CREATING HOPE IN CONFLICT: A HUMANITARIAN GRAND CHALLENGE

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Can Aggregator Funds Bridge the Energy Finance Gap in Humanitarian Settings?

GPA GLOBAL PLATFORM FOR ACTION

AUDAX CONSULTING

Contents

Background

Aggregator funds are innovative financing mechanisms that redistribute finance from multiple sources to enterprises that could not access it directly.

The P-REC Aggregation Facility (PAF) and the Refugee Environmental Protection (REP) Fund are aggregator funds due to commence in 2026 that aim to address the persistent financing gap for last-mile energy distributors in humanitarian settings.

These funds offer the potential to transform a fragmented, high-risk landscape into an efficient, investable market able to offer return to investors.

However, the humanitarian ecosystem needs to evolve to allow them to flourish, and they are only appropriate in specific settings and contexts.

Access to affordable, reliable, and sustainable energy remains one of the most pressing challenges in humanitarian settings, undermining health, safety, education, and livelihoods[1]. The humanitarian system is failing to meet these long-term energy needs. Traditional grant funding is volatile, fragmented, and increasingly scarce. Private capital, while vast, is scared off by the perceived high risks, small deal sizes, and the complex operating environments of humanitarian settings[2].

Existing blended finance mechanisms tend to favour large, multinational companies. Blended finance strategically combines concessional and commercial funding to de-risk investments, enhance project bankability and catalyse sustainable private-sector engagement. Such mechanisms have already demonstrated some success outside of humanitarian settings with models like Acumen's Hardest-to-Reach initiative. However, they struggle to reach the very last mile and typically focus on large, established multinational companies rather than smaller, local ones, despite such organisations selling a significant portion of products[3]. They have the local knowledge, adaptability, and reach to serve displaced and host communities, but are systematically excluded from finance. They are perceived as too small for development finance institutions and too risky for commercial banks and impact investors.

Aggregator funds have emerged as a promising mechanism to bridge this gap. They redistribute finance from multiple sources to companies who would not be able to access it directly, offering the potential to transform fragmented, small-scale transactions into an investible asset class that meets the due diligence and minimum transaction thresholds of institutional investors. This brief is based on a recent study commissioned by Grand Challenges Canada involving expert interviews with sector specialists, a workshop with 40 last-mile energy distributors, and an analysis of two pioneering funds: the **P-REC Aggregator Facility (PAF)** and UNHCR's **Refugee Environmental Protection (REP) Fund**.

[1] GPA. (2022). "The State of the Humanitarian Energy Sector: Challenges, Progress and Issues in 2022"
[2] Bisaga & To (2021) "Funding and delivery models for modern energy cooking services in displacement settings: A review"
[3] ESMAP, GOGLA, Dalberg (2024). "Off-Grid Solar Market Trend Report 2024".

The systemic barriers facing Micro, Medium and Small Enterprises (MSMEs)

Systemic barriers in the humanitarian energy landscape disproportionately impact MSMEs:

Fragmented & Short-Term Funding.

Donor funding is uncoordinated, politicised, and tied to short cycles (often 12 months), forcing MSMEs into a constant, expensive cycle of grant-chasing. This is fundamentally incompatible with the 5-10-year horizons needed for energy infrastructure or business growth.

Harmful Risk-Return Profile.

Commercial investors rely on broad, country-level risk perceptions that do not reflect on-the-ground realities. This is compounded by the often-high operational costs of serving fragile contexts and the low ability-to-pay of target populations.

Structural Exclusion of MSMEs.

Local distributors often lack the formal financial management systems required to pass investor due diligence. There is a critical scarcity of pre-investment technical assistance (TA) to help them become “investment-ready.”

Mismatch of Financial Products.

The sector is over-indebted yet debt remains the primary instrument offered. Products are not tailored to volatile contexts, and there is a particular gap in small-ticket financing (<$50,000) needed by the smallest, most locally embedded distributors.

Aggregator Funds: A Promising, but Complex, Solution

Aggregator (AG) funds are designed to tackle these exact problems by acting as a financial intermediary, pooling large-scale, risk-averse capital from sources like DFIs and institutional investors (Figure 1).

They then use concessional "first-loss" capital or guarantees to absorb the initial risk, making the overall proposition more attractive. They carve this large pool into smaller, MSME-appropriate tickets, centralising expensive and complex processes like due diligence, impact verification, and reporting, which individual MSMEs struggle to manage alone. In theory, AG funds transform a fragmented, high-risk landscape into an efficient, investable market able to offer returns to investors.

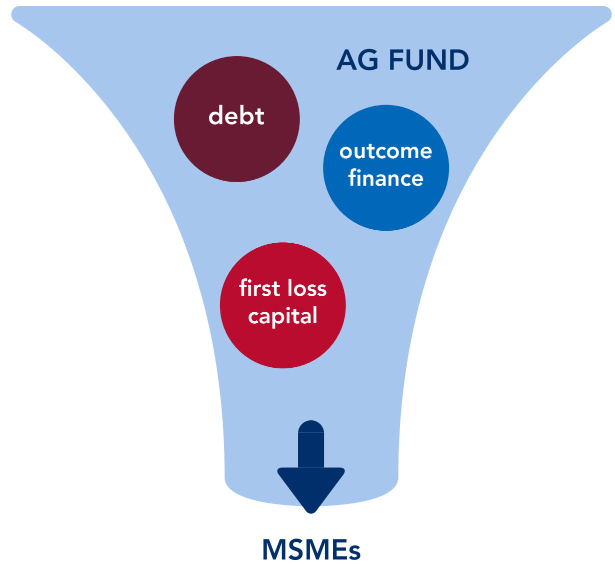


Figure 1: Schematic of how AG funds work, pooling finance from multiple sources to make available to MSMEs

While promising, Aggregator Funds face their own set of challenges:

Institutional Drag.
Funds housed within complex, bureaucratic systems (like the UN) can be paralysed by slow procurement and risk-averse cultures, which are at odds with private sector expectations for speed and flexibility.

The "Hype vs. Reality" Gap.
Sophisticated finance mechanisms can distract from the most basic and pervasive need expressed by MSMEs, which is access to patient, affordable working capital to purchase inventory and meet existing demand.

A "Valley of Death" for Funds.
Even well-designed AG funds struggle to raise capital, as their initial size is often below the minimum ticket thresholds of large institutional investors.

Not a Substitute for Grants.
AG funds are not suitable for all contexts. In the highest-risk, most transient populations, grant-based aid remains essential. Pushing commercial models where they don't fit can result in project failures.

Case Studies: Innovation in Action

The research spotlighted two pioneering funds that are attempting to navigate this complex landscape: The P-REC Aggregator Facility (PAF), designed by Energy Peace Partners and managed by CAMCO, and UNHCR's Refugee Environmental Protection (REP) Fund. They are described in Boxes 1 and 2 respectively and are due to launch in 2026.

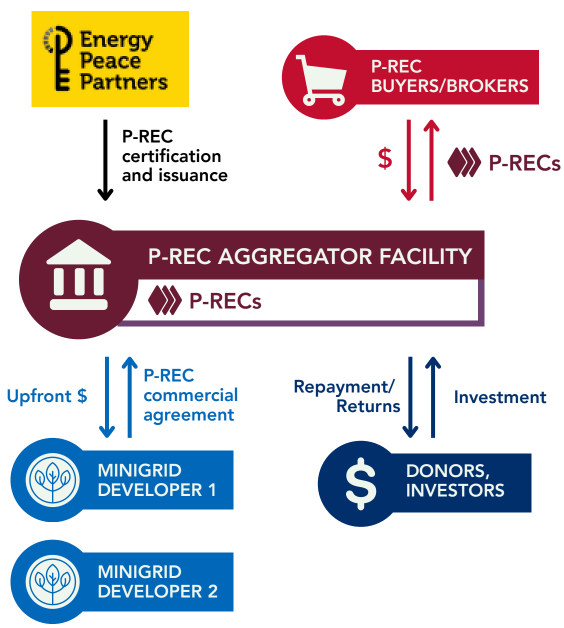
Case 1: The P-REC Aggregator Facility (PAF)

What it is:

A nonprofit facility designed by Energy Peace Partners and managed by Camco, designed to solved the problem of upfront finance for solar PV and run-of-river hydro mini-grids in fragile Sub-Saharan African countries.

How it works:

PAF provides project developers with an upfront payment (up to ~10% of project CAPEX) in exchange for the rights to the Peace Renewable Energy Credits (P-RECs) the project will generate over its first ten years. PAF then aggregates these P-RECs from multiple projects and sells them in bulk to corporate buyers at a premium price.



Key Strengths

Derisking:

The upfront payment acts as a catalytic, de-risking capital that makes it easier for developers to raise additional debt or equity.

Market-Making:

It solves a problem for both sides: developers get upfront cash, and corporate buyers get a large, aggregated volume of high-impact credits they can't source individually.

Investor Appeal:

Returns are capped at 6% per year, aligning with impact-first capital.

Key Challenges

Execution Risk:

It relies on projects being built on time and operating successfully for a decade to generate the promised P-RECs. Conflict, delays, and lower-than-expected energy demand are major threats.

Fundraising Risk:

The 10% CAPEX subsidy still relies on developers raising the other 90% to build any infrastructure.

Scale:

Its initial $11m size is a challenge for attracting large institutional investors.

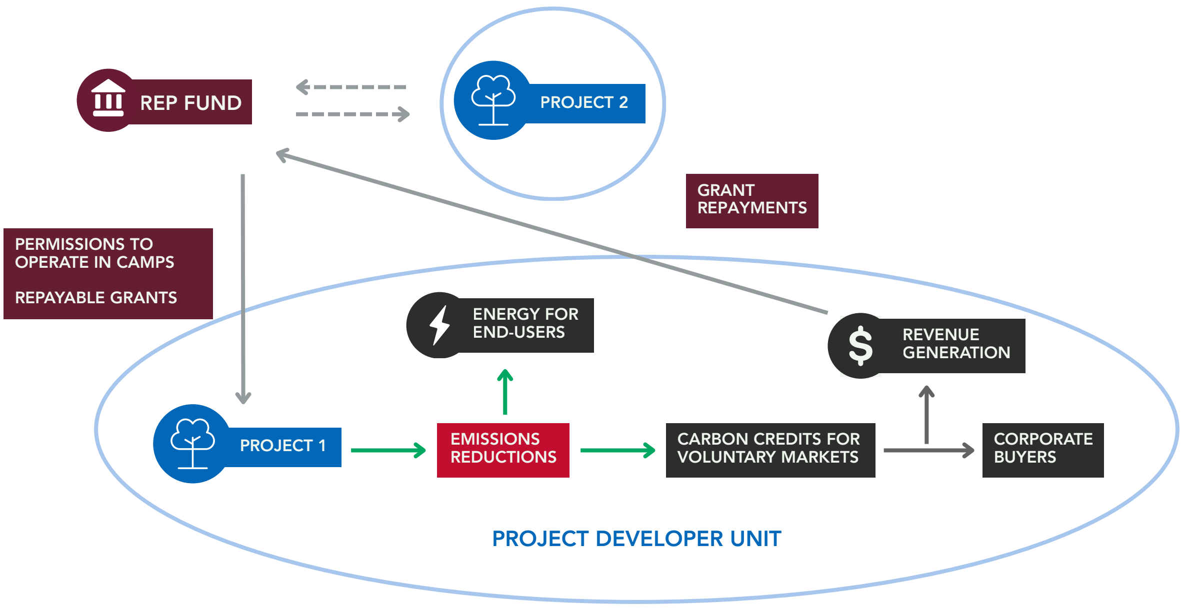
Case 2: The UNHCR Refugee Environmental Protection Plan (REP) Fund

What it is:

A $30m fund hosted by UNHCR that links reforestation and clean cooking programs in refugee-hosting areas to global carbon markets. It represents UNHCR's first major attempt to mainstream results-based finance.

How it works:

REP provides a $1.5m repayable grand to consortia of partners with expertise in clean cooking, reforestation, and carbon markets. This working capital is used to establish operations. The grant is to be repaid, with interest (targeting a 20% internal rate of return), through the sale of high-quality credits. The repaid funds are recycled into new projects.



Key strengths

UNHCR's Convening Power:

The agency's unique mandate and relationships are critical for securing government permissions, community access, and the necessary authorisations to operate in camps.

Focus on Quality:

REP is committed to generating premium, differentiated credits with strong co-benefits for communities (jobs, livelihoods, biodiversity), mandating that 60-80% of carbon revenue is shared back with refugees and hosts.

Market Signal:

The unprecedented interest from the private sector in REP's first call for partners proves a strong appetite to engage with humanitarian markets when a credible intermediary exists.

Key challenges:

Institutional Friction:

The seven-year journey from concept to launch highlights the acute friction between humanitarian systems and private sector expectations. The UN's risk aversion and slow partnership processes are a major operational threat.

Carbon Market Risk:

The voluntary carbon market is volatile and has faced integrity scandals, creating reputational risk for the UN. The fund's success is tied to a market the UN does not control.

Complex Governance:

Ensuring that carbon revenues are shared equitably with communities in a complex legal and social landscape is a critical risk that requires constant, dedicated attention.

Recommendations for Stakeholders

For Energy Companies

Include fragile and displacement settings across portfolios. This can be achieved by leveraging innovative financing mechanisms such as AG funds.

For Donors & Humanitarian Agencies

Support increased private sector engagement in humanitarian energy settings. Facilitate private sector engagement through convening local communities, government and other stakeholders. Promote sustainable market development to enable the private sector to thrive. Provide grants for the private sector to directly scope market potential in higher viability locations. Fund programmes inclusive of hard-to-reach and displaced populations.

Coordinate for the long-term. Move from fragmented, competitive short-term grants towards 5-10-year funding pipelines for specific regions. Align mandates and objectives across stakeholders to enable sustainable profits, ensure community protection and support cross-sectoral outcomes to reduce dependency on humanitarian assistance.

Drive procurement innovation. Streamline processes for private sector partnerships. Fast by UN standards is likely too slow for the market.

Be realistic about capital needs. Do not let the enthusiasm for "innovative finance" obscure the continued need for grants. Understand where patient, grant-based capital is still the only appropriate tool, and use innovative finance appropriately and strategically.

For AG Fund Designers

Prioritise enterprise needs. Before designing a complex fund, ask companies what they need most. In many cases, solving the working capital crunch for inventory is more urgent than complex financial engineering. Manage risk by using first-loss capital and guarantees; explore innovative instruments like parametric insurance (e.g., for conflict-related disruption) to absorb the risks that commercial investors cannot.

Embed flexibility. Design the fund to pivot. Include grace periods for conflict, mechanisms for currency fluctuation, and the ability to adjust terms when the unexpected happens. Rigid loan products may fail in fragile settings.

Get the ticket size right. Enable small-ticket capital deployments (<$50,000) for the smallest, most critical local distributors.

Integrate technical assistance. Provide high-quality, context-specific technical assistance, such as accounting, financial expertise and fundraising advice. Integrate with existing energy access technical assistance mechanisms where possible. Hire local experts who understand the market.

For Investors (DFIs, Impact Funds)

Rethink ticket sizes and risk perceptions. Challenge the minimum ticket sizes. Can bespoke windows for smaller intermediaries be created? Move beyond country-level risk ratings and partner with on-the-ground intermediaries who understand the nuanced reality.

Provide patient capital. Align return expectations with the reality of fragile contexts. This may mean accepting lower, capped returns (like PAF's 6%) or longer time horizons.

Value process as much as product. Recognise that how an investment is made (with flexibility, respect, and a long-term partnership mindset) matters as much as the financial terms.

For Researchers

Evaluate the results. Once funds like PAF and REP are operational, conduct independent evaluations to understand their impacts. What returns to investors are feasible and reasonable? Do they achieve additionality? How does access to energy affect communities?

Research willingness and ability to pay. Develop robust, context-specific tools to assess the real ability and willingness to pay among displaced and host communities. This evidence is critical for designing sustainable business models and informing decisions on where grants versus market-based approaches are appropriate.

Conclusion: A Piece of the Puzzle, but Not the Whole Picture

AG funds are an exciting and necessary innovation in the quest to finance energy access in humanitarian settings. The case studies presented here demonstrate the potential for AG funds to unlock significant private capital by de-risking investments and aggregating small-scale projects.

However, their success depends on a realistic understanding of their limits. They cannot fix the dysfunctions of the global humanitarian and development funding system. Without improvements in donor coordination, procurement speed, and an acceptance of where grants remain essential, even the most elegantly designed AG fund will struggle to deliver on promises. The urgent need for patient, context-specific working capital for last-mile distributors must remain front and centre.