



Strive Women, 2026

THE \$1 TRILLION BLIND SPOT

Redirecting Climate Finance to Women-Led Solutions



FUTERRA



Acknowledgements

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FOREWORD



PAYAL DALAL

**EVP, Global Programs,
Mastercard Center for Inclusive Growth**

Why investing in women entrepreneurs is the key to building an economy that expands opportunity and promotes sustainability

Through the Mastercard Center for Inclusive Growth and Mastercard Strive, we are focused on ensuring all small businesses, including those led by women, can thrive. We do this by ensuring small businesses can go digital, get capital, and gain the networks and know-how they need to succeed in today's digital economy. Our approach includes working with partners to create solutions that will help small businesses today and tomorrow. As engines to economies around the world, we must ensure they are supported, protected, and resilient to shocks – that's why Mastercard is committed to connecting and protecting 500 million people and small business on their pathways to financial health.

Micro and small businesses are among the most exposed to increasingly frequent and unpredictable climate shocks and stressors, but remain underrepresented in public, private, and international climate finance flows – and in the investment decision-making that shapes those flows. Financial products are also rarely designed around their needs and realities. This blueprint shows that women-owned businesses, in particular, are even more excluded from these systems.¹

The evidence amassed is clear: investing in women is smart economics because women entrepreneurs deliver consistent financial and social returns. Women are key to building stronger, more resilient, and sustainable economies. Their roles as farmers, waste workers, clean energy retailers, digital innovators, and small businesses owners means they are driving outcomes for both people and planet.

Closing the financing gap is not about carving out opportunity for some; it is about expanding opportunity for all, by directing capital to the entrepreneurs already strengthening resilience, jobs, and growth. In climate-aligned sectors where last-mile delivery and local trust determine adoption of digital financial solutions, women-led models are frequently the ones that translate innovation into lived outcomes. They are not waiting for a sustainable economy to be built. They are building it.

1. The focus on women-led enterprises reflects a documented market failure and financing gap identified in existing data and research. It is intended to highlight undercapitalized segments where investment may be commercially and socially additive, rather than to exclude other entrepreneurs or protected groups. Nothing in this blueprint is intended to prescribe exclusive eligibility criteria, mandate preferential treatment, or limit support for businesses led by individuals of any gender.

This leads to the next logical question: if finance can strengthen women-led micro and small enterprises, how do we scale that financing to accelerate both financial health and the building of more resilient, adaptive local economies at the same time?

The answer is concrete. This blueprint, authored by Futerra, Project Dandelion, and CARE, supported by the Mastercard Center for Inclusive Growth, outlines ten economic systems that are already functioning, delivering impact, and operated by women who have the expertise, the community trust, and the entrepreneurial drive to scale — if the right financing can find them.

For public funders, that means de-risking. For financial institutions, redesigning products for affordability and climate resilience. For private investors, widening mandates toward the decentralized, women-led enterprise models that are disproportionately delivering the climate solutions the moment demands.

The architects of tomorrow's resilient economy are not sitting in boardrooms or ministries. They are the millions of entrepreneurs, producers, and service providers already reshaping systems one decision, one venture, one community at a time. Now, we need capital and financial services to evolve fast enough to meet them, putting them on the pathway to financial health and broad-based economic growth.

“The evidence amassed is clear: investing in women is smart economics because women entrepreneurs deliver consistent financial and social returns.”

—PAYAL DALAL, EVP, GLOBAL PROGRAMS, MASTERCARD CENTER FOR INCLUSIVE GROWTH

EXECUTIVE SUMMARY

Where climate finance meets untapped potential

Women-led micro and small enterprises (MSEs)² are already delivering climate solutions across critical sectors, from clean energy and food systems to waste, water, and digital services. Yet climate finance still reaches only a small share of these enterprises, with a global MSME financing gap of USD 5.7 trillion (IFC 2017). This gap is not due to a lack of viable opportunities, but a mismatch between how capital is structured, who it flows to, and how these businesses operate. Women-led MSEs consistently outperform on loan repayment and community adoption, yet receive a fraction of global climate finance (IFC 2023). This is a market getting it wrong.

This is the blind spot. Over USD 1 trillion in climate-relevant capital and value is bypassing women-led, locally led MSEs that are already delivering practical climate solutions in their communities. This blueprint makes that market visible, and shows where finance can begin to meet it.

This blueprint examines ten economic systems where women-led MSEs are actively delivering climate solutions across multi-trillion-dollar markets, including renewable energy (USD 2.5 trillion by 2033), food systems (USD 10 trillion by 2030), and circular economy opportunities (USD 4.5 trillion by 2030) (Allied Market Research 2024; Statista 2025; WEF 2020). The solutions span essential, circular, and enabling systems, each with documented investment pathways and existing women-led MSE activity.

Within these systems, women-led enterprises represent a significant pipeline of investible business opportunities that current financing models have not fully reached. They are generating revenue, delivering climate outcomes, and positioned to scale with the right financial products and support. With catalytic concessional finance today, many can transition toward commercial viability in the near term. This is not a future opportunity. It is an investable market now.

Women entrepreneurs also face three distinct climate and financing risks: greater exposure to climate impacts, fewer resources to adapt or mitigate, and additional responsibility for managing household climate risks – this increases both the urgency and the risk of underinvestment (Gorza et al. 2024). Removing the lasting structural barriers women face to accessing finance, adapting to climate impacts, and full market participation can unlock their capacity for impact.

Operating close to end users, women design solutions grounded in lived experience across interconnected food systems, natural ecosystems, and essential services such as energy, waste, and water. This proximity helps them identify practical needs, leverage trusted local networks, and expand access to resilience-building services and support (Anderson et al. 2023).

2. Businesses with fewer than 50 employees, as defined by OECD.

Accelerating climate action by supporting women-led MSEs is a critical lever for achieving deeper, more durable, and system-wide climate impacts, alongside financial returns that support development that creates opportunity more broadly across communities and countries. Unlocking this opportunity requires patient capital³ that can absorb early risk, support business development, and enable these enterprises to scale toward stronger, healthier, greater commercial viability.

PURPOSE OF THIS BLUEPRINT

This blueprint identifies where women-led MSEs are delivering high-impact climate solutions that reduce greenhouse gas emissions and enhance communities' capacity to adapt to climate change. It then examines where enterprise viability and climate impact align and what is required to enable scale.

The blueprint:

- **Maps** climate-relevant economic systems where women-led MSEs are already active or well positioned to scale.
- **Assesses** the climate, investment, and community relevance of these opportunities.
- **Provides** investors and ecosystem actors with a clear understanding of where finance can drive measurable climate outcomes, while strengthening women-led MSEs.

This is not an exhaustive catalog of all climate solutions, nor a universal claim about all women-led businesses. It is a targeted blueprint designed to highlight areas where climate impact, enterprise feasibility, and investment opportunities intersect.

This is for those who decide where investment moves next. Public and development funders who set incentives and absorb early risk. Financial institutions who design products that either unlock opportunity or exclude it. Private investors and corporate actors who determine which business models scale and which stall. Philanthropic and ecosystem partners who build the pipelines that make the rest possible. Transforming climate finance requires a system-change approach. We are not separate actors but a funding ecosystem; and systems shift meaningfully when capital, policy, and product design move together. Intentional climate finance supports measurable mitigation and adaptation outcomes and plays a large role in aligning private finance with moving the whole of society to net zero. Yet persistent gaps in leveraging private capital to support a just transition remain, particularly in adaptation finance. Global climate finance exceeds USD 1 trillion annually, yet less than 5% is directed toward adaptation and only a small fraction reaches MSEs (Climate Policy Initiative 2023).

We have identified where women-led MSEs are delivering high-impact climate solutions and are well positioned to scale with the right financial support. Each is further detailed in the body and **Annex** of this report.

3. Patient capital in this blueprint refers to long-term, flexible, risk-tolerant investment for early-stage or impact-focused enterprises with delayed returns.

We invite you to look at where climate finance is flowing, where it is not, and which strategic shifts could yield the greatest impacts on future growth and resilience. Climate finance must evolve to reach women-led MSEs, from redesigning financial products for accessibility and climate resilience to leveraging digital and community-based distribution channels. Risk frameworks should expand, incorporating climate and social risks and innovative guarantees and blended finance structures to attract private capital while protecting low-income participants. These changes will power a transition that leaves no one behind and will unlock economic, social, and ecological resilience at scale.

Audience-specific recommendations for navigating this report:

- **Investors and DFIs:**

Use the **Investability Matrix**, **sector chapters**, and **“Funding the Solution”** sections to pressure-test your pipeline, instruments, and women-focused climate KPIs. These can help identify where you are well-positioned and where there are gaps to address.

- **Philanthropy and public funders:**

Look to the **“Enablers”** and **“Policy Leadership”** sections to pinpoint where grants and concessional capital can play a catalytic role by unlocking private investment.

- **Corporates and large buyers:**

Use the **sector chapters** to identify opportunities to integrate women-led enterprises into supply chains through procurement, offtake agreements, and partnerships that strengthen demand and investability.

- **Practitioners, intermediaries, and ecosystem builders:**

Draw on the **sector chapters** to design programs, partnerships, and financial models that translate into investable, women-led MSE models grounded in proven approaches.



WOMEN-LED CLIMATE SOLUTIONS AT-A-GLANCE

These three system groups represent distinct but interconnected roles in the climate economy. Progress depends on all three working together.

ESSENTIAL SYSTEMS deliver the services that underpin resilience and economic participation

SOLUTION AREA	MARKET OPPORTUNITY	ROLE OF WOMEN-LED MSEs
01 ENERGY ACCESS & SERVICES	A USD 2.5T market by 2033, with last-mile distribution structurally underfunded and disproportionately operated by women who lack access to the capital that would scale it.	Women already operate as the last-mile distribution network — 27–30% of the off-grid solar workforce and a majority of distribution agents in key markets. The inefficiency is that this network is operating without the capital to scale it.
02 MOBILITY & LOCAL INFRASTRUCTURE	Sustainable mobility is a USD 1.1T opportunity by 2035, but the last-mile and logistics layer — where women-led MSEs operate — remains the least capitalized part of the stack.	Women-led MSEs are already delivering last-mile logistics and shared mobility in informal and peri-urban markets through local knowledge and trusted relationships formal operators have struggled to build. They're doing it without capital.
03 WATER & SANITATION SYSTEMS	A USD 652B market by 2034 with a USD 85.6B funding gap and 3.5 billion people still unserved. Demand is not in question, delivery model is.	Women run the majority of last-mile water and sanitation services in LMICs — kiosks, purification, sanitation chains — and are the primary managers of household water decisions and are already trusted within their communities to deliver last-mile solutions.
04 SKILLS, CARE & SOCIAL INFRASTRUCTURE	The childcare market alone reaches USD 520B by 2030, with care demand rising 10% this decade. The larger opportunity is the labor supply it unlocks across every other sector in this report.	Women-led MSEs are primary providers of childcare and green skills training in markets where access remains limited. Investing here helps address unpaid care responsibilities that restrict workforce participation across every other sector.

CIRCULAR & REGENERATIVE SYSTEMS reshape how resources are used, reducing emissions and restoring value

SOLUTION AREA	MARKET OPPORTUNITY	ROLE OF WOMEN-LED MSEs
05 Textiles & Apparel	USD 500B in value lost annually to a linear model. Circular alternatives already represent a USD 73B market with a USD 10-20B profit pool emerging by 2030.	Women make up to 80% of garment workers globally and are already leading circular models across resale, repair, recommerce, regenerative fiber. Circular supply chains rely on the maker and recycler relationships that brands struggle to access, without going through the women who already hold them.
06 Waste & Circular Services	A USD 530B+ market by 2030 inside a circular economy transition that unlocks up to USD 4.5T. Women-led MSEs already operate the informal infrastructure it depends on.	Women make up 50–80% of the waste workforce in LMICs, already servicing areas and volumes formal operators have deemed uneconomic, without contracts, finance, or protective equipment. Capital that ignores this will pay to reconstruct what already exists.
07 Food Systems	A USD 10T market by 2030, with USD 4.5T in annual business opportunity unlocked by transforming food systems. Women managing 60% of agricultural labor in LMICs without proportionate access to capital.	Women represent 43% of global agricultural labor — up to 60% in LMICs — but receive a fraction of inputs and credit. The yield gap between women-led and equivalently-resourced farms is the direct cost of that underinvestment, and the return available from closing it.

ENABLING SYSTEMS provide the conditions, from finance to digital infrastructure, that allow these solutions to scale

SOLUTION AREA	MARKET OPPORTUNITY	ROLE OF WOMEN-LED MSEs
08 Nature-based Solutions	Investment in NbS must triple to USD 542B by 2030 to meet climate targets. The gap is not ambition, but the community-led delivery infrastructure that makes restoration stick.	Women-led MSEs are already active in nurseries, reforestation, agroforestry, and ecosystem monitoring, delivering the sustained local stewardship that landscape-scale restoration depends on. Without them, NbS projects lose the community embeddedness that makes restoration last.
09 Information & Digital Services	Climate tech and analytics grows from USD 38.5B to USD 115.4B by 2030. The underinvested layer is the last-mile translation that turns data into decisions for farmers and informal traders.	Women-led MSEs provide the last-mile translation layer between technical climate forecasts and actionable decisions, integrating Indigenous and local knowledge that scientific platforms alone cannot deliver. This layer is chronically underfunded relative to the platforms it serves.
10 Financial Services	A USD 5.7T annual MSME financing gap and hundreds of millions of women in countries facing high climate-related risks still outside formal finance. The market exists, the products just haven't reached it yet.	Women-led MFIs and cooperatives are already reaching the 589 million women in countries facing high climate-related risks that formal finance has written off — extending credit, savings, and insurance where no bankable product existed. The underservice is evidence of a product-market mismatch being actively corrected.

INVESTABILITY MATRIX

This matrix maps ten solution areas against the capital they need now, not their long-term potential. Every tier is a real investment opportunity; what differs is the instrument, the risk structure, and who should act.

Tier placement and scoring reflect **revenue clarity** (how predictable the income model is), **returns evidence** (strength of available investor data), and **women-led proof** (documented MSE activity at scale). Score gaps reflect underreporting in this market, not underperformance.

TIER 1 READY FOR COMMERCIAL CAPITAL

SOLUTION AREA	INVESTMENT PATHWAYS	EVIDENCED RETURNS	SCORE
 WASTE & CIRCULAR SERVICES	WHAT: Collection and recycling infrastructure; organic waste and biogas systems; circular material markets. HOW: Equipment leasing, results-based finance and blended finance link payments to verified outcomes and supports asset-heavy models.	Contracted municipal revenues; aggregation models stabilise cash flow; circular economy models generate USD 108.5B net annual benefit by 2050.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 ENERGY ACCESS & SERVICES	WHAT: Distributed energy asset financing; last-mile distribution and service models; productive-use energy for SMEs. HOW: Asset finance, PAYGo and blended finance are well suited to high upfront costs and predictable repayment from energy access. Grants support early market development.	PAYGo repayment rates >90%; solar irrigation 2–4 year payback; lease-to-own funds 8–15% blended returns.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●

TIER 2 INVESTIBLE WITH TARGETED INSTRUMENTS

SOLUTION AREA	INVESTMENT PATHWAYS	EVIDENCED RETURNS	SCORE
 FOOD SYSTEMS	WHAT: Regenerative production; climate-smart inputs; agro-processing and local value addition. HOW: Value-chain finance, transition loans and carbon-linked finance align with seasonal cash flows and transition risk.	Small-ticket investments increase revenues 20–40% with 2–5 year paybacks; regen practices lift productivity 10–30%.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 WATER & SANITATION SYSTEMS	WHAT: Decentralized water systems; sanitation service enterprises; climate-resilient water infrastructure. HOW: Blended finance, concessional loans and microfinance support affordability constraints and fragmented revenue streams.	USD 4.30 return per USD 1 invested; pay-per-use kiosks show double-digit revenue growth when digitized and managed.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 INFORMATION & DIGITAL SERVICES	WHAT: Climate advisory platforms; early warning systems; data and traceability tools. HOW: Early- and growth-stage investment capital with revenue-based finance are suited to scalable, tech-enabled models with growth potential.	SaaS platforms reach cash-flow breakeven in 3–5 years; hydrometeorological investments return ≥5:1; rice farmers +USD 40/ha net income.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 TEXTILES & APPAREL	WHAT: Circular business models (resale, repair, recommerce); sustainable material production and processing. HOW: Working capital and equipment finance are suited to inventory cycles and small-scale production.	Circular models (resale/rental) show 15–25% returns in 18–24 months; dyeing efficiency cuts operating costs up to 45%.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●

TIER 3 INVESTIBLE WITH CATALYTIC OR CONCESSIONAL CAPITAL

SOLUTION AREA	INVESTMENT PATHWAYS	EVIDENCED RETURNS	SCORE
 FINANCIAL SERVICES	WHAT: Climate-responsive credit, insurance, and savings products; women-focused and blended finance vehicles. HOW: Investment capital, guarantees and blended finance enable product innovation while de-risking portfolios and scaling reach.	High-volume small-ticket interest/fees; mobile money drove access to financial services in Kenya from 26% to 80%; strong when subsidies or guarantees are in place.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 NATURE-BASED SOLUTIONS	WHAT: Restoration and conservation enterprises; ecosystem service markets; community-led NbS projects. HOW: Results-based finance, PES and blended finance tie revenue to verified outcomes and supports long-term restoration cycles.	Small-scale investments increase enterprise revenues 20–40%; high single-digit to low double-digit returns; carbon credit income if well-structured.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 SKILLS, CARE & SOCIAL INFRASTRUCTURE	WHAT: Workforce development and green skills programs; care infrastructure to unlock labor participation. HOW: Concessional finance and grants limited direct revenue generation. High social returns justify public and catalytic capital.	Childcare employer investment returns up to 425%; women's training programs ~9:1 income ROI; care economy creates 300M jobs.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●
 MOBILITY & LOCAL INFRASTRUCTURE	WHAT: Electrified mobility fleets; retrofit and efficiency services; decentralized infrastructure and service delivery models. HOW: Infrastructure finance and equipment loans align with capital-intensive assets and long payback periods. Grants de-risk early adoption.	Sustainable buildings: up to 11% rental premium; energy-efficient systems cut costs up to 37%; transport USD 5 return per USD 1 invested.	Revenue clarity: ●●●●● Returns evidence: ●●●●● Women-led proof: ●●●●●

CALLS TO ACTION FOR INVESTORS

Finance is not reaching the women-led enterprises driving climate solutions. This is not primarily a capital shortage but a design and delivery failure. The financing exists, but it is not structured around the realities of women-led businesses.

Investors and financial institutions

must redirect climate finance toward women-led enterprises, channel funding through local intermediaries, and design financial products and terms that fit how these businesses operate, including appropriately sized, flexible, and blended approaches.

Corporates

must use procurement, offtake, and supply chain finance to create demand, strengthen revenue visibility, and integrate women-led enterprises into value chains.

Policymakers and multilateral actors

must ensure climate finance reaches women-led and local enterprises, strengthen local financial systems, and use public tools such as guarantees and incentives to shift investment toward underfunded sectors.



INTRODUCTION

Why this report and why now

This blueprint was developed by Futerra, Project Dandelion and CARE, with support from Strive Women, a Mastercard Strive initiative supported by the Mastercard Center for Inclusive Growth in partnership with CARE. The initiative aims to strengthen the resilience and growth of women-led MSEs through improved access to finance, digital tools, and ecosystem support. This blueprint is a continuation of Project Dandelion's "Invest Where the Impact Is Greatest" project and aims to answer the next logical question: If finance can strengthen women-led MSEs, where should it flow to accelerate both the economic and climate transition at the same time?

This blueprint sets us on a path to answer that very question. Together, the authoring partners bring complementary expertise in climate systems, cultural narratives, and development approaches that respond to women's needs, locally led adaptation, and financial health for MSEs.



CARE, 2026

BACKGROUND AND CONTEXT

MSEs constitute approximately 90% of all businesses globally, highlighting their central role in economic activity (IFC 2017; UN 2023a). While women-owned micro, small, and medium-sized enterprises (MSMEs) account for roughly 34% of the global MSME financing gap, which is estimated at USD 1.9 trillion (IFC and SME Finance Forum 2025). This blueprint focuses on women-led⁴ MSEs, which for the purpose of this analysis includes majority women-owned and women-managed enterprises. It also includes references to data relevant to MSMEs more broadly.

Despite their significant value to society, women-led MSEs are held back by limited access to finance and investment channels, restricted collateral and credit histories, gaps in technology and digital access, regulatory barriers, and disproportionate unpaid care burdens.

- Approximately 70% of women-led MSMEs have limited or no access to credit (Livingstone et al. 2021).
- Women borrowers consistently outperform men in repayment (World Bank 2022). Loan portfolios to women-led SMEs had lower non-performing loans than overall SME portfolios for six consecutive years, and women-founded startups deliver 2.5x the return per dollar invested compared to male-founded startups (IFC 2023; Abouzahr et al. 2019).
- It is estimated that equality in entrepreneurship could add USD 5-6 trillion in net value creation globally (WEF 2025a).

At the same time, climate mitigation⁵ and adaptation⁶ efforts rely on distributed, localized solutions. From energy distribution and regenerative agriculture to waste recovery, enterprise activity at the micro, small and medium scale is central to effective implementation. Thus, predictable, long-term, and locally accessible finance is necessary to both slow climate change and increase community resilience. Understanding where women-led MSEs intersect with climate-relevant sectors, and where structural barriers constrain scale, requires moving beyond representation metrics. We must instead move towards understanding how MSEs operate, how they access finance, and how they scale in practice.

4. For the purposes of this report, the term 'women-led' means women who either lead (at least 70%) or founded an enterprise.

5. Climate Mitigation: Actions that reduce or prevent greenhouse gas emissions or enhance sinks (IPCC).

6. Climate Adaptation: Adjustment in natural or human systems in response to climate impacts, reducing harm or exploiting beneficial opportunities (UNEP).

METHODOLOGY

Our approach unfolded in four stages.

1. Grounding in women's real-world conditions and constraints.

Drawing on existing research, we considered how barriers such as limited access to finance, skills, and networks, alongside unpaid care responsibilities and legal or safety constraints, shape women's economic participation. For a sector to qualify, we required evidence of women already delivering climate impact within it across diverse contexts, demonstrating that women-led MSEs can realistically participate in climate finance opportunities.⁷

2. Defining impact.

Before identifying solution areas, we established the lenses that would guide both selection and analysis. Each solution area needed to demonstrate strength across three dimensions:

- Climate benefit: Meaningful mitigation and/or adaptation potential.
- Investability and scalability: Clear revenue pathways and plausible capital routes.
- Community benefit: Income, resilience, health, and local economic participation, reflecting the broader benefits these solutions deliver.

3. Shortlisting climate solution areas.

We then reviewed leading climate research including IPCC AR6 WG II and III, Project Drawdown, Hot or Cool, RARE, and the IUCN to identify economic sectors with strong climate potential. From there, we reviewed leading development and investment literature to identify overlap with meaningful participation or plausible growth for women-led MSEs. From there, ten opportunity areas emerged where women-led MSEs are already active in practice. In the solutions, we prioritized areas that combine meaningful climate impact, real-world feasibility for MSEs, and credible pathways for investment where action is already underway and could be scaled with the right finance. While not exhaustive, this set of solutions highlights where the opportunity is immediate and actionable. Across them, women participate in different ways either as business owners, entrepreneurs, or as a significant share of the workforce. Where relevant, we distinguish between women-led enterprises and sectors where women's participation is primarily as employees, as the implications for investment and impact differ.

4. Analysis.

For each solution area, we reviewed reputable literature from global development organizations and peer-reviewed case studies, prioritizing sources from the last decade, to identify where women-led MSEs are active, the climate and community benefit they deliver, the finance currently reaching them, and existing gaps. We supplemented the synthesis with AI-assisted tools.⁸ Multiple rounds of partner feedback and a friendly peer review process refined the analysis. We developed a set of visual tags to highlight where evidence consistently shows positive impacts across health, social equality, livelihoods, jobs, and ecosystems. These are not scores but a visual shorthand for where benefits show up across interconnected systems.

7. The authors do not claim that all solutions within these sectors are equally viable or safe for women in varying contexts.

8. Human oversight to ensure accuracy, tone, and objectivity was an imperative throughout writing and editing stages.

DEFINITIONS AND LIMITATIONS OF THIS RESEARCH

While this blueprint focuses primarily on financial and market-based solutions, we acknowledge that women entrepreneurs operate within broader systems shaped by restrictive social norms, structural biases, and expectations placed on women. These factors can limit access to resources, markets, and decision-making power, and may constrain the effectiveness or feasibility of proposed solutions. Furthermore, enterprise growth in any context depends on enabling market conditions, predominately policy enablers. We have selected the solutions showcased in this blueprint as generally feasible for women-led MSEs, but context-specific social and legal barriers may make developing or delivering any of these solutions difficult or unsafe.

We also recognize that our perspective is shaped by our backgrounds. As a team largely rooted in Western, highly educated contexts and global economic systems, this influences how we understand risk, scale, and finance. This work draws primarily on secondary research and selected case examples, and English-language sources, which limits the expression of all local realities or lived experiences.

To strengthen and balance this perspective, we have engaged with a wide body of research representing diverse viewpoints, and sought input from external reviewers and partner organizations, including We-Fi, 2X Global and CGAP, to contribute to a well-rounded analysis. Finally, specific topics are understudied and therefore there are research gaps in this report. A lack of comparable, sex-disaggregated financial performance benchmarks and the absence of standardized emissions measurement at the micro-enterprise scale are two notable examples.

This blueprint is not intended to function as an investment prospectus or provide deal-level financial models. Instead, it identifies where climate impact, enterprise viability, and investment opportunity intersect, offering a strategic lens to help investors and ecosystem actors shape portfolios, design fit-for-purpose financial instruments, and prioritize areas for further due diligence.

See **Annex** for an expansive set of supporting documents, including a **Glossary of Key Terms** used throughout the report, a synopsis on the **Enabling Environment** and additional organizations delivering climate solutions around the world.

“If I could change a policy, it would be that all rural women had access to financial training and credit with low interest rates.”

– NORMA NIXABEL HERNÁNDEZ CALLE, RURAL ENTREPRENEUR AND PIG FARMER

SOLUTION AREAS

The ten solution areas in this report fall across three interconnected system groups, each playing a distinct role in the climate economy: **essential systems, circular and regenerative systems, and enabling systems.**

ESSENTIAL SYSTEMS

Energy / Water / Mobility / Care

Deliver the foundational services that underpin resilience and economic participation.

CIRCULAR & REGENERATIVE SYSTEMS

Textiles / Waste / Food

Reshape how resources are used, reducing emissions and restoring value.

ENABLING SYSTEMS

Nature-based Solutions / Financial Services / Digital Information

Provide the conditions that allow solutions across all three groups to reach scale.

Significant progress depends on all three working together, but does not preclude investments in each solution area.

The continuing pages map each solution area against its climate impact, investment pathways, and best-fit financing approaches.

GROUP 1

ESSENTIAL SYSTEMS



01 ENERGY ACCESS & SERVICES



02 MOBILITY & LOCAL INFRASTRUCTURE



03 WATER & SANITATION SYSTEMS



04 SKILLS, CARE & SOCIAL INFRASTRUCTURE

Across LMICs, decentralized energy, sustainable infrastructure, water systems, and social services are critical drivers of climate resilience and economic growth, particularly through locally led and women-led MSEs. However, persistent gaps in access, financing, and enabling systems continue to constrain their scale, highlighting the need for targeted investment, supportive policy frameworks, and finance models designed to reach smaller, locally led enterprises.



01 ⚡ ENERGY ACCESS & SERVICES AT-A-GLANCE



CARE, 2026

CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

WORKING CONDITIONS

MARKET OPPORTUNITY

A large, fast-growing market across LMICs, driven by unreliable grids and rising demand. Global renewable energy markets were valued at roughly USD 1.1 trillion in 2023 and are projected to reach USD 2.5 trillion by 2033 (Allied Market Research 2024). Investing in women's participation in the energy grid in LMICs represents a multi-hundred-billion-dollar opportunity, with broader economic losses from poor energy access reaching up to \$1.3 trillion by 2030 (IEA 2025b).

WHERE WOMEN-LED MSEs FIT IN

Critical to last-mile delivery and growth. Women operate as distributors, service providers, payment agents, and owners of energy-enabled businesses such as milling and cold storage.

PRIORITY INSTRUMENTS AND RETURNS

Opportunities include equipment and working capital finance, pay-as-you-go (PAYGo) models, and blended finance. Returns are typically moderate and stable, with performance shaped by currency and repayment risk management. Lease-to-own energy asset funds may generate 8-15% blended returns, depending on subsidy structures (Gorza et al. 2024).

CALL TO ACTION

The distribution network already exists – women operate 27-30% of the off-grid solar workforce. The capital to scale it does not. **Expand asset finance, PAYGo, and working capital facilities for women-led last-mile energy providers.**

PROBLEM

Energy poverty quietly constrains enterprise growth, affecting firm productivity, national GDP, and global economic output. 760 million people still lack access to electricity, resulting in estimated direct business losses of USD 185 billion per year (IEA 2023).

Many small businesses in LMICs operate with intermittent grid access or expensive diesel generators. This limits the ability to run equipment, store food safely, power irrigation, or adopt digital tools that improve productivity. For women entrepreneurs, unreliable energy is a structural constraint on growth. In many markets, this reinforces dependence on fossil fuels while slowing the emergence of new climate-aligned MSEs.

Currently, women represent only 32% of the total workforce in the renewable energy sector and are disproportionally concentrated in the lower spheres of the decision-making hierarchy and in 2022, only 7% of startup founders in the energy sector were women (IFC 2023a). Furthermore, women-led energy MSEs still receive a disproportionately small share of climate finance despite strong evidence of repayment reliability and community multiplier effects (Gorza et al. 2024).



SOLUTION

Clean energy access for productive use could lift 1 billion people out of energy poverty while avoiding 1.5-2.0 Gt CO₂e annually by 2030 (IEA 2023).

Women-led MSEs often sit at the critical interface between technology and community adoption. Women represent 27-30% of the off-grid solar workforce globally, and a significantly higher share of last-mile distribution agents in many markets (IRENA 2024). These roles are critical to uptake in rural communities and places where access remains limited, while also supporting more diverse supply chains and stronger business resilience (Gorza et al. 2024).

Across LMICs, women entrepreneurs are already expanding the reach of decentralized clean energy services, particularly in last-mile markets where traditional utilities struggle to operate. Kenya, India, and Uganda have established off-grid solar markets, with Kenya alone accounting for approximately 74% of sales across them (GOGLA 2023). Within these systems, women-led enterprises and distribution networks play a critical role in driving uptake and sustained use. Key innovation areas include:

- Distributed solar systems for productive use.
- Clean cooking and modern bioenergy distribution.
- PAYGo solar and efficient appliance financing.
- Solar-powered cold chains.

Together, these models reflect how women-led MSEs are actively driving the expansion, adoption, and sustained use of decentralized energy systems.

FUNDING THE SOLUTION

Distributed clean energy markets are expanding rapidly, driven by electrification needs and climate investment.

For women-led MSEs, finance is most effective when it enables local distribution, productive-use energy systems, and service networks. Business models tend to work best when they combine predictable cash flow, asset-backed finance, and rely on regular, recurring payments. The most reliable and scalable models are usually those that either replace existing energy costs or directly help people earn more income (Gorza et al. 2024).

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Equipment finance to support more solar technicians, appliance distributors, and installation services.
2. Blended finance structures that de-risk distributed infrastructure such as mini-grids for MSEs.
3. Results-based financing (RBF) that rewards verified energy access or clean cooking adoption.

ROI

PAYGo solar portfolios report repayment rates above 90%, solar irrigation and cold-storage systems often achieve 2-4 year payback periods, and lease-to-own energy asset funds may generate 8-15% blended returns, depending on subsidy structures (Energy Sector Management Assistance Program 2024; Efficiency for Access Coalition 2022; Gorza et al. 2024).

SYSTEM CHANGE

Impact is strongest when financing supports local enterprise ecosystems rather than isolated technology deployment. Structuring finance to support working capital, service networks, and productive-use energy systems helps ensure technologies translate into sustained income generation and adoption.

FINANCE INNOVATION

In 2025, the World Bank issued a USD 200 million Clean Cooking Outcome Bond supporting cookstove deployment in Ghana and linking investor returns to verified climate and development outcomes (World Bank 2025).

Such instruments expand funding for clean cooking technologies delivered through local retail and service businesses, where women entrepreneurs frequently operate.

POLICY LEADERSHIP

- Kenya's removal of VAT on off-grid solar equipment reduced system costs by roughly 16%, helping drive the sale of over 1.7 million PAYGo solar systems by 2022, with off-grid solar now contributing around 10% of national electricity access (World Bank 2022a).
- India expanded non-fossil power to 45% of capacity, putting the country ahead of its 2030 clean energy target (Ministry of New and Renewable Energy; Government of India 2021).
- Brazil has set deep 2035-2050 emission cut targets, built an 85% renewable power mix, and is launching an emissions trading system to attract private capital (IEA 2025a).

KEY RISKS AND UNKNOWNNS

From an investor perspective, key watchouts include foreign exchange volatility, uncertainty in carbon credit revenues, exclusionary carbon markets or credit schemes, and repayment risks linked to PAYGo consumer financing models.



WOMEN-LED ENTERPRISE IN ACTION – INDIA

FRONTIER MARKETS

Frontier Markets enables rural women entrepreneurs to deliver clean energy and climate-friendly technologies, strengthening last-mile access while driving women's livelihoods and improving energy reliability in communities with limited access to reliable power.

The company has trained thousands of “Solar Sahelis” to deliver and maintain clean energy solutions across rural India, increasing adoption of climate-aligned technologies, improving energy access, and supporting income generation for women entrepreneurs.

The model has generated over INR 3 billion (USD 36 million) in income for rural communities and an average annual net income of INR 65,000 per woman entrepreneur.

Revenue is generated through product sales and servicing, supported by grants, donor funding, and digitally enabled logistics and supply chain systems.

RAJNI VERMA, SAHELI ENTREPRENEUR

In Sivana village, Rajasthan, Rajni Verma joined Frontier Markets after COVID-19 disrupted her family's income. She had never owned a smartphone, but began using the Meri Saheli App to place orders, build customer trust, and expand her business category by category. Within three years, she had opened three physical shops, including a grocery store, cosmetics shop, and E-Mitra centre offering digital and Aadhaar-enabled financial services.

Today, Rajni sells solar and clean energy products alongside household essentials, mentors other women on savings and digital tools, and acts as a trusted access point for banking, documentation, and government schemes. As she puts it: “I lost hope, now I have direction. People come to me with their problems. I am the solution.”



Frontier Markets, 2026



MOBILITY & LOCAL INFRASTRUCTURE

AT-A-GLANCE



CLIMATE BENEFITS

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WORKING CONDITIONS

MARKET OPPORTUNITY

Urban growth and electrification are driving demand for clean transport, efficient buildings, and regenerative tourism. Sustainable mobility is projected to grow from USD 389B in 2023 to USD 1.1 trillion by 2035; with USD 5 in economic return per USD 1 invested in public transport (WEF 2024; APTA 2026).

WHERE WOMEN-LED MSEs FIT IN

Active in shared mobility (e-bikes, electric taxis), last-mile logistics, EV charging and battery systems, building retrofit, and regenerative tourism models rooted in local supply chains. With women representing only 5% of land transport workers globally, these models can help close a major participation gap while bringing women's needs into the design and delivery of mobility systems (Kurshitashvili et al. 2025).

PRIORITY INSTRUMENTS AND RETURNS

Asset finance for EV fleets, working capital for retrofit businesses, logistics electrification, and tourism enterprises. Blended finance helps de-risk. Returns supported by rental premiums (up to 11%), cost savings (up to 37%), and tourism returns of 12-15% (IFC 2019, UN Tourism and UNDP 2018).

CALL TO ACTION

Finance wasn't designed for the operators at this scale. **Deploy blended finance and municipal partnerships to scale women-led service models in low-carbon transport and retrofit markets.**

PROBLEM

Urban mobility and infrastructure systems remain heavily dependent on fossil fuels, creating significant climate and economic inefficiencies for MSEs, with transport accounting for 37% of global CO₂ emissions in 2021 (IEA 2022). Rapid urbanization in LMICs is further constrained by inadequate clean transport and infrastructure systems, while buildings contribute a further ~37% of global energy-related emissions, intensifying urban heat, air pollution, and infrastructure stress (UNEP 2023a; WHO 2023).

These challenges directly affect small businesses and disproportionately impact women-led MSEs, many of which operate in petty trade and market-based sectors and are exposed to higher climate, health, and productivity risks. Last-mile mobility in many regions depends on inefficient, fossil-fuel-powered vehicles that disproportionately strain the limited resources of women MSEs.

For women entrepreneurs, unsafe, unreliable, or poorly designed transport can create an additional barrier to market access and income generation. More broadly, lack of transport access has been associated with a 16.5% lower probability of women entering the workforce in developing countries (Kurshitashvili et al. 2025).

Rising heat, poor infrastructure, and inefficient transport systems all increase operating costs and climate risks for these businesses. These barriers make them key end users of targeted interventions in clean transport, resilient infrastructure, and energy-efficient urban systems.



SOLUTION

As cities grow and infrastructure systems modernize, a major opportunity is emerging for women-led MSEs to deliver cleaner mobility services, climate-resilient infrastructure upgrades, and regenerative tourism models that reduce emissions while strengthening local economies. And because women often travel differently due to caregiving roles, safety concerns, and multi-stop mobility patterns, their leadership can help make low-carbon transport safer, more useful, and more widely used (Kurshitashvili et al. 2025).

This chapter focuses on the parts of the mobility and built-environment transition where MSEs operate: local transport, building retrofit, and destination-side infrastructure. Regenerative tourism fits here because it is largely an infrastructure-and-services play – upgrading lodging, local transport, and local supply chains to reduce emissions while keeping value in communities.

Service-based business models are particularly well suited to MSEs and demand for eco-tourism is growing by approximately 20% annually (UN Tourism and UNDP 2018).

Women-led MSEs are increasingly delivering solutions across urban and regional economies. They are active across:

- Shared mobility services such as e-bike fleets, electric motorcycle taxis.
- Last-mile delivery systems that reduce emissions while improving urban logistics.
- Charging infrastructure, battery-swapping networks, and fleet management services that support the transition to electric transport.
- Low-carbon construction and building retrofit services.
- Regenerative tourism and hospitality MSEs that prioritize low-impact infrastructure, local supply chains, and community-owned tourism models.

Together, these models show how women-led MSEs are shaping lower-emission urban systems through locally embedded, service-based solutions.

FUNDING THE SOLUTION

Investment in sustainable mobility and infrastructure is expanding rapidly. With greater investments, technological advancements are making less carbon-intensive alternatives economically viable (UNEP FI 2024).

Blended finance mechanisms are increasingly used in this sector to channel private capital to women-led MSEs, while lowering perceived investment risk for investors in emerging markets. This model helps reduce barriers to entry and make investments in mobility and green infrastructure more bankable.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Asset finance for EV fleets and shared transport systems, to increase provision.
2. Equipment and working capital for low-carbon retrofit WMSEs.
3. Support for last-mile logistics electrification.
4. Investment in regenerative and community-owned tourism WMSEs.

ROI

Evidence from retrofit and green building markets shows that sustainable buildings can command up to 11% rental premiums, while energy-efficient systems can reduce operating costs by up to 37% (IFC 2019).

OTHER OPPORTUNITIES AND PROMISING SIGNALS

To ensure investment flows generate wide-ranging benefits, financing structures must be accessible to smaller operators and designed to support women-led MSEs, which often face structural barriers to credit, asset ownership, and infrastructure finance.

POLICY ENABLERS

Municipal governments are adopting EV and green building policies, with an increasing focus on heat stress and disaster management. For example, EU Member States are committing substantial funds for smart and sustainable transport, collectively investing nearly €83 billion in these measures through national recovery plans (European Commission 2023).

Türkiye's new national sustainable tourism plan requires accommodations to demonstrate year-over-year emissions reductions, signaling growing regulatory pressure and potential opportunities for investments in low-carbon, climate-resilient tourism infrastructure (OECD 2024).

At the same time, sustainable tourism certification frameworks and growing consumer demand for responsible travel are supporting the expansion of regenerative tourism MSEs that prioritize local supply chains, low-impact infrastructure, and community ownership (UNEP and UN Tourism 2020).

KEY RISKS AND UNKNOWNNS

Key risks include high upfront capital requirements, climate-related disruptions to transport and hospitality sectors, water impacts from EV production, and the potential exclusion of informal operators.



CARE, 2026



WOMEN-LED ENTERPRISE IN ACTION – KENYA

E-SAFIRI CHARGING LTD

E-Safiri Charging Ltd. provides electric vehicle charging infrastructure for motorcycles and small vehicles, supporting the transition to clean transport in Kenya while enabling low-emission mobility solutions.



As of latest available reporting (c. 2022-2024), the company has begun deploying EV charging solutions to support the electrification of motorcycle taxi fleets. Electric motorcycles can reduce lifecycle emissions by up to 50-70% compared to internal combustion alternatives in African urban contexts, while lowering fuel and maintenance costs for drivers.

Revenue is generated through EV charging services and partnerships with electric motorcycle operators. Growth is supported by participation in innovation programs, climate-tech networks, and strategic partnerships.



WATER & SANITATION SYSTEMS

AT-A-GLANCE



CARE, 2026

CLIMATE BENEFITS

MITIGATION

COMMUNITY BENEFITS

PUBLIC HEALTH

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

WORKING CONDITIONS

MARKET OPPORTUNITY

A USD 652 billion market by 2034. Universal access will require around USD 114 billion annually, roughly three times current levels, creating a clear need for decentralized, last-mile models that can extend reliable and affordable services where centralized systems are limited (Precedence Research 2025; Water.org 2022).

WHERE WOMEN-LED MSEs FIT IN

Central to last-mile delivery, operating water distribution and kiosk models, purification services, sanitation chains (including waste collection and reuse), and hygiene product businesses. Their proximity to users drives higher adoption, trust, and revenue stability in decentralized systems.

PRIORITY INSTRUMENTS AND RETURNS

Asset finance for infrastructure, working capital for service delivery, results-based financing, and blended finance to scale decentralized models. Strong fundamentals: USD 4 return per USD 1 invested, with stable revenues from prepaid services, contracts, and franchise models (Water.org 2024).

CALL TO ACTION

Finance wasn't designed for the operators at this scale. Deploy blended finance and municipal partnerships to scale women-led service models in low-carbon transport and retrofit markets.

PROBLEM

Water and sanitation systems remain severely underdeveloped in LMICs, creating both climate risks and large unmet demand for services. In 2022, 3.5 billion people lacked safely managed sanitation; today, one in four people lack safely managed drinking water, increasing exposure to disease, economic loss, and climate-related risks (UNICEF and WHO 2023).

For businesses of all sizes, climate change is intensifying water insecurity through droughts, floods, and contamination, making water access more volatile and expensive. At the same time, the wastewater sector contributes 7-10% of global methane emissions, highlighting a climate risk, an underdeveloped mitigation lever, and a missed opportunity for resource recovery and cost savings (UNEP 2025).

Much of this system is delivered through MSEs, including informal water vendors, sanitation providers, and hygiene businesses. Women are heavily represented in these last-mile services, but face barriers to finance, infrastructure, and formal contracts, limiting their ability to scale even where demand is high. As climate and resource pressures increase, the lack of resilient water and sanitation systems is becoming a growing constraint on business stability, productivity, and growth, particularly for women-led MSEs.

Inadequate WASH access also constrains labor productivity, as illness, time spent accessing water, and poor workplace sanitation reduce working hours and efficiency. For women particularly, the absence of safe, private sanitation facilities and adequate menstrual health management undermines dignity, limits workforce participation, and creates unsafe working environments.

SOLUTION

Invest in climate-resilient, low-emission water and sanitation infrastructure while expanding access to finance and formal support for MSEs, especially women-led, service providers to scale safe, affordable services (Precedence Research 2025; Water.org 2022).

Women are often the primary managers of household water, sanitation, and hygiene, giving them direct insight into demand, reliability gaps, and willingness to pay. By adopting women-centered design practices⁹, these enterprises are enabling higher service adoption, stronger customer trust, and more consistent revenue collection in decentralized models. In practice, women-led MSEs are critical operators in systems where behavioral uptake and last-mile delivery determine both climate and commercial outcomes.

Women-led MSEs are already delivering:

- Last-mile water distribution and kiosk models, purification services.
- Climate-resilient storage solutions that reduce reliance on expensive or unreliable supply systems.
- Affordable, sustainable and locally produced hygiene products sold through trusted community networks.
- Sanitation service chains including fecal sludge collection, treatment, and reuse.

They are converting waste into usable products while reducing methane emissions. They are developing and scaling climate-smart water management and irrigation can improve water productivity by 30-50% (FAO 2022). And they are doing so through decentralized models that are often more scalable than large infrastructure projects.

9. Women-centered design acknowledges that women's needs and the barriers they face are different to men due to laws and political systems that disadvantage women, harmful social norms, etc. Women-centered design starts with understanding women's needs and designing and iterating on solutions that involve them as designers and decision-makers, or otherwise centers their needs throughout the process.

FUNDING THE SOLUTION

The global water and sanitation sector represents both a significant market opportunity and a major infrastructure financing gap. While the water and wastewater treatment market is projected to grow from USD 369.6 billion in 2025 to USD 652.3 billion by 2034, achieving universal access requires approximately USD 114 billion in annual investment – around three times current levels – highlighting persistent underinvestment relative to rapidly growing demand (Precedence Research 2025; Water.org 2022).

Revenue models are typically stable when linked to prepaid water services, service contracts, product sales, and franchise systems that aggregate small operators and improve unit economics (OECD 2021).

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Asset financing for critical water and sanitation infrastructure, e.g., water purification systems, modular storage tanks, off-grid toilets.
2. Results-based or output-linked financing, such as payments tied to households connected, liters of safe water delivered.
3. Blended finance to catalyze private sector engagement and enable scale-up of community-level water and sanitation solutions.

ROI

Pay-per-use water kiosk businesses can achieve double-digit revenue growth and significantly higher earnings than traditional systems, especially when digitized and professionally managed (Wagner 2025).

ENABLING ENVIRONMENT

Blended finance, via platforms like the World Bank's Global Water Security & Sanitation Partnership and funds such as WaterEquity, are channeling capital into decentralized service models that can reach smaller operators, including women-led MSEs. Furthermore, procurement and delegated management frameworks are high leverage, with the public sector remaining a demand anchor for WASH.

POLICY ENABLERS

When governments mandate rainwater harvesting, support water reuse, or license decentralized operators, they transform fragmented service markets into bankable infrastructure ecosystems. In Morocco, performance-based contracts have shown how tying payments to verified service delivery can unlock financing while expanding access to low-income households (Chauvot de Beauchêne et al. 2026). In Rwanda, licensing frameworks for water kiosks are allowing MSEs to operate in underserved areas, supported by results-based payments and blended finance (Huttinger et al. 2017).

KEY RISKS AND UNKNOWNNS

Key risks include regulatory complexity and political sensitivity in WASH systems, weak cost recovery that can undermine MSE cashflows without smart subsidies or performance-based payments, and high transaction costs that can limit scalability without aggregation.



CARE, 2026

WOMEN-LED ENTERPRISE IN ACTION – RWANDA

IRIBA WATER GROUP

IRIBA Water Group delivers affordable, clean drinking water through solar-powered dispensing systems and a franchise model, improving water access while creating employment opportunities, particularly for women and youth.



As of latest available reporting (c. 2022-2024), IRIBA operates 73 sites, serving tens of thousands of people daily and over 300,000 regionally. The model reduces reliance on single-use plastic packaging and lowers transport-related emissions through localized water access and reusable container systems.

Revenue is generated through pay-per-use water access and supported by grants, awards, and blended finance to scale infrastructure and operations.

04 SKILLS, CARE & SOCIAL INFRASTRUCTURE AT-A-GLANCE



CLIMATE BENEFITS

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

WORKING CONDITIONS

MARKET OPPORTUNITY

Care and skills systems are the enabling infrastructure for women's participation across all climate solution areas. Without them, labor supply, productivity, and enterprise growth are constrained. Care work alone contributes USD 10.8 trillion annually (mostly unpaid), with demand rising 10% this decade, representing a major formalization and investment opportunity (CARE International UK and Cherie Blair Foundation for Women 2024).

WHERE WOMEN-LED MSEs FIT IN

Increasingly driving innovation in health, safety, and dignity in the workplace, particularly through addressing long-standing social inequalities. Enabling participation in the wider economy, while also building climate-resilient workforces and supporting at-risk populations.

PRIORITY INSTRUMENTS AND RETURNS

Working capital, digitization, and outcome-based finance for service delivery and job placement. Strong returns: public investments in care can deliver 4x GDP impact at the macro level and up to 10:1 returns in LMICs (De Henau et al. 2022; International Council of Nurses 2023).

CALL TO ACTION

Fund care systems through blended finance, grants, and concessional capital. For private investors, childcare franchise models and outcome-linked training contracts are the entry point.

PROBLEM

Climate change is both a technology challenge and a workforce and social systems challenge. It increases unpaid care burdens due to rising health risks, disrupts livelihoods, accelerates labor market transitions, and increases pressure on community health, childcare, eldercare, and worker support systems.

Unpaid care work alone is estimated to add USD 10.8 trillion to the global economy each year (CARE International UK and Cherie Blair Foundation for Women 2024). Women perform 76% of this globally (UN Women 2023).

As climate-related water stress, illness, displacement, and livelihood disruption rise, that burden grows further, reducing the time and flexibility of women to earn income, run businesses, or train for new jobs. As a result, care needs are expected to increase globally by 10% in the next decade (CARE International UK and Cherie Blair Foundation for Women 2024).

While demand for care is high, underinvestment in care systems keeps services fragmented, low-margin, and difficult to formalize or scale into investable MSEs (ILO 2025). This constrains women-led MSEs because they operate with low and unstable revenues, limited formal contracts, and weak financial records, making it difficult to demonstrate creditworthiness or attract investment to scale.

Alongside this, workers operating in MSEs are often at a greater risk of workplace accidents and work-related ill health and tend to have higher rates of accidents and disease (European Agency for Safety and Health at Work 2026). Globally, 14% of female workers have suffered serious injury at work, with risks increasing to 23% in agriculture and fishing (Lloyd's Register Foundation 2020). Key safety challenges include violence against women and girls, sexual harassment, inadequate sanitation, lack of PPE tailored for women, and inadequate maternity support. Combined with menstrual and menopausal health impacts on workplace performance and attendance, significantly negatively affect women in the workplace (Chartered Institute of Personnel and Development 2023).

Finally, the global skills gap carries significant economic costs, with estimates suggesting that skills shortages could result in up to USD 11.5 trillion in lost GDP globally by 2028 if unaddressed (WEF 2026).

SOLUTION

Stronger care, skills and social infrastructure significantly enhances economic resilience – social protection coverage is linked to a 40-60% reduction in climate-related economic losses (UN Women 2023).

Women-led MSEs are increasingly driving innovation in health, safety, and dignity in the workplace, particularly through FemTech and menstrual health solutions that address long-standing social inequalities. Enterprises with fair workplace practices and products or services that improve the lives of women and girls, are significantly important when delivering a women-focused approach to investing.

Further progress can be made by formalizing, financing, and professionalizing the care economy as essential climate infrastructure and enabling women-led care and skills MSEs to scale through targeted capital and procurement access.

Addressing the imminent skills gap provides a significant opportunity for investors. It is estimated that 59% of the global workforce will need reskilling by 2030 to meet shifting demands, primarily driven by AI, digital transition, and the green economy (WEF 2025b). Key areas of innovation include:

- Vocational and technical training for green jobs
- Green skills-matching, certification, and workforce placement services.
- Childcare MSEs that enable women's labor force participation and entrepreneurship.
- Digital tools to improve access to healthcare for women throughout their life stages.
- Community health networks and services supporting people and communities facing high climate risk.
- Migration and displacement support services related to climate change impacts, including advisory, language, and labor-market integration services.
- Preparatory and stabilizing community-based climate support services.
- Digital tools that improve service delivery, workforce tracking, payment systems, and training access.
- Menstrual care focused on sustainability and dignity.

These MSEs are locally embedded, labor-intensive, and often relatively low-capital expenditure, making them well suited to scaled service delivery, if paired with the right working capital, procurement access, and formalization support.

FUNDING THE SOLUTION

The global childcare and early education markets are projected to exceed USD 520 billion by 2030, driven in part by rising female labor force participation and demand for quality early childhood services (Adroit Market Research 2026). Furthermore, large-scale investments in the care economy could create 300 million new jobs, with every dollar invested producing almost four dollars in returns to global GDP (De Henau et al. 2022). Evidence shows that MSEs in this space can deliver strong returns at scale, with investments in workforce and care systems generating up to 10:1 economic returns in LMICs (International Council of Nurses 2023).

Yet finance for care, training, and social infrastructure remains far below its economic and social value. This represents a significant opportunity for blended finance vehicles and outcomes-based contracts tied to green job placement. Capital flows best when financing matches the operating model of these businesses.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Flexible expansion capital for franchise or network-based service models.
2. Outcome-linked financing tied to verified job placement, completion, or service-delivery outcomes.
3. Public-private structures that combine procurement contracts with catalytic capital to stabilize revenues.

ROI

Women-focused economic and training programs have delivered around US 9 dollars in income and savings for every US 1 dollar invested (CARE 2024). Care-related employer investments (e.g., childcare benefits) can generate returns of up to 425% through improved retention and productivity (BCG and Mom's First 2025).

OTHER OPPORTUNITIES

Emerging policy frameworks, including just transition mechanisms and climate finance criteria responsive to women's needs, increasingly recognize the role of skills and care infrastructure in climate strategies.

PUBLIC CAPITAL AND PROCUREMENT

When governments outsource care, training, and social infrastructure services through structured contracts, they convert fragmented demand into predictable, contracted revenue streams; creating bankable cash flows that blended finance, DFIs, and institutional investors can underwrite at scale.

Public childcare systems, just transition training funds, social employment programs, and procurement set-asides for women-led MSEs are all creating more predictable demand for care and training providers.

KEY RISKS AND UNKNOWNNS

There is a real risk of reinforcing unpaid or underpaid labor norms if care services are expanded without formalization, decent wages, and labor protections. Returns also remain sensitive to policy anchoring, subsidy structures, and procurement design. There is still limited longitudinal evidence linking childcare expansion or social infrastructure investment directly to specific climate or green-employment outcomes over time.



CARE, 2026

WOMEN-LED ENTERPRISE IN ACTION – KENYA

KIDOGO

Kidogo is a women-led social enterprise strengthening childcare systems in Kenya's low-income communities by identifying, upskilling, and quality assuring local childcare providers ("Mamapreneurs"). Rather than creating new childcare centers, Kidogo works with existing women entrepreneurs operating informal childcare businesses, helping them improve the quality, safety, and sustainability of the care they provide through training, mentorship, nutrition support, business development, and ongoing quality monitoring.



By improving access to safe, nurturing, and affordable childcare, Kidogo enables more women to participate consistently in the workforce while creating stronger livelihoods and professional pathways for childcare providers themselves. Globally, women spend an average of 4.7 hours per day on unpaid care activities compared to 1.8 hours for men. By strengthening childcare services and supporting caregivers as skilled professionals and business owners, Kidogo helps redistribute care burdens, elevate care work as valued labor, and expand women's economic participation and agency.

Kidogo's model combines direct support to childcare providers with broader systems change efforts aimed at strengthening the childcare sector. This includes working with government partners to improve childcare standards, mapping and data systems, workforce development pathways, and long-term financing solutions that can make quality childcare more accessible and sustainable at scale.

By the end of 2025, Kidogo was supporting nearly 1,800 Mamapreneurs serving more than 54,000 children across Kenya. Through this work, Kidogo is demonstrating how investing in women-led childcare enterprises can improve child outcomes, strengthen local economies, and build the care infrastructure families need to thrive.

GROUP 2

CIRCULAR & REGENERATIVE SYSTEMS

05 TEXTILES & APPAREL

🗑️ 06 WASTE & CIRCULAR SERVICES

🌱 07 FOOD SYSTEMS

Across textiles, waste, and food systems, circular and regenerative models are emerging as high-impact pathways to reduce emissions, recover value, and build more resilient local economies, with women-led MSEs playing a central role across value chains.

Despite strong market growth and climate benefits, these MSEs remain underfinanced and constrained by infrastructure, market access, and policy gaps, underscoring the need for targeted investment and system-level support to scale circular solutions.



CARE, 2026

05 # TEXTILES & APPAREL AT-A-GLANCE



CLIMATE BENEFITS

MITIGATION

COMMUNITY BENEFITS

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ECOSYSTEMS & BIODIVERSITY

WORKING CONDITIONS

MARKET OPPORTUNITY

Over USD 500 billion in value is lost annually as clothing goes unworn and unrecycled (Global Fashion Agenda et al. 2023). Circular models already represent USD 73 billion in value, with further profit potential of USD 10-20 billion by 2030 (Ellen MacArthur Foundation 2021). Addressing the sector's environmental and social impacts could unlock an additional USD 192 billion in global economic value by 2030 (Ellen MacArthur Foundation 2017).

WHERE WOMEN-LED MSEs FIT IN

Women make up around 80% of garment workers globally and are deeply embedded across the value chain, from production to repair and resale (Ellen MacArthur Foundation 2017). Women-led MSEs are driving circular models that extend product life, reduce waste, and shift into higher-value activities.

PRIORITY INSTRUMENTS AND RETURNS

Working capital, equipment, inventory finance, and investment in circular platforms and regenerative materials. Circular models (resale, rental) show 15-25% returns in 18-24 months, with additional upside from material efficiency and extended product lifecycles (ZIQY 2026). In the body of this solution we have split 'circular solutions' from 'regenerative fibers' as they present different investment opportunities.

CALL TO ACTION

Redirect investment toward circular business models and regenerative materials, including women-led MSEs in reuse, repair, and alternative fibers.

PROBLEM

More than USD 500 billion of value is lost every year as clothing goes unworn and unrecycled (Global Fashion Agenda et al. 2023). The textile and apparel sector produces over 100 billion garments annually and contributes 2-8% of global greenhouse gas emissions (Ellen MacArthur Foundation 2017). It relies heavily on fossil fuel-based synthetic fibers, generating significant microplastic pollution, and consuming enormous quantities of water, energy, and chemicals.

Women are deeply embedded across the textile and apparel value chain, representing a significant share of the workforce, up to 80% of garment workers in some contexts (Ellen MacArthur Foundation 2017). They sit at critical points in production, processing, repair, and resale systems yet remain concentrated in low-margin, labor-intensive roles with limited access to finance, equipment, or stable contracts. This creates a structural mismatch where women are central to both production and recovery systems but remain underfinanced.

Many women-led MSEs operate at small scales without stable contracts or predictable order volumes, making it harder to plan and grow. Gaps in fiber processing, dyeing infrastructure, and material innovation limit the ability to scale more sustainable production.

SOLUTION

Because women are already central to how textiles are produced, circulated, and recovered, they are uniquely placed to enable more circular, lower-impact models, from regenerative fiber production to repair, resale, and recycling systems. Women-led MSEs are already building the next generation of textile systems, based on low-impact materials and circular business models.

Key areas of innovation include:

- Sustainable and regenerative fiber production with lower water, chemical, and fossil fuel inputs.
- Climate-resilient fiber processing and first-stage aggregation.
- Lower impact dyeing and finishing services.
- Small-scale garment manufacturing focused on durability, local economic opportunity, and traceability.
- Repair, tailoring, remaking, and upcycling services.
- Resale, rental, and recommerce models.
- Textile collection, sorting, and preprocessing.
- Traceability and market-linkage services.

In high-income contexts, circular fashion platforms and low-impact processing services are challenging behavioral and systemic norms of fast fashion. Subscription models and peer-to-peer resale platforms are disrupting the market.

Women-led MSEs are using these models to move from low-margin production into more stable, higher-value businesses that improve material efficiency, extend product life, and strengthen resilience across supply chains.

FUNDING THE SOLUTION

Circular service models

Circular economy practices in fashion already represent USD 73 billion in value today. With investment, circular fashion markets are projected to generate a profit pool of USD 10-20 billion by 2030 (Ellen MacArthur Foundation 2021).

MSEs are particularly well suited to deliver solutions because circular textile models are service and labor intensive, rather than capital intensive. Many businesses require small, flexible investments for equipment, inventory, and working capital rather than large-scale capital.

Circular textile MSEs benefit from diversified revenue streams, including repair, resale, customization, and B2B services, including offtake agreements.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Small-ticket equipment and working capital finance.
2. Inventory and aggregation finance.
3. Buyer-linked and contract-based financing.

ROI

Circular models such as resale and rental programs have demonstrated returns of approximately 15-25% within 18-24 months in retail deployments, alongside additional margin uplift from extended product lifecycles and recommerce revenue (ZIQY 2026).

FUNDING THE SOLUTION

Regenerative and sustainable fiber production and manufacturing

To establish and scale localized fiber-to-fiber processing infrastructure, industry research suggests that multi-billion-dollar investments are required to build sorting, recycling and processing facilities on a meaningful scale (McKinsey and Company 2022). At the enterprise level, smaller recycling operations often require hundreds of thousands to several million dollars of capital, while industrial fiber production facilities can exceed USD 5 million in initial investment (Ellen MacArthur Foundation 2021).

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Financing for regenerative fiber production and lower-impact dyeing and manufacturing.
2. Investing in localized processing and recycling infrastructure for textiles.
3. Digitization investments like traceability systems, supply chain management tools, and farm-to-fiber data platforms.

ROI

Farm-to-fiber data platforms can deliver ROI through price premiums of 5-20% for verified sustainable fibers, alongside efficiency gains and reduced supply chain risk (Textile Exchange 2022). Furthermore, more efficient dyeing and finishing technologies can reduce operating costs by up to 45%, through energy savings of around 50% (UNEP 2023c).

SYSTEM CHANGE

Partnerships and shared investment opportunities between innovators, brands, and manufacturers can scale promising solutions that would bring them to the mainstream market. Investors can build networked relationships throughout the production process that are regenerative rather than extractive. Businesses need to invest in new technologies or support their supply chains to identify and adopt new materials that are lower impact, resilient to climate shocks, durable, and reusable. Brands can support small innovators to overcome high startup costs by stimulating interest and securing investment. Institutional and commercial buyers, like hotels and retailers, are already seeking circular partners and B2B offtake agreements.

ENABLERS

Policy and market signals are beginning to favor women-led textile MSEs. Growing pressure on synthetic fibers, microplastics, and waste, alongside circular economy policies and demand for more traceable supply chains, are all creating new market opportunities across both production and post-consumer stages. Fiscal incentives worldwide from subsidies for recycled materials and regenerative production to Extended Producer Responsibility schemes, can accelerate circularity, support start-ups, and shift the cost of waste back to industry.

KEY RISKS AND UNKNOWNNS

Returns remain dependent on buyer demand, infrastructure availability, and pricing for sustainable and recycled materials. Limited visibility into which models perform best also makes it harder to direct capital effectively as the sector evolves.



CARE, 2026

WOMEN-LED ENTERPRISE IN ACTION – VIETNAM

LIMART

Limart produces both fabrics and finished products, but the company is particularly known for lotus fiber innovation, integrating local artisan skills to create climate-friendly and sustainable fashion while supporting local livelihoods.



As of latest available reporting (c. 2022-2023), Limart reduces reliance on synthetic, fossil fuel-based fibers, lowers chemical and water use in production, and supports more climate-resilient, locally rooted material systems while providing livelihoods for women artisans and smallholder producers.

Revenue is generated from textile and fabric sales, finished product sales (apparel and accessories), and partnerships with designers and brands.



WASTE & CIRCULAR SERVICES

AT-A-GLANCE



CARE, 2026

CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

WORKING CONDITIONS

MARKET OPPORTUNITY

The market is large and growing, with waste management projected to exceed USD 530 billion by 2030 and the broader circular economy unlocking up to USD 4.5 trillion in value (WEF 2020). A fully circular model could generate USD 108.5 billion in net annual benefits by 2050 (UNDP 2025).

WHERE WOMEN-LED MSEs FIT IN

Women make up 50-80% of the waste workforce in many contexts and are central to collection, sorting, recycling, and organic waste systems (Wilson et al. 2010). They formalize and scale these activities through recycling, composting, waste-to-value services, and cooperative models that strengthen pricing power and material recovery.

PRIORITY INSTRUMENTS AND RETURNS

Working capital, asset finance, and blended finance tied to real service revenues such as collection contracts, material offtake, compost sales, and EPR payments. Aggregation models and long-term contracts improve cash flow stability and scalability, turning waste streams into bankable assets.

CALL TO ACTION

Deploy equipment finance, municipal contracts, and blended capital to formalize and scale women-led circular service providers.

PROBLEM

Waste is responsible for about 20% of global anthropogenic methane. Municipal solid waste is projected to rise 70% to 3.4 billion tons by 2050, and at least 33% of waste is mismanaged through open dumping or burning globally, with much higher shares in LMICs (UNEP and Climate and Clean Air Coalition 2021; Kaza et al. 2018). Incineration of waste releases hazardous pollutants that also pose significant health risks.

At the same time, a mere 7% of materials are reclaimed and cycled back into the global economy after the end of their useful life (Circle Economy 2023).

Women are central to how waste and circular systems function. Globally, an estimated 20-24 million people work in waste, the majority informally (Cities Alliance 2023). In communities where low proportions of waste are formally collected, waste pickers fill the gaps, recovering and sorting materials that would otherwise be lost to dumping or burning. Yet this work is often hazardous and remains largely informal, underpaid, and unsupported. Women operate without contracts, protective equipment, healthcare, or access to finance, despite performing essential material recovery and methane mitigation functions.

Evidence indicates that women waste entrepreneurs remain significantly undercapitalized despite strong climate and income multipliers (Gorza et al. 2024).



SOLUTION

Improving waste systems and advancing a circular economy could mitigate 20% of global emissions while reducing pollution and biodiversity loss.

Formalizing and financing women-led MSEs in waste collection, material recovery, and organic diversion are direct pathways to improving recovery rates, reducing emissions, and building more resilient urban systems.

Women-led MSEs are already building the local waste and circular services that communities depend on, turning invisible work into viable enterprise models. Their proximity to end users means they are designing services that communities actually use and that work for their realities – the crux of women-centered design. Waste management is often considered an accessible sector for women for its low barriers to entry, flexible business models, and strong alignment with their existing roles and informal economies.

Women are already leading innovation in:

- Collection and sorting services that formalize informal labor and improve material recapture.
- Recycling MSEs turning waste into usable material inputs.
- Organic waste solutions (composting, biodigesters, biochar) that cut methane and create soil amendments, energy or stable carbon.
- Aggregation and cooperative models that strengthen pricing power and feedstock access.
- Circular manufacturing using recovered materials.
- Digital tools for routing, traceability, reporting, and contract management.
- Municipal and commercial service partnerships that turn fragmented activity into contracted revenue streams.

These MSEs are significantly contributing to the development of circular value chains and generating green jobs for other women and the informal sector more widely.

FUNDING THE SOLUTION

Finance for women-led waste and circular MSEs remains well below the scale of the opportunity, with women-led operators still struggling to access working capital, equipment leasing, and contract-backed finance.

In this sector, capital flows best when it is tied to real service economics. For example, waste collection contracts, recyclable offtake, compost sales, tipping fees, Extended Producer Responsibility (EPR) compliance payments.

Durable, diversified revenues in waste MSEs come from subscription collection, compost sales, recycled material resale, carbon-linked income, and producer responsibility schemes, often reinforced by tipping fees and service contracts that convert waste into a bankable asset. Aggregation models with long-term offtake agreements improve revenue stability and scalability by reducing demand risk and strengthening cash flows (Climate Policy Initiative 2022).

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Applied R&D and commercialization for higher-value processing, including composting, material recovery, and low-cost biodigesters.
2. Legal integration of informal waste workers into finance and municipal procurement systems.
3. Increasing aggregation and cooperative models through pooling demand and revenues from many small providers into a single entity.

OTHER OPPORTUNITIES

The strongest opportunities to invest in women-led waste MSEs are where municipal waste infrastructure is lacking, organic waste streams are concentrated, and informal waste sectors are both large and predominantly women-led.

ENABLERS

There is increasing demand for recycled materials from global brands, expected to grow further with the shift towards a circular and net zero economy. Methane and other super pollutant reduction is rising on the climate agenda, and regulatory shifts such as EPR and circular economy laws, alongside procurement reforms, are increasing demand for local recovery and processing capacity.

Brazil's National Solid Waste Policy recognizes and integrates waste picker cooperatives into municipal systems, improving access to public contracting and income stability while supporting one of the world's leading aluminum can recycling rates (International Aluminium Institute 2026). The EU Circular Economy Action Plan and France's Anti-waste and Circular Economy Law create similar signals by pushing demand for reuse, recycling, and secondary materials markets (European Commission 2024). This matters for women-led MSEs because policy can convert fragmented, undervalued work into contracted service delivery and more predictable revenue.

KEY RISKS AND UNKNOWNNS

Municipal payment delays and volatile material prices can erode margins if financing is poorly structured. Much of the sector also still operates informally, meaning many women-led MSEs lack stable contracts, predictable income, and clear performance data, even when they are delivering essential services.



Strive Women, 2026

WOMEN-LED ENTERPRISE IN ACTION – INDIA

HARITHA KARMA SENA

Haritha Karma Sena is a women-led decentralized waste management network delivering collection, sorting, and recycling services in partnership with local governments, creating sustainable livelihoods and reducing urban waste-related emissions.



As of latest available reporting (c. 2022-2023), the network diverts significant volumes of waste from landfills and burning, reduces methane emissions, and strengthens urban sanitation systems while creating large-scale employment for women.

Revenue is generated from household and business user fees (~₹22.43 crore annually), sale of recovered recyclable materials, and government viability gap funding for early-stage stabilization.

WOMEN-LED ENTERPRISE IN ACTION – HONDURAS

CARE INITIATIVE

A CARE Honduras initiative introducing biodigesters that transform livestock waste into clean fuel and fertilizer to reduce harmful firewood use, cut emissions, and improve health, time use, and livelihoods for rural Honduran women and families.

Participant families using biodigesters have achieved an estimated 86% reduction in carbon emissions compared to traditional firewood, while also lowering household energy costs. Women have regained approximately three hours per day previously spent collecting firewood, and households report improved health due to reduced smoke and soot exposure. CARE's approach was recognized as a finalist for the 2024 FAO Farmer Field Schools Innovation Award.

The program was funded by philanthropic grant support (e.g., Cargill) and executed with technology partner Sistema.bio and community co-design. The model does not generate commercial revenue, as it is instead focused on sustainable impact and knowledge transfer.

NORMA NIXABEL HERNÁNDEZ CALLE, RURAL ENTREPRENEUR AND PIG FARMER

In Siguatepeque, Honduras, Norma Hernández uses a biodigester on her pig farm to turn animal waste into biogas for cooking and biofertilizer for fertilizing her corn, coffee, cocoa, banana, and bean crops. Before the biodigester, waste ran into a nearby stream, causing odors, flies, mosquitoes, and community concern. Now, she reports less pollution, fewer pests, reduced smoke in her kitchen, lower reliance on firewood and chemical fertilizers, and less water needed to clean the pens.

The biodigester has also changed how Norma manages her time and business. She says it has made her work easier, reduced time spent collecting firewood and lighting the stove, and freed up time for family, farm work, and selling pork and piglets in the community. Her advice to other women: start slowly, seek training, and do not be afraid. "As a woman, you are also capable of undertaking and improving your life and that of your family."



07 FOOD SYSTEMS AT-A-GLANCE



CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

MARKET OPPORTUNITY

Transforming local and global food systems could unlock USD 4.5 trillion in annual business opportunities by 2030 (Blended Finance Taskforce 2024). Closing gaps between women and men in farm productivity and agrifood wages could add nearly USD 1 trillion to global GDP and reduce food insecurity for 45 million people (FAO 2023).

WHERE WOMEN-LED MSEs FIT IN

Women represent 43% of the agricultural labor force globally and up to 60% in LMICs but remain underrepresented in ownership and access to finance (FAO 2022). They work across regenerative agriculture, climate-smart inputs, agro-processing, fisheries, and circular food systems; and are central to improving yields, strengthening local supply chains, and building resilient food economies.

PRIORITY INSTRUMENTS AND RETURNS

Blended finance, cooperative and aggregation models, transition finance, and carbon- or results-linked funding. Small-ticket investments can increase revenues by 20-40% with 2-5 year payback periods, alongside productivity gains of 10-30% from regenerative practices (Fuglie et al. 2020; FAO 2021; WEF 2023).

CALL TO ACTION

Expand value chain finance and blended capital to support women-led regenerative agriculture, agro-processing, and circular food systems.

PROBLEM

Food systems generate roughly one-third of global greenhouse gas emissions, largely from land conversion, methane from livestock and rice cultivation, and emissions from food loss and waste across the supply chain (FAO 2024; IPCC 2023). At the same time, food production is highly exposed to climate shocks and stresses such as droughts, floods, and ocean warming that threaten crop yields, livestock productivity, and fisheries; this is a destabilizing feedback loop (UNEP 2025).

Climate shocks and stresses disproportionately affect women entrepreneurs and producers, who are heavily represented across small-scale food producers, food processing, and informal food markets, but often operate with less access to land, finance, information, extension and advisory services, storage infrastructure, and climate-resilient inputs.

Women hold just 23% of agribusiness management positions and make up only 5.4% of entrepreneurs in these sectors worldwide (Buschmann et al. 2023).



CARE, 2026

SOLUTION

Transforming food systems offers one of the most powerful triple-win climate solutions – reducing emissions, strengthening resilience, and improving food security – while creating new markets locally (World Bank 2021).

Food systems are built by small-scale production, and women's labor. Women represent roughly 43% of the global agricultural labor force, up to 60% in LMICs, and a significant share of fisheries processing (World Bank 2021). They are a critical component to a women-focused approach to investing and are well positioned to scale climate-smart food MSEs that improve yields, reduce emissions and food loss and waste, strengthen local food security, and support resilient rural economies.

Their MSEs are operating in areas such as:

- Regenerative agriculture, fisheries, and livestock systems.
- Climate-smart inputs and services.
- Sustainable aquaculture and seaweed cultivation.
- Agroforestry and tree crop enterprises engaged in high-value tree crops or integrating trees into farmland for carbon sequestration and soil health.
- Agro-processing, local value chains, and circular food models.
- Solar-powered cold storage, aggregation platforms, and digital marketplaces.
- Composting and biogas production.

These MSEs tackle some of the largest drivers of food system emissions and inefficiencies, shortening supply chains through local processing, and improving soil health and productivity. For example, women-led composting cooperatives can increase farmers' yields by up to 50% (FAO 2025).

FUNDING THE SOLUTION

Food systems receive only around 2.5% of public climate finance (Global Alliance for the Future of Food 2024). This reflects both a risk perception problem and a structural capital mismatch, as many solutions operate at small-scale and therefore struggle to attract traditional institutional capital.

Women-led MSEs adopting climate-smart agriculture with concessional finance demonstrate higher repayment rates and stronger resilience outcomes, reinforcing the case for financing approaches responsive to women's needs (UNDP 2024). Revenue models that combine diversified income streams, strong buyer relationships, and recurring service fees tend to perform most consistently across geographies. The most resilient models are those linked to agricultural productivity gains, supply-chain demand, or verified environmental outcomes.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Blended finance and cooperative credit mechanisms that reduce the risks of adopting new inputs and improve access to capital during transition periods.
2. Carbon-linked and results-based funding tied to the verified adoption of regenerative and sustainable land-use practices, with strong safeguards to ensure environmental integrity and fair benefit sharing.
3. Digital advisory and farm management platforms that enhance productivity, traceability, and climate resilience, while delivering innovative extension services and timely, localized climate information.

ROI

Women-focused economic and training programs have delivered around US 9 dollars in income and savings for every US 1 dollar invested (CARE 2024). Care-related employer investments (e.g., childcare benefits) can generate returns of up to 425% through improved retention and productivity (BCG and Mom's First 2025).



OTHER OPPORTUNITIES AND PROMISING SIGNALS

To maximize impact, investors should ensure financing structures reach locally-led MSEs, rather than concentrating finance only in large agribusiness supply chains. Expanding cooperative models and digital traceability systems can also help overcome long investment horizons in agriculture.

POLICY LEADERSHIP

Policy frameworks remain foundational, as government procurement, subsidies, and transition programs can anchor demand and send credible market signals that crowd in private investment. National low-carbon agriculture programs such as Brazil's ABC+ Plan have already supported more than 54 million hectares of sustainable practices, avoiding an estimated 193 million tons of CO₂e emissions (Ministry of Agriculture, Livestock and Food Supply 2021).

MARKET DEMAND FROM BUYERS

Corporate sustainable sourcing commitments and procurement policies, particularly in hospitality, are driving investment into regenerative agriculture, traceable supply chains, and low-carbon food production.

BLENDED FINANCE INITIATIVES

Global initiatives such as We-Fi (Women Entrepreneurs Finance Initiative) provide grants and blended capital for women-led MSEs, with explicit climate-smart agriculture support. Blended finance facilities and aggregator platforms play a critical role in overcoming the small-ticket, fragmented nature of agricultural investments (Convergence Blended Finance 2024).

KEY RISKS AND UNKNOWNNS

Structural and social constraints remain a central barrier to scaling investment. Insecure land tenure, limited decision-making power over land use, and restricted access to aggregation platforms can reduce investment readiness and increase transaction costs. These challenges are often shaped by deeper social norms and power dynamics that limit women's decision-making, including unequal inheritance rights, limited agency in household and community decision-making, and restricted access to finance, inputs, and markets.

In parallel, the lack of standardized climate and soil carbon metrics complicates investment decisions, while uncertain long-term economic outcomes of regenerative agriculture remain a risk. These barriers are particularly pronounced for women-led MSEs, whose ability to participate and scale is often constrained not by viability, but by structural and systemic exclusion.

WOMEN-LED ENTERPRISE IN ACTION – KENYA

SAFI ORGANICS

Safi Organics produces biochar-based fertilizers from agricultural waste, improving soil health, increasing farmer incomes, and reducing emissions while strengthening rural agricultural systems.



Farmers using Safi Organics products have reported yield increases of up to ~30%, with some reporting income gains approaching 50% in pilot studies. The company has recycled over 60,000 tons of agricultural waste, restored soil health across thousands of acres, and contributed to carbon sequestration through biochar application.

Revenue is generated through fertilizer sales, with additional support from climate finance, grants, and development funding to scale production and farmer adoption.

GROUP 3

ENABLING SYSTEMS

- 🌱 **08 NATURE-BASED SOLUTIONS**
- 💰 **09 FINANCIAL SERVICES**
- 📱 **10 INFORMATION & DIGITAL SERVICES**

Nature-based solutions, financial systems, and digital information services form the enabling infrastructure for climate resilience. They unlock locally led adaptation and mitigation while supporting the growth of women-led MSEs.

Yet despite their critical role, these systems remain underfunded, fragmented, and unevenly accessible, highlighting the need for wide-reaching, blended, and system-level investments to translate climate opportunities into scalable, real-economy impact.



08 NATURE- BASED SOLUTIONS AT-A-GLANCE



CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

MARKET OPPORTUNITY

NbS could deliver up to 37% of required emissions reductions by 2030, but receives less than 3% of climate finance (Global Commission on Adaptation 2019; Global Alliance for the Future of Food 2024). Restoring 350 million hectares could generate up to USD 9 trillion in ecosystem services (UNEP-WCMC 2020).

WHERE WOMEN-LED MSEs FIT IN

Women-led MSEs are already active across restoration and natural resource economies including nurseries, reforestation, agroforestry, coastal and marine restoration, and ecosystem monitoring. They deliver locally led, landscape-scale solutions that restore ecosystems, while generating income and strengthening community resilience.

PRIORITY INSTRUMENTS AND RETURNS

Blended finance, carbon markets, payments for ecosystem services, and nature-based infrastructure. Returns are typically high single-digit to low double-digit, with revenue from restoration contracts, ecosystem services, and sustainable products (UNEP 2023b; IFC 2023a). Small-scale investments can increase revenue by 20-40% (FAO 2020).

CALL TO ACTION

Scale blended finance, carbon and ecosystem service payments toward women-led restoration and conservation enterprises.

PROBLEM

Around 75% of land and 66% of marine environments have been significantly altered by human activity, and deforestation is the second largest source of carbon emissions after fossil fuels, accounting for 12% of human-caused emissions each year (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services 2019; IPCC 2023).

For businesses operating in agriculture, fisheries, forestry and coastal economies degraded ecosystems directly undermine productivity and revenue. Soil degradation reduces agricultural yields, declining fisheries disrupt coastal MSEs, and the loss of forests, rangelands, wetlands, and mangroves weakens natural protection from floods, storms, and droughts. In degraded coastal ecosystems, an estimated 1.02 billion tons of carbon dioxide are being released annually while local communities are forced to cope with declining natural resources (Pendleton et al. 2012).

Women are disproportionately affected by ecosystem degradation while also playing a critical role in environmental stewardship.

These pressures create specific challenges for women-led MSEs, which are heavily concentrated in agriculture, natural resource livelihoods, and small-scale ecosystem economies.

Limited access to land and other natural resource rights, finance, and climate investment prevents women entrepreneurs from investing in restoration solutions even when they are already managing land, forests, fisheries, and local supply chains.

SOLUTION

As ecosystem risks grow, the need for locally led restoration and conservation MSEs is creating a significant opportunity for women-led businesses.

NbS create new business opportunities by turning ecosystem restoration and conservation into revenue-generating MSEs. Through various routes such as sustainable livestock management, they restore forests, soils, wetlands, rangelands, and coastal ecosystems while reducing emissions and raising the adaptive capacity of both ecosystems and communities.

Globally, restoring 350 million hectares of degraded land could generate USD 9 trillion in ecosystem services and remove up to 26 gigatons of greenhouse gases from the atmosphere, while strengthening soil fertility, water regulation and biodiversity (UNEP-WCMC 2020).

Women MSEs are notably active within:

- Restoration value chains, including seedling nurseries, mangrove and forest restoration services, agroforestry and silvopastoral MSEs, and coral reef protection initiatives.
- Ecosystem monitoring and verification services.
- Nature-based infrastructure, e.g., flood-resilient landscape design and green urban infrastructure

Women-led MSEs often operate at the community or landscape scale and can aggregate restoration activities across large geographic areas, positioning them to scale nature-based climate action while strengthening local economies. Specifically, their participatory methods that account for overlapping barriers faced by women are evidence of critical woman-centered design practices.

FUNDING THE SOLUTION

Annual global investment in NbS needs to increase from US 200 billion to US 542 billion by 2030, creating an estimated US 342 billion additional annual financing opportunity (UNEP 2023b). Several financing mechanisms are emerging to translate ecosystem restoration into investable opportunities. Blended finance structures play an increasingly important role in scaling investment in NbS.

By linking ecosystem restoration with enterprise models such as restoration contracts, sustainable forest products, and ecosystem service payments, NbS enable women-led MSEs to generate income while delivering measurable climate and biodiversity outcomes.

NbS projects that combine multiple revenue sources often demonstrate the most durable and financially resilient business models. Furthermore, carbon credit schemes designed and implemented with the highest level of social and environmental safeguards represent a significant investment opportunity if returns to communities are fair and transparent.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Blended finance facilities for landscape restoration, including locally led ecosystem savings and loan models.
2. Carbon markets and demand aggregation platforms.
3. Payments for ecosystem services (PES), supporting local stewardship by centering the agency of communities to design place-based solutions that sustain their livelihoods.

ROI

Small-scale investments in nursery infrastructure, irrigation systems, and seed processing equipment can increase seedling output and quality, often improving enterprise revenues by 20-40% (FAO 2020).

Focused, responsive investment in women small-scale farmers has potential to reduce 2.06 gigatons of CO₂ and generate USD 87.6 billion in savings by 2050, when linked to sustainable land-use and restoration practices (FP Analytics 2023).

ENABLING FACTORS

To ensure climate and community benefits are realized, investors should ensure essential enabling factors are in place, including prioritizing projects that apply strong social and environmental safeguards, ensure fair benefit-sharing with local communities, and support locally led MSEs. The opportunity is strongest where there is significant ecosystem degradation and/or strong community stewardship systems, particularly in particularly in tropical forest landscapes and coastal and freshwater ecosystems. These can be identified through strong policy signals.

MARKET DEMAND FROM BUYERS

Several policy and market signals are strengthening the investment case for nature-based solutions. Governments are increasingly adopting large-scale restoration commitments, including the African Forest Landscape Restoration Initiative (AFR100), a country-led effort to restore 100 million hectares across 34 African countries by 2030, aligned with global restoration targets such as the Bonn Challenge (IUCN 2016). Public programs are also expanding ecosystem restoration efforts. Indonesia's national mangrove restoration initiative aims to restore 600,000 hectares of mangroves (World Bank 2022b).

PES programs are also creating new revenue streams for restoration MSEs. Costa Rica's national ecosystem services program has helped increase forest cover from approximately 25% in the 1980s to more than 50% today while compensating thousands of landowners for conservation activities (UNFCCC 2020).

Biodiversity policies also create demand for habitat restoration by requiring development projects to leave nature in a measurably improved state.

CLOSING THE CREDIT GAP

An International Finance Corporation-facilitated loan of USD 160 million to Ecuadorian bank Produbanco in 2023, aimed to expand access to finance specifically for women-led SMEs in the blue economy.

KEY RISKS AND UNKNOWNNS

Key investor risks include carbon market volatility and integrity concerns, insecure land tenure and resource access, long investment time horizons, and persistent uncertainties around standardized impact measurement, long-term financial returns, and scalable financing models for restoration.

WOMEN-LED ENTERPRISE IN ACTION – TANZANIA

ECO-SAVINGS GROUP MODEL

The CARE-WWF Alliance's Eco-Savings Group model combines community finance with nature-based investment incentives to help women and rural communities invest collectively in ecosystem restoration and climate resilience. Built on CARE's Village Savings and Loan Associations (VSLAs), **the model supports women farmers and natural resource-dependent communities in launching sustainable enterprises tied to agroforestry, watershed restoration, sustainable agriculture, and beekeeping.**



By embedding environmental criteria directly into local savings and lending systems, the model helps shift environmental stewardship into a more achievable goal by making it a community-owned economic opportunity. In Tanzania, groups invested more than USD 68,000 across 91 collective enterprises, 92% of which were classified as environmentally sustainable or regenerative, with women representing 63% of participants. One participant from Ibumila village reflected: “Before the project, women were just waiting for the men to bring something home... But through the project, we have managed to save and buy or rent land for farming activities... Now in this village, women are also owners of land.”

Participating households in a small pilot program in Tanzania saw average incomes increase by 102%, rising to 157% for female-headed households, while communities investing in watershed restoration recorded a 178% increase in wet-season river flows. These outcomes illustrate how women-led savings groups can translate local stewardship into measurable ecological and economic gains — restoring degraded ecosystems and their valuable services while strengthening livelihoods, community resilience, and long-term economic stability.

\$ FINANCIAL SERVICES

AT-A-GLANCE



Strive Women, 2026

CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

MARKET OPPORTUNITY

The global MSME financing gap is estimated at USD 5.7 trillion annually and women-led businesses are disproportionately excluded (IFC and SME Finance Forum 2025). Women entrepreneurs receive less than 2% of global venture capital and only around 7% of climate finance (OECD and GWEP 2025; Women's World Banking 2024). In markets facing high climate risks, expanding access to savings, credit, insurance, and emergency liquidity can help women-led MSEs build resilience, recover faster, and keep investing in growth.

WHERE WOMEN-LED MSEs FIT IN

Operate as providers, intermediaries, and designers of financial services tailored to communities not well served by formal systems (e.g., savings groups, cooperative lending, mobile and agent-based banking, and climate-responsive financial products). Their proximity to end users enables trusted, accessible, and context-specific financial solutions, while increasing representation in financial decision-making.

PRIORITY INSTRUMENTS AND RETURNS

Blended finance, climate-responsive credit lines, digital financial infrastructure, and climate risk insurance. Returns are driven by high-volume, small-ticket transactions (interest, fees, premiums), often supported by guarantees or subsidies to reduce risk and enable scale.

CALL TO ACTION

Channel capital through MFIs, cooperatives, and digital platforms to expand climate-responsive credit, savings, and insurance for women-led MSEs.

PROBLEM

Women-led MSEs are central to climate resilience but still lack access to basic financial tools in contexts facing high climate risks, reinforcing the scale of unmet demand (Women's World Banking 2024). They remain heavily underrepresented across all levels of the global financial system, including as decision-makers and as recipients of business financing.

In countries facing high climate risks, 589 million women lack a bank account or e-wallet, 1.05 billion lack formal savings, and 812 million cannot easily receive emergency funds after climate shocks (Women's World Banking 2024). Digital exclusion reinforces this gap. In LMICs, women are 8% less likely to own a mobile phone and 14% less likely to use mobile internet (GSMA 2025). More than a quarter of financial services providers identified geographic proximity as a significant barrier to serving women (Women's World Banking 2024).

This financing and digital access gap is particularly impactful for women-led MSEs because it limits their ability to access capital, build financial resilience, and respond to climate shocks and stresses – ultimately constraining business growth and survival in already high-risk environments.

Women entrepreneurs and workers are particularly exposed to climate-related financial shocks due to operating in informal or micro-scale enterprises – with limited access to insurance, savings, and working capital. Climate change impacts such as droughts, floods, and extreme heat translate directly into income losses and business instability. Without savings, credit, or insurance, these impacts translate directly into income loss, asset depletion, and business disruption.

Improving access to finance enables small businesses to invest in climate-resilient technologies, recover from and manage exposure to climate shocks and stresses, and strengthen household and enterprise financial stability.

SOLUTION

Climate-responsive financial services that are designed to protect MSEs from climate shocks and stresses. Specifically, accessible and appropriately sized savings, credit, and insurance products.

A focus on digital financial services, mobile banking, and community-based savings systems could overcome geographic and infrastructure barriers. Furthermore, access to digital services can increase regular and consistent savings and build adaptive capacity through greater financial security (Klapper 2025).

Women-led businesses are increasingly bridging these gaps.

Key areas of innovation include:

- Regular, accessible savings tools that build liquidity buffers and reduce reliance on distress borrowing.
- Climate-responsive credit for adaptive business upgrades.
- Forecast-based finance and anticipatory funding released ahead of climate shocks.
- Social protection-linked finance delivering rapid loss-and-damage support.
- Parametric and bundled insurance products combining credit, savings, and risk coverage.
- Mobile and agent-based banking models that reduce geographic barriers.
- Community-based finance systems, including savings groups and cooperative lending networks.

On the whole, financial products and services must be designed to better reflect the structural barriers women face, from irregular income and limited collateral to caregiving responsibilities and climate risks.

FUNDING THE SOLUTION

Only a very small share of global climate finance, often cited as less than 1%, currently reaches women-led initiatives and businesses, including MSEs (Gorza et al. 2024). Blended finance and women-focused funds often reach formal SMEs, intermediaries, or platforms more easily than MSEs (CGAP 2025). MSEs are more effectively reached through microfinance institutions (MFIs), cooperatives, savings groups, and embedded finance models. Subsidized or guaranteed credit for green assets, bundled finance, and low-cost digital delivery models that make small-ticket finance viable, all directly enable women-led MSEs to invest in resilience and low-carbon growth (CGAP 2025).

Revenue models that combine predictable repayment flows (interest or service fees) with performance or incentive-based supplements (subsidies, risk-sharing, carbon credits) are the most resilient across diverse local markets, because they mitigate both borrower and lender risk while scaling with adoption. It is worth noting, however, that these are also considered to be barriers to usage for many.

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Climate-responsive MSE credit lines, including community-based finance networks.
2. Digital financial infrastructure for MSEs operating in climate markets.
3. Climate risk insurance and social protection-linked systems specifically for MSEs.

ROI

IFC financial institution clients reported lower non-performing loan (NPL) ratios for women-led SME portfolios than total SME portfolios for six consecutive years (Biese et al. 2022).

10. Accelerating Business to Empower Rural women in Agriculture (ABERA) is a cohort of financial service providers, agribusinesses, and agtechs, organized by CGAP and IDH.

OTHER OPPORTUNITIES AND PROMISING SIGNALS

Financial systems are foundational climate infrastructure. As climate risks intensify, the ability to move money quickly, price risk accurately, and deliver recovery finance at scale becomes central to adaptation.

PRODUCT INNOVATION

Countries such as Kenya demonstrate this shift, where access to finance rose from 26% to over 80% following mobile money expansion, now enabling climate-linked products such as PAYGo solar and agricultural insurance (GSMA 2025). Innovative climate risk micro-insurance, such as Aseguradora Rural and MiCRO in Guatemala, and the InsuResilience Investment Fund, provides rapid payouts through MFIs to help MSMEs facing high climate risks and low-income households stabilize income, recover from shocks, and invest in resilience (Biese et al. 2022).

Institutional momentum is growing, with initiatives like the ADB Women's Finance Exchange, EmPower, We-Fi, ABERA¹⁰, and the Global Gender-Smart Fund expanding liquidity to MFIs that serve women, rural populations, and micro-entrepreneurs, signaling increased investor interest in linking women-led enterprise financing with climate outcomes.

KEY RISKS AND UNKNOWNNS

Access to financial services does not automatically translate to resilience. Poorly designed products can increase indebtedness or shift risk onto borrowers with limited financial protections, particularly where consumer protections are weak. Insurance uptake remains constrained by affordability, trust, and basis risk, and many products still do not deliver sufficient value relative to cost. There are also persistent data gaps on what works best for MSEs.



CARE, 2026

WOMEN-LED ENTERPRISE IN ACTION – INDIA

KINARA CAPITAL

Kinara Capital is a women-led fintech providing collateral-free business loans to micro and small enterprises traditionally excluded from formal finance systems in India. Through a digital-first lending model, Kinara expands access to working capital for entrepreneurs with limited access to finance, particularly women-owned businesses, to help small enterprises grow, formalize, and build long-term economic resilience.



Kinara Capital via Calvert Impact

The company's financing model is designed around the realities of small business owners who often lack formal credit histories or collateral, reducing barriers that disproportionately exclude women entrepreneurs from traditional banking systems. Kinara has also developed targeted financial products to address specific social and climate needs, including HerVikas, a discounted loan product for women entrepreneurs, and Green Loans, which support MSMEs investing in renewable energy, energy efficiency, and environmentally sustainable business upgrades. By increasing access to timely and flexible financing, the model enables entrepreneurs to invest in equipment, inventory, clean technologies, and business expansion while supporting local economic development and livelihood creation.

Kinara has disbursed more than USD 800 million in loans to thousands of MSMEs across India and has attracted investment from women-focused investors aligned with the 2X Global criteria, helping mobilize capital toward women-focused enterprises.



INFORMATION AND DIGITAL SERVICES

AT-A-GLANCE



CARE, 2026

CLIMATE BENEFITS

MITIGATION

ADAPTATION

COMMUNITY BENEFITS

PUBLIC HEALTH

WOMEN'S AGENCY & PARTICIPATION

LIVELIHOODS & ECONOMIES

ECOSYSTEMS & BIODIVERSITY

WORKING CONDITIONS

MARKET OPPORTUNITY

A fast-growing, underdeveloped market: climate information and digital services represent a USD 1-2 billion core segment, expanding to USD 5-10+ billion when bundled with finance and platforms (CGAP 2025). Demand is driven by increasing climate volatility and the need for real-time, decision-useful data across sectors – around 80% of the world's cropland is rain-fed, making accurate, localized, timely, and trusted climate and weather information a critical resilience tool for billions of people (FAO 2026).

WHERE WOMEN-LED MSEs FIT IN

Providers and intermediaries of climate intelligence, translating data into locally relevant, actionable insights through digital platforms, advisory services, and community networks. They play a critical role in last-mile delivery, integrating local and Indigenous knowledge with scientific data to increase trust, relevance, and uptake.

PRIORITY INSTRUMENTS AND RETURNS

Venture and growth-stage investment capital, blended finance, and public-private partnerships supporting data infrastructure and scalable service layers. Returns are driven by asset-light, scalable models including SaaS, pay-per-use, and commission-based platforms, with low marginal costs and strong recurring revenue potential.

CALL TO ACTION

Invest in public-private models that combine core data infrastructure with scalable, women-led digital advisory and SaaS platforms.

PROBLEM

Climate risks and impacts are accelerating, with climate-related disasters increasing fivefold over the last 50 years (WMO 2023). However, access to actionable, trusted, and locally relevant information remains suboptimal. Significant gaps remain in climate data and early warning capacity globally, with around half of countries lacking adequate multi-hazard early warning systems (WMO and UN Office for Disaster Risk Reduction 2023).

This gap is not only about data availability, but translation. Existing climate, hydrological, and market data are often not delivered in formats that are timely, localized, or usable for real business decisions. For women-led MSEs operating in rural and urban contexts, this results in missed planting cycles, supply chain delays, and reduced ability to recover from shocks.

Digital access barriers, including restrictive social norms, affordability, literacy, and connectivity gaps, further limit uptake. MSEs often lack emissions tracking tools required for green finance access. This creates a clear market opportunity for trusted, hyper-local, and decision-oriented information services that combine technology with local knowledge systems and community-based delivery channels.



SOLUTION

Trusted climate information is vital and with the right support, translate technical forecasts into actionable insights.

Women-led MSEs and community networks enhance the generation, interpretation, and use of locally relevant climate information through peer learning and by integrating Indigenous and local knowledge systems with scientific data. This integration of local knowledge with scientific data is precisely what makes women-led digital services trusted and effective. Women-led MSEs offering digital solutions are asset-light and rapidly scalable, and thus can be catalytic for climate resilience.

Key areas of innovation include:

- Climate intelligence services combining weather forecasts and warnings, and environmental monitoring via accessible platforms to support real-time decisions.
- Market access and pricing transparency tools that reduce information gaps and improve business planning.
- Early warning systems and risk alerts for climate hazards.
- Participatory and community-based forecasting and scenario planning that integrates local and Indigenous knowledge.
- Integrated advisory platforms combining climate data with livelihood guidance for agriculture, fisheries, and urban informal sectors.
- Emissions tracking and traceability tools enabling access to climate-linked markets and finance.
- Peer-to-peer and community-based information networks that build trust and increase adoption.

These services are most effective when they triangulate climate data with hyper-local risks, capacity, and behavioral insights, ensuring relevance for real-world decision-making.

FUNDING THE SOLUTION

Global climate information and digital climate services are experiencing rapid expansion, with the broader climate technology and analytics ecosystem projected to grow from approximately USD 38.5 billion in 2024 to USD 115.4 billion by 2030, reflecting strong demand for AI-driven forecasting, risk analytics, and climate decision-support systems (Grand View Research 2025b).

Capital flows in this sector are more hybrid public-private than in other solution areas. Public and concessional capital funds core infrastructure, including meteorological systems, open data platforms, and early warning systems. Private capital supports scalable service layers, including SaaS platforms, analytics tools, and digital advisory services. Philanthropic and catalytic funding enables last-mile delivery models, whilst partnerships with governments, cooperatives, and NGOs are critical for adoption. Adaptation finance can also support the integration of Indigenous knowledge into participatory scenario planning for early warning systems, strengthening locally relevant forecasts, confidence levels and overall response strategies.

Digital platforms benefit from recurring revenue and low marginal costs. Consistently performing revenue models include SaaS, pay-per-use, commission-based, and hybrid pricing structures, alongside premium data licensing. Early warning systems also demonstrate strong public procurement revenue potential in markets facing high climate risks (Global Commission on Adaptation 2019).

PRIORITY INVESTMENT PATHWAYS FOR FUNDERS TO PRIORITIZE INCLUDE

1. Localized weather and early warning systems.
2. Participatory and community-based climate information systems.
3. Climate data infrastructure and analytics tools, including emissions tracking and traceability tools that unlock market and finance access.

ROI

SaaS-based climate platforms often reach cash-flow breakeven within 3-5 years (Ferdinand et al. 2021).

Hydrometeorological investments can generate significant returns, with estimates suggesting at least a 5:1 return on investment through avoided losses and productivity gains (Global Commission on Adaptation 2019).

Accurate and timely climate information enabled farmers in Viet Nam to increase their earnings on rice by 30% on average (World Bank 2024).

OTHER OPPORTUNITIES AND PROMISING SIGNALS

The opportunity is strongest where climate variability is high, digital connectivity can be expanding with supportive institutions, and strong Indigenous and community-centered knowledge systems can enhance forecasting, adaptation planning, and early warning systems.

PRODUCT INNOVATION

There is growing momentum to expand climate information access. The most effective models combine public-good data infrastructure with private or community-led delivery systems that translate information into business value.

Initiatives such as UN Early Warnings for All aim to ensure universal access to early warning systems by 2027, reflecting a shift toward treating climate data as essential infrastructure (UN 2025). At the same time, India's National Agriculture Market (eNAM) platform demonstrates how digital platforms can scale market transparency and information access, with national systems connecting farmers to real-time pricing and trading opportunities (Government of India 2026).

National Adaptation Plans (NAPs) provide the strategic framework to integrate early warning systems and participatory scenario planning, guiding investment and enabling women-led and local SMEs to develop climate-informed solutions that strengthen community resilience and last-mile service delivery.

KEY RISKS AND UNKNOWNNS

There is growing evidence that demand for more accurate and standardized climate and ESG data is rising globally as companies, investors and regulators seek reliable information to support compliance, risk management and sustainable investment. International reporting standards are being adopted globally to create a baseline for climate risk disclosure, reinforcing the need for robust data systems.

There is a risk that increasing privatization of climate data could limit access for the most at-risk users if not balanced with public investment and open-access models. Adoption remains uneven, particularly where digital literacy or trust is low, and many services struggle to demonstrate sustained willingness to pay in lower-income markets. There are also persistent data gaps regarding how information translates into business outcomes, particularly for women-led MSEs and in urban contexts where climate risks are less well understood.

WOMEN-LED ENTERPRISE IN ACTION – INDIA

DIGITAL GREEN INDIA

Digital Green India is a global social impact tech non-profit helping small-scale farmers use technology and data to build resilient, prosperous communities. Launched in 2008 out of Microsoft Research, they have evolved over 18 years from community-led video-based extension into a farmer-responsive, AI-driven advisory model – building open-source, AI-powered solutions that integrate with public systems and make climate-smart guidance accessible in farmers' own languages.



At the heart of their work is FarmerChat, a multilingual, agriculture-specific AI assistant delivering hyper-local guidance through voice, text, and photo queries – designed for low-literacy, low-connectivity contexts. Built on fine-tuned language models, retrieval-augmented generation (RAG), and expert-validated datasets, it offers trusted, region- and season-specific advisory on crop management, livestock management, climate-smart practices, women's needs, and government schemes. Since October 2024, FarmerChat has reached 900,000+ farmers and extension workers in India (45% women), with 60% of active users acting on its advice. It has cut the cost of timely advisory from \$35 to \$0.35 per farmer – 100x more cost-effective than traditional models. Among women users, 96% report greater confidence in their farming decisions, and 18% say without FarmerChat they would have no access to agricultural advisory at all.

Their work is supported through a hybrid model combining philanthropic funding with service delivery partnerships – collaborating with governments, NGOs, FPOs, SHGs, and global technology partners.

CONCLUSION

Increasing funding for a fair climate transition

This blueprint set out with a simple question: If finance can strengthen women-led MSEs, where exactly should that capital to accelerate both resilience and the climate transition at the same time? The answer is now clearer. Climate action is not constrained by a lack of solutions. It is constrained by how those solutions are financed and who that finance reaches. And to unlock these constraints, climate finance must evolve to center the needs of women-led MSEs delivering distributed climate solutions around the world.

Across the ten solution areas explored in this report, a consistent pattern emerges. The climate transition is being delivered through interconnected systems:

- The essential systems that underpin daily life;
- The circular and regenerative systems that reshape how resources are used and reused; and
- The enabling systems that unlock scale.

These systems are active, evolving, and driven by MSEs translating climate ambition into real-world outcomes. Women-led MSEs are embedded across all three systems, yet the financial systems designed to support climate action remain only partially aligned with how these solutions operate in practice.

WHAT NEEDS TO CHANGE

The gap in climate finance for women-led enterprises is a market inefficiency. To fix it, four shifts are required in how finance is designed, assessed, enabled, and connected to real-world conditions of women-led MSEs. The below shifts set the agenda. The subsequent section translates them into specific calls to action for actors who, together, shape the funding ecosystem.

1. Design the capital stack around women's realities.

Women-led MSEs driving climate solutions often fall outside traditional investment models. They need blended combinations of concessional, catalytic, and commercial capital, alongside technical support, to become more investable and scalable. This calls for more flexible instruments and women-centered design, including seasonal loans, flexible tenors, removal of traditional barriers (e.g., collateral, credit history, etc.), and delivery models tailored to women's realities. The financial instruments, or the 'capital stack' exists – grants, patient debt, blended finance, outcome-based capital. However, these mechanisms are not tailored to the needs of the borrowers already delivering these solutions.

2. Recognize women-led enterprises as a return signal.

The IFC has observed lower rates of non-performing loans (NPLs) among women-led SMEs, yet they continue to receive smaller investments, face higher borrowing costs, and are underrepresented in pipelines due to structural bias and restrictive norms (IFC 2023). Addressing this requires changes in how investments are sourced, assessed, and structured, including investment criteria designed to reach women-led enterprises, procurement approaches that expand market access, and decision-making processes that recognize the value and viability of women-led climate solutions.

3. Address the constraints that finance alone cannot fix.

Enterprise viability is shaped by constraints such as time poverty, mobility, and access to networks, infrastructure, and markets. Without addressing these, finance will underperform and miss high-impact enterprises.

4. Where policy leads, capital can follow.

Policy, public finance, and market signals determine where capital flows and what scales. Aligned frameworks can de-risk investment and crowd in private finance. National climate frameworks including NDCs and NAPs are key to the enabling environment. While progress is visible, with around 58% of recent NDCs referencing women's needs and priorities, few translate this into implementation or financing pathways (CARE 2025). The priority now is aligning policy, finance, and markets to support women-led solutions at scale.

Financial and enterprise-level solutions operate within broader structural constraints. Restrictive social norms, unequal care responsibilities, and systemic biases continue to shape women entrepreneurs' opportunities and outcomes, requiring complementary action beyond enterprise support. Shifts must also hold in uneven policy environments. Finance and enterprise activity will sometimes need to move ahead of policy to back viable models, while policy remains critical in setting direction and reducing risk. And as climate impacts intensify and volatility increases, financial institutions must proactively allocate capital toward resilient, low-carbon models and integrate climate risk into decision-making.

Taken together, these shifts point to a broader opportunity to align finance with the systems already delivering the transition and ensuring that finance reaches the full range of actors operating within them.

“Being a woman entrepreneur means creating opportunities not only for myself, but also for local farmers and the community.”

—LƯU THỊ HUYỀN, FOUNDER OF THẠCH BÌNH AGRICULTURAL COOPERATIVE

A CLEAR INVESTMENT OPPORTUNITY AND CALL TO FUND DIFFERENTLY

The next phase of the climate transition will be defined both by how much finance is mobilized and how effectively it is deployed. The question is no longer whether these solutions exist, but whether financial systems will evolve to support them at the scale and speed required.

This requires moving beyond siloed sectors and designing finance around how women-led MSEs grow and operate across interconnected systems. It also requires recognizing that expanding access for women-led enterprises is not a constraint on performance, but a driver of stronger financial returns, climate impact, and resilience.

WHAT DIFFERENT ACTORS MUST DO MORE OF

If climate finance were fully aligned with impact, more finance would be accessible to locally led, women-led solutions delivering real results. Closing the existing gap requires both better deployment of existing finance and increased investment overall, with different actors playing distinct roles.

The below actions are interconnected, but not equal in their ability to unlock change. Public policy and catalytic capital play a foundational role in setting the conditions for private investment to flow at scale.

For investors, asset owners, financial institutions and intermediaries:

- Direct finance toward women-led climate solutions, not just large-scale projects. Allocate funding directly, or through intermediaries, to women-led enterprises already delivering climate impact across energy, food, and circular systems. In many markets, local banks, MFIs, and fintechs are the first (and often only) institutions that women-led enterprises interact with. Prioritize channeling finance through and strengthening these actors to ensure appropriately sized finance reaches them.
- Align financing terms and time horizons with enterprise realities. Use flexible and blended approaches, including PAYGo models, working capital, and concessional or value-chain finance, with time horizons that reflect how MSEs grow and deliver impact.
- Design financial products and requirements alongside women-led enterprises. Co-design products with women-led enterprises, and right-size reporting and due diligence so businesses are not excluded or constrained by administrative burden, without compromising transparency outcomes.
- Apply a women-focused approach to climate finance. Use established standards such as 2X Criteria to actively identify, include, and prioritize women-led climate solutions that would otherwise be overlooked.

For corporations and large buyers:

- Use procurement and offtake to create demand for women-led climate solutions. Commit to sourcing from women-led enterprises and integrating them into value chains.
- Provide revenue visibility to improve investability. Use long-term contracts and partnerships to strengthen business stability and growth potential.
- Use supply chain finance to support enterprise growth. Deploy financing tools that enable women-led enterprises to scale within corporate value chains.

For philanthropies and public funders:

Fund the systems that make enterprises investable. Evidence shows that finance alone is not enough. Grant-based, philanthropic, catalytic finance, and good governance models are critical to support business development services, technical assistance, and ecosystem infrastructure that strengthen enterprise capacity and improve their ability to absorb and deploy finance.

For policymakers, multilaterals, and standard setters:

- Require climate finance to reach women-led and local enterprises. Embed this in policies, NDCs, and funding mechanisms.
- Redirect public climate finance beyond large intermediaries. Ensure funding flows to decentralized delivery models.
- Strengthen local financial institutions and intermediaries. Support banks, MFIs, and fintechs that are closest to women-led enterprises and best positioned to deploy appropriately sized finance and credit.
- Use public tools to shift the financial system. Deploy guarantees, incentives, and public finance instruments to unlock investment into underfunded sectors.
- Incentivize ongoing learning and collaboration. Support open and sex-disaggregated data, shared learning, and cross-sector partnerships to address evidence gaps and scale effective models across contexts.

This is not only about mobilizing more climate finance. It is about recognizing where women entrepreneurs are already building climate solutions, often beyond the limits of what financial systems are designed to see. The systems are in motion. The enterprises are operating. The pathways are visible. Don't let women-led MSEs who are already innovating and solving these problems on the ground be your blind spot.



ANNEX 1.

Additional Organizations Delivering Climate Solutions Around the World

This annex includes a non-exhaustive list of organizations identified during the research process as delivering, enabling, or financing climate solutions across the report's ten solution areas. These organizations were not all profiled in the main report, but they helped inform our understanding of the breadth of women-led climate action and climate solutions designed around women's needs already underway across sectors, regions, and business models. Organizations marked with an asterisk are mentioned in the Blueprint.

SOLUTION AREA	SELECTION OF ORGANIZATIONS DELIVERING IMPACT ACROSS SOLUTION AREAS
1. ENERGY ACCESS & SERVICES	• EarthSpark International • Sistema.bio • Solar Freeze • Koolboks • SHE • Solar Sister • *Frontier Markets
2. MOBILITY & LOCAL INFRASTRUCTURE	• Her Retrofit Space • Compressed Earth Bricks and Community Enterprises • Oculus Travel • E-Safiri
3. WATER & SANITATION SYSTEMS	• FRANK Water • Saha Global • Bumbi • EcoCiclo • Sanivation • Majik Water • IRIBA Water Group • Saathi
4. SKILLS, CARE & SOCIAL INFRASTRUCTURE	• Self-Employed Women's Association (SEWA) • Natakallam • *Kidogo • MedIQ
5. TEXTILES & APPAREL	• Rent the Runway • Vinted • SXD • Adiv Pure Nature • Seed2Shirt • ECONSCIOUS • Limart • GreenStitch Africa • Adire Lounge • Alner

SOLUTION AREA	SELECTION OF ORGANIZATIONS DELIVERING IMPACT ACROSS SOLUTION AREAS
6. WASTE & CIRCULAR SERVICES	• ReCharkha • WATS • Sanergy • *Haritha Karma Sena • *CARE Honduras Biodigesters • EcoPost
7. FOOD SYSTEMS	• Muda Meu Mundo • Agroapoyo • Olio • Green Rebel Foods • *Safi Organics • Green Grahi Solutions • GirlFarmsHub
8. NATURE-BASED SOLUTIONS	• Munje Tunusuru Women's Group • Green Belt Movement • Climate Impact Partners • LANDPROCESS • Priceless Planet Coalition • *Cameroun Ecologie • Mother of Corals
9. INFORMATION & DIGITAL SERVICES	• Women's Weather Watch • ClimateSense • Digital Green Trust • Kisan e-Mitra
10. FINANCIAL SERVICES	• FarmDrive • Ensibuuko • Mann Deshi Mahila Sahakari Bank • Mahila Money • *Kinara Capital • Kaleidofin • Tala • Breva

ANNEX 2

Glossary of Key Terms

This glossary defines key concepts used throughout the report, drawing on established definitions from leading international institutions, alongside applied frameworks from Futerra, Project Dandelion, CARE and Mastercard's Center for Inclusive Growth.

Key terms and definitions

Access to Financial Services: Access to affordable financial services including credit, savings, and insurance. (World Bank, 2022).

Agro-Processing: Transformation of agricultural products into value-added goods (World Bank, 2020).

Biodiversity Net Gain: Requires development projects to leave ecosystems in a measurably better state than before, generating demand for habitat restoration and conservation activities.

Blended Finance: The strategic use of public or concessional capital to mobilize private investment (OECD, 2020; World Bank, 2022).

Blue Carbon: Carbon stored in coastal and marine ecosystems such as mangroves and seagrasses (UNEP, 2021).

Carbon Credits: Tradable certificates representing one metric ton of CO₂ equivalent (tCO₂e) reduced or removed from the atmosphere. Verified emissions reductions or removals are quantified and sold to buyers seeking to offset residual emissions. High-integrity credits should guarantee benefit sharing with local communities. (UNEP, 2022)

Carbon Intensity: The amount of greenhouse gas emissions per unit of economic output (OECD, 2023).

Carbon Markets: Markets where carbon credits representing verified emissions reductions or removals are traded, including compliance and voluntary markets (UN, 2021).

Carbon Sequestration: The process of capturing and storing atmospheric carbon dioxide in natural or engineered systems (IPCC, 2022).

Care Economy: Encompasses care work –paid and unpaid, direct and indirect – delivered through public and private sectors, including MSMEs, non-profits, the social and solidarity economy, and households (ILO).

Catalytic Capital: Flexible, risk-tolerant capital used to unlock additional investment flows (MacArthur Foundation, 2019).

Circular Economy: An economic system focused on minimizing waste and maximizing resource reuse (UNEP, 2021).

Circular Systems: Systems with minimal input and operational losses of materials and energy through reduce, reuse, recycling, and recovery activities (IPCC WGIII).

Climate Adaptation: Adjustment in natural or human systems in response to climate impacts, reducing harm or exploiting beneficial opportunities (UNEP, 2022).

Climate Aligned: Activities, investments, or strategies aligned with net-zero emissions pathways and climate-resilient development goals.

Climate Capital: Financial capital deployed to support climate mitigation, adaptation, and resilience of investments.

Climate Change: Long-term changes in temperature, precipitation, and other atmospheric conditions, primarily driven in recent decades by human activities (IPCC, 2022).

Climate Displacement: Movement of people driven by climate impacts, from extreme weather to long-term shifts like drought or sea-level rise, that make it difficult or impossible to remain in place (EUAA; UNHCR).

Climate Exposure: The degree to which a system, population, or asset is physically exposed to climate-related hazards (IPCC, 2022).

Climate Finance: Financial resources devoted to reducing emissions and/or strengthening adaptation and resilience across public and private actors, aiming to reduce emissions and/or enhance adaptation and resilience (IPCC AR6).

Climate Impact: The observed effects of a changing climate on natural or human systems, distinguished from short-term variability (IPCC and UNFCCC).

Climate Mitigation: Actions that reduce or prevent greenhouse gas emissions or enhance sinks (IPCC, 2022).

Climate Multiplier: Factors through which climate change impacts amplify or exacerbate existing risks.

Climate Resilience: The capacity of systems, businesses, or communities to anticipate, absorb, and recover from climate shocks (OECD, 2021).

Climate Responsive: Systems or practices designed to anticipate and respond to climate risks while supporting resilience and low-emissions outcomes (IPCC; UNFCCC).

Climate Risk: The potential for adverse consequences resulting from climate-related hazards interacting with exposure and risk for people, ecosystems, or economic systems (IPCC).

Climate Shocks: Sudden, extreme climate- or weather-related events whose intensity or frequency is amplified by climate change and that exceed the ability to cope (UNDP, World Bank, IPCC).

Climate Solution: Technologies, practices, or business models that contribute to reducing greenhouse gas emissions or increasing resilience to climate impacts.

Climate Transition: The structural shift of economies and systems toward low-carbon, climate-resilient development (OECD, 2021).

Community Benefits: Social, economic, or environmental benefits delivered to local communities through project design, ownership, employment, or revenue sharing.

Concessional Finance: Financing provided on terms more generous than market rates, often to achieve development outcomes (OECD, 2020).

Development Finance Institutions (DFIs): Public or semi-public institutions providing financing and technical support to promote economic development.

Developing/Emerging Economies/Markets: Economies transitioning toward higher income levels, characterized by growth and industrialization.

Distributed Renewable Energy (DRE): Decentralized energy systems such as mini-grids and off-grid solar (IEA, 2023).

Emissions Avoided: Emissions reductions occurring outside a company's value chain that result from the use of its products or services (IPCC).

Enabled Emission Reductions: Emissions reductions enabled by a product or service that allow other actors to reduce their emissions (OECD, 2023).

Enabling Systems: Systems supporting delivery of climate solutions, such as finance, digital platforms, and policy frameworks (Futerra & Project Dandelion, 2026).

Energy Access: Availability of reliable, affordable, and modern energy services (IEA, 2023).

Enterprise: An organization engaged in economic activity, which may be formal or informal.

Environmental Taxes: Taxes on environmentally harmful activities (e.g., carbon tax).

Ecosystem Services: Benefits humans derive from ecosystems (UN, 2021).

Essential Systems: Core sectors underpinning livelihoods and resilience, including energy, food, and water (Futerra & Project Dandelion, 2026).

Extended Producer Responsibility (EPR): Policy approach making producers responsible for products across their lifecycle (UNEP).

Fecal Sludge Management (FSM): Collection, transport, treatment, and reuse of waste in non-sewered systems (World Bank, 2019).

Food Systems: All activities and actors involved in food production, processing, distribution, and consumption (FAO, 2022).

GDP (Gross Domestic Product): Total value of goods and services produced within a country over a specific period.

Financing Gap for Women-Owned Businesses: The gap between financing available to women-owned businesses and their total financing needs (World Bank, 2019).

Global Green Skills Gap: Shortage of workers with skills needed to deliver climate solutions (World Economic Forum).

Green Buildings: Buildings designed to minimize environmental impact across their lifecycle (OECD, 2024).

Green Finance: Financial investments flowing into sustainable development projects.

Green Growth: Economic growth that is environmentally sustainable.

Greenhouse Gas (GHG) Emissions: Gases such as CO₂, methane, and nitrous oxide that trap heat (IPCC, 2022).

Human Capital: Skills, knowledge, and experience possessed by individuals.

Impact Investment: Investments generating social and environmental impact alongside financial returns (OECD, 2019).

Informal Economy: Economic activities not covered or insufficiently covered by formal arrangements (WIEGO).

Informal Transport: Small-scale, often unregulated transport systems shaped by local demand (UNDP).

Investability: The extent to which a business or sector can attract investment (Climate Policy Initiative, 2023).

Fair Climate Transition: A shift toward lower-emission, climate-resilient economies that protects workers, expands economic opportunity, and supports decent work (ILO).

Last-Mile Distribution: Transport of goods from final hub to end user.

Locally Led Adaptation (LLA): Adaptation designed and implemented by local communities (CARE, 2021).

Local Economies: Economic systems operating within a defined geographic area (Futerra, 2025).

Low- and Middle-Income Countries (LMICs): Countries classified by income per capita (World Bank).

Micro and Small Enterprises (MSEs): Businesses with a workforce of fewer than 50 employees (OECD).

Microfinance Institutions (MFIs): A formal organization whose primary activity is microfinance, often providing financial services to people and businesses with limited access to formal banking.(CGAP; UNESCO).

Micro, Small and Medium Enterprises (MSMEs): Businesses with a workforce of fewer than 250 employees (OECD).

MRV (Measurement, Reporting, and Verification): Framework for tracking climate outcomes (UNFCCC, 2021).

Nature-Based Solutions (NbS): Actions to protect and restore ecosystems while addressing societal challenges (UNEP, 2022).

Nature Positive: An approach aiming to halt and reverse nature loss by 2030 (UNEP, 2022).

Participatory and Community-based Forecasting: Combines climate science with local knowledge for decision-making (WMO, FAO).

Patient Capital: Long-term, flexible, risk-tolerant investment for early-stage or impact-focused enterprises with delayed returns.

Payments for Ecosystem Services (PES): Financial incentives for maintaining ecosystem services (IIED).

PAYGo (Pay-As-You-Go): Financing model allowing incremental payments for services (World Bank, 2020).

Priority Investment Pathways: Investment approaches aligned with system constraints and capital gaps (Futerra & Project Dandelion, 2026).

Regenerative Agriculture: Farming that restores soil, biodiversity, and ecosystem function (WEF).

Regenerative Tourism Models: Practices that leave destinations better than they were found (GSTC).

Restoration and Conservation Enterprises: Businesses whose core activities restore, conserve, or sustainably manage ecosystems while generating economic value.

Results-Based Finance (RBF): Financing contingent on verified results (World Bank, 2021).

Safely Managed Water: Drinking water that is accessible, available, and free from contamination (WHO, 2023).

SDGs (Sustainable Development Goals): Global goals for sustainable development (UN, 2015).

Skills, Care and Social Infrastructure Sector: Systems supporting human capital and well-being.

Small-Scale Food Producers: Individuals or communities producing food at small scale (FAO).

Sustainable Mobility: Transport systems that reduce environmental impact (OECD, 2023).

Turnover: Total revenue generated by a business over a period.

Urban Resilience: Capacity of cities to absorb and recover from shocks (UN, 2020).

USD: Currency of the United States; used for standardized comparisons.

WASH (Water, Sanitation and Hygiene): Integrated approach to water and sanitation (WHO & UNICEF, 2023).

Waste Pickers: Individuals who collect and recycle discarded materials (WIEGO).

Women Entrepreneurs: Women who lead or found enterprises.

Workers: Individuals engaged in paid employment or self-employment, including formal and informal work (ILO).

Working Capital: Short-term capital for day-to-day operations (World Bank, 2020).

ANNEX 3

Enabling Environment

Scaling women-led climate solutions requires a set of enabling conditions that make enterprises visible, investable, and able to grow. These include access to appropriately structured finance, predictable sources of demand, reduced structural barriers to participation, and the systems and support needed to build strong pipelines of investment-ready businesses. The five market enablers below illustrate how these conditions are already beginning to take shape across different contexts.

This annex is not a comprehensive view of the enabling environment. Rather, it highlights a selection of policies, platforms, and partnerships beginning to create the conditions for women-led enterprises to develop and deliver climate solutions.

Progress is visible but uneven. Much of this activity operates in informal or semi-formal economies, where businesses are harder to track, measure, and finance. As a result, a significant share of climate-relevant economic activity, much of it led by women, remains undervalued, undercounted, and underinvested.

While data and measurement gaps persist, they reflect structural limitations rather than a lack of viable solutions. Improving visibility will strengthen investment pipelines over time but should not delay the deployment of finance to enterprises already demonstrating impact.

1. Targeted Blended Finance & Funds Focused on Women-Led Enterprises: Initiatives like We-Fi, 2X Global, CGEF, and the Global Gender-Smart Fund provide de-risked capital, guarantees, and concessional financing specifically for women-led MSEs, making small-ticket, climate- or impact-oriented investments more viable.

- **What this unlocks:** *Makes smaller, distributed investments viable by improving risk-return profiles.*

2. Digital Finance & Mobile Platforms: Platforms such as Women's World Banking WAM, Kenya's M-Pesa ecosystem, and rural finance initiatives reduce transaction costs, expand financial access, and enable women-led MSEs to receive credit, savings, and climate-linked micro-insurance at scale.

- **What this unlocks:** *Reaches enterprises with limited access to finance at scale without costly physical infrastructure.*

3. Corporate Responsible Sourcing & Traceable Supply Chains: Private sector commitments to responsible sourcing and ESG-aligned procurement create direct market demand for women-led MSEs, especially in agriculture, textiles, and renewable energy, while traceability systems provide investors confidence in impact and revenue stability.

- **What this unlocks:** *Provides revenue visibility and buyer demand, increasing investability.*

4. Public Procurement & Policy Incentives: Regulatory frameworks like Kenya's Public Procurement and Asset Disposal Act, Brazil's waste policy, and Singapore's NEWater program enable women-led MSEs to access government contracts, subsidies, or technical support, offering predictable revenue streams that attract investors.

- ***What this unlocks:*** Anchors predictable revenue streams that attract private finance.

5. Technical Assistance & Capacity-Building Networks: Programs such as She-Leads Bharat: Mahila Kisaan, EmPower, and ADB Women's Finance Exchange (WFX) strengthen business, financial, and climate resilience skills, increasing MSE investment readiness and enabling lenders and equity investors to confidently deploy capital.

- ***What this unlocks:*** Builds investment-ready pipelines and improves capital absorption.

Enablers in Action

The following examples show how these enablers are being put into practice across regions and sectors.

Financial & Investment Platforms for Women-Led MSEs

A growing ecosystem of funds and platforms is making women-led climate enterprises more visible and more investable.

NAME	FOCUS	GEOGRAPHY	FINANCIAL INSTRUMENTS	RELEVANT SOLUTION AREAS
2X Global Gender Lens Initiative	Investment criteria and standards focused on women-led enterprises	Global	Standards, investment screening	Cross-sector
ADB Women's Finance Exchange (WFX)	Pipeline of investment-ready women-led SMEs	Asia-Pacific	Blended finance, pipeline development	Cross-sector
ABERA	Women-led agricultural SMEs	Africa	Blended finance, capacity building	Food systems
African Forestry Impact Platform (AFIP)	Forestry and conservation enterprises	Africa	Impact investment	Nature-based solutions
CGAP – Rural Women Financial Inclusion	Systems that improve access to financial services for rural women	Global	Advisory, catalytic capital	Cross-sector
Clean Cooking Fund (World Bank ESMAP)	Enterprises delivering modern/ resilient cooking technologies	Global	Blended finance	Energy access & services
Climate Risk Micro-Insurance (Aseguradora Rural & MiCRO)	Climate insurance for agricultural SMEs	Latin America	Insurance products	Food systems

NAME	FOCUS	GEOGRAPHY	FINANCIAL INSTRUMENTS	RELEVANT SOLUTION AREAS
EmPower	Investment readiness for women-led SMEs	Asia	Blended finance, TA	Cross-sector
Global Gender-Smart Fund	Investment funds focused on women-led and scalable SMEs	Global	Blended finance, insurance	Cross-sector
InsuResilience Investment Fund	Climate risk insurance markets	Global	Blended finance, insurance	Cross-sector
She-Leads Bharat (Mila Kisan)	Finance, energy, and agri services for women farmers	India	Blended finance, TA	Food systems; Energy access & services
WaterEquity	Water and sanitation enterprises	Global	Blended finance	Water & sanitation
We-Fi	Supporting women-led enterprises in markets with limited access to formal finance	Global	Blended finance, guarantees, TA	Cross-sector
Women's World Banking Asset Management (WAM)	Investment funds focused on women-led and scalable SMEs	Global	Private equity, women-focused funds	Cross-sector
World Bank Global Water Security & Sanitation Partnership	Water and sanitation enterprise development	Global	Public-private finance	Water & sanitation

Supportive Policies

Policy plays a critical role in shaping markets: creating demand, lowering risk, and unlocking new business models. The following examples illustrate how different types of policy interventions shape markets in distinct ways.

Policies that created new markets:

- **Kenya** – VAT Removal on Off-Grid Solar: Exempting VAT on solar equipment reduced costs ~16%, boosted PAYGo adoption, improved repayment rates, and attracted blended finance, enabling women-led solar distributors and small-scale installers to expand rural energy access.
- **Rwanda** – Plastic Bag Ban: Banning non-biodegradable plastics spurred alternative packaging businesses, supporting women-led MSEs in environmentally friendly production and local enterprise growth.
- **EU/UK** – Extended Producer Responsibility (EPR) & Circular Textiles Policies: Mandatory take-back and recycling requirements create demand for collection, repair, and resale, enabling women-led circular SMEs to generate jobs, income, and measurable climate impact.

Policies that made revenue predictable:

- **Morocco** – Output-Based Aid (OBA): Performance-based water/sanitation contracts expanded services to low-income areas, enabling women-led operators to secure results-based finance and scale operations.
- **Rwanda** – Decentralized Water Kiosks: Licensing frameworks empower private operators, including women-led MSEs, to provide safe water, reduce emissions, and access blended finance for kiosk infrastructure.
- **Kenya** – Public Procurement & Asset Disposal Act 2015: Mandating 30% procurement for women, youth, and disadvantaged enterprises creates reliable revenue streams, enabling women-led SMEs to scale and deliver climate and social services.

Policies that reduced entry barriers:

- **Quebec, Canada** – Universal Childcare: Subsidized childcare increased women's workforce participation and formalized social enterprises, enabling women-led care SMEs to expand employment and service provision.
- **Bangladesh** – Microfinance Regulation: Microfinance targeting women enables investment in renewable energy, climate-resilient agriculture, and disaster recovery, strengthening women-led MSEs' resilience and income.
- **India** – Pradhan Mantri Jan Dhan Yojana: A national program designed to improve access to financial services opened over 480M accounts, half for women, enabling climate-responsive credit and insurance services by women-led enterprises.

Policies that attracted private capital:

- **Brazil** – Renewable Energy & Emissions Trading: Renewable expansion, forest restoration, and carbon markets attract private investment, providing women-led MSEs opportunities in sustainable energy, forestry, and climate-aligned services.
- **EU** – Energy Performance of Buildings Directive: Mandatory efficiency and renovation standards stimulate retrofits, enabling women-led energy service SMEs to access green finance, achieve stable revenue, and scale low-carbon building solutions.
- **China** – New Energy Vehicle Policy: EV targets, subsidies, and charging infrastructure reduced acquisition risk, enabling women-led fleet, charging, and shared mobility SMEs to access blended finance and scale electric mobility solutions.
- **India** – Renewable Energy Policies: National renewable deployment, EV support, and efficiency measures lower emissions and create investment certainty, enabling women-led renewable energy SMEs to access finance and scale low-carbon solutions.

The examples below further demonstrate how policy shapes markets across solutions areas by creating demand, reducing risk, and enabling investment across sectors.

SOLUTIONS AREA	POLICY	FUNCTION
Mobility	London – Ultra Low Emission Zone	Creates new markets
Mobility	Brazil – National Urban Mobility Policy	Makes revenue predictable
Water & Sanitation	Singapore – NEWater Policy	Attracts private capital
Skills & Care	Colombia – Just Transition Training Funds	Reduces entry barriers
Skills & Care	EU – European Social Fund	Reduces entry barriers
Waste & Circular	Brazil – National Solid Waste Policy	Makes revenue predictable
Waste & Circular	EU – Circular Economy Action Plan	Attracts private capital
Waste & Circular	France – Anti-Waste Law	Creates new markets
Food Systems	India – Soil Health Card Scheme	Reduces entry barriers
NbS	Netherlands – Room for the River	Attracts private capital
NbS	China – Loess Plateau Restoration	Attracts private capital
NbS	Toronto – Green Roof Policy	Creates new markets
NbS	New York – Watershed Protection Program	Makes revenue predictable
Digital / Agriculture	India – eNAM Marketplace	Reduces entry barriers
Financial Services	Kenya – Mobile Money (M-Pesa)	Reduces entry barriers

Sector Transformation Initiatives

Beyond policy and finance, global initiatives are shaping the direction of entire sectors:

- PRISM (World Food Programme): Real-time climate and hazard monitoring informs anticipatory action, creating market opportunities for women-led MSEs in climate advisory and digital services.
- UN – Early Warnings for All: Multi-hazard early warning systems reduce disaster losses, supporting women-led service providers delivering climate information and adaptation services in communities facing heightened climate risks.
- Global Sustainable Tourism Certification: Environmental certification unlocks sustainability-linked finance for eco-lodges and community-based tourism SMEs, supporting women-led hospitality enterprises that reduce emissions, strengthen local economies, and build resilience.

Across these examples, a small set of enabling conditions consistently determines whether women-led MSEs can access and deploy climate finance at scale: clear and aligned policy signals that create demand and reduce risk; mechanisms that improve revenue predictability, such as procurement, offtake, and results-based financing; and systems that reduce structural barriers while strengthening enterprise pipelines, including access to finance, infrastructure, and technical support. While each of these exists in parts, they are not yet present at the scale or consistency required. Closing these gaps is critical to correcting current market inefficiencies and enabling finance to reach the enterprises already delivering climate solutions.

These shifts do not happen in isolation. Aligning finance with impact will require coordinated action across policy, finance, markets, and support systems to ensure capital reaches the enterprises already delivering the transition.

ANNEX 4

Each solution is accompanied by a set of benefit tags, highlighting where credible evidence shows consistent positive impacts across health, livelihoods, equality, and ecosystems. Below indicates what is behind each.

SOLUTION AREA	CLIMATE BENEFITS	PUBLIC HEALTH	WOMEN'S AGENCY & EQUAL PARTICIPATION
1. ENERGY ACCESS & SERVICES	Reduced emissions from fossil fuel use, Improved energy resilience	Reduced indoor air pollution, Improved respiratory health	Increased women's time availability, Greater participation in income-generating activities
2. MOBILITY & LOCAL INFRASTRUCTURE	Reduced transport-related emissions, Increased efficiency of local infrastructure systems	Reduced urban air pollution	Increased access to safe and affordable transport
3. WATER & SANITATION SYSTEMS	Improved resilience to climate impacts, Reduced emissions from inefficient water systems	Reduced waterborne disease, Improved hygiene and sanitation outcomes	Increased women's time availability, Reduced burden of water collection
4. SKILLS, CARE & SOCIAL INFRASTRUCTURE	Increased adaptive capacity of communities, Strengthened resilience to climate shocks	Improved child and community health outcomes, Strengthened access to care services	Increased women's labor force participation, Greater recognition of unpaid care work and more balanced care responsibilities
5. TEXTILES & APPAREL	Reduced emissions from material production and processing, Lower resource use through circularity	Reduced exposure to toxic dyes and chemicals	Women's concentration in low-margin roles and how circular models shift them into higher-value work
6. WASTE & CIRCULAR SERVICES	Reduced urban flooding and exposure to climate risks, Reduced demand for virgin materials, Reduced emissions from material production, waste and landfill methane	Reduced exposure to waste-related pollutants, Improved community sanitation and health	Recognition of informal labor can lead to enhanced working conditions and higher wages for women
7. FOOD SYSTEMS	Increased carbon sequestration in soils and biomass, Reduced agricultural emissions, Increased capacities to adapt	Improved nutrition and dietary diversity, Reduced exposure to harmful agrochemicals	Increased women's time availability, Greater participation in income-generating activities
8. NATURE-BASED SOLUTIONS	Increased carbon sequestration, Enhanced climate resilience and risk reduction	Reduced disaster risk and exposure to environmental hazards, Improved air and water quality	Increased women's time availability, Greater participation in income-generating activities
9. INFORMATION AND DIGITAL SERVICES	Improved climate risk management and adaptation, Increased efficiency in resource use	Improved access to early warning systems, Reduced exposure to climate-related risks	Increased access to information and digital tools
10. FINANCIAL SERVICES	Increased adoption of technologies that reduce emissions or build climate resilience, Improved capacity to manage climate risks		Increased access to financial services and control over assets, Greater participation in climate-relevant enterprises

SOLUTION AREA	LIVELIHOODS & LOCAL ECONOMIES	WORKING CONDITIONS	ECOSYSTEMS & BIODIVERSITY	SYSTEMS ENABLEMENT
1. ENERGY ACCESS & SERVICES	Higher household income, Increased productivity of local enterprises	Improved safety and reliability of energy access	Reduced deforestation and land degradation	
2. MOBILITY & LOCAL INFRASTRUCTURE	Increased access to markets and services, Reduced transport costs and improved economic participation	Improved safety and formalization of transport work	Reduced air and noise pollution, Improved conservation and biodiversity protection through eco-tourism	
3. WATER & SANITATION SYSTEMS	Local livelihood creation and formalization, Reduced exposure to water-related shocks and stresses	Improved safety in sanitation services	Improved watershed and ecosystem health	
4. SKILLS, CARE & SOCIAL INFRASTRUCTURE	Improved job quality and stability	Improved child and community health outcomes, Strengthened access to care services		Expands women's ability to pursue paid work, education, or enterprise by reducing care-related barriers
5. TEXTILES & APPAREL	Increased local value creation through circular models	Improved occupational health in production if fewer toxic chemicals and dyes are used	Reduced water and chemical pollution, Lower pressure on natural resources	
6. WASTE & CIRCULAR SERVICES	Increased income and income stability for waste workers, Strengthened local recycling and recovery markets	Improved worker safety and formalization	Reduced environmental contamination, Improved land and water ecosystem health	
7. FOOD SYSTEMS	Increased income resilience, Diversified and more stable livelihoods		Improved soil health and water retention, Enhanced biodiversity and ecosystem health	
8. NATURE-BASED SOLUTIONS	Increased livelihood opportunities in restoration economies, Strengthened local income from ecosystem services and ecosystem-based enterprises		Restored ecosystems and increased biodiversity, Improved soil, water, and habitat quality	
9. INFORMATION AND DIGITAL SERVICES	Reduced crop losses and income volatility, Improved market access and price transparency	Improved preparedness and safety during climate related hazards	Improved monitoring of ecosystems and resources, Increased capacity for responsible resource management	Helps other sectors and climate solutions operate and grow
10. FINANCIAL SERVICES	Increased investment in local businesses, Improved income stability and resilience			Helps other sectors and climate solutions operate and grow

REFERENCES

Abouzahr et al. Why Women-Owned Startups Are a Better Bet. Boston Consulting Group, 2019. https://web-assets.bcg.com/img-src/BCG-Why-Women-Owned-Startups-Are-a-Better-Bet-May-2018-NL_tcm9-193585.pdf.

Adroit Market Research. Early Childhood Education Market Size. Adroit Market Research. 2026. <https://www.adroitmarketresearch.com/industry-reports/early-childhood-education-market>.

Allied Market Research. Renewable Energy Market to Reach \$2.5 Trillion Globally by 2033 at 8.5% CAGR. GlobeNewswire, 2024. <https://www.globenewswire.com/news-release/2024/09/19/2949190/0/en/renewable-energy-market-to-reach-2-5-trillion-globally-by-2033-at-8-5-cagr-allied-market-research.html>.

American Public Transportation Association. Economic Impact of Public Transportation Investment. APTA, 2026. <https://www.apta.com/wp-content/uploads/2026/03/APTA-Economic-Impact-of-Public-Transportation-022026.pdf>

Anderson, Jamie, Victoria Clause, Max Mattern, and Kassim Zani. Strengthening Rural Women's Climate Resilience: Opportunities for Financial and Agricultural Service Providers. CGAP, 2023. <https://www.cgap.org/research/publication/strengthening-rural-womens-climate-resilience-opportunities-for-financial-and>.

BCG and Mom's First. Childcare Benefits: A Business Investment with Measurable ROI. BCG, 2025. <https://www.bcg.com/publications/2024/childcare-benefits-pay-for-themselves-at-us-companies>.

Biese, K., McCord, M. J., and Gopalakrishna, I. Making climate risk microinsurance work: Case study - MiCRO & Aseguradora Rural (AR), Guatemala. Microinsurance Network, 2022. <https://landscape.microinsurancenet.org/taxonomy/term/1635>.

Blended Finance Taskforce. Better finance, better food: Financing a healthy, equitable, and sustainable food system. 2024. <https://static1.squarespace.com/static/5acdc066c258b4bd2d15050b/t/5fbf3f84cb3e0f577144b404/1606369299711/Better+Finance%2C+Better+Food+-+Case+study+catalogue.pdf>.

Buschmann, Mareen. Making the Green Transition Work for Women: Unlocking Gender-Just Economic Opportunities in the Era of Crisis Recovery. CARE International, 2023. <https://www.wocan.org/wp-content/uploads/2023/07/care-report-making-green-transition-work-for-women.pdf>

CARE International UK and Cherie Blair Foundation for Women. Building Caring Economies as a Pathway to Economic and Gender Justice. CARE International UK, 2024. <https://www.careinternational.org.uk/news-stories/building-caring-economies-as-a-pathway-to-economic-and-gender-justice/>.

CARE. Her Money, Her Future: Women's Economic Growth Impact Report. CARE, 2024. <https://www.care.org/media-and-press/new-care-report-reveals-9x-return-on-womens-economic-investments/>.

CGAP. Big futures for the smallest firms: Finance that works for nano, micro, and small enterprises. CGAP, 2025. <https://www.cgap.org/research/publication/big-futures-for-smallest-firms-finance-works-for-nano-micro-and-small>.

Chartered Institute of Personnel and Development. Menstruation and Support at Work. CIPD, 2023. <https://www.cipd.org/en/knowledge/reports/menstruation-support-at-work/>.

Chauvot de Beauchêne, Xavier. Output-Based Aid in Morocco (Part 1): Extending Water Services to the Poor in Urban Areas. Global Partnership on Output-Based Aid and World Bank. Accessed 2026. <https://www.gprba.org/knowledge/resources/output-based-aid-morocco-part-1-extending-water-services-poor-urban-areas>

Circle Economy. The Circularity Gap Report 2023. Circle Economy, 2023. <https://circularity-gap.world/2023>.

Cities Alliance. Empowering Informal Workers in Urban Waste Management. Cities Alliance, 2023. <https://www.citiesalliance.org/newsroom/news/cities-alliance-news/empowering-informal-workers-urban-waste-management>.

Climate Policy Initiative. Global Landscape of Climate Finance 2023. CPI, 2023. <https://www.climatepolicyinitiative.org/publication/global-landscape-of-climate-finance-2023/>.

Climate Policy Initiative. Investing in gender and nature: Opportunities for DFIs and MDBs. CPI, 2022. <https://www.climatepolicyinitiative.org/publication/investing-in-gender-and-nature-opportunities-for-dfis-and-mdbs/>.

Convergence Blended Finance. State of Blended Finance 2024. Convergence Blended Finance, 2024. <https://www.convergence.finance/resource/state-of-blended-finance-2024/view>.

De Henau, Jérôme. Costs and Benefits of Investing in Transformative Care Policy Packages: A Macrosimulation Study in 82 Countries. International Labour Organization, 2022. <https://www.ilo.org/publications/costs-and-benefits-investing-transformative-care-policy-packages-1>.

Efficiency for Access Coalition. Solar appliance market report 2022: State of the sector and outlook to 2030. Efficiency for Access, 2022. <https://efficiencyforaccess.org/publications/off-grid-solar-market-trends-report-2022-state-of-the-sector/>.

Ellen MacArthur Foundation. A New Textiles Economy: Redesigning Fashion's Future. Ellen MacArthur Foundation, 2017. <https://www.ellenmacarthurfoundation.org/a-new-textiles-economy>.

Ellen MacArthur Foundation. Circular Business Models: Redefining Growth for a Thriving Fashion Industry. Ellen MacArthur Foundation, 2021. <https://content.ellenmacarthurfoundation.org/m/60926fc64dbab81d/original/Circular-business-models.pdf>.

Energy Sector Management Assistance Program. Off-Grid Solar Market Trends Report 2024: Outlook. World Bank Group, 2024. https://www.esmap.org/Off-Grid_Solar_Market_Trends_Report_2024.

European Agency for Safety and Health at Work. Occupational Safety and Health in Micro and Small Enterprises. European Agency for Safety and Health at Work, 2026. <https://osha.europa.eu/en/themes/safety-and-health-micro-and-small-enterprises>.

European Commission. A New Circular Economy Action Plan: For a cleaner and more competitive Europe. EU Commission, 2024. <https://circular-cities-and-regions.ec.europa.eu/support-materials/eu-regulations-legislation/new-circular-economy-action-plan-cleaner-and-more>.

European Commission. Recovery and resilience scoreboard: Thematic analysis. European Commission, 2023. https://ec.europa.eu/economy_finance/recovery-and-resilience-scoreboard/thematic_analysis.html.

European Investment Bank. Sweden: EU backs Renewcell to boost circularity in the fashion industry. European Investment Bank, 2021. <https://www.eib.org/en/press/all/2021-239-eu-backs-renewcell-to-boost-circularity-in-the-fashion-industry>.

Ferdinand, T., Illick-Frank, E., Postema, L., Stephenson, J., Rose, A., Petrovic, D., Migisha, C., Fara, K., Zebiak, S. E., Siantonas, T., Pavese, N., Chellew, T., Campbell, B. M., and Rumbaitis del Rio, C. A blueprint for digital climate-informed advisory services: Building the resilience of 300 million small-scale producers by 2030 (Working Paper). World Resources Institute / Global Commission on Adaptation, 2021. <https://gca.org/reports/a-blueprint-for-digital-climate-informed-advisory-services-building-the-resilience-of-300-million-small-scale-producers-by-2030/>.

Food and Agriculture Organization. Climate-smart agriculture sourcebook. FAO, 2021. <https://www.fao.org/4/i3325e/i3325e.pdf>.

Food and Agriculture Organization. Gambian women boost yields and income through rapid composting. FAO, 2025. <https://www.fao.org/forest-farm-facility/forest-farm-facilitynews/news-detail/ar/c/1736384/>.

Food and Agriculture Organization. Greenhouse Gas Emissions from Agrifood Systems: Global, Regional and Country Trends, 2000-2022. FAO, 2024. <https://www.fao.org/statistics/highlights-archive/highlights-detail/greenhouse-gas-emissions-from-agrifood-systems.-global-regional-and-country-trends-2000-2022/en>.

Food and Agriculture Organization. The state of food and agriculture 2022: Leveraging automation in agriculture for transforming agrifood systems. FAO, 2022. <https://openknowledge.fao.org/items/98a4c80a-b4d3-403c-8557-d8536c8316ee>.

Food and Agriculture Organization. The Status of Women in Agrifood Systems. FAO, 2023. <https://www.fao.org/gender/the-status-of-women-in-agrifood-systems>.

Food and Agriculture Organization. The global forest resources assessment 2020. FAO, 2020. <https://www.fao.org/interactive/forest-resources-assessment/2020/en/>.

Food and Agriculture Organization. The State of the World's Land and Water Resources for Food and Agriculture: Facts and Figures. FAO. Accessed 2026. <https://www.fao.org/land-water/solaw2021/facts/en>.

FP Analytics. Accelerating Nature-Based Solutions to Climate Change Through Women's Leadership. Foreign Policy Magazine, 2023. <https://fpanalytics.foreignpolicy.com/2023/11/17/accelerating-nature-based-solutions-to-climate-change-through-womens-leadership/>.

Fuglie, K., Gautam, M., Goyal, A., and Maloney, W. F. Harvesting prosperity: Technology and productivity growth in agriculture (The World Bank Productivity Project). World Bank, 2020. <https://documents1.worldbank.org/curated/en/845031568696802783/pdf/Harvesting-Prosperity-Technology-and-Productivity-Growth-in-Agriculture.pdf>.

Global Alliance for the Future of Food. Public climate finance for food systems transformation. Global Alliance for the Future of Food, 2024. <https://futureoffood.org/publication-library/public-climate-finance-for-food-systems-transformation/>.

Global Commission on Adaptation. Adapt Now: A Global Call for Leadership on Climate Resilience. World Resources Institute, 2019. <https://gca.org/reports/adapt-now-a-global-call-for-leadership-on-climate-resilience/>.

Global Fashion Agenda, Boston Consulting Group, and Sustainable Apparel Coalition. Pulse of the fashion industry 2023: Measuring fashion's environmental and economic impact. Global Fashion Agenda, 2023. <https://globalfashionagenda.org/resource/the-gfa-monitor-2023/>.

GOGLA. Global off-grid solar market report: Semi-annual sales and impact data. GOGLA, 2023. https://gogla.org/wp-content/uploads/2024/11/GOGLA_Sales-and-Impact-ReportH2-2023_FINAL.pdf.

Gorza, D., F. Siegrist, A. Moline, and F. Tadros. Women Climate Entrepreneurs: The Face of a Livable Planet. Women Entrepreneurs Finance Initiative, 2024. <https://we-fi.org/climate-paper/>.

Government of India. National Agriculture Market (e-NAM): Digital Transformation of Agricultural Trade in India. Press Information Bureau, 2026. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=2251543®=3&lang=1>

Grand View Research. Child Care Services Market Size to Reach \$442.34 Bn by 2030. Grand View Research, May 2025. <https://www.grandviewresearch.com/press-release/global-child-care-services-market>.

Grand View Research. Climate tech market size, share & trends analysis report (2025-2030). Grand View Research, 2025. <https://www.grandviewresearch.com/industry-analysis/climate-tech-market-report>.

GSMA. The mobile gender gap report 2025. GSMA, 2025. <https://www.gsma.com/gender-gap/>.

Huttinger A, Brunson L, Moe CL, et al. Small Water Enterprise in Rural Rwanda: Business Development and Year-One Performance Evaluation of Nine Water Kiosks at Health Care Facilities. *Int J Environ Res Public Health*. 2017;14(12):1584. 2017. doi:10.3390/ijerph14121584

IFC. Banking on Women Business Case Update #6: Lower Nonperforming Loans (NPLs) for Women-Owned SMEs. IFC. 2023. <https://documents1.worldbank.org/curated/en/695561597298099897/pdf/banking-on-women-business-case-update-lower-npls-for-women-led-smes.pdf>.

Intergovernmental Panel on Climate Change. AR6 Synthesis Report Climate Change 2023. IPCC, 2023. <https://www.ipcc.ch/report/ar6/syr/>.

Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Global assessment report on biodiversity and ecosystem services. CCAC, 2019. <https://www.ccacoalition.org/resources/global-assessment-report-biodiversity-and-ecosystem-services-intergovernmental-science-policy-platform-biodiversity-and-ecosystem-service-full-report>.

International Aluminium Institute. Brazil. The Aluminium Story. 2026. <https://alustory.international-aluminium.org/recycling/brazil/>

International Council of Nurses. Recover to rebuild: Investing in the nursing workforce for health system effectiveness. [Publisher/site to verify], 2023. https://www.icn.ch/sites/default/files/2023-07/ICN_Recover-to-Rebuild_report_EN.pdf.

International Energy Agency. Brazil 2025: Energy policy review. IEA, 2025. <https://www.iea.org/reports/brazil-2025>.

International Energy Agency. CO2 emissions in 2021. IEA, 2022. <https://www.iea.org/reports/global-energy-review-co2-emissions-in-2021>.

International Energy Agency. Tracking SDG: The Energy Progress Report, 2023. IEA, 2023. <https://www.iea.org/reports/tracking-sdg7-the-energy-progress-report-2023>.

International Energy Agency. Unlocking smart grid opportunities in emerging markets and developing economies (Executive Summary). IEA, 2025. <https://www.iea.org/reports/unlocking-smart-grid-opportunities-in-emerging-markets-and-developing-economies/executive-summary>.

International Finance Corporation and SME Finance Forum. MSME finance gap: An updated estimation of shortfalls and opportunities in financing. IFC, 2025. https://www.smefinanceforum.org/sites/default/files/Data%20Sites%20downloads/IFC%20Report_MAIN%20Final%203%2025.pdf.

International Finance Corporation. Exploring Opportunities for Women Entrepreneurs Driving Climate Solutions. World Bank Group, 2023. <https://www.ifc.org/content/dam/ifc/doc/2023/exploring-opportunities-for-women-entrepreneurs-driving-climate-solutions.pdf>

International Finance Corporation. Exploring opportunities for women entrepreneurs driving climate solutions: A discussion note. IFC, 2023. <https://www.ifc.org/en/insights-reports/2023/exploring-opportunities-for-women-entrepreneurs-driving-climate-solutions>.

International Finance Corporation. Green buildings: A finance and policy blueprint for emerging markets. IFC, 2019. <https://www.ifc.org/en/insights-reports/2019/green-buildings-report>.

International Finance Corporation. MSME Finance Gap: Assessment of the Shortfalls and Opportunities in Financing Micro, Small, and Medium Enterprises in Emerging Markets. World Bank Group, 2017. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/653831510568517947>

International Labor Organization. Advancing decent work and the care economy: An essential component of social development. ILO, 2025. <https://www.ilo.org/publications/advancing-decent-work-and-care-economy-essential-component-social>

International Renewable Energy Agency. Renewable energy and jobs: Annual review 2024. IRENA, 2024. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2024/Oct/IRENA_Renewable_energy_and_jobs_2024.pdf.

International Renewable Energy Agency. Renewable Energy: A Gender Perspective. IRENA, 2025. https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2025/Oct/IRENA_SOC_Renewable_energy_gender_perspective_2Ed_2025.pdf.

IUCN. Africa & the Bonn Challenge: A demonstration of leadership. IUCN, 2016. <https://www.bonnchallenge.org/sites/default/files/resources/files/%5Bnode%3Anid%5D/Africa%20%26%20the%20Bonn%20Challenge%20-%20A%20demonstration%20of%20leadership.pdf>

Kaza, Silpa, Lisa C. Yao, Perinaz Bhada-Tata, and Frank Van Woerden. What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050. World Bank Group, 2018. <https://openknowledge.worldbank.org/entities/publication/d3f9d45e-115f-559b-b14f-28552410e90a>.

Klapper, L. How financial inclusion can make the poor more resilient to extreme weather events. In Financial Innovation and Technology, 2025. https://link.springer.com/chapter/10.1007/978-3-032-02983-6_26.

Kurshitashvili et al. Addressing Barriers to Women's Participation in Transport: Global, ECA, and MENA Perspectives. World Bank, 2025. <https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099010925132542721>.

Livingstone, D., Jenkins, O., and Cardinal, I. Women's economic empowerment and climate change: A primer (WOW Helpdesk Guidance Note No.3). UK Aid / Work and Opportunities for Women, 2021. <https://assets.publishing.service.gov.uk/media/60882a278fa8f51b8a93b7ec/Guidance3-WEE-Climate-Change-Primer.pdf>.

Lloyd's Register Foundation. Women Across the World Fear Violence and Harassment at Work. Lloyd's Register Foundation, 2020. <https://www.lrfoundation.org.uk/news/women-across-the-world-fear-violence-and-harassment-at-work>.

McKinsey and Company. Scaling Textile Recycling in Europe: Turning Waste into Value. McKinsey & Company, 2022. <https://www.mckinsey.com/industries/retail/our-insights/scaling-textile-recycling-in-europe-turning-waste-into-value>.

Ministry of Agriculture, Livestock and Food Supply. Plan for Adaptation and Low Carbon Emission in Agriculture (ABC and ABC+). Government of Brazil, 2021. <https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/planoabc-abcmals/publicacoes/abc-english.pdf>.

Ministry of New and Renewable Energy, Government of India. India achieves over 40% cumulative electric power installed capacity from non-fossil fuel sources. Ministry of New and Renewable Energy. 2021. <https://www.pib.gov.in/PressReleasePage.aspx?PRID=1777364®=48&lang=2>.

OECD and GWEP. Bridging the Finance Gap for Women Entrepreneurs: Insights from Academic and Policy Research. OECD Studies on SMEs and Entrepreneurship. Paris: OECD Publishing, 2025. <https://doi.org/10.1787/75b52972-en>

OECD. Making Blended Finance Work for Water and Sanitation: Unlocking Commercial Finance for SDG 6,

OECD Studies on Water. OECD Publishing, Paris, 2021. <https://doi.org/10.1787/5efc8950-en>.

OECD. OECD Tourism Trends and Policies. OECD Publishing, Paris, 2024. <https://doi.org/10.1787/80885d8b-en>.

Pendleton L, Donato DC, Murray BC, et al. Estimating global blue carbon emissions from conversion and degradation of vegetated coastal ecosystems. PLoS One. 2012. <https://pmc.ncbi.nlm.nih.gov/articles/PMC3433453/>

Precedence Research. Water and Wastewater Treatment Market Size, Share and Trends Report, 2025-2034. Precedence Research, 2025. <https://www.precedenceresearch.com/water-and-wastewater-treatment-market>.

Project Dandelion. "Demand." Project Dandelion, 2025. <https://www.projectdandelion.com/demand>.

Statista. Food Market Worldwide: Market Forecast. Statista Market Forecast, 2025. https://www.statista.com/outlook/cmo/food/worldwide?utm_id=23822144307.

Tech Observer. Digital India: Over 1.79 Crore Farmers Register on e-NAM as 1,522 Mandis Go Digital. Tech Observer, 2026. <https://techobserver.in/news/egov/digital-india-over-1-79-crore-farmers-register-on-e-nam-as-1522-mandis-go-digital-320904/>.

Textile Exchange. Preferred fiber and materials market report. Textile Exchange, 2022. <https://textileexchange.org/knowledge-center/reports/materials-market-report-2022/>.

UN Women. Progress on the sustainable development goals: The gender snapshot 2023. UN Women, 2023. <https://www.unwomen.org/sites/default/files/2023-09/progress-on-the-sustainable-development-goals-the-gender-snapshot-2023-en.pdf>.

UNEP and UN Tourism. Making tourism more sustainable: A guide for policy makers. United Nations Environment Programme & World Tourism Organization, 2020. <https://www.unep.org/resources/report/making-tourism-more-sustainable-guide-policy-makers>.

UNEP-WCMC. 10 Years to Boost Ecosystem Restoration for People and Planet. UNEP, 2020. <https://www.unep-wcmc.org/en/news/10-years-to-boost-ecosystem-restoration-for-people-and-planet>.

UNFCCC. Payments for Environmental Services Program - Costa Rica. UNFCCC, 2020. <https://unfccc.int/climate-action/momentum-for-change/financing-for-climate-friendly-investment/payments-for-environmental-services-program>.

UNICEF and World Health Organization. Progress on household drinking water, sanitation and hygiene 2000-2022. UNICEF, 2023. <https://data.unicef.org/resources/jmp-report-2023/>.

United Nations Development Programme. Making finance work for people and planet: How countries are building their sustainable finance ecosystem through Integrated National Financing Frameworks (INFFs) (INFF Facility, UNDP, UN DESA, UNICEF, OECD, & EU). UNDP, 2024. <https://www.undp.org/sites/g/files/zskgke326/files/2024-04/undp-inff-making-finance-work-for-people-and-planet.pdf>

United Nations Development Programme. Transitioning to a circular economy: The future we cannot afford to delay. UNDP, 2025. <https://climatepromise.undp.org/news-and-stories/transitioning-circular-economy-future-we-cannot-afford-delay>.

United Nations Environment Programme (UNEP). Adaptation Gap Report 2025: Running on empty. UNEP, 2025. <https://www.unep.org/resources/adaptation-gap-report-2025>.

United Nations Environment Programme Finance Initiative. Climate risks in the transportation sector. UNEP FI, 2024. <https://www.unepfi.org/themes/climate-change/climate-risks-in-the-transportation-sector/>.

United Nations Environment Programme, and Climate and Clean Air Coalition. Global methane assessment: Benefits and costs of mitigating methane emissions. UNEP, 2021. <https://www.ccacoalition.org/resources/global-methane-assessment-full-report>.

United Nations Environment Programme. Advancing gender and informal sector integration in waste management. UNEP, 2025. <https://www.unep.org/ietc/news/blogpost/advancing-gender-and-informal-sector-integration-waste-management>.

United Nations Environment Programme. Beyond foundations: Mainstreaming sustainable solutions to cut emissions from the buildings sector. UNEP Global Alliance for Buildings and Construction, 2023. https://globalabc.org/sites/default/files/2024-11/global_status_report_buildings_construction_2023.pdf.

United Nations Environment Programme. State of Finance for Nature Annual Report. UNEP, 2023. <https://www.unep.org/resources/state-finance-nature-2023>.

United Nations Environment Programme. Sustainability and circularity in the textile value chain: A global roadmap. UNEP, 2023. <https://www.unep.org/resources/publication/sustainability-and-circularity-textile-value-chain-global-roadmap>.

UN Tourism and UNDP. Tourism and the sustainable development goals - Journey to 2030. UNDP, 2018. <https://www.undp.org/publications/tourism-and-sustainable-development-goals-journey-2030>.

United Nations. Early Warnings for All: A global initiative to ensure universal coverage of life-saving early warning systems by 2027. United Nations, 2025. <https://www.un.org/en/climatechange/early-warnings-for-all>.

United Nations. Supporting Small Businesses to Achieve Inclusive Growth for All. United Nations, 2023. <https://www.un.org/en/desa/supporting-small-businesses-achieve-inclusive-growth-all>.

United Nations. The sustainable development goals report 2023. United Nations, 2023. <https://unstats.un.org/sdgs/report/2023/>.

Wagner, J., S. Merner, S. Innocenti, A. Geling, and R. Hope. Can Solar Water Kiosks Generate Sustainable Revenue Streams for Rural Water Services? World Development 185: 106787, 2025. <https://doi.org/10.1016/j.worlddev.2024.106787>.

Water.org. Unleashing capital to make safe water and sanitation available for all. Water.org, 2022. https://water.org/documents/287/Strategic_development_overview_August_2022.pdf.

Water.org. Key Water + Sanitation Facts: For Use in FY24. Water.org, 2024. https://water.org/documents/335/FY24_Key_water_sanitation_facts_n6A6biG.pdf

Wilson, D. C., Rodic, L., Scheinberg, A., Velis, C., and Alabaster, G. Solid waste management in the world's cities: Water and sanitation in the world's cities 2010. UN-Habitat, 2010. https://www.researchgate.net/publication/48199927_Solid_Waste_Management_in_the_World's_Cities_UN-HABITAT.

Women's World Banking. Finance, Climate, and Gender: Empowering Women Agents of Change. Women's World Banking, 2024. https://www.womensworldbanking.org/wp-content/uploads/2024/11/WWB_Finance-Climate-and-Gender_FINAL.pdf.

World Bank. Cooking up change: How financial innovation can help transform lives. World Bank Group, 2025. <https://www.worldbank.org/en/news/feature/2025/12/05/cooking-up-change-how-financial-innovation-can-help-transform-lives>.

World Bank. Off-Grid Solar Market Trends Report 2022: State of the Sector. World Bank Group, 2022. <http://documents.worldbank.org/curated/en/099235110062231022>

World Bank. The economics of large-scale mangrove conservation and restoration in Indonesia. World Bank Group, 2022. <https://www.worldbank.org/en/country/indonesia/publication/the-economics-of-large-scale-mangrove-conservation-and-restoration-in-indonesia>.

World Bank. Water for Food. World Bank Group, 2026. <https://www.worldbank.org/ext/en/topic/water/water-for-food>.

World Bank. Women, business and the law 2022. World Bank Group, 2022. <https://doi.org/10.1596/978-1-4648-1817-2>.

World Bank. World Bank Group Climate Change Action Plan 2021-2025: Supporting green, resilient, and inclusive development. World Bank Group, 2021. <https://doi.org/10.1596/35799>.

World Bank. Greening Viet Nam's Rice Bowl: A Mekong Delta Success Story. World Bank, 2024. <https://www.worldbank.org/en/news/feature/2024/05/14/greening-viet-nam-s-rice-bowl-a-mekong-delta-success-story>

World Economic Forum. Advancing gender parity in entrepreneurship: Strategies for a more equitable future. WEF, 2025. <https://www.weforum.org/stories/2025/01/advancing-gender-parity-in-entrepreneurship-strategies-for-a-more-equitable-future/>.

World Economic Forum. Green Transport: How Countries Can Grow Their Mobility Infrastructure Sustainably. WEF, 2024. <https://www.weforum.org/stories/2024/11/green-mobility-sustainable-transport-infrastructure/>.

World Economic Forum. How can businesses accelerate the transition to a circular economy? WEF, 2020. <https://www.weforum.org/stories/2020/01/how-can-we-accelerate-the-transition-to-a-circular-economy/>.

World Economic Forum. Skills. Accelerators Network. Accessed 2026. <https://initiatives.weforum.org/accelerators-network/skills>

World Economic Forum. The Future of Jobs Report 2025. WEF, 2025. <https://www.weforum.org/publications/the-future-of-jobs-report-2025/>.

World Economic Forum. Transforming the global food system for human health and resilience. World Economic Forum, 2023. <https://www.weforum.org/publications/transforming-the-global-food-system-for-human-health-and-resilience/>.

World Economic Forum. Why Putting Women in Charge of Their Own Financial Security Pays Dividends. World Economic Forum, 2022. <https://www.weforum.org/stories/2022/03/women-centred-design-finances/>.

World Health Organization. Healthy urban environments: Urban planning and health risks. WHO, 2023. <https://www.who.int/teams/environment-climate-change-and-health/healthy-urban-environments>.

World Meteorological Organization and United Nations Office for Disaster Risk Reduction. Global status of multi-hazard early warning systems 2023. UNDRR, 2023. <https://www.undrr.org/reports/global-status-mhews-2023>.

World Meteorological Organization. Atlas of mortality and economic losses from weather, climate and water extremes (1970-2021). WMO, 2023. <https://wmo.int/publication-series/atlas-of-mortality-and-economic-losses-from-weather-climate-and-water-related-hazards-1970-2021>.

ZIQY. Vermietung und Second Hand: Retailers skalieren ihre Strategien. ZIQY, 2026. <https://ziqy.co/de/blog/vermietung-second-hand-retailers-skalierung-strategie>.