EVI-SICEE-RESEARCH BRIEF-10

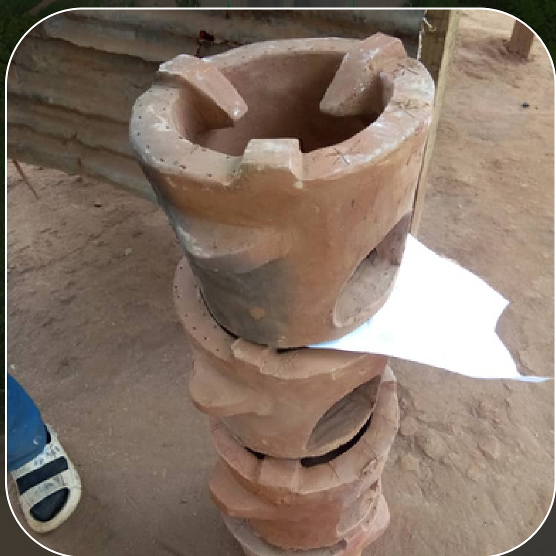
Powering Malawi's Energy Future by Unlocking Women and Youth Potential in Clean Energy Entrepreneurship

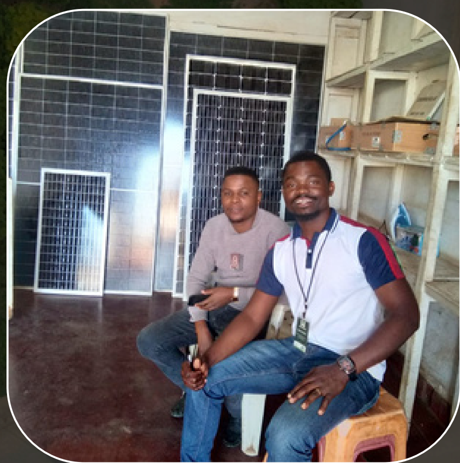
MAY 2026

Maxon Chitawo[1], Joyce Gathaci [2], Tiffany Njoroge[2], Yvonne Gitu [2], Mourine Chepkemoi[2]

Mzuzu University[1]
African Centre for Technology Studies (ACTS)[2]

Design and layout by Peter Ongalo





KEY MESSAGES

- Women and youth are not just users of clean energy; they are emerging as critical drivers of Malawi's energy transition, as clean energy entrepreneurs, mainly Micro and Small Enterprises (MSEs).
- Women and youth entrepreneurs in Malawi are primarily in sales and distribution in clean energy businesses and largely excluded from fabrication and technology development, arguably high-value activities, that are likely to drive innovation towards building wealth and industry.
- Systemic barriers to inclusive innovation are lack of finance, weak business development support, and unclear and unsupportive regulatory hurdles.
- There is need to reposition women and youth entrepreneurs as strategic industrial actors through inclusive finance, enterprise upgrading, local value addition, and genuine ecosystem collaboration.

Introduction

Malawi continues to face significant energy access challenges, particularly in rural communities where reliance on traditional biomass remains high. At the same time, the country is increasingly prioritizing clean energy transitions as part of broader national development, climate action, and industrialization efforts. Within this transition, women- and youth-led clean energy enterprises are emerging as important actors in expanding access to renewable energy technologies, creating employment opportunities, and supporting local livelihoods.

Despite their growing importance, empirical evidence confirms that many of these enterprises continue to operate under difficult structural conditions characterized by limited financing, weak institutional support, low participation in formal markets, and restricted opportunities for innovation and scale. These challenges are particularly pronounced for women and youth entrepreneurs who often encounter additional social, economic, and regulatory barriers.

This research brief draws insights from Malawi stakeholder validation workshop, convened under the EVI-SICEE project (Box 1).

> The Evidence for Informing Optimization and Scaling of Youth and Women-Led Clean Energy Enterprises (EVI-SICEE) project is a multi-country initiative implemented by the African Centre for Technology Studies (ACTS) in partnership with Mzuzu University (MZUNI), Makerere University Business School (MUBS), the Kenya Climate Innovation Center (KCIC), and other regional stakeholders, with support from the International Development Research Centre (IDRC). The project seeks to generate evidence on the systemic barriers and opportunities affecting youth- and women-led clean energy enterprises across Malawi, Kenya, Uganda, and South Africa. As part of this initiative, the Malawi Stakeholder Validation and Learning Workshop held on 29 May 2026 in Malawi, convened 44 participants from government, academia, development agencies, civil society, private sector enterprises and regional research institutions. The workshop provided a platform to learn and validate research findings, promote cross-country learning, strengthen stakeholder engagement, and identify pathways for scaling inclusive clean energy entrepreneurship in Malawi. For more about this workshop, access the workshop report here (link)

The workshop deliberations revolved around moving beyond conventional conversations on energy access, towards broader articulation of questions around inclusion, innovation, industrialization, enterprise formalization, financing, policy support, and ecosystem development. Participants critically reflected on the structural conditions shaping clean energy entrepreneurship in Malawi and identified opportunities for strengthening inclusive participation within the sector.

Why Inclusive Participation Matters in Malawi's Clean Energy Transition

Workshop participants emphasized that women and youth represent a significant proportion of Malawi's population and therefore remain central to the country's development, including the energy's future. Stakeholders noted that women and youth are already actively engaging within clean energy value chains, largely in the product distribution and sales, retailing, installation, and community-level energy services. However, majority of the workshop participants agreed that participation alone is insufficient if women and youth remain concentrated in the low-value segments of the clean energy economy. Discussions repeatedly highlighted the importance of moving beyond "survival entrepreneurship" towards more transformative forms of engagement that support industrialization, local manufacturing, innovation, and enterprise growth.

There was general consensus that, although many women and youth led clean energy enterprises are in the sale and distribution activities, there is still limited engagement in value addition and manufacturing activities. This concern was linked to broader national conversations around industrialization and economic transformation. Stakeholders argued that if Malawi is to realize the developmental benefits of clean energy transitions, greater attention must be directed at strategic support to the micro enterprises, with the intention of moving them upstream (upgrading and innovation) within clean energy value chains.

Participants further emphasized that inclusive clean energy entrepreneurship has the potential to contribute to multiple development outcomes simultaneously, including:

- Employment creation for women and youth
- Expansion of energy access in hard-to-reach communities
- Poverty reduction and livelihood improvement
- Climate change mitigation and adaptation
- Rural industrialization and local economic development
- Technological learning and innovation

Key Issues Emerging from Stakeholder Discussions

Workshop participants identified six persistent constraints that systematically impede the growth and performance of women- and youth-led clean energy enterprises in Malawi.

1. Limited participation in purportedly high value learning-oriented activities

Women- and youth-led enterprises are largely occupying the lower segments of clean energy value chains, particularly in sales, distribution, and retail activities, with relatively limited participation in fabrication, product development, research, or technological innovation.

This pattern arguably limits opportunities for enterprise growth, income generation, and local industrial development. There is a need for more deliberate efforts to strengthen local production capacities, support technology upgrading, and encourage innovation-driven entrepreneurship.

Entrepreneurship support programs should not only promote business entry and related innovation but also enable enterprises to transition into higher-value and more sustainable activities, through upgrading.

2. Financing Constraints and Weak Investment Incentives

Access to finance emerged as one of the most persistent barriers affecting women- and youth-led clean energy enterprises. Participants noted that many entrepreneurs struggle to secure startup or growth capital due to collateral requirements, limited credit track record, and perceived investment risks within the sector.

Stakeholders further observed that even where entrepreneurs possess technical skills and viable business ideas, financial barriers often limit enterprise expansion and formalization. Some participants questioned whether existing policy frameworks provide adequate incentives to support emerging clean energy enterprises, particularly those led by women and youth.

Comparisons were made with international contexts where governments provide tax incentives, startup support, or targeted financing schemes to encourage innovation and enterprise growth. Participants argued that Malawi could benefit from adopting more deliberate fiscal and financial incentives aimed at supporting inclusive clean energy entrepreneurship.

3. Enterprise Informality and Regulatory Challenges

The workshop discussions highlighted the high prevalence of informality among clean energy enterprises. Participants observed that many businesses operate without formal registration or licensing, limiting their ability to access financing, partnerships, and formal markets. Importantly, stakeholders emphasized that informality is not always driven by unwillingness to comply with regulations. Rather, many entrepreneurs reportedly lack awareness of registration procedures, licensing requirements, and the broader benefits of formalization.

Several participants explained that women and youth often perceive business registration as expensive, bureaucratic, and immediately linked to taxation. As a result, many entrepreneurs avoid formalization due to fear of financial obligations or administrative complexity.

Regulatory authorities participating in the discussions acknowledged these challenges and highlighted ongoing efforts to improve public awareness, strengthen enforcement mechanisms, and enhance collaboration among relevant institutions. Participants emphasized that regulatory systems should become more supportive, accessible, and responsive to the realities facing Micro and Small Enterprises (MSEs) in the clean energy sector.

4. Skills Gaps and Limited Business Development Support

Stakeholders repeatedly highlighted the importance of capacity building in supporting enterprise growth. Discussions revealed that many entrepreneurs lack access to training in areas such as business planning, financial management, market development, innovation management, and enterprise scaling.

Some participants observed that limited business planning capacity directly affects access to finance, as many financial institutions require structured business plans before providing loans or investment support. Others emphasized that entrepreneurship support should move beyond technical training alone and include mentorship, incubation, networking, and long-term enterprise development support.

Participants further stressed the need for stronger linkages between universities, innovation hubs, policymakers, and entrepreneurs to promote knowledge sharing and entrepreneurial learning.

5. Gender, Social Norms, and Unequal Participation

Gender disparities within clean energy entrepreneurship emerged strongly throughout the discussions. Participants observed that women continue to face structural barriers linked to social norms, unequal educational opportunities, limited access to productive resources, and underrepresentation in technical fields.

Some stakeholders noted that women remain significantly underrepresented in engineering, science and technology-related disciplines, which later affects their participation within clean energy industries. Others emphasized that cultural expectations and care responsibilities continue to constrain women's entrepreneurial engagement and leadership opportunities.

At the policy level, concerns were raised regarding the persistence of gender-blind policies that fail to adequately address the specific realities facing women entrepreneurs. Participants emphasized the importance of gender-disaggregated data in informing more inclusive and responsive policy frameworks.

6. Innovation, Standards, and Intellectual Property

Participants also reflected critically on the issue of innovation within women- and youth-led enterprises. While some evidence suggested low participation in technological innovation, stakeholders questioned how innovation itself is being defined and measured.

Several contributors argued that innovation should not only refer to product manufacturing or technological invention but should also include marketing innovation, service delivery innovation, and community-based adaptation strategies.

The discussions further highlighted the importance of standards, certification, quality assurance, and intellectual property protection. Participants emphasized that without stronger support systems around standardization and intellectual property rights, many local enterprises may struggle to commercialize innovations or compete effectively within formal markets.

Policy Implications

The workshop discussions demonstrated that inclusive clean energy entrepreneurship requires more than isolated enterprise support programs. Participants repeatedly emphasized the need for systemic and coordinated interventions that address financing, regulation, innovation, gender inclusion, skills development, and market integration simultaneously.

The discussions also exposed the importance of repositioning women and youth not only as vulnerable groups requiring support, but as active economic actors capable of driving industrial transformation, innovation, and sustainable development within Malawi's clean energy transition.

Policy Recommendations

Beyond diagnosing systemic challenges, the workshop produced a concrete set of policy actions to address the barriers identified:

Barrier	Recommendation
Limited high-value activity	Promote enterprise upgrading: Support moves into manufacturing, assembly, and technology development. Invest in local innovation ecosystems.
Financing gaps	Design inclusive finance: Targeted schemes for women and youth, blended finance, guarantee schemes, and tax incentives for startups.
Regulatory friction	Simplify and inform: Streamline registration, run public awareness campaigns, and build regulatory frameworks that reward compliance.
Weak business skills	Scale incubation and mentorship: Link universities, innovation hubs, and entrepreneurs. Support business plans, market access, and financial literacy.
Gender blindness	Mainstream inclusion: Embed gender and youth measures in energy policies. Collect and use disaggregated data. Address structural barriers to technical fields.
Innovation and Intellectual Property (IP) gaps	Broaden and protect: Recognize non-technological innovation. Strengthen standards, certification, and intellectual property support.

Conclusion

The stakeholder workshop provided an important platform for reflecting on the future of inclusive clean energy entrepreneurship in Malawi. The discussions reaffirmed that women and youth are already making important contributions to the clean energy sector, particularly at community and grassroots levels. However, participants also emphasized that their transformative potential remains constrained by persistent structural, financial, institutional, and regulatory barriers.

The workshop ultimately called for a broader rethinking of inclusive participation within Malawi’s clean energy transition. Rather than limiting women and youth to peripheral roles within the sector, stakeholders argued for more deliberate efforts to support enterprise upgrading, innovation, industrial participation, and long-term economic empowerment.

Achieving an inclusive clean energy transition in Malawi will therefore require coordinated policy action, stronger ecosystem support, and sustained investment in women- and youth-led enterprises as central actors in the country’s sustainable development future.

Contact Us

African Centre for Technology Studies

Email: info@acts-net.org

Website: www.acts-net.org

2nd Floor, Konza Technopolis Complex

P.O. Box 45917 - 00100

Nairobi- Mombasa Road,

Konza, Kenya.

Instagram | X/Twitter: @ACTSNET

Facebook | LinkedIn: African Centre for Technology Studies (ACTS)