# **Unlocking Critical Finance for**

# Climate & Economic Resilience

EARTHSHOT PRIZE

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S4S Technologies

# Foreword

# Foreword



The defining challenge of our era lies in charting a path toward sustainable global prosperity amidst accelerating climate change. The impacts of a warming planet are not abstract; they are tangible and disproportionately burdening the world's most economically vulnerable communities, exacerbating inequalities and threatening hard-won development gains. This reality underscores an urgent truth: climate action is not merely an environmental imperative, but an economic one. It is a matter of jobs, livelihoods, and the very foundation of inclusive growth.

For too long, significant funding gaps have persisted, particularly in financing climate adaptation and directing capital to the ingenious, locally led solutions emerging from the frontlines. This report, "Unlocking Critical Finance for Climate and Economic Resilience," offers a timely and powerful intervention into this critical global dialogue. It moves beyond simply diagnosing the problem, providing vital insights into how innovation and strategic investment can reshape resilience by fostering Shared Economic Prosperity.

What truly excites me about this report is its dual focus: it champions the dynamism of innovators who are creating viable, job-generating solutions, and it provides crucial lessons for investors and funders on how to effectively bridge the existing financing divides. By spotlighting pioneering ventures that integrate climate action with tangible economic benefits – from green job creation to enhanced financial inclusion – the report makes a compelling case for shifting capital towards models that genuinely serve people and the planet. It underscores that the current financial system isn't broken, but rather "unfinished." The tools for transformative change exist – from blended finance mechanisms to outcome-based investments and strategic partnerships. The task before us now is to scale these proven approaches, ensuring that capital flows with greater intention and equity to those who need it most, enabling communities to adapt, thrive, and contribute to a more resilient global economy.

This report is a testament to the power of collaboration and an essential resource for governments, financial institutions, private sector leaders, and development partners. It offers a blueprint for unlocking the capital and collective action necessary to build a future where climate resilience and economic opportunity are not just aspirations, but lived realities for all.

**Dr. Ngozi Okonjo-Iweala, Director-General, World Trade Organization.** The Earthshot Prize Council Member

# Acknowledgements

# Acknowledgements

This report was made possible through the insights, expertise, and collaboration of a core group of partners committed to advancing climate and economic resilience. We gratefully acknowledge their contributions:

# Written by



# **The Earthshot Prize**

Inspired by the Moonshot and launched by Prince William in 2020, the Earthshot Prize aims to identify and scale the world's most promising environmental solutions. Each year through to 2030, Earthshot Prize will award 5x £1 million prizes targeting 5 critical goals: Protect and Restore Nature, Clean Our Air, Revive Our Oceans, Build a Waste-Free World, and Fix Our Climate.

With over 5000 nominations from more than 150 countries, Earthshot has a global portfolio of high-impact innovations. As the lead author of this report, Earthshot contributed insights from its platform, emphasizing how bold innovations, combined with finance and collaboration, can be scaled for transformative impact.

# Supported by



# Mastercard Center for Inclusive Growth

The Mastercard Center for Inclusive Growth drives inclusive economic growth and financial inclusion through data, expertise, and partnerships. The Center helps build scalable solutions by mobilizing a global network and supporting impactful programs.

The development of this report was made possible by the Center, convening partners and contributing resources; in particular expertise on the intersection of financial inclusion and economic growth and opportunity. Their support shaped the report's focus on practical pathways to resilience in underserved markets.

# Contributors

# CGAP

CGAP is a global partnership of over 35 organizations focused on advancing financial inclusion, especially for women and underserved communities. It works at the forefront of inclusive finance to test solutions, generate evidence, and enable stakeholders to scale financial systems that support vulnerable populations and microenterprises.

For this report, CGAP provided critical expertise on how financial access can enhance both climate and economic resilience, helping to shape the report's focus on the necessary structural shifts to ensure finance reaches frontline communities.

# DataKind

DataKind is a nonprofit that pairs data scientists with social change organizations, facilitating the use of AI and data science for social good. It helps organizations unlock data's potential to drive social impact across sectors.

For this report, DataKind partnered with Earthshot to apply AI (Large Language Models) to assess innovations that promote shared economic prosperity (SEP). By analyzing over 2,200 innovations, DataKind identified high-potential solutions and demonstrated how AI can spotlight scalable, investable innovations at the intersection of climate and economic resilience. This report would not have been possible without the generous contributions of time, insight, and leadership from a wide network of collaborators. In particular, we gratefully acknowledge the innovators, investors, funders, and senior leaders—many of whom also served as authors and reviewers—whose deep engagement shaped both the thinking and the final product:

### Earthshot Finalists and Innovators:

D.light, Coast4C, Abalobi, Boomitra, S4S Technologies, Eco Mensajería, Frontier Markets, RISCO

#### Investors and Funders:

Acumen, Leapfrog, Global Innovation Fund

### Authors and Reviewers:

Anuradha Bajaj, Carolina Zuluaga, Chris Large, Dan Shone, Jason Knauf, Joanna Swift, Katie Louise Shaw, Luz Gomez, Mehrnaz Ghojeh, Payal Dalal, Peter Zetterli, Zahra Husain

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Inlocking Critical Finance for Climate and Economic Resilience

# **Context & Catalysts**

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# How Innovation and Investment Can Reshape Resilience



Due to the persistence and size of the funding gaps that remain in the drive for climate and economic resilience, greater focus on untapped investment opportunities is necessary.

This report highlights high-impact opportunities that are accelerating climate and economic resilience through shared economic prosperity, and investigates the role that innovators, funders, investors, and new financial models can play in shaping a more resilient, equitable future. In particular it focuses on:

### **Global Solutions and Innovations:**

What works, who's leading, and where momentum is building globally.

#### **Funding and Financing Mechanisms:**

Exploring effective models, needs, and critical gaps with a focus on resilience, inclusion, and long-term value through approaches that broaden how success is defined and financed. This includes blended finance, catalytic capital, and localized finance solutions.

### Accelerating and Scaling:

Pathways to unlock capital rapidly, build alliances, and deploy practical tools to scale high-impact solutions—from adaptive finance and frontier technologies to systems-level innovations that deliver meaningful results for people and the planet. These reflect the shared mission of the contributing partners: to spotlight investable innovation, make the strategic case for investing in economic resilience and adaptation to climate change, and support funders in directing capital where it can drive the greatest impact. This report outlines two major opportunities to unlock scale:

### 1. Unlocking Capital for Commercial Innovations

Bridging the mismatch between available capital and the funding needed to scale investable, high-impact solutions, particularly those led by micro, small and medium enterprises (MSMEs), at the intersection of climate and economic resilience.

# 2. Ensuring Funding for Resilience Reaches Locally-Led Solutions

The means for accelerating finance to the communities and solutions where it can deliver the most inclusive, long-term impact; ensuring fair, sustainable capital flows to locally led initiatives and expanding financial inclusion for low-income populations to foster resilience and opportunity from the ground up.

# Definitions

# Shared economic prosperity:

The wide and equitable distribution of wealth that improves the wellbeing of the whole community.

### Locally-led:

innovations, projects, solutions, and efforts where power, decision-making, and resources are driven by local actors—including individuals, households, communities, civil society, and local governments—who have genuine authority, equitable access to resources, and the capacity to design, implement, and monitor activities.

# Innovators, Investors and Communities Depend on Each Other



# The Global Funding Gap is Too Big for the Status Quo to Fill

The interlinked crises of climate change and socio-economic vulnerability represent two of humanity's greatest challenges. Yet, current funding levels fall drastically short. Estimates suggest an additional \$5 trillion to \$11 trillion is needed annually to effectively mitigate climate change and adapt to the impacts of a rapidly warming planet (Songwe, Stern and Bhattacharya, 2022).

The capacity of societies to absorb shocks, adapt, and thrive in the face of growing environmental and economic stresses is critical to achieving climate and economic resilience. Reimagining investment strategies to simultaneously address climate and economic goals is the most effective pathway forward. By mobilizing capital towards integrated solutions—such as nature-based infrastructure, green jobs, and inclusive financial systems— we can unlock transformative benefits for the planet and create new avenues for shared economic prosperity.

Investment is an urgent imperative. Climate change is already intensifying economic instability through more frequent and severe weather events, food and water insecurity, and displacement. At the same time, poverty and underdevelopment severely undermines communities' ability to adapt to and recover from climate events, creating a vicious cycle of vulnerability. Without urgent action, the consequences will be increasingly irreversible, disproportionately harming the most vulnerable populations and undermining global development progress.

# \$5-11**T**n

needed annually to effectively mitigate climate change and adapt to the impacts of a rapidly warming planet.

# **\$6.9Tn**

per year required for developing countries to meet goals related to social protection, decent jobs, universal access to essential services, equality, and human rights.

# Funding Gaps Expose Critical Breakdowns In Support for High-Impact Actors

Despite expansion of global climate and development finance, albeit amid growing uncertainty and shifting donor priorities, a persistent disconnect remains. Adaptation finance is just 5% of total climate finance (Global Center on Adaptation & Climate Policy Initiative, 2023) and less than 17% of global adaptation finance is allocated to building local resilience (UNEP, 2023) and of that, less than 1% has a specific focus on local communities. This shortfall critically undermines the potential of locally-led and place-based initiatives—those most attuned to local challenges and best positioned to deliver effective, sustainable solutions.

Notably, Indigenous Peoples, despite their vital role in protecting ecosystems and biodiversity, receive less than 1% of environmental funding (Rainforest Foundation Norway, 2021). While large-scale funds continue to grow, their disbursement mechanisms are often slow, bureaucratic, and poorly aligned with the needs of communities and innovators. Many locally-led initiatives stall or collapse while awaiting funding that can take years to materialise—an ill-suited timeline for the urgent needs of high-impact, local actors on the frontlines of climate disruption.

Globally, climate-induced damages could reduce average incomes by 19%, equating to \$38 trillion in annual losses by mid-century (Swiss Re Institute, 2021). These economic shocks exacerbate existing structural inequalities, particularly in communities with limited access to resources or influence over financial decisions. Without timely and accessible funding, they remain trapped in cycles of vulnerability and underinvestment.





# Locally-Led Adaptation Overdelivers, Yet Remains Chronically Underfinanced

Adaptation receives just 5% of total climate finance, and nearly 98% of that is sourced from the public sector highlighting both the critical role of public institutions and the underutilisation of private capital (Climate Policy Initiative, 2023). Despite its potential to scale solutions, private finance remains largely untapped, often hindered by a lack of fit-for-purpose financial instruments and effective risk mitigation mechanisms (GCA, 2024).

Meanwhile, evidence shows that investing in locally-led adaptation is not only more equitable, it is cost-effective and catalytic. According to WRI, such investment delivers 'triple dividends': reducing losses, spurring growth, and driving broader development gains (WRI, 2022). Every \$1 invested in disaster risk reduction returns \$13 in savings, underscoring the economic efficiency of proactive, locally driven approaches (UNDRR, 2020).

It is imperative that funding reaches innovators working on the frontlines and we expand the financing available directly to people living in low-income communities where their actions can have the greatest impact—ensuring they have access to the financial tools they need to invest in adaptation, cope with shocks, and recover afterward. While each person may need only a small amount, the collective actions of billions of individuals building their own resilience form a vital pathway to impact at scale. "Every \$1 invested in disaster risk reduction returns \$13 in savings, underscoring the economic efficiency of proactive, locally driven approaches."

(UNDRR, 2025)



# **Two Frontlines, Two Financing Challenges, One Shared Mission**

To build climate and economic resilience at scale we must unlock the pathways and potential of two distinct, yet interdependent groups.

First are the innovators and solution providers entrepreneurs, start-ups, and locally-led enterprises designing the tools, technologies, and services that make adaptation possible. Innovators who depend on communities as customers, collaborators, and enablers of scale.

Second are the households and individuals in climate-exposed communities who need access to financial services and affordable solutions to adapt, recover, and thrive. In turn, these communities rely on innovators to provide the affordable products, services, and livelihood opportunities that support long-term resilience. (CGAP 2024) These two groups are deeply interconnected, yet their financing needs are fundamentally different. Innovators typically require early-stage capital often concessional, blended, or patient—to develop and scale models that serve vulnerable populations. Households, meanwhile, need inclusive financial systems that offer access to savings, credit, insurance, and social protection to invest in their own adaptation strategies.

Recognising and addressing the distinct capital flows required for each group is essential. This report focuses primarily on financing mechanisms and insight for the first group—innovators and enterprises in The Earthshot Prize portfolio and beyond. However, you will see that for many of the most impactful solutions, building the financial inclusion and economic participation of the second group—individuals and communities on the frontline—is central to their success in reaching the ultimate goal: economic and climate resilience through shared economic prosperity.



# The System Isn't Broken, It's Unfinished

Communities most vulnerable to climate impacts are often the least economically secure and yet remain largely overlooked by private and commercial capital.

Short-term financing, rigid investment criteria, and perceived investment risk biases mean capital rarely reaches the sectors and regions where resilience is most urgently needed. This creates a compounding effect: local solutions are underfunded, climate risks deepen, and inequality grows.

To build truly resilient economies, those on the frontlines need more than access to solutions; they must be able to afford to implement them. Yet despite growing recognition of this, critical structural barriers continue to prevent meaningful capital and support from reaching where it's needed most.



# **O1** Capital Still Fails to Reach the Frontlines

Frontline innovators and local and community agents of adaptation—from farmers and women's cooperatives to Indigenous networks and local enterprises—face chronic underinvestment and lack of access to adaptation finance, with less than 10% of adaptation funding reaching the local level (IIED, 2017). Funding models continue to favour large, established organisations through rigid financing models, risk-averse criteria, and narrow definitions of success that too often leave community-driven solutions overlooked and underfunded.

Even when funding exists, it rarely flows effectively. Slow disbursement (often taking years) coupled with high transaction costs and complex compliance requirements, make it difficult for smaller actors to plan, scale, and sustain climate resilience initiatives (BCG & The Rockefeller Foundation, 2022).

# **Emerging Solutions:**

Local intermediaries and blended finance vehicles are accelerating capital flows to the frontlines. By reducing transaction costs, streamlining due diligence, and offering concessional and catalytic capital, they help local innovators access the finance needed to scale climate resilience solutions.

# 02 Climate Adaptation Remains Underfunded and Undervalued

In 2021/22, only \$63 billion went towards adaptation, less than a fifth of what is needed annually by 2030 (UNEP, 2023). MSMEs and local innovators—often at the forefront of adaptation solutions—face persistent barriers in accessing capital required to scale up adaptation.

Yet, while mitigation continues to dominate global climate finance, innovative adaptation models are already delivering significant impact. Microinsurance schemes are beginning to protect farmers against extreme weather, early warning systems are saving lives, regenerative agriculture is restoring ecosystems, and urban water innovations are strengthening infrastructure resilience. Despite strained resources, many governments in the Global South are proactively financing adaptation from their own domestic budgets (BCG, Global Resilience Partnership, USAID, 2023). These are not passive recipients of aid, but active architects of resilience.

# 03 The 'Missing Middle' is Still Missing

Enterprises seeking between \$50,000 and \$5 million in growth capital remain chronically underserved (Convergence, 2023), excluded from mainstream capital flows due to traditional finance models that are poorly suited.

At one end, seed funding targets early stage pilots; at the other, institutional investors focus on large-scale deals. Mid-sized, growth-stage businesses—especially in low- and middleincome countries (LMICs)—often fall through the cracks, facing barriers such as limited collateral, informal credit histories, short-term investment horizons, and business models not yet scaled to attract commercial capital. This financing gap is compounded by high transaction costs and strict due diligence requirements, which make individual investments less attractive to larger investors (Convergence, 2023).

# 04 Scalability Bias Distorts Capital Allocation

Alongside issues of access, investment logic often prioritizes ventures with rapid, scalable growth over those focused-on job creation or local economic resilience. As a result, community prosperity models may be overlooked if they do not fit conventional hyper-growth or short-term return expectations (GIIN, 2020).

For innovators in many LMICs, this presents a major hurdle. Many offer proven, high-impact models, but their slower growth trajectories and longer timeframes do not fit conventional investment theses.

# Emerging Solutions:

Risk-sharing mechanisms (including guarantees, innovative insurance products, and concessional capital) are beginning to unlock adaptation investment. Trusted intermediaries such as DFIs and regional banks are helping channel capital to local innovators (though there is still much more to be done to reach the scale required).

# Emerging Solutions:

Dedicated aggregation vehicles, trusted intermediaries and SME-focused financing platforms are pooling smaller investment tickets, standardising risk, and offering concessional, catalytic and patient capital, making early- and growth-stage businesses more attractive to private investors.

# **Emerging Solutions:**

Patient capital, concessional finance, and flexible investment models are helping expand definitions of investability. By aligning financial returns with community impact and resilience, these mechanisms enable ventures with slower but more durable growth paths to access the capital needed to scale.

# 05 Climate Risk Remains Mispriced

06 Data Gaps and Visibility Issues Persist

# **07** Climate Vulnerable Populations Need More and Better Financial Solutions

Climate change is increasingly destabilising global markets, fuelling volatility and exposing serious outlier risks across asset classes and sectors. Yet many financial institutions, investors, and risk models still systematically underestimate and misprice these risks, leading to suboptimal capital allocation, heightened stranded asset risks, and insufficient investment in resilience (FSB, 2025). By embedding climate risk into credit assessments, pricing models, and financial products, investors may be able to direct capital more effectively.

Weak pipeline visibility limits the flow of capital to high-potential solutions, slowing the pace of innovation and local resilience building (World Bank, 2024). Even as promising grassroots innovations emerge, community-driven projects in climate adaptation, renewable energy, and sustainable agriculture often struggle to gain the attention and investment they deserve, not because of lack of impact, but because their outcomes and potential are not systematically validated. Data gaps and visibility issues persist due to fragmented data, inconsistent metrics, and limited aggregation platforms for smallerscale opportunities. To bolster their resilience, individuals and households most vulnerable to the effects of climate change need to manage climate risk, invest in adaptation, and fortify their lives and livelihoods against climatic shocks and stresses. That requires access to adaptation innovations with affordable and responsible financial solutions that will help them pursue more effective resilience strategies. Without the right savings, credit, payments, and insurance products, many simply will not be able to afford the solutions that innovators are developing.

# **Emerging Solutions:**

Financial institutions, particularly in Europe, are increasingly integrating climate risk into investment decisions, pricing models, financial products and risk assessments. This shift is driven by regulatory frameworks, such as the Bank of England's climate stress testing. Accurate climate risk modelling, stress testing, and innovative financial instruments—including green bonds, catastrophe bonds, and blue bonds—are enhancing risk pricing.

# **Emerging Solutions:**

Stronger intelligence platforms and opportunity-matching systems can better surface, validate, and connect high-potential grassroots innovations with investors. Aggregating and verifying data while leveraging AI, IoT and digital tools to track and communicate outcomes in real time can build trust and unlock capital.

# **Emerging Solutions:**

Innovative approaches to climate risk insurance, anticipatory payments, and adaptation finance—including pay-as-yougo models, adaptive lending, and carbon revenue sharing—are helping unlock access for households and microbusinesses.

# Innovation Hotspots: Where Climate and Economic Resilience Intersect

While the challenges of building climate and economic resilience are vast, the Earthshot portfolio reveals where innovation is already delivering tangible results. These innovation hotspots highlight the broad sectors where solutions—spanning commercial ventures, social enterprises, and nonprofit models—are creating measurable economic outcomes alongside climate benefits.





01 Sustainable Aquaculture & Agriculture

A wave of innovation is reshaping smallholder farming and local aquaculture into resilient, adaptive livelihoods. From AI-powered precision tools to regenerative practices, these solutions are reducing input costs, increasing yields, and diversifying incomes—all while boosting food security and carbon storage.

# 02 Circular Waste & Water Systems

Circular models are converting waste and water stress into local value. Innovations strengthening both environmental performance and local livelihoods include: smart irrigation, decentralised reuse technologies and platforms that turn waste into revenue.

# Examples:

Boomitra (soil carbon monetisation); Frontier Markets (tech access for rural women farmers); Oceanfarmr (smart aquaculture tools); Materra (climate-resilient cotton); Igbehinadun Agroforestry (agroforestry for degraded lands).

# Examples:

Craste (crop waste into packaging); Instituto BVRio (circular economy platforms); M-taka (waste digitisation and sorting); Koolboks (solar-powered refrigeration); S4S Technologies (preserving food and reducing loss).



# 03 Resilient Infrastructure

From low-carbon materials to nature-based defences, green infrastructure is protecting cities and communities from climate extremes, ensuring continuity for services and businesses while creating jobs and avoiding damage costs.

# 04 Risk Reduction & Early Warning Systems

Risk-management innovations—including parametric insurance, early warning systems, and predictive analytics—are helping communities and enterprises act before disaster strikes. These tools are reducing losses, improving preparedness, and unlocking climate finance.



# 05 Access-Driven Energy & Basic Services

Innovative models for delivering energy and essential services—especially in last-mile contexts—are expanding access, reducing emissions, and improving resilience. Whether through pay-as-you-go solar, microgrids, or community governance, these solutions are enabling long-term, locally anchored outcomes.

# Examples:

Basel Agency for Sustainable Energy (financing municipal infrastructure); Bogota's Environmental Secretariat (urban greening); SMV Green Solutions (electric transport); Planet Indonesia (locally-led development planning).

# Examples:

RISCO (digital risk assessments); Mesoamerican Reef Fund (reef-based insurance); ATEC Global (biodigesters with embedded services); Working Power (solar access plus climate education).

### **Examples:**

d.light (solar access via mobile payments);
Eco Mensajería (electric last-mile delivery);
Global Alliance of Territorial Communities (indigenous-led resource governance);
Harvest Wild (wild food and carbon markets);
Savory Institute (regenerative land hubs).

# Innovation & Impact

# Unlocking Action Through Shared Economic Prosperity



The Earthshot Prize spotlights some of the world's most promising early-stage climate solutions. With over 5,000 nominations from 150+ countries, Earthshot identifies and helps scale innovations that tackle critical issues like clean energy, regenerative agriculture, and climate-smart supply chains.

Insights from the Earthshot portfolio reveal a powerful shift: while global conversations often focus on funding gaps, these emerging innovations point to underexplored commercial opportunities that, if nurtured, could create significant impact. From climate-tech start-ups reducing emissions to e-mobility ventures linking clean transport to local livelihoods, these solutions represent early signals of how investment could eventually flow at scale.

However, many remain in a pre-commercial or early-commercial phase, seeking relatively small but catalytic amounts of capital—often between \$250,000 and \$5 million—to validate, refine, and grow. Utilising innovative ways to trickle in the patient, blended capital needed to fund these critical climate and development actions now offers the potential to unlock billions later.

# Identifying the Untapped Investment Opportunities

To understand what success could look like, we are going to look at promising examples of innovators who are working to show that climate and economic resilience can be achieved at scale.

Rather than dwelling on gaps, we spotlight innovative solutions and business models that are already being tested and deployed globally.

These market-driven innovations illustrate emerging climate solutions that are aiming to create measurable economic benefits such as job creation, higher household incomes, increased financial resilience, and, depending on their business model, improved business profitability. To identify and evaluate key innovators, we focused on key components of Shared Economic Prosperity (SEP) across four key pillars:

# **O1 Economic Wellbeing**

Improves financial health, job security, income, education, healthcare, and overall standards of living within communities.

# **02 Equity and Access**

Promotes fairness by addressing systemic barriers and ensuring all individuals—especially historically underserved or excluded groups can access opportunities, resources, and services. This includes gender equity, social inclusion, and removing structural inequalities.

# **03 Economic Resilience**

Enhances the ability of communities, businesses, and individuals to withstand and adapt to economic shocks due to climate impacts, and natural disasters.

# **04 Financial Inclusion**

Ensures access to affordable financial services, such as banking, credit, and insurance, that empower individuals and businesses to manage their finances, invest, and grow.

This framework allowed us to identify innovators aligned with the four pillars of shared prosperity and building resilience to climate challenges. Of the 2,200 Earthshot-nominated solutions analysed, almost 20% were identified as engaging with all four pillars. A clear differentiator was often financial inclusion—empowering underserved communities with access to credit, savings, payments, and insurance reinforces outcomes for the other pillars of shared economic prosperity.



# Earthshots from Around the Globe

This world map presents 25 promising innovations spanning all five Earthshots (Protect and Restore Nature; Clean Our Air; Revive Our Oceans; Build a Waste-Free World; and Fix Our Climate). They include a mix of commercial ventures and not-for-profits, with eight explored in detail.

These solutions represent a spectrum of maturity. Some are established and already scaling their impact, while others are earlier-stage and testing their models in new markets or sectors. Most are seeking relatively modest but catalytic amounts of capital to grow, often in the form of patient, blended finance.

Collectively, they demonstrate how commercially minded models—if supported appropriately—can help bridge the funding gap between philanthropic/ development finance and mainstream investment capital. From job creation to increased financial resilience and reductions in public-service costs, these innovations signal the potential of a more inclusive, scalable climate economy.



1	Abalobi	Empowering small fishing communities with technology to record catch data and improve sustainable fishing.
2	ATEC Global	Aggregating emission reductions across the Global South via IoT stoves, generating income from carbon markets.
3	Basel Agency for Sustainable Energy	Offering efficient cooling solutions through an innovative model without upfront costs or performance risks.
4	Bogota's Environmental Secretariat	Offering financial and employment incentives to help small truck owners adopt zero-emission technologies.
5	Boomitra	Reducing emissions and boosting farmer profits through soil restoration and regenerative agriculture.
6	Coast 4C	Protecting coastal habitats by leveraging the global boom in seaweed demand; replenishing fish populations.
7	Craste	Converting crop waste into products; encouraging better agricultural practices, and more revenue for farmers.
8	d.light	Expanding energy access in Africa by financing affordable solar solutions for underserved populations.
9	Eco Mensajería	Delivering goods to the last-mile with e-bikes, creating formal jobs for vulnerable people.
10	Frontier Markets	Empowering women farmers in rural India to adopt smart agriculture, renewable energy, and climate technologies.
11	Global Alliance of Territorial Communities	Facilitating direct and sustainable funding to Indigenous Peoples and local communities via a common platform.
12	Harvest Wild	Converting agricultural and forestry waste into surfactants and palm oil substitutes using microbial technology.

13	Igbehinadun Agroforestry	Reforesting and conserving wildlife by providing Nigerian communities with biodiversity-based employment.
14	Instituto BVRio	Increasing waste recovery, monitoring and recycling rates, and improving waste pickers' livelihoods.
15	Koolboks	Providing refrigeration on demand for businesses when they need it, using a pay-as-you-go model.
16	M-taka Waste Solutions Limited	Building a sustainable zero-waste circular economy with technology, data analytics, and social incentives.
17	Materra	Developing climate-resilient cotton production through regenerative and hydroponic farming, powered by AI.
18	Mesoamerican Reef Fund	Coordinating reef recovery plans and risk financing to help coastal communities sustain natural benefits.
19	Oceanfarmr	Offering regenerative aquaculture to locals to foster environmental stewardship amongst coastal communities.
20	Planet Indonesia	Conserving ecosystems by enabling indigenous and local communities to lead social-ecological governance.
21	RISCO	Insuring coastal communities against natural catastrophes and incentivizing them to protect local mangrove forests.
22	S4S Technologies	Reducing food waste amongst smallholder farmers through solar-powered dryers and processing equipment.
23	Savory Institute	Driving large-scale ecological regeneration that generates financial and ecological benefits for local communities.
24	SMV Green Solutions Private Limited	Providing e-rickshaw ownership to improve livelihoods and cut emissions in peri-urban and rural India.
25	WorkingPower	Connecting frontline communities with impact investors to build wealth and power through climate solutions.

# **Case Studies**

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# **Featured Case Studies**

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# Coast 4C

Scaling-up protection and restoration of coastal habitats and boosting local incomes by leveraging the global boom in seaweed demand.



d.light

Enabling energy access in Africa by providing and financing affordable solar solutions to people without access to electricity.



# Eco Mensajería

Pioneers in sustainable last mile delivery, creating formal jobs and a fair network of independent deliveries with carbon neutral mobility for vulnerable men and women.



# Frontier Markets/ SLB:MK

Enabling 1 million women small farmers to become climate champions in rural India through technology, sustainable products, smart agriculture, renewable energy adoption, finance and shared insight.



# RISCO

Increasing coastal and financial resilience of vulnerable communities by insuring them against natural catastrophes while funding 'mangrove-positive businesses' through the sale of insurance and blue carbon credits.



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ABALOBI

Transforming small-scale fisheries through digital tools, transparent supply chains, and fair market access for coastal communities.



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Boomitra

Incentivising land restoration and improving farmer incomes through satellite-verified carbon credits.



# **S4S Technologies**

Reducing food waste amongst smallholder farmers through solar-powered dryers and processing equipment.

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Revive Our Oceans

# Coast 4C

Country of Operation: Philippines
 Website: coast4c.com

Scaling-up protection and restoration of coastal habitats and boosting local incomes by leveraging the global boom in seaweed demand.











Through improved genderequitable livelihood opportunities in seaweed aquaculture, Coast 4C empowers marginalised coastal communities to become good stewards of coastal resources, leveraging their unique local ecological knowledge and connection to the environment to help protect and restore coastal ecosystems and replenish fish populations.

Accessible financial and technical services are provided to enable sustainable seaweed farming practices that enhance yields and quality, whilst improving climate resilience. Coast 4C provides a guaranteed buy-back of sustainable production at a premium price, ensuring communities that demonstrate good stewardship are rewarded, while feeding global demand for responsible seaweed. Shortening the value chain and introducing efficiency improvements and traceability enables Coast 4C to create a profitable business opportunity whilst delivering impact across the 4Cs of Community, Commerce, Conservation and Climate.

# Climate Change

# **Climate Mitigation**

Protection and restoration of 407
 hectares of blue carbon habitats are
 estimated to avoid approximately 11,200
 tonnes of CO2 emissions annually.

# **Climate Adaptation**

- Protection of 5,868 hectares of coastal zones through eight locally managed marine protected areas, increasing protection from less than 1% to 17%, with each area about 450 times larger than the national average.
- Around 60,000 people have benefited directly from reduced marine plastic pollution and improved coastal management.
- Disaster risk mitigation plans and climate-resilient guardhouse infrastructure have been implemented to safeguard vulnerable livelihoods.
- Single-use plastics have been eliminated from seaweed farming, with reuse and recycling programmes significantly reducing local marine plastic pollution.

# Shared Economic Prosperity

# **Economic Wellbeing**

Improved seaweed farming has boosted yields and incomes for 680 households. GROW farmers saw mortality drop from up to 80% to under 10%, enabling 100% of year-one farmers to return, double their investment, and triple farm size. Seaweed farming remains a vital income source, especially for low-income households.

# **Equity and Access**

77% of farm input package recipients are women, and female representation in fisheries leadership has increased from 10% to 30%. The iMPA model and GROW programme embed local knowledge and prioritise community-led implementation, expanding opportunity for underserved groups.

# **Economic Resilience**

Coast 4C co-develops digital tools and low-cost sensors with farmers to improve decision-making and reduce losses. Regenerative seaweed farming, paired with community-led conservation, helps build long-term ecological and economic resilience to climate and market shocks.

# **Financial Inclusion**

Coast 4C has enabled financial inclusion for 8,800 people—82% of whom are women—by providing access to locally appropriate savings and loan services. Financing for farm input packages and the use of digital traceability tools help smallholders build credit histories, improving their bankability and unlocking access to formal financial services.







#### **Keys to Success**

- Coast 4C identified a high-potential but overlooked entry point: smallholder seaweed farmers, who represent the only proven path to scale yet remain underserved due to systemic neglect and bias.
- Financial inclusion is unlocked by making smallholder farmers bankable—bundling enterprise loans with insurance in tailored farm finance products, and packaging this with introduction of self-help financial services that increase access to savings and credit whilst building financial literacy
- A hybrid nonprofit–for-profit structure preserves mission integrity while enabling blended finance and investment.
- Legal and financial mechanisms are strategically used to secure community rights and align incentives toward environmental stewardship.
- A behaviour-led, community-based approach underpins all operations, driving long-term change, deeper economic participation, and more durable resilience outcomes.

### Insights from the Innovators

- Cloud-based mobile tools are helping Coast 4C deliver services more efficiently and improve traceability across thousands of smallholder seaweed farms. However, these technologies are not a substitute for trusted, on-the-ground relationships. They are designed to enhance—not replace—the team's ability to work effectively. Off-the-shelf traceability and farm management apps have proven inadequate in smallholder seaweed contexts. As a result, Coast 4C has partnered with SaaS and tech companies to co-develop tailored solutions, collaborating with those most committed to adapting their tools to fit these unique needs.
- · Low-cost sensors and AI are creating new opportunities to improve farm productivity, manage nutrients, restore biodiversity, and deliver ecosystem services. Yet, existing technologies such as large marine monitoring buoys are often expensive, provide only singlepoint data, and are prone to theft-making them unsuitable for smallholder use. Seaweed growth can vary significantly over short distances, and the scientific understanding of the factors driving growth and mortality remains limited. Coast 4C works closely with farmers to draw on local ecological knowledge, formulate testable hypotheses, and develop the necessary tools to generate granular data for more predictive and precise farm management.

- The "iMPA" (inclusive Marine Protected Area) model was co-designed with communities to embed local knowledge and priorities in area-based conservation. Coast 4C acts as a facilitator—building capacity while enabling communities to lead implementation.
- The farm inputs package is grounded in behavioural science to support widespread adoption of best practices. The GROW programme prioritises behaviour change over the provision of inputs, reducing seaweed mortality from 50–80% to below 10%.
- With support from the TRANSFORM initiative (Unilever, UK FCDO, EY), Coast 4C is scaling digital tools and replicating the GROW model to expand impact efficiently and sustainably.

### Funding so Far:

Sales revenue, angel investors, government/ public sector grants

### Funders:

Conservation International Ventures (debt), Hatch Blue (global aquaculture catalyst) - equity. TRANSFORM Initiative (Unilever, UK FCDO, EY) grant. Ocean Risk and Resilience Action Alliance - grant. Global Seaweed Coalition - grant. Rumah Investments - equity and debt. Potato Impact Partners - debt. Rising Tide Investments - equity. Angels - equity.

#### **Business Model:**

- Primary revenue comes from the sale of sustainably farmed seaweed to responsible global brands, initially targeting the carrageenan market and expanding into high-growth segments like biopolymers.
- Secondary revenue is generated through the Farm Inputs Package, designed to increase supply by supporting farmer productivity and resilience.
- Additional revenue streams include the sale of recycled end-of-life fishing nets.
- Future revenue opportunities lie in commercialising data and ecosystem services, leveraging the environmental value of restored coastal ecosystems, downstream product integration, franchise opportunities, vertical integration.

### **Investment Opportunity:**

Coast4C is already in revenue (USD1m in 2024), servicing global demand for responsible seaweed. We are seeking to close a \$1m pre-Series A raise, 25% already secured, so that we can drive efficiency improvements and scalability, in preparation for a larger Series A raise in 12-18 months that will see us expanding into central and southern Philippines, Indonesia and beyond. The simple, proven and replicable technology boosts economic participation and growth on a local level as well as delivering on climate goals and value for investors.

# THE EARTHSHOT PRIZE

# Clean Our Air



- Country of Operation: DR Congo, India, Kenya, Nigeria, Tanzania, Uganda, Zambia
- Website: dlight.com

Enabling energy access in Africa by providing and financing affordable solar solutions to people without access to electricity.













d.light designs and distributes a range of transformative offgrid clean-energy products such as solar home systems, lanterns, appliances and clean cookstoves.

The company reaches customers primarily through its last mile distribution network, consisting of more than 10,000 commission based sales agents that reach remote rural communities. d.light's proprietary pay-as-yougo platform registers customers, processes payments, and manages devices remotely, handling more than 6 million transactions per month. d.light's vision is to transform the lives of 1 billion people with sustainable products by 2030.

# Climate Change

# **Climate Mitigation**

d.light has helped avoid 35 million kilograms of CO<sub>2</sub>e emissions by replacing kerosene, diesel, and open fire cooking. This shift also significantly reduces indoor air pollution, improving health outcomes.

# **Climate Adaptation**

 By providing reliable clean energy and clean cookstoves, d.light reduces vulnerability to fuel price shocks, environmental degradation, and health risks linked to traditional energy sources. Their products extend productive hours and support livelihoods, enhancing communities' ability to adapt to climate and economic challenges.

# 💁 Shared Economic Prosperity

# **Economic Wellbeing**

- Clean cookstoves reduce medical expenses from improved indoor air pollution.
- Reliable lighting extends study hours, improving educational outcomes and long term prosperity.
- Over 10,000 sales agents from rural communities are trained and employed, promoting local economic inclusion.
- New revenue is created through charging services and enabling micro-entrepreneurs to extend business hours, increasing income and job opportunities.

# **Equity and Access**

- d.light has sold over 30 million products, improving energy access for 160 million people in underserved communities.
- Subsidized clean cookstoves generate income for over 30,000 low-income households monthly, while electricity access enables micro-entrepreneurs to extend business hours, increasing incomes and jobs.

# **Economic Resilience**

- The Pay-Go model buffers households from upfront costs, reducing vulnerability to financial shocks.
- Electricity powers rural life, helping break the cycle of energy poverty, improve quality of life, access new income and finance, and contribute to economic growth.

# **Financial Inclusion**

- More than 2 million products have been sold via Pay-Go to customers often lacking bank accounts, providing their first access to finance.
- d.light's proprietary Pay-Go platform enables customers without traditional banking access to afford solar products through manageable installments. Linking to global carbon markets supports subsidized pricing, widening financial accessibility and expanding credit opportunities.







# **Keys to Success**

- d.light's proprietary Pay-Go technology, embedded in all products, has transformed energy access by enabling low-income households to pay in affordable installments.
- Linking households to global carbon markets allows d.light to offer highly subsidised products, expanding access while generating verified, traceable carbon credits.
- Success has been built from the ground up through a focus on local job creation, community-driven innovation, and a trusted last-mile rural distribution network.

### Insights from the Innovators

- A human-centered approach to product design ensures long-term reliability in challenging environments—hot, dusty, and humid conditions where customers live and work.
- Carbon credit financing has unlocked large-scale distribution of subsidised clean cookstoves.
- We use our Atlas platform and sales agent network to vet customers using traditional fuels and track clean cookstove adoption, ensuring impact and carbon market compliance.
- Co-founding GOGLA reflects our leadership in shaping industry standards and fostering collaboration.
- With rising interest rates challenging securitised financing models, building a robust pipeline of carbon credit buyers is key to sustaining scale and affordability.

# Funding so Far:

Impact funds, DFIs, investors and lenders

### Funders:

Inspired Evolution, Shell Energy Ventures, FMO, Norfund, Swedfund, Acumen Fund, Kawi Safi Venture Lenders: Cygnum Capital, SunFunder, DFC, Nithio, Trade Development Bank

# **Business Model:**

 For-profit model with products purchased by paying an initial deposit and over time on a pay-as-you-go basis until the product is paid off.

### Investment Opportunity:

With over \$100M USD turnover d.light has proven its financial viability as well as its climate credentials, aiming to impact 1 billion lives with sustainable products by 2030. Growth will be driven by existing partners across Africa and Asia, and by expansion into new markets such as the Democratic Republic of the Congo and Zambia.

# THE EARTHSHOT PRIZE

• Clean Our Air

# Eco Mensajería

Country of Operation: Dominican Republic
 Website: ecomensajeria.com.do

Pioneers in sustainable last mile delivery, creating formal jobs and a fair network of independent deliveries with carbon neutral mobility for vulnerable men and women.











Eco Mensajería operates a sustainable last-mile delivery service mainly powered by a fleet of electric motorcycles across 20 cities. It is the only courier service in the region with the option to formally employ its riders, offering stable income, digital financial access, and inclusive benefits like life and health insurance.

Their value-driven solution enables a sustainable economy and carbon neutral value chain to reduce  $CO_2$  emissions, noise, water and air pollution in cities, facilitating both economic participation and climate action from those at the very bottom of the pyramid.

# Climate Change

# **Climate Mitigation**

Eco Mensajería has avoided over 3.3 million kilograms of CO<sub>2</sub>e by replacing gasoline-powered vehicles with electric motorcycles across 20 cities. This shift has also eliminated the consumption of over 11.5 million kWh and avoided contamination of 2.56 million gallons of water by eliminating oil use, contributing to cleaner air, quieter streets, and healthier urban ecosystems.

# **Climate Adaptation**

 By building a carbon-neutral last-mile delivery service, Eco Mensajería helps cities reduce their exposure to environmental risks like air and water pollution. Their electric fleet and sustainable logistics model reduce urban heat, improve air quality, and strengthen the resilience of low-income communities to climate-related health and economic shocks.

# 💁 Shared Economic Prosperity

# **Economic Wellbeing**

Eco Mensajería has created over 1,000 formal green jobs, offering stable income, digital payments, and benefits like life and health insurance—an uncommon standard in the informal courier sector. Through the "Super Delivery" network and vehicle ownership schemes, the company improves quality of life and income generation for vulnerable workers.

# **Equity and Access**

Its inclusive employment model provides formal jobs and independent contracts for people historically excluded from the labor market. Over 340 full-time riders have received wages, insurance, and access to bank accounts—often for the first time—bridging gender and income gaps in urban mobility and logistics.

# **Economic Resilience**

Eco Mensajería's flexible job structures and vehicle ownership incentives build long-term economic security for workers. Their courier model shields riders from exploitative gig work norms by offering dignified, consistent employment. Access to electric vehicles reduces workers' fuel dependency and exposure to price volatility.

### **Financial Inclusion**

Each formal job includes digital wage payment and requires a bank account, introducing hundreds of workers to the financial system for the first time. Riders gain access to loans and savings products, unlocking new pathways for economic advancement. The company's vehicle ownership programme doubles as a savings and credit mechanism.







# **Keys to Success**

- Unique fidelity program enables vehicle ownership after two years of outstanding service, motivating employees and turning them into sustainability ambassadors.
- Every delivery includes a CO<sub>2</sub> reduction certificate and an eco-label featuring the national tree leaf, building environmental awareness and brand value.
- Competitive pricing, flexible solutions focused on efficiency, alongside strong eco credentials, drives customer loyalty and market retention.
- By creating dignified green jobs and improving the income of their independent supplier network, Eco Mensajería demonstrates that environmental sustainability and inclusive economic growth can go hand-in-hand.

### Insights from the Innovators

- Our flexible employment model allows for task- or time-based pay, catering to diverse formal/independent workers and market needs.
- We fully outsource last-mile logistics, including vehicles and personnel, optimising delivery efficiency and sharing cost savings.
- We offset our entire surplus carbon footprint annually through local renewable energy credits.
- Strategic contracts with national and multinational companies allowed us to create 350+ new formal jobs and our own network of 200+ delivery providers—a replicable model for scale with local and global brands in all cities around the world.
- Our collaboration with the Dominican Ministry of Labour produced the country's first ethical courier code; a model we aim to scale across other markets.

# Funding so Far:

Self-funded through sales revenue (US\$10MM+ sales in last 4 years)

### Funders:

The founder Edison Santos, loans from private banks

### **Business Model:**

- Price per task: From a single on demand task, # of deliveries made, or monthly fixed number of errands as a business plan.
- Price per time: Personalized schedule for any type of operation with the number of delivery agents and days required. Full day, half day, short or long periods of time in any location.

### **Investment Opportunity:**

To reach its target of 5x growth by 2027, Eco Mensajería requires investment to digitize data driven operations, governance, scale its electric fleet, install renewable energy points and expand to new cities. With the right financing, the company could avoid over 500,000 additional tonnes of CO<sub>2</sub>e, while deepening formal economic inclusion in underserved urban communities while promoting more sustainable cities beyond the Dominican Republic. • Fix Our Climate

# Frontier Markets /SLB:MK

Country of Operation: India
 Website: frontiermkts.com/she-leads-bharat

Enabling 1 million women small farmers to become climate champions in rural India through technology, sustainable products, smart agriculture, renewable energy adoption, finance and shared insight.











She-Leads Bharat: Mahila Kisaan (SLB:MK) is a joint effort by Frontier Innovations Foundation, Frontier Markets, catalytic funders, research partners and a network of agriculture, finance, and renewable energy service providers.

Through its tech-enabled "Meri Saheli" platform and network of women leaders (called Sahelis), SLB:MK cultivates an informed and empowered network focused on supporting women in agriculture, bringing catalytic capital to support the design, testing, and delivery of womencentric solutions, encouraging companies to adopt a gender lens. This approach aims to drive economic resilience and transformative shifts for rural women farmers while unlocking financing opportunities.

# Climate Change

### **Climate Mitigation**

 SLB:MK has enabled the avoidance of 2.69 million tonnes of CO<sub>2</sub>e emissions through the distribution of clean energy technologies—including solar torches, lanterns, lamps, street lights, and biomass cookstoves. These low-emission solutions reduce dependency on fossil fuels and promote sustainable living across rural India.

# **Climate Adaptation**

 Through access to climate-smart agricultural practices—including resilient seeds, solar-powered water pumps, efficient irrigation, and organic fertilizers—SLB:MK equips women smallholder farmers to adapt to shifting climate conditions. Their platform strengthens local food systems and buffers rural households against environmental stressors and erratic yields.

# Shared Economic Prosperity

# **Economic Wellbeing**

Over 85,000+ Direct and Indirect Jobs created through the SLB: MK Model. With over 25,000 rural women entrepreneurs.

# **Equity and Access**

SLB:MK addresses structural gender gaps in agriculture by training and digitizing 50,000 rural women and appointing 10,000 women as banking correspondents— targeting 1 million rural women entrepreneurs catering to 100 million households by 2030 - driving inclusive growth, gender equity, and climate resilience at the last mile.

### **Economic Resilience**

The program strengthens rural supply chains and builds community-level resilience through diversified income opportunities, secure food production, and access to climate-resilient agri-tech. By positioning women at the center of climate adaptation, SLB:MK reduces household vulnerability to both climate and financial shocks.

### **Financial Inclusion**

SLB:MK unlocks access to finance by linking rural women with digital banking and formal credit systems. Sahelis help local farmers navigate applications, bridging trust and literacy barriers. This facilitates first-time financial access for thousands of women opening doors to savings, loans, and long-term financial security.

### CASE STUDIES







# **Keys to Success**

- SLB:MK empowers rural entrepreneurs through inclusive commerce, distributing value across the supply chain and enabling broad-based economic participation.
- The Al-integrated Meri Saheli platform built by and for women—enables a trusted network of rural women to deliver insights, generate leads, provide support, and manage last-mile distribution in local languages.
- The gender-inclusive, bottom-up model has become a proven, high-growth strategy for climate-aligned businesses entering rural Indian markets.
- By unlocking capital, supporting entrepreneurship, and generating deep insights on women farmers, SLB:MK has reframed rural women not as passive recipients but as frontline climate champions.

### Insights from the Innovators

- Women comprise 57% of agricultural laborers and 28% of cultivators in India—yet are largely overlooked in agri-tech and climate solutions.
- Key barriers include lack of relevant insights (Insight Gap), limited access due to geography and digital literacy (Access Gap), and market models that overlook women's spending patterns (Profitability Gap).
- We succeed by addressing barriers head-on through a women-led platform tailored to their needs and realities.
- Deep community engagement ensures solutions are culturally grounded, inclusive, and respectful of indigenous knowledge.
- Empowering women in agriculture is not only just—it is essential for climate resilience and sustainable food systems.

#### Funding so Far:

Sales and service revenue, impact investors, government/public/corporate sector grants

#### Funders:

Rajasthan Govt - DolT (State Govt), Lesing Mauritius Limited (Corporate), ENGIE Rassembleurs d'Energies (Corporate), Unreasonable Capital Fund 1.L.P (Corporate), Acumen Fund Inc (Development Trust), Schneider Electric Energy Access Asia (Corporate), TPG Rise Fund (Corporate), Echoing Green Signal Fund (Development Trust), Beyond Capital Ventures (Corporate)

#### **Business Model:**

- Product sales to rural customers ranging from solar energy solutions, clean cookstoves, agricultural equipment, to digital banking services, financial services to consumer goods like household items, hygiene products, and more.
- Data and Insights on rural markets, consumer behavior, and preferences packaged to other organizations, researchers, or companies looking to understand these markets better.
- Delivery of services including R&D pilots, marketing campaigns, and training for other organizations.

### **Investment Opportunity:**

The women-assisted, digital gig worker model connecting markets is both innovative and scalable. Partnering with the Indian government, NGO partners, and corporate partners like Microsoft, Global Parametrics, existing investors, and others—SLB:MK is ready to scale its work across India and explore global south partnerships that will leverage its technology, learnings and business model to replicate with "She-Leads Africa," empowering women gig workers to assist women farmers in Kenya, Uganda, and Nigeria. Revive Our Oceans

# RISCO

Country of Operation: Singapore, Philippines
 Website: restoration.finance

Increasing coastal and financial resilience of vulnerable communities by insuring them against natural catastrophes while funding 'mangrove-positive businesses' through the sale of insurance and blue carbon credits.









RISCO increases the financial resilience of vulnerable coastal communities by insuring them against natural catastrophes, and by directing profits generated through the sale of these insurance products to train and fund the start-up or scaling of 'mangrove-positive businesses'. This results in a self-sustaining virtuous cycle that protects coastal communities, increases mangrove cover, and financially empowers coastal communities.

# B Climate Change

### **Climate Mitigation**

RISCO's model leverages mangrove restoration to capture and store carbon at scale. In its pilot phase, 1 hectare of mangroves was safeguarded, storing 1,000 tonnes of CO<sub>2</sub>e. In its first year, the venture is projected to restore 50,000 square meters, sequester over 50,000 tonnes of CO<sub>2</sub>e, and scale blue carbon trading to further monetize ecosystem protection.

# **Climate Adaptation**

RISCO's parametric insurance model is structured to provide \$10 million in climate insurance coverage for coastal cities and communities in the first year, building on pilot implementations and municipal endorsements. Its parametric insurance model delivers fast, transparent payouts and is designed for areas with limited financial infrastructure, increasing adaptive capacity for the most climatevulnerable populations.

# Shared Economic Prosperity

### **Economic Wellbeing**

RISCO has successfully piloted seaweed farming (training 30 women) in the Philippines, and Integrated Mangrove Aquaculture Systems (IMAS) in India's Sundarbans in India, proving the viability of diverse mangrove-positive business models. Year one projections anticipate 3,000+ local entrepreneurs empowered through inclusive, nature-based livelihoods that strengthen local economies and ecological resilience.

# **Equity and Access**

RISCO's inclusive finance model prioritizes underserved coastal communities—especially women—offering low-interest loans, hands-on training, and market entry for those traditionally excluded from financial systems. By pairing access to income and insurance with conservation, RISCO ensures that the benefits of climate protection reach those most at risk.

### **Economic Resilience**

- RISCO's "restoration flywheel" links climate insurance, microfinance, and blue carbon trading to deliver compounding impact. This integrated model restores ecosystems while reducing disaster risk and safeguarding livelihoods. By integrating aquaculture with restoration, RISCO increases food security, natural protection, and rural employment—Unlocking 70M in blue carbon revenues at an IRR of 17% over 40 years on a planned 1720 hectare project.
- Through IMAS (Integrated Mangrove Aquaculture System) pilots in India's Sundarbans, RISCO increases coastal resilience of the village, food security, and sustainable employment.

# **Financial Inclusion**

RISCO redefines credit access by tying loan terms to ecological restoration. This innovative approach opens up finance for unbanked populations, rewards stewardship, and builds long-term financial security through climate-aligned lending.







# **Keys to Success**

- RISCO's integrated model goes beyond closing a market gap; it creates a powerful link between financial resilience and ecosystem restoration.
- Parametric insurance protects coastal cities and communities from climate-driven disasters with fast, transparent payouts.
- Microfinance supports 'mangrove-positive businesses' through training, seed funding, and access to markets; rewarding entrepreneurship that restores nature.
- Blue carbon trading adds a third income stream, monetizing ecosystem services and enhancing financial sustainability.
- Preferential loan terms are tied to mangrove restoration commitments, turning ecological restoration into a requirement for access to finance.
- RISCO's innovative "restoration flywheel" fuses insurance, debt, and nature-based solutions, delivering climate protection, economic empowerment, and ecological renewal as a unified outcome.

### Insights from the Innovators

- By pairing low-interest capital with hands-on training and market access we have reimagined inclusive finance to empower community-led conservation.
- Our risk modelling simulations identify priority zones where mangrove restoration will yield the greatest protective impact.
- Post-restoration data will measure reduced insurance claims, allowing for profit-sharing between RISCO, the insurer, and the community.
- A pivotal milestone was receiving endorsement letters from two city governments, committing to purchase RISCO's insurance, promote it to their coastal villages, and support our conservation-linked finance model.
- RISCO was highlighted in the G20 meeting in Brazil as an innovative business model for Financing Nature-Based Solutions.

### **Funding so Far:** Self-funded, grants

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# Funders:

Grants from SwissRe, Convergence, Conservation International and from one of the largest players in the consumer electronics space (grants are earmarked for design and feasibility study activities, the venture itself is self funded at this point)

### Business Model:

- Insurance premiums: Revenue from the sale of parametric insurance policies to communities, municipal, and village governments.
- Inclusive lending returns: Interest income generated from microloans provided to local entrepreneurs launching or scaling 'mangrovepositive businesses.
- Blue carbon trading: Revenue from the sale of verified blue carbon credits generated through mangrove restoration, unlocking long-term ecosystem value.

### Investment Opportunity:

The potential to transform mangroves' natural risk-reduction value into investable financial products remains largely untapped in emerging markets. RISCO is pioneering this model; where insurance revenues help finance ecological restoration, and restore ecosystems, in turn, reduce future risk and improve financial returns. Revive Our Oceans

# ABALOBI

Country of Operation: South Africa, Kenya
 Website: abalobi.org

Transforming small-scale fisheries through digital tools, transparent supply chains, and fair market access for coastal communities.









ABALOBI is a non-profit and social enterprise unlocking economic, social and ecological resilience in small-scale fisheries through an integrated digital platform. Built by and for fishers, ABALOBI enables realtime catch reporting, traceable supply chains, and fair market access.

The 'Fish with a Story' marketplace model directly connects artisanal fishers to conscious buyers, including chefs and retailers. Fishers receive fair prices while buyers gain full visibility into sourcing and sustainability metrics. By placing fishers at the centre of digital, datadriven fisheries governance, ABALOBI supports thriving coastal economies while ensuring fishing stocks are sustainably fished and ocean ecosystems are protected.

# Climate Change

### **Climate Mitigation**

Fishers increased sustainable species in their catch from 40% to 88.5%, reducing overfishing and supporting healthier marine ecosystems. Localized supply chains cut emissions by minimizing cold chain logistics and long-haul transport.

### **Climate Adaptation**

Digital catch recording enhances transparency and improves fisheries monitoring, enabling adaptive management. The ABALOBI app supports data-driven governance and community stewardship, strengthening resilience of coastal fishing communities.

# Shared Economic Prosperity

### **Economic Wellbeing**

Over 1,600 small-scale fishers have achieved 3–4x increases in revenue through direct market access, benefitting over 7,800 community members. Within six months of joining the ABALOBI platform, participating households reported 94% food security. Localised, fair-trade seafood supply chains are enabling thriving coastal economies built on sustainability and dignity.

# **Equity and Access**

ABALOBI's fisher-led digital ecosystem levels the playing field for historically excluded communities. Over 150 women actively participate across the value chain, from quality control and logistics to record-keeping and community leadership.

### **Economic Resilience**

By integrating fisheries management, traceability, and direct sales, ABALOBI creates resilient local economies rooted in ecosystem health. With 88.5% of catches now from sustainable species (up from 40%), and real-time data supporting climate-smart fishing, communities are better positioned to adapt to ecological and market shifts while preserving marine biodiversity.

### **Financial Inclusion**

Fisher-owned data unlocks new pathways to finance, insurance, and policy advocacy. ABALOBI's model offers business cash advances and savings tools, enabling fisher households to build financial stability. Transparent pricing and mobile-based transactions further ensure direct payment and economic agency, especially for communities long excluded from formal financial systems.More than 2,000 smallscale fishers—many previously operating informally—now have access to digital identities, tailored training, formal recognition, and financial tools.

### ABALOBI







# **Keys to Success**

- Co-designed digital tools built with fishers, increasing trust, usability, and long-term adoption.
- 'Fish with a Story' marketplace model links small-scale fishers directly to key markets.
- Fisheries management, traceability, and fair-trade pricing in one digital ecosystem.
- Women in operational roles fosters community-wide engagement in sustainable seafood systems.
- Mobile-based systems enable transparent pricing and direct payment, improving financial inclusion for fisher households.
- Trusted partnerships with chefs, NGOs, and public agencies help scale impact and advocacy.
- Amplifying the voices of small-scale fishers, reconfiguring their broken food system while enabling critical and localized ocean stewardship.

### Insights from the Innovators

- Co-designing technology with fishers ensures usability, trust, and long-term behaviour change.
- Our digital logbooks foster a culture of transparency and stewardship, enabling more sustainable catch practices.
- The 'Fish with a Story' branding has become a market differentiator—linking consumers to community-led conservation.
- Local sales reduce the carbon footprint and strengthen circular economies in coastal regions.
- A profitable marketplace allows us to re-invest in further growth and onboard more fisher communities (to date, many operational costs are covered).

### Funding so Far:

Sales revenue, concessional loans, equity, government and philanthropic grants

### Funders:

Catalytic and project grants from The Happel Foundation, The Oak Foundation, Coleman Family Ventures, Cartier for Nature Foundation, Schmidt Marine Technology Partners, Ocean Risk and Resilience Action Alliance, Worldwide Fund for Nature, Norwegian Agency for Development Cooperation (NORAD), African Union, Margaret A. Cargill Philanthropies (MACP), United Nations Development Programme (UNDP), Resource Legacy Fund, FishChoice – FisheryProgress, McPike-Zima Foundation, Fourfold Foundation; and concessional loans from lenders including CI Ventures, Ninety One, and SAB Foundation.

### **Business Model:**

- Marketplace transaction fee revenue from sales facilitated via ABALOBI Marketplace.
- Software-as-service fees via customisation for governments and NGOs to support fisheries digitisation.
- Full traceability and fair trade certification unlock access to premium buyers and new revenue.
- Advisory services for fisher cooperatives, seafood traceability certification, and inclusive market design.
- Data services include aggregated, fisherowned data used (with consent) for sustainability reporting, impact metrics, and climate finance applications.

#### Investment Opportunity:

ABALOBI aims to scale its fisher-centred digital ecosystem to additional coastal regions across Africa and the Global South. With a proven model, strong fisher engagement, and rising demand for traceable seafood, strategic investment would enable ABALOBI to expand access to tools, launch new products like digital finance and insurance, and deepen climatesmart fisheries governance. • Fix Our Climate

# Boomitra

 Country of Operation: India, Kenya, Argentina, Paraguay, Mexico, Colombia, Costa Rica, Namibia, Botswana, Mongolia
 Website: boomitra.com

Incentivising land restoration and improving farmer incomes through satellite-verified carbon credits.









Boomitra is a for-profit technology platform enabling farmers and ranchers across the Global South to generate income through carbon credits earned from sustainable land management.

By using remote sensing and AI-powered models to measure soil organic carbon, Boomitra unlocks access to international carbon markets rewarding farmers for climate-positive practices such as cover cropping, rotational grazing, and reduced tillage.

The platform helps smallholder farmers transition to regenerative agriculture without upfront cost. Boomitra partners with local agribusinesses, cooperatives, and NGOs who train farmers and ensure ongoing support. Verified improvements in soil health translate into tradable soil carbon credits, which are sold to global buyers. Farmers then receive a majority share of the revenue helping restore land while boosting rural incomes.

# Climate Change

# **Climate Mitigation**

- Over 10 million tonnes CO<sub>2</sub>e sequestered across more than 5 million acres through sustainable land management.
- Verified soil carbon credits from regenerative practices such as cover cropping, agroforestry, reduced tillage, and improved grazing enhance carbon storage in soils.

# **Climate Adaptation**

- Improved soil organic matter increases water retention and drought resilience for agricultural lands.
- Regenerative agriculture practices strengthen ecosystem health and biodiversity, making farming systems more climate-resilient.

# 💁 Shared Economic Prosperity

# **Economic Wellbeing**

- Majority of revenue from carbon credit sales goes directly to farmers, generating new, performance-based income streams.
- 3,175 entrepreneurs supporting farmers with jobs and training across Boomitra's projects.
- 12,800+ women farmers with land parcels as small as 0.5 acres included in the North India project.

# **Equity and Access**

- Boomitra addresses systemic barriers by prioritizing smallholders and women farmers who have historically been excluded from carbon markets and financial services.
- The model promotes gender equity and social inclusion by enabling participation without upfront costs, internet access, or specialized equipment—removing key structural obstacles.
- Partnerships with NGOs and cooperatives provide accessible, community-led training and ongoing support, ensuring that underserved groups can fully engage in regenerative agriculture and carbon finance.

# **Economic Resilience**

- Al and satellite-based monitoring simplifies participation and reduces verification costs by up to 90%, increasing payouts and long-term viability.
- End-to-end model covering measurement, reporting, verification, credit sales, and revenue sharing strengthens farmer livelihoods while promoting ecosystem restoration.

# **Financial Inclusion**

- Boomitra's model removes financial barriers by eliminating upfront costs, allowing farmers to participate in carbon markets without loans or credit requirements.
- Revenue-sharing payments and digital tools help farmers build financial literacy and secure new income streams, increasing their access to formal financial services over time.
- 150,000+ farmers engaged, many smallholders accessing global carbon markets for the first time.







# **Keys to Success**

- Al and satellite-based monitoring enables accurate, cost-effective measurement at scale.
- End-to-end model covering measurement, reporting, verification (MRV), credit sales, and revenue sharing simplifies participation for farmers.
- Validation by leading registries such as Verra and Social Carbon ensures credibility and market acceptance.
- Partners with local NGOs, co-ops, and agribusinesses who train and support farmers in adopting regenerative practices—ensuring compliance and maintaining standards.
- No physical equipment or internet required; farmers can participate using the tools and equipment they already have, making it accessible in low-infrastructure environments.
- Flexible, scalable model that works across diverse geographies, soil types, and crop systems.

### Insights from the Innovators

- Soil is the second largest carbon sink after oceans—yet farmers in the Global South have been excluded from monetising this value.
- Verifying soil carbon via satellite and AI reduces costs by up to 90% compared to manual sampling which results in larger payouts for the farmers.
- New digital tools are being developed to give farmers visibility into performance and payouts via trusted intermediaries.
- Boomitra's farmer application delivers crop-specific agronomic insights, including soil moisture and key nutrient levels such as nitrogen, phosphorus, and potassium. This enables a distinctive model—AgTech and extension services funded by carbon—that supports smallholder farmers in restoring soil health while increasing crop yields.
- Boomitra works with over 100 partners worldwide, including non-profits such as the Farm to Market Alliance (FtMA) and Welthungerhilfe, global corporations like YARA, and large agribusinesses such as DCM Shriram.
- Channel partnerships through NGOs and cooperatives to manage farmer engagement and ensure best practice adoption.

### Funding so Far:

Revenue from carbon credit sales, philanthropic and investor support.

### Funders:

Foundations and Impact Investors such as Yara Growth Ventures, Tom Steyer and Kat Taylor, Jerry Yang, GIF (Global Innovation Fund), CBI (Commercial Bank International), and CTV (Chevron Technology Ventures).

#### Business Model:

- Carbon credit sales generate revenue by selling verified soil carbon credits on international voluntary carbon markets.
- Revenue sharing ensures the majority of carbon revenue is distributed to participating farmers, with Boomitra retaining a share for operations and growth.
- Boomitra provides AI and satellite-powered MRV services to carbon buyers, registries, and ecosystem partners (no charge to farmers/ ranchers for services).

### **Investment Opportunity:**

Boomitra aims to expand its reach to millions of farmers and scale across Latin America, Sub-Saharan Africa, and South Asia. With a validated MRV system, strong pipeline of carbon buyers, and growing demand for nature-based solutions, Boomitra offers a scalable model to unlock climate finance for smallholders while restoring ecosystems and improving food security. THE EARTHSHOT PRIZE

• Build a Waste-Free World

# S4S Technologies

Country of Operation: India
 Website: s4stechnologies.com

Tackling post-harvest losses and poverty through solar-powered food processing led by rural women farmers.







S4S Technologies is a womenled agritech company building a decentralised, solar-powered food ecosystem that tackles food loss, boosts farmer incomes, and slashes emissions.

By equipping women farmers with solar dryers and linking them to formal markets, S4S enables them to process and sell surplus produce locally—transforming them into microentrepreneurs and climate leaders.

Their innovation combines clean energy, financial inclusion, and traceable supply chains to create green livelihoods at scale. By enabling food preservation at source, S4S strengthens nutrition access, reduces methane-heavy food waste, and empowers women as economic decision-makers—creating climate and economic resilience in tandem.

# Climate Change

# **Climate Mitigation**

- Over 37,000 tonnes CO<sub>2</sub>e avoided annually by replacing fossil fuel processing with solar and hybrid biomass technologies.
- Significant reduction in methane emissions from decomposing food waste, a greenhouse gas 86 times more potent than CO<sub>2</sub>.
- Localized solar-powered food dehydration reduces transport-related emissions by minimizing the need for long-haul distribution.

### **Climate Adaptation**

- Decentralized food processing reduces post-harvest losses, improving food security and resilience to climate shocks.
- Enables rural farmers, especially women, to maintain income stability despite climate variability by preserving surplus produce.
- Partnerships with government and UN agencies support climate-resilient infrastructure and community capacity building.

# 💁 Shared Economic Prosperity

# **Economic Wellbeing**

- 300,000+ smallholder farmers benefit from reduced post-harvest losses and improved market access, increasing profits by over 15%.
- 2,000+ women farmers earning \$1,000– 1,500/year net profit, doubling household income.
- Creation of 200+ direct green jobs in rural communities.

# **Equity and Access**

- Women-led business model addresses systemic barriers by empowering rural women with land tenure rights, leadership development, and decision-making roles.
- Women's agency enhanced through land tenure rights, leadership development workshops and participatory governance.

### **Economic Resilience**

- Solar-powered decentralized processing reduces reliance on fossil fuels and fragile supply chains, strengthening local economic stability.
- Digital traceability tools enhance market transparency and buyer confidence, supporting premium pricing and sustainable livelihoods.

# **Financial Inclusion**

- Facilitated access to formal banking and credit through partnerships with Indian national banks, disbursing over \$2.5 million in loans to women farmers.
- Financial services have enable long-term agency and household decision-making, expanding economic opportunities beyond farming.







# **Keys to Success**

- Women-led, decentralised food processing model tailored to rural realities reduces waste, boosts nutrition, and empowers women as agri-entrepreneurs
- Financial inclusion facilitated through partnerships with Indian national banks—\$2.5 million in loans channelled to women farmers
- Strong market demand from corporates (e.g. Nestlé, Sodexo, Indian Railways) ensures sustained income and scale
- Government alliances across three ministries—Agriculture, Renewable Energy, and Food Processing—enable programme integration and access to subsidies
- UN partnerships (with UN Women and World Food Programme) support genderspecific training, programme design, and evaluation, ensuring robust delivery and global alignment
- Technical collaboration with Cisco, Bayer, Autodesk strengthens product development, traceability, and digital platforms

### Insights from the Innovators

- Solar-powered dehydration preserves nutrients and prevents spoilage at source reducing methane-heavy food waste.
- Formal earnings and land rights have shifted rural women's roles from unpaid labourers to decision-makers.
- Traceability tech built with Nestlé boosts transparency and buyer confidence across the supply chain.
- Decentralised processing slashes transport emissions and creates hyper-local green jobs
- Nutrition trials with the Gates Foundation showed measurable health gains from solar-dried food products.
- Co-location of food processing, clean energy, and market access creates a replicable model for resilient food systems.

### Funding so Far:

Sales revenue, government support, philanthropic grants, and corporate partnerships.

# Funders:

Public Sector (Ministry of Agriculture, Ministry of Renewable Energy, and Ministry of Food Processing in India), Development Agencies (UN Women, World Food Programme, USAID), Foundations and Impact Investors (Bill & Melinda Gates Foundation, Acumen, Accel), Corporate Partners (Nestlé, Sodexo, Autodesk, Bayer, Cisco (technical collaboration and market development)).

#### **Business Model:**

- Solar-powered dehydration units sold to women farmers, with financing often facilitated through partnerships with national banks (over \$2.5 million in loans disbursed to-date).
- Food sales include nutrient-rich, shelf-stable food products sold to institutional buyers including food multinationals and public sector entities (e.g. Indian Railways).
- Digital services such as traceability tools and supply chain tech co-developed with Nestlé to enhance transparency and efficiency.
- Advisory & Training underwritten through programme partners: bundled support for rural women agribusiness via training, nutrition guidance, and entrepreneurship development.

#### **Investment Opportunity:**

To meet its 2025 target of 30,000 women entrepreneurs and 3 million supported smallholders, S4S is expanding its hybrid solar-biomass dryer systems, launching grain-drying units, and scaling digital traceability platforms. With government subsidy pathways, proven impact, and a trusted brand among buyers, S4S offers a scalable solution for food security and climate adaptation.

# Funders & Future

06

# Mechanisms for Getting Finance Where It Matters

Building resilience at scale will require not just more capital, but better capital; financial mechanisms designed for the people, places, and innovations most often left behind. Many solutions are emerging, but to achieve impact at scale, finance must align more intentionally, directing resources to where they're most needed and adapting proven models to new contexts.

While promising tools exist, most remain underused or untested at the scale and in the settings required, particularly in low-income or climatevulnerable regions. To meet global needs, finance must shift: deploy what works, refine emerging models, and expand access to locally-led efforts. A diverse toolbox—from blended finance and insurance to carbon-linked revenues—can align capital with economic resilience and unlock long-term impact.

The challenge is no longer invention—it's application, adaptation, and scale.



# Blended Finance

Blended finance is the most proven tool for mobilising private capital into high-risk but essential resilience markets at scale, making solutions investable while keeping local innovators and communities at the centre.

# **How It Works**

- Common tools include first-loss capital, guarantees, and tiered capital stacks, which improve risk-return profiles and mobilise private investment.
- Capped returns are sometimes used to limit upside and ensure concessional capital stays focused on de-risking and enabling market access vs. boosting private returns.
- Private investors are incentivised to participate, due to reduced downside risk and the prospect of steady, risk-adjusted returns.
- Transparent structures and clear alignment of objectives across funders, intermediaries, and innovators are critical to success. Without this clarity, blended finance vehicles risk becoming overly complex and failing to attract capital at the scale needed.

# <sup>Case Study:</sup> Southeast Asia Clean Energy Fund II (managed by Clime Capital)

A \$175M blended finance vehicle designed to accelerate the low-carbon transition in frontier ASEAN markets, with a focus on Indonesia, Vietnam, and the Philippines.

The fund targets equity investments in early-stage companies and projects driving the low-carbon transition across key sectors such as energy storage, electric vehicles, and grid management solutions, while generating employment and promoting gender equality, aligning with the 2X Challenge's criteria for women's economic empowerment and leadership.

The fund targets equity investments in early-stage companies advancing clean energy and infrastructure solutions—such as energy storage, electric mobility, and grid management—while also generating employment and promoting gender equity, in line with the 2X Challenge criteria

# **Financial Model and Structure**

A two-tranche equity structure to mobilise capital and manage risk:

• Junior Tranche: Philanthropic and governmentbacked investors provide first-loss capital to

# **Other Examples:**

BlueOrchard MSME Support Fund uses concessional capital to absorb risk and unlock private investment into MSMEs delivering adaptation solutions. By protecting senior investors from initial losses, the fund enables capital flow to vulnerable markets critical to long-term resilience. This concessional capital, often provided by public or philanthropic sources (e.g. FSD Africa, BII) accepts below-market returns and is structured as a junior, first-loss tranche, directly de-risking the fund for commercial investors (BCG & BII, 2025). absorb early-stage risk and safeguard senior investors.

 Senior Tranche: Development finance institutions (BII, FMO, Norfund, CISCO Foundation) and private investors hold senior equity positions, benefitting from the reduced risk profile enabled by the subordinated junior tranche.

This transparent and aligned waterfall structure lowers the fund's weighted average cost of capital.

# How It Works in Practice

A ticket size of \$1–2M for early-stage investments, follow-on investments of \$5–10M

Technical assistance provided through a dedicated facility, offering capacity building and project development support to strengthen investees' commercial viability and scaling potential.

# Impact to Date

As of 2025, \$35M deployed across five projects in solar energy and e-mobility, expected to:

- Create or sustain 2K+ jobs.
- Avoid 27K t CO<sub>2</sub> emissions annually.
- Align with the Paris Agreement and the 2X Challenge for gender equality and sustainability.

Further information: BCG and BII, Scaling Blended Finance, 2025

Acumen Fund leverages blended finance and patient capital to back early-stage enterprises in LMICs that don't fit traditional scalability models. By combining concessional capital (e.g. DFID, Rockefeller Foundation) with private investment (e.g. JP Morgan), Acumen has invested in over 100 businesses in clean energy, agriculture, and water, including d.light and M-KOPA, which have impacted 100 million people across Africa, Asia, and Latin America (Acumen, 2024).



# Insurance

While not traditionally seen as an investment vehicle, insurance plays a critical role in enabling climate resilience finance by helping to de-risk markets, attract capital, and protect against cascading climate shocks.

# How It Works

- By lowering downside risk, insurance makes climate-exposed sectors more investable, supporting portfolio stability, regulatory compliance, and the creation of new markets.
- Insurance facilitates risk transfer by shifting

# climate-related financial burdens away from asset owners and investors, reducing uncertainty and improving liquidity.

- Parametric products offer quick, lower-cost payouts, but still face issues—like basis risk, where payouts may not match actual losses, and limited user adoption. When welldesigned, they can speed up recovery by triggering payments based on climate indicators like rainfall or wind speed.
- Aggregating across multiple risks, regions, and sectors ('Risk Pooling') improves affordability and scale.
- Insurance bundled with loans can expand access to adaptation finance, lower financing costs, and drive climate-smart investments.
- Cities, MSMEs, and communities are driving demand for financial protection, unlocking new revenue streams and investable markets for insurers.



# Case Study: Generali Global Corporate & Commercial (GC&C) in partnership with the United Nations Development Programme (UNDP)

Pioneering parametric insurance solutions to close the \$1.8 trillion global protection gap in climate-vulnerable markets. Launched in 2022, the initiative delivers rapid, pre-agreed payouts following climate shocks—such as cyclones, droughts and floods—helping governments, MSMEs, and communities recover faster, protect livelihoods and build resilience.

# **Financial Model and Structure**

Generali GC&C underwrites parametric insurance policies triggered by objective climate indicators (e.g. rainfall, wind speed, temperature), ensuring automatic, rapid payouts and predictable liquidity following climate events.

The partnership, through UNDP's Insurance and

Risk Finance Facility (IRFF), integrates parametric insurance with loans and adaptation finance to improve affordability, manage risk, and drive uptake; particularly for MSMEs and public sector clients in climate-vulnerable countries.

# How It Works in Practice

Trigger-based payouts are automatically released when pre-agreed disaster or climate thresholds are met, eliminating lengthy claims processes and providing swift access to funds.

Solutions are tailored for diverse sectors and geographies, including drought insurance for farmers, and wind risk coverage for renewable energy projects.

Working through the UNDP IRFF, Generali GC&C delivers solutions across LMICs, leveraging UNDP's presence in over 50 countries.

The IRFF aims to integrate insurance into public financial decision-making and scale protection for vulnerable communities as part of the InsuResilience Global Partnership, which targets 500 million people by 2025.

# Impact to Date

In Malawi, parametric payouts are triggered if droughts hit during sowing season, supporting household food security and stabilising livelihoods with immediate cash payments to farmers, enabling timely replanting and preventing harmful coping strategies.

In India, heat-index-based payouts provide direct cash transfers to informal workers, particularly women, when working becomes unsafe. This safeguards daily incomes and reduces vulnerability during increasingly severe heat waves.

By the end of 2023, over 232 million people were covered by climate and disaster risk finance and insurance solutions globally, marking significant progress towards InsuResilience's target of 500 million by 2025.

# **Further information:**

UNDP & Generali - Parametric Insurance to Build Financial Resilience, 2024

# Other examples:

Climate Insurance-Linked Resilient Infrastructure Facility (CILRIF) is an innovative insurance-backed solution designed to unlock investment in climateresilient infrastructure in vulnerable cities. The model combines long-term (10–20 year) pre-arranged climate insurance with a financing facility, where coverage is contingent on cities committing to invest in resilience measures. Backed by a \$125M first-loss equity commitment from the Green Climate Fund (GCF), CILRIF de-risks private capital and enables institutional investors to enter previously unbankable markets.

African Risk Capacity (ARC), ARC combines public sector funding from African governments, with private sector capital to provide parametric insurance for rapid disaster response to climate shocks. By pooling risks across African countries, it ensures quick payouts with support from institutions like the African Development Bank (AfDB) helping de-risk private investments.

# **Outcome-Based and Performance-Linked Finance**

Embedding impact metrics directly into financing terms drives accountability and rewards results, ensuring investments flow to solutions that deliver tangible impact and economic value at scale.

# **How it Works**

- Impact metrics can help translate resilience into investable value through indicators such as reduced flood risk (lower insurance costs), ecosystem restoration (e.g. blue carbon credits), or inclusive job creation. While some metrics are more established than others, they help signal performance and guide capital toward high-impact solutions.
- Instruments like resilience bonds, blue bonds, catastrophe bonds, and impact-linked loans embed resilience metrics into financing terms—linking investor returns to outcomes such as reduced risk, improved resilience, or verified social impact.
- In catastrophe bonds, investors purchase bonds whose proceeds are held in a trust account. If a predefined disaster (such as a wildfire or typhoon) occurs during the coverage period, part or all of the principal is paid out for recovery. If no event occurs, investors receive above-market yields. This structure offers risk-adjusted returns to investors while enabling governments to rapidly mobilise recovery funds and transfer risk off public balance sheets.

# Examples:

World Bank Catastrophe Bond – Philippines, a \$225 million bond issued in 2019 to provide the Philippines—one of the world's most disaster-prone countries—with financial protection against earthquakes and typhoons. Payouts are triggered when events meet predefined thresholds under the bond terms, enabling rapid access to recovery funds. The bond mobilises private capital to support resilience and reduce fiscal pressure. In 2013, Typhoon Yolanda resulted in over 6,300 deaths and \$12.9 billion in damages, underscoring the urgent need for prearranged disaster risk financing. LeapFrog Investments uses outcomelinked equity strategies to finance inclusive businesses in LMICs. By tying returns to impact metrics—such as access to essential services and job creation—it attracts commercial capital while delivering measurable socio-economic and climate resilience outcomes. Its \$2 billion portfolio demonstrates how private equity can align investor returns with long-term development objectives (LeapFrog Investments, 2024).



# **Inclusive Carbon Financing Models**

Creating the financial viability needed to attract investors and scale impact by turning climatepositive activities that help adaptation enterprises serve vulnerable communities into steady, verifiable cash flows.

LMICs are particularly well positioned to generate carbon credits, with revenues increasingly being used to finance inclusive, low-carbon solutions. As voluntary carbon markets grow—projected to reach \$10–40 billion by 2030—this model offers a powerful opportunity to fund climate resilience at scale (CGAP, 2024). Through carbon revenue sharing with households and communities, adaptation enterprises can subsidise green assets and incentivise long-term behavioural change.

# **How it Works**

- Carbon revenues can enable affordability and scale by generating verified carbon credits from activities like clean energy, regenerative agriculture, and ecosystem restoration.
- Revenues from credit sales can be reinvested to lower consumer prices, expand market reach, and create steady cash flows; essential for attracting commercial capital.
- Pay-As-You-Go and inclusive payment models offer flexible payment approaches, replacing large upfront costs with affordable, recurring

payments, making adaptation solutions like solar lighting, clean cookstoves, and water systems accessible for low-income households—while providing predictable income streams for enterprises and, in some models, revenue-sharing benefits for customers.

- These models help bridge the financing gap, making solutions affordable for households while supporting enterprise cash flow.
- These models help bridge the financing gap for early-stage and community-based solutions, enabling adaptation enterprises to extend affordable access to households and microbusinesses who often become long-term customers and active participants in the resilience economy.

# Examples:

d.light uses carbon credit revenues to subsidise solar home systems and clean cookstoves for underserved communities across Africa and Asia, enabling affordable energy access while generating predictable cash flow for investors.

**Koko Networks** leverage carbon revenues to offer bioethanol cookstoves to lowincome households. This model links carbon finance with inclusive business growth, climate mitigation, and resilience in vulnerable markets.





# Funders & Future

# Aggregation Platforms and Local Intermediaries

Aligning and structuring capital at scale by creating investment vehicles that bundle projects and standardize outcomes. This enables finance to flow to locally-led solutions, ensuring investments reach frontline actors.

# **How It Works**

- For investors, local intermediaries can reduce transaction costs, improve risk-return profiles, and unlock access to fragmented, hard-to-reach markets.
- Intermediaries often combine concessional and commercial capital (blended finance) to reduce downside risks, catalysing private investment into resilience markets that would otherwise remain underfunded.
- Global platforms pool smaller or fragmented projects into diversified investment vehicles, this can create investable scale for institutional investors while standardising impact metrics and reporting.
- Local intermediaries help early-stage and locally-led projects access funding.
- Regional impact funds, accelerators, and grassroots finance platforms aggregate smaller transactions, offer technical support, and build investable pipelines.

# Case Study: Accelerating Business to Empower Rural Women in Agriculture (ABERA)

A business accelerator collaboration between CGAP and IDH launched in 2024, ABERA works with local financial and agricultural service providers across Africa and Asia to develop climate-resilient financial solutions for rural women farmers—focusing on economic inclusion in vulnerable rural economies.

# **Programme Model and Structure**

An accelerator and cohort model, convening 8–10 local, non-competing financial and agricultural service providers (including agri-finance institutions, ag-techs and cooperatives) for a structured accelerator programme. Participants receive, tailored technical assistance, and peer learning to design, test, and scale gender-inclusive, climate-smart financial products. Harnessing data-driven design, each company undergoes an Inclusive Business Analysis (IBA) to identify commercial opportunities and co-create solutions that align climate resilience, gender inclusion and business sustainability.

# How It Works in Practice

Other Examples: Giving to Amplify Earth Action (GAEA),

launched by the World Economic Forum in 2023, is a global platform convening over 100 public, private, and philanthropic partners to catalyze blended finance and donor collaboratives for nature and climate. GAEA aims to help unlock the estimated \$3 trillion in annual investment needed for global climate and nature goals with a strong focus on impact measurement and collaboration (World Economic Forum, 2024). Companies receive hands-on support to pilot financial solutions—such as agri-loans, digital finance products, and regenerative agriculture models—tailored to rural women's needs. The cohort platform fosters collaboration and standardisation, enabling participants to share lessons, refine models, and accelerate the adoption of gender-responsive climate finance approaches.

# Impact to Date

Companies from ABERA's first cohort are already demonstrating tangible results:

- BRAC Tanzania Finance achieved 99%
   on-time repayment in its women-focused
   agri-finance product.
- Agribusiness Intervention identified 30% post-harvest losses in one area, reduced to 8% through targeted financial solutions.

# Further information:

CGAP & IDH - Accelerating Business to Empower Rural Women in Agriculture,, 2025

**TerraFund for AFR100** channels blended finance and technical assistance to grassroots NGOs, SMEs, and community groups restoring land across Africa. By aggregating smaller restoration projects and providing flexible capital, TerraFund unlocks local nature-based solutions and bridges the financing gap for grassroots initiatives (World Resources Institute, 2024).



# We Have the Mechanisms, Now We Need Momentum

Taken together, these mechanisms lay the foundation for a more inclusive and resilient investment model that balances investor returns with lasting prosperity. From blended finance and outcome-based models to insurance and carbon-linked revenues, the tools are in place but underused. The challenge now is not invention, but application and scale. To meet urgent global needs, finance must shift—deploying proven models, expanding their reach, and directing capital to the grassroots.

The capital exists. The solutions are ready. Now, alignment is essential to ensure finance delivers maximum impact and resilience reaches those who need it most.



# **Resilience Demands Investment Beyond Capital**

Unlocking climate and economic resilience at scale depends not just on capital or innovation, but also on the strength of the partnerships between those developing frontline solutions and those financing them. Yet, these two communities—innovators and investors—often operate in silos. Bridging that divide is essential to unlocking the finance, knowledge, and networks that early-stage, high-impact solutions need to grow.

# Innovators Must Be Visible and Investors Must Be Engaged Early

Many high-impact solutions remain invisible to investors—not due to lack of merit, but to limited access or misaligned positioning framing—while investors struggle to find risk appetite, aligned investment opportunities.

These examples of early engagement and curated pipelines demonstrate how building trust and understanding can drive capital flows:

• Curated pipeline platforms and initiatives such as Earthshot's Launchpad and the Climate Finance Lab illustrate the power of curated pipelines and storytelling to connect locally rooted innovators with aligned capital. The Climate Finance Lab, in particular, develops and launches innovative finance instruments with early input from public and private investors—mobilizing over USD \$3.5 billion to date.

- Online platforms such as Marketplace by Convergence and Aceli Africa help investors source climate adaptation and inclusive finance opportunities through structured deal rooms and shared metrics.
- Pitch forums and convenings, including Adaptation Futures, CIF events, and the AVPN Climate Action Platform, give early-stage ventures direct access to funders and visibility within key networks.
- Accelerators like Village Capital and Katapult Ocean provide tailored support, visibility, and pathways to capital for ventures advancing climate resilience and regenerative business models.
- Data tools such as the UNDP Climate Finance Explorer can help funders identify gaps and direct capital, while also helping innovators find suitable finance opportunities.



# **Strategic Partnerships Drive Market Access**

Capital alone doesn't scale innovation. Long-term, strategic partners can embed solutions into real-world systems and connect innovators with critical enablers—such as utilities, infrastructure providers, or supply chains—who can unlock durable market opportunities. Without these essential linkages, even the best-funded ideas often struggle to gain traction, reach users, or achieve meaningful impact at scale.

# Opportunities for pursuing strategic partnerships include:

- Partnership platforms like Earthshot's Global Alliance are crucial for connecting innovators to supply chains, buyers, enabling partners across industries, and critical service partners who support legal, IP, marketing, and beyond. Successful collaborations highlight the importance of strategic partnerships in scaling and integrating resilience solutions.
  - Living Seawalls, a 2021 Earthshot Finalist, secured £500,000 from DP World to scale internationally, with 1,000 panels to be installed at Jebel Ali Port in Dubai.
- Boomitra's £300,000 partnership with DP
   World supports regenerative agriculture
   and farmers in the Global South, enabling
   CO<sub>2</sub> removal through soil carbon credits.

- Venture accelerator platforms connect startups with industry players to leverage experience, networks and market access.
  - The Climate Innovation Lab (CIL) is advancing sustainable water management in India.
- Newlab is facilitating deep-tech pilots for mobility and energy in New York.
- Plug and Play Tech Center is helping scale clean energy and water management solutions with corporations like BP and Nestlé.
- Procurement platforms—such as the Health Product Procurement Platform—can help channel institutional demand toward high-impact innovations through strategic purchasing, driving large-scale adoption and accelerating market integration.





# Deeper Systems Change is Needed to Break Out of Sectoral and Institutional Silos

Many promising resilience innovations stall not for lack of ideas or capital, but because systems remain fragmented. Donors, DFIs, private investors, and governments often work in silos, with misaligned mandates, risk appetites, and timelines.

This fragmentation leads to broken innovation pipelines — from pilot to scale, or from grant to investment. Deeper systems change is needed to bridge innovation to impact at scale, including:

Embedding innovation into national and corporate systems through government procurement, corporate supply chains, and public-private partnerships — so that solutions proven at the local level are not stuck in perpetual pilot mode but are absorbed into national and sectoral strategies.through procurement, partnerships, and supply chains. **Strengthening multi-actor platforms** that go beyond financing. True resilience-building requires coordinated efforts around co-design, knowledge sharing, and institutional capacity-building — not just capital. This means creating spaces where community innovators, investors, public agencies, and technical experts can work side-by-side from the outset and facilitate multi-actor collaborations that goes beyond financing to include knowledge sharing, co-design, and capacity-building.

Realigning incentives and breaking institutional silos across sectors and levels of governance. For example, DFIs and climate funds could adjust risk frameworks to better accommodate early-stage or locally-led innovations. Government ministries could collaborate across infrastructure, environment, and finance to co-develop long-term pipelines for adaptation and resilience. Private sector actors could work with local communities to de-risk and co-invest in scalable solutions, breaking institutional silos and align incentives across public, private, and community actors to build robust, long-term pipelines for local solutions.



# Validating Innovation and De-Risking Investment is Vital

As highlighted in this report, viable solutions often fall outside traditional investment parameters—not due to lack of potential, but due to missing validation tools (e.g. pilot programs to prove realworld impact, third-party certifications, early customer traction, or standardized impact metrics).

De-risking approaches are essential to close this gap and help high-impact innovations reach scale by generating the evidence investors need to assess and scale promising innovations.

# **Effective approaches include:**

**Technical assistance and capacity-building,** which help entrepreneurs refine their business models, strengthen governance, and improve financial planning — all critical for meeting investor expectations and achieving long-term viability.

**Pilot and seed funding,** which enables innovations to be tested and validated in real-world conditions,

generating the data and proof points needed to attract follow-on investment from public or private sources.

**Blended finance structures,** which combine concessional capital (e.g. grants or first-loss capital) with commercial investment to lower the perceived risk for private investors and make high-impact innovations more financially attractive.

**Impact measurement frameworks,** which quantify and communicate the social, environmental, and resilience benefits of a solution — helping investors understand its full value beyond financial return, and enabling more informed decision-making.



# Governments and Multilateral Institutions Have a Critical Role in Establishing a Supportive Environment

Investment and innovation also depend on the broader policy and regulatory environment. Supportive frameworks including clear regulations, public procurement pathways, and inclusive financial systems—help innovations reach new markets, secure contracts, and access risksharing tools.

Governments must also ensure financial systems work for low-income populations and local intermediaries, such as microfinance institutions, cooperatives, and community banks. Inclusive regulation with simplified rules and proportionality can unlock capital from the ground up, boosting resilience and creating viable markets for climate solutions.

Multilateral institutions play a pivotal role in shaping these enabling environments by coordinating cross-border efforts, setting international standards, and providing technical assistance and capacity-building support to governments.

Beyond financial inclusion, the public sector must actively create the conditions for innovation adoption—especially through public procurement. Many climate resilience innovations—such as those addressing waste, water, air quality, or energy—need to be integrated into public service delivery systems, particularly at the municipal level. Yet public procurement processes are often opaque, slow, and overly complex, effectively locking out early-stage or non-traditional providers. For many innovators, especially those working in the business-to-government (B2G) space, these barriers are deal-breakers.

There is a growing call for procurement reform to allow municipalities and public agencies to become engines of innovation, not bottlenecks. This includes shifting to more agile, outcomes-oriented procurement models; creating pathways for early-stage solutions to pilot and scale through public systems; and fostering partnerships that embed innovation into long-term public infrastructure and service delivery.

Ultimately, achieving resilience at scale depends not only on capital but on strengthening the ecosystem itself. This means building:

- · visible pipelines of investable solutions,
- responsive and inclusive regulation,
- strategic procurement pathways, and
- strong partnerships that connect public demand with private innovation.

These are not optional extras—they are the enabling architecture that allows climate innovations to thrive in the markets and communities where they are needed most.





# Building Bridges to a Resilient Future

Too often, a disconnect exists between the people building climate and economic resilience on the ground and those financing the solutions. Innovators are developing powerful, practical models in communities worldwide, while many investors remain committed to scaling climate adaptation and resilience—if riskreturn expectations are aligned. Yet, systemic gaps persist and the effective tools that are already in place to de-risk capital remain underused, especially where financing is most urgently needed.

This report has set out to help bridge that divide. By listening to and learning from both groups, we've surfaced lessons that can assist others in navigating these fault lines; whether you're an entrepreneur refining your business model, or a funder shaping your strategy for impact and scale. The insights below reflect not just what is working, but why—and how we can move faster together.



# A Blueprint for Delivering Impact at Scale

Across diverse geographies and sectors, a new generation of innovators is proving that climate and economic resilience can go hand-in-hand. These ventures are not only protecting communities and ecosystems but also building viable, scalable businesses.

The following insights are drawn from an aggregate of discussions and learnings from The Earthshot Prize (TEP) pool of innovators actively working in this space. These shared success factors reveal what makes these models work and offer a blueprint for others looking to deliver impact at scale: O1 Think of resilience not as charity, cobenefit or compliance, but as a product or service people need and will pay for —because it protects or grows livelihoods and makes businesses more resilient.

**Examples:** Services that monetize direct risk reduction such as flood management, drought-resilient farming, energy access, regenerative agriculture or circular resource use.

O2 Building with (not for) communities ensures solutions are relevant, trusted, and used—leading to both social and financial sustainability.

**Examples:** Co-creating with smallholder farmers or informal settlements to build local ownership, trust, and relevance.

 $03\,$  Diversify your revenue model to de-risk and build resilience into the business.

**Examples:** Combining service fees, product sales, ecosystem service payments, and sometimes public contracts.

O4 Leverage blended and staged financing; build the foundation with grants, but design with a pathway to commercial viability from the start.

**Examples:** Early-stage grant or concessional capital supporting testing, iteration, and community engagement, followed by revenue-based financing or private capital.

05 Design with scale in mind —create growth through models and tools others can adopt, adapt, and replicate.

**Examples:** Franchise-like models for community infrastructure; platform tech for farmers or SMEs; local training hubs; partner networks.

06 Harness tech and data for dynamic impact tracking and make results visible, verifiable, and actionable —key to attracting funders, scaling operations, and reinforcing the resilience case.

**Examples:** Use of AI to predict crop yields, soil health or flooding risk; IoT sensors for water or energy usage; mobile platforms for tracking real-time livelihood data and income shifts; satellite data to monitor forest or reef restoration, or ecosystem changes. 07 Don't just build a business, build an ecosystem. Collaboration with public and private partners offers access to new markets, users, and policy frameworks—enabling faster growth and embedding resilience into broader systems.

**Examples:** Working with municipalities, utilities, insurers, NGOs, cooperatives, or value chain actors to integrate and scale.

08 Inclusive asset financing models are essential to responsibly and sustainably scale innovations amongst low-income customer bases who often lack savings and access to basic financial products and services.

**Examples:** Pay-as-you-go models, subsidy schemes and carbon revenue sharing for green asset finance.

09 Financial inclusion unlocks resilience. Meet people where they are and evolve with their needs. Access to savings, credit, insurance, and digital payments enables people to manage shocks and invest in the future—but only when products are tailored to their realities.

**Examples:** Pay-as-you-go solar enabling asset ownership; crop or flood insurance linked to mobile payments; savings groups integrated with digital wallets; revenue-based financing for informal entrepreneurs; credit scoring based on farm or income data.

# Key Shifts in the Strategies and Actions of Investors

The journey to finance climate resilience is revealing crucial lessons, particularly for investors and funders who are at the forefront of efforts to scale climate and economic resilience innovations and agendas.

The following insights are built on existing research and direct insights from the CGAP network and TEP Launchpad investors who have either invested in these solutions or expressed strong interest. These leading actors are adapting their strategies and approaches, and the following points highlight key shifts in their understanding and action: O1 Perceived high-risk misses crucial opportunities. More sophisticated risk assessment and blended finance must be deployed to engage with frontline solutions.

**Example:** <u>Aceli Africa</u> offers financial incentives and data-driven insights to lenders, enabling them to reduce real and perceived risks when funding agricultural SMEs in East Africa.

O2 Emerging metrics (e.g. risk reduction per dollar invested, avoided losses) show that investing in climate adaptation reduces risk helping attract impact-driven investors who see the societal and economic value of resilience.

**Example:** The <u>Global Resilience Index</u> Initiative (GRII) helps investors and insurers more accurately price climate risk, creating stronger financial incentives to fund climate resilience solutions.

03 Traditional large-scale investments often bypass growing MSMEs vital for local resilience; utilize tailored financial instruments and aggregation mechanisms to channel capital into the underserved 'Missing Middle' and support the resilience of informal micro businesses.

**Example:** <u>The Local Infrastructure</u> <u>Development Fund</u> by FSD Africa and PIDG aggregates smaller infrastructure projects to create investable opportunities for commercial capital, targeting critical local resilience needs. 04 Focus on rapid growth excludes many highimpact, community-embedded ventures. Investors with a long-term perspective can take advantage by offering patient capital and flexible models that prioritize durable resilience outcomes alongside financial returns.

**Example:** <u>The Livelihoods Fund</u> combines upfront investment with revenue-sharing models over 10–20 years to support land restoration and sustainable farmer income generation, allowing for long-term impact.

05 Climate risk analysis should be embedded into core financial practices, including investment decisions and pricing, and be used to underpin efforts on resilience and risk reduction. Ignoring and undervaluing climate risk is a fundamental oversight that leads to critical failures. Conversely, however, climate risk should also not be overvalued or automatically shied away from, which could lead to the unintended exclusion of climate exposed segments, geographies, or value chains.

**Example:** Many banks now adopt TCFD-aligned frameworks to incorporate climate risk into credit models and portfolio stress-testing, providing clearer risk assessments for climatesensitive investments. It is however critical that such risk analysis provide the basis for a proactive discussion around how to help clients bolster their resilience, not merely to exclude people exposed to risk. 06 Blended finance is vital and should be used to unlock commercial capital. Use it as a tool to de-risk investments and attract private sector participation in challenging resilience markets.

**Example:** <u>Climate Investor One</u> utilizes concessional capital to de-risk project development in renewable energy markets, attracting private investors in emerging markets with the promise of risk-adjusted returns.

07 Investors focused on broader impact are learning that capital alone is insufficient. Enabling ecosystems for scaling resilience have power to affect systemic change; cultivate partnerships and collaborations between innovators, corporations, and governments.

**Example:** The Climate Innovation Lab connects startups with municipalities in India to implement sustainable water management solutions, driving adoption through key industry partnerships.

08 Early-stage ventures often require more than just funding; look to provide holistic support, including technical assistance, pilot funding, and robust impact measurement to build viable business models and investor confidence.

**Example:** The Global Climate Innovation Fund offers both financial backing and technical support to early-stage climate ventures, helping them refine their models and build confidence for future funding rounds.

# The Path Forward is Connection, Collaboration, and Collective Impact

Climate and economic resilience are no longer future concerns they are today's imperative. The innovators profiled in this report are showing what's possible. The funders supporting them are revealing what's needed. Together, they offer a roadmap for those ready to build and back solutions that meet real needs and withstand real shocks.

Our goal is simple: to reduce the friction between ideas and investment, between frontline action and financial systems. By learning from what works and what doesn't—we can make it easier for others to connect, replicate, fund, and scale resilience everywhere.

The opportunity is real, the solutions are here and closing the gap is possible.



# Terminology

Term	Definition	Source
Climate Adaptation	Actions taken to adjust to actual or expected changes in climate and its effects. In human systems, it seeks to moderate or avoid harm or exploit beneficial opportunities.	IPCC
Climate Smart Agriculture	An approach that transforms agricultural systems to support food security under climate change, aiming to increase productivity, build resilience, and reduce emissions.	FAO
Regenerative Agriculture	A farming system focusing on soil health and ecosystem enhancement, also addressing water, fertilizer, and more.	Regeneration International
Sustainable Aquaculture	Aquaculture that meets current needs without compromising future generations, addressing environmental, economic, and social sustainability.	FAO
Basic Services	Fundamental services for human well-being, including water, sanitation, energy, healthcare, and education.	-
Blended Finance	Use of development/philanthropic funds to mobilize private capital for sustainable development by reducing risk and enhancing returns.	OECD
Blue Bonds	Debt instruments for raising capital for ocean and water-related projects and ecosystems.	World Bank
Catalytic Capital	Investment that is patient, risk-tolerant, and concessionary, aiming to mobilize additional capital for impactful projects.	MacArthur Foundation
Concessional Capital	Financing with below-market terms, often from development or philanthropic sources.	-
Patient Capital	Investments in non-publicly listed companies/assets, e.g., private equity or venture capital.	-
Carbon Projects	Projects implemented with the aim of either removing greenhouse gas emissions or avoiding their release. These can generate revenues from the sale of carbon credits, calculated using	CGAP
Circularity (in Waste & Water Management)	Keeping resources in use as long as possible, maximizing value, and regenerating materials.	Ellen MacArthur Foundation
Climate Action	Efforts taken to reduce GHG emissions and/or to prepare for and adapt to both the current effects of climate change and the predicted impacts in the future.	EU
Climate Finance	Local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change	UNFCCC
Climate Mitigation	A human intervention to reduce emissions or enhance the sinks of greenhouse gases	IPCC
Climate Reilience	n this report, climate resilience refers to the capacity of individuals, households, communities, ecosystems, and economies to anticipate, absorb, adapt to, and recover from climate-related shocks and stresses, encompassing both mitigation efforts to reduce greenhouse gas emissions and adaptation strategies to manage unavoidable impacts.	-
Early Warning Systems	Integrated systems for hazard prediction, communication, and preparedness to reduce disaster risks.	UNDRR
Ecosystem Service Payments	Incentives for managing land to provide ecosystem services like carbon sequestration or water purification.	-
Economic Wellbeing	Improves financial health, job security, income, education, healthcare, and overall standards of living within communities.	-
Economic Resilience	Enhances the ability of communities, businesses, and individuals to withstand and adapt to economic shocks due to, climate impacts, and natural disasters.	-
Economic Vulnerability	Susceptibility of systems or individuals to economic shocks and stresses.	-

# **Terminology (continued)**

Term	Definition	Source
Equity and Access	Promotes fairness by addressing systemic barriers and ensuring all individuals—especially historically underserved or excluded groups—can access opportunities, resources, and services. This includes gender equity, social inclusion, and removing structural inequalities.	-
Extreme Weather Events	Severe weather events like heat waves, floods, and storms intensified by climate change.	-
Financial Inclusion	Financial inclusion means that all people and businesses have access to — and are empowered to use — affordable, responsible financial services that meet their needs. These services include payments, savings, credit, and insurance.	CGAP
First-Loss Capital	Concessional capital that absorbs initial losses to protect senior investors and attract private investment.	OECD
Frontier Markets	Developing nations with small, illiquid, riskier capital markets.	_
Frontier Technologies	Emerging technologies with high innovation potential like AI and blockchain.	_
Green Bonds	Bonds to fund environmental or climate-focused projects.	Climate Bonds Initiative
Green Infrastructure	Infrastructure using or mimicking nature to manage water, carbon, and provide protection.	_
Guarantees	Risk-sharing instruments where a guarantor covers losses if a borrower defaults.	OECD
Impact Investment	Investments generating measurable social/environmental impact alongside returns.	GIIN
Innovators	People or organizations that create and apply new ideas, methods, or products.	_
Intermediaries (Financial)	Entities facilitating funding flows between savers and borrowers, investors and projects, or other parties to a financial transaction e.g. banks and non-bank financial institutions such as investment funds, insurance companies, pension funds and other financial intermediaries,	_
Locally-led	In this report, refers to innovations, projects, solutions, and efforts where power, decision-making, and resources are driven by local actors—including individuals, households, communities, civil society, and local governments—who have genuine authority, equitable access to resources, and the capacity to design, implement, and monitor activities.	WRI
Locally-Led Adaptation	A new paradigm where local actors and communities lead decisions over how, when and where to adapt. LLA recognizes the value of local knowledge and ensures that local actors have equitable access to power and resources to build resilience.	-
Market-Driven Innovations	Commercially viable solutions driven by market demand.	-
Microgrid Solutions	Decentralized energy networks that can operate with or without the main grid.	-
Inclusive insurance	"Inclusive insurance is insurance targeted at low-income populations to protect them against the specific risks they face in exchange for a premium proportionate to those risks"	CGAP
Missing Middle	Financing gap faced by SMEs needing more than microfinance but less than large-scale investment.	-
Parametric Insurance	Insurance that pays out when triggered by predetermined events (e.g. a predetermined level of rainfall), rather than based on actual losses.	World bank
Revenue-Linked Finance	Finance where repayments are tied to the borrower's revenue performance.	OECD
Shared Economic Prosperity	The wide and equitable distribution of wealth that improves the wellbeing of the whole community.	-
Waterfall (Capital Stack)	A payment structure prioritising senior investors, with junior capital absorbing losses.	Convergence

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