) that operate under a parent company.
Corporate Venture Capital (CVC)	Corporate venture capital are venture capital funds that come directly from the corporate.
Development Finance Institution (DFI)	Development finance institutions (DFIs) are development banks and their subsidiaries/ sibling organisations whose main operations support private sector development in developing countries. DFIs can be national or international and are often majority-owned by national governments who fund the DFIs from their national or international development funds or government guarantees. The sources of the funding create creditworthiness that can mobilise large sums of funds from international capital markets.

Family Office	Family offices are entities that manage the assets and wealth of a wealthy family. Some family offices are single-family, meaning it manages one family's wealth. They can also be multi-family or a group of families.
Government	National and international governments or their subsidiaries that are making financial investments in companies and projects.
Impact Investor	Impact investors use an impact-focused investment strategy to achieve environmental, social, governmental or climate goals while also generating profit in the form of return on their investment.
Pitch Competition & Hackathons	Events and competitions where entrepreneurs pitch their company in front of judges in order to win funds for their ideas, products, and companies.
Private Equity Firm	Private equity investors (PEs) are the general investors (General partners-GP) that pool funds from investors that commit capital (Limited partners - LPs) to invest or acquire private companies that are not listed publicly. PEs usually take controlling stakes in the companies that invest in and work with the management to make the company more profitable.
Venture Capital Firm	Venture capital firms (VCs) are investors that invest in startups and early to growth stage businesses with longer-term growth potential and with an expectation of exponential return. Venture capital is technically a type of private equity, but the innovation ecosystem they are in often refers to investors that invest in earlier stage companies as VCs and investors that invest in later stage companies to get controlling stake in the company as private equity (PE). The sources of venture capital can come from individuals, financial institutions, companies (although this would be labelled as corporate venture capital under our taxonomy), and other institutions.

Entrepreneur Support Organisations (ESOs)

Accelerator	Accelerators support early-stage and startup-stage companies by providing funding, non-funding support, networking, and knowledge sharing to help the company become a sustainable entity. Accelerators usually take in companies that are past the ideation stage and accept the companies in cohorts.
Co-Working Space	Co-working spaces provide communal spaces where early-stage startups can come and set up an operational base.

Incubator	Incubators support ideation-stage or very early-stage entrepreneurs to develop their ideas into a company by providing mentorship, access to resources, business training, funding, and more.
Innovation Hub	An innovation hub is a physical space that brings innovators, producers, scientists, and other innovation value chain actors together to realise an innovation. An innovation hub is often a larger concept than a maker space.
Maker Space	Maker spaces are physical or sometimes digitally connected spaces equipped with technologies for innovators to come and make items. Examples of this are a 3D printing hub, a laser cutting space, a robotics lab, etc.
Venture Builder	Venture builders are businesses that build, launch, and scale an idea into a business. They often develop an idea into a product and then invest resources to test and scale the product. They are also referred to as startup factories, startup studios, tech studios, and venture production studios. Venture builders often differ from incubators and accelerators because they are often very involved in the everyday management of the companies and stay involved in those companies until a much later stage or exit stage.
Industry Representative	Organisations that represent the interests of a particular industry group by creating a bargaining power and advocating for the group. This can be a policy advocacy group, unions, industry representative groups, and cooperatives.
Humanitarian Organisation	Organisations that provide support for humanitarian missions and to improve the quality of lives.
Academia & Research	Organisations whose main mission is academic knowledge development and gathering. They usually make their research public good.

II. C. Funding Information

Disclosed Funding: Disclosed funding that has been announced between 2015 and 2024, funding includes early-stage support at the incubator and accelerator level, commercial (VC, debt, PE, Impact investors), concessional funding (DFIs and government co-investments), and non-commercial funding (grants).

No Deal: The number of disclosed funding

Deal Size: The disclosed deal size in USD, note that a high proportion of disclosed deals do NOT disclose their funding size.

Climate Tech Venture: Startups and high-growth SMEs that offers technologically-enabled climate technology solutions and products

