Community

Opportunity

Re-imagine

Collective action

Futures

Uncertainty

Transformative change

Visioning fair transitions in African cities

UIII Fund

ICLEI
Local Governments for Sustainability
AFRICA

Contents

Cover photographs by Ayorinde Ogundele and Benjamin Kollenberg*

*These photos were sourced from the RISE Africa photo competitions. RISE Africa is convened by ICLEI Africa and Changing Cities.

RISE AFRICA   CHANGING CITIES

Photograph by Jide Ojediran*

Photograph by Ayorinde Ogundele*

Photograph by Ismail Odetola*

Photograph by Aliou Coulibaly*

© ALOUPY.PRO

Photograph by Benjamin Nsubuga*

Photograph by Jide Ojediran*

Photograph by Emmanuel Bekoe*

Photograph by Oghenetejiri Ovuema*

1 Why African cities are important for the future of the world

Africa's urban challenge is defined by a paradox of rapid growth and systemic constraints. The continent's cities are expanding at unprecedented rates, fuelled by in-migration and youthful populations, grappling with chronic infrastructure deficits and financial limitations, and primarily powered by economic activities of the informal sector (Haas et al., 2023). Over 60% of Africa's urban dwellers live in informal settlements characterised by limited and fragmented service delivery and infrastructure, and where climate risks and extremes, for example, floods, heatwaves, and droughts are magnified. Unlike other regions, Africa's urbanisation is occurring with limited industrialisation, leaving cities economically vulnerable and largely reliant on informal economies. Without urgent action, cities face entrenched inequality, climate-driven displacement, destruction of settlements and ecosystems, and unsustainable resource extraction.

An overshoot of the 1.5°C increase in global average temperature would compound and amplify these risks, resulting in major disruptions across the continent, which would overflow to other parts of the world (Rogelj et al., 2022).

Yet, the continent is also home to unmatched possibilities. Africa's urban spaces are hubs of ingenuity and adaptability, where informal systems fill gaps left by formal institutions in innovative, flexible and hybrid ways (Satterthwaite et al., 2020).

The continent's riches; renewable energy potential, arable land, critical minerals, cultural diversity and a young, entrepreneurial population position it to leapfrog outdated, extractive development models (Sokona et al., 2023). Fair transitions in African cities hold the potential to prioritise inclusive governance for equitable development, community-led innovation, and climate-resilient infrastructure. These features make Africa the continent of the future which, if harnessed, will be the driver of opportunities, innovation, and change. Localising economies and knowledge, making science and data accessible to decision-makers, and leveraging Africa's diverse knowledge systems, are imperative for designing context-specific solutions (Satterthwaite et al., 2020).

African cities are the frontline for change: their low infrastructural base allows for radical reinvention, while their informal ingenuity offers blueprints for resource-efficient living. The task ahead is to harness this creativity to build equitable, resilient futures, before climate overshoot and systemic gaps render the window of opportunity closed. Africa's urban challenge is a race between crisis and transformation, uncertainty and complexity, at a time in which the world looks set to breach the 1.5°C temperature threshold, which will fundamentally alter life on the continent and on earth (Rogelj et al, 2022; Resinder et al., 2025).

2 The need for a new toolbox

The imperative of futuring for fair transitions in African cities

African cities stand at a crossroads, facing unprecedented challenges but also unparalleled opportunities for reinvention. Traditional planning approaches, rooted in reactive, technocratic and incremental logic, are ill-equipped to respond to the scale and urgency of these challenges (Karuri-Sebina, 2020).

Crucially, this work is not about predicting the future but creating the foundations for preparation, equipping cities to thrive amid uncertainty and build the capacity to anticipate change and adapt with intention.

Visioning and futures thinking and processes offer transformative alternatives to find ways to move beyond current constraints, reimagine possibilities, and unlock systemic change (Pereira et al., 2019).

Future visioning exercises involve innovative participatory processes that facilitate the imagination and articulation of desirable medium- to long-term futures, where participants are encouraged to explore and co-create desired visions of the future that go beyond their current conceptions of the future, and help to explore the unknown. Future visioning helps to work with biases and preferences to reframe perspectives and unlock forward thinking, and foster shared thinking and innovation through participatory and creative exercises.

The power of visioning lies in its ability to leverage imagination as a strategic tool (UNESCO, 2023). By asking: "How do we think new things?" African cities can move beyond inherited constraints and disrupt path dependencies and colonial legacies that perpetuate inequality, social injustice and ecological harm (Karuri-Sebina & Kouakou, 2025). Futures thinking shifts the focus from crisis response to proactive design, to explore urban trajectories that prioritise justice, resilience, and innovation, and avoid reproducing or perpetuating inequitable and unsustainable development pathways.

Yet imagination alone is not enough. Inclusive action is essential: "How do we work in new ways?" means centring a diversity of voices including informal communities, youth, and marginalised voices in co-creating urban futures through participatory processes. The power of future visioning lies not only in envisioning *what* could be, but in how we could work differently to realise those possibilities. Africa's ingenuity, from informal economies to community-led climate adaptation, provides a living laboratory for scalable context specific solutions. But to scale these, cities must institutionalise new practices (e.g., participatory budgeting, open-data platforms) and build governance systems and enabling environments that support and reward experimentation and long-term learning and reflexivity.

The urgency is clear. Without futures literacy, African cities risk being trapped in cycles of maladaptation to overlapping crises and unsustainable development pathways (Karuri-Sebina, 2020). With it, they can turn constraints into catalysts for fair transitions and transformative change. The goal is not just to survive climate overshoot but to thrive: African cities shaped by their own visions and imperatives, lived experiences and aspirations, and their own knowledge systems, not imposed blueprints. By working with the future today, African cities can redefine urbanism and transformation on their own terms. For this, a new toolbox is needed.

3 Project aim

Creating pauses and spaces for transformative change in African cities

The *Visioning fair transitions in African cities* project, led by ICLEI Africa and supported by the UMI Fund, created a space and pause moment to step beyond day-to-day demands and constraints confronting African cities, and grapple with the continent's complex challenges: rapid urbanisation, climate risks (including a 1.5°C overshoot), and systemic inequality.

In January 2025, in Cape Town, South Africa, ICLEI Africa convened a diverse cohort of some of Africa's foremost urban thinkers and implementers. Through immersive methodologies they explored futures for African cities and co-developed actionable strategies to unlock fair transitions.

At its core, the project champions African agency by connecting a diverse set of change agents to build a movement that works towards African city futures shaped by the people who know them best, ushering in an era of prosperity, grounded in equity and sustainability. In so doing, the project aims to contribute to an emerging set of capabilities on the continent that enable African cities to move beyond crisis response to proactive future-building by leveraging collective wisdom, and to redefine urban development on African terms, and reposition African cities in the global landscape.

What follows is a description of this unique gathering, the process adhered to, and the material created by this group of leaders. We hope this can be a useful resource for African cities wanting to run their own futuring processes and become part of a growing community of practice endeavouring to bring about transformative change in African cities.

FIGURE 1: Visioning fair transitions in African cities, 29 - 30 January 2025

4 Visioning fair transitions in African cities

The immersive two-day process convened by ICLEI Africa and supported by the UMI Fund, combined a Futures Literacy Lab (UNESCO, 2023) and Three Horizons Framework (Sharpe et al., 2016) to collectively reimagine equitable and resilient futures for African cities.

Moving beyond conventional planning paradigms, the process examined current urban trajectories and their limitations before creatively envisioning transformative, fair alternatives that centre African values and realities. Through collaboratively creating images of the future, participants identified both systemic barriers and catalytic opportunities for transitioning from policy innovations to grassroots solutions while grounding long-term visions in practical pathways for change.

By blending imaginative exploration with strategic rigor, the process cultivated both the mindsets and actionable pathways and strategies needed to turn visionary ideas into transformative practice, ultimately fostering urban futures that are inclusive, sustainable, and authentically African in their design.

What follows is a description of the workshop process, activities and the material that was created. The intention is that this can act as a guide for African cities wanting to carry out similar processes.
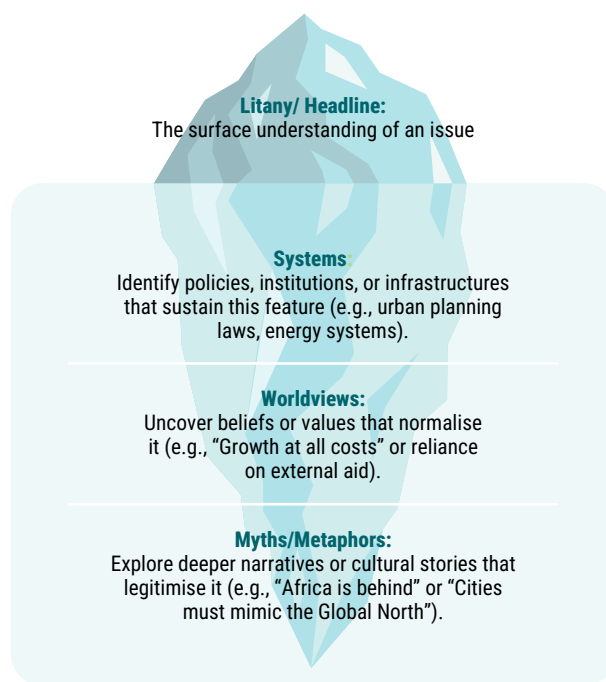
4.1. Working with aspirations and biases: Exploring probable and preferred futures

Probable futures

The process used a combination of plenary sessions and small group breakaways. This first phase of the process invited participants to divide into four groups of four to collaboratively explore probable futures for African cities, and consisted of the following steps (Karuri-Sebina & Kouakou, 2025):

1. **Imagine probable futures:** In small groups, each member selects three key elements they believe are likely to define an African city in 2050. These elements reflect current trends, challenges, or opportunities.
2. **Share and prioritise:** Members share their ideas within the group, then collectively choose one focal feature to analyse deeply. This feature becomes the lens through which the group examines systemic drivers of change through a causal layered analysis (CLA).
3. **Conduct a CLA on the selected theme:** Causal layered analysis is a research theory and method that is used to break down a specific problem of some kind into different levels of reality (Inayatullah, 1998; UNESCO, 2023). A CLA consists of the following four levels:

Litany/ Headline:
The surface understanding of an issue

Systems:
Identify policies, institutions, or infrastructures that sustain this feature (e.g., urban planning laws, energy systems).

Worldviews:
Uncover beliefs or values that normalise it (e.g., "Growth at all costs" or reliance on external aid).

Myths/Metaphors:
Explore deeper narratives or cultural stories that legitimise it (e.g., "Africa is behind" or "Cities must mimic the Global North").

(Inayatullah, 1998)

The following table captures the probable futures explored by the groups using CLA, along with some of the insights associated with each level:

TABLE 1: Breaking down three "probable futures" using causal layered analysis

Headline	Worsening inequality	Informality is the most significant form of urbanism	African cities have full de-gridding of electricity
Systems	• Populism • Capitalism benefiting the rich • Increasing climate-related shocks and impacts • Technology transfer barriers • Poor implementation of policy, plans, laws	• Lack of formal housing leads people to try provide for themselves • Climate and economic displacement of people to urban centres • Community-driven agency • Lack of political vision for inclusion • Limited funding for public infrastructure • Colonial legacies	• Removal of subsidies for fossil fuels • Low cost of solar (with tech imports from China) • Systemic failure of grid system and no regulation • Widespread informality in the electricity sector
Worldviews	• Exploitation of African resources • Perceptions of Africa as backwards, needy, lazy • Success for African cities modeled after success in the developed world • Indigenous and local knowledge is inferior	• Indirect control of Global North through controlling the flow of finance • Tech savourism • The world does not want a strong Africa • Minerals are available to exploit	• Continued nationalism • Business as usual in development finance • Decreased reliance on national government, increased community action
Myths & Metaphors	• We are not all created equal • Individualism and blaming the poor for their own poverty • Normalised exploitation and poverty	• Africa is a country • Africa is dangerous and risky • Africa does not have excellence • Africa needs capacity building and technological assistance	• Necessity is the mother of invention • Power to the people

Preferred futures

The next step was for the participants to engage with their preferred futures. This exercise guided participants in co-creating an aspirational vision for African cities in 2050, and consisted of the following steps (Karuri-Sebina & Kouakou, 2025):

1. Imagine your ideal future:
Each participant reflects on and selects three key elements they hope to see defining African cities by 2050.

2. Share and align:
In small groups, members share their visions and collectively choose one shared priority to explore in depth. This becomes the group's focal point for designing change.

3. Causal Layered Analysis for action:
Using the same CLA approach as with probable futures, the group examines:

Headline:
As a group, decide on the selected headline to explore through a CLA.

Systems:
What policies, infrastructures, or institutions would need to exist to support this vision?

Worldviews:
What values or beliefs would drive this future (e.g. collective well-being over individualism)?

Myths/Metaphors:
What empowering narratives could replace limiting ones (e.g. "African ingenuity" over "dependency")?

The headlines associated with the preferred futures developed by each group and explored through a CLA is represented by the table on the next page.

Why this matters for African cities

The exercise of creating probable and preferred futures demonstrated to the groups the inherent assumptions, biases, and preferences that they hold about the future. As individuals we are often unaware of our underlying assumptions, and yet they influence everything we do. The process illustrated to everyone in the room how these assumptions, biases, and preferences were different for each individual, depending on where they come from, their lived experiences, professional backgrounds and many other factors. This created a basis for rich discussion and also demonstrated how multi-faceted bringing about change is.

Collectively conducting a CLA also helped to reveal how surface-level issues are rooted in systemic structures, cultural norms, and unspoken narratives. By mapping these layers, participants can:

- Design interventions that address root causes, not just symptoms, and do so in ways that cut across the different levels and cultivate integrated approaches.

- Identify leverage points where small shifts could catalyse large-scale change (e.g. challenging myths of "underdevelopment").

- Tailor interventions according to the level at which change is sought.

- Align actions with the timeframes needed for lasting impact (e.g. short-term policy reforms vs. long-term cultural shifts).

These images of the future then provided the material with which the groups would work with in the subsequent stages of the process.

TABLE 2: Breaking down three "preferred futures" using causal layered analysis

Headline	Equitable access to opportunities and services	Green cities, planned well, to be urban cool islands	Happy and safe Africans who have access to the continent and the world
Systems	• Good governance • Educated and empowered citizens and authorities • Open-source technologies and data • Low-carbon transformative technologies • Reformed financial architecture	• Breakthroughs in blended infrastructure • Massively increased investments in climate change adaptation from public sector globally • Increased access to finance at subnational level and for nature-based solutions	• World has limited overshoot to 1.7 degrees Celcius and has returned to 1.5. • Diaspora remittance and investment • Basic needs and services are met • Visa-free travel • African trade corridors established • Well-planned cities (by government and communities)
Worldviews	• The collective is more important than the individual	• Quality of life prioritised • Acceptance of historical responsibility for climate change, and polluter pays principle	• Proudly African • Transparency is recognised as valuable • We must invest in ourselves • United stance against neocolonialism
Myths & Metaphors	• Ubuntu: I am because you are • You walk fast alone, you walk further together • Leave no-one behind	• The lives of people far away are as important as those nearby	• Africans are excellent • The world depends on Africa

4.2. Moving into the unfamiliar through reframed futures

The step of creating reframed scenarios gave the opportunity for participants to work with the future in an unfamiliar way, neither probable nor preferred, but allowing a different type of future to emerge (UNESCO, 2023). To achieve this, groups were given an overarching condition to work with, as well as an additional feature that defined only their group's future, as below (Karuri-Sebina & Kouakou, 2025):

• **Overarching condition:** The Slow Death of the Paris Agreement. The US withdrawal from the Paris Agreement in 2025 fractured global climate unity. Slowly, many nations became sceptical of committing to their climate obligation and renege. The effect of the Trump 2.0 Executive Order wildcard becomes manifest.
• **Additional features (one per group):**
   ▢ Murmuration: A heterarchical, learning-intensive society

• In 2050, there are no nation states
• "Blurred lines" – Human-AI integration eminent by 2050

Participants were given the opportunity to work with different materials to build this unfamiliar future. The process started individually and then the group brought together their individual creations to develop a group image of the future and supporting story.

This process allowed participants to move from a head space into a making space through different materials. It allowed participants to feel their way into this unfamiliar future, to represent through different materials the features of this future, and to come together collectively to make sense of the meaning and story of the future they have constructed, prominent features and their underlying origins. This brought insights to the surface that likely would not have been revealed had participants been asked directly to describe their features of an unfamiliar future.

Part of the power of the process was indirectly getting at the question: "How do we uncover what we don't yet know, individually and collectively?" and providing a different set of materials to navigate this exploration, rather than simply our cognitive faculties, which are typically relied on.

After each small groups' reframed future had been visited by the wider whole group, and interrogated with questions and reflections, the group came back into plenary to make sense of the process they had journeyed on, its significance, and implications. A summary of the questions to structure this reflective session are provided below.

Back to the present

Return to 2025, and ask: "What's changed? What seems important?"

Participants revisit the images of the future from Phases 1a&b and 2 to assess the implications for perception in the present.

Question:
- What feels desirable or important as we think about the future of fair transitions in African cities in 2050?
- What is feasible?
- What really matters?
- What might emerge, unintended?

Next steps

Identifying new ideas: New images of the future Question:

1. What insights emerge, or what shifts for you? What would you now do or do differently? How can the capabilities learned in the laboratory be used in the everyday environment of participants?

2. What are emerging as shared images or characteristics of the future [expressed in 3 or 4 statements]? (different sets per group which will be taken into next day's work)

4.3. Moving from ideation to action through the Three Horizons Framework

Day 2 started with a reflection of the ground that had been covered in Day 1, and how this would be worked with in Day 2 – beginning with the Three Horizons Framework. This framework uses three lines across a timeline to represent patterns of how things are done and how these patterns evolve over time. As seen in Figure 4 below, the first horizon (H1) represents the decline in status quo and dominant features of the present. The third horizon (H3) represents the growth of a new order, as new ways of doing things increase as we move further into the future (before stabilising as the new status quo). The second horizon (H2) charts the increase and decline of interventions and innovations that bridge the gap between the present and the future which we want to reach (Sharpe et al., 2016; Pereira et al., 2019).

The Three Horizons Framework allowed participants to take their images of the future from Day 1 and start to work with them in a structured way, breaking them down into their constituent parts, and working with them to understand what might be required to bring about the futures they have created. It did so by posing a set of questions for exploration, as indicated in the questions and figure below, the sequence of which provided the steps for the four small groups to conduct their own three horizons exercise (Karuri-Sebina & Kouakou, 2025).

1. **H3: What does the future look like?** Based on the images of the future from Day 1, participants were asked to identify the different elements of this created future.
2. **H1: Where are we now?** Participants were asked to identify dominant features that currently shape the present.
3. **H1: What do you want to preserve?** From the dominant features of the present, participants were asked to identify those, or elements of those that they would to preserve in the future
4. **H3: What is already happening?** Participants were asked to identify seeds of the future that are present today, but would need to grow to become dominant features of the hoped-for future.
5. **H2: What needs to change?** The final step honed in on leverage and actionable intervention points. Participants were asked to identify actions that could bring about change.

FIGURE 2: A model of a reframed future created by one of the groups in the workshop

FIGURE 3: A model of a reframed future created by a second group in the workshop

PRESENT | TRANSITION | FUTURE

2

1 Present conditions

1st horizon

2nd horizon

3 What needs to change?

5

2 Future conditions

3rd horizon

2nd horizon

1

4 What is already happening?

3rd horizon

5 What essential features need to be kept?

1st horizon

DOMINANCE

4

3

TIME
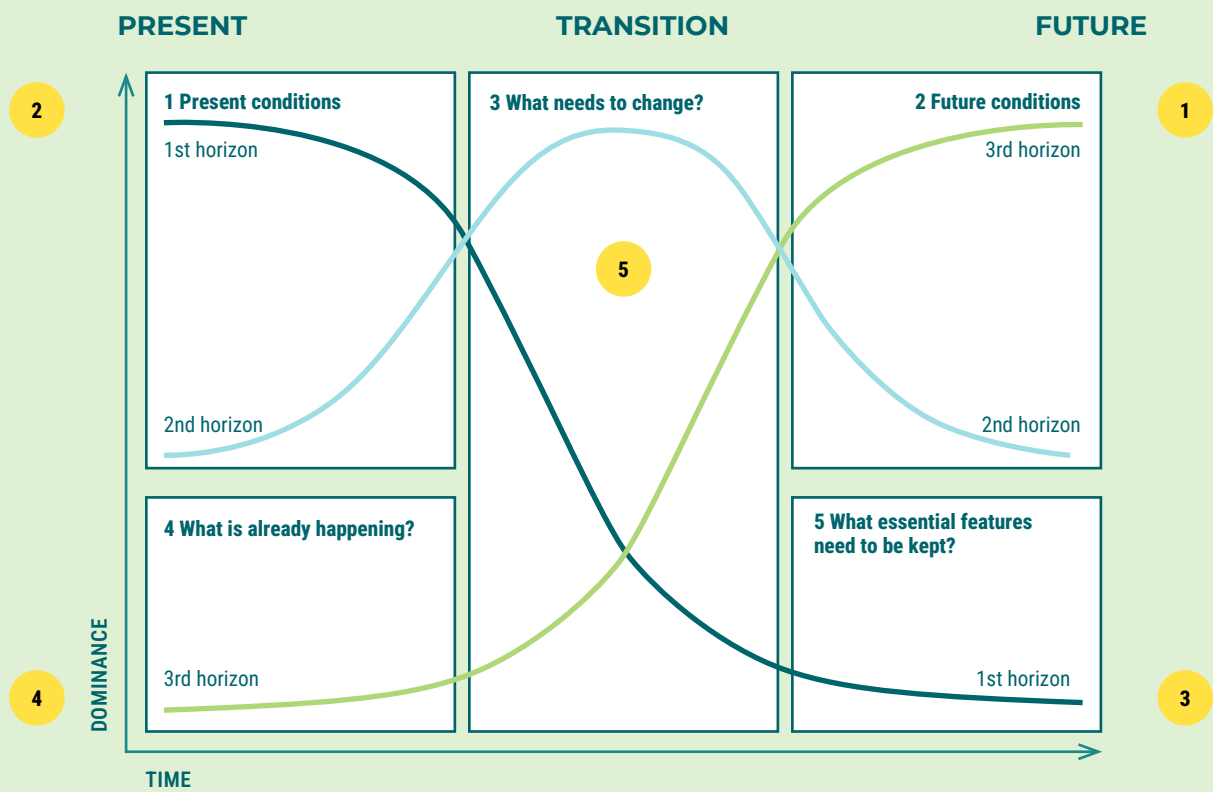
FIGURE 4: An instructional diagram of the Three Horizons Framework (Karuri-Sebina & Kouakou, 2025; Sharpe et al., 2016; Pereira et al., 2019)
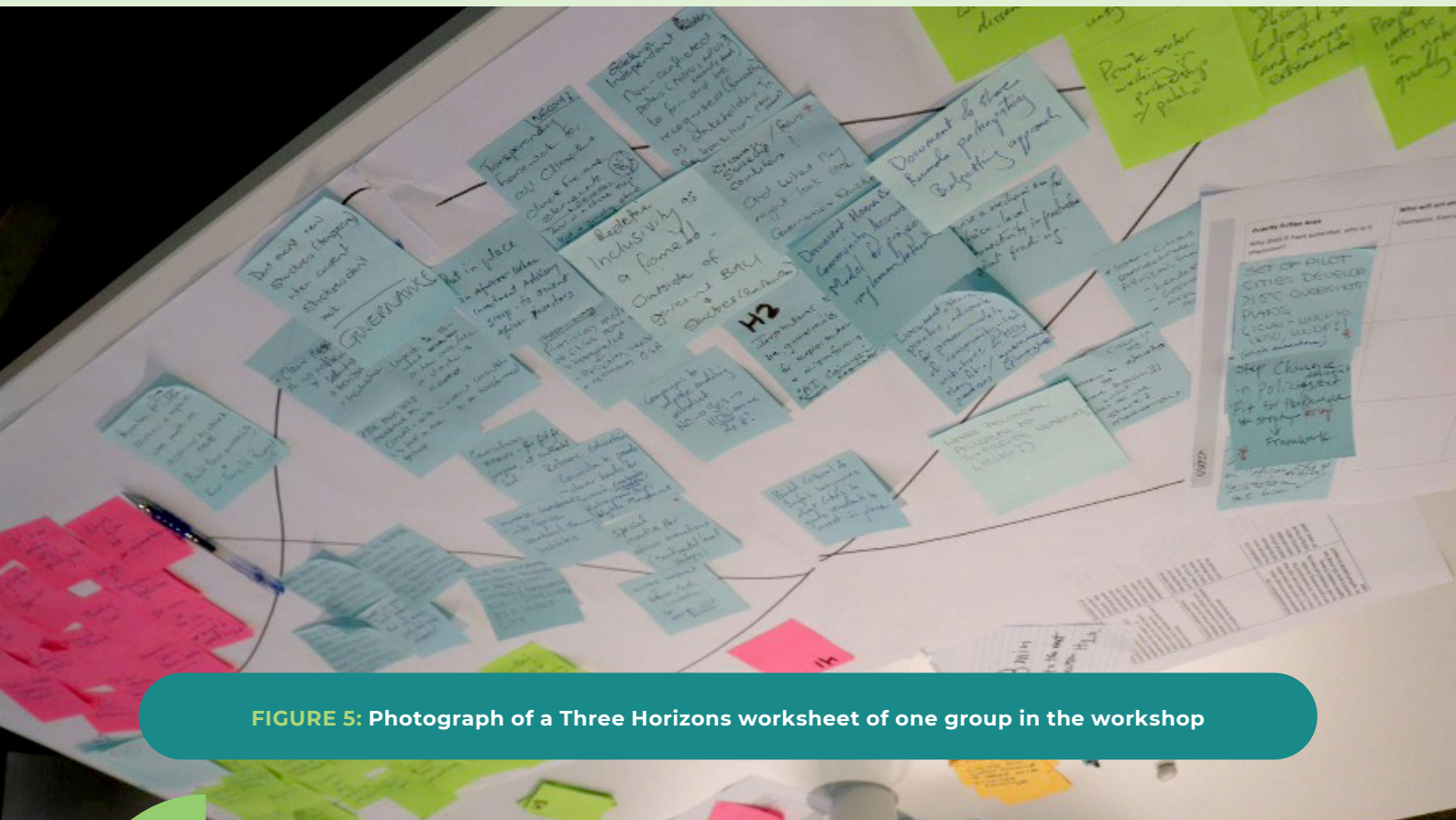
FIGURE 5: Photograph of a Three Horizons worksheet of one group in the workshop

Populating a detailed Three Horizons Framework gave participants an opportunity to document the features of the present, future, and transition that they identified as important, which when populated in the structure as shown above, offered a guide for how they could bring about change and what this might look like. A synthesis of the Three Horizons populated by all groups is provided in the table below:

**TABLE 3: Features of the present, transition, and future with the Three Horizons Framework**

PRESENT	TRANSITION	FUTURE
Horizon One: **Where are we now?**	**Horizon Two:** **What are leverage and intervention points?**	**Horizon Three:** **What does the future look like?**
• Infrastructure, particularly public infrastructure, is limited, defunct, poorly maintained, fragmented, and unequally available or accessible – e.g. energy, water, sanitation, waste management, transport, and human settlements. • Environmental degradation, e.g. poor air quality. • Employment and opportunities are too sparse and not of high quality. • African countries are fragmented. • Crime is flourishing. • Much food is poor quality & highly processed. • Education and knowledge: too few educators; curricula not fit for purpose; indigenous knowledge is undervalued. • Class divisions are deep: rich versus poor. • We address symptoms of problems instead of the root causes. • Poor implementation of policies and laws. • Local communities are excluded from decision making, public participation is tokenistic. • Certain critical sectors are carbon-intensive, and others are climate-sensitive. • High and growing levels of urban informality. • Economic system based on growth without constraints. • High fossil fuel dependence and vested interests. • Poor integration of climate consideration into urban planning.	• Determine how local biodiversity will be impacted by temperature overshoot. • Increase citizen science in African cities. • Increase investment in science, technology and innovation to over 5% of GDP. • Special incentives for African innovations (continental level strategy) and promotion of policies that stimulate innovation (especially green innovation). • Increase investment into capable vocational training institutions. • Review curricula to be fit for purpose. • Document, share, practice and advocate for proven models of community-led initiatives and how they fit with government processes. • Institutions to be guardrails for exploitation and misinformation. • Put in place an urban investment advisory group to orient African investors. • Build cultural and joyful imaginaries about cities to guide residents to invest in place. • Compile local data on anticipated loss and damage from climate overshoot. • Access to finance for MSMEs. • Mapping of informal systems and their benefits and incentives. • Integration of climate change data and considerations in the design of infrastructure and urban plans. • Dedicated programmes and funding for building municipal capabilities.	• Private and public sectors working in partnership together. • People can immerse themselves in nature quickly and easily. • Smart governance that increases access to government services and participation in decision-making. • Good access to basic needs including quality and affordable food, clean water & air, renewable energy, shelter, and sanitation. Internet access is also widespread. • Education systems are responsive to emerging needs and challenges and is equipping people with flexibility and adaptability. • Government transparency. • Integrated resource cycling. • People can navigate different narratives and identify false information. • Active civic governance accommodates and welcomes dissent. • Integrated planning, transport and mobility systems mean that people can access all parts of cities. • The built environment accommodates extreme heat through passive design. • Access to dignified and safe livelihoods. • Equitable access to opportunities and services. • Participatory and evidence-based decision making.
Horizon Three: **What seeds of the future already exist?**		**Horizon One:** **What do we want to preserve?**
• Food systems concept and urban-rural linkages for food planning. • Existing coalitions for driving change. • Technological solutions for inclusive finance, e.g. mobile money. • African drive to tax the rich globally. • Regenerative agricultural practices. • Debates on decolonisation. • Making climate data accessible to and at the city level, particularly for secondary cities.		• Cities showing leadership in regional and global agendas. • Attention being given to equitable and innovative finance in line with the fair transitions. • Attention to co-existence with nature. • Ingenuity and innovation of the informal sector (especially speed of response and tailoring responses to real limitations).
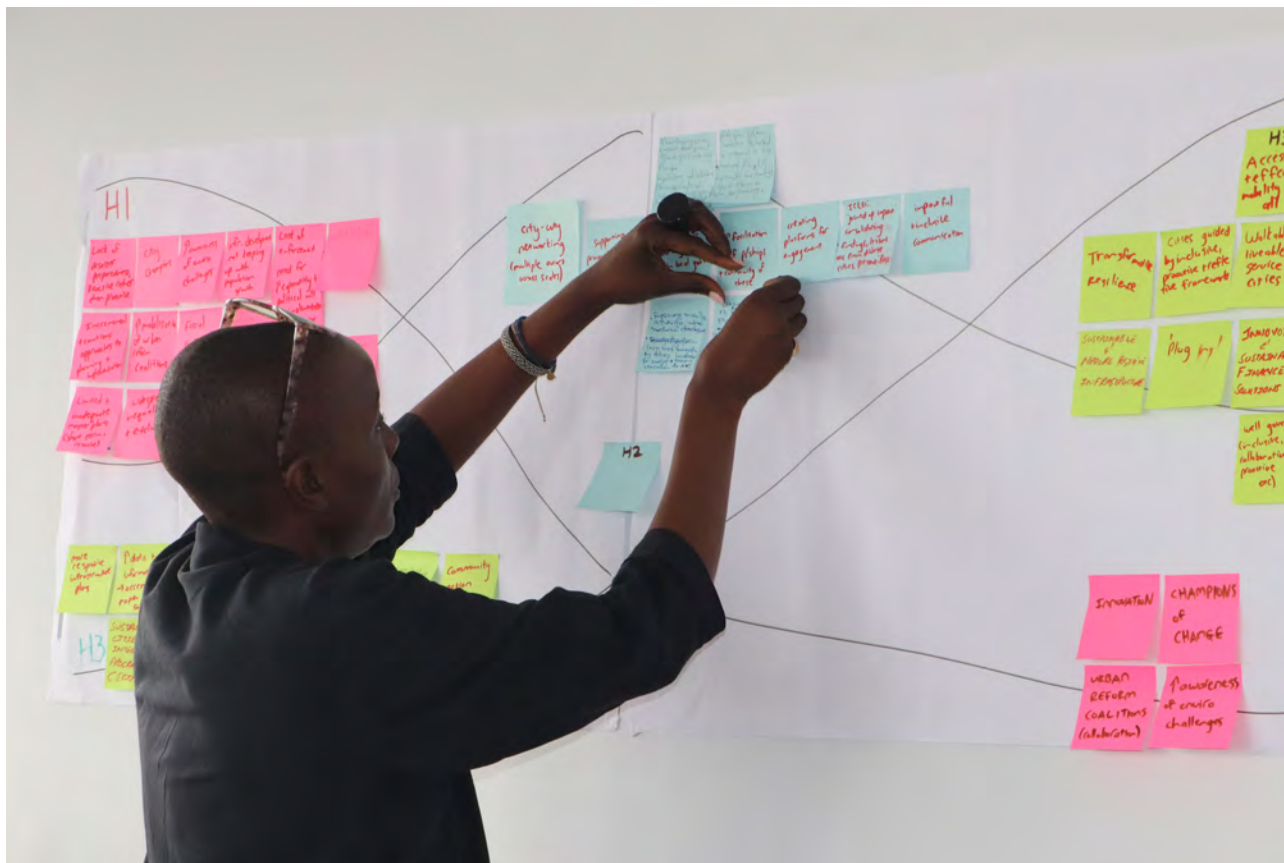
4.4. Uncovering actionable interventions and ways forward

The final step of using the Three Horizons Framework was to focus on Horizon 2 to identify leverage points, or actionable interventions for bringing about change.

The core value of working with Horizon 2 was that it enabled participants to identify concrete actions to enact the transition they were aiming for to move from Horizon 1 to Horizon 3. This allowed participants to hone in on the roles they could play, or to identify interventions in their spheres of influence, bringing to the surface important conversations about potential roles and responsibilities.

Based on the interventions identified from Horizon 2, groups were asked to pick three priority actions, and to deepen the conversation about how to implement these.

This included identifying (Karuri-Sebina & Kouakou, 2025):

- why the action was important,
- who would need to act on it,
- how they would act on it, and
- timeframes for implementation.

A summary of this Horizon 2 exercise as carried out by one of the groups is represented by the table on the next page.

This process culminated in a final plenary discussion to consolidate reflections and learning from the two-day process. It was a chance to collectively identify stand-out reflections, unanswered questions, priority concrete actions, and thinking through how to take this work forward together to bring about action in the context of the participants and beyond.

What follows is a summary of key themes, participant reflections, and insights on what's next to continue the work this process has started.

TABLE 4: Developing actionable interventions through Horizon 2

Priority action area	Who will act on it?	How?	When?
Set of pilot cities develop 1.5°C overshoot plans (HEADLINE)	ICLEI Africa & UNEP to lead; UNEP, UNDP, UNHabitat, ICLEI Africa, local government associations to campaign, promote, execute. CSAG & Wits to downscale models. Makerere, KNUST, [...] to [...]. African Association of Planners – spatial. AQINILE partnerships. Africa Union (Urban Resilience Unit) as potential anchor partner	1. UNEPCities position as champion to lead, convene and get plan together – funding with GEF9? 2. Draw coalition of partners and identify pilot cities. 3. Find politically palatable name/framing for this type of strategy. 4. Anchor funding for 2-year pilot (to keep urgent). 5. Replicate and get next cohort and 10-year funding.	1. Feb 2025 2. July 2025 3. Oct 2025 4. Feb 2026 to Feb 2028 (political moment with launch of IPCC Cities report). 5. 2028 – 2038
Step change in policy and strategy development: Fit for purpose strategy (framework) for implementation (SYSTEM)	National and local policy designers. African Union AQINILE Branding agencies	1. [...] develop a guide for what "fit for purpose" means, applicable across sectors. Build a campaign targeted at national governments and ensure they take on its slogans and principles. (AU and partners.) 2. Draw commitments to STEP CHANGE Principles. 3. National and local governments commence processes of replacing policies (Review/ rip up and start again/ evolve and adapt).	1. 2025 – 2026 2. 2026 – 2027+ 3. 2027 onwards
Massive continental-level campaign/ coalition/ movement on "African Cities of the Future" – co-created and youth-driven (WORLDVIEW)	RISE Africa African Union	1. Multilevel, multi-stakeholder campaign with debates, events, competitions that invite inputs/ ideas and that use digital tech to attract youth attention. 2. Build MOUs/ agreements about what each organisation contributes and/ or takes forward. 3. Offer brokering support to connect organisations.	2025+
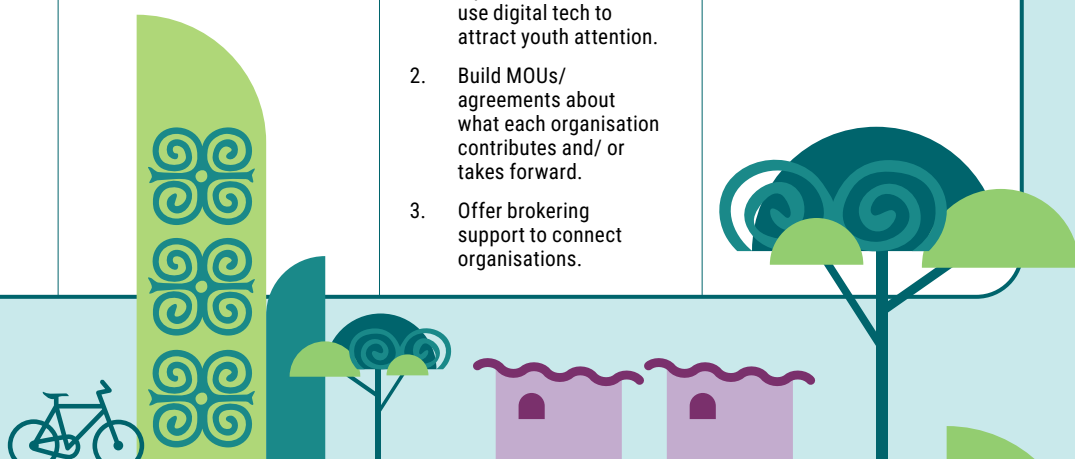
5 Priority themes for African cities navigating change amid 1.5°C overshoot

I t became clear through this process that the 1.5°C overshoot is not a distant risk, it is a near-term reality with long-term consequences that threaten to destabilise and undermine urban systems, livelihoods, and development pathways. The implications of this for African cities are profound. Yet within this crisis lie significant opportunity: the imperative to reimagine and reshape African urban futures in ways that are just, resilient, and locally embedded.

This future-visioning process identified both barriers that hinder transformation, and the forces and emerging seeds that have the potential to drive positive change. These were broadly divided into **threats** that are rapidly undermining traditional development pathways, and **drivers of change** that, if leveraged proactively and strategically, have the potential to create solid foundations for fair transitions and thriving urban futures.

basis, with no recognition of the imperative to stay within the safe operating boundaries of the planet, and instead were premised on over-extraction and exploitation of the earth's resources. This logic, for the most part, persists in today's financial, economic and trade systems, where many critical sectors to this model are still emissions intensive, and there is a high reliance on climate-sensitive sectors such as agriculture. However, these taken-for-granted options are becoming rapidly unfeasible, and new forms of development that are designed according to the limits of the natural planetary system, and prepare for impacts of overshoot, will have to take hold. What's more, with the 1.5°C overshoot, climate impacts will fundamentally disrupt African cities (and all cities), in the way they provide goods, services and livelihoods to their populations.

A concrete idea that emerged from the process was the need for African cities to develop long-term plans that help to proactively prepare for the impacts of a 1.5°C overshoot, and the need for a group of African cities to pilot these and share their learning with others on the continent.

5.1. Threat #1: The breakdown of the climate system is narrowing our set of options

A defining feature of the current development era is the breakdown of the climate system, rendering options for driving development and progress that are taken for granted or assumed to exist, to rapidly disappear. This trend will only accelerate and amplify in the future, with the almost certain overshoot of 1.5°C. The developmental models, as well as economic and trade systems established during the industrial revolution, were based on a growth without constraints

5.2. Threat #2:
The breakdown of multilateralism is a threat to climate justice for Africa

In a decade in which ambitious multilateral collaboration is a necessity for bringing about the scale and speed of change required, there is a growing concern from African states and cities that the current strain on multilateralism is a major threat to climate justice for African countries.

> **Withdrawals from the Paris Agreement, cuts in official development assistance (ODA), failure of developed countries to meet their international climate finance commitments, and an increasingly nationalist and insular direction of global geopolitics, undermines the prospects of fair transitions to equitable, climate-resilient, and low-carbon futures in Africa cities.**

In the current global order, African cities are facing growing isolation from financial and political systems. Here, a repositioning of the African continent is essential, to recognise African excellence, and unlock Africa's potential to be a major player in an emerging, new world order. Africa is home to many of the natural resources and minerals essential for the energy and other transitions, as well as a youthful population that represents a vital workforce for the future, given the aging populations of western Europe and other parts of the developed world. Essential to this repositioning will be the promotion of African continental cooperation and trade, the establishment of value chains for the export of products and services to other parts of the world, and the positioning of Africa as a leading region in the global value chains of the future. These features make Africa the home of unique opportunities for the future.

5.3. Threat #3:
There are persistent barriers to African cities accessing finance

A major concern identified through this process was the barriers that continue to prevent African cities from accessing the quantity and quality of finance they require to bring about fair transitions. High costs and limited availability, lack of direct access to finance, the overall global financial architecture, and the slowness to change to cater for the needs of African cities, are some of the challenges that participants emphasised. An important reflection was that without adequate, direct, inclusive and affordable financing, the ability of African cities to implement the transformative actions needed to respond to the overshoot and pressing developmental challenges will be significantly undermined.

> **An even more sobering reality is that the cost of inaction far outweighs the costs of action, and the longer finance takes to reach African cities, the more these costs grow.**

Through visioning processes, it is critical to not only anticipate what the future might bring in terms of threats and drivers of change, but to actively ask and contemplate: "What future(s) do we want to create, and how can we begin building it today?". As identified through the 'threats' outlined above, this exercise entailed engaging with hard truths about planetary limits, multilateral failures, and financial exclusion. In contrast, as outlined through the drivers of change below, it is also about harnessing the potential and power of informality, technology, and social capital and innovation. The drivers of change identified reflect powerful, often underleveraged assets and dynamics that can shape and support alternative, desirable futures, and set Africa apart from many other regions of the world.

5.4. Driver of change #1: Informality brings ingenuity and resourcefulness

Informality was identified as one of the most important drivers of progress in African cities, yet it is given little support. In many ways the informal sector in African cities offers a model or solutions for African versions of smart cities that are local, resilient, adaptive, resource-efficient and innovative. This stands in stark contrast to the technology-centric, resource-intensive nature of smart cities that are championed in other parts of the world. Given the current era where several planetary boundaries are in overshoot, solutions of the future will need to be designed according to the limits within which we need to operate.

Part of the discussion on informality highlighted the critical role of informal governance systems, and the interplay with formal governance systems in shaping the future of African cities.

> Informal governance systems—characterised by flexibility and embedded local knowledge—offer considerable potential for innovation and adaptability, while complementing and strengthening formal governance structures.

These systems are emerging as significant drivers of resilience, often helping to address gaps created through overstretched, underfinanced or underperforming formal institutions. While some governments are increasingly recognising the critical roles of informality, it is often still marginalised, leading to tensions and mistrust within hybrid governance arrangements. However, traditional governance structures can be significantly strengthened by informal systems that provide grounded insights, adaptability, innovation and development solutions that are often resource-efficient and contextually appropriate. In the context of overshoot and mounting development pressures, embracing and scaling such informal systems is critical.

Part of the work to harness the power of the informal sector is to better understand their data flows and networks, including mapping informal ecosystems, their benefits, systems and incentives. Importantly, the conditions to support a thriving informal sector are imperative, such as supporting systems of governance, access to land, finance and technology.

5.5. Driver of change #2: Data, knowledge systems, technology and AI

It is widely accepted that data, technology and AI will play a key role in shaping the future of African cities (Wamuyu, 2021; West, 2023). Some examples shared included contributing to urban climate resilience through community-based early warning systems via WhatsApp, technology to assist with collecting local data, and the local ownership of this data, and ensuring open-source data and technology, so the benefits are widely accessible.

Despite their essential role and potential, this process highlighted that there is growing concern that data, technology and AI could contribute to widening the gap between the rich and poor, due to lack of access to data, high costs, and a lack of open-source technology. Given the speed at which these technologies are being developed and where they are being developed (overwhelmingly not on the African continent), there is a pressing need to intervene with their development so that their benefits reach all corners of the world in an inclusive manner. (Leal Filho et al., 2022)

> Addressing the cost barriers, blindspots and biases in design, and ensuring the necessary skills development in African cities, will be essential in ensuring just and equitable design and impacts of these technologies.

Alongside the critical role of data, technology, and AI, this visioning process strongly emphasised Africa's highly diverse, and rich knowledge systems as being foundational to African innovation and solutions. Deeply rooted in communal problem-solving, place-based learning, and indigenous practices and traditions, these diverse knowledge systems offer invaluable insights for designing socially inclusive and context-relevant solutions for facilitating local fair transitions.

The integration of diverse knowledge systems, for example, incorporating science (natural and social) and indigenous knowledge, can support the development of more effective emerging technologies in African cities, particularly when codesigned with communities who have deep-rooted understanding of their local environments and lived realities.

Further critical aspects discussed include engaging with diverse societal actors to jointly frame research questions, to co-produce data and to analyse and find solutions to societal challenges. Embracing Africa's rich cultural diversity ensures inclusion of diverse perspectives in shaping urban futures. Ensuring inclusive and participatory design processes and incorporation of diverse knowledge systems in developing AI and technology was also highlighted as critical for ensuring communities retain ownership over their data and processes, and to co-create AI systems informed by their needs.

5.6. Driver of change #3: Capabilities, a community of practice, and intermediaries

African cities are characterised by a wealth of creativity and skills, as well as emergent communities of practice for supporting fair transitions and resilience building (ACRC, 2025). However, there is a recognition that the skills, capabilities and capacities required to vision and realise fair transitions for African cities are currently inadequate.

Furthermore, existing municipal structures, KPIs and incentives are not fit for purpose for preparing for 1.5°C overshoot and enacting long-term transitions. Key aspects emphasised include the need to institutionalise and professionalise the civil service for climate response and preparedness, a programme for building municipal capacities and capabilities for 1.5°C fair transition plans, capabilities for visioning and futures thinking, and capabilities for partnering, particularly with investors to crowd in new forms of finance.

Establishing an inclusive and dynamic community of practice is crucial for facilitating learning across African cities and building a critical mass to drive change across the continent. This collective effort can help cities escape path-dependent trajectories and open up pathways to radically different and more just urban futures.

The pivotal role of intermediaries and knowledge brokers for supporting communities of practice was strongly emphasised throughout the process.

> **Through connecting diverse actors and networks, and bridging knowledge, policy and practice, intermediaries play a pivotal role in facilitating knowledge sharing across diverse domains, scaling innovations, and supporting the co-creation of inclusive solutions—all critical elements of supporting fair transitions in African cities.**

It was also noted that intermediaries are essential for creating spaces for learning, fostering trust, and promoting collaborative innovation that can help strengthen communities of practice. Additionally, the roles of intermediaries in mobilising finance and connecting community needs in the development and implementation of projects were identified as essential for driving implementation.

5.7. Driver of change #4: Fit-for-purpose governance

As the breakdown in governance presents a major threat, so too is it a potential driver for change. There is a pressing need in Africa and around the world for establishing systems of governance that can shape and deliver fair transitions.

> This requires anticipatory and adaptive governance that can rapidly address the drivers of the climate system breakdown and its impacts, at scale. This governance also needs to repair multilateralism and harness the power of informal systems. Finally, it needs to guide the technology and AI revolution in ways that both represent and cater for the needs of African cities.

So too is there a need for a step change in policy, to move away from incremental policies that are unimplementable, to multi-level governance approaches and policies that unlock ambitious implementation at scale and speed.

The threats and drivers of change identified through this visioning process are not comprehensive or representative of a linear path forward, but rather they highlight key features of an urgent call to action: to recognise the rapidly changing contexts African cities must navigate, to distinguish between constraining and empowering forces, and to enhance collective and united capacities to vision, re-envision, innovate, dismantle and transform in the context of multiple interacting crises.

By engaging with the future now, under conditions of uncertainty and disruption, African cities can develop new and inclusive pathways for urbanism.

FIGURE 6: Participants listening to the description of the Three Horizons worksheet developed by one group

6 What have we learnt from this space and process?

Reflections from journeying together

Following the completion of this visioning process, participants were asked to share some of their stand-out reflections from the process. Four overarching takeaways are distilled below.

6.1. Multilevel action is urgent and complex

Given the embodied nature of participating in this visioning process, what was in a sense an experience of world-building, or building the world anew together, participants highlighted how it cultivated a visceral sense of the urgency of action, having inhabited those future worlds. As emphasised by one participant: *"We have to have plans [so that] we can prepare ourselves, and those should be drastic plans, if we are to make a difference."*

At the same time, what was eye-opening for some, was how deep-rooted problems can be, and how the best solutions may not be visible at first glance due to this complexity. Participants highlighted how the process demonstrated the need to peel back the layers to understand the features that entrench business as usual, and the need to tailor interventions at the headline, systems, worldview, and myth and metaphor level, to bring about transformative change.

6.2. Futuring and visioning for African cities is valuable and relevant

For many participants, futuring and visioning started off as unfamiliar concepts, not something that is engaged with often, given the immediate, everyday demands of their respective workplaces. Participants highlighted that participating in the process and engaging with these methodologies presented new ways in which to think about the challenges of, and solutions for African cities' fair transitions.

The tools and exercises used in the workshop helped participants to imagine and visualise possibilities that would otherwise not have been thought of, particularly by gently pointing out and challenging

the limitations of our own perspectives and our standard and normative ways of thinking. A similar highlight for some participants was having their self-beliefs about their perceived lack of imaginative and creative abilities challenged.

Venturing into the unknown through imagination creates the space for new thoughts and ideas, which otherwise can be difficult to bring to the surface. This space enables more "broad" thinking – new, different, and deeper. As captured by one participant: *"The best ways to address [deep-rooted issues] may not be visible at first glance"*, but imagination can help to uncover as-yet-unknown or unseen solutions. Furthermore, these structured and creative ways of engaging with the future can help to break the deadlock of the status quo, by uncovering previously unthought ways of approaching a problem. There was a strong sentiment amongst participants that the work of building sustainable African cities has to be future-oriented, but also has to decouple itself from the limitations of what reality looks like now. Thus, we need more processes that allow us to imagine what African cities could look like, so that we can start to create strategies to overcome the forces that are locking us into the present.

Importantly, using our imaginations with futuring and visioning methodologies can be used to create tangible and workable ideas and actions – not just images of the future, but ways of getting there as well. It was encouraging to hear participants express their immediate desire to host a similar workshop in their home cities, to share the knowledge gained, and ensure that other practitioners and decision-makers also have the capabilities to envision just futures. This was identified as a next frontier for this work, to take it into the specific, real-world contexts of the cities and workplaces of the participants, and experiment with how to bring about change through applying similar processes and methodologies, and embedding them in a specific institutional context.

6.3. Growing seeds of the future and dismantling present features is needed for change

"Another takeaway was how some pockets of the future that we envision are already embedded in the present, and how they must be nurtured, explored and developed to realise this future that we envision." This articulation by one participant highlighted something that may already be known, that a wealth of innovation is already taking place across cities in Africa, and furthermore, that these seeds need to be unearthed and supported to grow to become dominant forces.

At the same time, there was an acknowledgement of the need to dismantle some of the more destructive features of the present that are resisting change. Therefore, working towards a future will always require a combination of breaking down and building up.

Participants highlighted that these locally led approaches need to be authentically African. This could include going back to basics, unleashing the ingenuity of informality, Africa working within its data, knowledge and images of the future, rather than expensive, technology-centric, and resource-intensive versions of smart cities often advocated for in the developed world.

6.4. A diversity of voices and robust engagement around contestation is essential

A strong part of this gathering's success was that it managed to bring a diverse set of voices, experience and interests together and tease out how those could be negotiated, which was largely a product of having space to create and imagine together. As aptly put by one participant in their feedback: *"It's one thing to disagree and it's one thing to contest, but it's quite another thing to be able to negotiate those contestations… [This transition] is going to take a lot of work and compromise from a lot of people who don't agree."*

The workshop created a space in which these processes were navigated, although it did not end with one agreed-upon path of action – this is not possible (nor even desirable) when faced with plural possible futures. The page that everyone ended firmly on was still significant, however: wanting a transition into futures that are good for all of us, and feeling slightly more hopeful about achieving those futures.

The above highlights the importance of working together towards a common cause, but also how working together can be facilitated to achieve better outcomes. In their feedback, many participants mentioned the need to work together in some form, from leveraging partnerships, to multilevel collaboration, to coordinating efforts so as to complement and not duplicate efforts.

Given the tendency of institutions and organisations to work in silos (including within themselves), this theme of feedback was unsurprising. What the workshop brought to the table, then, were tangible ways in which to bring different disciplines and organisations together.

7 Moving forward together

A toolbox for the future of African cities to navigate a 1.5°C overshoot

This process of convening a leading group of African urbanists, experts, and implementers, to vision fair transitions in African cities, has created the space to step back from the everyday and move beyond familiar ways of knowing, to unfamiliar, generative spaces.

We have sought to respond to the realisation that African cities do not possess the necessary toolbox for navigating the future in a world of 1.5°C overshoot. With this process we have begun to contribute to the longer-term project of developing a fit-for-purpose toolbox.

7.1. A set of tools, how to use them, and their relevance

We have drawn on a set of tools and processes to imaginatively, critically and in structured ways, explore images of the future, as well as strategies and interventions for acting in the present to bring about these aspirational futures. These tools build on one another to reveal assumptions, biases, aspirations, to unlock the imaginative and constructive spaces to uncover the unfamiliar, and work with that to move from a creative space of ideation to a creative space of action.

It is clear that the current approaches in African cities are not up to the task of navigating the complexity and uncertainty of the unfolding futures they have already embarked on. There is a rich set of futuring and visioning tools and methodologies that offer valuable resources for African cities preparing for and navigating the future. We have used a small set of these, and hope with this work to contribute to

establishing a community of practice, supported by the necessary tools and resources to work towards realising fair transitions in African cities.

Our intention has been to capture the direct perspectives of this group of leading change agents on the value of such processes, how and why they are useful, in the realities of the contexts in which they seek to bring change. We hope this is relevant for other change agents around the continent too.

7.2. A set of themes to take forward

This gathering has explored a rich set of themes that demonstrate some of the concerns and possibilities that characterise different possible futures, but this is far from comprehensive. It is clear that many of these themes are not inherently positive or negative, rather it is how we work with them to shape them, that determines whether they make positive contributions to our cities moving forward, or lead to mounting risks.

It was not the intention of this process to establish consensus, but rather explore a set of futures and themes that can stimulate further exploration in the unique settings of African cities. So too are they intended to give a sense of the nature of the material that arose through this process, so that others thinking of holding such a process in their cities have a sense of their potential for developing interventions to address some of the challenges their cities are facing.

7.3. Moving from incremental change to a step change through multi-level approaches in African cities

This process has grappled with the challenge of bringing about change, and particularly the need to move from incremental change (which is no longer commensurate with the problem at hand) to step change. By engaging with the multiple levels of changemaking, or the levels that underpin incumbent systems, the process sought to examine how to break the path dependencies of business-as-usual ways of doing things in African cities, and identify how to tailor our interventions accordingly to work towards transformative change.

At the core of this work is centring African knowledge, approaches and solutions to African problems, and the necessity of African leadership and excellence. Achieving lasting change will require finding ways to institutionalise change and the incentives for change in African cities.

7.4. A call to action and toolbox for the future of African cities

Lastly, this process and this group of leaders have highlighted the necessity of growing a community of practice, concerned about the long-term futures of African cities, and committed to realising fair transitions.

The process has highlighted that much working together lies ahead, and that there is a need for intermediaries in bridge building, coordinating, and bringing to life this emerging community of practice. This could include regular convenings of this group, expanding this group to a wider group, and creating pressure for bringing about change that this process and group of people have identified as imperative. A community of practice is most impactful when working together on concrete solutions over an extended period.

A call to action from this process is to begin the development of a toolbox that better equips African cities for the future, including in a world of 1.5°C overshoot, which could include developing and piloting 1.5°C overshoot plans for African cities.

We invite everyone concerned about the future of African cities to participate in this effort. It will need all of us.

References

Haas, A. R. N., Cartwright, A., Garang, A., Songwe, V. (2023) From millions to billions: Financing the development of African cities. African Development Bank Group. https://www.afdb.org/en/documents/millions-billions-financing-development-african-cities

Inayatullah, S. (1998) Causal layered analysis: Poststructuralism as method. Futures 30, 815–829. https://doi.org/10.1016/S0016-3287(98)00086-X

Inayatullah, S. (2017) Causal Layered Analysis: A Four-Level Approach to Alternative Futures. Futuribles International. https://www.researchgate.net/publication/332706079_Causal_Layered_Analysis_A_Four-Level_Approach_to_Alternative_Futures_RELEVANCE_AND_USE_IN_FORESIGHT

Karuri-Sebina, G. (2020) Urban Africa's futures: perspectives and implications for agenda 2063. Foresight 22 (1). https://doi.org/10.1108/FS-07-2019-0056

Karuri-Sebina, G., and Kouakou, K. (2025). The Future of fair transitions in African cities 2050. Workshop guide, 29-30 January 2025.

Leck, H., Atkins, Z., Dreyer, L., Dubazana, Y., Marais, C., Pasquini, L., Piprek, T., Spires, M. and Strachan, K. (2025) Climate change: Crosscutting report. ACRC. Working paper: 27. https://www.african-cities.org/wp-content/uploads/2025/03/ACRC_Working-Paper-27_February-2025.pdf

Leal Filho, W., Wall, T., Mucova, S.A.R., Nagy, G.J., Balogun, A.L., Luetz, J.M., Ng, A.W., Kovaleva, M., Azam, F.M.S., Alves, F. and Guevara, Z. (2022) Deploying artificial intelligence for climate change adaptation. Technological Forecasting and Social Change. 180. https://doi.org/10.1016/j.techfore.2022.121662

Pereira, L., Bennett, E., Biggs, R., Mangnus, A., Norstrom, A. V., Peterson, G., Raudsepp-Hearne, C., Sellberg, M. & Vervoort, J. (2019) Seeding Change by Visioning Good Anthropocenes. Solutions Journal. 10 (3). https://www.thesolutionsjournal.com/article/seeding-change-visioning-good-anthropocenes/

Rogelj, J., Schleussner, C.-F., and Hare, W. (2022). The overshoot problem: How global warming targets risk becoming a liability. Nature Climate Change. 12, 872-876. https://doi.org/10.1038/s41558-022-01506-2

Reisinger, A., Fuglestvedt, J., Pirani, A., Geden, O., Jones, C., Maharaj, S., Poloczanska, E., Morelli, A., Johansen, T. G., Adler, C., Betts, R., Seneviratne, S. (2025) Overshoot: A Conceptual Review of Exceeding and Returning to Global Warming of 1.5°C. Annual Review of Environment and Resources. 50: 1.1-1.33. https://doi.org/10.1146/annurev-environ-111523-102029

Satterthwaite, D., Archer, D., Colenbrander, S., Dodman, D., Hardoy, J., Mitlin, D. and Patel, S. (2020) Building resilience to climate change in informal settlements. One Earth. 2 (2), 143-156. https://doi.org/10.1016/j.oneear.2020.02.002

Sharpe, B., A. Hodgson, G. Leicester, A. Lyon, and I. Fazey. (2016) Three horizons: a pathways practice for transformation. Ecology and Society 21 (2): 47. http://dx.doi.org/10.5751/ES-08388-210247

Sokona et al. (2023) Just Transition: A Climate, Energy and Develop¬ment Vision for Africa. Independent Expert Group on Just Transition and Development. https://justtransitionafrica.org/wp-content/uploads/2023/05/Just-Transition-Africa-report-ENG_single-pages.pdf.

UNESCO, Prince Mohammad Bin Fahd University Center for Futuristic Studies. (2023) Futures literacy laboratory playbook: an essentials guide for co-designing a lab to explore how and why we anticipate. France, UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000385485

Wamuyu, P.K. (2021) Digital technologies for smart cities in Africa: An overview of digital infrastructure and data governance. Information Polity. 26 (2), 235-250. https://doi.org/10.3233/IP-200293

West, D.M. (2023) Leveraging AI and emerging technologies to unlock Africa's potential. Brookings Institution. https://www.brookings.edu/articles/leveraging-ai-and-emerging-technologies-to-unlock-africas-potential/

**Visioning fair transitions
in African cities**