



Digitalising Innovative Finance: A guide to key instruments for early-stage innovators in low- and middle-income countries



GSMA

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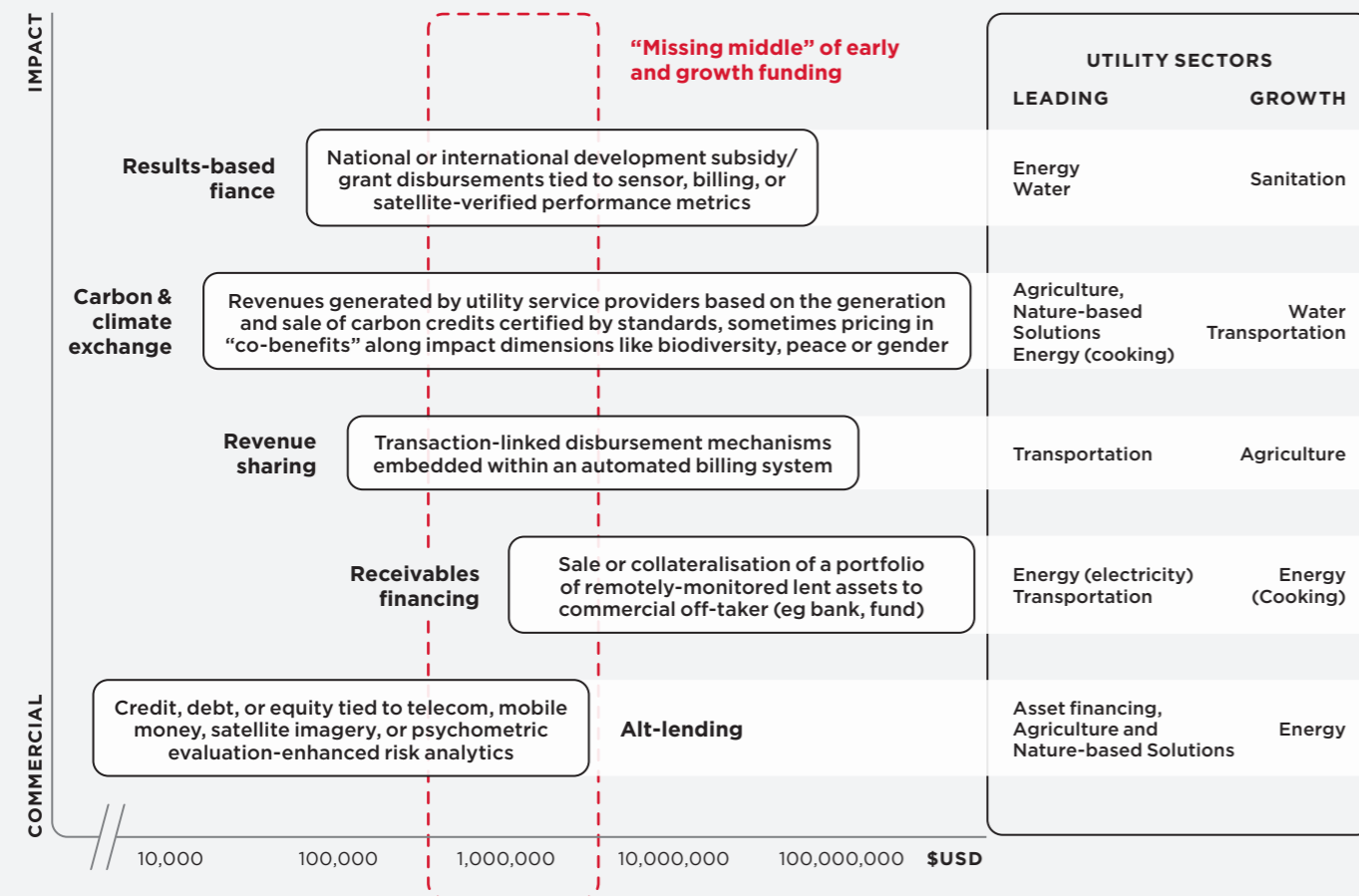
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Introduction

This is a companion guide to the 2023 report, **Digitalising Innovative Finance: Emerging instruments for early-stage innovators in low- and middle-income countries**, which examines how social enterprises in low- and middle-income countries (LMICs) can attract private sector capital through digital technologies and innovative financing.

This guide profiles innovative financing instruments that can help close financing gaps for early-stage digital innovators in the utility services sector. Five key instruments are profiled, along with their requirements and examples of how they have been put into practice. We also look at how digital technologies can be used to make them more accessible (see Figure 1).

Figure 1
Financing instruments profiled



Y axis: Primary type of capital instrument deployed by expectation of return. "Commercial" refers to traditional investment vehicles (including formal banks and venture capital increasingly exposed to impact motivations through sustainable finance). "Impact" refers to grant capital oriented exclusively towards impact returns. X axis: Indicative magnitude of capital available through the profiled financing instruments.

These instruments span the spectrum, from impact capital (non-repayable grants or concessional capital intended to demonstrate social or environmental impact) to commercial capital (emphasising profitability and financial return on investment through debt or equity). The value of funds available varies by instrument, from the low thousands to single-deal announcements that may top a hundred million dollars.

Digital technologies are transforming finance, unlocking funding in critical areas like working capital and blended finance, and making it more accessible, efficient and impactful. However, the potential of these new financing instruments remains largely untapped, with real-world use cases struggling to keep up with the rapid pace of innovation.

The challenges of financing: the "missing middle" and operating in complex sectors

A fragmented finance ecosystem has created the "missing middle" - a funding gap that is stalling the growth of small and medium-sized enterprises (SMEs) and private sector innovators that use digital technologies for growth in resource-constrained markets. Too mature for microfinance and grant capital but too small for many commercial funders, these enterprises are caught in this gap, particularly in LMICs where start-up and financing ecosystems are still at a nascent stage.

According to the United Nations Capital Development Fund (UNCDF), **three factors exacerbate this funding gap**: high transaction costs, perceived investment risks and a lack of investment readiness. These challenges are especially pronounced in sectors that face regulatory uncertainty, such as utility services, asset-heavy models (e.g., e-mobility, energy or productive use equipment) or services targeting low-income customers (e.g., clean cooking, water, sanitation and hygiene or off-grid solar). Addressing these funding challenges through innovative finance is an opportunity for investors to develop financing instruments that match the market realities of early-stage digital innovators.

Innovative finance for utility services

Efforts to increase access to modern utility services like reliable electricity and clean water **are making slow progress** relative to population growth. Since most utility customers in LMICs are financially constrained, it is difficult for traditional utility providers with limited fiscal space to improve access through conventional financing sources, whether commercial loans or development assistance through grants.

Innovative finance for utility services can leverage the burgeoning field of sustainable finance, where private investors seek social or environmental impact alongside financial returns. According to the United Nations Conference on Trade and Development (UNCTAD), the sustainable finance market (funds, bonds and voluntary carbon markets) **grew to \$5.8 trillion** in 2022, up 12% from 2021.

How digital can unlock innovative finance

This companion guide, a complement to the main GSMA report, profiles five innovative financing instruments that use digital solutions to unlock growth in the utilities sector. The following sections look at how start-ups and social enterprises in LMICs can engage with these instruments. This guide aims to:

- Highlight the relevance of the financing instruments for early-stage innovators
- Demonstrate how digital tools open access to these financing instruments
- Outline the steps and barriers for innovators seeking access to financing
- Offer insights from case studies of documented successes and resources for understanding

Digital tools can be used to address financing challenges for innovators across utility sectors, particularly in LMICs. By understanding and using these innovative financing instruments, start-ups and social enterprises can open even more access to capital to bridge funding gaps and grow their business.

1 Results-based finance



WHAT IS RESULTS-BASED FINANCE?

In a results-based finance (RBF) scheme, funders make non-repayable payments to service providers, which are responsible for meeting set targets. Funding is released once these results have been independently verified, often by a third party. RBF shifts the financial risk associated with targets not being met from the donor to the recipient. RBF is a donor- or government-based financing instrument that can minimise the transaction costs, risks and delivery timelines associated with transferring funds into the financial ecosystems of target countries, which ultimately benefits end users.



HOW ARE DIGITAL TECHNOLOGIES ACCELERATING RESULTS-BASED FINANCE?

The digitally enabled RBF mechanisms highlighted in this report are based, at least in part, on automated, digital verification of performance indicators, for example, sensor, meter or other Internet of Things (IoT) data. Satellite-based methods can also be used, as well as mobile-based tools like survey tablets and mobile phones.



KEY REQUIREMENTS

- **National or international RBF programmes:** Start-ups interested in RBF must enrol in a funding programme, which are typically tied to sector-specific, regionally defined targets against which registered participants receive payouts.
- **Clear and measurable results:** RBF programmes typically require measurable outcomes that can be objectively assessed to align results with the goals or programme objectives.
- **Verification mechanism:** RBF programmes vary, but all require participants to commit to a reliable mechanism for verifying and validating results. This often involves third-party or independent evaluators to ensure accurate performance assessments.



KEY CONSIDERATIONS

- **Establishing automated verification systems:** While IoT and smart sensor technologies are crucial for automated verification in RBF, start-ups must assess the upfront investment. They should weigh the initial cost of these technologies against the long-term benefits, such as reduced need for in-person verification, which can lower ongoing operational costs.
- **Balancing digital and manual verification:** While digital verification offers efficiency over the long term, complete reliance on it can be risky and expensive for start-ups. A staged implementation and mix of digital and manual verification processes can provide a more cost-effective solution. Mobile-based tools for field verification can optimise resources while maintaining accurate data. The balance between manual and digital verification methods can also depend on specific programmes and funders, as some programmes have been quicker to accept and adopt digital verification mechanisms than others.
- **Building or integrating with digital platforms:** For early-stage enterprises, developing a digital platform and remote monitoring tools to gather, host and transmit data can require significant resources. The cost-benefit analysis should consider the expense of technology development versus integration with existing digital platform solutions that can be adapted for new programmes using third-party functionalities and APIs. It should also consider whether such platforms can improve business performance more broadly and open pathways to related financing opportunities, such as climate financing.
- **Sector-specific reporting requirements:** Beyond the simplest volume-based sales or connection-based subsidies for energy, metrics are not well defined across sectors, and there are few off-the-shelf examples to easily learn from and replicate. Active participation in programme design can help ensure that digital innovators maximise the value of RBF.



WHO IS RESULTS-BASED FINANCE BEST SUITED FOR?

- RBF is particularly well suited to digital innovators that target lower-income customer segments and populations that are logistically hard-to-reach. These innovators should also have a reporting infrastructure capable of meeting compliance requirements associated with concessional capital. Elements of such a reporting system could include customer transaction platforms through mobile money, proprietary digital customer relationship management (CRM) systems and remote monitoring of asset or product use.

■ Sectors:

- | More mature applications across off-grid solar (mini-grids and solar home systems)
- | Strong growth in clean cooking
- | Few examples in rural water
- | Limited but growing uptake in productive uses of electricity and, to a lesser extent, transport



PROS:

- Well-suited to start-ups targeting lower-income customers as RBF can act as a price subsidy.
- Can mitigate some regulatory and political risks associated with sectors such as energy and water, as RBF programmes are often spearheaded

by government entities such as rural electrification agencies.

- Well-suited where IoT-connected devices is already an integral part of existing business models and product offerings such as pay-as-you-go (PAYG).



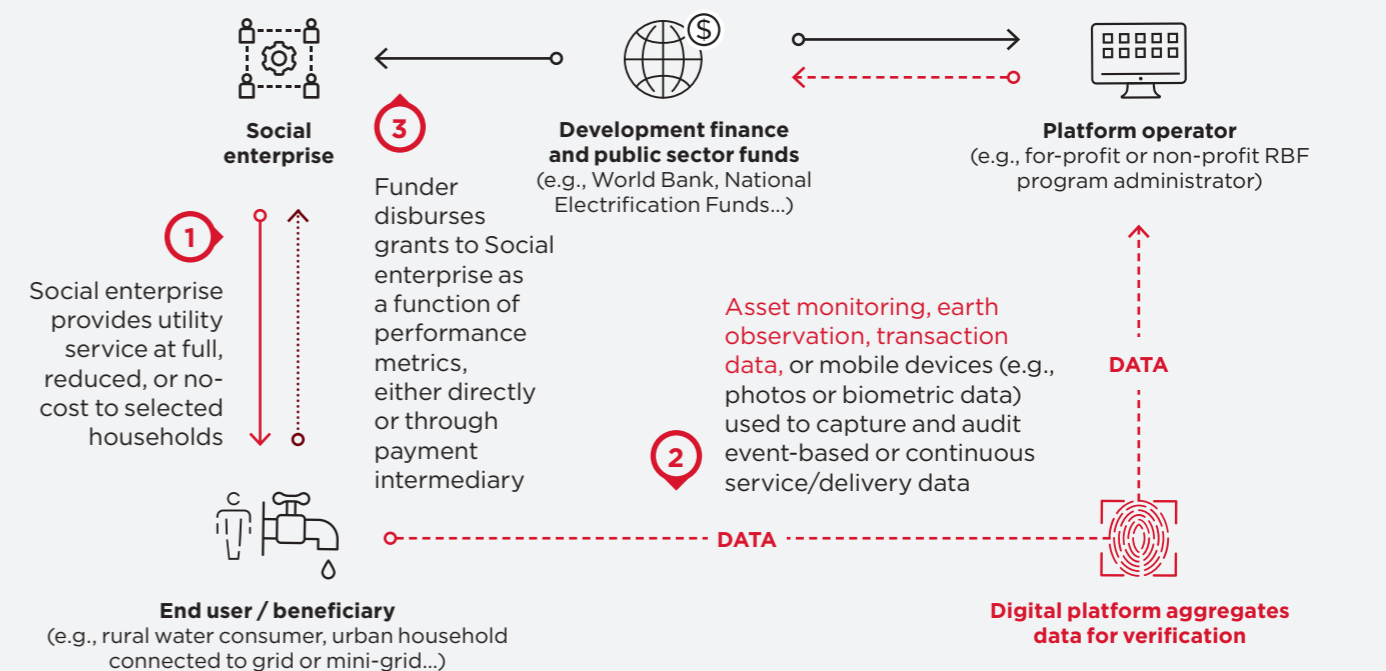
CONS:

- IoT can facilitate data collection and reporting, but additional costs can be prohibitive and outweigh the value of the subsidy to providers.
- Metrics are not well-defined across sectors so there are few off-the-shelf examples to replicate.
- Not appropriate for enterprises that do not have the resources to devote to monitoring and evaluation.
- Programmes are often time-bound and therefore cannot be relied upon as a core part of the business model in the medium to long term.

Figure 2

A digitally verified results-based financing initiative

Digitally verified results-based finance



2 Voluntary carbon markets



WHAT ARE VOLUNTARY CARBON MARKETS?

In voluntary carbon markets (VCMs), credits equivalent to one tonne of carbon are purchased by companies or individuals to offset their carbon impacts. Price premiums associated with social impact “co-benefits” is an emerging area across climate finance, which includes fiscal incentives for nature and biodiversity benefits, as well as community advantages like renewable energy, peacebuilding and gender equality, which can be traded at a higher value than standard carbon credits.



HOW ARE DIGITAL TECHNOLOGIES ACCELERATING VOLUNTARY CARBON MARKETS?

The main group of technologies supporting climate finance are satellite-based Earth observation methods for the verification of nature-based solutions (NbS) like afforestation or conservation, blockchain for addressing the double-counting challenges of carbon credit issuance and, to a lesser extent, IoT, sensors and drones for data acquisition.



KEY REQUIREMENTS

- **Certification standards:** Climate finance often requires third-party certification to ensure the standards of carbon exchange platforms are being met. Credits must be generated using an established methodology and require baseline data for areas of operation.
- **Registration on a carbon exchange platform:** Certified environmental impact is monetised by selling to buyers on various platforms.
- **Remote tracking and monitoring:** Digital technology like sensors, satellite-visible effects or API integrations with trusted verification providers can track and monitor carbon reduction, climate adaptation and/or environmental impact mitigation.



KEY CONSIDERATIONS

- **Strategic intermediation and corporate collaborations:** Partnerships with intermediaries like Energy Peace Partners and South Pole, which link project developers with corporate buyers (e.g., Microsoft, Google), demonstrate the value of cross-sector connections. Collaborating with corporates that are pursuing the UN Sustainable Development Goals (SDGs) and ESG goals can help to align sustainability initiatives and open potential funding avenues.
- **Technological synergies and standards development:** Leveraging technology partnerships provides access to expertise and broadens operational capabilities. Involvement in developing standards with certification bodies and industry alliances can also open access to standard credits and ensure project compliance.
- **Sales strategy:** Generating credits does not guarantee their sale, but listing on a digital platform or selling directly to a corporate buyer can maximise revenues for the enterprise generating the credits.
- **Operational and financial trade-offs:** Start-ups must balance the operational and financial implications of deploying technologies like IoT for automated verification and integrating digital platforms. While these technologies promise long-term benefits and efficiencies, there are still upfront costs.



WHO IS THE VCM BEST SUITED FOR?

- It is necessary to have quantifiable mitigation or adaptation benefits, such as in energy, transport, waste management, sanitation, agriculture, and land use. Increasingly, remotely tracked impact is becoming the gold standard for climate projects. Important to note is that participation in carbon markets comes with financial risks due to fluctuating credit prices. It also may not make sense for start-ups transacting small quantities, as there are upfront costs to engaging in the market.

Sectors:

Most carbon market activity in Africa and Asia has focused on renewable energy and nature-based solutions like forest conservation.

Smaller, distributed systems like off-grid solar and electric cooking are beginning to benefit from carbon markets since project aggregation combines the portfolios of different providers

Emerging interest in electric mobility and waste and sanitation

Limited uptake in the water sector



PROS:

Digital innovators can tap into new and additional revenue sources by leveraging technologies like IoT and blockchain for verification and tracking. This can make green technology and services more affordable for end users.

New digitally-enabled standards, such as CavEx and Carbon Clear, are enabling market entry for smaller projects.

Using digital technologies for monitoring and verification can streamline processes, reduce the need for in-person verification and lower long-term operational costs. A number of new digital-first standards have emerged that streamline the process for digitally enabled companies and integrate sales in their offerings.

Tightening regulations in the compliance market and around Article 6 of the Paris Agreement as part of the COP negotiations offer some opportunities for high-quality credit producers.



CONS:

The upfront cost of implementing digital technologies for tracking and verification, as well as the ongoing costs of maintaining these systems, can be substantial. A rough rule of thumb is, when working with established standards, generating fewer than 10,000 credits may not generate a meaningful return on investment.

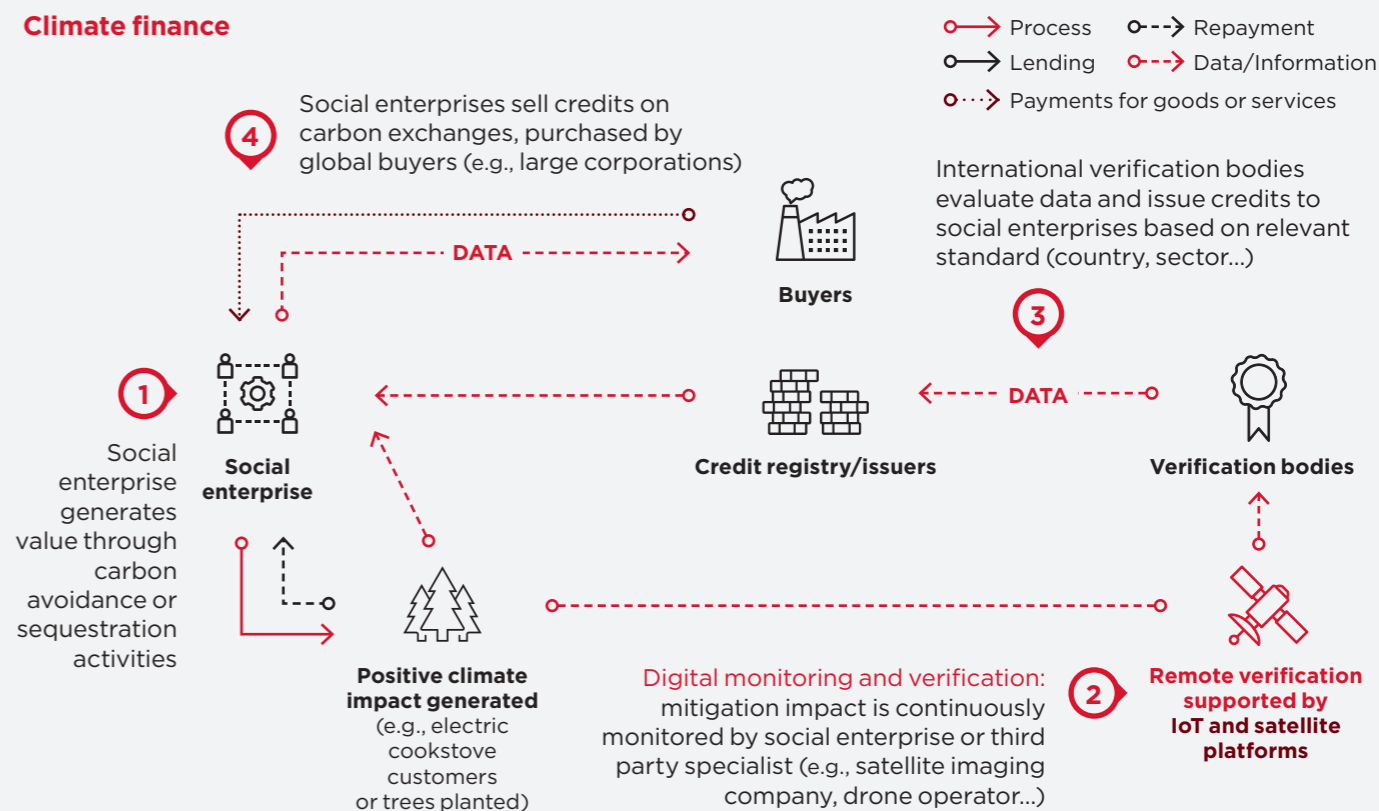
Navigating VCMs can be challenging, requiring significant expertise and resources. Market intermediaries can also capture much of the value of credit sales.

VCMs can be unpredictable, with fluctuating credit prices and evolving standards, posing a financial risk for start-ups.

Figure 3

Financing through voluntary carbon markets

Climate finance



3 Revenue sharing



WHAT IS REVENUE SHARING?

Revenue share finance, also known as revenue sharing, is a financial arrangement whereby stakeholders distribute operating profit or revenue based on their roles in a shared business initiative. The model is based on repayments as a flow of future revenues rather than fixed repayments, aligning incentives for borrowers and lenders and distributing the risk. A critical feature of these instruments is the design and mechanism by which the financier is paid from the earnings. Properly implemented, revenue sharing can optimise profits while ensuring they are distributed equitably among collaborators.



HOW ARE DIGITAL TECHNOLOGIES ACCELERATING REVENUE SHARING?

Revenue-sharing models have been enhanced by asset tracking through IoT combined with platform analytics applied to the associated data. Having line of sight into source data is critical for financiers to ensure deals are being honoured according to the agreed revenue-share arrangement. This can be tied to the use of a particular asset where remote monitoring of assets is feasible. Visibility into cash revenues is just as important and can be automated through integrations with payment processing systems, accounting software and mobile money integrations.



KEY REQUIREMENTS

- **Visibility or control of billing system:** This includes PAYG functionality or direct visibility into CRM or billing software to ensure revenue distribution is transparent.
- **Data trail:** For digital innovators seeking to access upfront capital on revenue-share terms, operational data for credit scoring is a typical requirement.
- **Asset-driven payment systems:** This can include any payment system tied to the revenue-generating use of vehicles, point of sale (POS) machines, monitored liquefied petroleum gas (LPG) containers, refrigerator systems, gig drivers and water distribution.



KEY CONSIDERATIONS

- **Digital-only transactions and embedded finance:** Using digital platforms for transactions is crucial, especially to facilitate embedded finance within app-based ecosystems, which connect buyers and sellers of higher value goods and services.
- **Asset types and recovery:** The types of assets and strategies for recovery are key considerations in revenue sharing, which is typically suited to hard assets in the \$5,000-\$20,000 range but can go up to \$500,000. These investments can be de-risked through advanced analytics and digital platforms.
- **Clear understanding of revenue-sharing terms:** It is critical for digital innovators to understand the specifics of a revenue-sharing agreement upfront, particularly the percentage of revenue to be shared, duration of the agreement and any caps or floors on payments. Start-ups should seek flexibility in the agreement to accommodate changes and understand the exit clauses to ensure there are options for renegotiation or termination if necessary.
- **Risks and variability of revenue streams:** Start-ups must consider the inherent risks and variability of revenue streams, particularly in LMICs where market volatility can introduce currency or political risk. They should also consider the impact of revenue sharing on cash flow, especially during periods of lower revenue, to ensure operational stability and growth potential.



WHO IS REVENUE SHARING SUITABLE FOR?

- Revenue-sharing models are best suited to enterprises that rely heavily on digitally connected revenue-generating assets, such as two-wheelers in the mobility sector. Small, informal auto entrepreneurs, gig workers and digitally savvy start-ups participating in agricultural value chains, mobility, logistics and supply chains, or digital POS transactions, can all benefit from flexible terms for accessing productive use equipment.
- Sectors:
 - | Most mature sectors for revenue sharing include e-commerce (e.g., financing POS digital payment machines) and mobility assets for gig drivers
 - | Emerging applications in off-grid energy and agriculture
 - | Limited uptake in the water sector due to sector-specific challenges (e.g., tariff regulations)



PROS:

- Revenue sharing is often more flexible, with repayments directly linked to a company's revenue, making it easier to manage during periods of fluctuating cash flow. This can be beneficial for start-ups with seasonal or unpredictable revenue streams.
- Increases access to capital-intensive, income-generating assets for low-income customers.
- Automates repayment to lenders, increasing overall efficiency and the lowering cost of capital for borrowers.
- Compared to equity financing, revenue sharing gives start-ups the opportunity to raise capital without giving up significant ownership.



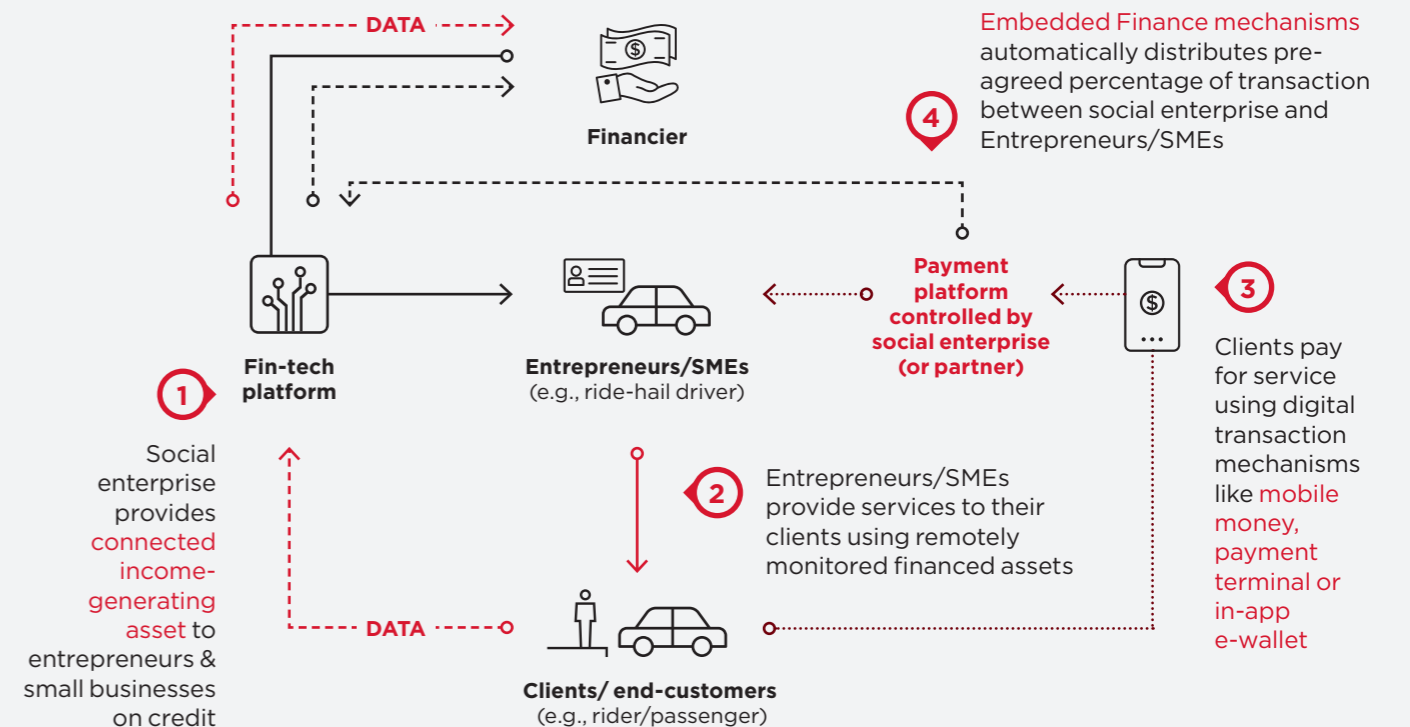
CONS:

- The effective interest rate in revenue sharing can be relatively high compared to other financing models. Start-ups may end up paying more in the long run, especially if the business performs well.
- Investors take on a higher level of risk with revenue sharing, as the return is tied directly to the company's revenue.
- The revenue share model is not yet well understood by the market, which gives it limited appeal for some investors and makes it difficult to standardise.

Figure 4

Revenue sharing arrangement

Revenue sharing



4 Receivables financing



WHAT IS RECEIVABLES FINANCING?

Receivables financing is a financing method whereby a company uses its outstanding invoices as collateral to secure immediate cash from lenders or financial institutions. These institutions, also known as “factors”, buy the right to collect a company’s invoices from its customers by paying the company the face value of these invoices, minus a discount. The immediate access to cash sellers makes factoring an essential financing instrument for companies offering physical assets to low-income customers on credit.



HOW ARE DIGITAL TECHNOLOGIES ACCELERATING RECEIVABLES FINANCING?

The main contribution of digital technologies is the data they produce, including granular payment data from digitally enabled assets, wallets and mobile money. IoT, in conjunction with GPS-enabled asset tracking, are the foundation of receivables financing for mobility solutions, for example. For PAYG solar, mobile money payments in conjunction with remote-locking technology is a prerequisite for receivables models. In both cases, advanced analytics are typically applied to complex portfolios to quantify the default risk in a portfolio valuation.



KEY REQUIREMENTS

- **Existing portfolio of prefinanced assets:** Digital innovators or start-ups in LMICs need to maintain a portfolio of assets that have already received preliminary financing, demonstrating a solid track record of asset management and investment potential.
- **Digitised CRM and billing system with historical payment data:** It is essential for these innovators to have a fully digitised CRM and billing system with comprehensive historical payment data to demonstrate reliable revenue generation and customer interactions.
- **Establishing a special purpose vehicle (SPV):** Receivables financing arrangements are typically based on lending against the established cash flow of a company and involves transferring a cash-flow stream to an SPV. The SPV then borrows against this cash flow, without any significant recourse or guarantee to the owners of the original company, who are able to raise off-balance sheet funding and reduce their own business risks.



KEY CONSIDERATIONS

- **Foreign exchange (FX) and currency risks:** Start-ups must consider the risks associated with FX and currency fluctuations. This is particularly important when receivables are in different currencies than the financing, as it can significantly impact the value of the receivables and the cost of financing. Partnerships with reputable local banks can be critical to securing hard currency and mitigating FX risk.
- **Importance of first-loss guarantees:** Understanding and securing first-loss guarantees can be critical to accelerating receivables financing, particularly securing local bank partners. These guarantees, often provided by development finance institutions (DFIs), play a vital role in incentivising the involvement of local banks and mitigating the risks associated with local currency financing.
- **Processes for calculating discounts by factors:** Start-ups need to be aware of how factors calculate discounts when purchasing a portfolio of receivables. This understanding is crucial for evaluating the cost-effectiveness of the financing option and for financial planning.
- **Non-payment/default risks:** There is a need to assess and manage the risks associated with customers failing to service loans before or after the sale of receivables. This includes understanding the operational and market risks, particularly in selling products on credit to low-income customers with seasonal or irregular income streams, and servicing/collections obligations before and after the sale of the receivables portfolio.



WHO IS RECEIVABLES FINANCING SUITABLE FOR?

- Because receivables finance provides a way for businesses to access funds tied up in outstanding accounts, this form of innovative financing is best for early-stage innovators with seasonal cash flow or long payment cycles, like agritechs, manufacturers, waste managers and recyclers. Businesses with high working capital needs are also a good fit, particularly those in industries where customer financing is required, like off-grid solar distributors, ride hailing and food logistics.
- Sectors:
 - | More mature receivables financing targeting PAYG off-grid solar companies
 - | Emerging growth in receivables in the mobility sector for financing ride-hailing vehicles
 - | Limited uptake in cooking, water, waste and sanitation



PROS:

- Working capital released by shifting consumer financing debts to third-party buyers of receivables.
- Well-adapted to the reality of asset-heavy businesses selling to low-income target markets.
- Isolates operator risk through off-balance sheet financing, and isolates lenders from the operational and market
- Lower cost of capital for receivables by crowding and blending in development finance into commercial arrangements with local banks.
- Working with local banks can supply innovators with hard local currency, mitigating FX risks.



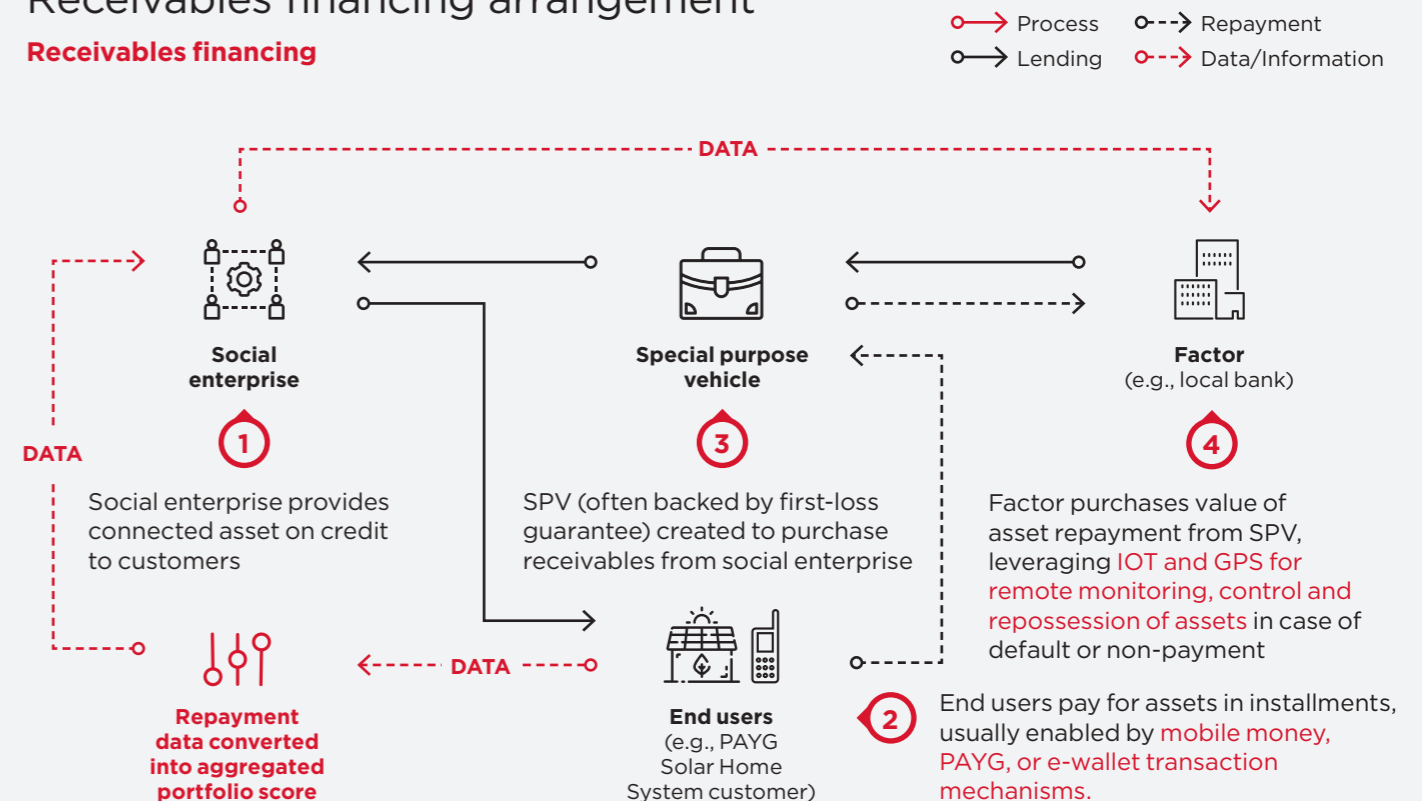
CONS:

- Discounted value of receivables from factors will be lower than original book size.
- Requires building partnerships with banks or DFIs, which can take a lot of time, paperwork and effort.
- Typically only available to companies with several years of operational performance indicators.
- Legal and advisory fees associated with receivables financing under an SPV can be substantial, and thus only accessible to a few well capitalised companies.

Figure 5

Receivables financing arrangement

Receivables financing



5 Alternative lending



WHAT IS ALTERNATIVE LENDING?

Alternative lending or “alt lending”, in the context of innovative financing, refers to nontraditional methods of providing funds outside of traditional financial institutions. Alt lending often involves using technology, data analytics and other creative strategies to assess creditworthiness and facilitate lending. Alt lenders often use a wide range of data sources to assess a borrower’s creditworthiness. Examples include social media activity, transaction history and other nontraditional data points like psychometric assessments.



HOW ARE DIGITAL TECHNOLOGIES ACCELERATING ALT LENDING?

Alt lending uses a variety of digital technologies to address lending friction points along operations, risk assessments and transaction facilitation. Digital technologies that collect and analyse data are key enablers of alt lending, which uses advanced algorithms to assess creditworthiness. This includes machine learning and AI for predictive analytics, computer vision based on satellite imagery and data visualisation tools and platforms. Additionally, the wealth of transaction data generated from digital payments or app-based services are key data points for assessing creditworthiness. As these technologies evolve, alt lending will be better positioned to adapt and offer more inclusive, efficient and personalised financial solutions to untapped customer segments.



KEY REQUIREMENTS

- **Performance history in disbursing and recouping loans to SMEs in LMICs:** A proven track record of successfully distributing loans to SMEs in LMICs, coupled with a consistent history of recouping these loans, demonstrates both operational competency and financial reliability.
- **Robust risk assessment model:** The ability to leverage the wealth of transaction data generated from digital payments or app-based services is essential, as this data is key to evaluating the creditworthiness of potential borrowers.
- **Integration with digital wallets and payment services:** The use of existing digital wallets and payment services for companies and customers to access and use digital credit services is a key requirement of alt lending.



KEY CONSIDERATIONS

- **Matching repayment terms:** It is crucial to align the repayment terms of lenders and fund recipients. This involves careful management of cash flow and return expectations, ensuring that the terms are feasible for both parties in the context of LMICs, particularly for seasonal sectors like agriculture.
- **Developing data and performance benchmarks in data-scarce environments:** On-lenders need to develop reliable data and performance benchmarks in environments where traditional data may be scarce. This requires using creative alternative data sources to accurately assess creditworthiness and performance, with a focus on the unique conditions of local sectors and country dynamics.
- **Data privacy and anti-money laundering (AML) compliance:** Adhering to data privacy regulations and AML standards is essential. On-lenders must navigate the regulatory hurdles to ensure compliance with local regulations for nonbank lending, consumer privacy and rights.
- **Alternative and creative credit-scoring methods:** Emphasising alternative and creative credit-scoring methods is paramount in a competitive lending sector. For example, machine learning, AI for predictive analytics, computer vision based on satellite imagery and other innovative data visualisation tools, can all be used to assess creditworthiness. Digital innovators should consider opportunities to decentralise credit-scoring tools and decisions, making them more accessible and adaptable to diverse lending scenarios in LMICs.



WHO IS ALT LENDING SUITABLE FOR?

- Alt lending is often best suited to smaller and newer players with limited credit history that require quick access to funding and more flexibility, as it offers faster approval processes. In particular, early-stage innovators that focus on mobility, agriculture and productive use assets and equipment. Alt lending is particularly useful for highly innovative business models that integrate technology-driven solutions.
- **Sectors:**
 - | The most mature alt lending targets agrifinance, either directly to small-scale farmers or through cooperatives
 - | Emerging focus on SME shops and kiosks with high-volume working capital requirements
 - | Limited existing emphasis on heavy-asset financing, such as in the mobility and logistics sector



PROS:

- Provides access to capital for start-ups that may be overlooked by other financing mechanisms, particularly those with limited credit history or collateral.
- Typically offers fast approval processes and quicker disbursement of funds.
- Offers flexibility with loan structures, repayment schedules and collateral requirements, which can suit businesses with specific needs or irregular cash flows.
- Credit assessments based on new data and AI can result in more dynamic and data-driven lending decisions.
- The competitive landscape for alt lending is fierce, which can translate into more competitive interest rates and lower fees depending on the opportunity.

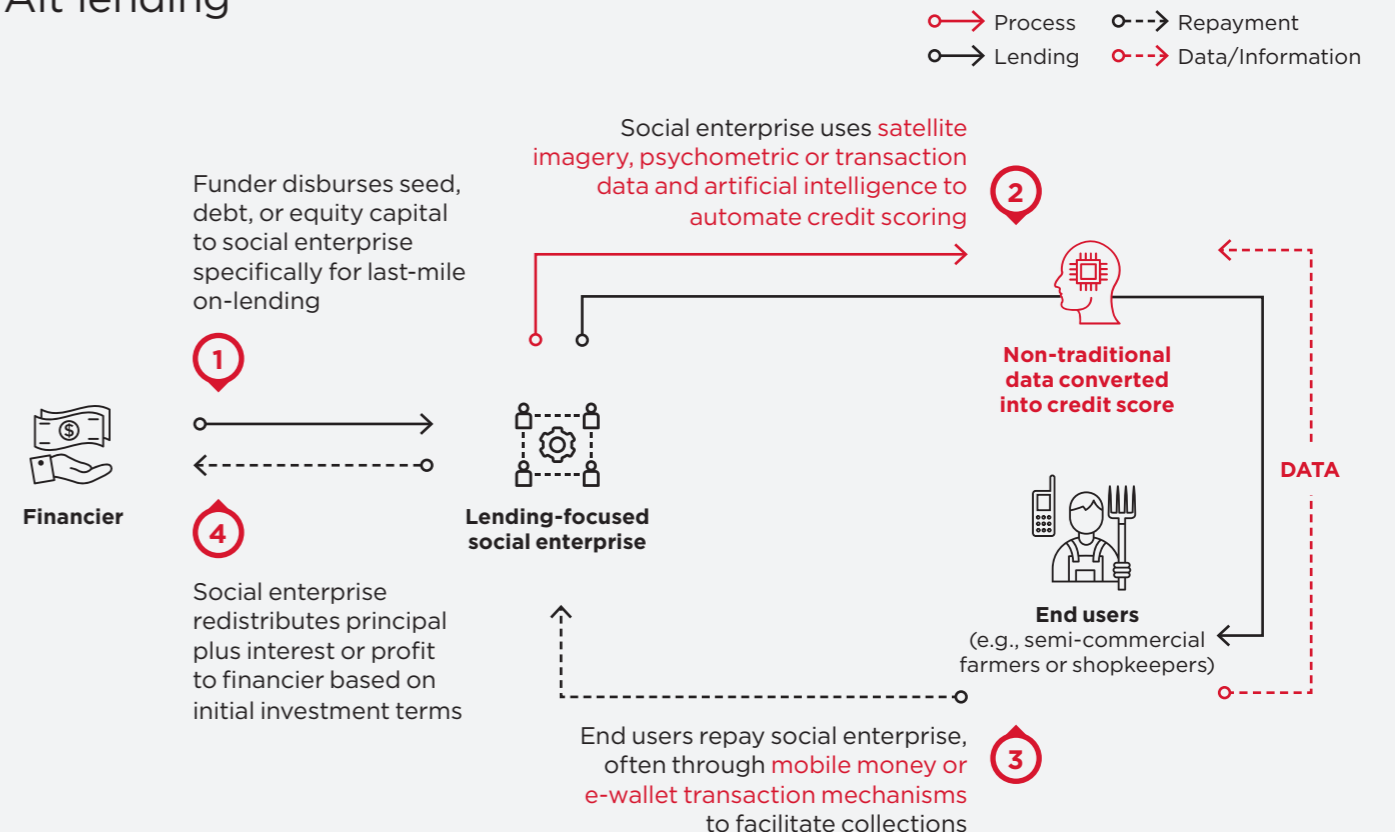


CONS:

- Terms and conditions for alt lending can be less transparent than other forms of innovative financing, making it critical for borrowers to thoroughly understand the terms before committing to loans.
- There may be limitations on loan sizes, which may make it challenging for early-stage innovators that need substantial capital to scale.
- Because alt lending is relatively new and less regulated, there is a higher risk of unscrupulous practices like predatory lending and unclear terms.

Figure 6

Alt lending



Key takeaways

Digital tools and innovative financing instruments can unlock significant capital for early-stage digital innovators in utility sectors, particularly in LMICs. For these start-ups and social enterprises, the key is understanding the instruments and how digital technologies can be used to make them more accessible. With proper planning and execution, digital tools and innovative financing instruments can help early-stage digital innovators in utility sectors access the capital they need to grow their businesses and have a positive impact.

Recommendation #1:

Seek investment partners with access to catalytic capital to support the transition from early-stage to growth fundraising

Many enterprises with a dual focus on social impact and financial viability struggle because they have limited access to traditional financing options and need patient capital to scale their businesses. Social enterprises should seek partnerships at the intersection of climate and fintech. Positioning utility services in this way can enable enterprises to benefit from the momentum and financing opportunities of this critical and growing area, particularly if it is well timed (for example, around annual COP announcements.)

Recommendation #2:

Invest in the long-term benefits of digitisation and identify ways to monetise it

Operating in the utilities sector requires managing complex and critical infrastructure, which has both technical and operational challenges. Digitisation enables enhanced infrastructure tracking and management, which can ultimately lower maintenance costs and make investment more attractive. Digitising processes can also unlock access to novel kinds of finance, from receivables financing and revenue sharing to climate finance and co-benefits.

Recommendation #3:

Seek out trusted partners, such as industry associations, enabling organisations and specialists with technical expertise in a financing mechanism or related technical solution

Many social enterprises require additional technical assistance and struggle with regulatory and operational challenges. Often, additional resources and expertise are needed to navigate these hurdles. Taking advantage of digital technology training for local entrepreneurs and innovators can build knowledge and generate opportunities for local and international partnerships. These can also prove useful in keeping abreast of frontier technologies that have become off-the-shelf solutions, like IoT sensors, modular blockchain services and satellite subscription packages.

For more information, see the full report: *Digitalising Innovative Finance: Emerging instruments for early-stage innovators in low- and middle-income countries.*

Key players and organisations by financing instrument



RESULTS-BASED FINANCING (RBF)

- Knowledge platforms:** The **Global Partnership for Results-Based Approaches** (GPRBA, a programme in the World Bank Group) funds, designs, demonstrates and documents RBF approaches to improve the delivery of basic services in LMICs.
- Multi-country programme funders:** The **Universal Energy Facility** (UEF, a United Nations initiative) has been piloting RBF for mini-grid players since 2020, while **Energising Development** (EnDev) is an international flagship programme for providing energy access that pioneered early experiments in RBF and mainstreamed it across their operations.
- National consortia:** National governments, typically through sector-specific regulatory or investment promotion agencies like the **DRC's Mwindu Fund** or the **Nigeria Electrification Project**, earmark funds for the delivery of results-tied subsidies, with the help of specialised financial consulting groups like **GreenMax Capital**.
- Private-sector platform enablers:** The **Odyssey** digital platform has enabled renewable energy companies, financiers and suppliers to connect, exchange and partner for the implementation of RBF, procurement and tendering. Beyond private sector platforms, the **Access to Energy Institute** (A2EI) and the European programme **GET.invest** launched **Prospect**, an open source data platform that automatically collects, aggregates, analyses and displays data from all modern sustainable energy solutions.



VOLUNTARY CARBON MARKETS (VCMS)

- Independent verification and issuance agencies:** The majority of climate finance involves agencies like **Verra**, the **Gold Standard** and the **American Carbon Registry**, which are crucial for verifying and issuing credits that companies can sell on exchanges.
- Support for project certification:** Established players such as **South Pole**, **4R Digital**, **CarbonClear**, **Cynk** and **Verst Carbon** play significant roles in supporting the certification of climate projects.
- Peace Renewable Energy Credits (P-RECs) and peace co-benefit monetisation:** Initiatives like P-RECs offered by **Energy Peace Partners** and **Odyssey** offer renewable energy credits with an added focus on peace co-benefit monetisation.
- WOCAN/W+ and co-benefits for women's empowerment:** The **W+ Standard**, created by **WOCAN**, is dedicated to developing co-benefits focused on women's empowerment within the scope of climate finance.
- Methodologies for verified carbon credits:** The **Container-Based Sanitation Alliance** (CBSA) is developing methodologies to generate verified carbon credits. The **Modern Energy Cooking Services** (MECS) programme is supporting clean cooking projects with carbon financing, while **GOGLA** is helping off-grid solar providers navigate opportunities in the VCM.



REVENUE SHARING

- Mobile money and embedded finance integrators:** Companies like **Paga** and **DotPay** are pivotal in integrating mobile money solutions into the large informal retail sector, while the **GSMA Open API Gateway** can help digital innovators connect to the payment systems of local mobile network operators (MNOs).
- Fintech lenders:** Specialist fintech lenders like **KopoKopo**, **Unconventional Capital** and **Credable** focus on specific lending niches within their geographic footprint.
- Asset-tracking and monitoring specialists:** Beyond PAYG companies, specialists are emerging that focus on asset tracking and monitoring, including **Untapped's** pioneering IoT-based revenue sharing model, **PayGas** and **Koolboks**, which integrates IoT in utilities.
- Digital platforms for app-based services:** Companies leveraging digital platforms to deliver app-based services like ride-hailing are well placed to experiment with revenue sharing in their models, like **Watu** and **Moove**.



RECEIVABLES FINANCING

- PAYG service providers and platform developers:** These entities specialise in converting recurring payment data into credit scores, essential for receivables financing securitisation and valuation. For example, Solaris OffGrid is developing a platform to facilitate the sale of receivable pools by off-grid solar companies through **PayGOps**. **Angaza** offers similar services, enhancing credit access through data analytics. Solaris Offgrid is developing the **Bridgin** receivables aggregation platform that integrates with all major PAYG management platform to broaden access to receivables financing to smaller companies
- Financial intermediaries and credit analysts:** These players are crucial in standardising credit risk assessments and improving portfolio and impact monitoring. **Nithio FI** focuses on data-powered lending; **Pezesha**, a Kenyan-based fintech, excels in credit scoring and managing financial transactions; **SunFunder** provides targeted finance aimed at crowding in and improving the terms of locally accessible commercial credit; and **Africa Frontier Capital** deploys numerous debt facilities to provide local currency lending to PAYG companies by packaging receivables assets into well-understood and standardised finance offerings that can be evaluated by institutional investors and rating agencies.
- First-loss guarantors:** These entities play a vital role in attracting local banks by mitigating foreign exchange risks. Guarantors such as IFC's "**Multilateral Investment Guarantee Agency** (MIGA) or **Lion's Head Global Partners**", provide essential guarantees that facilitate more secure lending by easing currency-related concerns.



ALT LENDING

- Alternative data credit risk lenders:** A growing cohort of lending companies like **Provenir**, **M-Shwari** and **Credo Lab** employ alternative data sources to facilitate risk assessment and loan decisions, including satellites, mobile phones, app platform usage and psychometric tests.
- Sector-specific value chain financiers:** Entities such as **Apollo**, **GrowSari** and **Intelligra** specialise in financing specific sectors, from agriculture to kiosk vendors and smartphone financing.
- Supply chain corporates involved in lending:** Major corporations like **Procter & Gamble**, **Nestlé** and **Mastercard** are playing a significant role in financing participants along their supply chains. These companies are extending their reach into financial services, offering innovative lending solutions that integrate with their supply chains.
- Investment in alt-lending platforms:** Tech-driven alt-lending opportunities attract a range of traditional and impact-focused investors like **ResponsAbility**, **OikoCredit** and **Quona**.



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