

EVI-SICEE-POLICY BRIEF-05

Working Capital, Not Start-Up Capital

What it will take for Malawi's small clean energy enterprises to finance their customers

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Targeted Stakeholders: Ministry of Energy · Malawi Energy Regulatory Authority (MERA) · Ministry of Trade and Industry · Ministry of Gender, Community Development and Social Welfare · Reserve Bank of Malawi

The Issues!

Seven in ten clean energy enterprises in Malawi sell only for cash. That means the customer must find the full price of a solar system or improved cookstove on the day of purchase, a requirement most rural households cannot meet. Arguably, source of funds for clean energy enterprises is primarily from personal savings. This notwithstanding, the enterprises that do offer instalment payment are not the ones that started with more money. They are the ones with access to finance now. Start-up capital shows no relationship at all to whether an enterprise offers customer financing. Access to working capital shows a very strong one. This single contrast should reshape how enterprise support in the sector is designed.

70% of enterprises sell for cash only	93% are funded from the owner's personal savings	1.3% have ever used a loan of any kind
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Why this matters now

Malawi's clean energy market is served largely by very small firms. Three-quarters of the enterprises surveyed are micro-enterprises; the median employs two people. These are the businesses that reach the last mile, and they are the ones deciding, transaction by transaction, whether a rural household can afford a solar system or a cleaner cookstove.

When an enterprise lets a customer pay in instalments, it is not simply making a sale. It has handed over a product and is waiting for money financing that customer out of its own pocket while still paying for stock, transport and staff. Only an enterprise that can carry that gap can offer the arrangement. Seven in ten cannot, and so they do not.

The policy question is therefore narrower and more tractable than it first appears. Expanding affordable clean energy access does not require a new consumer subsidy. It requires enabling the enterprises already in the market to carry their customers' receivables.

What the evidence shows

Evidence from the Informing Optimization and Scaling of Youth and Women-Led Clean Energy Enterprises (EVI-SICEE) project provides the context for the argument advanced above. The project is a multi-country initiative implemented by the African Centre for Technology Studies (ACTS) in partnership with Mzuzu University and other partners and supported by the International Development Research Centre (IDRC). The project seeks to understand and address systemic barriers facing women and youth entrepreneurs in the clean energy sector across Malawi among other countries.

What the data show	What it means for policy
Enterprises with external finance offer instalment payment at more than twice the rate of those without – 44% against 21%.	One-off start-up grants will not produce consumer financing. Revolving working capital will. Start-up capital shows no relationship to it at all.
The sector is almost entirely self-financed: 93% of enterprises are funded from personal savings and only 1.3% have used a loan of any kind.	There is no existing credit channel to build on. A facility has to be created, not merely widened.
Only 7.5% of clean-cooking enterprises offer instalment payment, against 26.3% of solar enterprises.	The solar affordability model does not transfer to clean cooking. A separate instrument is needed for the segment where the access deficit is worst.
Education and vocational training do not distinguish enterprises that offer financing from those that do not, once other factors are accounted for.	Training alone cannot close the gap. It has to be paired with a financing facility to have any effect on affordability.
Female-youth-led enterprises offer instalment payment at 32%, against 15% for male-adult-led enterprises.	Women entrepreneurs are already leading on affordability innovation. Treating them only as constrained beneficiaries misreads the market.
Cooperative or business-group members are 9 percentage points more likely to offer instalment payment.	Associations are a working delivery channel for credit, information and payment systems that individual micro-enterprises cannot reach.
Adoption is concentrated in a few districts. Zomba alone accounts for 42% of all instalment-selling enterprises in the country.	The market is not uniform even within regions. A single national programme design will fit almost nowhere well.

Figures are average marginal effects from a multinomial logit model of payment-regime choice, N = 860. All effects cited are statistically significant. Source: Clean Energy Enterprises Survey

Recommendations with suggested lead organisations

Five actions follow from the evidence, in order of expected impact.

1 Redirect enterprise support from start-up grants to revolving working capital

This is the central recommendation and the one the evidence supports most directly. Enterprises with access to external finance offer instalment payment at more than twice the rate of those without; enterprises that started with more capital are no more likely to do so at all. Money given once, at establishment, does not produce consumer financing. Money available on a rolling basis does.

The starting point is close to zero. Across all reported sources of business capital, 93 per cent of enterprises name the owner's personal savings and only 11 enterprises in 860 have used a loan of any kind. This is not a market where credit is expensive or poorly targeted; it is a market where credit is effectively absent. A facility therefore has to be built rather than reformed.

Practical instruments: a dedicated working-capital or receivables-financing window for clean energy retailers; partial credit guarantees to reduce the collateral demanded of micro-enterprises; and inventory or supplier-credit facilities that free an enterprise's own cash to sit in customer receivables. The design principle is that the facility must revolve, because the receivable portfolio revolves.

Lead: Ministry of Energy with Ministry of Trade and Industry and Reserve Bank of Malawi

2 Design a distinct clean-cooking financing instrument rather than extending the solar model

Clean-cooking enterprises are 29 percentage points less likely to use instalment payment than the comparison group — the largest enterprise-level effect in the analysis. The likely reason is arithmetic. A cookstove costs far less than a solar home system, so the cost of chasing several small payments consumes a much larger share of the sale. Solar systems can also be switched off remotely if payments stop; cookstoves cannot.’

Extending a solar-designed PAYGo programme to clean cooking will therefore underperform, and it will underperform in the segment where Malawi’s access deficit is most severe. Options worth testing include aggregating collections through cooperatives or mobile-money group accounts to spread administrative cost, shorter repayment horizons matched to fuel purchase cycles, and results-based support that offsets collection costs directly rather than subsidising the unit price.

Lead: Ministry of Energy, clean cooking programme leads, with MERA

3 Channel financing and payment systems through cooperatives and business associations

Membership of a business group or cooperative is associated with a 9 percentage-point increase in instalment adoption. Larger enterprises are also more likely to offer PAYGo, suggesting that group structures can help smaller firms overcome some of the scale and organisational requirements needed to manage customer credit portfolios. Groups appear to supply what individual micro-enterprises cannot assemble alone: access to finance, supplier relationships, customer information and record-keeping systems.

This makes associations an efficient delivery channel as well as a target for support. Routing a credit guarantee or a receivables facility through an association reduces the transaction cost of reaching hundreds of two-person firms individually, and gives the lender a counterparty with some collective accountability.

Lead: Ministry of Trade and Industry with Small and Medium Enterprises Development Institute (SMEDI) and district councils

4 Treat women-led enterprises as financing innovators, not only as a disadvantaged group

Female-youth-led enterprises offer instalment payment at 32.4 per cent, against 15.2 per cent for male-adult-led enterprises more than double the rate, and the gap holds once enterprise size, sector, finance and location are accounted for. Female-adult-led enterprises also sit above male-adult-led ones, though that group is small (53 enterprises) and the result is less firm. This runs against the standard framing of women entrepreneurs as uniformly finance-constrained. They face real constraints, but on this measure they are ahead of the market, plausibly because they work closest to the customers for whom affordability binds hardest.

The programming implication is concrete: young women-led enterprises in particular should be a priority channel for working-capital facilities rather than a target group for separate, smaller training-led interventions. Gender-responsive design here means backing an existing strength, not compensating for a deficit.

Lead: Ministry of Gender, Community Development and Social Welfare with Ministry of Energy

5 Target districts, not regions and start where the market already works

Instalment selling in Malawi is not a regional pattern. It is a district one. Zomba district alone contains 42 per cent of all instalment-selling enterprises in the country; Zomba, Machinga and Chiladzulu together contain 61 per cent. Meanwhile Blantyre, in the same region as all three, sits at 8.6 per cent.

A programme designed around the three regions would treat Zomba and Blantyre as the same market. They are not. Two actions follow: first, establish what is working in the Zomba–Machinga corridor whether a distributor, an agent network, a mobile-money footprint or a past programme, because that is the closest thing to a proven Malawian model available. Mobile-money penetration is a key enabler of PAYGo, as it simplifies payment collection and reduces administrative costs. Second, use a short district-level diagnostic on mobile-money coverage, agent density, active distributors and financial service points to sequence any national rollout rather than launching uniformly.

Lead: Ministry of Energy with district councils and MERA

Instalment selling by district

District	Region	Enterprises	Instalment %	Deferred %
Machinga	Southern	41	61	2.4
Zomba	Southern	161	50.9	3.1
Chiladzulu	Southern	20	50	0
Mzimba	Northern	36	22.2	52.8
Salima	Central	27	22.2	0
Dedza	Central	28	14.3	0
Balaka	Southern	23	13	0
Lilongwe	Central	242	12.8	12.8
Blantyre	Southern	233	8.6	0.4
Dowa	Central	23	4.3	21.7

Districts with 20 or more surveyed enterprises. Seven further districts had fewer than 20 enterprises each and are omitted. Source: Clean Energy Enterprises Survey, N = 860

The deferred-payment column is worth noting separately. Informal “pay me later” arrangements are concentrated in Mzimba (52.8 per cent) and Lilongwe, and are almost absent from the Southern districts. This is a different market failure from the one instalment finance addresses and should not be counted as progress toward affordable access.

What to avoid

- **Do not treat training as a substitute for finance.** Neither education nor technical training distinguishes enterprises that offer customer financing from those that do not. Credit-management and business-development training remains useful, but it should be attached to a financing facility. On its own, the evidence gives no reason to expect it to change payment practice.
- **Do not treat all deferred payment as equivalent to PAYGo.** Informal “pay me later” arrangements and structured instalment schemes have almost nothing in common in this data. Deferred payment is associated with licensing and location, not with finance, networks or enterprise scale. A programme that counts them together will report progress it has not achieved, and will misdirect support toward arrangements that carry credit risk without the enforcement structure to manage it.

How to read this evidence

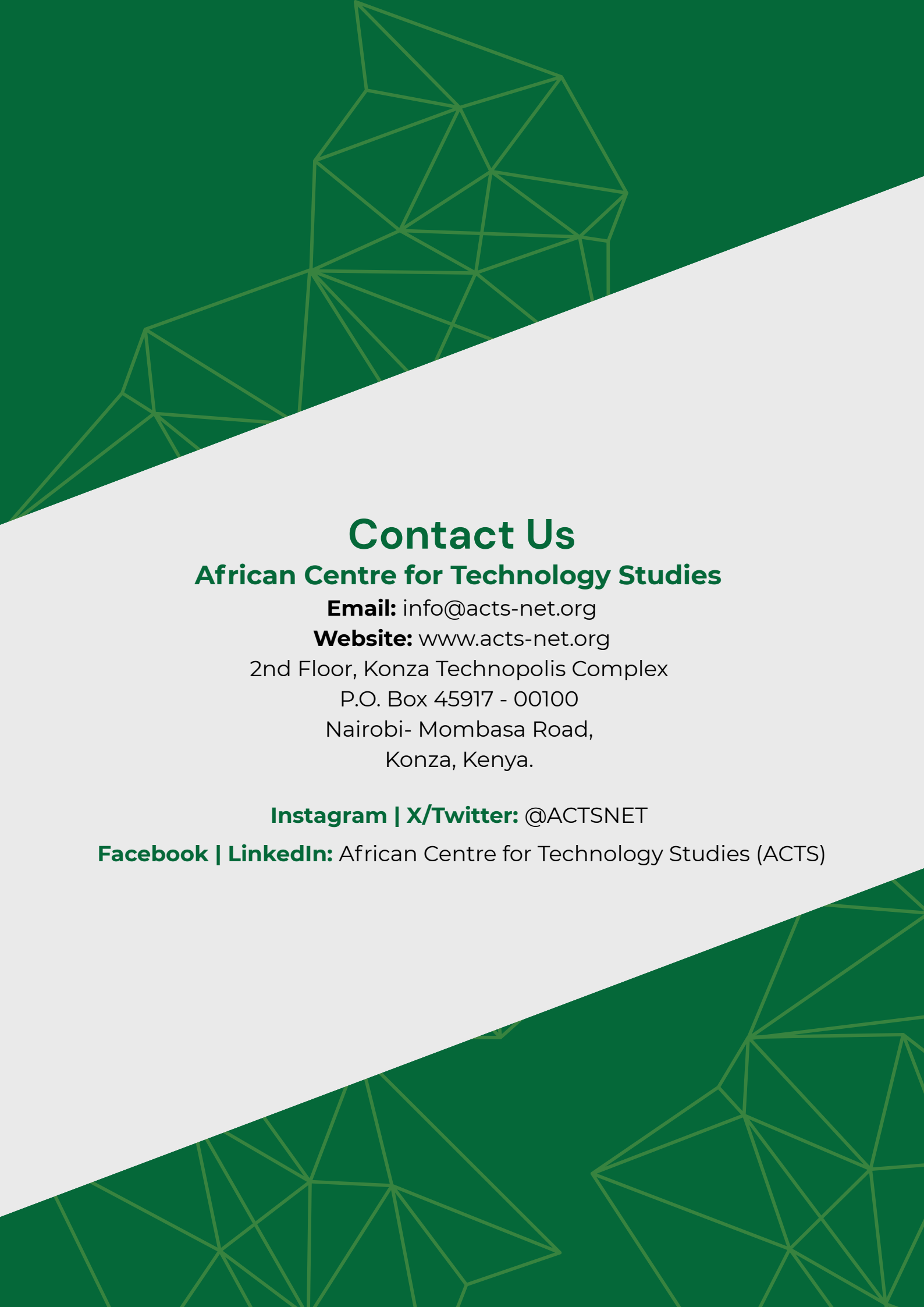
Four caveats matter for anyone acting on these findings.

- The relationships are associational, not causal. The finding that finance and instalment selling go together is equally consistent with lenders preferring to back enterprises that already offer instalments. A pilot with staged rollout and monitoring would settle this and is worth building into any facility from the start.
- Only 63 enterprises in the sample use external finance of any kind, and the survey does not distinguish bank credit from microfinance, supplier credit, grants or equity. Which instrument works best for financing receivables is an open question that programme design should be structured to answer.
- Because adoption is so concentrated in Zomba and its neighbouring districts, national figures are influenced heavily by what is happening in one part of one region. Understanding that concentration is a prerequisite for reading the national picture correctly.
- The reasons behind the technology and district effects are inferred rather than measured. Product prices, collection costs and default rates were not collected. The patterns are strong enough to act on; the explanations are not yet established.

None of this weakens the central finding. The contrast between start-up capital, which predicts nothing, and current access to finance, which predicts a great deal, is the most robust result in the study and the one with the clearest programming consequence.

EVIDENCE BASE

Drawn from *Who Extends Credit to the Energy Poor? Consumer-Financing Model Adoption among Women- and Youth-Led Clean Energy Enterprises in Malawi*, using enterprise-level data from the Clean Energy Enterprises Survey conducted under the Women’s and Youth Entrepreneurship for Clean Energy Ecosystems in Malawi project. Estimation sample: 860 enterprises across 17 districts in the Northern, Central and Southern regions. A companion research brief sets out the methodology and full results.



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