Royal Academy of Engineering

Accelerating the green transition through skills and innovation

11 to 13 February 2026
Nairobi, Kenya

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Contents

The Royal Academy of Engineering hosted the Green Skills Symposium, from 11 to 13 February 2026, in partnership with the United Nations Environment Programme (UNEP), the Alliance for Greening Skills and Opportunities (AGSO), Jacob's Ladder Africa and the Royal Society, funded by the United Kingdom (UK) Government's Department for Science, Innovation and Technology (DSIT).

Frontiers symposia

The Royal Academy of Engineering's symposia bring together researchers, innovators and practitioners from the UK and beyond to work on ways to address complex global challenges. Each symposium has a curated programme that hosts around 70 academics, industry professionals and policymakers working in global development linked to the United Nations Sustainable Development Goals (SDGs). Participants are encouraged to build diverse partnerships and take part in interdisciplinary workshops that address fundamental development challenges.

The objectives are to foster collaborative, cross-disciplinary thinking among the next generation of leaders, to tackle global development challenges such as the energy transition, sustainable waste management, and education and skills. Unlike traditional conferences, it drives creative solutions that deliver lasting impact and build a global community, equipped to achieve a sustainable and inclusive society.

To sustain this momentum, competitive collaborative seed funding grants are awarded to the most promising proposals. This is designed to strengthen the partnerships formed, allowing participants to not only realise their innovations but also to embrace the systems-thinking approach – considering how each solution fits within and affects the broader social, environmental, and economic context.

The Green Skills Symposium, Kenya

From 11 to 13 February, over 70 experts from 31 countries gathered in Nairobi to explore ways to accelerate the green transition through skills and innovation. The symposium brought together a diverse cohort of engineers, academics, entrepreneurs, and specialists in international development, sustainability, and skills development – all aligned toward the singular objective of placing skills at the core of the green transition. This covered sectors including renewable energy, climate-smart agriculture, e-mobility, and circular waste management.

Funded by the UK government's Department for Science, Innovation and Technology (DSIT), the symposium was delivered in partnership with the United Nations Environment Programme (UNEP), the Alliance for Greening Skills and Opportunities (AGSO), Jacob's Ladder Africa, and the Royal Society.

Chaired by Professor Washington Yotto Ochieng CBE FREng (Imperial College London) and Mercy Kimalat (Association of Startups and SMEs Enablers of Kenya – ASSEK), the event delved into real-life case studies, critical discussions, and collaborative group work with future-gazing scenario planning.

While participants were established experts in their fields, few had previously engaged in such a diverse environment. The symposium was specifically designed to bridge traditional silos and enable interdisciplinary collaboration. **Diana Dalton, the Deputy British High Commissioner** who addressed the participants, stated that "innovation is never a product of working in silos. It happens when engineers, policymakers, researchers, community leaders, creative thinkers and also risk-takers sit at the same table and take the time needed to work things out together".

The symposium also explored context-appropriate and sustainable strategies that strengthen the green transition, particularly in skills, integration of the informal economy, and ensuring the labour force meets real market demands.

Across all discussions, emphasis was put on practical alignment between industry, education and public policy, and on moving beyond isolated initiatives and towards coordinated action.

This report summarises the key findings from the session discussions, with the following overarching insights across the sub-themes:

- Advancing the green transition through innovation and business models
- Strengthening certification pathways for decent jobs in the informal economy
- Participatory approaches to bridging the skills gap

The overarching insights across the sub-themes were:

1. **Systems thinking and coordinated alliance:** demonstrating that shared objectives, aligned institutions, and collective responsibility, not isolated action, are what unlock the green transition at scale.
2. **Recognising and valuing informal expertise:** practical skills and indigenous knowledge are equally meaningful forms of expertise that unlock untapped potential and drive a more inclusive green transition.
3. **Aligning skills supply with market demand:** without aligning skills with market demand, the green transition faces both a talent shortage and a surplus of underused workers.

Event chairs

Professor Washington Yotto Ochieng CBE FREng

Imperial College London, UK

Professor Washington Ochieng is Head of the Department of Civil and Environmental Engineering and Director of the Centre for Active Resilience and Security at Imperial College London, and a Fellow of the Royal Academy of Engineering. His work spans education, research and innovation across space-based positioning, navigation and timing (PNT) systems, critical infrastructure design and operation, user-focused mobility systems, and geospatial engineering.

Professor Ochieng addressed the symposium on how global environmental and energy challenges require a whole-of-society systems approach that brings together different sectors and perspectives. He emphasised the importance of empowering Africa's large youth population, making strategic investments and closing skills gaps through fit-for-purpose training. Doing so would help stakeholders navigate geopolitical pressures and overlapping 'multi-hazards' that require coordinated, system-wide approaches to build long-term resilience.

Mercy Kimalat

Association of Startups and SMEs Enablers of Kenya (ASSEK), Kenya

Mercy Kimalat has spent over a decade working across the Kenyan and East African innovation and entrepreneurship ecosystems. Her work has focused on building the skills of entrepreneurship actors, improving access to investment and markets, and making it easier to do business in the region. As the Founding CEO of ASSEK, she represents more than 200 entrepreneur support organisations, championing the growth of startups and small- and medium-sized enterprises (SMEs) across East Africa.

Mercy summarised the barriers and enablers that participants identified for a successful green transition. Key barriers included weak local ownership of clean energy, cost competition with conventional systems, underdeveloped markets, low awareness, and slow government action.

Kenya as a strategic blueprint

Kenya took centre stage as the primary case study for the green transition, with discussions focused on skills development, informal economy integration, and bridging the labour-market gap.

The Green Skills Symposium served a dual purpose: convening regional dialogue and informing the AGSO National Green Skills Baseline Survey, currently being developed through a participatory process spanning communities, practitioners, innovators, educators, and policymakers. The survey aims to generate evidence on Kenya's green skills landscape, including gaps in training, certification, and the gap between the labour and market demand.

Mercy Kimalat pointed to the scale of the challenge: "In Kenya, they [the informal economy] make up more than 60% [of the economy], and we cannot leave them behind. We need to start thinking about how to make them part of the economy." Discussions reemphasised that efforts to drive the green transition must acknowledge and integrate this market segment. Failure to do so could risk deepening existing inequalities.

Diana Dalton pointed to Kenya as a country already moving in the right direction on the green transition. The foundations, she suggested, are in place. In July 2024, the UK and Kenya launched a five-year strategic partnership roadmap built around four pillars: **shared prosperity, climate and nature, science innovation and technology,** and **security and migration**. This partnership reflects Kenya's potential as a regional hub for sustainable development, which may establish a more coordinated investment in its green economy. The critical gap, however, is not ambition or capacity. As Dalton noted, "Certainly in Kenya, there are a tremendous number of very bright startups with great potential, but what they're struggling to do is get the investments and support to take them to the next level."

Divya Datt, Senior Programme Management Officer at UNEP Kenya, underlined the necessity of a systems-thinking approach to drive the green transition. She emphasised that "This is something none of us can do alone. We need to bring together experts and forge global partnerships so we can learn from each other. What's working in one part of the world can inform initiatives in another part of the world."

Kenya offers a compelling example of this potential in action. The Green Jobs for Youth Pact, launched in 2022 by UNEP, UNICEF, ILO, and the Kenyan State Department of Labour and Skills Development, has already contributed to the redrafting of a national strategy for green skills and jobs. The steps are being taken, and the direction is clear. The Green Skills symposium seeks to build on this momentum – convening global expertise and fostering the kinds of cross-border partnerships that can accelerate progress, not only for Kenya, but for Africa and beyond.

Session one

Advancing the green transition through innovation and business models

Session chair presentations

1. **Controlled disruption: designing for adoption at scale**

   Jason Hallett, Professor in Chemical Engineering, Imperial College London, UK

2. **Local green transitions: risk, governance, and the long work of implementation**

   Anuj Jain, International development expert, Nova Scotia, Canada

3. **Is the support system fit for green enterprises? Ecosystems, finance, and scale pathways in africa**

   Silvia Mwaura, Strategic Partnerships Development, Programme Management Impact Investing, Nairobi, Kenya

This session explored how green innovation translates into lasting impact, emphasising that scale depends as much on business models, governance, and finance as on technology itself. Speakers highlighted that successful transitions require technical advancement coupled with market compatibility, deliberate institutional design, and long-term capital, rather than pursuing disruption at every level. Scale, they argued, is not automatic, but the result of intentional institutional design that empowers green enterprises to move from pilots to sustained change.

Key takeaways

- **Lead with the solution, not the technology:** Users care about what a product does for them, not how it works. Engineers and innovators are encouraged to shift their mindset from solely technical function to end-user value.
- **Challenging the pressure to disrupt:** There is a pervasive 'disruption' narrative that forces entrepreneurs and innovators to prioritise radical innovation. However, ensuring a sustainable green transition often stems from steady, incremental improvements rather than mere disruption.
- **The disproportionate burden of risk:** A critical imbalance exists among green entrepreneurship, where nearly all financial, regulatory, and market risks are borne solely by the entrepreneurs themselves. A sustainable ecosystem requires all actors (funders, investors, donors, governments, and policymakers) to share responsibility for these burdens and prevent the failure of social enterprises.
- **Sustainable funding for lasting growth:** Unlike conventional profit-driven models with faster returns, the green sector demands patient, long-term investment. Funders, investors, and policymakers must share a common understanding of how to support enterprises through slow processes and complex regulation, or risk abandoning impact before it is realised.

Controlled disruption: designing for adoption at scale

Jason Hallett, Professor in Chemical Engineering, Imperial College London, UK

Jason Hallet argued that successful innovation depends on minimising industry disruption and prioritising economic viability over technical novelty. While innovation is inherently disruptive, Jason highlighted that developers must limit this disruption to specific "upstream" areas to ensure that end-products remain compatible and feasible within the market. Through case studies like **Lixea**, **DyeRecycle**, and **Oorja**, he demonstrated that for deep tech and social enterprises alike, commercial de-risking is more critical than technical de-risking; a sustainable business survives by providing reliable, cost-effective solutions that solve a customer's problem without requiring them to navigate unnecessary complexity.

"We chose not to disrupt the product, but to reinvent how it is made. By creating familiar products from sustainable feedstocks, we ensured the market could adopt our innovation today, rather than waiting for a future that might never arrive."
Jason Hallett

Local green transitions: risk, governance, and the long work of implementation

Anuj Jain, International development expert, Nova Scotia, Canada

Anuj Jain, founder of Facilitators for Social Change, argued that institutional design and systems thinking are as critical to the green transition as technology itself. He presented two **community-led case studies from Nova Scotia**: a jointly owned wind and solar company formed by three towns, now supplying 63% of their energy needs and generating $1.2 million in community dividends; and a 120-person cooperative regenerating 15,000 hectares of depleted forest through timber, tourism, carbon markets, and education, achieving 60% financial self-sufficiency within a decade.

Both cases pointed to the same conditions for success: communities having real ownership, access to long-term funding, and strong alignment between policy, finance, and governance. Anuj also cautioned that established private actors often push back against community-led models that threaten their position, making political support essential. Long-term planning, diverse income streams, and starting with small but credible pilots were identified as the key to turning good ideas into lasting change.

"Institutional design is a critical piece of understanding the ecosystem and how you develop institutions. In the first case, three towns came together and found this operation very entrepreneurial. In the second case, a bunch of 120 well-meaning, compassionate people came together and said, 'We can do this.' Look at the scale of aspiration they had, and they did it."
Anuj Jain

Is the support system fit for green enterprises? Ecosystems, finance, and scale pathways in africa

Silvia Mwaura, Strategic Partnerships Development | Programme Management Impact Investing, Nairobi, Kenya

Silvia Mwaura, challenged the “disruption” narrative, arguing that current support models often prioritise donor-mandated surface metrics, such as short-term outputs and headline numbers, over the technical depth required for green innovation. She highlighted a critical gap in programme design where a lack of sector-specific expertise, such as engineering or data analysis, results in training that favours “soft skills” over long-term performance.

Drawing on the collapse of **Koko Networks,** Silvia highlighted how risk in the green economy falls almost entirely on the entrepreneur. She called for a more equitable distribution of risk across the wider ecosystem. To achieve a sustainable transition, enablers must move beyond traditional business logic. This includes embracing long-term investment and having the courage to push back against unrealistic demands by funders, investors, or even governments, to ensure support is genuinely impactful.

“Scale is not an accident; it is a thoughtful, systemic design. As enablers, we must ask if we are truly equipped for the sectors we support, or if we are simply churning out numbers to meet short-term, unsustainable metrics.”
Silvia Mwaura

Group activity

Following the presentations, participants broke into teams to apply the learning ideas to a practical challenge: Imagine it's 2035, where the green transition is mature, what fundamental shifts in material reality and human behaviour would we witness?

Based on the discussions and the 2035 visioning exercise, the groups clustered their insights under four key themes:

- **Policy and governance rebirth:** The role of governments shifts from a barrier to an enabler by demystifying regulations, ending corruption-led policy, and establishing clear and consistent funding streams that treat sustainability as the baseline for all business.
- **A behavioural shift in consumption:** A fundamental shift toward reduced consumption and sustainable practices has become the norm. In this scenario, external catalysts like extreme heat are used to incentivise the adoption of eco-labels and energy-efficient technologies.
- **Workforce readiness and skill recognition:** Modernise education by embedding green technology, AI literacy, and entrepreneurship directly into traditional school systems. Establishing clear pathways to recognise and validate skills across formal, semi-formal, and informal learning environments.
- **Green economy as a driver of social progress:** Reframe the green economy as a poverty eradication tool, which directs renewable energy and mineral wealth into industry and farming, not just household consumption.

The exercise found that a sustainable 2035 requires more than technological advancement; it demands aligned shifts across governance, behaviour, education, and economic systems. No single intervention is sufficient. The green transition sustains only when policy, workforce development, and social progress move together as an integrated whole.

Session two

Strengthening certification pathways for decent jobs in the informal economy

Session chair presentations

1. **What is the global and national policy context for strengthening certification pathways for decent jobs in the informal economy?**

   Tracy Ferrier, Director, Skills Transform, UK

2. **Opening up recognition, growing opportunity in a green economy**

   Don Presant, President, Canadian Association for Prior Learning Assessment, Canada

This session examined how recognition and certification systems can enable informal workers to access decent work. Speakers highlighted the need to appropriately recognise existing skills through scalable approaches. This centres around recognition of prior learning (RPL), which assesses and validates what workers already know without requiring them to repeat formal training. Digital badging was also discussed, alongside persistent challenges around funding, assessor capacity, and employer trust. RPL is especially important in developing economies, where most workers have built skills outside formal education. Traditional qualifications alone cannot capture the true depth of the available workforce.

More importantly, speakers stressed that certification must be linked to tangible benefits, including access to finance and formal contracts, and aligned with real labour market demand to ensure it translates into meaningful economic opportunity

Key takeaways

- **Barriers to skill recognition:** Informal workers often lack appropriate recognition of their skills and indigenous knowledge, which limits their ability to access opportunities and be fully integrated in the economy and the green transition.
- **Sustainable and inclusive system design:** Effective policy responses must build strong foundations through industry partnerships and regional collaboration.
- **Skills recognition as a human-centric practise:** Recognition should be understood not just as a formal academic or workplace requirement, but also as a fundamental human practise that generates capital and empowerment.
- **Alternative pathway to recognition:** Digital badges offer a modern, verifiable way to document the array of skills, qualifications and learning pathways, reinforcing the need to look beyond traditional qualification systems.
- **Transferability of skills:** A digital badge enables recognition earned in one context to be trusted in another, creating a marketplace where skills, regardless of where they were gained, are valued across industries and platforms.

What is the global and national policy context for strengthening certification pathways for decent jobs in the informal economy?

Tracy Ferrier, Director, Skills Transform, UK

Tracy Ferrier examined the global scale of the informal economy and its implications for the green transition, noting that while regional variation is significant, the majority of the world's workers operate outside the formal economy. She highlighted that without appropriate recognition of skills, informal workers face significant barriers to progression, decent work, and social protection, reinforcing the notion that RPL is a critical policy tool. She, however, highlighted that many RPL systems exist only on paper, disconnected from the realities of the informal economy.

Tracy invited two local panellists to bring in the Kenyan context. They noted that of the 708,000 jobs created in Kenya in 2024, 90% were in the informal sector. Kenya has established three qualification pathways – university, technical and vocational education and training (TVET), and skills – which enable workers to apply for RPL online, submitting portfolio evidence, and completing social interviews and practical assessments. However, with 18 million informal workers and only 300 accredited RPL trainers, a significant capacity gap remains. The chairs stressed that uptake will stay low until certification is tied to tangible incentives such as access to credit, social protection, insurance, and equipment leasing, making the link between recognition and real economic benefit essential.

"From a policy and systems level, we'll only get there if we take a holistic and joined-up approach, if we are open about what we mean by recognition and commit to creating flexible pathways, and if we provide the skills that are needed to support the transition to green economies."
Tracy Farrier

Opening up recognition, growing opportunity in a green economy

Don Presant, President, Canadian Association for Prior Learning Assessment, Canada

Don Presant presented the concept of digital badges as an alternative and scalable approach to recognising skills beyond traditional qualification systems. He challenged participants to widen their perspectives about recognition, framing it not as a bureaucratic process, but as a fundamental human practice that builds human capital that empowers both the giver and the recipient. Don emphasised that most learning happens outside the classroom, through problem-solving, collaboration, and everyday work, yet formal systems continue to prioritise course delivery over recognising what people already know and can do.

He introduced digital badges as portable, standardised credentials that record learning and achievement. Don noted that badging systems can capture a wide range of achievements, from attending a workshop to completing a rigorous short course, making them flexible enough to work across many different learning environments.

"If you do it right, you make learning visible by showing people the progression they can make in their lives, mapping their learning journeys, and providing recognition that is truly personalised."
Don Presant

Group activity

Following the presentations, participants were invited to co-create a digital badge across one of three use cases: green skills recognition for **individuals, organisations, or RPL for workers moving between formal and informal systems.**

Several practical insights emerged on what an effective digital badging system requires:

- **Security and trust:** Cryptographic verification, similar to blockchain technology, is essential to maintaining the integrity of badges, which addresses the concerns around identity misuse and ensures that credentials remain tamper-proof.
- **Contextual and hybrid formats:** Effective badges must be rooted in specific lived experience, linking directly to where skills were gained and where workers are currently active, rather than offering generic, one-size-fits-all credentials.
- **Endorsement as a trust signal:** Specific endorsements from recognised bodies, industry, government, or community were seen as a critical component of the credibility and uptake of digital badges.
- **Linking certification to opportunity:** For badges to drive real impact, they must be connected to tangible benefits, including access to decent jobs, reduced costs, and improved traceability – reinforcing that recognition only holds value when it opens doors.
- **Business viability of recognition systems:** Groups noted that for badging ecosystems to scale, funders, programme designers, and implementing organisations must treat them as sustainable business models, not just credentialing tools. This means backing them with strategic partnerships, active social media promotion, and compelling case studies that demonstrate real-world impact.

Considerations centred around how not all workers have reliable digital access, highlighting the need for hybrid solutions such as printed QR codes to ensure inclusivity. Without accessibility built in from the outset, digital recognition risks excluding the very communities it intends to serve.

"The mindset of bringing the informal into the formal implies a one-way street. We now have the technology and capability to recognise knowledge where it is, as it is, and to embrace that diversity rather than flatten it. The question is whether we design skills recognition systems that meet people where they are, because that is where the real innovation lives."
Andrew Lamb, Internet of Production Alliance & FabLab Winam, Australia

Session three

Participatory approaches to bridging the skills gap

Session chair presentations

1. **How Movilizatorio is mobilising citizen power in search of a socially and environmentally equitable world**

   Lina Torres, Co-Founder, Movilizatorio, Colombia

2. **How GIZ is strengthening Kenya's TVET ecosystem**

   Emmanuel Choge, Technical Advisor, GIZ, Kenya

3. **How the Royal Academy of Engineering's Skills Centre is addressing skills gaps**

   Jon Prichard, Project Lead – Skills Centre, Royal Academy of Engineering, UK

This session explored how participatory approaches can help bridge the skills gap in the green transition by strengthening the link between communities, institutions, and labour market demand. Speakers emphasised that effective skills development requires shared ownership, employer engagement, and inclusive decision-making, ensuring that those most affected by economic transformation establish active roles in shaping it. It also highlighted the need for stable, inclusive systems with broader community backing, stronger SME involvement, and the crucial role of public momentum and media to drive the green transition.

Key takeaways

- **Participation as a tool for power shifts:** Meaningful community engagement goes beyond consultation. It requires deliberate redistribution of power, among governments, funders, developers, and local communities, so that those most affected by the green transition have a genuine role in shaping it.
- **Creativity as a catalyst for change:** Before ideas become policy, they must win the public imagination. Creative, organised action can shift political agendas and normalise alternatives that once seemed impossible.
- **Bridging the skills supply-demand gap:** A persistent mismatch between what training systems produce and what green industries need can only be resolved through dual training models that bring the private sector directly into curriculum design.
- **Greening must be embedded, not added on:** Sustainability cannot be treated as an optional extra. It must be integrated across entire curricula and institutions, from energy audits in welding workshops to emissions standards in automotive training.
- **Inclusion is a prerequisite, not an afterthought:** A sustainable green transition must actively reach informal workers, women-led enterprises, youth, and marginalised communities, who make up the majority of the workforce. Failure to do so may risk deepening existing inequalities.
- **Skills development requires long-term, evidence-based infrastructure:** National skills initiatives need dedicated observatories, centralised resources, and employer-led pilots to stay relevant, with SMEs at the centre, not the margins.

How Movilizatorio is mobilising citizen power in search of a socially and environmentally equitable world

Lina Torres, Co-Founder, Movilizatorio, Colombia

Lina Torres drew on a decade of experience in bringing communities into transition processes to share how participatory approaches can create meaningful citizen power. She outlined two distinct but complementary pathways:

1. **Collective action to build political cover for decision-makers. This means the strategic creation of public pressure (through media, advocacy, and visible collective action) that signals broad support for change, giving decision-makers the confidence and safety to act.**

2. **Capacity building to develop the social infrastructure (networks, institutions, skills, and shared knowledge) that enables communities and organisations to engage effectively on complex issues.**

Lina emphasised that policymakers are often followers who act once they feel broad public endorsement exists, making the perception of widespread support as important as the support itself. Tools such as closed-door lobbying, media coverage, research, and international influence can be strategically deployed to create this cover and enable leaders to act. She illustrated this through an energy transition protest at COP30, which successfully shifted global negotiation agendas and normalised the idea of a fossil fuel phase-out.

"We need citizen power that is intersectional because our problems are intersectional. We don't live in silos. We don't live in communities that are only affected by one issue. But we need to work intersectionally."
Lina Torres

How GIZ is strengthening Kenya's TVET ecosystem

Emmanual Choge, Technical Advisor, GIZ, Kenya

Emmanuel Choge presented how GIZ's Promotion of Youth Employment and Vocational Training Project is bridging the gap between academia and industry in Kenya through a dual training approach, involving the private sector to ensure skills meet real market demand. He stressed that greening TVET institutions must go beyond surface-level actions, such as adding a single green module or relabelling existing courses. Instead, he argues that we need to embed sustainability across curricula, integrating topics like renewable energy systems, resource efficiency, and climate adaptation into core technical training.

Emmanuel highlighted that while Kenya excels at producing strong policies, implementation remains a persistent challenge, and stressed that a truly inclusive green transition must reach women-led enterprises, marginalised communities, and most importantly, the informal sector.

"In Kenya and by extension in Africa, we have a supply system in academia which doesn't speak to the demand. The demand always says that we don't get the qualified trainees coming from the TVET system or higher education. Yet our TVET system or higher education system is holding graduations every year, churning out thousands of talents."
Emmanuel Choge

How the Royal Academy of Engineering Skills Centre is addressing skills gaps (including the lessons learnt from the Connect Northumberland Project)

Jon Prichard, Project Lead – Skills Centre, Royal Academy of Engineering, UK

Jon Prichard introduced the Royal Academy of Engineering's Skills Centre, a national hub designed to help engineers and practitioners keep pace with rapid technological change in areas such as AI, machine learning, and clean energy. Built around three pillars, insights, resources, and programmes, the Centre aims to map future skills needs, signpost best practices, and support upskilling and sector transitions, with ambitions to reach one million engineers by 2030 and five million by 2035.

Jon also showcased the Connect Northumberland initiative as a practical case study in community-led, employer-driven skills development. Designed to address regional skills gaps and youth outflow, the programme brings together 70 employers across the Newcastle-Northumberland area, with a particular focus on SMEs, to build a work-ready population through leadership development, digital literacy, and practical technology training.

"The purpose of education is to create that habit of mind such that when you've forgotten all you've been taught, you know how to proceed."
Jon Prichard

Group activity

To close the session, participants took part in a World Café exercise exploring three interconnected themes: the skills needed for the green transition and what is blocking them; how to bridge those gaps and who needs to be involved; and what success looks like and what needs to happen now to get there.

The insights gathered included the following:

- **Cross-sector collaboration:** Significant duplication exists in green skills development across countries, highlighting the need for centralised hubs to share best practices, open-source materials, and curriculum toolkits.
- **Skills development and training:** Effective green skills development must balance technical expertise with durable skills, resilience, adaptability, and leadership, while appropriately recognising informal knowledge and indigenous expertise alongside conventional qualifications.
- **Policy and leadership:** Stable, proactive leadership and targeted policy interventions, such as tax relief and financial incentives, are essential to accelerating the green transition. Existing but inactive policies should first be implemented before new ones are introduced.

The World Café exemplified the power of cross-sector collaboration, while also surfacing overlooked priorities in the green transition. Notably, participants highlighted communication and awareness as an overlooked enabler. They stressed that making green concepts easier to understand for everyday people and improving how technical experts explain complex ideas in plain language are just as critical to driving adoption as policy or skills development itself.

Elizabeth Wangeci Chege, Chair of Governance and Nominations Committee, Board of Directors of WorldGBC, Energy Efficiency & Cooling Specialist, SEforALL

Green Skills: Engineering beyond technology

The keynote by Elizabeth Wangeci Chege set a clear framing for the session: green skills are no longer a niche specialism but a core engineering competency – driven by compliance requirements, finance prerequisites, and labour market demand. Critically, scaling the green transition requires more than innovation. It demands a full delivery chain of people capable of designing, procuring, installing, commissioning, verifying, operating, and retrofitting sustainable solutions.

The panel that followed connected grassroots innovation to national policy, global funding, and long-term systems change.

Leslie Igiraneza: The fiscal gap in e-mobility

A recurring theme was the gap between technical potential and economic viability. Leslie Igiraneza, Energy Associate at Bayes Consulting, highlighted e-mobility as a key driver of Kenya's green transition, one that stimulates energy demand and enables utilities to reinvest in broader energy access. Expanding charging infrastructure and promoting local assembly were identified as critical levers to make the transition locally grounded and financially sustainable.

Tracy Kimathi: Cost, cold chain, and local manufacturing

Cost and local manufacturing emerged as equally central concerns. Tracy Kimathi at BARIDI demonstrated how solar-powered cold chain solutions can address food loss at scale, having preserved over five million kilograms of food since 2021. However, import dependencies continue to inflate asset prices, limiting reach among low-income consumers. Flexible financing through banks and savings and credit cooperative organisations (SACCOs), alongside regional expansion into dairy and horticulture markets, is helping to close this gap.

Rufus Karanja: Systems thinking in clean energy

The session also surfaced the importance of systems thinking in clean energy transitions. Rufus Karanja's work at Renerge Resources Ltd, showed that energy transitions and food security are deeply interconnected. His geothermal steam project harnesses surplus steam to pre-cook staple foods, cutting preparation times by over 80%, all without waiting for large-scale infrastructure change.

Leonard D'Cunha: Data infrastructure as a green finance lever

Finally, Leonard D'Cunha from ZIDI Solar Africa's work on end-to-end electronics manufacturing in Kenya pointed to a broader insight: trusted data infrastructure is as important as physical infrastructure in unlocking green finance. His digital monitoring, reporting, and verification (DMRV) technology, designed to function in low-connectivity environments, is helping build financier confidence in green projects. His advocacy for pairing technical skills with business and financial literacy reinforced a message that ran throughout the session: engineering capability alone is not enough.

External activity

Site visit to Roam Electric – Kenya's e-mobility leader – Roam Park, Nairobi

On the second day of the symposium, participants visited Roam Park, East Africa's largest electric motorcycle assembly plant, inaugurated to produce, develop, and distribute Roam Electric's sustainable transport solutions – ranging from e-bikes and e-buses to batteries and charging infrastructure. The visit was hosted by Mikael Gånge, Chief Commercial Officer of Roam Electric, who guided participants through every stage of the operation.

Roam's role in Kenya's green transition is significant. Operating in a market that is 98% petrol powered, the company is actively displacing fossil fuel dependency while leveraging Kenya's national grid, approximately 85–90% renewable, to power its charging infrastructure.

Key learnings from the visit included:

- **Reskilling over replacement:** Roam hires from local technical universities and reskills existing petrol mechanics for electric systems. The transition does not render prior skills obsolete, and mechanical knowledge remains relevant; what changes is the application. This points to the value of targeted, modular reskilling and deliberate investment in local talent over importing expertise.
- **Industry-education alignment:** Roam's recruitment from local technical universities signals the importance of close collaboration between green enterprises and TVET institutions to ensure curricula keep pace with real market demand.
- **Inclusion and accessibility:** The clutch-free design offers greater comfort and ease of use in heavy traffic. This lowers the barrier to entry, presenting a concrete opportunity to increase women's participation in a male-dominated industry.
- **Local talent as a competitive advantage:** By sourcing and developing skills locally, Roam demonstrates that green enterprises can build resilient, community-rooted workforces, which reduces dependency on imported expertise while creating decent, future-proof jobs.

Seed funding outlook

At the close of the symposium, participants were invited to apply for seed funding of up to £20,000 to bring to life the collaborations and ideas sparked across the two and a half days. Supporting interdisciplinary, pilot-stage projects aligned with the green skills agenda and the SDGs, the funding covers activities ranging from preliminary data gathering and prototyping to building new consortia and cross-sector partnerships.

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To be eligible, proposals had to be new, interdisciplinary, and challenge-based, involving at least two disciplines and collaboration between participants based in the UK or part of the International Science Partnerships Fund (ISPF) Official Development Assistance (ODA) priority countries.

Following a competitive process, seed funding grants of over one year were awarded to nine successful collaborations developed via the symposium. These selected projects span nature-based restoration, resilient agri-food solutions, environmental remediation, and safe, low-carbon construction and energy systems, alongside inclusive pathways for green skills development and recognition. Reflecting the international reach of the event, the projects focus on challenges in Kenya, Uganda, Rwanda, Madagascar, South Africa, Somalia, Tanzania, Ghana, Colombia, Canada, Australia, and the UK.

Participants reflections

The Green Skills Symposium in Nairobi demonstrated that the green transition is not a technical problem waiting for a technical solution, but one of coordination that requires shared purpose across governments, educators, industries, and communities. Three insights ran through every session. Skills development must not be designed in isolation but must be aligned with real market demand. Informal expertise must be recognised and integrated, never overlooked. And progress at scale requires more than piecemeal effort from individual actors; it requires coordinated action across institutions.

From Indonesia to Colombia, the Philippines to Madagascar, participants left with new partnerships, sharper ideas, and renewed energy. For **Hamed Khayar from the Chad Innovation Hub**, the symposium produced a practice-based recognition model grounded in a simple but powerful principle: “we don’t have to take workers away from their livelihoods to recognise them, we’ll go to them.” **Annet Nsiimire from Uganda** was reminded that technical work depends on softer foundations: “the way we transition is by learning from each other. That is what this symposium has given me.” And for **Sarah Chismo Msambira from Malawi**, seeing young women not just talking about the green transition but “actually doing it” was, in her words, what makes it possible.

The collaborations, partnerships, and seed-funded projects that emerged from Nairobi are a small but concrete expression of what that coordination can produce. The Academy looks forward to tracking its impact and to building on this momentum at future symposia.

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