Q4•2024

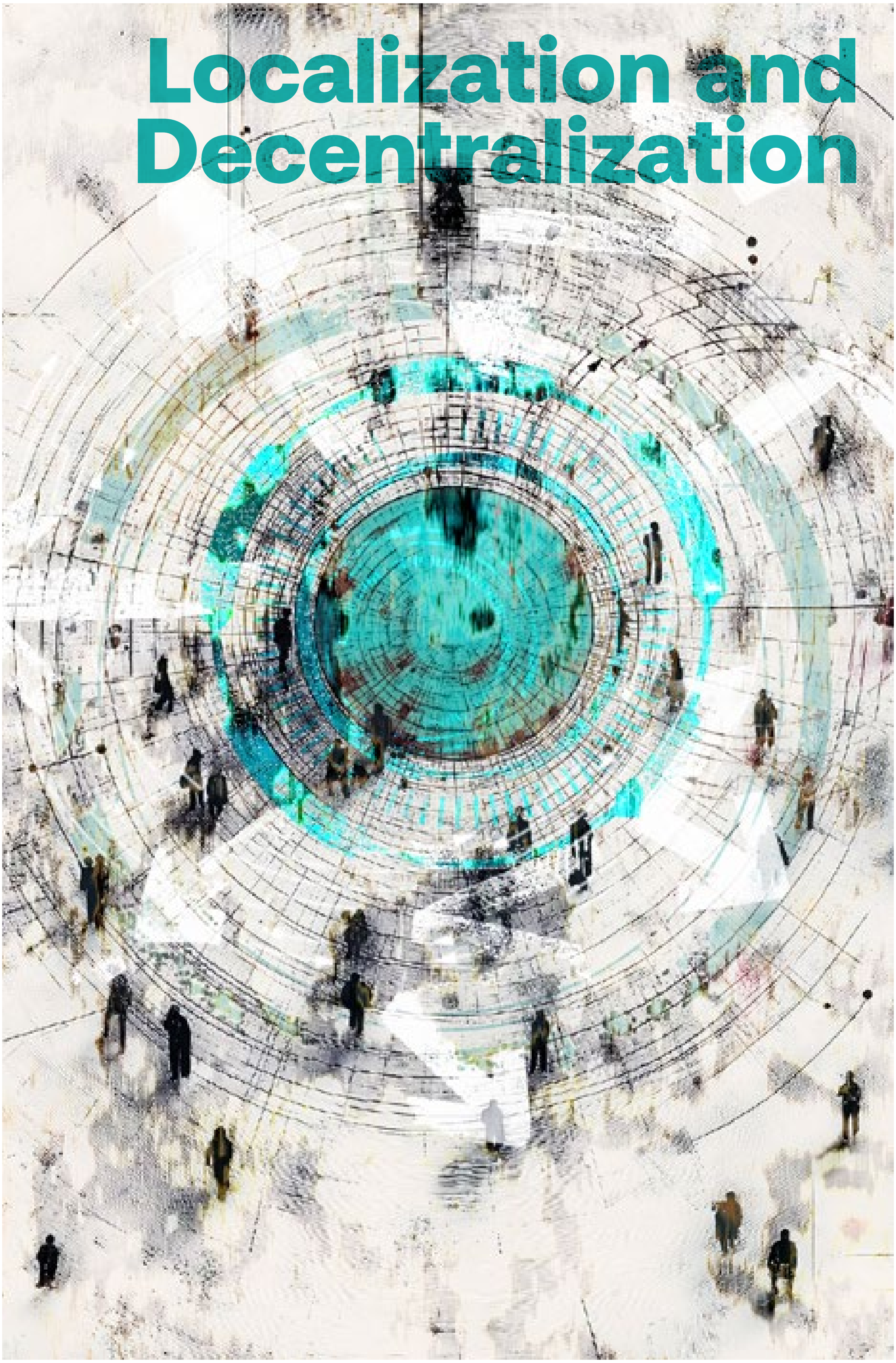
Q&A with CrossBoundary Group Managing Partners

What does it mean to be LOCAL?

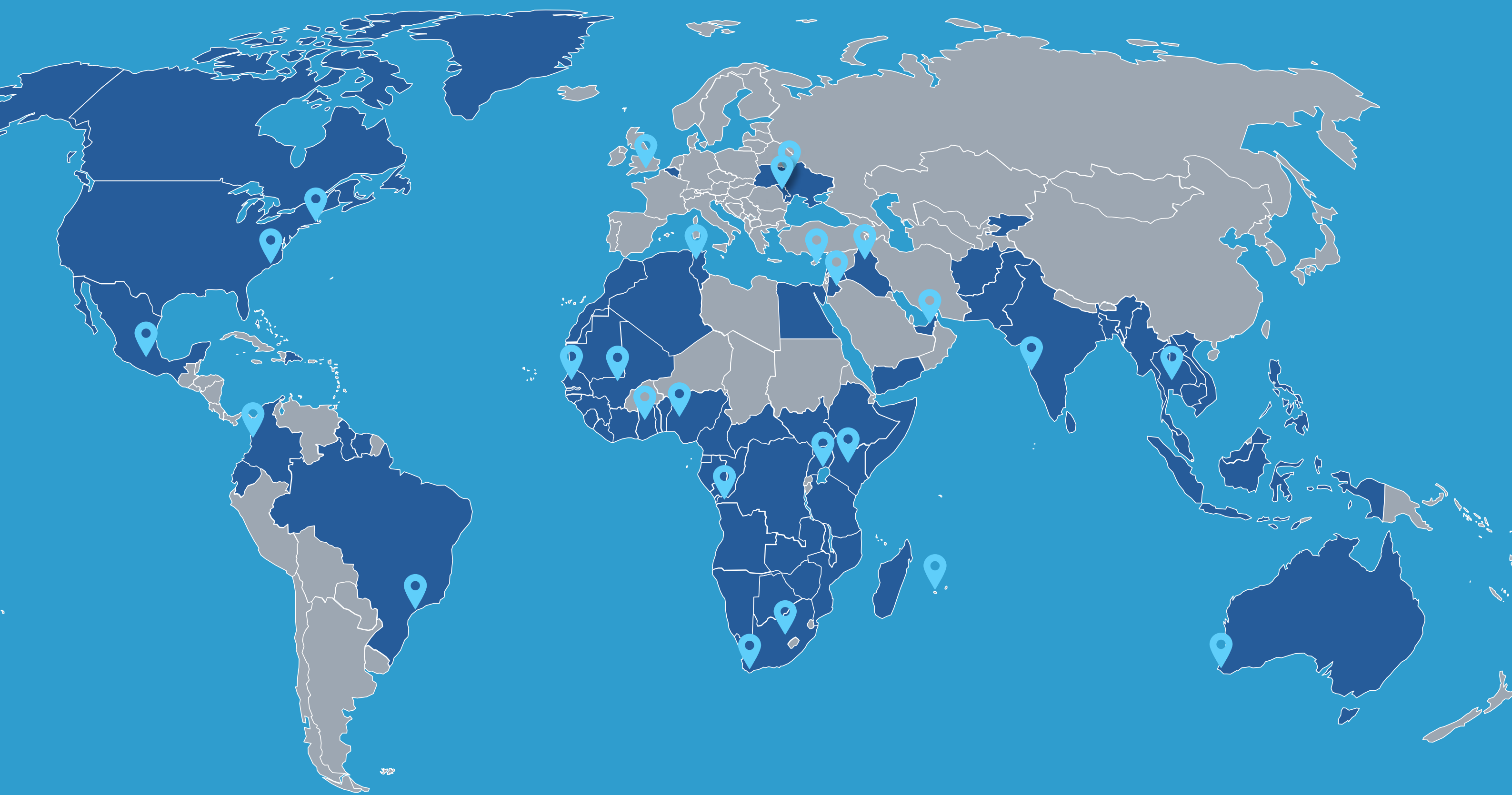
Beyond 'Localization': Trust the ship captains of naturebased solutions

CrossBoundary QUARTERLY

Localization and Decentralization



CrossBoundary Group



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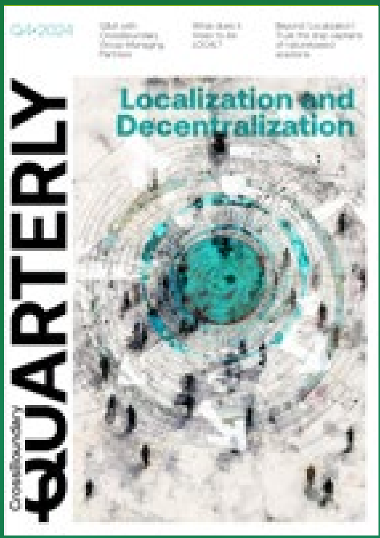

CROSSBOUNDARY QUARTERLY
Q4 2024

EDITORS
MIKE CASEY
KYMBERLY BAYS

DESIGNER
DAVE LLOYD

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About the CrossBoundary Group

CrossBoundary Group is a mission driven investment and advisory firm that unlocks the power of capital for sustainable growth and strong returns in underserved markets. CrossBoundary Group has advised on over US$11 billion of closed transactions in impactful sectors, such as agriculture, health, education, manufacturing, ICT, infrastructure, and clean power. CrossBoundary Group also directly deploys capital through its investment platforms, such as CrossBoundary Energy, CrossBoundary Energy Access, CrossBoundary Real Estate, and The Fund for Nature. CrossBoundary Group has a global presence with 23 offices and over 180 professional staff. For additional information, visit **www.crossboundary.com.**

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This interactive document has been optimized for use on screens in portrait orientation.

Bold blue words will link you to the reference associated with the text.

Localization and Decentralization

The concept of localization was central to the founding of CrossBoundary. Having participated in large, top-down efforts to transform societies, our founders believed a better answer lay in bottom-up innovation and development. This wasn't because top-down approaches are inherently bad, but rather because a bottom-up approach forces one to be disciplined by local context.

Localization and decentralization are two mega-trends that are shaping the investable landscape across underserved markets. The donor community and global investors are seeking greater participation from local partners, partly to drive greater impact, but also to capture more granular insights on market developments.

For our part, CrossBoundary Energy and CrossBoundary Access are deploying bespoke solar-energy solutions that accelerate the decentralization of electricity generation and distribution. This is enabling more flexible, resilient energy systems that expand access while reducing dependence on sclerotic centralized utilities. But much work remains to be done.

The power of localization lies in its ability to tailor solutions to specific contexts, acknowledging that one-size-fits-all approaches often fall short in addressing complex societal and commercial challenges. By embracing localization, organizations can tap into the wealth of knowledge and expertise that exists within communities, leveraging local insights to develop more effective and sustainable solutions. This approach not only enhances the likelihood of success but also fosters a sense of ownership and empowerment among local stakeholders.

Decentralization, which is closely linked to localization, involves the distribution of power, decision-making, and resources away from central authorities. In the context of development and investment, this trend is reshaping how projects are conceived, implemented, and managed. By decentralizing processes, we believe more agile and responsive systems that are better equipped to address the unique needs of diverse communities can emerge.

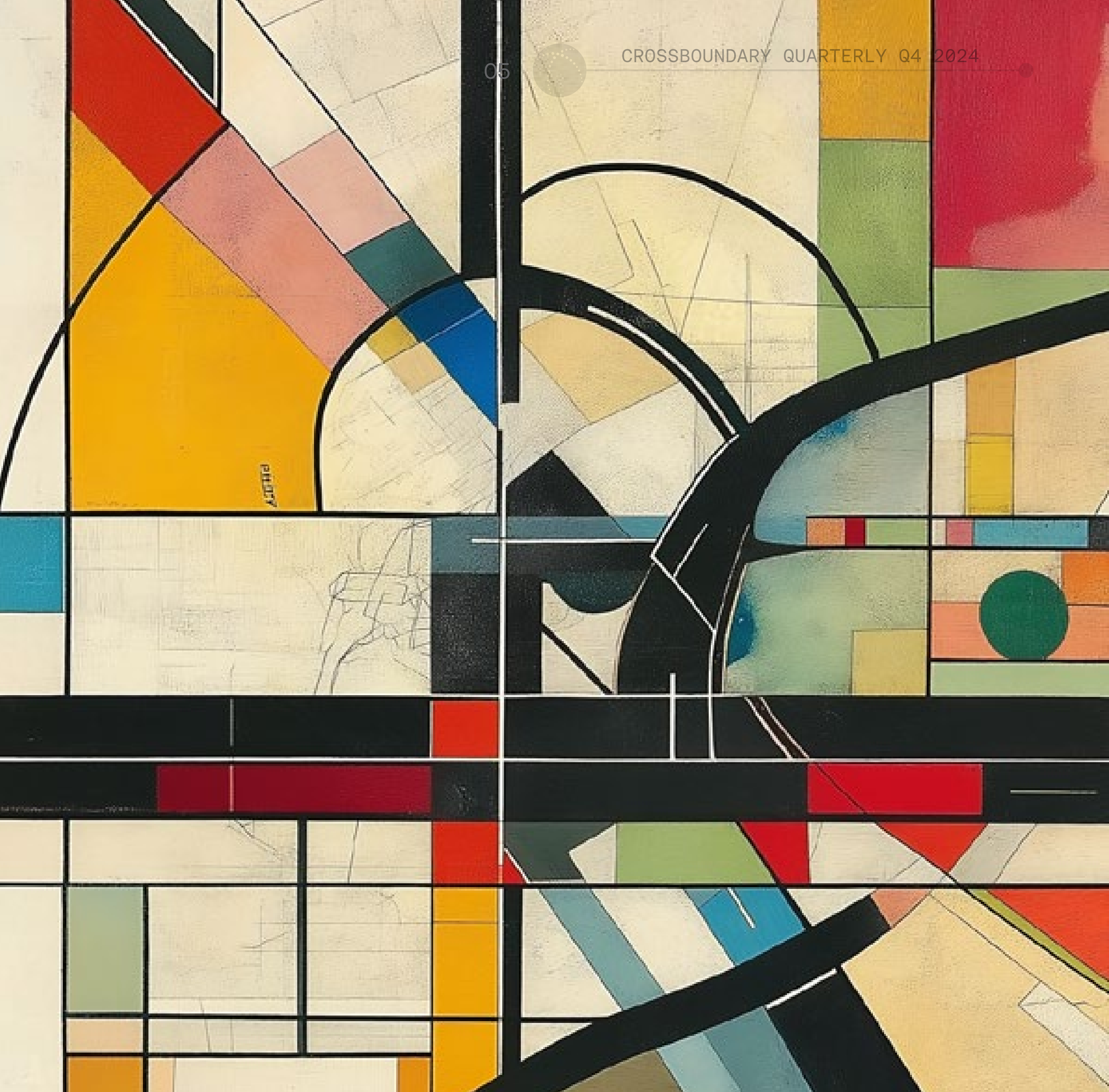
The shift towards localization and decentralization is not without its challenges, however. It requires a fundamental rethinking of traditional power structures and a willingness to cede control to local actors. This can be particularly challenging for large international organizations accustomed to top-down approaches. However, the potential benefits far outweigh the difficulties of transition.

In the realm of energy, the impact of these trends is particularly evident. The traditional model of centralized power generation and distribution, often characterized by inefficiency and unreliability in underserved markets, is giving way to more nimble, decentralized solutions. Solar energy, as Matt Tilleard recently stated to The Economist, is at the forefront of this transformation in Africa.

The decentralization of energy systems also has profound implications for resilience. In regions prone to natural disasters or political instability, centralized grids can be vulnerable to widespread outages. Decentralized systems, on the other hand, can continue to function even if parts of the network are compromised, ensuring a more reliable power supply.

Looking ahead, the trends of localization and decentralization are likely to accelerate, driven by technological advancements, changing investor preferences, and a growing recognition of the limitations of centralized approaches. However, realizing the full potential of these trends will require continued innovation, policy support, and a commitment to genuine partnership with local communities.

In this edition of the CrossBoundary Quarterly, we dive into these two mega-trends and explore how they're shaping the markets where we're active. We begin with an



interview featuring Jake Cusack, Matt Tilleard, and Tom Flahive, CrossBoundary's Managing Partners. Next, Nneka Chime, a Partner in our Advisory business **asks the question: what does it mean to be local?** Finally, in a fitting homage to the late James C. Scott, Kate Wharton, Managing Director of our Natural Capital team explores the role of local partners as "boat captains" who play a crucial role in getting projects through to completion. And CrossBoundary Energy shares how decentralizing energy approvals in Africa can unlock industrial sectors.

Q&A with CrossBoundary Group Managing Partners Matt Tilleard, Jake Cusack, and Tom Flahive

In this edition of CrossBoundary Quarterly, we explore Localization and Decentralization—two megatrends shaping the investable landscape across underserved markets.

The concept of localization was central to the founding of CrossBoundary in 2011. Having participated in large, top-down efforts to transform societies, our founders believed a better answer lay in bottom-up innovation and development. This wasn't because top-down approaches are inherently bad (though often they are), but rather because a bottom-up approach forces one to be disciplined by local context.

Read on for insights from our Managing Partners Jake Cusack, Matt Tilleard, and Tom Flahive on how localization and decentralization influence CrossBoundary's mission and operations.

Q

Take us back to CrossBoundary's founding and your early experiences. How did localization influence your conceptualization of investment facilitation?

A

Jake: In 2011, Matt and I were part of this massive effort from the outside—in terms of U.S. and European troops and money—going into Iraq and Afghanistan, trying to "fix" everything all at once.

It was similar to what we read about later in the book The Idealist by Nina Munk, about Jeff Sachs's attempt to end poverty in Africa through grant money while simultaneously fixing education and health systems, providing jobs, etc. In both instances, the interventions weren't rooted in local context, so as a result, the solutions didn't go anywhere.

During these early experiences in Iraq and Afghanistan, Matt and I saw that the effective and sustainable solutions come from the bottom up, from those with the closest view of the problem.

Matt: We didn't see this through a cynical lens; the top-down plans were assembled by groups of extremely smart and well-meaning people. However, you can write a plan for what it will take to turn Afghanistan into Denmark. Still, if you don't truly understand the context of Afghanistan or even what made Denmark successful, you'll never be able to achieve it.

Solutions are local and decentralized. The private sector is an effective tool for creating contextual, responsive, decentralized solutions that meet people's needs. We want to use the private sector as a better tool for sustainable development. When you peel that back, you wonder why. Why is the private sector an underutilized tool? Why should we try to use it more for sustainable development in general? The answer is that the private sector is inherently contextual.

Jake: The tension has always been between the right mixture of local context and bringing in relevant expertise that might be needed.

There's a contradiction—what does it mean to be local? I'm from Michigan, but it doesn't mean I'm the best-equipped person to solve the challenges of the automotive sector. The nature of economic growth is usually that you're trying to add some economic complexity or capability to a system that didn't have it before. The growth engine that worked in Asia would not be considered local, right? China and the broader Asia region have largely powered their progress through partnerships with foreign companies that transferred technology and expertise to the local economy.

Still, the point is to use what's working in the local context; this is our guiding light at CrossBoundary. And there is inherently a decolonization aspect to this, right? Calling an engagement "external" or "top-down" means people coming in and directing how resources should be used or deployed. We want to be the opposite of that but still provide the benefits of tech and knowledge transfer.

Early days: CrossBoundary co-founder and Managing Partner Matt Tilleard and Afghan entrepreneurs at an impact investing conference in India

Q

How have you seen the underserved markets CrossBoundary operates in evolve in the last several years?

A

Tom: In the firm's early years, we focused significantly on Sub-Saharan Africa. One area we've seen evolve during this time is the type of capital coming into local businesses and the number of local entrepreneurs receiving investments on the continent.

In many markets, the capital being deployed is often impact or development minded. That could mean capital coming from grants, donor programs, or foundations. It could also be coming from some form of concessional capital from development finance. While it still hasn't reached full momentum, we see more commercial capital backing local entrepreneurs. Local businesses are securing more commercial capital or pure private equity from investors seeking strong returns, above anything else.

We've also witnessed a modest change in the flow of venture capital–from disproportionately supporting startups founded by expats to funding local founders and ideas.

Funding should be flowing to the best business ideas, and for many years, there was a clear market breakdown where little to no capital was going to locally funded startups. There is still work to do, but we have seen many more local founders win venture capital support over the past five years, whereas ten years ago, most startups receiving media attention and startup capital were expat-led.

The CrossBoundary team in Mali in 2016

Dhows at sunset off the Kenyan coast during CrossBoundary's 2021 Summit

Q

How do you see the role of local innovation in driving bottom-up development, and what has CrossBoundary's approach been in supporting this?

A

Matt: The first important thing about innovation is to look for it. It can be easy to ignore or not notice what it is about a solution that's working, and then you find a tendency to run off and design a top-down initiative. This is why the private sector can be such an effective tool for development. It constantly looks for the innovation that is working and winnows out those that aren't. That is hard to do without the contextually driven discipline that market forces provide.

On the electrification side, solar home systems seem like a great idea, but what customers actually want is access to finance. So, the lack of local context has resulted in the sector beginning to struggle with repayment rates over time.

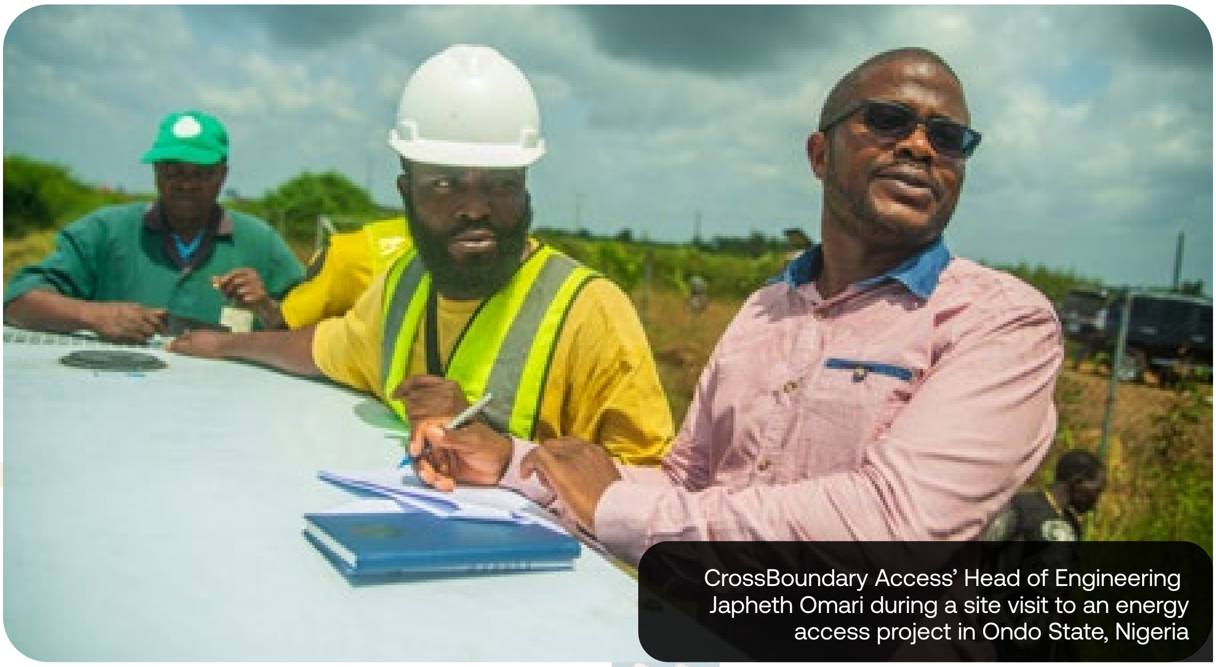
Conversely, take a look at M-Pesa—a world-renowned Kenyan innovation and mobile payment technology—and ask why it works so well. Consultants can throw the same concept of mobile payments up on a whiteboard in New York or London and say, "Let's scale that; let's make mobile payments everywhere." But it won't work the same. Why has it worked in Kenya and not in other places? The answer is contextual and local, not some missing piece on a PowerPoint slide. You will never be able to replicate it unless you figure it out.

Q As the firm has grown, CrossBoundary is known for being present and deeply embedded in the markets it serves. How does this local presence influence your approach and success?

A **Jake:** The biggest value add of CrossBoundary is that we are genuinely local. We now have more than 20 offices in the markets we serve. When working through problems or delivering our transaction advisory services, I can ask our teams a question, and the answer is completely obvious to them. Which companies are doing well? Which investors are credible? It's knowledge that would not be possible to gather during a visit or while researching from abroad.

We are experiencing the benefits of scale as we grow both in these markets and internationally. There's all this subtle contextual stuff we gain from being present locally that we almost don't think about day-to-day, from mannerisms or meeting norms to how you approach or connect with people and how people will respond and connect with you.

The interesting thing for us now is that we've probably underinvested in some of our centralized functions and presence in developed markets, which are needed to create linkages and multipliers. Our focus has always been on being present on the ground in our markets.



CrossBoundary Access' Head of Engineering Japheth Omari during a site visit to an energy access project in Ondo State, Nigeria

CrossBoundary Energy's Head of Regulatory Affairs Tessa Lee at CrossBoundary's bi-annual 2023 Summit in Cape Town, South Africa

Q

Can you tell us a bit about how CrossBoundary Energy and CrossBoundary Access are contributing to the decentralization of electricity generation and distribution in Africa, and what impact this could have on these markets – for local businesses and communities?

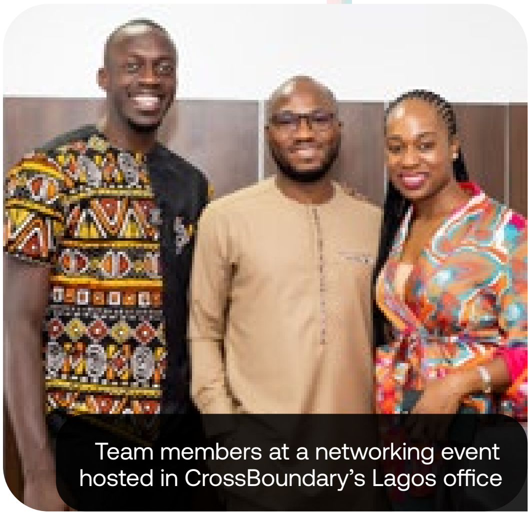
A

Matt: Decentralization of electricity is an extraordinarily exciting thing. Solar and battery storage are technologies, not fuels. The first implication of this is becoming more widely understood: as you go down an experience curve, the more you manufacture solar panels and batteries, the cheaper they get. So, you have this incredible decrease in electricity generation and storage costs. The world is starting to get its head around this first part.

What's interesting is the next step. The top-down approach is, "OK, well, let's just build a gigantic solar farm in the desert in Morocco."

Those ideas have missed the second, really important, implication: that those economies of scale we're talking about are happening at the factory level. The unit cost of installing a really small solar system and a really, really big one is pretty similar. So, it's not much cheaper per kilowatt to build a GW of solar than to build 100 kilowatts. And when you build 100 kilowatts right

CrossBoundary Group at our 2023 Summit in Cape Town, South Africa



Team members at a networking event hosted in CrossBoundary's Lagos office

Co-founder and Managing Partner Matt Tilleard at CrossBoundary Energy's first project for Garden City Mall in Nairobi, Kenya

next to the point that it needs to be consumed or right next to the point it needs to be stored, you don't have to transmit it and distribute it, and you can save a massive cost.

This second fundamental aspect of solar technologies hasn't yet been fully appreciated. It will drive a massive decentralization of the electricity system, which we're trying to accelerate in the context of Africa first.

This is going to be a really positive, powerful force because you're essentially taking control of power and, therefore, political and geopolitical power itself out of a top-down system—which is what fuel-based energy technologies demand—and placing them in a decentralized system.

Q

Can you discuss where CrossBoundary Advisory is helping pioneer investments in a local market?

A

Jake: The Africa Resilience Investment Accelerator (ARIA) is a great example—this program brings together development finance institutions (DFIs) to unlock investments in multiple transition markets in Africa, including Benin, the Democratic Republic of Congo (DRC), Ethiopia, Sierra Leone, and more.

Many DFIs have commitments to invest in markets in Africa, and historically, they've been approaching it on a fly-in, fly-out basis, especially for smaller markets. ARIA is a solution that allows DFIs to work collectively and hire a player like us. We provide access to experts on the ground in DRC from DRC, experts in Ethiopia from Ethiopia, and so on. We can follow up, chase things, and take impromptu meetings that would have required a trip to/from London or Amsterdam because we're in these markets full-time.

In our Investment Facilitation paper, we discuss how CrossBoundary solves for clients, usually some combination of bandwidth, time, and/or expertise. In other words, they could do it themselves, but they might not have the time, personnel, network, or know-how.

This goes back to the logic of Adam Smith and specialization. If you're building a house and need plumbing, you don't think, "Oh, I need to teach myself how to be a plumber." You hire a plumber. If you're investing in these markets and need local expertise, you hire a specialized player who has the local expertise; you don't need to try and build up scraps of a presence, a costly endeavor, too, for these episodic periods. You want a surge of capacity or a project on the ground.

So, ARIA is a good example—but generally, the whole investment thesis of CrossBoundary is that we believe there is a lot of capital available out there. The missing gap is not the availability of capital; it is the origination, the connection, and the trust to deploy it on the ground.


An Africa Resilience Investment Accelerator (ARIA) facilitated DFI investor visit to Benin and Liberia


A roundtable discussion during an ESG-focused visit to Ethiopia


A farmer in Sierra Leone


ARIA's Vivanne Infante delivers a session on DFI collaboration in frontier markets at the DFI Fragility Forum hosted by the Blavatnik School of Government, University of Oxford

CrossBoundary Group co-founder and Managing Partner Jake Cusack (second from left) and fellow panelists at the Milken Institute's Global Conference 2024

Q

Could you share your thoughts on how global investors can better engage with local partners to drive impactful change?

A

Tom: For investors to better engage, they must get out of their comfort zone and be willing to learn about a local ecosystem—a willingness to log the yards of getting smart in a local context, which quite frankly should be the expectation of any savvy investor.

Global investors are looking for suitable investments, so they're trying to find companies that will achieve their goals—typically strong financial returns but it could also be social or environmental benefits. Investors are not in this line of work to back a startup solely because they have a story they like. From an investment perspective, impact will be achieved from what the company itself does.

I want to return to what I said before about capital flows to expat-backed startups. Typically, this happens because the investor and the founder were one degree of separation from another. I'm talking about scenarios where someone from New York goes and founds a startup in Nairobi, and then an investor comes in from New York; they may have mutual contacts, friends, and networks in common. They're a bit pre-vetted, which is not an uncommon thing for an investor to want, and it's the way a lot of transactions happen in any market.

Partnering with local founders and companies requires learning and a willingness to get into the market and understand the dynamics up close. Of course, investors can work with an intermediary like CrossBoundary, which works extensively in the market and has a team tuned to market dynamics. These intermediaries can provide the color or background that those interpersonal relationships in the other scenario provide. They can quickly educate a new investor on what is incredibly prestigious about a founder given local credentials and institutions or provide perspective on existing local investors who have already backed a startup.

There is a benefit to engaging with advisors like CrossBoundary, who can help bring up that learning curve.

Q

How do you envision localization and decentralization shaping the future of CrossBoundary Group?

A

Matt: When I look back at the founding of CrossBoundary, it is essentially a story of outsiders who wanted to be more responsive to local contexts. What I am most proud of about CrossBoundary as a firm today is that we are now comprised predominantly of people from the societies where we're trying to make an impact—and that is so important because that means we have a better chance of coming up with truly localized and decentralized solutions that meet what people want and need.

One simple indicator that we've made this transition is that we used to describe ourselves as trying to unlock capital for "frontier markets." When you think about it, that was a very natural thing to say, as it's also what the MSCI Index uses to describe many markets we work in. But when you think about it fundamentally, it is language an outsider would use. You can't have the frontier without having a metropole. Instead, we now use the term "underserved markets," which is much more in line with how we view these markets and what we are trying to accomplish.

Even more broadly, what is your vision for the future of the markets you serve, particularly in the context of localization and decentralization?

Jake: CrossBoundary will continue to put ourselves in the sweet spot between local expertise and presence and global capital relationships and expertise—this is a powerful fulcrum for our firm.

If we had remained local to South Sudan, Afghanistan, Kenya, or anywhere else, we would not have the possibilities we see now. Yes, local is the critical first element, but we need scale—in the broader corporate world, the most successful companies are the ones that have a considerable amount of scale.


CrossBoundary co-founder and Managing Partner Jake Cusack climbing a ladder in Monrovia, Liberia in CrossBoundary's early days

The vision for CrossBoundary is to keep our local expertise, context, and contacts and build on the trust, but to put real scale behind our operations so that we can access the large capital flows.

We know capital is out there and can be tapped to grow underserved markets. We think we can do more "interlocking" investments—so to speak—into these markets. So, not just bringing capital from the US or Europe into underserved markets, which is how people used to think about it, but now facilitating investments between the markets themselves.

CrossBoundary Energy

CrossBoundary Energy finances 100% renewable energy solutions for rural, off-grid telecommunications sites in South Sudan and DRC

On the sidelines of the TowerXchange Africa gathering in Nairobi, CrossBoundary Energy signed an agreement with iSAT Africa to finance renewable energy solutions for telecom sites providing rural connectivity services across the Democratic Republic of the Congo (DRC) and South Sudan.

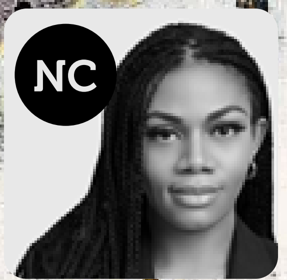
Access to the internet is crucial to building businesses, accessing education, and even in social movements, and expanding communications infrastructure is a core enabler to increase connectivity. The 100% renewable energy solutions will be provided by Clear Blue Technologies, a smart off-grid energy systems company.

Rik Wuts, Head of Telecom Solutions at CrossBoundary Energy, said "Digital infrastructure is a cornerstone of economic growth and an essential enabler of social progress in communities across the continent. Powering this infrastructure with renewable energy enables increased connectivity in underserved markets. This agreement with iSAT Africa reflects our confidence in providing reliable, cost-effective energy in the most remote and challenging locations desperate for connectivity and we look forward to expanding our collaboration rapidly."

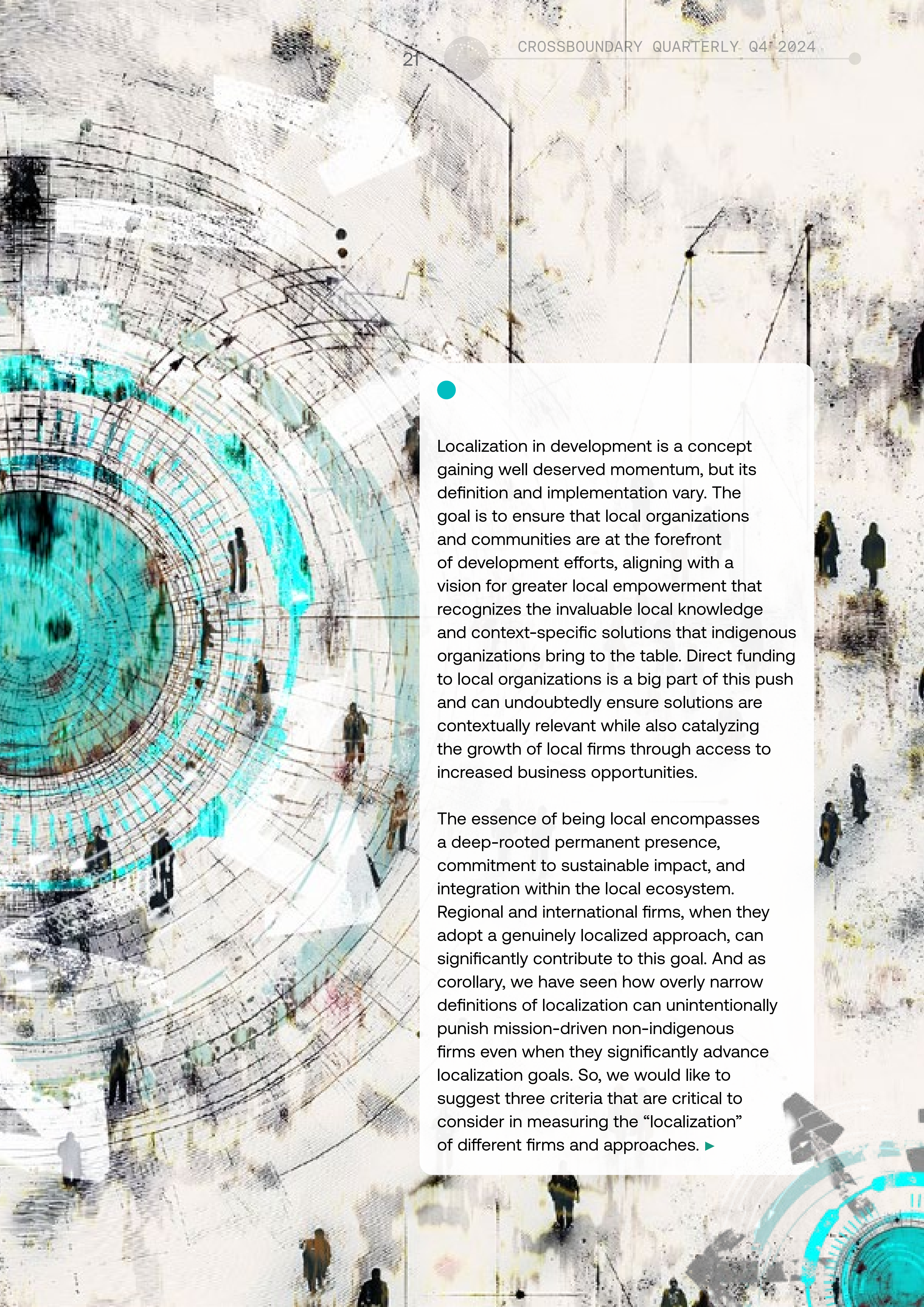
Communications infrastructure has rapidly expanded in Africa in recent years but despite this, only 36% of its population has access to broadband internet. South Sudan has some of the lowest internet access on the continent, with only 12% of the population reliably connected. The DRC's population has around 27% access. These challenges are further exacerbated by a lack of access to reliable electricity and other crucial infrastructure. Renewable energy can power digital infrastructure on the continent as it is decentralized, long-lasting, and reduces reliance on diesel generators.

Scan or click the QR code to learn more

What does it mean to be LOCAL?



Written by:
Nneka Chime, Partner and Co-Head of Africa Advisory, CrossBoundary Advisory



Localization in development is a concept gaining well deserved momentum, but its definition and implementation vary. The goal is to ensure that local organizations and communities are at the forefront of development efforts, aligning with a vision for greater local empowerment that recognizes the invaluable local knowledge and context-specific solutions that indigenous organizations bring to the table. Direct funding to local organizations is a big part of this push and can undoubtedly ensure solutions are contextually relevant while also catalyzing the growth of local firms through access to increased business opportunities.

The essence of being local encompasses a deep-rooted permanent presence, commitment to sustainable impact, and integration within the local ecosystem. Regional and international firms, when they adopt a genuinely localized approach, can significantly contribute to this goal. And as corollary, we have seen how overly narrow definitions of localization can unintentionally punish mission-driven non-indigenous firms even when they significantly advance localization goals. So, we would like to suggest three criteria that are critical to consider in measuring the “localization” of different firms and approaches. ▸

We propose that the definition of 'local' should be revised to incorporate these three criteria suggested, recognizing that there is a continuum of "localization"

To be considered local, firms should...

1

Be formally incorporated according to local laws and pay taxes

Taxes on services related to economic growth, where private advisory firms often act as program implementors, are more than just financial obligations; they are investments in the country's future, supporting public infrastructure, education, and services that strengthen the very foundation of sustainable economic progress.

2

Show a commitment to long-term not temporary presence

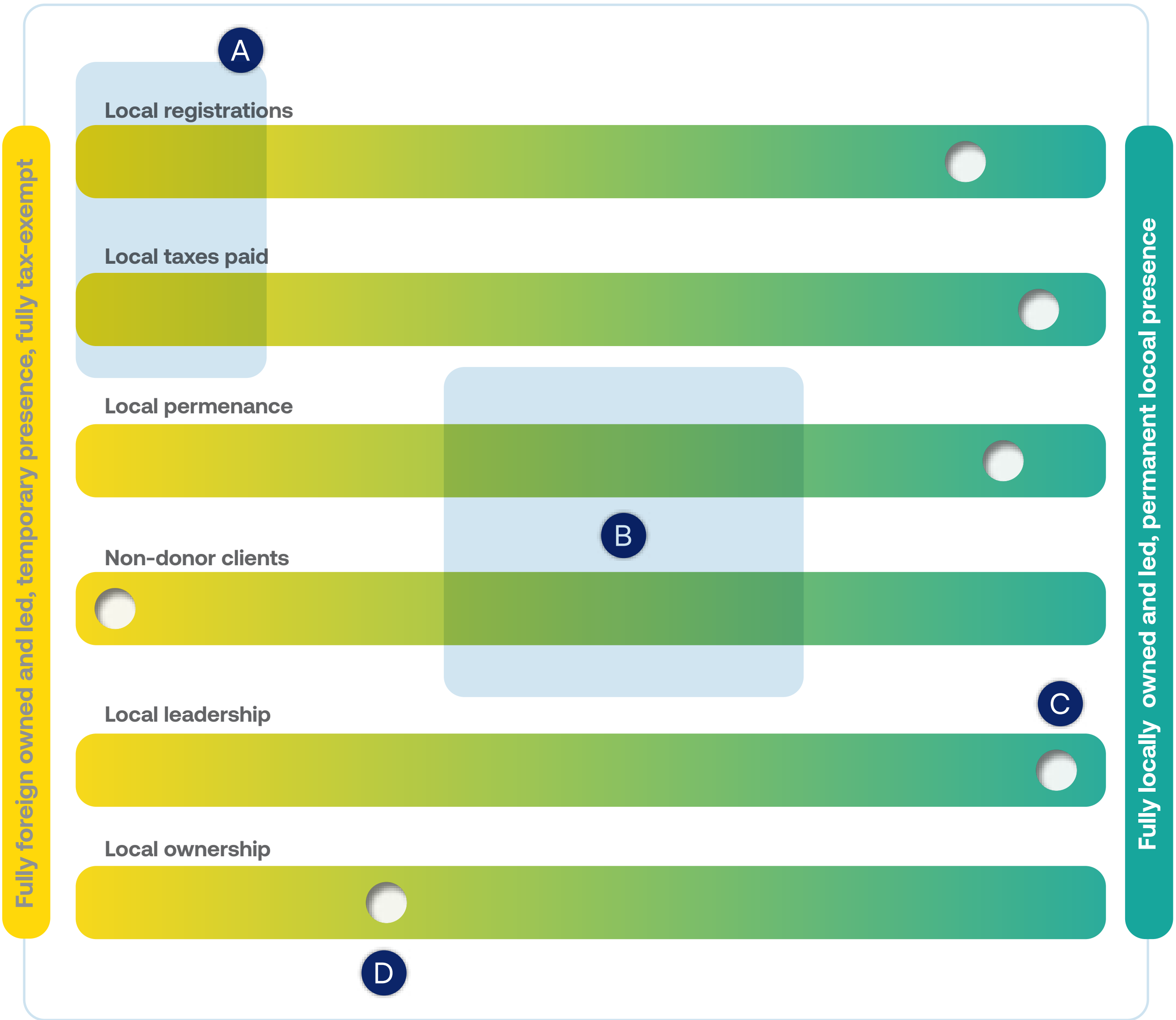
While some degree of surging up and down to meet demand is understandable, this is not sustainable and causes substantial losses of knowledge and networks, not to mention creating large distortions in the talent ecosystem and market systems of the country.

3

Empower local employees with decision-making authority and a meaningful stake in the organization

Local professionals bring invaluable insights, and their efforts can be significantly enhanced when supported by international resources and expertise.

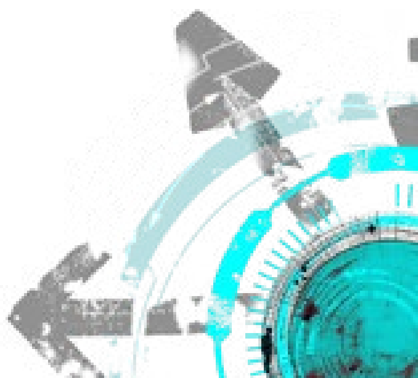
The “spectrum” of localization



Key

Low - none High

- **A** Fully tax exempt foreign firms with no meaningful local entity
- **B** Regional firms with local overlap fall here
- **C** Foreign firm may still be fully locally led
- **D** Foreign firms may still have meaningful local owernship



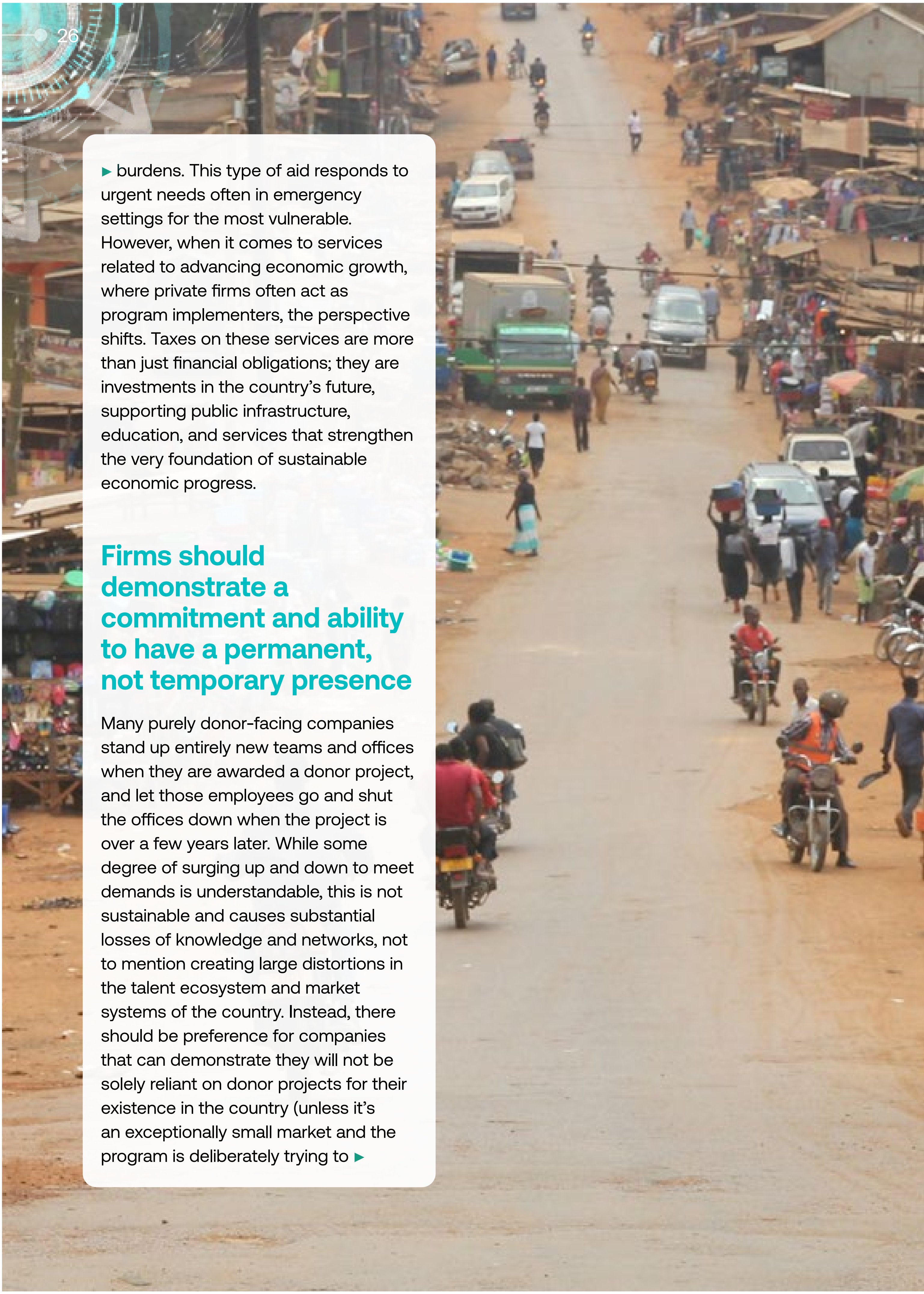
Firms should be formally incorporated according to local laws and pay taxes

A crucial aspect of being local is having a formal local incorporation and presence within the community. Firms should be locally registered and have physical offices that are not solely project-based. This avoids the unsustainable practice of most international firms where offices are set up temporarily for specific projects and then dismantled once the project ends, resulting in loss of knowledge and disruption in local talent ecosystems. Instead, firms should demonstrate long-term commitments to the markets they operate in, retaining employees and continuing their work beyond the lifespan of individual projects.

Moreover, the issue of paying taxes is fundamental. Entities operating in a country should pay relevant country and employee taxes, contributing to the local economy and the virtuous cycle between the government, the enabling environment, and businesses. Solely donor-facing companies that seek tax exemptions can undermine this cycle, creating reliance on aid and distorting the economy. Paying appropriate taxes ensures that firms are truly contributing to the sustainable development of the regions they serve. One caveat is that pure humanitarian assistance should be exempt from taxes so as to ensure that vital and often lifesaving resources are delivered without additional financial ▶

The CrossBoundary Access team hosts a workshop in Nairobi, Kenya with ENGIE Energy Access

Members of the CrossBoundary Advisory MENACA team deliver a training presentation in Ridyah, Saudi Arabia



▶ burdens. This type of aid responds to urgent needs often in emergency settings for the most vulnerable. However, when it comes to services related to advancing economic growth, where private firms often act as program implementers, the perspective shifts. Taxes on these services are more than just financial obligations; they are investments in the country's future, supporting public infrastructure, education, and services that strengthen the very foundation of sustainable economic progress.

Firms should demonstrate a commitment and ability to have a permanent, not temporary presence

Many purely donor-facing companies stand up entirely new teams and offices when they are awarded a donor project, and let those employees go and shut the offices down when the project is over a few years later. While some degree of surging up and down to meet demands is understandable, this is not sustainable and causes substantial losses of knowledge and networks, not to mention creating large distortions in the talent ecosystem and market systems of the country. Instead, there should be preference for companies that can demonstrate they will not be solely reliant on donor projects for their existence in the country (unless it's an exceptionally small market and the program is deliberately trying to ▶

The CrossBoundary team at the Am-Cham Business Summit in Nairobi, Kenya

CrossBoundar Advisory Managing Director and Head of Latin America & Caribbean Advisory Jonathan Duarte and attendees of the 2023 Concordia Amazonas Summit during a field visit to the Amazon

▶ entice new entrants from the region), and have demonstrated they retain most employees and continue to work in a market when specific projects end. For these firms, the donor support is an accelerant and deepening of their long-term capabilities in each country or region, rather than creating a short-term one-off presence.

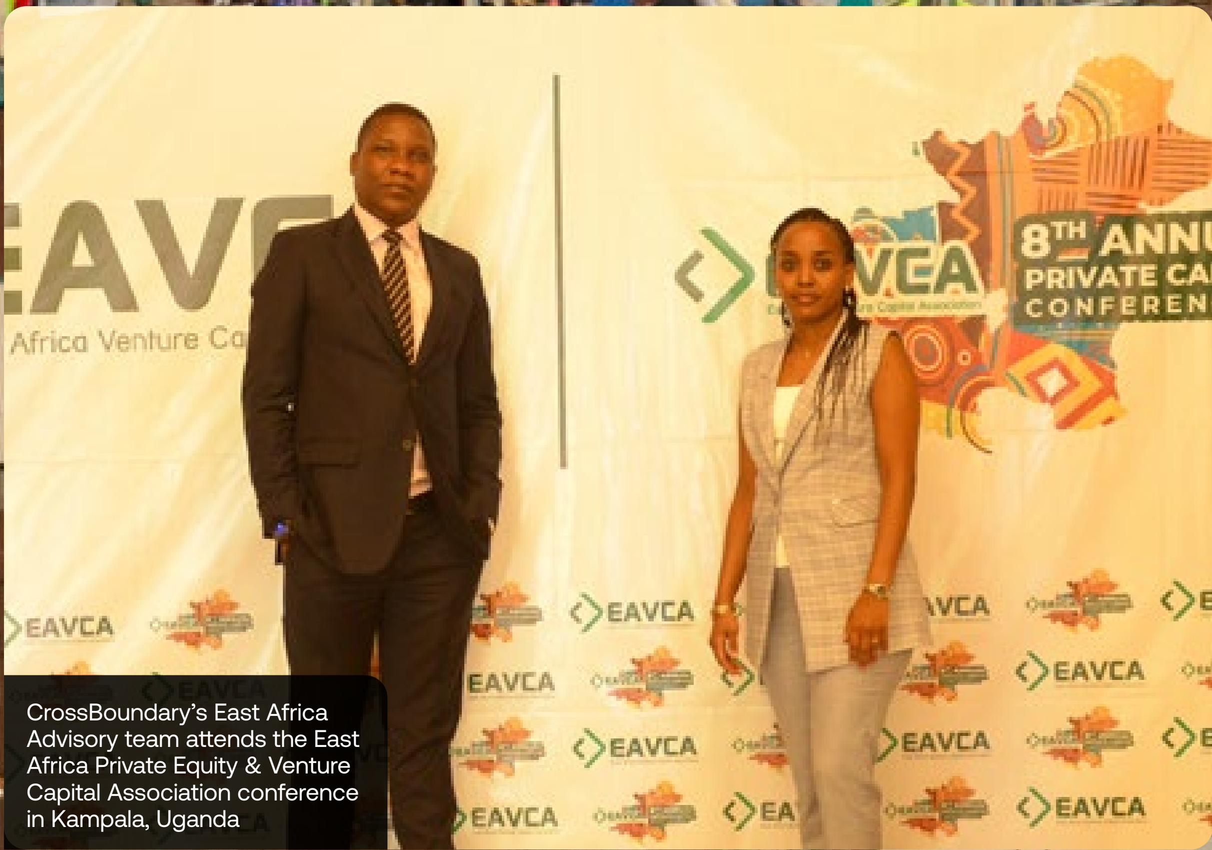
Firms should prioritize local team members empowered with decision-making authority and a meaningful stake in the organization

To truly embody what it means to be local, development efforts must be deeply embedded within the communities they serve. This involves prioritizing local leadership and ensuring that projects are designed and implemented with a profound understanding of the local context. Local professionals bring invaluable insights, and their efforts can be significantly enhanced when supported by international resources and expertise.

Firms which are internationally connected but locally led exemplify this balanced approach. With teams that are mostly local and integrated into the global infrastructure, they bring the 'best of both worlds.' This model allows for efficient regional integration and ▶

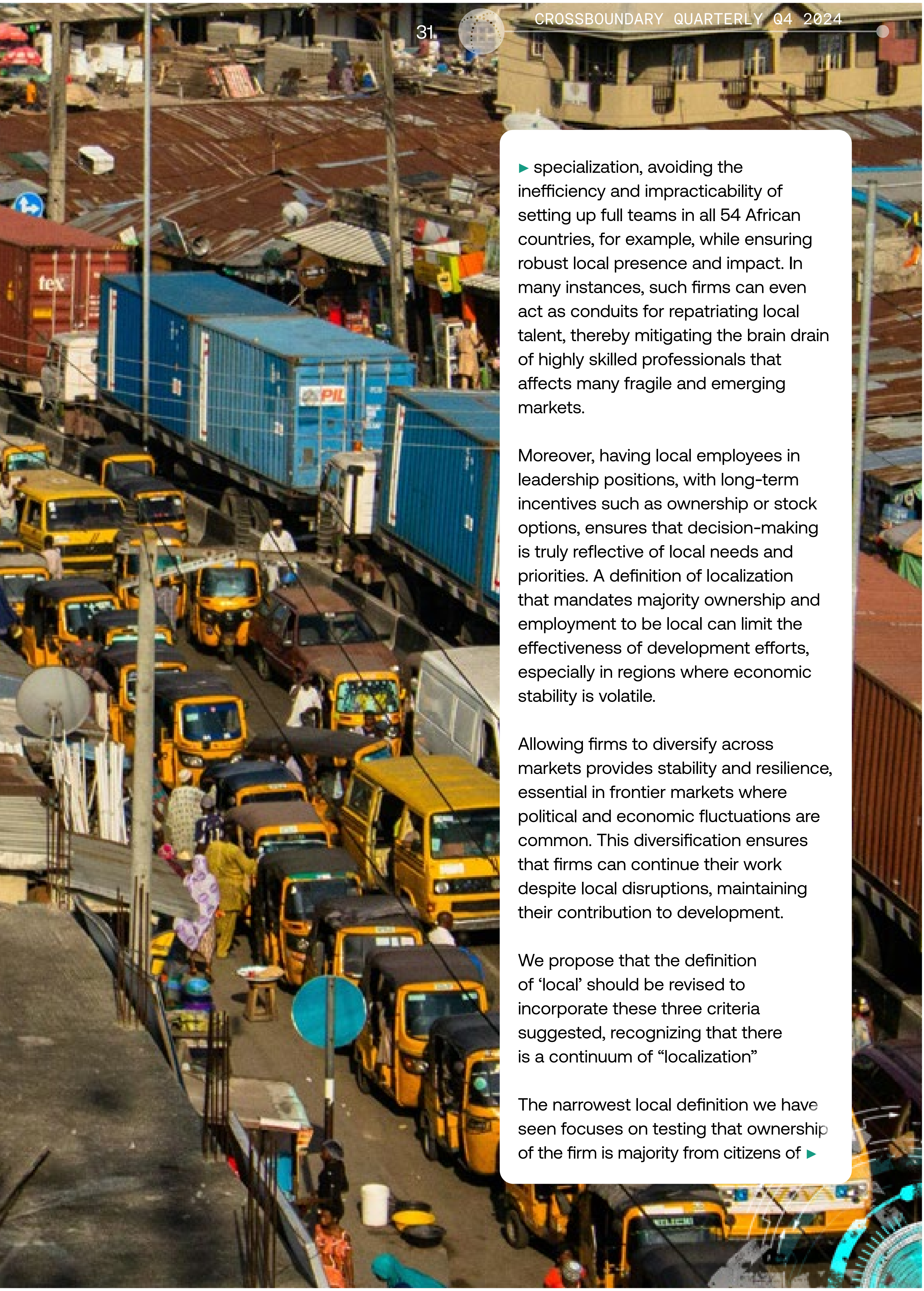
The author, Nneka Chime (right), hosts a creative sector roundtable with Prosper Africa during Lagos Fashion Week in 2022

Team members celebrate their cultural heritage during an event at CrossBoundary's Nairobi office



CrossBoundary's East Africa Advisory team attends the East Africa Private Equity & Venture Capital Association conference in Kampala, Uganda

Head of Asia Pacific Advisory Nandini Chaudhury speaking at a conference in Mumbai, India



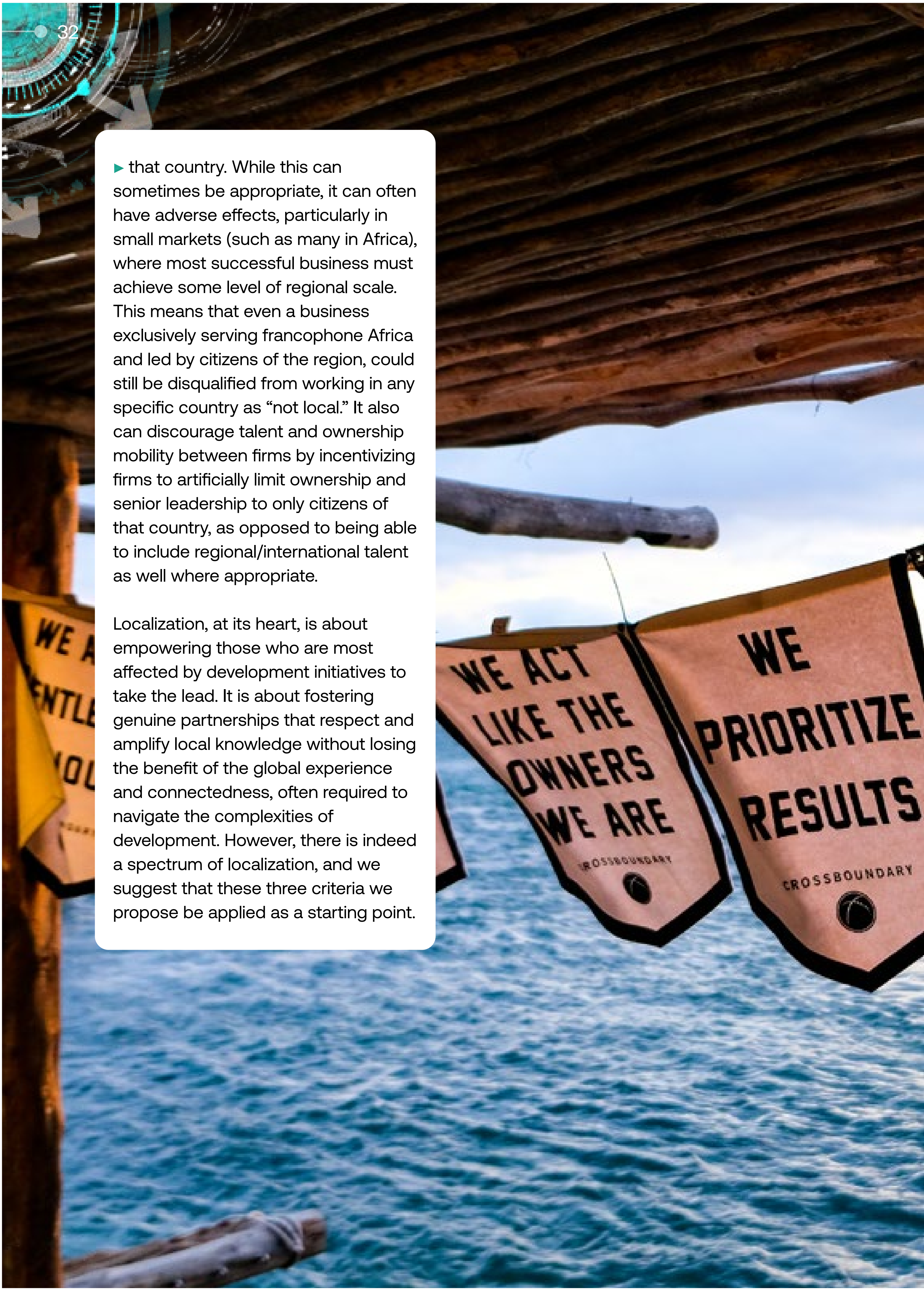
specialization, avoiding the inefficiency and impracticability of setting up full teams in all 54 African countries, for example, while ensuring robust local presence and impact. In many instances, such firms can even act as conduits for repatriating local talent, thereby mitigating the brain drain of highly skilled professionals that affects many fragile and emerging markets.

Moreover, having local employees in leadership positions, with long-term incentives such as ownership or stock options, ensures that decision-making is truly reflective of local needs and priorities. A definition of localization that mandates majority ownership and employment to be local can limit the effectiveness of development efforts, especially in regions where economic stability is volatile.

Allowing firms to diversify across markets provides stability and resilience, essential in frontier markets where political and economic fluctuations are common. This diversification ensures that firms can continue their work despite local disruptions, maintaining their contribution to development.

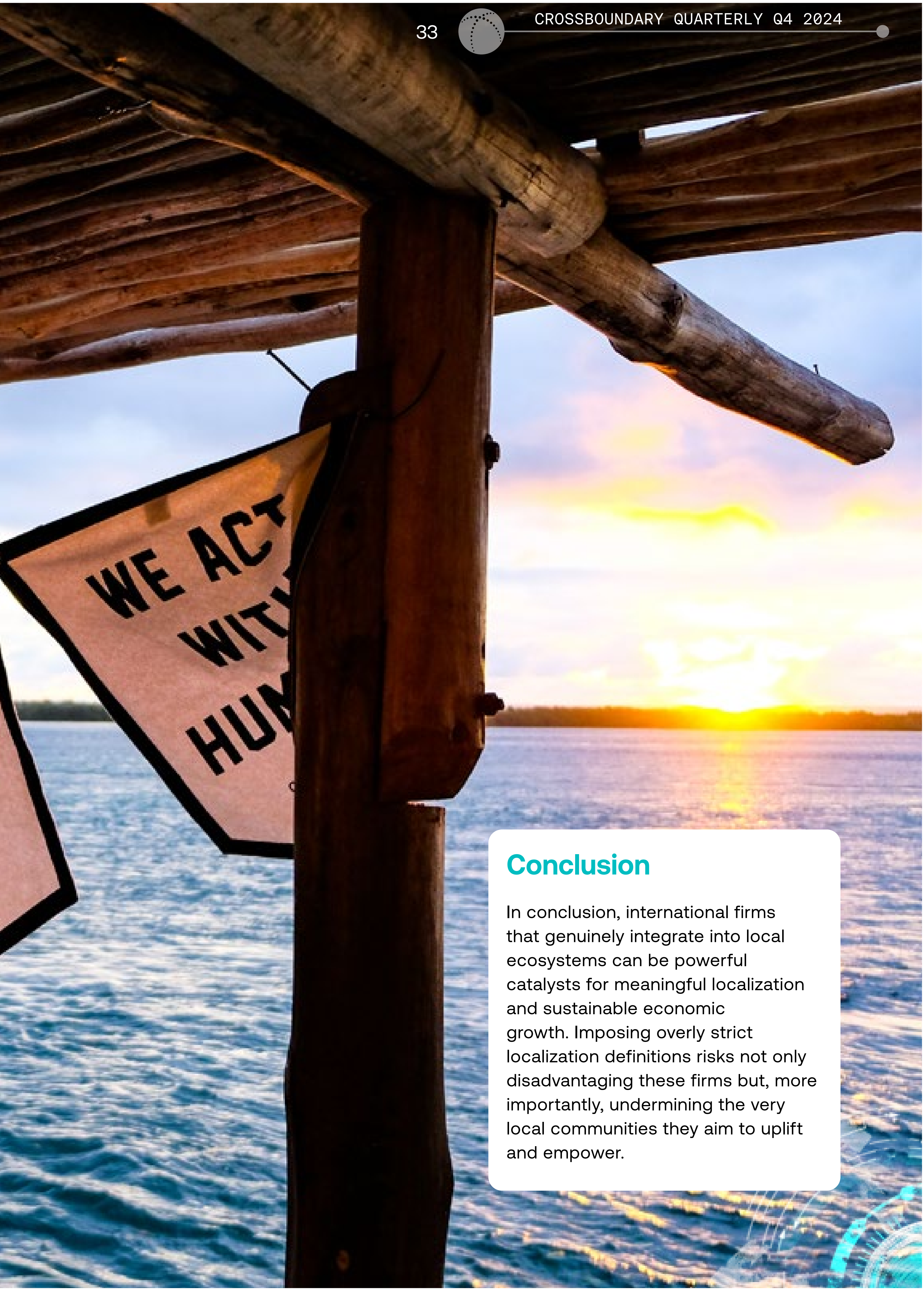
We propose that the definition of 'local' should be revised to incorporate these three criteria suggested, recognizing that there is a continuum of "localization"

The narrowest local definition we have seen focuses on testing that ownership of the firm is majority from citizens of



▶ that country. While this can sometimes be appropriate, it can often have adverse effects, particularly in small markets (such as many in Africa), where most successful business must achieve some level of regional scale. This means that even a business exclusively serving francophone Africa and led by citizens of the region, could still be disqualified from working in any specific country as “not local.” It also can discourage talent and ownership mobility between firms by incentivizing firms to artificially limit ownership and senior leadership to only citizens of that country, as opposed to being able to include regional/international talent as well where appropriate.

Localization, at its heart, is about empowering those who are most affected by development initiatives to take the lead. It is about fostering genuine partnerships that respect and amplify local knowledge without losing the benefit of the global experience and connectedness, often required to navigate the complexities of development. However, there is indeed a spectrum of localization, and we suggest that these three criteria we propose be applied as a starting point.



Conclusion

In conclusion, international firms that genuinely integrate into local ecosystems can be powerful catalysts for meaningful localization and sustainable economic growth. Imposing overly strict localization definitions risks not only disadvantaging these firms but, more importantly, undermining the very local communities they aim to uplift and empower.

Empowering Future Leaders at Vokoli Girls' Secondary School in Vihiga County, Western Kenya

CrossBoundary's Women Affinity Group recently supported a mentorship initiative at Vokoli Girls' Secondary School in Vihiga County, Western Kenya. Over 1,400 students engaged with a diverse group of CrossBoundary professionals and friends of the firm, gaining invaluable insights into career pathways, education, and personal growth.

The interactive sessions, covered critical topics like balancing school and home life and opportunities in STEM, finance, and creative fields. Our aim was to provide guidance to the girls as they navigate their secondary schooling and offer perspectives that might broaden their horizons beyond the limitations often faced by girls in rural Kenya.

Beyond 'Localization': **Trust the ship captains of nature-based solutions**

Written by:
Kate Wharton, Managing Director and Head of Natural Capital, CrossBoundary Group

At CrossBoundary, we trust ship captains over physicists (though we do hire physicists from time to time!). It's an idea borrowed from James C. Scott's *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed*, in which we are posed the question:

If your life depended on your ship making it through rough seas, would you rather be guided by a brilliant physicist who knows all there is to know about fluid dynamics, meteorology, and oceanography... or the ship captain who may lack a PhD but has made the trip a thousand times? I've yet to meet anyone who has chosen to brave rough seas with the physicist.

For us, the takeaway from this thought experiment is the value of practical knowledge, or *mētis*, in positively transforming societies. In Greek, *mētis* is contextual knowledge often expressed as rules-of-thumb, standing in contrast to *teche*, or knowledge comprised of universal rules derived from first principles. While both are important, we know that the most successful operators in emerging markets must be hyper-aware of the contours of their local environment and highly adaptive to change.

It's why we trust those who have the most context and who are closest to the action. It's why 80% of our team is based in – and typically from – the emerging and frontier markets we serve. And it's why we are so committed to supporting local teams to raise the capital they need to scale their businesses.

This same philosophy guides our Natural Capital team's perspective on what is needed for nature-based solutions to be successful. Unlike climate solutions more broadly, nature-based solutions are inherently local. Biodiversity is local. Fresh water is local. Agriculture is local. And the people whose livelihoods depend on nature are local.

Nature-based solutions are also long-term. Success requires changing how people interact with the natural environment over the decades and centuries ahead. This can only be done through local action, by those with long-term interests in the community.

Finally, nature-based solutions are context-dependent. Project design cannot simply be copied and pasted from one location to the next. The unique features of the local environment matter – climate, topography, water and energy sources, local species, land rights, and more all influence project design. While external expertise is absolutely needed, local expertise and local implementation of improved land management is what ultimately makes or breaks projects in the long run.

So, who are the "ship captains" of nature-based solutions?

The author, Kate Wharton, CrossBoundary Advisory Managing Director and Head of Natural Capital, speaks at the Kenya Carbon Markets Conference in Nairobi

First and foremost, they are Indigenous Peoples and Local Communities. Indigenous Peoples make up about 6% of the global population, yet they conserve an astounding 80% of the world's biodiversity, and at least a quarter of all tropical and sub-tropical above-ground carbon is stewarded by Indigenous Peoples and Local Communities.[1] These groups have some of the strongest track records of managing land for the mutual benefit of people and nature.

However, nature's ship captains face challenges in accessing finance. For those seeking funding to implement new projects, there are often several degrees of connection to investors and a lack of experience putting together an investable project. Partnership is often required to address capabilities such as carbon measurement and monitoring, marketing of carbon credits to buyers who are typically large corporations in the US and Europe, and project

1 https://www.worldbank.org/en/topic/indigenouspeoples

Case Study: Tree Aid Reforestation Carbon Project in Burkina Faso

Across African drylands, climate change has arrived, with temperatures rising at twice the global average. Communities in Burkina Faso are particularly vulnerable due to the combined effects of climate change and deforestation on rural populations who rely on the land to survive. Tree Aid, an NGO, is working with communities who hold customary land rights to restore 13,000 hectares of degraded land and generate new sources of income – all funded by the sale of carbon credits to a global investor.

Tree Aid employs community members to operate the project; offers capacity development in sustainable land management practices that address soil fertility and water harvesting, value chain development, and marketing; and provides direct financial compensation including exposure to potential upside via communities' direct participation in future carbon credit sales. For the portion of carbon credits retained by the community, members will be able to decide how, when, and to whom to sell these credits based on needs and opportunities at that time.

In total, more than 6 million trees will be planted, sequestering more than 3 million tons of CO_2 over 40 years. Over that time, the project will deliver approximately US$70M in benefits to households from 115 villages in rural Burkina Faso, the vast majority of whom are living below the poverty line. It provides a unique opportunity for these communities who are otherwise excluded to participate in climate finance flows, and to make a globally significant contribution to the climate crisis.

documentation and reporting to the standard required by investors with fiduciary responsibilities.

The good news is that for nature-based solutions with revenue from carbon credits, carbon markets themselves offer the added discipline of results-based finance. Projects that lose sight of their ship captains, or fail to properly incorporate local context, will fail over the long run. You can find those stories in the news.

The other good news is that investors and project developers understand this. We find that most often the challenges lie in the "how" and "how much" – building projects of sufficient scale with credible operators, and landing on the price that buyers of carbon credits are willing to pay. Quality has a cost, and underpaying the ship captain is short-sighted.

CrossBoundary's Natural Capital team focuses on addressing the barriers for indigenous peoples and local communities and their partners to raise up-front capital for new projects.

We support projects that place communities at the center – as partners rather than solely beneficiaries of projects that prioritize transparency and Free, Prior, and Informed Consent processes. Moreover, we ensure that communities are appropriately compensated for the risk they are taking in the project, just like every other stakeholder.

We know that communities are not always invited to the table during negotiations with investors, and that getting a fair deal is both a moral and a commercial issue. Helping our clients understand best practice globally, elevating the role of communities, and communicating the real costs of high-quality projects during negotiations helps move the market in the right direction.

We are deeply committed to supporting nature's ship captains, and we hope this analogy helps shed light on the exceptional value of local context and stewardship, which is too often undervalued in the market today.

CrossBoundary
Fund for Nature

Fund for Nature

CrossBoundary Group participates in Bio-Logical's US$1.3M fundraising round to enable scale-up of biochar production and boost climate resilience for Kenyan farmers

CrossBoundary Group's Fund for Nature participated in Bio-Logical's recent US$1.3 million fundraising round, which will enable the climate tech company to scale up its Mt Kenya biochar facility.

Bio-Logical has garnered significant attention with its innovative approach to climate mitigation and sustainable agriculture, meeting the increasing demand for carbon removal and supporting climate resilience for Kenyan smallholder farmers. In February, Microsoft committed to purchase 10,000 tons of carbon removal from Bio-Logical, marking its first biochar deal in Africa.

Since March 2024, Bio-Logical has empowered over 1,000 farmers to enhance their climate resilience and increase crop yields through its Asili biochar-based fertilizer. This innovative fertilizer offers multiple benefits, including enhanced soil structure, improved nutrient retention, soil neutralization, and climate mitigation.

"Biochar technology stands at the intersection of innovation and ecological stewardship. By harnessing the power of organic waste transformation, we're not just sequestering carbon—we're reimagining soil health and agricultural resilience. This partnership exemplifies our commitment to funding scalable, high-impact solutions that address climate change while generating tangible benefits for local communities in emerging markets," said Kate Wharton, Managing Director of the Fund for Nature at CrossBoundary.

CrossBoundary's investment is part of a broader coalition of investors, including Redshaw Advisors and the Steyn Group, aimed at supporting Bio-Logical's growth and impact in East Africa. This funding will enable Bio-Logical to expand its operations and continue providing sustainable solutions to farmers, enhancing both agricultural productivity and climate resilience.

Scan or click the QR code to learn more more about the Fund for Nature

Bio Logical

Distributed power, localized benefits: how decentralization of energy approvals in Africa can unlock industrial sectors

Written by:
Albert Nganga and Henry Carr

Distributed Energy Resources (DERs) - energy generation and storage technologies that can provide power where it is required – present a huge opportunity to unlock localized economic benefits in Africa. Whilst DERs can be grid-connected or behind-the-meter, their power is channelled to specific sites or functions.

In recent decades, governments in Africa have gradually moved to liberalize energy sectors to improve service delivery. Whilst many previously bundled, state-owned utilities have opened private participation in the generation subsector, fewer have privatized other parts of the electricity supply chain. Private distribution is authorized in eight countries in Africa, private transmission in four, and only three countries (Gabon, Cote d'Ivoire, and Zambia) have private sector operators across generation, transmission, and distribution[1]

African energy sector planning and policy are still largely the purview of national governments, and licensing regimes and processes are mostly overseen by national energy regulators (which have varying degrees of independence).[2] Federal Ministries, Departments, and Agencies have the overall authority to approve DER licenses or issue project approvals, and state and local authorities only work with DER providers on local construction or physical planning permits.

However, through our work originating, financing, and developing DER projects for industry across Africa, CrossBoundary Energy (CBE) has noted an emerging trend of decentralizing energy regulation in three key African markets: Nigeria, Kenya, and the Democratic Republic of the Congo (DRC). How has devolution of control occurred in each of these markets, what are some potential challenges arising from the decentralization of energy regulation, and how can local authorities maximize its benefits?

1 Financing Clean Energy in Africa, International Energy Agency, November 2023

2 Electricity Regulatory Index, African Development Bank Group, 2022

A shaky transition to regulatory decentralization in Nigeria

On March 17th, 2023, sections of the 1999 constitution of the Federal Republic of Nigeria were amended. Following the constitutional amendment, a new Electricity Act was signed into law on June 9th, 2023. The constitutional amendment grants Nigerian states new legislative powers to establish markets for the generation, transmission, system operation, distribution, and supply of electricity within their respective territories.[3]

Against the backdrop of a struggling nationwide electricity system, this amendment empowers states to set the terms for private sector participation in energy systems. Once states have implemented their own Electricity Laws and regulatory frameworks, they are allowed by the Nigerian Electricity Regulatory Commission (NERC) to regulate electricity provision within their states.

It remains to be seen how many states will take advantage of this expanded authority. As of today, five of 36 Nigerian states have fully implemented energy legislative and regulatory frameworks: Imo, Enugu, Ekiti, Ondo, and Oyo.

While progress has been relatively slow, the private sector can now consider each of Nigeria's states as potential individual regulatory jurisdictions. Though this shift has the potential to create policy and regulatory uncertainty in the immediate term (see Case Study 1), in time, states will be empowered to direct how the private sector can support improved distributed energy access.

3 Nigeria Amends Constitution to Enable Electricity Decentralization: Key Highlights for Investors and Stakeholders, Templars, 28 March 2023,

Case study 1:

Double licensing causing project delays in Nigeria

The transfer of regulatory powers from the national energy regulator, NERC, to individual states has already presented challenges for private-sector DER providers. There appears to be ambiguity regarding the ultimate authority over DER project licensing, leading to a 'double licensing' scenario for some projects.

For example, CBE developed an onsite solar project for a key industrial firm in Nigeria. The state where the facility is located had not yet implemented its own legislative or regulatory framework, and as such NERC remained the authority to grant generation licenses for DER projects.

However, the state requested that CBE apply for a generation license directly from its Ministry of Energy, as the local energy regulator had not been established. The state's license application requirements, statutory fees, and timelines had not yet been established or shared for public consultation, yet the state withheld approval for a construction permit of the DER facility on condition that a generation license from itself was secured, despite CBE already having secured a generation license from NERC.

This intervention caused significant delays to the project and illustrated the uncertainty that devolution of power can cause for investors and developers of DER projects in Nigeria. CBE advocates for sector-wide guidelines on the transfer of regulatory powers to individual states, including what approvals developers must secure at both the national and state level. States should also be encouraged to engage with the private sector on the laws and licensing frameworks that will be applied to DERs for industrial clients.

Streamlining local statutory fees for DER projects in Kenya

Kenya has not gone as far as Nigeria in decentralizing energy licensing and regulations, but the Physical and Land Use Planning Act, 2019, confers authority to local governments or counties, allowing them to formulate procedures and standards that govern energy activities within their territory. Direct oversight of project design integrity occurs at the county level.

The Energy (Electricity Licensing) Regulations, 2012, govern DER Power Purchase Agreements (PPAs). DER providers are required to first obtain No-Objection Certificates and physical planning approvals from the relevant county. They can then apply for a generation license from the national energy regulator, the Energy & Petroleum Regulatory Authority (EPRA). Obtaining the pre-requisite county approvals informs EPRA of a project's compliance level and any requirement for further technical study.

CBE found significant differences in how counties in Kenya handle and charge for physical planning approvals. The permit fees charged by counties are considered revenue-raising measures and are decreed under each county's finance law. As such, before imposing any tax or revenue-raising measure, the Public Finance Management Act, 2012 (PFMA) requires County Governments to seek the views of the Cabinet Secretary at the National Government's Ministry of Lands & Physical Planning and the Commission on Revenue Allocation, and public participation is mandated before passing county tax laws.

It is unclear whether all counties are following this process. Public participation exercises are also not routinely being carried out on specific fees to be applied to renewable energy projects. Several Kenyan counties have not yet ratified physical planning fees for DER projects and are instead imposing ad-hoc charges. This has resulted in some counties

requesting inflated fees, and developers being uncertain what fees will be required for these projects.

CrossBoundary Energy saw an opportunity to harmonize the fees applied to DER projects across Kenya's respective counties:

Case study 2:

Harmonizing physical planning fees across Kenya's Counties

CBE, in partnership with the Electricity Sector Association of Kenya (ESAK), worked to develop a physical planning fee methodology. We identified several barriers to implementing a harmonized approach including:

- The high cost of conducting a nationwide study and stakeholder engagement, as required by law
- The need for all county assemblies to pass finance bills enacting a proposed fee methodology in line with other counties

In response, CBE proposed a physical planning fee methodology that replaced square meters with kilowatt (kW) to determine the licensing costs for DER projects, sizing electrical systems by output and not by physical size. CBE also proposed a lower statutory fee rate to encourage electricity consumers to adopt renewable energy, aligning county laws with national objectives for power generation.

CBE presented the proposed fee methodology to ESAK in the second quarter of 2024. The fee methodology was submitted to the Kenya senate as part of an ongoing policy development roundtable meeting aimed at finalizing the Physical Planning Bill, 2017.

Localizing DER project approval for mining clients in the DRC

The DRC offers another example of partial decentralization of regulation and oversight of DER projects. Decarbonizing Africa's mining sector, particularly in the DRC, involves transitioning to renewable energy sources to reduce the sector's significant carbon footprint. Few mines are connected to the national grid and the government is seeking to localize the benefits of the mining sector, including through local content and local participation.

The Electricity Act of 2014 in the DRC introduced substantial changes to the regulatory framework for energy projects, particularly affecting DERs. The requirement for DER projects with generation capacities greater than 51kW to obtain authorization from provincial governors at the final stage of licensing shifted decision-making authority from the national energy regulator (ARE) to local authorities.

Case study 3:

Provincial governor approval in the DRC – opportunity or obstacle?

Obtaining approvals from local authorities may offer opportunities for responsive and regionally focused energy development. DER providers will likely be encouraged to engage with Provincial Governors around the local benefits of their projects, including community development, as part of the licensing process.

This decentralization of authority could also pose a challenge to consistent regulatory standards: DER providers may be subject to different requirements imposed in different DRC provinces. As statutory requirements have not yet been established for the granting of final approval, DER providers lack clarity on respective application requirements and timelines for securing final approval for generation licenses. This could lead to delays in the provision of reliable, affordable distributed energy to DRC's mines.

CrossBoundary Energy wrote about how the Government and national energy regulator can support DER providers to ensure a streamlined process, even with the involvement of local governors in the DER licensing process.

The benefits of decentralizing DER regulation in Africa

The measures taken in Nigeria, Kenya and the DRC give state and local authorities power to dictate the role DERs can play within their local energy systems. This is a huge opportunity. Unreliable and expensive power is a binding constraint on commercial and industrial activity across the continent and in each of these countries, and DERs inherently deliver their energy services straight to the locality where they are built. Favorable DER regulations could allow local authorities to become national leaders in attracting private-sector investment and energize the industrial powerhouses of their communities. Shoring up distributed manufacturing can create jobs and support local economic growth.

In addition to the wider economic benefit, the deployment of DERs can also have a direct financial benefit for local authorities. Through the establishment of fair DER licensing fees, local state authorities can directly raise revenue that can be used to support administrative functions or community-based projects. Local authorities must establish clear and predictable fees, ideally through statutory frameworks, to reap the gains. As our second case study demonstrates, an even playing field is needed for effective DER project delivery.

Countries that seek to restrict or centralize the deployment of DERs normally do so to control perceived risks like oversupply, grid defection, and national utility insolvency. Local authorities do not hold this vested interest in the same way, and this frees them to fully consider the benefits of opening their local systems to DERs. Local regulators can focus on developing innovative regulatory mechanisms that reduce the administrative burden for DER developers and enhance local energy provision. Some opportunities include:

- Improving DER licensing regimes that were previously overseen and controlled by national regulators or institutions. Local authorities may explore ways to streamline the approval processes for DERs, such as replacing individual generation licensing for portfolio projects with established developers that meet specific requirements

- Leveraging DER providers to supply excess power to local communities and community development programs

- Working with DER providers to invest in and reinforce local electricity distribution infrastructure by providing a clear regulatory framework on how this may be accomplished in conjunction with local utilities

Conclusion

The decentralization of energy regulation emerging in the DRC, Nigeria, and Kenya provides an exciting opportunity for local industrial growth. DERs offer easily deployable, flexible power generation that can address modern energy challenges and deliver significant benefits for the local jurisdictions that embrace their potential.

To maximize these benefits, local regulatory capacity and capability need to be developed and new regulations must be formulated in partnership with the private sector. The following principles may provide a guide on how best to make decentralization of DER regulation work for local governments, DER providers, and the local industrial players they look to serve:

Decentralization of DER Regulation: How to make it work

1. Federal authorities should provide clarity over which powers will be devolved to local authorities and when – DER providers need to know the rules and authorities they are subject to
2. Local authorities should engage with all stakeholders when formulating new regulatory frameworks, especially the private sector – new policies can be transformational, but they must balance the interests of all parties
3. Local authorities should publish specific guidelines for their application process, timelines, and associated fees. This gives DER providers certainty and ensures projects do not get delayed due to unforeseen licensing delays
4. Local authorities should ensure their local regulators have the capability to assess and license projects. Once an investable regulatory framework has been developed, the regulator must the resources and expertise to regulate it

CrossBoundary Group

Mini-Grid Innovation Insight: Harmonizing tariffs through smart green subsidies in Sierra Leone

The results are in - lower tariffs boost energy use, especially for low-income customers, without significant revenue loss in local currency.

In December 2022, CrossBoundary's Mini-Grid Innovation Lab, in partnership with the Global Energy Alliance for People and Planet (GEAPP), launched a nationwide tariff harmonization pilot in Sierra Leone.

Here's a snapshot of the pilot:

8 treatment sites

9 control sites

3,300+ customers impacted

$0.34/kWh Subsidized tariff

80% Minimum expected system uptime

After 12 months, this is what the study shows:

- When electricity tariffs were cut by **41%** over a year, energy use surged by **58%**
- Low-income customers, who made up **63%** of those in the study, benefited the most
- Despite lower tariffs, overall revenue didn't drop as much as expected due to increased usage

How can this be replicated at scale for more affordable electricity access? Click or scan the QR code to read the full report

CrossBoundary Group

Nneka Chime honored for Impact Investing at the Black Women in Asset Management Awards

Congratulations to CrossBoundary Advisory Partner & Co-Head of Africa Advisory Nneka Chime for winning an award for Impact Investing at the Black Women in Asset Management (BWAM) 40 under 40 Awards!

The BWAM 40 Under 40 Awards celebrate the outstanding accomplishments of 40 inspiring Black women under 40 in asset management. This recognition of Black excellence is a crucial step towards:

- Increasing the visibility of Black women in the industry
- Improving diversity in asset management

"I'm thrilled to be recognized for my work with the full spectrum of capital providers, assisting them in positively impacting livelihoods and lives across Africa and other emerging markets, harnessing the power of private investment and blended finance"

We congratulate Nneka and the other exceptional women shortlisted in the Impact Investing category.

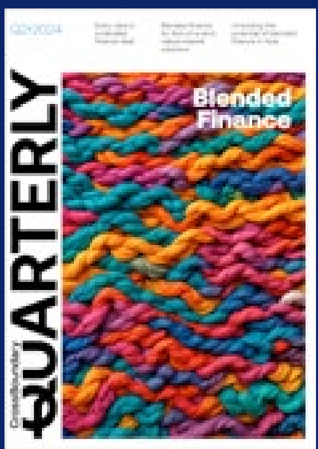
Our next *CrossBoundary Quarterly* will focus on the Electrification of Everything

In the next edition of the CrossBoundary Quarterly, we'll explore the "**Electrification of Everything**".

Decarbonization, decentralization, and digitization of the world's generation, transmission, distribution, and transportation networks open up enormous opportunities for businesses and countries to "leapfrog" legacy structures.

How is the "Electrification of Everything" impacting underserved markets?

From distributed renewable energy and hydropower to e-mobility solutions, we'll examine how the "Electrification of Everything" can unlock new pathways for growth, sustainability, and equity.

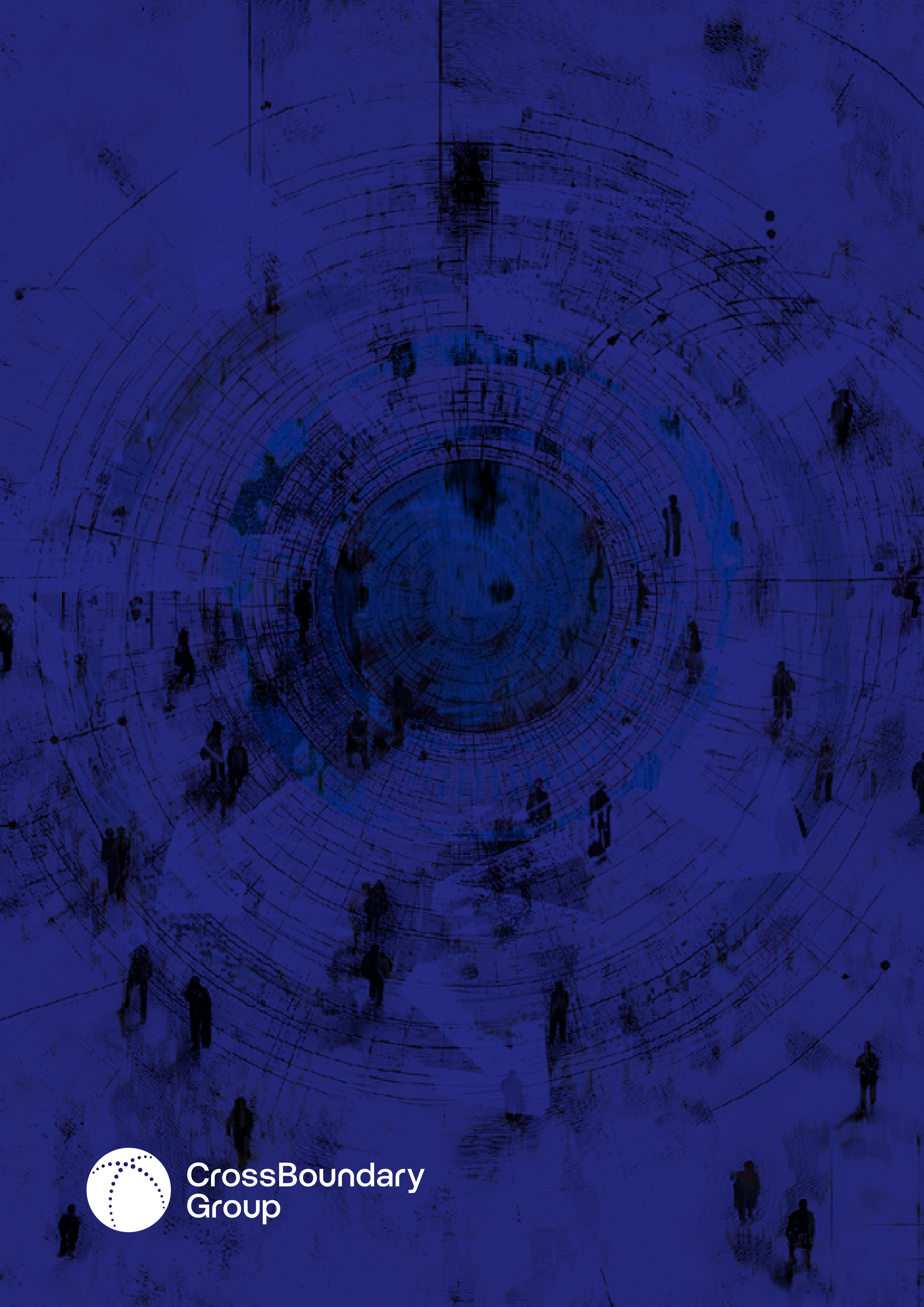


It's not too late!

Did you miss our issue on Blended Finance?

Blended finance is one of the core capabilities CrossBoundary employs to mobilize capital in underserved markets. In our perspective, all deals have externalities, and the majority of deals—even those considered "purely commercial"—use blended finance instruments. Read more of our perspectives on blended finance in our previous CrossBoundary Quarterly.

CrossBoundary Group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