





Nairobi Climate Network.









Foreword

Cities are taking action to tackle the climate crisis through a variety of measures, covering areas such as water security, waste management, building emissions, air pollution, transport, and urban planning. A concerted effort on all these fronts is essential if the world is to meet the 1.5°C target set out by the Paris Agreement.



I believe it is time for Nairobi to lead these global efforts and the members and organisations that make up the Nairobi Climate Network will play a key role in delivering on this ambition.

When I took my oath of office as Governor of Nairobi, one year ago, I promised, quite simply, to make Nairobi a city of order, dignity, hope, and opportunity. Inclusive climate action, the implementation of Nairobi's Climate Action Plan and the creation of good green jobs for our citizens are all central to that vision.

Nairobi has committed to a short-term goal of reducing emissions by 23% by 2025, and a long-term goal of 66% emissions reduction by 2050. Our ambitious target, which requires financing and government prioritisation, is for Nairobi to become carbon-neutral by 2050.

Climate action is critical not just for Nairobi itself, but also for the city's role as a hub for climate action across Kenya. Initiatives in Nairobi can help to catalyse new innovations and opportunities that set the country and the continent on a climate positive pathway. To meet these goals, we are pulling out all the stops—and we're already seeing change happen.

One area of focus is the creation of good, green jobs, where we are working hard to provide workers and communities the necessary skills and knowledge they need, to help deliver a brighter and more prosperous future for this city and its residents.

Good green jobs not only deliver stable employment for millions, but they also reduce air pollution and deliver billions in health-related economic benefits. Research from C40 has found that creating 50 million good green jobs would result in the creation of 30% more jobs compared with today's "business-as-usual" economic approach. It would also slash air pollution by up to 30% and deliver \$280 billion of health-related economic benefits in C40 cities.²

Training the next generation of skilled workers in the green economy is key to ensuring the transition away from fossil fuels is equitable and leaves no one behind. It also underlines how meaningful climate action can benefit a city's natural ecology, provide significant quality of life gains for residents, boost health and tackle the climate crisis.

To achieve this, we need to build actionable frameworks for change through earnest and collaborative dialogue between communities, municipal leaders, and national agencies and we need collaboration between—and investment from—the public and private sectors to build both supply and demand for good, green jobs. The perspectives shared in this report help to build our understanding of what actions are needed and how we can work together to achieve them.

The Africa Climate Summit represents a real opportunity to bring together cross-continent and cross-sector actors to create that future today. Together we can transform our economies to create fairly compensated green jobs and become better equipped to create and deliver climate solutions, and to face the climate emergency in the long run.

H.E Sakaja Arthur Johnson, CBS

Governor of Nairobi City County & C40 Vice Chair

Executive Summary

The Nairobi Climate Network (NCN) is a thriving community of professionals propelling climate action in Kenya. NCN provides the collective Voice of the Industry and supports our members to accelerate Kenya's path to climate positive growth.

NCN was asked to support the upcoming Africa Climate Summit to help showcase concrete actions and solutions from climate actors in Kenya and across the continent. This report presents the outputs from a survey of 300+ leaders together with 25 interviews. The leaders engaged represent a range of sectors and industries, and a variety of organisation and project types across 50+ African countries.

Climate Leaders express interest in and see opportunities across a range of climate innovations and emerging solutions, regardless of the sector they represent. We identified nine different clusters of innovations with applications across multiple industries. 36% of leaders are excited about opportunities and innovations in the renewable energy space, 24% carbon markets, 22% sustainable and regenerative agriculture and 19% nature-based solutions. Other areas of interest include data and platforms, construction and building materials, water technologies, e-mobility and industry and engineered carbon removal solutions.

The biggest challenge faced by 59% of leaders is funding and finance, followed by the policy and regulatory environment at 23%. Consumer education and awareness is also cited as a key concern by 19% of leaders, followed by network and partnerships, and the talent pipeline and skills. Meanwhile, 13% of leaders say that the effects of climate change are already having an impact on their organisation. Many are concerned by the lack of progress towards meeting finance commitments and the stalled implementation of climate goals.

36% of climate leaders are asking policymakers for tax and fiscal incentives to support their growth, whilst 33% want to see clear and transparent, policies, regulations and standards - particularly in those in carbon markets. Beyond the setting of policy, leaders are also asking for predictable implementation and enforcement, streamlined trade and collaboration, as well as increased efforts to engage communities and minority groups and help to build overall climate awareness and understanding. As well as looking to policymakers, climate leaders are looking for more cross-sector collaborations with their peers in other industries, from climate curriculum development with education institutions to more flexible and climate-appropriate finance from banks.

Leaders see the Africa Climate Summit as an opportunity to network (57%) and build their understanding of climate issues and solutions (32%). Few expect to see commitments or funding realised (just 12%), despite the Summit's stated focus on action. Nonetheless, the Africa Climate Summit is an opportunity for global stakeholders to support climate leaders and to meet obligations for climate action. Africa will be the continent most affected by climate change, but it also contains immediate capacity for change and an alternative pathway for sustainable development.

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Africa can play a pivotal role in creating and implementing solutions to the climate crisis.

Africa is well positioned to take action and lead on climate change. It has the highest rates of entrepreneurship in the world, with 22% of working-age people starting new businesses.³ The continent has a young demographic that are more likely to care about the climate - 70% of sub-Saharan Africa is under the age of 30.⁴ There is growing interest from climate finance investors and carbon markets developers looking to realise the renewable energy potential and wealth of natural resources on the continent.

Yet efforts are disparate and scattered. Climate change is not just one industry - it's a whole collection of different actors, industries and solutions coming together to solve a systemic problem. Organisations work in silos and lack avenues to share best practice. This limited collaboration and coordination slows down the pace of growth and the ability to scale for local and continent-wide actors.

The Nairobi Climate Network is a thriving community of professionals propelling climate action in Kenya.

Our mission is to build connections and networks by curating events, improving access to information and building knowledge for the climate movement in Kenya, as well as to help guide policy at a national and local level. We provide the collective Voice of the Industry and support our members to accelerate Kenya's path to climate positive growth.

Our Values:

- Ambitious: providing a platform for meaningful content that translates to action
- Collaborative: bridging sector divides, industries and competitors
- Inclusive: connecting senior leaders from corporates to communities
- Local: membership based in Kenya and focused on local stakeholders

900+ members **550+** different organisations

52% Women
67% Kenyan

Our community leads the narrative for climate-based industries across Kenya across three key pillars:

- Community: coming together through high quality events and groups
- Communication: sharing expertise and information across members
- Knowledge: inputting to research and collective efforts that accelerate climate action

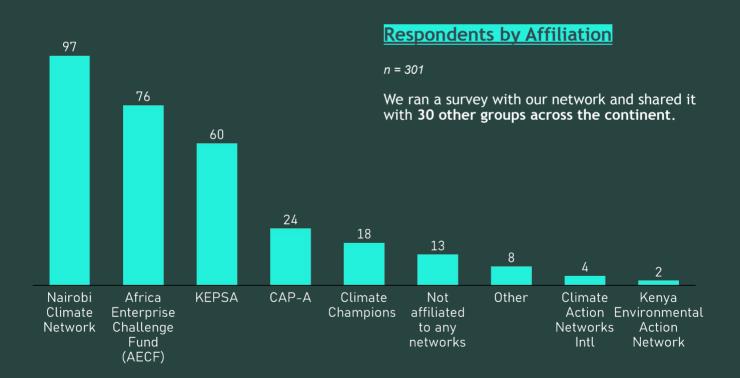
The Africa Climate Summit will showcase concrete actions and solutions for countries in the global south that are at the forefront of climate change

H.E. President William Ruto announced the first Africa Climate Summit (ACS) to be held in Nairobi, 4-6 September 2023, in partnership with the AU, the African Group of Negotiators on Climate Change (AGN), UNECA, AfDB, NEPAD, and Egypt. The ACS is an innovative multi-stakeholder Summit to catalyse actions that can inform the other formal climate processes leading up to COP28. ACS will be hosted in collaboration with the African Union Commission (AUC), and the African Development Bank (AfDB).

Traditional climate conferences often present different opportunities in silos and focus on risks and challenges that drive a higher perception of risk and make it hard to focus on realising opportunities. This Summit structures the agenda around opportunities, the intersection of cross-cutting issues and solutions across industries, and unlocking the opportunities from Climate Positive Growth.

This approach is very much in keeping with the ethos of NCN and the solution-driven mindset of our members.

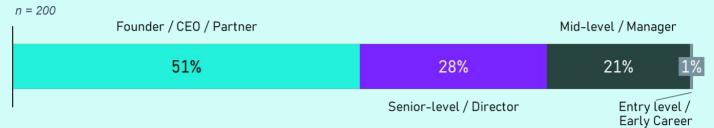
Kenya's Climate Envoy and Special Advisor to the President asked NCN to provide the 'Voice of the Industry' in the planning and delivery of the Summit



The 301 respondents* were asked to share their background and climate work as well as specific project announcements that were fed into the planning of the Summit. We also asked about the innovations and opportunities they are excited about for climate action in the continent, as well as the challenges and risks they are facing, together with their asks for policymakers and other stakeholders. We have quantified and analysed these insights to distill the 'Perspectives from Africa's Climate Leaders' contained in this report.

Survey respondents represent many different types of organization and sector at a senior level

Level of Seniority



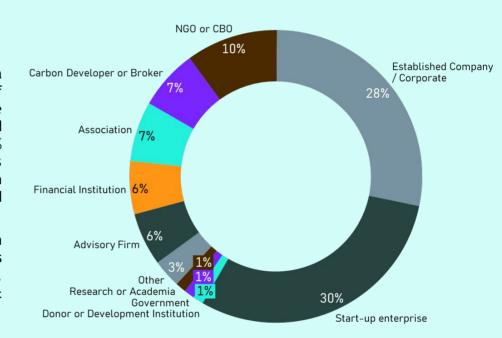
More than 50% of the survey respondents are at the Founder, CEO or Partner level, with a further 28% in the Senior Leadership team. As such, the perspectives in this report represent the views of a small selection of the foremost climate leaders across the continent.

Type of Organisation

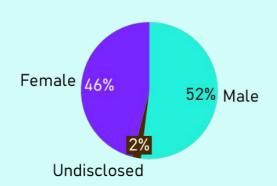
n = 256

These climate leaders represent a cross-section of different types of organisations. The majority are companies - either established corporates or start-ups totalling 58% of respondents. Private companies are also represented by carbon developers and brokers (7%) and advisory firms (6%).

There is also representation from NGOs and CBOs (10%), associations (7%) and others including financiers, government and research & academia.



Whilst not fully representative of all actors involved in taking action on climate change, this cross-section of views and experiences help to provide a starting sample for understanding industry perspectives in a integrated outlook that is otherwise missing from African climate literature. However, it is important to note that the views of 'climate leaders' as expressed in this report cannot be taken as consensus across all respondents or of all continent-wide climate leaders.



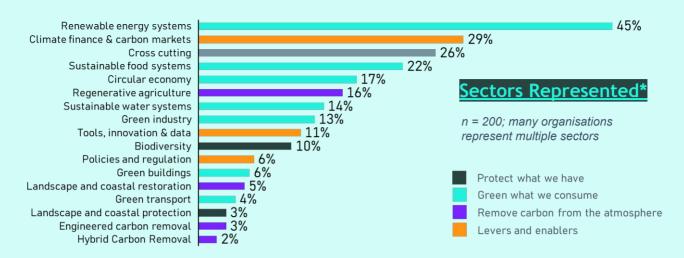
Gender of Respondents

n = 300

52% of respondents were men compared to 46% women, with 2% undisclosed.

To add depth of insight to the survey findings NCN's Organisation Members were invited to participate in an interview. Of the 25 interviews, 64% were women and 36% men.

Respondents are working across multiple sectors and industries in the climate space



Kenya's renewable energy gives us the opportunity to be the hub for climate investment and progress, creating new job opportunities for the country's youth.

Charlie Habershon, Associate Partner, Dalberg

Climate leaders represent solutions that include:

Protect What We Have

- Preserving and safeguarding natural resources, such as forests, wetlands, oceans, and wildlife, from the impacts of climate change
- Landscape protection is one of the smallest represented areas, with biodiversity more of a focus
- Yet leaders recognise the critical value of Africa's natural capital in driving climate-based industries for the continent

Green What We Consume

- Transformation of industries to green domestic consumption and produce low-carbon goods and services for the world
- Renewable Energy is the area with highest response rate at 45%
- Green sectors are the most dominant in terms of representation in the survey and are likely to dominate perspectives in the report

Remove
Carbon from
the
Atmosphere

- Technologies, both natural, hybrid, and engineered that can sustainably remove and store carbon
- Hybrid and engineered carbon industry are the two smallest represented but as emerging technologies this is aligned with expectations
- Regenerative Agriculture is a well-represented area of work with high carbon sequestration and impact potential

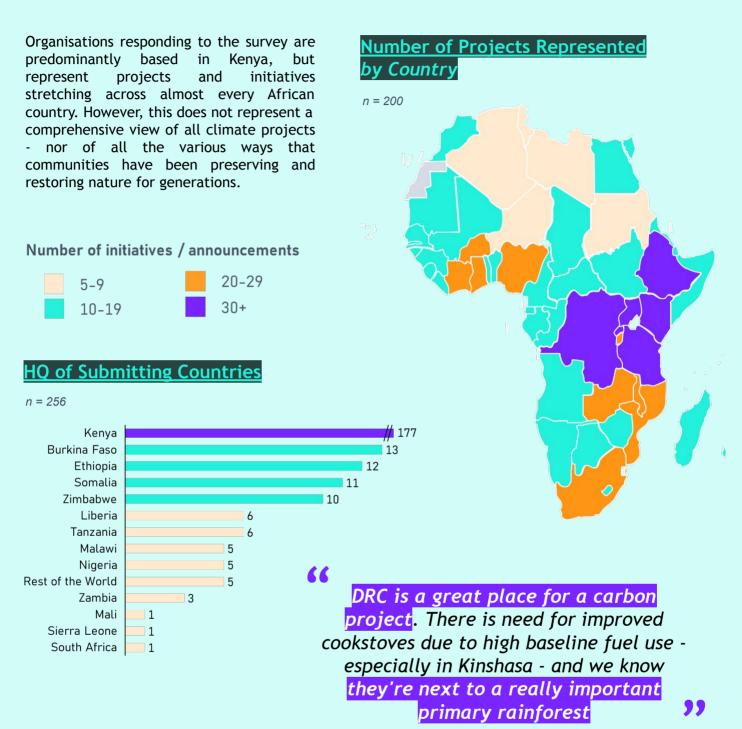
Levers and Enablers

- Direct and indirect factors that influence industries and sector transformations towards climate action
- Carbon Markets and Climate Finance is the second biggest area represented many organisations are present in this space whether as climate funders or carbon project developers

There is huge value in having local climate impact entrepreneurs and teams that understand the culture of the market because they contribute to developing solutions suitable for the local context.

Wairimu Karanja, Partner, Persistent Energy Capital LLC

In total, the 300 submissions represent and showcase projects and initiatives across 50+ African Countries

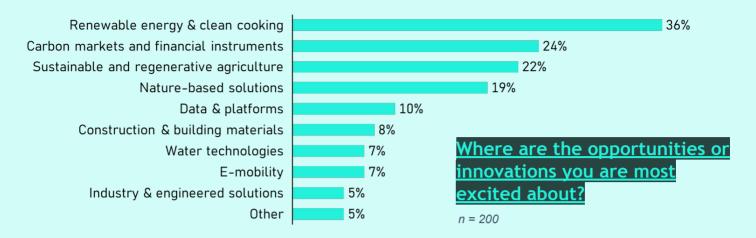


Molly Brown, Head of Carbon Strategy, BURN Manufacturing

Despite the inclusion of cross-continental networks in the survey outreach, there remains a significant skew of respondents from Kenya. This skew will impact the perspectives shared in this report as not fully representative of all countries climate realities. At the same time, Kenya is a regional headquarters for many international organisations, which does mean that many Kenya-based leaders have more of a regional or continental view, as seen in the spread of project countries above. Thus despite the Kenya-heavy nature of the perspectives shared in this report, they still have relevance and pertinence across Africa and can be seen as a start to better understanding continental viewpoints. Future iterations of the survey will aim to address this gap and provide more cross-continental and community-level perspectives.

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36% of leaders are excited about opportunities and innovations in the renewable energy space



Whilst the opportunities cited largely reflect the areas of work where the respondents are active, there are some interesting cross-sector insights about the future opportunities and innovations emerging across the continent.

Climate Leaders see opportunities and innovations such as:

Renewable Energy and Clean Cooking

- The productive use of energy for income generating activities such as solar irrigation, cold chains and biodigesters
- New value energy chains such as biogas, hydrogen and associated energy storage that can drive industrial growth beyond household access and productivity to industrial applications and even for export markets
- Innovations in fuels, stoves and business models that can help to close the access gap in clean cooking from ethanol to electric stoves to the use of faith-based networks to reach rural communities

Carbon Markets and Financial Instruments

- The potential for carbon credits to bring much needed funding to climate projects across the continent and bring benefits to local communities
- Localising verification through improved capacity to conduct assessments domestically and technologies that improve measurement helping to expand accessibility and access to smaller scale, local and community projects
- Other emerging financial instruments include sustainable bonds, blue carbon bonds, debt for nature swaps and targeted facilities - e.g. Open Capital's new Green Genset Facility (GGF) designed to replace fossil fuel generators with solar-powered alternatives by providing working capital financing to distributors

Sustainable and Regenerative Agriculture

- Regenerative farming practices are less about new innovations and technologies but rather new models that enable farmers to produce whilst boosting biodiversity, soil carbon and improving access to markets
- Precision agriculture, satellite and drone technologies are improving capabilities for carbon measurement and helping to link regenerative farming to carbon markets
- Models that produce and distribute bio-based fertilisers hold great interest for both soil and ecosystem enhancement as well as boosting yields
- Insects being produced for animal feed can help to reduce waste and the carbon footprint for meat production, whilst cold chain storage technologies are reducing food loss and waste across the food value chain

Nature-based Solutions

- Nature-based solutions are not so much new in their technologies (although that can play a role) but more in their models and applications
- Leaders are excited by the potential to integrate nature and biodiversity into future cities to build resilient and liveable urban spaces for people
- Approaches that engage communities and consider livelihoods as an integral part of conservation are seen as key. To not just consult but design projects with communities and create innovative projects that address needs holistically

Data and Platforms

- Data and platform innovations that leverage satellite information and remote sensing together with 'ground truthing' data can help enhance the measurement, verification and reporting (MRV) of carbon impacts
- Data-focused tools are gaining particular traction in the carbon markets space, where improved information can enhance project integrity and transparency
- The role of data to similarly improve MRV for biodiversity and agriculture

Water technologies

- There is an opportunity for water technologies to help integrate with water resources management and enable clean water access as water scarcity issues escalate whilst in other places we see irregular weather patterns and flooding,
- Water monitoring and other solutions such as natural wetland restoration can also help to clean water sources and restore coastline, lakes and riparian land

Construction and Building Materials

- The way we build the future cities and shape the urban environment will impact global carbon emissions and the livability and resilience of urban spaces
- Innovations cited include replacing building materials with low carbon alternatives such as mass timber, reducing use of concrete materials, technologies to improve energy efficiency, and reintroducing nature-based solutions and biodiversity into cities

E-mobility

- Electric solutions such as e-bikes are being specifically designed for African markets with simpler and more robust designs for rough urban roads
- In countries with heavily renewable grids, e-mobility solutions can scale quickly to reduce reliance on, and vulnerability to, high fuel prices
- Innovative charging models such as renting and battery-swaps are also making e-mobility solutions more accessible and affordable

Industry and Engineered solutions

- Opportunities to decarbonise Africa's industry is a small but growing area of interest amongst climate leaders, building on a heavy renewables advantage
- From creating new industry in green hydrogen, green ammonia and direct air capture that leverages renewable energy potential to building local 'green' product manufacturing of stoves, e-bikes and bio-based plastic alternatives

Other

• Other innovations include adaptation-based technologies such as early warning systems, circular economy and plastics alternatives to reduce waste to landfill

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Tourism's role in protecting Africa's natural capital in the face of climate change is endlessly underappreciated and overlooked. Tourism is the third largest industry on the continent - and much of it depends on the preservation of Africa's rich natural capital.

Ben Peterson, Founder & CEO, Purple Elephant Ventures

The insights shared by climate leaders demonstrate that opportunities and innovations aren't always about new technologies. "Climate tech" is only ever as good as its application and cannot solve the climate crisis alone. Innovation can also come in how solutions are applied - the models being deployed, the ways in which communities are engaged and how consumers are brought on board.

Applying well established principles effectively, leveraging technology to improve efficiency and accuracy, and above all engaging with communities are just as exciting opportunities that need to be recognised and supported by the international community - and especially by funders - as a critical part of climate action.

Getting scientists to leverage their scientific research and partner with entrepreneurs and other innovators to deploy practical, real-world climate solutions could facilitate more impactful and relevant innovations.

Shirley Mburu, Programmes Director, BFA Global

Madrin Maina, Director - East Africa, Sistema.bio

Sistema.bio collaborates with farmers to foster the adoption of clean energy and sustainable agricultural practices by facilitating access to advanced biodigester technology, offering comprehensive training and financial support.



On opportunities: We're excited about the potential of biofertilizer alongside clean cooking and regenerative farming. We're conducting various studies to improve its utilization and potentially monetize this innovation.

Introducing a carbon market program with subsidies could accelerate the uptake of biogas in markets such as Uganda and Malawi, where there is a well-established biogas market, but many people are unable to adopt biogas systems due to the high price point.

Policymaker ask: It is important to understand and adhere to international guidelines, incorporating the knowledge gained by companies that have already participated in carbon programs, and comprehend the diverse ways benefits can be delivered to communities. Policy makers need to avoid passing retrogressive laws that may inadvertently harm communities despite good intentions. The goal is to ensure that government participation in the carbon market is an enabler rather than an obstacle to positive outcomes for local communities.

Stakeholder asks: Financial institutions need to develop a deeper understanding of the renewable energy market and tailor financing facilities to meet the specific needs of end-users. Banks could allocate funds directly for financing end-users, reducing the burden on producers of environmentally friendly products to offer asset-financing.

Technical institutions can collaborate more with the green sector to provide adequate training and bridge the skills gap. There is great potential for individuals with traditional backgrounds to transition into the green sector given the right training and opportunities.

There are so many climate niches that are ready for disruption - from battery technologies to monitoring and evaluation of carbon credits

Dr Jasper Grosskurth, Managing Director, Dalberg Research

Fiona Mugambi, Co-Engineering Lead, Octavia Carbon

Octavia Carbon is the Global South's first Direct Air Capture (DAC) company which aims to leverage Kenya's geothermal energy, geology, and talent to radically accelerate DAC down the cost curve.

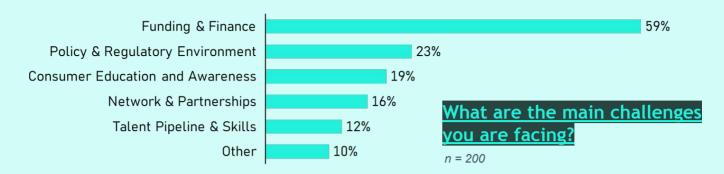


On opportunities: As Africa's leading geothermal energy producer in Africa, Kenya has an untapped potential of 10GW which is enough to power Kenya's peak demand five times over. This opens up an opportunity for us to tap into that renewable energy to build low cost direct air capture machines - leading to cross subsidising electricity for Kenyans. By taking advantage of its geothermal energy potential, and suitable geological formation, Kenya could become a global leader in DAC technology and play a significant role in the fight against climate change. From taking up this opportunity, we can gain revenue from carbon credits, and diversify into carbon commodities such as sustainable aviation fuels (SAFs).

On challenges: Technologies like Direct Air Capture (DAC) can accelerate the pace of carbon removal and help achieve the 1.5 degree Paris climate goal, alongside nature-based solutions. Yet most people are not accepting of engineered based solutions like DAC due to lack of awareness and trust. Education for schools, civil society and policy makers is a vital step that needs to take place to improve awareness and acceptance of these nascent technologies.

Policymaker ask: We should hold more workshops similar to the National Carbon Removal Workshop involving policy makers so that they can better understand and appreciate the value of both engineered and nature based solutions. This would equip them with valuable insights that would be helpful in forming relevant laws or task forces in the Ministry of Environment and climate change that tackle carbon removal.

59% of leaders say that funding and finance are a key challenge for them



- Funding and finance is a concern for the majority of respondents, being quoted as a challenge more than twice as frequently as any other
- Funding is even more of a barrier outside Kenya, with 68% seeing funding as a challenge compared to just 51% within Kenya. This may in part reflect Kenya's strength as a hub for climate action and finance on the continent
- The policy and regulatory environment is also a key challenge for almost a quarter of leaders

Climate Leaders are facing challenges such as:

Funding and Finance

Policy and Regulatory Environment

Consumer Education and Awareness

Network and Partnerships

- Investors are highly risk averse and reluctant to invest patient capital in early stage climate ventures given the current macroeconomic climate
- Funders often don't understand the local dynamics when structuring facilities
- Transaction costs are too high to invest in smaller ticket sizes, so funds don't tend to reach smaller projects whether commercial or non-profit
- Early stage projects struggle to access finance at the pace and scale to grow, and funds therefore lack a clear pipeline of larger investments
- The venture model doesn't work for all and can push for growth at the cost of sustainability - more blended options are required, including local funding
- Traditional silos in local and national governments do not enable co-ordinated
 action on climate. Intersectional issues such as clean cooking do not have
 ownership by one ministry or agency because they are linked to so many other
 development challenges making them "everyone's issue and hence nobody's
 one issue" (Lindsay Umalla, Clean Cooking Alliance)
- Lack of clarity on legislation especially Article 6 of the Paris Agreement causes uncertainty in carbon markets. This is being compounded by new laws in multiple African countries that add taxation obligations and can undermine the investability of projects
- Underlying policy challenges such as land rights, cross-border trade, import and logistics complexities affect multiple sectors and industries
- Lack of consistent policy implementation and poor enforcement can undermine favourable climate legislation
- Limited domestic consumer awareness on climate issues together with some cultural preferences slows uptake of climate-friendly products and services
- Critical media coverage of carbon credit projects scares buyers and tends not to show the constructive steps projects are taking to improve integrity
- Lack of understanding on particular climate issues e.g. (a) the relevance of sectors such as the built environment and (b) the conflation of new technologies such as DAC with more controversial approaches such as geoengineering two very different propositions
- Early stage companies often lack the networks and connections to reach customers - and especially local founders often struggle to access funders
- Larger non-profit organisations can struggle to reach smaller projects at a community level and hence continue to go back to the same projects & spaces
- In carbon markets, developers lack connections to a pipeline of local projects

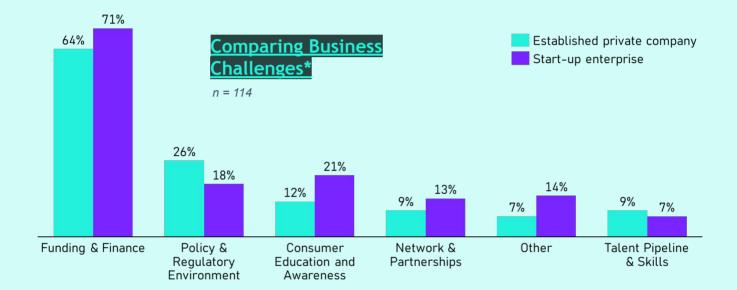
Talent Pipeline and Skills

- Organisations often struggle to find talent and expertise in the climate space not just the 'hard' science but also communication and interpersonal skills
- Young people are often not aware of opportunities in the climate sectors and educational institutions are not preparing them for this potential career option
- Talent is expensive to attract from other sectors and hiring expertise from abroad lacks local context and understanding
- Lack of local validation and verification bodies and experts for carbon projects

Other

• Other challenges include the lack of available and reliable data, technological limitations in specific countries and infrastructure and logistics hurdles

More business leaders face funding and finance challenges compared to other types of organisations



Funding is more of a challenge for business leaders than for those in other sectors - especially for start-ups, with 71% of start-up leaders facing finance challenges and 64% of more established businesses (vs 59% overall).

Start-up leaders face greater challenges around consumer education and awareness

- which aligns with expectations given that many are launching new products or models with customers. They also face more challenges in building the network and partnerships necessary to scale. However, more established business leaders find the policy and regulatory environment more of a challenge, as well their talent pipeline.

The development finance community (DFIs, donors, philanthropy) should continue to support intermediaries (funds, lenders, accelerators, venture studios) because they are able to deploy and make investments rapidly and effectively.

Intermediaries have higher risk appetite and are able to deploy smaller ticket sizes which are important to support innovation and new business models. They can move quickly, and when it comes to climate, time is of the essence.

Marcus Watson, Partner, KawiSafi Ventures

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Foreign donors and investors are searching for a pipeline whilst locally led companies struggle to access finance. There is a mismatch between investors and companies.

Ciara Remerscheid, Director, Shortlist

Bilha Ndirangu, Co-Founder, Jacob's Ladder

Jacob's Ladder is a non-governmental youth-centric organisation predominantly focused on shaping the narrative of workforce readiness for the emerging Green Economy in Africa.



On opportunities: Africa is in a unique space to be a leader within the climate industry and export innovations and talent. The green economy will generate novel employment opportunities requiring unique skill sets that currently do not exist - such as green hydrogen engineers.

There is an opportunity for young people to utilise their skills to develop and create solutions for climate related challenges locally such as drought and waste production. For instance, recycling food waste to create organic fertiliser, using plastic for construction of pavements, building blocks or paper. Creating a circular regenerative economy would create entrepreneurship and employment opportunities where young people can apply their skills.

Policymaker ask: Climate change and climate action cuts across all sectors of the socio-economic space. We need to foster collaboration between policymakers and the climate industry to understand the needs of the industry, how we can adopt a green economy and how they can contribute to generating opportunities for the future workforce.

Other stakeholder asks: In education, there is a lot of foundational work to be done to educate young people about how they can contribute to climate action and prepare themselves for future job opportunities. Identifying where there are shortages in skills and developing curricula to address those shortages would be very helpful in equipping the future workforce with skills they require to maximise opportunities.

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Convincing consumers of the benefit of organic fertilisers is a challenge when there is so much support for on-going subsidised chemical fertilisers to farmers.

David Auerbach, President, Regen Organics

Obtaining the necessary funds for climate action is of critical importance and a key challenge for the majority of Climate Leaders we spoke with. From NGOs to start ups to investment funds themselves - the challenges of finding accessible, flexible and patient capital that understands the local context and can suit organisation needs is paramount.

Carbon credits are often seen as a financial solution, but many are finding that credits are less accessible and certainly not appropriate in all situations. From a lack of clarity on legislation to finding local verification capacity and a lack of appropriate tools and methodologies, it is difficult for projects to reach sufficient scale to justify the upfront expense.

Climate action is more than just carbon - the planet is also facing a nature and biodiversity nature crisis, and all are inextricably linked. Many NGOs are finding that a focus on carbon credits is pulling attention and funding away from many other vital project areas - especially the smaller ones more reliant on grant funding.

The policy and enabling environment also brings challenges for climate leaders - both in the setting of effective legislation and in its implementation. This affects not just the policies on climate directly, but also challenges around trade, education and consumer awareness that underpin effective operations across all types of organisations.

"

Failure to meet climate finance obligations is a major risk - with the impacts of climate change a real threat

of leaders say that the effects of climate change are already posing a challenge for their organisation

In the agriculture sector, climate leaders mentioned the impact of erratic rainfall patterns, severe weather events and soil degradation impacting farmers and hampering the shift towards climate positive food supply chains. Marine conservation is also particularly impacted, with biodiversity decline and overfishing in oceans - particularly the risk from overseas trawlers outside their influence - affecting the coastal communities they work with.

The war in Ukraine and global cost of living crisis have redirected financial support away from climate projects and pose a continuing risk to meeting financial targets in taking global focus away from the climate crisis. The risk of further currency devaluation is also affecting the ability of organisations of all types to raise funding for their work. Under financial pressure and without sufficient incentives, consumers globally are less likely to make sustainable choices, thereby putting climate goals at risk.

Carbon finance and credits currently favour large projects over smaller, grassroots ones doing vital conservation work. There is a push for "thinking big" with large projects and budgets, but that is difficult for communities on the ground to manage or find the capacity for.

Hannah Evans, Executive Director, Lamu Environment Foundation

Caroline Ray, Regional Director - East Africa, Arup

Arup is a global sustainable development consultancy. Their work is focused on producing safe, inclusive and resilient communities, infrastructure and cities.



On opportunities: We need to ensure that Africa's future built environment responds to the climate emergency. It's not just about creating radically new technologies, but also about immediate and collective actions we can take now. For example we can make responsible decisions in construction such as reducing waste, reducing the use of concrete and increasing use of lower-carbon materials. We are at a tipping point where Africa's future built environment can go down one of two paths - we need to make sure it is the low-carbon route.

On challenges: People won't always adapt their approach to projects when they have no incentive to change. Generating progress through regulations takes time - we need to raise awareness with developers and contractors about the difference each can make through lowering carbon on their projects, and driving efficiency in the process.

Policymaker ask: Cities are responsible for a quarter of global carbon emissions. Policymakers must prioritise urbanisation in Africa and create net zero policies that support climate smart development. We need to think about urban shaping rather than urban planning - we are working with existing cities and existing communities that continue to grow and change. Policymakers need to understand what the community is looking for and steer urban development in a way that accounts for what people and businesses want, in an environmentally sustainable way.

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Fiscal incentives plus clear and transparent policies, regulations and standards are the biggest policy asks



- The ask to develop tax and other fiscal incentives is the biggest request to policy makers, reflecting the largest challenge being funding and finance
- Yet the need for clear and transparent policies, regulations and standards is almost as highly requested. This is particularly true in Kenya, where it was the main policy ask from 37% of leaders.
- The importance of following through policies with practical and predictable implementation and enforcement is also a keen request from sector leaders

One thing that is encouraging is that we have policymakers understanding that there is a lot they don't know and they are willing to ask the questions.

Christina Nduba-Banja, Advisory Partner, Bowmans Law

Climate leaders are asking policymakers to:

Tax and other fiscal incentives

- Support climate projects with tax incentives, import duty breaks and subsidies.
- To some extent this can already be seen e.g. Kenya's recent finance bill provided import exemptions for electric vehicle components; Rwanda has done the same
- Enact more 'polluter pays' policies that increase the tax burden on fossil fuels as opposed to renewables recognising the need to raise governments funds, especially in the current fiscal environment

Clear and transparent, policies, regulations and standards

- Establish clear and consistent principles upon which to establish climate policies, regulations and standards
- Provide transparency in how legislation is created, input contributions from all stakeholders, and ensure any amendments are consistent with the set principles of fairness and enabling climate action
- Offer stability and clarity on the way forward particularly for carbon markets

Practical, predictable implementation and enforcement

- Build confidence in clear regulatory regimes that are implemented with predictability and enforced consistently, down to a local level
- Provide more clarity in regulatory plans, increased intentionality and guidance in use would be useful - e.g. the National Export Development and Promotion Strategy (Kenya) provides incentives and support for exporters - but complex administrative procedures make it difficult to navigate

Streamline international trade and collaboration

- Find ways to understand, contextualise and localise international guidelines to streamline across borders whilst still remaining relevant domestically
- Coordinate with neighbours to lower barriers to trade, reduce market fragmentation and make it easier for organisations to operate regionally

Engage communities and minority groups

- Provide a seat at the table and equity in decision making for communities, youth, women and minority groups in policy design through to implementation
- Engage different sectors, industries and perspectives in an inclusive approach
- Build community engagement from the bottom up ask communities what they need and want from projects rather than a top down mandate

Awareness and understanding

- Build internal government knowledge of new climate technologies such as DAC, hydrogen and even carbon markets to understand the issues and solutions, and to pass effective legislation
- Educate citizens about the climate crisis through awareness campaigns and educational curriculums in order to build the population's climate resilience and to prepare the future workforce for green jobs

Other

• Other asks to policymakers include more support for research and development, and sector asks for funding to urban adaptation, communities and conservation

We need to sustain the momentum behind discussions on the need for reform in the global financial system so that Africa's needs are addressed and the continent is no longer excluded.

Nelson Karanja, Director, Communications & Engagement, FSD Africa

Josh Whale, CEO, Ampersand

Ampersand builds affordable electric vehicles and charging systems for the five million motorcycle taxi drivers in East Africa.



On opportunities: A combination of normalising of global supply chains for key components, high fuel prices, and our own traction and product maturity have increased our overall savings for customers to nearly 50%, while producing healthy gross margins and strong interest from strategic partners and governments. High profile government officials are beginning to endorse various climate friendly technologies, especially the movement towards electric mobility. For instance, the new [Kenyan] finance bill removes VAT on electric vehicles and batteries and there is already talk of phasing out petrol motorcycles as soon as there is enough availability of suitable electric vehicles and energy infrastructure.

On Challenges: Low fuel prices in some countries such as Nigeria make it difficult for electric mobility to compete with petrol vehicles, especially when there is a higher cost of electricity and inconsistent electricity supply. The ability to raise capital at appropriate scale and speed is difficult. Climate venture capital firms have been particularly cautious and until recently have sat on the fence waiting to see 'who will win'. Another challenge has been the infrastructure capex need. Many Venture Capital firms started out with a focus on capex-light software, but struggled with the infrastructure capex needs of climate hardware. Meanwhile traditional infrastructure capital finance has also understandably been cautious around such new technology too.

Other asks: I would encourage e-mobility companies to collaborate in creating one single voice to partner with governments. This helps make action and policy changes much easier and more efficient, ensures sensible approaches are taken to standards and standardisation, and creates a level playing field without one company securing an unfair advantage against the public interest. Foreign governments and financiers need to release the pledged funds to e-mobility projects in Africa and move faster. Just a fraction of the promised funds - \$6 billion of the \$100 billion promised annually by the global north - would be enough to convert all motorcycles in Africa to electric.

For leaders in the carbon markets space, clear policies and practical implementation is paramount



Whilst tax and fiscal incentives are making a real difference in sectors such as e-mobility, they are less of a priority for actors within carbon markets than in other sectors (although still at 25%). Instead, new legislation passed in Zimbabwe and Tanzania, and shortly expected in Kenya has created uncertainty and pushed policy and regulatory priorities to the top of mind. The need for clear and transparent policies was quoted by 37% of actors in carbon markets, followed by the ask for practical and predictable implementation at 33%.

For the legislation to be effective, lawmakers must (1) craft crystal-clear laws, leaving no room for ambiguity in subsidiary regulations; and (2) keep their eyes on the prize, which is lowering emissions for a sustainable future and nurturing commerce for a thriving economy. Laws and subsidiary legislation that hamper project development in country defeats the overall goals we are aiming for.

Christina Nduba-Banja, Advisory Partner, Bowmans

Faith Temba, Sourcing Manager Africa, Climate Impact Partners

Climate Impact Partners develop and deliver the highest quality carbon financed projects, and create carbon credit and energy attribute certificate portfolios for clients.

On opportunities: As the carbon market develops, the opportunities for private sector finance to scale these projects across the continent are significant. African carbon projects and businesses are attractive to ambitious and forward-thinking corporations that are embedding carbon-financed solutions into their broader climate objectives. Beyond the carbon reduction or avoidance capabilities, they offer a wide range of co-benefits to communities, for example access to clean cooking, clean water, food security and supporting biodiversity-enabling companies to invest in solutions aligned with their values.

On innovations: The increased development and adoption of Digital Monitoring Reporting and Verification (DMRV) solutions is providing greater transparency, efficiency and integrity across the voluntary carbon market. The use of technologies such as sensors, satellites, and remote sensing is improving the accuracy and speed of data collection and analysis. As the industry develops, we need to see greater funding towards these innovations to enable widespread adoption and help ensure project quality.

On challenges: Recently there has been increased scrutiny of voluntary corporate action and the claims companies make to demonstrate their achievements or commitments. This has caused reluctance amongst some companies to talk about their climate achievements. While we welcome scrutiny and transparency, we also need to encourage solutions and recognize companies that deliver action and results now.





The Voice of the Industry: an NCN working group for Carbon Markets in Kenya

In 2023 NCN launched a Carbon Markets Working Group made up of 70+ carbon project developers and sector experts with the objective to provide a unified perspective and feedback to the Kenyan government's Climate Change Amendment Bill.

This legislation has, if designed well, the potential to build on the significant positive returns that many carbon projects already make for communities, crowd-in foreign exchange, make Kenya a green hub in all aspects of energy provision - not just renewable electricity - and be a beacon for landscape restoration. A clear and enabling framework will attract climate finance and ensure the integrity of projects developed in the country, bringing jobs and new income streams to communities.

After several rounds of feedback, the messages from our members remains clear:

- 1. The bill should provide a framework to integrate the Paris Agreement into Kenya's economy. It should focus on the legal architecture, such as the roles of the Cabinet Secretary, the Council and the DNA, setting up the carbon registry and even dispute resolution. The Bill should not slip into areas that are better suited to regulation that would be defined as policy matters.
- 2. The bill should incentivise benefit sharing through transparency. We agree that communities should benefit fairly from carbon revenues, but emphasise that this is already happening.

- The Government of Kenya should support existing initiatives by increasing monitoring and transparency. This will improve carbon project integrity and send a positive signal to the business community which will in turn accelerate capital flows in the country, formal job creation, and amounts of corporation tax collected by the government.
- 3. The bill should recognise that projects using community or government land have different responsibilities and requirements to those on private land or those that are energy/technology based and privately funded. These projects have different needs and make different contributions to local communities, to employment and to the economy as a whole. Requiring an arbitrary percentage allocation doesn't reflect the nuances of different project types and could scare investors. At present, there seems to be some confusion as to whether the percentage of "community benefits" stipulated in the bill would go directly to communities or to local and central government. To avoid confusion we recommend treating them separately.
- 4. The bill should build on the existing internationally recognised Carbon Standards so that projects using these standards can qualify for the transfer of mitigation outcomes. This will help to streamline with international guidelines whilst still remaining locally relevant.

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Where is our single source of truth on carbon markets?



Sophie Odupoy, Group Head of Public Affairs, KOKO Networks

NCN remains committed to working with the government of Kenya to develop successful carbon market policy that works for all stakeholders, and welcomes the opportunity for further discussion and consultation on the practicalities of carbon finance, carbon projects, benefit sharing and international perceptions. The group members collectively urge the government of Kenya and the parliament to make well developed and principled legislation that will be supported by project developers and investors.

What Climate Leaders are asking from their peers:

Breaking down silos between sectors and and actors is critical to tackle the systemic barriers behind climate change. Climate leaders are actively looking to engage and collaborate with peers across industries.

Private sector

- Unite as an industry to provide a single voice in a particular sector e.g. the Electric Mobility Association of Kenya as a recent initiative as well as engaging across sectors and outside the private sector
- Meaningfully engage with communities from project inception to design, delivery and management rather than tokenistic consultation
- Work with scientists to improve data and bring climate innovations to life

Development Finance Institutions (DFIs)

- Put capital at risk and act as that bridge between grant and commercial capital to enable climate solutions to reach maturity and sustainability
- Fund intermediaries who can make smaller, earlier stage investments at the pace required to support climate start-ups
- Design programmes and funds for beneficiaries, not for investor reports

Education Institutions

- Embed climate education into curriculums and training to prepare the future workforce and the ability of youth to take up 'green jobs'
- Include technical training for specific skill sets e.g. validation and verification qualifications to reduce reliance on 'Western' personnel
- Plus soft skills training that have application across climate industries e.g. sales and marketing for green products and services

Donors and Foundations

- Continue to provide grants and concessional investments into early ventures
- Don't let the uptick in interest for carbon credits take away from other environmental and community projects that need funding such as biodiversity and nature but may be less measurable in terms of carbon
- Supporting government upskilling through off-sites and governance workshops can have catalytic impact in nascent sectors such as DAC

Financial Institutions

- Design financial products that incentivise the uptake of climate products and services - e.g. solar irrigation, biogas digesters or clean cookstoves - so that product companies can focus on operations not asset financing
- Adopt a patient approach wherever possible, one that understands the long-term vision of a company and supports their journey and provides flexible financial services that address the needs at different stages

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We will see much better adoption if we, as project developers, make programs that serve the needs of the target people more holistically.

Catrine Shroff, CEO, Mwangaza Light

Reflecting funding as a dominant challenge, many asks were to financial actors - both concessional and commercial - regarding providing more patient, flexible and specific capital suited to the needs of climate projects.

Common across all stakeholder groups was the ask to engage more deeply with others - especially with communities. Interestingly, there were few asks to communities themselves.

Yet clearly most actors feel that consultation of peers does not go far enough. Climate solutions need to go beyond consultation and include cross industry and cross sector engagement at all stages of project development.

The Africa Climate Summit presents a prime opportunity to initiate and solidify these collaborations and partnerships to accelerate scale and impact.

Leaders see the summit as an opportunity to network - with few expectations of commitment or funding



Whilst funding is cited as the key challenge for climate leaders - just 17% see the Summit as a chance to actually realise those funding opportunities. The majority (57%) are looking to network and build the connections that can bring new collaborations and partnerships.

32% are also hoping to gain new knowledge in their field of expertise through new connections and as part of the Summit sessions. This is in contrast to just 7% who see the Summit as an opportunity to gain awareness and generate media interest in their work.

Most climate leaders are attending the Summit with a listening ear - wanting to learn from others and take away opportunities for the future. Just 12% expect to see real commitments and implementation realised at the Summit - despite an ambition from the Summit to move beyond talking and towards action.

As policymakers and others take to the stage, it may be useful to bear in mind these expectations and maximise opportunities to build connections between delegates across industries, sectors and countries, as well as curating meaningful content engagement in the sessions.

The alternative pathway...

Climate leaders see a fork in the road for Africa - a choice between 'business as usual', or a new climate positive pathway. The risk of following a high carbon pathway is immense, with Africa's emissions projected to reach 7,700 MT or 10% of the global total by 2050 under BAU scenarios - representing 18% of the total global emissions growth and posing a material threat to achieving a 1.5°C future.⁵

Yet Africa has enough renewable energy to power the needs of the entire continent. This means an alternative pathway is possible - one that achieves or even surpasses the Paris climate goals whilst also creating livelihoods and development for Africa's economy and people.

Economic and financial returns cannot come at the expense of biodiversity, water, clean air and nature. Indeed, these public goods underpin social wellbeing and dignified livelihoods that are so essential to achieve both climate and social goals. With the right approach Africa's rich natural capital can work in tandem with innovative models and technologies to create unique opportunities for Africa and its people. That is what the NCN community and climate leaders across the continent are striving to achieve.

The Africa Climate Summit is an opportunity for global stakeholders to support this journey and to meet their financing obligations for climate action. They must do so not just because Africa will be the continent most affected by climate change, but also because Africa contains immediate capacity for change and an alternative pathway for sustainable development.

NCN's vision is to create a thriving and interconnected community driving climate positive change across Africa. We plan to create a localised, collaborative group of networks that build connections across the climate space and provide a pan-African Voice of the Industry.

Partner with us as we become "The Climate Network" - visit www.nairobiclimatenetwork.com

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Africa is uniquely positioned to lead on climate action - from renewables to carbon markets to nature-based solutions.

Gathered across the continent is the perfect confluence of ideas, people, and funders all looking for the next climate opportunity.

We can help them find it.

Nairobi Climate Network.

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