

Stakeholders' Learning Workshop Report

EVIDENCE FOR INFORMING SCALING AND IMPACT YOUTH AND WOMEN-LED CLEAN ENERGY ENTERPRISES (EVI-SICEE) IN MALAWI

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Tamandani Jonamu¹, Sarah Njeru², Chrispin Gogoda¹, Tiffany Njoroge², Joyce Gathaci², Yvonne Gitu², Mourine Chepkemoi²

¹Mzuzu University

²African Centre for Technology Studies (ACTS)



Table of Contents

LIST OF ABBREVIATIONS.....	3
Executive Summary.....	4
Key Outcomes.....	5
Project Background.....	6
Objectives of the Stakeholders' Learning Workshop.....	6
Day One: 1.....	7
Stakeholder Validation Event.....	7
Introduction: Fostering Collaborative Learning and Inclusive Innovation.....	8
Setting the Scene Session.....	12
The Malawi clean energy ecosystem and the entrepreneurial context for youth and women-led businesses.....	13
Evidence for Clean Energy Entrepreneurship and opportunities for youth and women entrepreneurs in Malawi- Scoping study.....	21
Validating Evidence for Scaling Youth & Women-Led Clean Energy Enterprises in Malawi -The survey report.....	24
Stakeholder perspectives on systemic factors enhancing scalability and transformative potential of CEEs for youth and women in Malawi – KIIs report.....	27
Interactive Plenary Session: Reflections On the Malawi Presentations.....	29
Project Output, Challenges and next steps- Kenya.....	32
Project Output, Challenges and next steps- Uganda.....	34
Project Output, Challenges and next steps- South Africa.....	37
Distilling key messages from the presentations.....	38
Moderated Panel session.....	39
Closing Remarks on Day One.....	43
DAY TWO: PROJECT TEAM LEARNING MINI-WORKSHOP.....	43
Student Presentations.....	43
Collective Feedback to Research Fellows.....	46
Debriefing of Day 1 of the Workshop.....	48
Recap of Malawi Data and knowledge products development by Daniel Musyoka and Joseph Elasu.....	49
Discussion on policy brief ideas from the workshop and Next steps for Malawi.....	50
EVI-SICEE Incubation Program in Malawi, next steps.....	51
Leveraging Project Resources for Learning, Dissemination, and Policy Influence.....	51
Closing.....	51
APPENDICES.....	52

LIST OF ABBREVIATIONS

- EVI-SICEE Evidence for Informing Scaling and Impact in Youth and Women-Led Clean Energy Enterprises
- ACTS African Centre for Technology Studies
- IDRC International Development Research Centre
- MZUNI Mzuzu University
- KCIC Kenya Climate Innovation Center
- MUBS Makerere University Business School
- CIE Climate Innovation/Entrepreneurship Ecosystem
- SMEs Small and Medium Enterprises
- KIIs Key Informant Interviews
- UNDP United Nations Development Programme
- SDG7 Sustainable Development Goal 7
- NCST National Commission for Science and Technology
- CEM Community Energy Malawi
- CE Clean Energy
- MERA Malawi Energy Regulatory Authority
- REIAMA Renewable Energy Industries Association of Malawi
- STI Science, Technology, and Innovation
- NDC Nationally Determined Contribution
- MGDS Malawi Growth and Development Strategy
- PAYC Pay-As-You-Cook
- EU European Union
- VSLAs Village Savings and Loan Associations
- RBF Results-Based Financing
- STEM Science, Technology, Engineering and Mathematics
- EIIC Enterprise, Innovation, and Incubation Centre
- IRENA International Renewable Energy Agency
- EEP Energy and Environment Partnership
- REC Renewable Energy Conference
- JOOUST Jaramogi Oginga Odinga University of Science and Technology

Executive Summary

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 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.

The workshop highlighted the critical role of women and youth in Malawi's clean energy transition, particularly within solar energy and clean cooking value chains. Findings from the Malawi scoping review and enterprise survey demonstrated that although women and youth are increasingly active in the sector, their participation remains concentrated in low-value downstream activities such as sales and distribution, with limited involvement in manufacturing, design, innovation, and higher-value technical functions. Several barriers including limited access to finance, inadequate technical and business skills, restrictive gender norms, weak market linkages, and burdensome regulatory processes continue to constrain enterprise growth and sustainability. Despite these constraints, entrepreneurs expressed strong optimism regarding the growing demand for clean energy products and services, particularly in off-grid electrification, clean cooking, productive use of energy, and climate finance opportunities.

The workshop also underscored the importance of Malawi's evolving policy environment in supporting clean energy entrepreneurship. Government representatives highlighted ongoing reforms aimed at promoting decentralized energy systems, private sector participation, carbon market integration, and climate finance mobilization. Stakeholders emphasized the need to operationalize these policies through gender-responsive financing mechanisms, simplified licensing procedures, targeted incubation programmes, and stronger integration of women and youth considerations into national energy and industrialization strategies.

The workshop concluded with a strong commitment among stakeholders to strengthen collaboration, enhance evidence-based policymaking, and support inclusive clean energy transitions in Malawi and across Africa. Participants emphasized that women and youth are not merely beneficiaries of the energy transition, but central actors whose entrepreneurship and innovation are essential for achieving sustainable development, climate resilience, and inclusive economic growth.

Key Outcomes

- Malawi field work research findings validated by the stakeholders, as guided by evidence from clean energy scoping study, survey, and key informant interviews on women- and youth-led clean energy enterprises.
- Strengthened multi-stakeholder engagement: the project convened representatives from government parastatals, regulators, academia, development partners, private sector actors, and entrepreneurs, fostering structured dialogue and cross-sector collaboration to strengthen the clean energy ecosystem in Malawi.
- Major barriers affecting women and youth entrepreneurs highlighted and discussed. These include limited access to finance, inadequate technical and business skills, weak market access, restrictive gender norms, and complex licensing procedures.
- Emerging and Growing Opportunities in solar energy, clean cooking, productive use of energy, carbon finance, and decentralized energy systems for women and youth-led enterprises interrogated.
- Policy and Financing Recommendations Developed: Stakeholders proposed actions such as gender-responsive financing, simplified business registration, targeted incubation programmes, mentorship, and stronger implementation of clean energy policies.
- Cross-Country Learning and Knowledge Sharing: Experiences from Kenya, Uganda, South Africa, and Malawi enabled participants to share lessons, business models, and strategies for scaling inclusive clean energy enterprises.
- Promotion of Inclusive and Gender-Responsive Approaches: The workshop emphasized the need to place women and youth at the center of clean energy policies, enterprise development, and innovation systems.
- Commitment to Future Collaboration and Knowledge Products: Partners agreed to continue collaboration through policy briefs, research publications, incubation support, mentorship, and future stakeholder engagement activities.

Project Background

The EVI-SICEE project has been under implementation since December 2023. The motivation behind the project is that the informal, small and medium enterprises (SMEs) that drive economic development in many African countries comprise of a significant population of women and youth either as business entrepreneurs or employees. This fact makes women and youth more vulnerable to external shocks like the global economic crisis and the impacts of climate change that do not spare this informal sector. Further, structural and social-cultural barriers limit their capabilities to access finance, markets and training to grow their businesses/enterprises compared to adult men. The impact is confounded by the African challenge of burgeoning youth populations requiring formal or informal employment. The project is joined-up action research involving actors in the climate innovation/entrepreneurship ecosystem (CIE) with aim to provide evidence for informing scaling of promising youth and women-led clean energy enterprises for their transformative impact in the African context.

The overall objective of the project is to understand within the CIE context the systemic factors that enhance or constrain women and youth' access to entrepreneurial opportunities in clean energy innovation, and how the promising best practices can be scaled up for impact. The workshop aimed to bring together stakeholders in Malawi's clean energy ecosystem, including those who participated in the field survey and key informant interviews in 2025. Project team members from Kenya and Uganda also shared their experiences during the workshop.

Objectives of the Stakeholders' Learning Workshop

The workshop created an interactive space for both the Clean Energy (CE) ecosystem stakeholders in Malawi and the project team from participating countries to deliberate on the findings from Malawi and co-create relevant knowledge aimed at positively shaping the optimization and scaling of youth- and women-led clean energy enterprises and business models in Malawi and other African countries.

Specifically, the validation learning workshop was designed to achieve the following objectives.

1. To present findings from Malawi's scoping study, the survey, and the key informant interviews (KIIs).
2. To present a preliminary analysis of data from Malawi, generating evidence on system-level dynamics that contribute to the success or failure of women and youth in accessing business opportunities within the CE ecosystem.
3. To enable stakeholders to validate the study findings and collaboratively develop future scenarios for scaling youth- and women-led clean energy enterprises in Malawi and beyond.
4. To reflect on the project's progress, including what had worked, what had not worked, and the lessons learned from the diverse experiences during the project implementation.

Day One: Stakeholder Validation Event



Figure 1: Workshop Attendees

The EVI-SICCE Stakeholder Learning Workshop brought together 44 participants from across southern Africa and internationally. The diversity of representation at the workshop was not accidental as it was a deliberate reflection of the project's transdisciplinary approach, which recognizes that addressing the systemic barriers facing women and youth-led clean energy enterprises requires the active engagement of multiple knowledge systems, sectors, and perspectives.

The workshop was designed as an interactive space where policy makers, entrepreneurs, development partners, civil society, and academia could deliberate together, validate evidence, and co-create solutions. The transdisciplinary nature of the project was evident in who was in the room and how they engaged with one another.

Government • Ministry of Energy (Energy Officer) • Malawi Energy Regulatory Authority (MERA)	Development Partners & Civil Society • United Nations Development Programme (UNDP) • Self Help Africa • CEM (NGO)
Industry Associations & Private Sector • REIAMA (Renewable Energy Industries Association of Malawi) • ZUWA Energy • BNG (Clean Energy Enterprise) • Up-Energy • Kenya Climate Innovation Center (KCIC)	Academia & Research Institutions • Mzuzu University (Malawi) • African Centre for Technology Studies (ACTS, Kenya) • Makerere University Business School (MUBS, Uganda) • Jaramogi Oginga Odinga University of Science and Technology

Box 1: Transdisciplinary nature of participants

Introduction: Fostering Collaborative Learning and Inclusive Innovation

The opening session of the workshop was marked by a tone of reflection and strategic foresight, set by Fanwell Kapute, Director of Research at Mzuzu University, and Ann Kingiri, Director of Research and Innovation at the African Centre for Technology Studies (ACTS) and Principal Investigator of the EVI-SICEE project.

The session grounded the day's proceedings in a spirit of collective accountability, with appreciation for a diverse representation of stakeholders, which signalled a shared commitment to translating research into tangible impact. Rather than merely celebrating progress, the session emphasised the need to learn from successful implementation and from validation exercises already conducted in other countries. Participants were encouraged to critically examine the findings emerging from Malawi, identifying both the achievements and emerging gaps. Every voice, data point, and critical observation from stakeholders were collectively essential to strengthening the project's knowledge base. Moving forward, the shift is from passive participation to active, interactive engagement.

This foundation positioned the workshop as a dynamic knowledge space rather than a routine convening. This partnership was framed as intellectual, enabling cross-border learning on what works in advancing inclusive innovation. Particular emphasis was placed on the project's core commitment to youth and women. Evidence from other countries has demonstrated that these societal actors are both the most vulnerable to exclusion and the most powerful agents of change when given the right opportunities. The Malawi findings were therefore seen as an important point of reflection and comparison.

The participants were encouraged to engage continuously, contributing insights to refine the work undertaken in Malawi towards consultative finalized reports. Clarity was sought around three critical areas: what has been accomplished, what remains to be done, and the concrete way forward. By fostering an interactive knowledge environment, the session underscored the importance of questioning assumptions, interrogating findings, and co-developing next steps. Ultimately, success will not be measured by the number of outputs produced, but by how effectively the collective wisdom in the room informs the project's trajectory and contributes to meaningful empowerment of youth and women at the grassroots in Malawi and beyond.

Welcome remarks: Maxon Chitawo, Project Advisor, Senior Lecturer, TCRET Coordinator, Department of Energy Systems, Faculty of Science, Innovation, and Technology, Mzuzu University.



Figure 2: Chitawo welcoming the stakeholders

An opening prayer was led by one of the participants before proceeding with the formal opening. Chitawo welcomed all participants to the EVI-SICEE Stakeholder Learning Workshop and officially opened the session.

He emphasized that the workshop was convened to validate the field reports that had been developed from the research conducted in Malawi. Chitawo highlighted the importance of bringing together diverse stakeholders to examine evidence-based findings on women- and youth-led clean energy enterprises and to chart a path forward for inclusive clean energy entrepreneurship in Malawi. He introduced key partners present including the following:

Regional: ACTS (Kenya), Makerere University Business School (Uganda), Kenya Climate and Innovation Centre (KCIC).

National: Ministry of Energy, Malawi Energy Regulatory Authority (MERA), UNDP, Mzuzu University, private sector entrepreneurs, and civil society organizations

Chitawo made important announcements regarding the venue, including emergency procedures and fire safety protocols, before proceeding with the day's program. He then invited Fanwell Kapute, representative of the Vice Chancellor, Mzuzu University to deliver the official opening remarks.

Opening remarks by Fanwell Kapute, Director of Research, Mzuzu University



Figure 3: Fanwell Kapute delivering the opening remarks

Kapute formally opened the workshop by welcoming all participants, including project team members from Kenya and Uganda, as well as local stakeholders from Malawi's clean energy ecosystem. He acknowledged that women are a driving force of the economy and emphasized that the primary purpose of the gathering was to validate the data collected during the project's research phase.

Key Highlights in the opening remarks:

- **Purpose of Workshop:** To validate the research findings and learn what has been accomplished and what remains to be done.
- **Women as Economic Drivers:** Recognized that women are a driving force of the economy and must be central to clean energy interventions.
- **Collaborative Spirit:** Acknowledged the partners whose support made the initiative possible, including IDRC, ACTS, and Mzuzu University.
- **Call to Action:** Urged all participants to engage actively and honestly with the findings, reminding them that research must translate into meaningful support for youth and women-led clean energy enterprises.
- He concluded by emphasizing that the workshop represents a critical step in translating research into actionable policy and practice for Malawi.

Learning Workshop expectations by Chrispin Gogoda - Mzuzu University



Figure 4: Chrispin Gogoda, leading brainstorming on workshop expectations

Gogoda supported the focus on clean energy businesses and renewable energy, and how these sectors link to women and youth. He invited three women and one youth from the stakeholder group to share their expectations and what they hoped to achieve from the workshop, ensuring that the voices of the target groups were heard from the outset. Gogoda emphasized that the workshop was expected to maintain a clear focus on clean energy businesses and renewable energy, specifically examining the linkages with women and youth participation.

Overview of the project by Ann Kingiri, Lead Investigator, African Centre for Technology Studies (ACTS)

Ann Kingiri began her introduction by welcoming all participants and expressing her appreciation to the International Development Research Centre (IDRC) for funding the initiative.

She went further to introduce her team members, beginning with Solomon Ogara, an advisory board member who was present and representing the other three advisory board members. She proceeded to introduce the Uganda team, including their students who would speak later in the day, and noted that while the South African team could not attend in person, their research work would be shared during the workshop. She further introduced her fellow members from Kenya and stated how important their presence in the project is, noting that they are playing a key role. She also talked about how implementation has been smooth because of a good working relationship.



Figure 5: Ann Kingiri giving the project background

Kingiri explained that ACTS is a "think and do tank" that helps with policy directions in the African context. The key themes that make ACTS well known include climate, agriculture, digital economy, STI (Science, Technology, and Innovation), and knowledge systems. She highlighted the role of ACTS in regional policies, noting that ACTS works closely with the African Union and has been nominated as one of the organizations that would be implementing the STISA-2034 policy instruments.

She noted that this project brings out the nexus between gender and energy, with a focus on youth and women. She described how the Masters and PhD students are supporting the generation of evidence base for the project.

Regarding project status, she explained that the project in Malawi is still lagging behind with respect to the business incubation and scaling component. Kenya and Uganda have completed their workshops, while in South Africa the project is still ongoing. She emphasized that the validation workshop in Malawi was critical towards further sharing of emerging knowledge with wider stakeholders. She concluded by encouraging active participation from the audience.

Setting the Scene Session

This session was moderated by Maxon Chitawo from MZUNI. The objective was for the stakeholders to provide an overview of Malawi's context with regards to inclusivity of women and youth led clean energy enterprises. There were 3 key presenters from different sectors that demonstrated an interdisciplinary approach to understanding the gender and clean energy context in Malawi.

The Malawi Clean Energy Policy Environment: Enock Palapandu- Ministry of Energy



Figure 6: Enock Palapandu sharing on Malawi Clean Energy Policy Environment

Palapandu provided an overview of Malawi's clean energy policy landscape, outlining the country's current energy situation, ongoing policy reforms, and emerging opportunities for youth- and women-led enterprises in the clean energy sector. He emphasized that clean energy businesses are becoming important drivers of entrepreneurship and economic inclusion for young people and women in Malawi. With only 25.9% of the population having access to electricity and 98% of households still dependent on biomass, he noted that there is substantial room for innovation and business growth in clean energy access and clean cooking solutions.

He explained that Malawi's current installed electricity capacity stands at 551 MW, with the generation mix comprising 72% hydropower, 18% solar, and 10% thermal energy from diesel. The heavy dependence on hydropower makes the system vulnerable to droughts and floods, contributing to supply instability. Additional challenges include limited grid infrastructure, low baseload generation capacity, and widespread energy poverty.

The presentation highlighted the evolution of Malawi's energy policy since the introduction of the National Energy Policy in 2003. While earlier reforms focused on sector development, more recent policies have increasingly emphasized private sector-driven energy markets, low-carbon transition pathways, decentralized energy systems, and the integration of carbon markets. The forthcoming 2026 draft policy further strengthens this direction by embedding resilience, innovation, and climate finance into the country's energy strategy. Across these reforms, the overarching objective remains achieving Sustainable Development Goal 7 (SDG 7), which aims to ensure universal access to affordable, reliable, sustainable, and modern energy.

Palapandu highlighted several clean energy business opportunities for youth and women entrepreneurs. These include solar home systems using Pay-As-You-Go models, mini-grid development, clean cooking enterprises, and Productive Use of Renewable Energy (PURE) initiatives for agriculture and agro-processing.

He stressed that the growing transition toward decentralized energy systems presents a significant market opportunity for startups and local enterprises.

He also discussed ongoing market reforms aimed at creating a more competitive and investment-friendly energy sector. These reforms include the transition from a single-buyer electricity market model to a more open system supported by Direct Power Purchase Agreements (DPPAs), net metering, feed-in tariffs, energy auctions, and mini-grid regulatory frameworks. According to him, these measures are intended to encourage greater private sector participation and improve access to finance and energy services.

On climate finance and carbon markets, Palapandu explained that Malawi has aligned its energy transition agenda with international climate mechanisms, particularly under Article 6 of the Paris Agreement. Carbon finance is now integrated into the National Energy Policy and linked to Malawi's Nationally Determined Contribution (NDC) target of achieving a 51% reduction in greenhouse gas emissions. He noted that initiatives such as the Rural Electrification Fund can leverage climate finance and carbon credits to improve project bankability, especially for rural electrification, mini-grids, renewable energy projects, and clean cooking solutions.

The presentation further emphasized the importance of creating an enabling environment for youth and women entrepreneurs. Government support mechanisms include financing facilities such as the Accelerating Sustainable and Clean Energy Access Transformation In Malawi (Ascent Malawi) Project and the Ngwengwe Fund, alongside regulatory reforms, capacity-building initiatives, the mini-grid regulatory framework, and the Malawi e-cooking roadmap. These efforts are intended to strengthen entrepreneurship, improve access to finance, and support inclusive participation in the clean energy transition.

In conclusion, Palapandu noted that Malawi has established a strong policy and regulatory foundation for a market-driven clean energy transition. He stressed that the greatest opportunities lie in supporting youth- and women-led enterprises through accessible financing, capacity building, and policies that promote innovation, decentralized energy systems, clean cooking, renewable energy development, and climate finance integration.

Innovative Opportunities in Clean Energy Ecosystem- Perspective from Entrepreneurs: Johns Ntaukira Zuwa Energy



Figure 7: Ntaukira presenting about entrepreneurs' perspective on Clean Energy Ecosystem

Jones Ntaukira shared practical insights from his experience as a clean energy entrepreneur, shifting the discussion from policy and technology to business models and market opportunities within Malawi's clean energy ecosystem. He emphasized that while many discussions focus on energy access, such as the number of solar panels installed or cookstoves distributed, the real entrepreneurial opportunities lie in the hidden economies and supply chains surrounding energy use. Drawing from practical examples, he encouraged participants to adopt an investor mindset rather than a donor approach, stressing that successful clean energy businesses should focus on solving real customer problems and delivering value rather than simply selling technology.

Key Highlights

- **Selling solutions, not technology.** Ntaukira emphasized that entrepreneurs often market the wrong things by focusing on products instead of benefits. Customers do not want solar panels or solar pumps; they want reliable electricity, water access, food preservation, and income opportunities. He encouraged entrepreneurs to stop selling technology and start selling practical solutions that improve livelihoods and productivity.
- **Clean cooking and the charcoal value chain.** He identified clean cooking as one of the largest business opportunities in Malawi. Rather than treating the charcoal market as the enemy, he argued that the existing charcoal distribution system should be viewed as valuable infrastructure that can support cleaner alternatives. He proposed producing clean briquettes from agricultural waste, such as tobacco stalks, using solar-powered briquette machines under lease or Pay-As-You-Go models. These briquettes could then be distributed through existing charcoal supply chains, preserving local livelihoods while reducing deforestation and household cooking costs.

- Fuel supply, not cookstoves, is the real challenge. Ntaukira stressed that clean cooking initiatives often fail because they are treated as a product problem instead of a fuel supply and affordability issue. He proposed developing Pay-As-You-Cook energy service models where households pay small amounts through mobile money while fuel is distributed through local agents. According to him, the real opportunity lies in controlling the fuel relationship rather than simply selling stoves.
- Solar cold storage and agri-business opportunities. He highlighted post-harvest losses in fisheries and agriculture as major energy-related business opportunities. Using fishing communities as an example, he explained that fishers are often forced to sell products cheaply before spoilage or rely on firewood for preservation. He proposed solar-powered cold rooms at landing sites, combined with produce aggregation, market linkages, and cold-chain transport systems connecting rural producers to urban markets. He noted that this model could also benefit tomatoes, milk, fruits, vegetables, and other perishables.
- Cold storage as a market timing solution. Ntaukira explained that post-harvest loss is not simply a food problem but a market timing problem. Cold storage transforms highly perishable products into tradeable commodities with longer market windows, improving incomes and reducing waste. He suggested deploying solar cold hubs in partnership with women's cooperatives and local agri-business groups.
- Energy-as-a-Service business models. He discussed the growing potential of Energy Service Companies (ESCOs) and Solar-as-a-Service models, particularly for institutions such as schools and hospitals. Drawing from Zuwa Energy's experience, he noted that many donated solar systems fail due to lack of maintenance. The company instead provides professionally maintained solar systems under service agreements, allowing institutions to replace expensive diesel, gas, or charcoal costs with reliable solar energy services. This model creates sustainable businesses while ensuring system maintenance and operational reliability.
- Solar irrigation as a financing opportunity: Ntaukira argued that solar irrigation systems should not be viewed merely as clean energy products, but as financial and agricultural productivity tools. Farmers do not necessarily want solar technology; they want income certainty and improved crop production. He suggested structuring financing around harvest payments, where crop income supports repayment systems linked to solar irrigation investments.
- Carbon credits and climate finance opportunities. He described carbon markets as a major untapped economic opportunity for Malawi, referring to carbon as "Malawi's newest cash crop." Activities such as clean cooking adoption, tree planting, and land restoration already generate carbon savings that can be monetized through international carbon markets. He suggested deploying local data agents to monitor clean cooking adoption and generate verifiable carbon credits that can create additional income streams for communities and enterprises.

Ntaukira concluded that the greatest opportunities in Malawi's clean energy sector are not simply in selling equipment, but in redesigning energy-dependent systems across cooking, agriculture, food preservation, irrigation, and institutional energy services. He emphasized that successful clean energy enterprises must begin with real customer needs, practical commercial models, and scalable solutions. His overall message to entrepreneurs was clear: stop selling technology and start delivering reliable services, economic value, and livelihood solutions.

The Business Incubation Support for Small Scale Clean Energy Entrepreneurs: The Role of Development Partners and Funding Agencies: Emmanuel Mjimapemba UNDP



Figure 8: Mjimapemba presenting about Business Incubation Support for Small Scale Clean Energy Entrepreneurs

Mjimapemba presented on the critical role development partners and funding agencies play in supporting small-scale clean energy entrepreneurs through business incubation. He highlighted that future projects must include a component where youth are included as well as women. He emphasized that UNDP has shifted from "funding" to capacity building helping enterprises develop business plans and learn how to run them. The presentation underscored that development partners must focus on capacity building, not just writing cheques, and that Africa Minigrids Program (AMP) and One Acre Fund (ACRE) projects serve as entry points for enterprise incubation. From his presentation it was worth noting that:

- Youth inclusion is essential: Future projects must include a component where youth are included as well as women in clean energy programming. Youth (aged 15–35) represent over 60% of Africa's population and are powerful agents of clean energy delivery as entrepreneurs, operators, and innovators.
- Shift from funding to capacity building: UNDP has stopped calling it "funding" the focus is now on capacity building. This includes helping enterprises develop business plans, strengthen governance structures, improve financial management, and become investor-ready. Enterprises do not just need grants, they need business plans, financial management skills, and market linkages.
- Key barriers facing youth and women entrepreneurs: These include lack of collateral for bank loans (interest rates of 20-45%+ in Malawi), weak financial management and limited market intelligence, limited engineering and O&M skills, discriminatory norms limiting women's enterprise roles, complex licensing processes, and remote last-mile locations with poor logistics.

- UNDP funding windows for clean energy enterprises: The Green Economic Transition Facility (GETF) has three windows Clean Energy Access (grants for solar, mini-grid, clean cooking), Productive Use (financing for agro-processing and irrigation), and Innovation (support for novel business models and pilots). The Accelerator Lab provides small grants (US\$5,000–US\$25,000) for rapid prototyping, while the Innovation Hub supports digital finance, mobile money, PAYGO, and capacity building.
- AMP and ACRE as entry points for incubation: The AMP and ACRE projects serve as the primary on-ramps identifying enterprises, building readiness, and connecting them to the full funding ecosystem across five pillars: Enterprise Development, Technical Capacity, Access to Finance, Market & Networks, and Gender & Inclusion.
- Recommendations for development partners: Strengthen projects as enterprise entry points; harmonise UNDP funding windows into a clean energy incubation track so enterprises progress without restarting applications; invest in gender-transformative incubation design (women's leadership modules, flexible scheduling); build a shared evidence base across partners; and leverage innovative finance for long-term viability (carbon credits, PAYGO digital finance, blended finance)
- He concluded that the funding ecosystem exists, but it must be harmonized and made accessible to youth and women-led enterprises. Development partners must move from writing cheques to building capacity.

The Malawi clean energy ecosystem and the entrepreneurial context for youth and women led businesses

This session was moderated by Vincent Mwale, following the presentations from the Ministry of Energy, UNDP and Zuwa Energy, and opening the floor for a question-and-answer session. Several critical questions were posed to the presenters, going deeper into issues of accessibility, gender considerations, impact measurement, policy recognition of youth, and climate finance.



Figure 9: Vincent Mwale leading the question-and-answer session



Figure 10: Stakeholders respond to questions

Highlight of the issues from question and answer session

Selected Questions	Addressed To	Summary of Response
How accessible are the opportunities for small-scale clean energy enterprises?	UNDP (Emmanuel Mjimapemba)	Opportunities exist but accessibility is not as easy as desired. They favor those with internet access; communication channels and media tend to be exclusive. English language also creates barriers. Would prefer opportunities to be open to everyone.
How do you determine gender considerations in your projects?	UNDP (Emmanuel Mjimapemba)	Two aspects are looked at: (1) ownership of enterprise, funds are given to those that are female-led or youth-led in terms of shareholding, ownership structure, or management setup; (2) what the enterprise is proposing if it demonstrates positive impact on youth and women or gives advantage to these groups, it is considered to have positive gender impact.
How do you measure impact of your projects, particularly in terms of gender impact and green jobs?	UNDP (Emmanuel Mjimapemba)	A variety of matrices are used: (1) growth of the enterprise, what stage it reaches by end of project, whether matured or commercially viable; (2) turnover, before and after intervention; (3) green jobs, impact based on community access and contribution; (4) ability of enterprise to sustain itself without external support.

Does the 2026 energy policy recognize the gaps that youth and women have faced over the years in the green energy transition in Malawi?	Ministry of Energy (Enock Palapandu)	Yes, the policy recognizes the challenges that young people and women are facing. The policy serves as a platform for capacity building taking them through development strategies to become entrepreneurs. Highlights issues like ability to access funds and meeting eligibility criteria (e.g., audited accounts). Policy statements recognize need to build capacity so youth and women can reach a level where development partners see a fertile environment for investment.
What is the government doing in terms of climate financing in Malawi? In Uganda, the government is doing a lot, but support is not trickling down to micro level. What can we learn from Malawi?	Ministry of Energy (Enock Palapandu)	Climate financing framework is yet to be approved will be approved in about three months. By integrating climate finance into the energy policy, it will be tracked. At first, monitoring the sector was challenging, but by integrating it into policy, in five years they will be able to say what they have achieved from policy implementation. This is more of an initiative for entrepreneurs.
What do you mean by predictability of entrepreneurs in line with productive use of energy? Beyond primary level, how can this be advanced?	Zuwa Energy (Jones Ntaukira)	Specifically, when it comes to productive use of energy, when the income level is linked to the product itself, it becomes really viable. Most entrepreneurs are busy marketing the wrong things selling the technology rather than the benefits the technology has.

Evidence for Clean Energy Entrepreneurship and opportunities for youth and women entrepreneurs in Malawi- Scoping study

Presenter: Joseph Elasu, Makerere University Business School (MUBS)



Figure 11: Joseph Elasu presenting about Malawi Scoping Study

Joseph Elasu presented the scoping review findings on the status of women- and youth-led clean energy enterprises in Malawi. The study was motivated by the recognition that SMEs are central to economic growth across sub-Saharan Africa, and that women and youth are increasingly recognized as critical actors – not only as users but as entrepreneurs and innovators in the clean energy sector. Despite growing investment in Malawi's clean energy space, systematic evidence on women's and youth's engagement remains limited. This study aimed to generate evidence for scaling clean energy innovations among women and youth in Malawi through a systematic scoping review of 44 documents, including peer-reviewed journals, organizational reports, and grey literature. Joseph noted that women and youth are bringing significant value to the energy sector, and that entrepreneurship is a key factor to consider when scaling clean energy.

Key insights from the presentation:

- **Malawi's energy context creates opportunity:** Only 25.9% of Malawians have access to electricity, while over 90% of households rely on biomass for cooking. This gap presents significant opportunities for women and youth-led clean energy enterprises in solar distribution, clean cookstove manufacturing, and briquette production. Policy frameworks including the National Energy Policy (2018), Malawi Vision 2063, and MGDS IV recognize clean energy as a driver of inclusive growth.
- **Women and youth are emerging actors in clean energy:** The scoping review identified several women- and youth-led clean energy enterprises in Malawi. In the solar subsector, examples include Solar Works (SHS distribution), EcoGen (youth-led solar solutions), Sollys Energy (youth-led), Green Impact Technologies (women-led), and Solar Ku Midzi (women-led). In the clean cooking subsector, examples include PRHE Women's Briquette Enterprise (women-led), Malawi Living Lab – Going Green (women-led), Chitetezo Mbaula Stove producers (women-led), Team Planet Solar Solutions (youth-led), and Youth4Biz-affiliated enterprises.

- Concentration in downstream value chain roles: Women and youth are predominantly engaged in downstream activities like marketing and sales, distribution and retail, rather than upstream roles such as manufacturing, design, or recycling. Youth are more visible in installation and repairs, while women are active in design and manufacturing of clean cookstoves. This concentration limits their ability to capture higher-value opportunities in the clean energy value chain.
- Key business models supporting women and youth: Several inclusive business models are expanding access for women and youth entrepreneurs. These include Retail Cash & Credit (outright purchase or short-term credit), Pay-As-You-Go (PAYG) for solar home systems using mobile payment installments, Pay-As-You-Cook (PAYC) for e-cooking aligned with women's income flows, Social Enterprise models targeting rural households, Lease-to-Own arrangements, and Partnership/Agent Networks where women and youth serve as last-mile agents embedded in larger distribution chains.
- Financing models available to women and youth: The financing landscape includes Donor & Grant-Based funding from UNDP, EU, USAID, and EEP Africa for early-stage enterprises; Microfinance & Community Savings through MFIs and VSLAs providing working capital to rural women; Results-Based Financing (RBF) where payments are tied to verified outputs such as clean cooking device sales; Blended Finance combining public, private, and philanthropic capital; Equity & Impact Investment from climate funds targeting gender-lens portfolios; and Carbon Credit Financing from verified emission reductions, an emerging mechanism with high potential for youth and women.
- Key opportunities for women and youth in Malawi's clean energy sector: The study identified four major opportunities. First, expanding off-grid electrification through SHS, mini-grids, and clean cooking creates entry points for women-led distribution and retail enterprises. Second, global partnerships and gender inclusion through UNDP, European Union (EU), USAID, IRENA, and EEP Africa are funding gender-inclusive clean energy programs in Malawi. Third, policy commitments and political will through National Energy Policy (2018), Gender Policy (2016), and Vision 2063 create a supportive environment. Fourth, untapped entrepreneurial potential exists as women in Malawi show strong micro-enterprise capability, and improved energy access can directly amplify their productivity and market reach.
- Systemic barriers limiting women and youth participation: The scoping review identified several persistent barriers. Cultural and social norms confine women to domestic roles while technical and business roles are perceived as male domains. Access to finance and assets is limited as women lack collateral, face financial exclusion, and face high borrowing costs. Educational and skills gaps exist due to gender disparities in STEM and vocational training. Information and network gaps mean inadequate outreach and Information and Communications Technology (ICT) access prevent rural women from learning about technologies. Time poverty and unpaid care work restrict time for entrepreneurship. Finally, a policy-practice disconnect persists where despite strong policies, operationalization remains weak with limited institutional accountability and monitoring.
- Policy framework governing clean energy in Malawi: Relevant policies include the National Energy Policy (2018), Malawi eCooking Roadmap (2024), National Climate Change Policy, MGDS IV, Malawi Vision 2063, National Charcoal Strategy, National Gender Policy (2016), National Youth Policy (2023), and the National Energy Compact for Malawi (2024).

- However, the study noted that policies exist but operationalization within clean energy projects remains weak with limited institutional accountability.
- Clean energy hubs and platforms supporting women and youth: Several platforms are active in Malawi including EEP Africa (funding youth and women's clean energy enterprises), MECS supporting e-cooking scale-up, Energy 4 Impact providing technical assistance, AWIEF connecting women entrepreneurs with investors, Youth4Biz/Conrema for youth-focused incubation, and UNDP/EU Gender Programmes funding gender-responsive clean energy access.

Conclusions and research gaps identified:

The study concluded that women and youth are emerging as vital actors in Malawi's clean energy transition, but their engagement is concentrated in downstream activities. Inclusive business models such as Pay-As-You-Go, social enterprise, and Pay-As-You-Cook (PAYC) are expanding access but remain limited in reach. While Malawi's policy framework is supportive, operationalization is weak.

Research gaps identified:

- Women and youth-led clean energy enterprises are few and predominantly urban-centred; rural women and youth remain largely excluded.
- Limited availability of sex and age-disaggregated data for evidence-based policymaking.
- No gender impact measurement framework contextualized for Malawi.
- Women and youth are rarely involved in designing clean energy products; innovations often ignore local cultural and economic needs.
- Short-term evaluations fail to capture sustained outcomes.

Policy implications:

Joseph concluded with four key policy recommendations. First, integrate gender and youth indicators by revising the National Energy Policy (2018) and Gender Policy (2016) to include operational, measurable gender metrics at program level. Second, promote gender-responsive financing through loans, credit guarantees, dedicated funds, and fiscal incentives targeting women and youth entrepreneurs. Third, integrate clean energy entrepreneurship into vocational and higher education curricula with targeted support for women and girls in STEM. Fourth, localize gender policies by embedding gender initiatives at district level via focal points, development plans, and sustained funding for monitoring and evaluation.

He concluded that the clean energy transition in Malawi cannot be fully realized without deliberately positioning women and youth as central actors in the ecosystem. Their enterprises are not only engines of innovation and employment but also conduits for equitable access to energy. By implementing these recommendations, Malawi can accelerate progress toward universal clean energy access and inclusive growth.



Figure 12: Workshop participants keenly following the proceedings

Validating Evidence for Scaling Youth & Women-Led Clean Energy Enterprises in Malawi -The survey report by Daniel Musyoka



Figure 13: Daniel Musyoka presenting about Malawi survey report

This section presents the findings from the survey by Daniel Musyoka from ACTS. Musyoka highlighted the systemic factors influencing women- and youth-led clean energy enterprises in Malawi, as well as the conditions necessary for scaling their participation and impact within the sector.

Research Focus

From the presentation, the survey examined the structural dynamics shaping enterprise participation and growth within Malawi's clean energy ecosystem. It focused on participation across value chains, business and financing models, enterprise outcomes, systemic barriers, and pathways for scaling inclusive clean energy enterprises.

Methodology

The study adopted a quantitative survey design targeting clean energy enterprises operating within the solar and clean cooking value chains. Data was collected from 904 enterprises across Lilongwe, Blantyre, Zomba, and Mzuzu. A stratified sampling approach was applied to ensure representation across gender, age groups (youth and adults), and value chain segments. Quantitative data analysis was conducted using descriptive statistics and regression techniques to identify patterns and determinants of enterprise performance and scaling.

Findings

Enterprise and Demographic Profile

The findings indicated that participation in the clean energy sector was largely youth-driven but male-dominated. While youth constituted the majority of participants, women remained underrepresented, particularly in enterprise ownership. Most enterprises operated at a micro level, typically employing between one and four individuals. The sector was also characterised by a high degree of informality, with many enterprises lacking formal registration, business licenses, and structured business plans. In addition, enterprises were predominantly concentrated in urban areas, limiting the reach of clean energy solutions in rural contexts.

Value Chain Participation and Opportunities

Participation across the Malawi value chain showed to be heavily skewed toward downstream activities, particularly sales, marketing, and distribution. Engagement in technical roles such as installation and maintenance is relatively limited, while participation in upstream segments, including manufacturing and fabrication, is minimal. This concentration in lower-value activities reflected a significant value addition gap, which constrained enterprise growth, limits income potential, and reduced opportunities for innovation. Despite this, the sector continues to present opportunities driven by increasing demand for clean energy solutions, particularly in off-grid and last-mile distribution contexts.

Business Models and Enterprise Operations

A range of business models were in use, including retail cash and credit systems, Pay-As-You-Go (PAYG) models, and agent-based distribution networks. These models contributed to improved access to clean energy technologies, particularly among low-income households. However, most enterprises continued to operate at a subsistence level, with limited transition toward scalable and growth-oriented models. This suggests that while existing business approaches support entry into the sector, they are less effective in enabling long-term expansion.

Business Formalization and Performance

The findings highlighted a substantial formalization gap within the sector. A significant proportion of enterprises operate without licenses or formal business plans, limiting their ability to access formal financial services, government support, and structured markets. Evidence from the analysis indicates that enterprise performance is strongly associated with formalization. Enterprises that are licensed, have business plans, and have operated over longer periods to demonstrate better performance outcomes and higher potential for scaling.

Financial System Constraints

Access to finance remained a critical constraint for women- and youth-led enterprises. The majority of entrepreneurs relied on personal savings as their primary source of capital, while access to formal credit remained limited. Barriers to formal financing included lack of collateral, limited financial histories, and high borrowing costs. These constraints were more pronounced among women and youth. Additionally, climate finance mechanisms were largely inaccessible due to their complexity and administrative requirements, further limiting opportunities for growth.

Skills and Capacity Gaps

The survey revealed significant gaps in both technical and business skills. Many entrepreneurs lacked competencies in installation, servicing, and manufacturing, as well as financial literacy and business planning. These skills gaps constrained enterprise development and limit the ability of women and youth to move into higher-value roles within the sector. Access to incubation and support services is also uneven, with most support concentrated in urban areas, leaving rural entrepreneurs underserved.

Market Dynamics

The clean energy market in Malawi perceived to be growing, particularly in relation to household energy needs. However, enterprises faced limitations in capturing this demand due to weak marketing strategies, limited promotional activities, and low consumer awareness. As a result, the existing market potential was not fully translated into enterprise growth and expansion.

Gender and Youth Dynamics

The findings confirmed persistent gender disparities within the sector. Women were underrepresented in enterprise ownership and are largely concentrated in lower-value roles, particularly in sales and distribution. Youth demonstrate higher levels of participation but face similar structural barriers that limit enterprise scaling. Importantly, the analysis indicated that enterprise success is not determined by gender alone. Rather, structural factors such as education, business formalization, and planning play a more significant role in influencing outcomes.

Determinants of Enterprise Scaling

Key determinants of enterprise growth included higher levels of education, business formalization, the presence of a written business plan, and product diversification. These factors are associated with improved performance and increased likelihood of scaling. This suggested that strengthening institutional and capacity-related enablers is critical for supporting enterprise development.

Systemic Barriers

The study identified a range of interconnected barriers affecting women and youth, including limited access to finance, skills gaps, high levels of informality, and weak implementation of supportive policies. These barriers were mutually reinforcing, creating systemic constraints that limit participation, growth, and sustainability within the clean energy sector.

Consequently, it was concluded that addressing these challenges would require a systemic and integrated approach to strengthen inclusion, enterprise capacity, and enabling support systems across the sector.

Stakeholder perspectives on systemic factors enhancing scalability and transformative potential of CEES for youth and women in Malawi – KIIs report

This section was done by Daniel Musyoka where he presented insights from the qualitative component of the study, capturing stakeholder perspectives on the systemic factors influencing the scalability and transformative potential of women- and youth-led clean energy enterprises in Malawi.

Methodology

The qualitative study adopted an exploratory design using Key Informant Interviews (KIIs) to capture in-depth perspectives across the clean energy ecosystem. Data was collected using semi-structured questionnaires and involved 16 key informants drawn from diverse stakeholder groups, including entrepreneurs (producers, installers, and sellers), government ministries, non-governmental organizations, development partners, and academic institutions. A purposive sampling approach was used to ensure representation across different roles within the clean energy value chain. Data was analyzed using thematic analysis, enabling the identification of recurring patterns related to enterprise participation, enablers, and systemic constraints.

The Findings

Motivations for Engagement in Clean Energy Enterprises

The findings indicated that participation in clean energy enterprises is driven by a combination of economic, social, and environmental motivations. From an economic perspective, entrepreneurs were motivated by income generation, livelihood stability, and the potential for business growth. Social drivers include job creation, community development, and improved health outcomes associated with reduced reliance on traditional cooking methods. Environmental considerations, particularly concerns about deforestation and climate change, also play a significant role in motivating engagement. These motivations were interconnected and collectively shape the commitment of women and youth to the sector.

Ecosystem Enablers: The study identified several key enablers that support participation and enterprise development within Malawi's clean energy ecosystem.

Collaborations and partnerships emerged as critical, involving government institutions, non-governmental organizations, savings groups, private sector actors, and international development partners. These partnerships facilitate access to finance, markets, and technical support.

Capacity building and skills development were also highlighted as essential enablers. Training programmes, covering both technical and business skills, enhance productivity, improve product quality, and support enterprise sustainability.

Community engagement and awareness creation play an important role in building trust and promoting adoption of clean energy technologies. Demonstration projects and localized sensitization efforts were noted as effective strategies for increasing acceptance and demand.

Standards and quality assurance mechanisms as they showed to contribute to market legitimacy, enabling enterprises to compete more effectively.

Financial and Market Constraints

Despite the presence of enabling factors, significant financial and market-related barriers persist. Access to formal finance remains limited, with high interest rates and stringent collateral requirements restricting borrowing. Financial institutions often perceive clean energy enterprises as high-risk, resulting in limited lending. Market-related constraints include restrictive structures and policy limitations, as well as regulatory delays that hinder business operations. In some cases, institutional bottlenecks limit market access and expansion opportunities. Low levels of awareness and cultural preferences for traditional energy solutions further constrain demand, particularly in rural areas.

Skills and Capacity Gaps

The findings highlighted ongoing gaps in both technical and business-related skills. While training programmes existed, access remained uneven, and many entrepreneurs still lacked competencies in areas such as installation, maintenance, and business management. These gaps limit enterprise growth and reduce women's and youth's ability to transition into higher-value roles within the clean energy value chain.

Gender Inclusion and Dynamics

Women were increasingly active in clean energy enterprises, particularly in clean cooking, distribution, and last-mile service delivery. Participation contributed to improved income levels, increased confidence, and greater involvement in household decision-making. However, gender disparities remained evident. Women continued to face structural barriers that limited their full participation and progression within the sector.

Gender-Specific Barriers

The study identified several genders-specific constraints affecting women entrepreneurs. These included:

- Social norms that question women's technical competence
- Time constraints linked to unpaid care responsibilities
- Limited access to finance and asset ownership
- Exclusion from male-dominated business networks
- Gender bias in customer interactions and market trust

These challenges were particularly pronounced for young women, who faced compounded barriers related to both age and gender.

Coping and Adaptation Strategies

In response to these challenges, women and youth adopted various coping strategies. These included participation in savings groups and enterprise networks, engagement in mentorship programmes, and targeted efforts to build technical skills. Community engagement initiatives were also being used to address cultural norms and increase acceptance of women's roles within the sector.

Systemic Perspective

The findings underscored that the challenges affecting women- and youth-led enterprises are interconnected and systemic. Financial constraints, skills gaps, regulatory barriers, and social norms reinforce one another, limiting enterprise growth and scalability. At the same time, the presence of strong enablers, particularly partnerships, training, and innovative business models, indicated that the sector holds significant potential if these barriers were addressed in an integrated manner.

In conclusion, challenges facing the sector were systemic and interconnected, requiring coordinated, inclusive, and multi-level interventions to strengthen enterprise development and sustainability.

Interactive Plenary Session: Reflections On the Malawi Presentations



Figure 14: Artz Luwanda presenting on Key reflections from Malawi

This session was moderated by Artz Luwanda and comprised of key reflections and comments emerging from the interactive discussion following the three Malawi presentations.

Overall Reflections on the Presentations

Stakeholders acknowledged the robustness of the research presented, noting that the study was well-grounded in theory and provided strong empirical evidence on women- and youth-led clean energy enterprises. The presentations were described as timely and relevant, particularly in relation to ongoing efforts to promote inclusive economic development and clean energy transitions.

It was noted that many of the challenges identified in Malawi mirrored broader patterns across countries, including high levels of informality in the private sector, male-dominated enterprise ownership, and limited participation of women in higher-value economic activities.

Value Addition and Structural Transformation

A central theme emerging from the discussion was the need to shift enterprises from low-value activities toward higher-value segments of the value chain. Stakeholders observed that most women- and youth-led enterprises are concentrated in sales and distribution, with limited engagement in manufacturing, production, and innovation.

This concentration was viewed as a structural limitation that constrains industrial development and economic transformation. It was noted that while governments are prioritizing industrialization and value addition, current enterprise patterns still reflect strong dependence on primary and low-level economic activities. Stakeholders emphasized the importance of deliberately promoting value addition, innovation, and upstream participation, as a pathway to closing productivity and income gaps.

Policy and Incentive Structures

The discussion highlighted concerns regarding the adequacy of existing policy and incentive frameworks to support women- and youth-led enterprises in the clean energy sector. It was noted that in some contexts, enterprise support policies do not sufficiently include targeted incentives such as tax reliefs, startup support mechanisms, or reduced registration burdens for small enterprises. Stakeholders questioned whether current regulatory frameworks adequately recognize the financial and operational constraints faced by emerging entrepreneurs.

Attention was drawn to the cost and complexity of business registration and licensing, which may discourage formalization. It was emphasized that excessive administrative requirements, without corresponding incentives, risk pushing enterprises further into informality. The importance of aligning clean energy enterprise support with broader economic policies such as industrialization, trade, and SME development, was strongly emphasized.

Innovation and Enterprise Development

Stakeholders raised questions regarding the nature and level of innovation among women- and youth-led enterprises. It was noted that while marketing and distribution activities are evident, there is a need to better understand the extent of innovation occurring within the sector, particularly in product development, business models, and technological adaptation.

This prompted reflection on how innovation is defined and measured within the clean energy ecosystem, and whether current assessments adequately capture non-technical forms of innovation, such as market and delivery of innovations.

Informality and Regulatory Environment

The high prevalence of informal enterprises was identified as a persistent challenge. Stakeholders observed that many enterprises operate outside formal regulatory frameworks, often due to perceived burdens associated with taxation, licensing, and compliance requirements.

It was further noted that lack of awareness regarding registration procedures and obligations contributes significantly to informality. Many entrepreneurs' associate formalization with immediate tax liabilities, without full understanding of thresholds, exemptions, or benefits associated with registration. The need for improved awareness of creation and simplified regulatory processes was emphasized as critical for encouraging formalization and enabling enterprise growth.

Gender, Youth, and Cultural Barriers

Stakeholders highlighted persistent gender disparities in enterprise participation, noting that cultural norms continue to influence women's engagement in technical and entrepreneurial roles. In some cases, women's participation in engineering and technical fields remains limited, affecting their entry into higher-value segments of the clean energy value chain.

Youth-related challenges were also noted, particularly limited knowledge of business processes, including registration, compliance, and financing requirements. This knowledge gap was identified as a key barrier to enterprise formalization and sustainability.

Financial Access and Business Planning

The discussion reinforced findings on limited access to finance, with particular emphasis on the importance of business plans as a prerequisite for financing. Stakeholders noted that many enterprises lack structured business plans, which limits their ability to access formal financial services. This was linked to broader capacity gaps, suggesting that financial inclusion efforts must be accompanied by targeted support in business planning, financial literacy, and enterprise development skills.

Policy Alignment, Data, and Implementation Gaps

A significant reflection centered on the importance of gender-disaggregated data in informing policy design and implementation. Stakeholders observed that while such data is increasingly available, it is not always fully integrated into policy processes.

Concerns were raised about whether existing policy frameworks sufficiently reflect the realities of women and youth, particularly given their demographic significance and economic potential.

The discussion emphasized the need for stronger mechanisms to translate research findings into actionable policy interventions.

Additional Policy Considerations

Several additional areas were highlighted for further attention, including:

- Strengthening standardization and quality assurance systems to support enterprise growth
- Enhancing intellectual property protection to safeguard innovation and knowledge assets
- Improving coordination between government, regulators, and private sector actors
- Promoting fiscal and policy measures that support enterprise scaling and competitiveness

These were viewed as important enablers for strengthening the clean energy enterprise ecosystem.

Insights from the Interactive Session

- Stakeholders confirmed that value chain concentration in low-value activities is a major structural constraint.
- Existing policy and incentive frameworks may not sufficiently support early-stage enterprises, particularly women and youth.
- Informality remains widespread, driven by cost, complexity, and lack of awareness of formalization processes.
- There is a need for clearer understanding and measurement of innovation beyond technology, including business and market innovation.
- Business planning capacity is critical for access to finance yet remains limited among many enterprises.
- Gender and cultural norms continue to influence participation, particularly in technical and leadership roles.
- Strong emphasis was placed on the importance of data-informed policymaking and better policy implementation mechanisms.
- A systemic and coordinated approach is required to address interconnected barriers across finance, skills, regulation, and markets.

Project Output, Challenges and next steps - Kenya context

Presenter: Mourine Chepkemai, Research Fellow, ACTS



Figure 15: Presenting the state of Kenya with regards to the project

Mourine Chepkemai presented Kenya's progress under the EVI-SICEE project, highlighting key achievements and activities to date. She explained how the research was conducted in Kenya, detailing the scoping study, survey, key informant interviews, scholarship programme, and business incubation activities. She noted that the findings were informed by a survey involving 1,093 respondents (56% male, 44% female) across 32 counties in Kenya. She further stated that women and youth were active participants but remain underrepresented in ownership and leadership positions, with youth engaged in sales, technical work, and innovation roles, while women are concentrated in customer relations and administration.

Progress

Scoping Study:

The scoping study was conducted to understand the landscape, identify the main issues, actors, and gaps in the clean energy sector. Its importance was to refine survey design, identify key variables, define the target population, and avoid duplications, thereby saving time and resources. Keywords used included women and youth in the clean energy sector, Climate Innovation Ecosystem, and clean energy enterprises. A conceptual framework was developed to guide the research.

Survey:

A comprehensive survey was completed involving 1,093 respondents (56% male, 44% female) across 32 counties in Kenya. The survey captured data on enterprise characteristics, financing mechanisms, barriers, and opportunities for women and youth-led clean energy enterprises.

Findings from the Survey:

- Success depends on access to training, finance, markets, and supportive policies.
- Main barriers include financial constraints, skill gaps, high startup costs, and regulatory hurdles.
- Existing enablers include mentorship, funding, market access programs, and strategic collaborations.
- Public-private partnerships and donor-supported initiatives have strengthened capacity and policy support.

Barriers to Scaling Identified:

- Limited access to finance and start-up capital
- High cost of technologies and inventory
- Inadequate business and technical skills
- Social norms affecting women's mobility, ownership, and decision-making
- Limited networks, mentorship, and market linkages
- Long ideation-to-commercialisation periods

Key Informant Interviews (KIIs):

Qualitative research was undertaken to complement the survey data, adding in-depth understanding to the quantitative findings. The clean energy stakeholders interviewed included entrepreneurs, policymakers, development agencies, donors, and non-governmental organizations (NGOs).

Scholarship Programme:

The project supported a scholarship programme for students across the partner countries. This included four Master's students at KCA University, one Master's student at Kenyatta University, two Master's students at Makerere University Business School, and one PhD student at Mzuzu University. Activities under the scholarship programme included mentorship, presentation platforms, direct engagement with stakeholders, exchange learning, and networking. The 4 students that attended were able present during this workshop; they were given insights on how to perfect their work and encouraged to publish their work.

Business Incubation:

Incubation hubs offered entrepreneurship training, mentorship and exchange visits, market readiness support (including clean cooking national programmes and social media platforms), and networking opportunities such as Climate Innovation Summit (CIS) 2025. An integrated business incubation model was developed and implemented. One enterprise won a grant from the Global Centre on Adaptation.

Next Steps

- Expand access to affordable financing and technical training to address the persistent barriers of capital constraints and skills gaps.
- Streamline regulatory processes and scale awareness campaigns to reduce bureaucratic hurdles and increase visibility of clean energy opportunities.
- Strengthen ecosystem support for women and youth-led enterprises through targeted interventions that address their specific needs and constraints.
- Leverage collaborations across government, private sector, development partners, and academia to ensure sustainability and scalability of interventions.
- Continue the integrated business incubation model to provide entrepreneurship training, mentorship, market readiness support, and networking opportunities for selected enterprises.

Take-away from Kenya's Progress Report

Women and youth are active in Kenya's clean energy sector but remain underrepresented in ownership and leadership positions. The main barriers are financial constraints, skill gaps, high startup costs, and regulatory hurdles. However, mentorship, funding, market access programs, and strategic collaborations have shown positive results. Public-private partnerships and donor supported initiatives have strengthened capacity and policy support. With continued collaboration and targeted support, women and youth-led enterprises in Kenya's clean energy sector are capable of achieving significant growth and impact.

Project Output, Challenges and next steps - Uganda

Presenter: Sylvia Aarakit, Project Coordinator – Energy, Entrepreneurship & Innovation, MUBS



Figure 16: Presenting on state of Uganda with regards to project

Sylvia Aarakit presented Uganda's progress under the EVI-SICEE project, covering the period from August 2024 to April 2026. She explained how the research was carried out in Uganda, detailing the work packages and methods used, and presented the key findings in summary. She noted that only solar and clean cooking value chains were identified as viable, and that most policies remain gender-blind. She also highlighted that most businesses run by women and youth can only employ 1 to 5 people. She further stated that the findings from the other three countries (Kenya, Malawi, and South Africa) are not so different from Uganda's findings, and that the team made sure most of the people involved in the research were women and youth.

Progress

Research Methodology and Work Packages:

Sylvia outlined the four work packages guiding project implementation. Work Package One focused on transdisciplinary research, mapping renewable energy and clean energy sectors to generate evidence on best practices in clean energy enterprises and business models, while documenting impact on women and youth. Work Package Two focused on business incubation hubs to optimize and scale best practices through the MUBS Entrepreneurship and Innovation Incubation Centre (MUBS EIIC), supporting youth and women-led clean energy enterprises. Work Package Three focused on knowledge exchange and learning, promoting transdisciplinary knowledge generation and dissemination through policy briefs, research briefs, and journal articles. Work Package Four focused on project coordination, administration, reporting, stakeholder liaison, financial management, and monitoring and evaluation.

Research Outputs Completed:

The first phase was anchored in rigorous evidence generation. A scoping study was completed, synthesizing 114 documents covering solar and clean cooking subsectors, policies, financing, and business models. This was followed by a comprehensive baseline survey of 1,318 clean energy enterprises across 19 districts in Central and Eastern Uganda. The qualitative research component was undertaken to complement the survey data, with 27 key informant interviews conducted across five stakeholder groups: policymakers, association leaders, enterprise owners, financial institutions, and development partners. Focus group discussions were also conducted during the Stakeholder Validation Workshop in October 2025.

Master's Fellowships Completed:

Two Master's research fellows completed their studies and graduated at Makerere University in February 2026. Reginah Nakawuki researched the role of innovative business models in scaling up women-led clean energy enterprises in the cooking sub-sector. Hafswa Nakibuuka researched factors influencing market acceptance of clean cooking technologies among youth and women-led enterprises in the informal food sector.

Incubation Hub Established:

An MOU between MUBS and the Kenya Climate Innovation Center (KCIC) was signed in October 2025, enabling joint implementation of incubation activities at MUBS EIIC. Eleven enterprises were identified and mapped for due diligence, with eight enterprises onboarded into the incubation hub.

Knowledge Exchange and Dissemination:

The Uganda team participated in five major conferences and workshops, including the Renewable Energy Conference REC24 & EXPO in Kampala (October–November 2024), the Joined-Up Learning Workshop at ACTS in Nairobi (February 2025), the CEDCA Fireside Chat at the Institute of Development Studies (June 2025), the 4th Annual WiCC2025 Conference at MUBS (July 2025), and the Stakeholder Validation and Gender Learning Workshop at Serena Hotel, Kampala (October 2025).

Gender Equality and Inclusion:

Sylvia emphasized that gender inclusion was central to the project. Four out of seven core team members are women, including the Project Coordinator. Both Master's research fellows are women. Seventy percent of the field data collection team were women, the majority being youth. All data was disaggregated by gender and age using intersectionality frameworks.

Challenges

Sylvia highlighted several implementation challenges encountered during the project:

- Delay in Research Ethics Committee at National Council for Science and Technology (REC/NCST), Uganda: The institutional delays in research approval slowed down implementation
- Length of the questionnaire: Some respondents were unwilling to respond due to the length of the survey instrument
- Trust issues: Some respondents were unwilling to respond due to lack of trust in researchers
- Unexpected weather changes Heavy rains and floods disrupted fieldwork activities
- Wide geographical coverage the team had to increase districts in the Eastern region to achieve an adequate sample size

Next Steps

Sylvia outlined the pending activities for 2026:

- Full Incubation Programme (May–October 2026): This includes onboarding and baseline data collection for eight enterprises, training and mentorship materials development, business development training and mentorship sessions, incubatee check-in meetings and facilitation, networking and market linkage events, and incubation monitoring, evaluation, and learning (baseline, midline, and endline)
- Integrated Research (February–September 2026): This involves baseline data collection (pre-incubation), midline data collection, endline data collection (post-incubation), data analysis and report writing, and a dissemination and validation workshop.
- Knowledge Products and Write Shop (March–June 2026): This includes manuscript preparation (pre-workshop), a three-day residential writing workshop, post-workshop editing and journal submission, and journal publication process management
- Dissemination and Conferences (April–October 2026): This includes the ACTS Dissemination Workshop in Malawi, the AfricaLics RCS Conference in South Africa, conference paper preparation and submission, and additional blog posts and policy engagement

Takeaway from Uganda's Progress

Sylvia concluded that the clean energy sector in Uganda is dominated by micro-enterprises, with women and youth concentrated in downstream sales and distribution roles. Access to finance remains the single biggest barrier, with 92.9% of entrepreneurs relying on personal savings to start up. Only 9% of businesses have ever received any formal business support. However, there is strong optimism about growing demand and innovation opportunities. The incubation programme is designed to address the critical gap between the fragile early stage of enterprises and something more durable. With the right support, these enterprises are capable of much more than the system has so far allowed them to achieve.

Project Output, Challenges and next steps - South Africa

Presenter: Ann Kingiri, ACTS

The EVI-SICEE project in South Africa, presented by Ann Kingiri, is defined by a unique case study approach necessitated by the country's distinct energy landscape, which remains dominated by coal despite a progressive shift toward clean energy. Project outputs have focused on an in-depth value chain analysis of youth and women-led enterprises, particularly in the biogas and biomass sectors. Through these case studies, ranging from women-owned technology firms to youth-led agricultural energy initiatives, the project has identified high-impact business models and established productive practices within the local policy framework. A significant achievement is the documentation of how clean energy is being integrated into sectors like agriculture and water services, highlighting the potential for hybrid models that combine renewable technology with traditional infrastructure to meet essential community needs.

However, the scaling of these enterprises faces complex challenges, particularly concerning policy and public perception. A major hurdle is the prevailing mistrust of biogas technology due to past system failures in the region, coupled with low public awareness and delayed consumer payments. Additionally, socio-economic issues such as theft of solar panels have forced enterprises to adopt more expensive or less efficient security measures. From a financial perspective, many of these businesses are currently self-driven and struggle with high operational costs and a lack of external capital. Technical and entrepreneurial skills also remain a bottleneck, as there is a critical need for a workforce that possesses a mix of both technical engineering capabilities and business management expertise.

Moving forward, the project aims to leverage South Africa's robust university training systems to bridge the existing skill gaps through targeted mentorship and capacity building. Next steps involve strengthening partnerships across the public and private sectors to address regulatory constraints and improve market access for renewable products. There is a strategic focus on encouraging industry assistance and fostering linkages that support the commercialization of these enterprises from the design stage through to installation and maintenance. By identifying these cross-cutting opportunities for inclusive growth, the project seeks to establish a more resilient clean energy ecosystem that can thrive alongside South Africa's evolving national energy policies.

Distilling key messages from the presentations



Figure 17: Solomon Ogara distilling key messages from the presentations

The session was presented by Solomon Ogara and provided an important platform for cross-countries reflection and knowledge sharing among partners involved in the EVI-SICEE project. Chaired by Solomon Ogara, a member of the EVISICEE project advisory board, the discussion focused on lessons emerging from the project's implementation across Kenya, Uganda, and Malawi, with particular attention to how research findings can translate into long-term societal impact. Participants reflected on the importance of rigorous research methodologies, stakeholder engagement, and the role of qualitative and quantitative data in understanding the realities facing youth and women-led clean energy enterprises. Ogara guided the discussion by encouraging participants to move beyond project outputs and critically examine what interventions are working within different national contexts and what lessons can be adapted across countries.

A key theme that emerged during the session was the importance of policy alignment, institutional collaboration, and community engagement in supporting sustainable clean energy entrepreneurship. Participants highlighted the need for stronger multi-sectoral approaches involving government ministries, academia, private sector actors, and community organizations to ensure that climate finance opportunities and digital innovations effectively reach grassroots communities. Experiences shared from Uganda and Kenya demonstrated the value of coordinated institutional structures, stakeholder buy-in, and capacity-building initiatives that empower entrepreneurs to access financing, licensing support, and business development opportunities. Discussions also underscored the importance of tailoring interventions to local socio-economic realities and strengthening awareness among communities to improve uptake of available services and technologies.

The session further emphasized the need for sustainability beyond the lifespan of the project. Participants noted that while grant funding remains valuable in supporting innovation, there is also a growing need to strengthen entrepreneurs' ability to attract long-term investment and build financially sustainable enterprises. Participants reflected on the role of universities, innovation hubs, and policymakers in creating enabling ecosystems that can support innovation continuity after project completion. In his closing reflections, Ogara stressed the importance of continued collaboration, political goodwill, and institutional commitment in ensuring that the lessons and evidence generated through the EVI-SICEE project contribute meaningfully to inclusive clean energy transitions across Africa.

Moderated Panel session

The section was moderated by Vincent Ogaya from Kenya Climate and Innovation Centre who provided guiding questions for the panel discussion, reflecting on opportunities and challenges of clean energy entrepreneurs in Malawi.

Panelists:

- 1) Policy - Enock Palapandu
- 2) Entrepreneur –Benson Ntepa Gama-BNG
- 3) Entrepreneur –Sithembire Tembo -REIAMA
- 4) NGO - Memory Suwedi Mumba -CEM
- 5) Supporting Partners- Emmanuel Mjimapemba -UNDP



Figure 18: The panelists

Question	Response	Key Takeaway
What does your business do? Where do you see the opportunity?	The company works in the energy sector: power & consumption, renewable energy, and general electrical installations. Has 8–9 lady technicians working on local projects across Malawi. Recruits and empower technicians (often from technical institutions).	Strong focus on youth and local talent development. Marginal preference in tenders gives women- and youth-led businesses a 20% advantage.
What opportunities are there for women and women-led businesses	Many tenders provide marginal preference (20% advantage) for women- and youth-led companies. Several workshops are run on business training, financial management, and business development. Programs like the lowan Project support women and youth.	Significant policy and programmatic support exist for women entrepreneurs, but uptake and capacity remain challenges
What does Grid and Beyond do? Why focus on clean cooking?	Grid and beyond is founded by a woman entrepreneur. Providing las mile solutions. Focuses on clean cooking solutions (induction stoves, LPG, electric cooking appliances) because the energy sector is male-dominated while cooking is female-dominated.	There is a huge market gap in clean cooking. Transition to clean cooking also brings men into household cooking activities.
What challenges are there for women entrepreneurs in clean energy	Lack of proper licensing (e.g., solar distribution permit from MERA), low participation in entrepreneurship (<20% women), lack of documentation, poor access to funding, insufficient mentorship and capacity building.	Capacity and formalization gaps are the biggest barriers and not lack of opportunities. Women need better mentoring and licensing support.
Why do many businesses lack business plans?	Cultural, planning is not deeply ingrained and as such many operate informally and pivot as opportunities arise. Business plans are only prepared when seeking loans/grants.	Low formalization and planning are a cultural and skills issue, not just lack of support institutions.

How do you see the support of UNDP in business incubation and acceleration in Malawi	UNDP shifted from pure funding to innovative financial solutions that include technical assistance, mentorship, and capacity building. They advocate for entrepreneurship education from primary school level.	Support is evolving from grants only to holistic capacity development. Curriculum reform is a long-term solution.
As NGO how do you handle Mini-grid company operations	Focus on mini-grids in remote/hard-to-reach areas. Creates opportunities especially for women and youth (e.g., female cooperative doing oil processing using green electricity).	Mini-grids drive local economic opportunities beyond just electricity access (productive use and cooking).
What Government incentives and collaboration exist in support of Malawi Clean Energy	Duty removals, tax incentives, easier registrations. MOUs between MERA and Ministry of Standards/Trade. New institution being set up to provide finance and support. Shift toward supporting early-stage and social entrepreneurs.	Policy framework exists and is improving, but implementation, awareness, and inter-ministry coordination need strengthening.
Effectiveness of policies & big fixes needed	Energy policy contributed to access rising from <11% to higher levels. However, challenges are still there like poor operationalization, funding gaps, awareness. The solutions here could be evidence-based implementation, more collaboration with donors like World Bank, EU and UNDP for better awareness, and enforcement of standards.	Policies have impact but need stronger execution, funding, and public communication. Collaboration across government and donors is critical.
What Incentives, standards, and reaching end users	Incentives must reach both companies and end users. Standards for technologies especially solar have improved through government and regulator efforts.	Incentives and standards are in place, but awareness and last-mile delivery remain key gaps.

Closing Remarks on Day one

Remarks by Solomon Ogara, Advisory Board Member

Solomon Ogara expressed his gratitude to everyone for attending and briefly recapped the key moments of the days program. He encouraged Mzuzu University to ensure that the lessons and experiences shared during the workshop reach the wider stakeholder community in Malawi.

Remarks by Artz Luwanda, On Behalf of Mzuzu University

Luwanda shared Mzuzu University's appreciation for the partnership with Kenya, Uganda, and South Africa, noting that the insights gathered during the validation workshop would be carefully taken forward. He thanked IDRC and ACTS for selecting Mzuzu University as a collaboration partner and expressed hope for continued cooperation. He also pointed out the need to shorten business registration processes and asked how quickly the ideas generated could influence national policies.

Remarks by Ann Kingiri, African Centre for Technology Studies (ACTS)

Ann Kingiri expressed gratitude to God for the successful completion of Day One. She noted that the workshop had exceeded her expectations, with participants learning a great deal from one another across academia, government, and business. She emphasized that this was just the beginning of a longer journey, announcing that the project has been extended to June 2027 completion of delayed activities. She highlighted that peer to peer learning between Malawian entrepreneurs and those from the other three countries would be supported through mentorship and capacity building efforts.

She acknowledged the three main presenters from the Ministry of Energy, UNDP, and Zuwa Energy for their valuable contributions, which deepened her own perspective on clean energy and innovation systems. She also recognized the National Council for Science and Technology (NCST) representative from Malawi and extended special thanks to the entrepreneurs who shared their real-world experiences. She reflected on the strong interaction during the workshop, noting that the exchange of ideas had enriched everyone involved and called on participants to carry the momentum forward with long-term thinking.

Closing Announcements by Maxon Chitawo

Maxon informed participants that Day Two would be reserved for internal meetings among the in-country teams. He expressed gratitude to everyone for their time and active participation. The session closed with a word of prayer.

Day Two: Project Team Learning Mini-Workshop



Figure 19: Team members implementing the project

Student Presentations

The student presentations segment, moderated by Sylvia Aarakit of Makerere University Business School, provided a platform for four project research fellows, one PhD student and three Master's students to share their experiences as well as progress for those who have not completed their studies. Each presentation was followed by a question-and-answer session, during which supervisors, senior researchers, and fellow participants offered feedback and guidance.

Dickson Bota: PhD Student – Mzuzu University



Figure 20: Dickson Bota, Mzuzu University

Topic: Analysis of Systemic Factors and Value Chain for Women and Youth-Led Solar Enterprises in Malawi: Towards Inclusive Innovation Business Model By

Dickson Bota presented his doctoral research, which focuses on conducting a critical analysis of inclusive innovation business models for scalability and sustainability of women and youth-led solar enterprises in Malawi. He explained that data collection had already been completed and he was currently at the data analysis stage. His study aimed to develop a business model that addresses the performance of youth-led enterprises in Malawi, with manuscript development already underway and his proposal successfully defended. The study targeted four major cities in Malawi: Blantyre, Lilongwe, Zomba, and Mzuzu, which are the primary commercial hubs hosting approximately 65% of the country's registered business enterprises.

Findings:

- Results showed that advanced value chain positioning, greater product-service complexity, and serving multiple customer segments significantly increase the likelihood of higher revenue performance.
- Education level and workforce size also positively influence outcomes.
- Once strategic and firm-level factors are controlled for, female-led enterprises demonstrate strong revenue potential, despite persistent structural barriers.

Joyce Gathaci: Master's Student – KCA University, Kenya

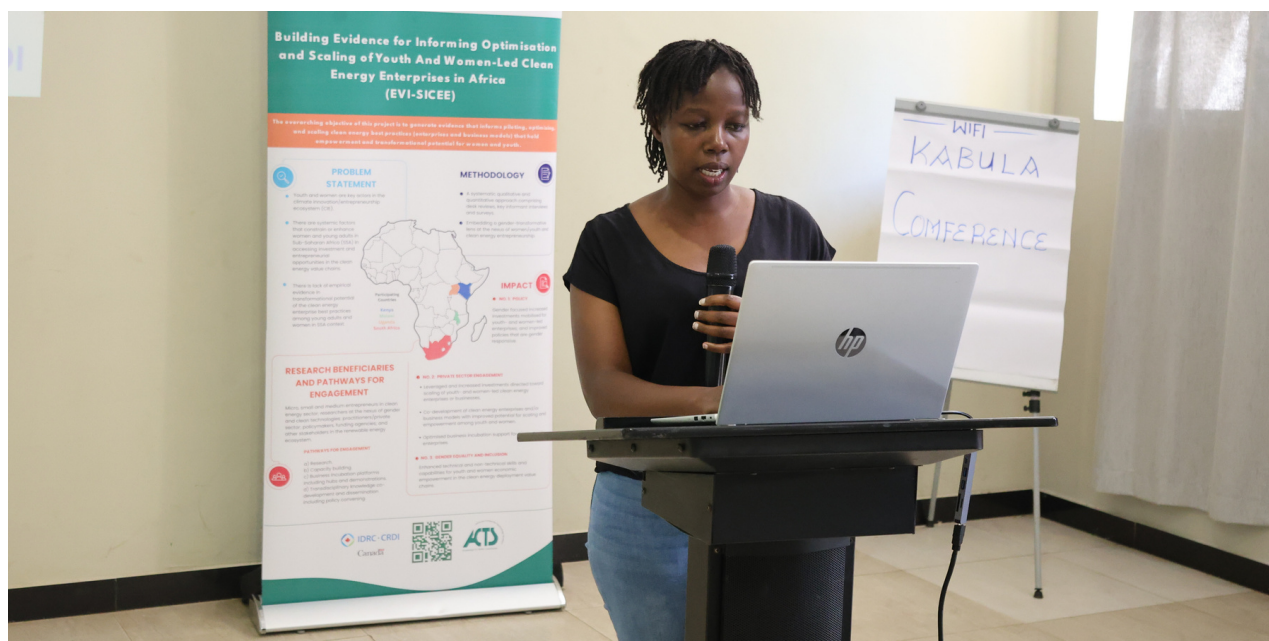


Figure 21: Joyce Gathaci, KCA University, Kenya

Topic: Influence of Knowledge Sharing in Clean Energy Incubation Programs on the Performance of Women- and Youth-Led Enterprises in Kenya.

Joyce presented her research examining how knowledge sharing influences enterprise performance among women and youth-led clean energy enterprises in Kenya. She noted that incubation programs provide training, mentorship, and networking opportunities, and that knowledge sharing enhances skills development, innovation capacity, and market access. However, she observed that enterprise performance remains uneven despite these interventions. Her study employs a mixed methods approach using a multiple case study design, targeting three clean energy enterprises in solar energy and clean cooking solutions.

Hafswa Nakibuuka: Master's Student – Makerere University Business School, Uganda



Figure 22: Hafswa Nakibuuka, Makerere University Business School, Uganda

Topic: Technology Attributes and User Awareness among Women and Youth-led Clean Cooking Enterprises in Uganda

Hafswa Nakibuuka presented her research examining why market acceptability of clean cooking technologies remains low. Her study focused on the relationship between technology attributes, user awareness, and market acceptability. She noted that clean cooking technologies are increasingly available but adoption remains uneven and often below expectations. Hafswa expressed her gratitude for the support she has received from IDRC and ACTS throughout her research journey. She also shared that she intends to pursue doctoral studies in clean energy, reflecting her commitment to the field.

Regina Nakawuki: Master's Student – Makerere University Business School, Uganda



Figure 23: Regina Nakawuki, Makerere University Business School, Uganda

Topic: Innovative Business Models and Scalability of Women-Led Clean Energy Enterprises in the Clean Cooking Sub-Sector in Kampala

Regina presented her research examining the relationship between financing models, distribution models, community-based models, and the scalability of women-led clean energy enterprises in Kampala. She noted that over 90% of startups, including those in the clean energy sector, fail within the first five years, yet these enterprises are vital in advancing the energy transition agenda. She has already collected and analysed her data. She thanked everybody for the assistance with her research and noted that every presenter did well.

Findings:

- Most women-led clean energy enterprises in Kampala are micro and small-scale, operating mainly in sales, manufacturing, and distribution of improved cookstoves.
- They are owner-managed, with limited formal structures and heavy reliance on personal savings for start-up capital.
- Financing models were found to be positively associated with scalability; enterprises that accessed equity capital showed better growth and expansion.
- Distribution models are positively linked to scalability, with wider market access and strong partnerships driving growth.
- Financing, distribution, and community-based models together significantly predict scalability.

Collective Feedback to Research Fellows

The moderator emphasized that students should learn from the comments made so that they are able to come up with good work. Ann noted that networking and peer learning might overlap, but both are valuable for student development. She encouraged students to approach her for help, emphasizing that the project needs to shape them, not just produce a paper.

1. Aligning Objectives and Methodology

Researchers were advised to ensure that their objectives are speaking to one thing rather than addressing separate issues. It was noted that some students had first two objectives that were not speaking to the same thing as the other two, meaning they were dealing with two separate issues rather than one coherent study. This made the methodology unclear. A clear methodology is essential, and students needed to specify whether their research is more quantitative or qualitative in nature. For Master's level work, the focus should be on understanding what is coming into the research rather than measuring performance. Students were reminded that coaching and mentorship can work together as they speak to each other, and that the project needs to shape the students themselves, not just produce a paper.

2. Use of Theories

Students were asked whether they had theories to support their work. One student responded that they had three theories and explained how each theory was assigned to each objective. This was noted as acceptable practice. However, another student was told that their theories were good but too many, and that the methodology needed to be worked on. Researchers needed to be clear about how their theories connected to each objective and ensure that the number of theories was appropriate for the scope of their study.

3. Data Validation and Uniqueness

One area of feedback focused on how a reader would know that the data had been validated. A student was asked about their objective four, where they proposed something, and questioned how a reader would know that the data was validated. Students were also asked what made their study unique. For one student, a 66% figure was noted as a higher value that needed to be checked. For PhD-level work, it was emphasised that the issues need to be in relation to one another, meaning that all parts of the research must connect logically and coherently.

4. Learning from Others

Researchers were encouraged to learn from successful models, particularly the Kenya Climate Innovation Center, regarding sample size issues. It was noted that the habits and unique aspects of women and youth have their own characteristics, and students should capitalize on these unique aspects in their research. One team member advised a student to learn from things done by the Kenya Climate Innovation Center, noting that they know what kind of knowledge can be shared across different contexts.

5. Statistics and Findings

Students were advised to ensure that their statistics are aligning with their findings. For those investigating why enterprises do not scale, the data analysis must support the conclusions being drawn. One student was specifically told to ensure the statistics align with what they were presenting, as they were investigating why women-led enterprises do not scale and needed to ensure their data supported that investigation.

6. Coaching, Mentorship and Peer Learning

It was noted that coaching and mentorship can be one thing as they speak to each other. The project needs to shape the students, not just produce a paper. Networking and peer learning might overlap at one time, but both are valuable for student development. Students were encouraged to approach senior researchers and supervisors for help, and it was made clear that they could reach out for support and guidance throughout their research journey.

7. Learning from Feedback

The moderator emphasized that students should learn from the comments made so that they are able to come up with good work. The feedback session was meant to help students improve, and those who listened carefully would benefit the most. It was noted that students should learn from the people who asked them questions, as this is a learning experience. The feedback was designed not to criticise but to help students refine their research and produce stronger, more credible work.

8. Moving Forward

Students were reminded that there is room for improvement, especially for those who have not yet submitted their proposals. The comments and guidance provided during the session should be taken seriously and incorporated into their ongoing work. The research journey does not end with the presentation of findings, but rather continues through revision, refinement, and engagement with supervisors and peers.

Debriefing of the Day 1 of Workshop

Moderator: Maxon Chitawo, Mzuzu University

The debriefing session was moderated by Maxon Chitawo, who opened the floor for reflections on what went well during the workshop and what could be improved. Participants were encouraged to speak honestly so that lessons could be learned, whether by the whole group or specifically by the Malawi team.

What Went Well

- Participants agreed that the workshop had been largely successful. One participant observed that everything was done well, though the time allocated to each presenter was short. Another noted that they had a good time since arriving and appreciated the overall experience.
- A member of the advisory board expressed appreciation for every delegate of the core team, noting that most of the presentations were impactful. They observed that there was great impact from the workshop as policymakers were brought together, which is not easy to achieve. The workshop reflected a transdisciplinary approach, and the funders are looking at the fundamental issues of problem identification and the solutions being proposed. They also suggested that it would be good if different people from the participating countries were able to listen and learn from what is happening in each country.
- Another participant noted that the product delivered was a pure sign of commitment, and they appreciated the Kenya team for the support they gave. Logistics were also noted to have been done well. The speakers were well selected, and despite some last-minute changes, these were worked through on time.

Areas for Improvement

- Several participants raised the issue of time. It was suggested that next time, it would be reasonable to add more time to the workshop, perhaps two days or more. The time assigned to the workshop needs to be increased, and at least site visits outside the hotel should be planned. Most presenters had more to say than the time assigned, so presenters should be given more time in the future.
- Regarding the presentation of findings, one participant noted that while the workshop objectives were met, it would have been better if the findings were presented by a stakeholder from Malawi or the project lead. Another participant mentioned that there was no time for attendees to give feedback about the workshop itself. Additionally, it was noted that more attention should have been paid to the gender aspect, as more presenters were men from the team.
- On planning, one participant stated that there is a need to learn from other projects to plan future activities smoothly. There is also need to plan for another workshop to bring people together again. The back-and-forth issues on the budget were noted as the biggest constraint on planning.

What Participants Learned

- One student noted that the workshop had been very insightful. Another student thanked everybody for the assistance with their research and noted that every presenter did well. Students were reminded that they should learn more from the people who asked them questions, as this is a learning experience.
- One participant noted that the information presented was good, and they felt the workshop achieved its objectives. The lessons learned should be taken back from the stakeholders as feedback. Capacity building was also mentioned as an important takeaway.

Conclusions from the Debriefing

Ann noted that the team exceeded expectations, had three excellent speakers, and, overall, achieved the objective. Now what remains is to write, as the validation was done greatly. She also noted that the funds for the workshop would be sent and expressed thanks for the good faith. Maxon further talked about future collaborations with Makerere University on research and with ACTS for further activities. The session concluded with a shared understanding that while the workshop was successful, there are clear areas for improvement that will inform future events.

Recap of Malawi Data and knowledge products development by Daniel Musyoka and Joseph Elasu

The session was very interactive on knowledge products development and began with Joseph Elasu emphasizing the need for Malawi to produce more knowledge products from the project. He outlined three key outputs: The first product to be expected is the scoping report, which is 90% ready and will be finalized once adjustments are done. A key question was raised on how to extract a manuscript from this, particularly a journal-based article, with the important reminder that reports and journal articles follow different principles.

The second knowledge product is the research brief, and a sample was shown though it is still under work. The third product is a policy brief that will be worked on soon. In summary, the expected knowledge products are the scoping report, the policy brief, and a manuscript for journal publication.

After Elasu's presentation, Daniel Musyoka led the discussion on policy brief ideas, starting with a recap of the project's objectives, work packages, and activities carried out. He highlighted the connectivity between the various speakers and presenters, and how their contributions speak to each other, as well as how the policy brief or research brief can be developed from the evidence gathered.

The moderator asked the Malawi team to speak on their priorities. Chitawo stated that the policy brief should come first, followed by work on publication. Gogoda concurred and spoke about the write-shop where they discussed how to write a policy brief and a manuscript, noting that this resonated well with the expectations from the workshop. One of the students from Malawi noted that while they are required to have a journal article by graduation, they still see a policy brief as an important starting point.

It was highlighted by the moderator that the issues of awareness creation and formalization of enterprises, as stated by MERA participants are quite important and need to be highlighted in a policy brief or research brief. A policy brief may target a single problem, but for articulation of multiple problems, then a research brief may be more appropriate. It was further stated that statistics need to be shown, as well as what the problem is, what the cause is, and what the solution is.

Ann Kingiri noted that knowledge products development and publishing should be collaborative. What needs to be done is to come up with a structure on who will lead what. She also noted that there is support for researchers to attend conferences.

Discussion on policy brief ideas from the workshop and Next steps for Malawi

A major section of the presentation by Ann Kingiri focused on the “post workshop-journey from here,” outlining the tasks that needed to be completed following the workshop. Ann emphasized on the need to convert collected data into practical knowledge products that could influence policy and practice. Among the planned outputs were:

- A workshop report capturing proceedings and discussions, led by Sarah (ACTS) and Tamandani (MZUNI)
- Finalized research reports and research briefs by May 2026 led by Ann Kingiri, Daniel Musyoka, Joseph Elasu and a team member from MZUNI
 - i) Scoping reports and related briefs
 - ii) Analysis of survey and key informant interview data
- Policy briefs capturing stakeholder perspectives from the validation workshop led by Maxon (MZUNI)
- A broader policy brief synthesizing systemic factors emerging from the different datasets, including the workshop’s finding led by Ann Kingiri and Daniel (ACTS) and a team member from MZUNI
- Journal articles focusing on themes such as enterprise formalization and unlocking clean energy markets for youth and women, an article led by Chrispin, another article led by Dickson in relation to his PhD work and another article written by anyone determined to do so from any of the collaborating team members within the project.

She stressed the importance of assigning clear leadership roles and timelines for each output to ensure completion within the project schedule. The presentation repeatedly returned to the importance of communication and coordination among the various lead teams from ACTS, Mzuzu University, and other collaborating institutions.

EVI-SICEE Incubation Program in Malawi, next steps

Ann also addressed the project's business incubation work package, acknowledging that time constraints made it difficult to undertake a full six-month to one-year incubation cycle for entrepreneurs in Malawi. As a result, she encouraged participants to explore ways Malawi could benefit more rapidly from experiences already emerging from Kenya and Uganda. Peer-to-peer learning, knowledge exchange, and collaboration between hubs were proposed as practical ways to accelerate impact without duplicating processes already tested elsewhere.

The presentation further highlighted the role of institutions such as the Kenya Climate Innovation Center (KCIC) in leading aspects of the incubation support, with collaboration from project partners. Discussions focused on how Malawi could adapt lessons from neighboring countries to strengthen support for entrepreneurs more efficiently.

Leveraging Project Resources for Learning, Dissemination, and Policy Influence

In concluding, Kingiri reflected on the resources available to support both project implementation and dissemination. These included opportunities for cross-country learning among project teams, support for stakeholder engagement, and limited support for conference participation and academic dissemination. She emphasized that the ultimate value of the project would depend not only on generating data, but on ensuring that evidence is translated into practical outputs, policy influence, and stronger support systems for youth- and women-led clean energy enterprises.

Closing

Ann Kingiri led the final session of the workshop, outlining the next steps and what IDRC expects from the Malawi team. She noted that the reports have been merged as they speak to each other, and a systemic approach has been developed that can guide other countries. The journey from this point was outlined, with roles clearly defined as to who will do what exactly. She observed that people become more sophisticated when they are upgraded from a low level to a high level, looking at driving from informality to formality. She noted that Work Package One is done, but the bigger issue in Malawi is Work Package Two, and asked what criteria were used in Kenya and Uganda for incubation. The last speaker was Vincent from the Kenya Climate Innovation Center (KCIC), who highlighted the issues on incubation in Kenya and Uganda and what Malawi can learn from them.

Ann then invited Maxon Chitawo to share any last words. A meeting to discuss incubation activities in Malawi was scheduled for afternoon, after lunch, to consolidate planning.

APPENDICES

Appendix : Workshop Programme – Day 1



EVIDENCE FOR INFORMING SCALING AND IMPACT IN YOUTH AND WOMEN-LED CLEAN ENERGY ENTERPRISES (EVI-SICEE) IN AFRICA

Stakeholders Learning Workshop
29th April 2026

Venue: Sigele Hotel, Senga Bay Road, Salima, Malawi

BACKGROUND

The EVI-SICEE project has been under implementation since January 2024. The motivation behind the project is that the informal, small and medium enterprises (SMEs) that drive economic development in many African countries comprise of a significant population of women and youth either as business entrepreneurs or employees. This fact makes women and youth more vulnerable to external shocks like the global economic crisis and the impacts of climate change that do not spare this informal sector. Further, structural and social-cultural barriers limit their capabilities to access finance, markets and training to grow their businesses/enterprises compared to adult men. The impact is confounded by the African challenge of burgeoning youth populations requiring formal or informal employment. The project is joined-up action research involving actors in the climate innovation/entrepreneurship ecosystem (CIE) with aim to provide evidence for informing scaling of promising youth and women-led clean energy enterprises for their transformative impact in the African context.

The overall objective of the project is to understand within the CIE context the systemic factors that enhance or constrain women and youth' access to entrepreneurial opportunities in clean energy innovation, and how the promising best practices can be scaled up for impact.

This one and half day workshop will bring together the clean energy ecosystem stakeholders from Malawi, including those that participated in the field work survey and key informant interviews in 2025. Project team members from Kenya and Uganda will also share their experiences during the workshop.

THE OBJECTIVES STAKEHOLDERS LEARNING WORKSHOP

The workshop will create an interactive space for both the clean energy (CE) ecosystem stakeholders in Malawi and project team from participating countries to deliberate on the findings from Malawi and co-create relevant knowledge aimed at positively shaping the optimization and scaling of youth- and women-led clean energy enterprises and business models in Malawi and other African countries.

Specifically, the validation learning workshop is designed to achieve the following objectives.

1. To present findings from Malawi's scoping study, the survey, and the key informant interviews (KIs).
2. To present a preliminary analysis of data from Malawi, generating evidence on system-level dynamics that contribute to the success or failure of women and youth in accessing business opportunities within the CE ecosystem.
3. To enable stakeholders to validate the study findings and collaboratively develop future scenarios for scaling youth- and women-led clean energy enterprises in Malawi and beyond.

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4. To reflect on the project's progress, including what had worked, what had not worked, and the lessons learned from the diverse experiences during the project implementation.

29 April 2026: STAKEHOLDERS LEARNING WORKSHOP (participants include project team and invited stakeholders)

Tentative Program			
Opening session 1 - Moderator: Dr. Maxon Chitawo			
Time	Activity	Description	Facilitator
08:30 - 09:00	Registration	-	Kumbukani, Tamandani
09:00 - 9:30	Introduction & Opening remarks	Welcome remarks	Prof. Fanwell Kapute, Director of Research Masuzu University
09:30-10:00	Project background		Dr. Ann Kingiri
10:00-10:10	Learning Workshop expectations		Dr. Chrispin Gogoda and Mourine
10:10 - 10:30 – Health Break and Poster Session plus Group Photo			
Setting the Scene Session 2 – Moderator: Dr. Maxon Chitawo			
10:30-10:45	The Malawi Clean energy policy environment		Enock Palapandu Ministry of Energy
10:45-11:00	Innovative opportunities in clean energy ecosystem: perspective from entrepreneurs		Jonas Ntaukira Zuwa Energy
11:00-11:15	The business incubation support for small scale clean energy entrepreneurs: the role of development partners and funding agencies		Speaker – Emmanuel Mjimapemba-UNDP
Session 3: The Malawi clean energy ecosystem and the entrepreneurial context for youth and women led businesses Moderator: Dr. Vincent Mwale			
11:15-11:35	Evidence for clean energy entrepreneurship and opportunities for youth and women entrepreneurs in Malawi: Scoping study: Dr. Joseph Elasu		
11:35 - 11:55	Stakeholder perspectives on systemic factors enhancing scalability and transformative potential of CEEs for youth and women in Malawi – KIs report: Daniel Musyoka		
11:55 - 12:15	Validating Evidence for Scaling Youth & Women-Led Clean Energy Enterprises in Malawi: The survey reports: Daniel Musyoka, Dickson Bora		
12:15-12:30	Interactive plenary session: Reflections on the Malawi presentations Moderator –Dr. Artz Luwanda		
Session 4: Learning from other contexts – the case of Kenya and Uganda Moderator: MUBS – Dr. Sylvia Asarakit			
12:30- 12:45	Presentation from Kenya	Project Output, Challenges and next steps	Mourine Chepkemol
12:45- 1:00	Presentation from Uganda	Progress, Challenges and next steps	Dr. Sylvia Asarakit
1:00-1:10	Presentation from South Africa	Progress, Challenges and next steps	Dr. Ann Kingiri

2

1:10-1:30	Discussions on the reports	Distilling key messages from the presentations	Prof. Solomon Ogara
13:30-14:30	Lunch Break		
14:30 – 15:30	Moderated Panel session: 4 Panelists 1) Policy - Enock Palapandu 2) Entrepreneur –Benson Ntepa Gama-BNG 3) Entrepreneur –Sithembire Tembo -REIAMA 4) NGO - Memory Suwedi Mumba -CEM 5) Supporting Partners- Emmanuel Mjimapemba -UNDP Guiding questions for the panel discussion: to reflect on opportunities and challenges of clean energy entrepreneurs in Malawi Moderator - Vincent Ogaya		
15:30-16:00	Student pitching (Dickson, Joyce, Hafswa, Regina)		
16:00 – 16:30	Reflections on the workshop – Prof. Solomon Ogara		
16:30-17:00	Closing Remarks Dr. Artz Luwanda Dr. Ann Kingiri		
17:00	End of Day one and Stakeholders depart		

Appendix : Workshop Programme – Day 2



DAY 2: 30 APRIL 2026

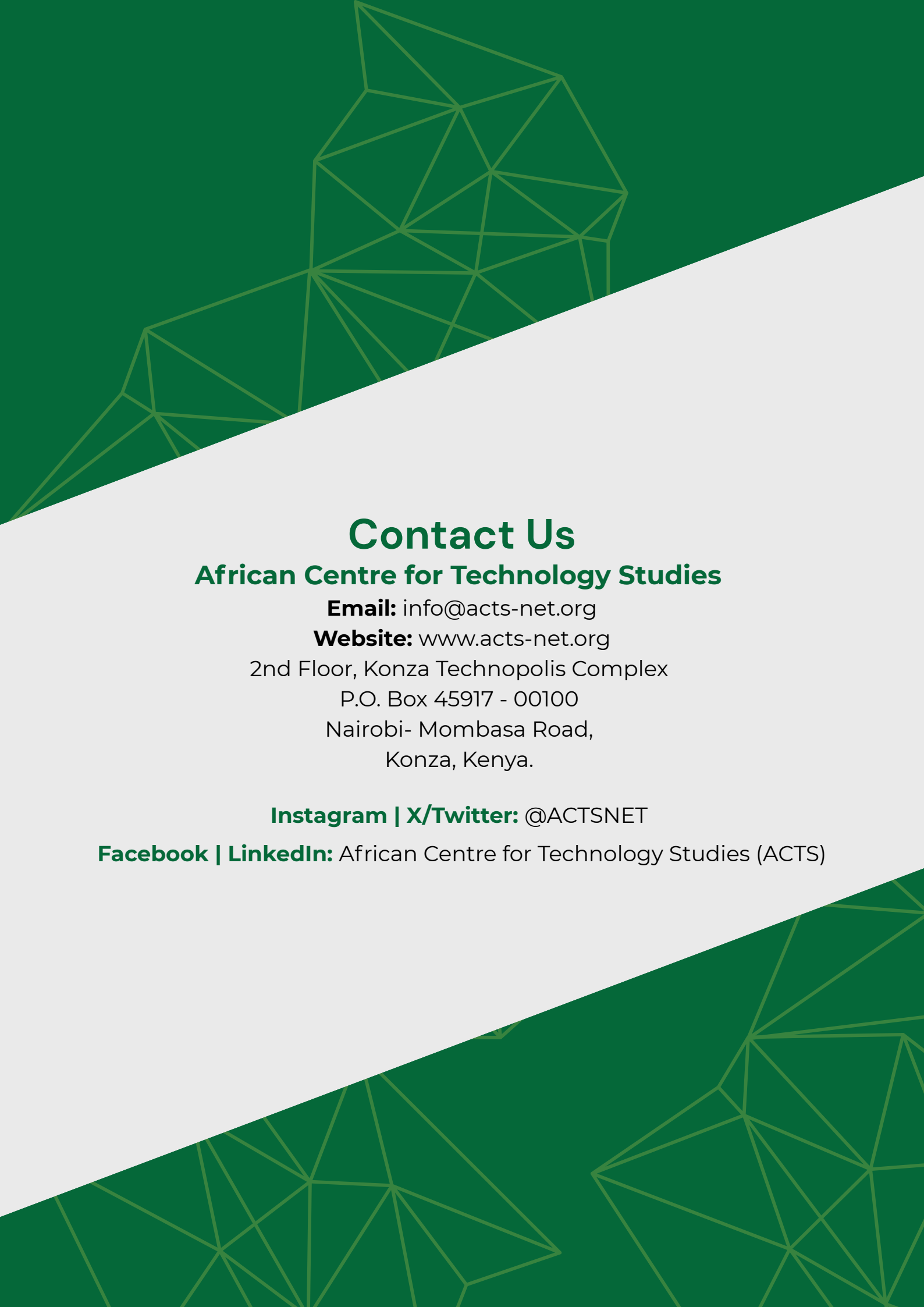
PROJECT TEAM LEARNING MINI-WORKSHOP (participants include project team members from Malawi and other countries)

TIME	ACTIVITY	FACILITATOR
09:00-09:30	Presentations from students	Sylvia
09:30-10:30	Debriefing of the workshop on Day 1	Maxon/Chrispin (All)
10:30 - 11:00	Health Break	
11:00 - 13:00	Recap of Malawi Data and knowledge products development Discuss policy brief ideas from the workshop	Joseph Elasu, Daniel, Maxon and Chrispin
13:00 - 13:30	Next steps and closing	Ann Kingiri
13:30	Lunch	
	End of Day 2	

Appendix 2: List of Participants

Names of attendant clean energy entrepreneurs	Organization	Gender Female/male
Vincent Mwale	MZUNI	M
Peter Maliro	MZUNI	M
Timeyo Maroyi	MZUNI	M
Mourine Chepkemai	ACTS	F
Peter Ongalo	ACTS	M
Fanuel Kapute	MZUNI	M
Chrispin Gogoda	MZUNI	M
Ganizani Malango	Up-Energy	M
Isaac Malekano	Self Help Africa	M
Enoch Palapandu	Ministry Of Energy	M
Ann Kingiri	ACTS	F
Daniel Musyoka	ACTS	M
Sylvia Aarakit	MUBS	F
Beston N Gama	BNG	M
Priscilla Mkandawire	MERA	F
Florence Chibwana	MERA	F
Harriet Chiwaula	MERA	F
Jones Ntaukira	ZUWA	M
Kondwani Gondwe	MZUNI	M
Kondwani Mubisa	OXFAM	M
Maxon Chitawo	MZUNI	M
Emmanuel Mjimapemba	UNDP	M
Cliff Kawanga	MZUNI	M
Artz Luwanda	MZUNI	M
Vitumbiko Kumwenda	NCST	F
Tiffany Njoroge	ACTS	F

Yvonne Gitu	ACTS	F
Kumbukani Khoza	MZUNI	F
Regina Nakawuki	MUBS-ACTS	F
Hafswa Nakibuuka	MUBS-ACTS	F
Loudon Banda	Ener-G-Africa	M
Ousman Kaliati	Times TV	M
Howard Chikeadane	MBC	M
Dickson Bota	MZUNI	M
Sithembile Tembo	REIAMA	F
Vincent Mazibuko	MZUNI	M
Steve Machilika	MZUNI	M
Vincent Ogaya	KCIC	M
Joseph Elasu	MUBS	M
Fegson Phabuli	ZODIAK	M
Elisha khombe	CEM	M
Tamandani Jonamu	MZUNI	F
Prof. Solomon Ogara	JOUST	M
Joyce Gathaci	ACTS	F
Sarah Njeru	ACTS	F



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)