

EVI-SICEE POLICY BRIEF No. 04 Empowering Women and Youth Entrepreneurs in Malawi's Clean Energy Sector

Evidence, Barriers, and Policy Priorities from a Scoping Review

May 2026

Ann Kingiri¹, Daniel Musyoka¹, Joseph Elasu² and Dickson Bota³

Design and layout by Peter Ongalo



¹African Centre for Technology Studies (ACTS), Kenya

²Makerere University Business School (MUBS), Uganda

³Mzuzu University, Malawi

AT A GLANCE

This policy brief draws on a scoping review of 44 documents (2000–2025) on women- and youth-led clean energy enterprises in Malawi. The scoping review is complemented by perspectives of stakeholders as captured during the validation workshop held in Malawi on 29 April 2026. The brief presents key evidence, identifies systemic barriers, and sets out ten actionable policy priorities for the Government of Malawi, development partners, and private-sector actors to accelerate gender-transformative and youth-inclusive energy entrepreneurship.

25.9% Population with electricity access	86% Energy supply from biomass	1.2% Access to clean cooking	44 Documents synthesised (2000–2025)	USD 3.1B Investment needed for universal access
----------------------------------------------------	------------------------------------------	----------------------------------------	------------------------------------------------	-----------------------------------------------------------

1. The Challenge: Energy Poverty and Exclusion

Malawi ranks among the least-electrified nations in sub-Saharan Africa. Only 25.9% of the population has access to electricity 11.4% through the national grid and 14.5% via off-grid systems while 86% of all energy consumed comes from biomass. Access to clean cooking stands at a mere 1.2%. The Government targets 50% electricity access and 3.6% clean cooking access by 2030, requiring an estimated USD 3.1 billion in investment and robust private-sector participation. Despite these challenges, women and youth constitute the majority of potential clean energy entrepreneurs. Yet they remain systematically excluded from the sector's most dynamic, higher-value segments. Addressing this exclusion is not only a matter of equity it is an economic imperative. Firms in Africa with women in decision-making roles report profit increases of up to 15% (ILO, 2019).

2. What the Evidence Shows**2.1 Women and Youth Are Active But Concentrated Downstream**

The scoping review confirms that women and youth participate in clean energy entrepreneurship and innovation through enterprises such as EcoGen, Green Impact Technologies, Sollys Energy, Solar Ku Midzi, Mudzi Cooking Project, and the SolarAid Mayi Walas initiative. However, participation is heavily concentrated in downstream activities - distribution, marketing, and retail, while upstream roles such as technology design, manufacturing, research, and finance remain largely inaccessible.

2.2 Effective Business Models Are Expanding Access

Several inclusive business models have demonstrated impact:

- **Pay-As-You-Go (PAYG):** Mobile-payment installment models (Solar Works, Green Impact Technologies, M-PAYG) reduce upfront cost barriers and generate employment for youth as agents and technicians.
- **Micro-franchising and agent networks:** Models such as Yellow Solar's 20-district network actively recruit women and youth as last-mile distributors.
- **Village Savings and Loan Associations (VSLAs):** Informal savings groups provide critical micro-credit to rural women excluded from formal banking.

- **Mayi Walas initiative:** SolarAid’s pilot trained 1,500 rural women as solar product entrepreneurs, demonstrating the scalability of women-led last-mile delivery.

2.3 The Policy Environment Is Supportive but Under-utilized

Malawi has a comprehensive policy architecture, including the National Energy Policy (2018), Gender Policy (2016), National Youth Policy (2023 - 2028), Renewable Energy Strategy (2017), eCooking Roadmap (2024), and Financial Inclusion Strategy (2024 - 2028). These policies lack operational gender metrics, are weakly coordinated across ministries, and are frequently driven by donor requirements rather than national accountability systems.

3. Persistent Barriers to Participation in Clean Energy Entrepreneurship

Six structural barriers consistently limit women’s and youth’s ability to enter and scale clean energy enterprises:

- **1. Limited access to finance and assets:** Women typically lack collateral and face institutional biases in lending. Only around 23% of women entrepreneurs access traditional bank loans.
- **2. Educational and skills gaps:** Gender disparities in STEM and vocational training perpetuate underrepresentation in technical roles such as installation and product design.
- **3. Cultural and social norms:** Patriarchal norms confine women to domestic roles. Mobility constraints further impede access to training and markets in rural areas.
- **4. Information and network gaps:** Inadequate outreach limits rural women’s awareness of technologies, financing options, and business opportunities.
- **5. Time poverty and unpaid care work:** The disproportionate household burden prevents participation in training and enterprise activities.
- **6. Policy-practice disconnect:** Gender mainstreaming in energy projects remains inconsistent with limited institutional mechanisms for monitoring gender outcomes.

4. Critical Evidence Gaps

The scoping review identifies six significant gaps constraining gender-responsive policy:

- No standardized national framework for measuring gender impact in clean energy enterprises.
- Evidence base is dominated by programmatic reports; peer-reviewed academic publications are scarce.
- Limited sex- and age-disaggregated data, preventing subgroup-specific analysis.
- Short-term, output-oriented evaluations that do not capture long-term empowerment trajectories.
- Intersectionality, how gender interacts with age, geography, and class, is underexplored.
- Insufficient evidence on how financing mechanisms translate into gender equality outcomes.

5. Policy Recommendations

The following ten recommendations are directed at the Government of Malawi, development partners, private-sector actors, and research institutions.

1 Develop a National Gender Impact Measurement Framework for Clean Energy

The Ministry of Energy, the Ministry of Gender, and the National Statistical Office should jointly develop a standardized Gender Impact Measurement Framework. It should capture quantitative indicators (access to credit, asset ownership, enterprise growth) and qualitative dimensions (agency, leadership, decision-making), aligned with SDG 5, SDG 7, and SDG 13.

2 Embed Gender and Youth Indicators in Energy Policy Monitoring

Future revisions of the National Energy Policy (2018) and Gender Policy (2016) should incorporate measurable gender and youth empowerment indicators, including ownership, leadership, access to finance, and training, into national energy sector monitoring frameworks.

3 Strengthen Inter-Ministerial Coordination

Establish a multi-sectoral coordination mechanism between the Ministry of Energy, Ministry of Gender, Ministry of Labour and Skills Development, and development partners, with responsibility for gender mainstreaming in energy policy, allocated budgets, and annual accountability reporting.

4 Expand Gender-Responsive Financing and Fiscal Incentives

Operationalize gender-responsive financial schemes including credit guarantee funds, low-interest green loans, and dedicated women and youth clean energy funds. Extend fiscal incentives VAT exemptions and import duty waivers to gender-inclusive enterprises under the Malawi Financial Inclusion Strategy (2024–2028).

5 Invest in Technical and Entrepreneurial Skills Development

Vocational and higher education institutions should integrate clean energy modules into vocational curricula with targeted scholarships and apprenticeships for women and girls. Private-sector partnerships should expand mentorship programmes to build a technically skilled and gender-inclusive workforce.

6 Support Women and Youth in Upstream Value Chain Segments

Policies should incentivize participation in research, technology design, manufacturing, and finance through start-up incubation programmes, innovation hubs, and preferential procurement frameworks aligned with the MSME Order (2020).

7 Embed Gender Transformation Not Just Participation in Energy Programmes

Adopt a transformative gender approach in Monitoring and Evaluation (M&E) frameworks that assess agency, leadership, and control of assets, not just participation. Revise energy project monitoring systems accordingly.

8 Strengthen Sex- and Age-Disaggregated Data Systems

The National Statistical Office should incorporate gender and youth energy indicators into national household surveys. All implementing agencies must report disaggregated data for evidence-based policymaking and accurate SDGs tracking.

9 Localize Gender Policies at District Level

Embed gender and youth focal persons in district energy offices and integrate clean energy entrepreneurship into District Development Plans. Sustained funding for local monitoring systems is essential to ensure continuity beyond donor project cycles.

10 Establish Longitudinal Impact Evaluation Systems

The Ministry of Energy, in partnership with universities and development partners, should establish long-term monitoring frameworks to assess empowerment outcomes over time, promoting adaptive policy learning and evidence-based refinement of gender impact tools.

6. What Needs to Happen- Some Recommendations

Immediate priorities for 2025–2026:

- **Immediate (0–12 months):** Design an inter-ministerial working group to design the national Gender Impact Measurement Framework.
- **Short-term (1–2 years):** Revise the National Energy Policy to include operational gender metrics. Launch a dedicated gender-responsive credit guarantee facility for women and youth clean energy enterprises.
- **Medium-term (2–5 years):** Integrate clean energy entrepreneurship into vocational curricula nationwide. Establish district-level gender focal points in all districts with energy M&E responsibilities.

*Note: This policy brief is part of the **EVI-SICEE project - Evidence for Informing Optimization and Scaling of Youth and Women-Led Clean Energy Enterprises** in Malawi funded by IDRC and implemented by ACTS and partners, including Mzuzu University*



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)