ENGIE ENERGY ACCESS

MAXIMISING IMPACT: TRANSFORMING GRANT FUNDING FOR ENERGY ACCESS

Perspectives from ENGIE Energy Access

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Abbreviations

AfDB – African Development Bank Group

ARE – Alliance for Rural Electrification

BGFA – Beyond the Grid Fund for Africa

DFI – Development Finance Institution

DMRV – Digital Monitoring, Reporting, & Verification

EEA – ENGIE Energy Access

ESMAP – Energy Sector Management Assistance Program

GOGLA – Global Off-Grid Lighting Association

IFI – International Financial Institution

LNOB – Leave No One Behind

M300 – Mission 300

MIGA – Multilateral Investment Guarantee Agency

NEFCO – Nordic Environment Finance Corporation

OGS – Off-Grid Solar

PUE – Productive Use of Energy

PV – Photovoltaic Energy

RBF – Results-Based Financing

SDG – Sustainable Development Goal

SDG7 – Sustainable Development Goal 7 (Affordable and Clean Energy)

SEforALL – Sustainable Energy for All

SHS – Solar Home System

SLAs – Service-Level Agreements

SSA – Sub-Saharan Africa

TA – Technical Assistance

VAT – Value Added Tax

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Executive Summary

Context

- **Sub-Saharan Africa stands at a critical inflection point in its energy transition.** With less than 5 years to 2030, universal access remains elusive. Over 685 million people still lack access, and current funding trajectories are projected to fall well-short of what's required to deliver *SDG7*: standalone systems alone will face a funding gap of approximately $12 billion.
- **Grant funding has played a vital role** in the scale-up of last-mile electrification. New initiatives, like *Mission 300,* are a significant and much-needed commitment. However, there is limited strategic alignment on how capital should be structured, allocated, and operationalised to align with market dynamics and delivery constraints.
- **This moment of momentum**, driven by new programs and the phase-out of legacy initiatives, represents a unique opportunity to reset strategy and coordination. If we miss it, the risks are significant: diluted impact, loss of *SDG7* credibility, weakened investor confidence, and reduced private sector engagement.
- At **ENGIE Energy Access,** we have over 17 years of experience in the sector across 9 countries in Sub-Saharan Africa. We have seen firsthand the transformative impact of well-targeted, well-structured, and well-administered grants, as well as the pitfalls of suboptimal program design and implementation.
- This paper sets out to answer a **key critical question**: *"How can the allocation of limited public and philanthropic funding be optimised to maximise energy access in SSA and accelerate progress toward SDG7?"* We share **four critical observations** from our on-the-ground experience and propose a roadmap for transforming grant funding, shifting from ad hoc subsidies to strategic, catalytic investments that drive sustainable, inclusive energy systems at scale.

Our Key Observations

1. **Core electrification is losing focus.** Fragmented attention and competing priorities are diverting limited resources from household electrification, increasing the risk of slowing progress toward universal energy access.
2. **Instruments are evolving, but can be misaligned with segments.** Tools can be applied uniformly across diverse contexts, operational complexity can be under-estimated, and implementation mechanisms at times fragmented or not fit for scale.
3. **The volume and mix of capital is insufficient to achieve *SDG7*.** There is a disconnect between the sector's ambition and the capital composition. Grant funding remains too limited, with many governments yet to fully prioritise or fund off-grid solutions.
4. **Grant management remains fragmented** across programs, resulting in slow and costly implementation, limited delivery capacity and oversight, disbursement delays, lack of flexibility, and inefficient data management systems.

The Way Forward: Proposed Strategic Reforms

Refocused Targeting	**Reorient grant targeting toward closing the access gap.** Refocus financial support on core universal access first to *"finish the job"* on *SDG7*. The household segment should be sequenced to balance available funding and the economic realities of hardest-to-reach communities.
Standardised & Pragmatic Instruments	**Instruments to match segment characteristics.** Design and deploy instruments that are tailored to distinct market segments and risk profiles, while strengthening delivery systems and governance to ensure transparent, efficient, and sustainable implementation.
Boosted & Balanced Capital Mix	**To achieve SDG7, funding must be increased, tailored and comprise a larger share of grants.** The total volume and share of grants in the mix needs to increase, with governments taking greater ownership and deploying subsidies. The mix needs to be aligned to market maturity.
Integrated Management	**Shift to integrated, multi-donor platforms** to replace fragmented, project-based funding. Use coordinated funding mechanisms with harmonised applications and compliance, unified monitoring and enforceable SLAs. Strengthen governance and transparency.

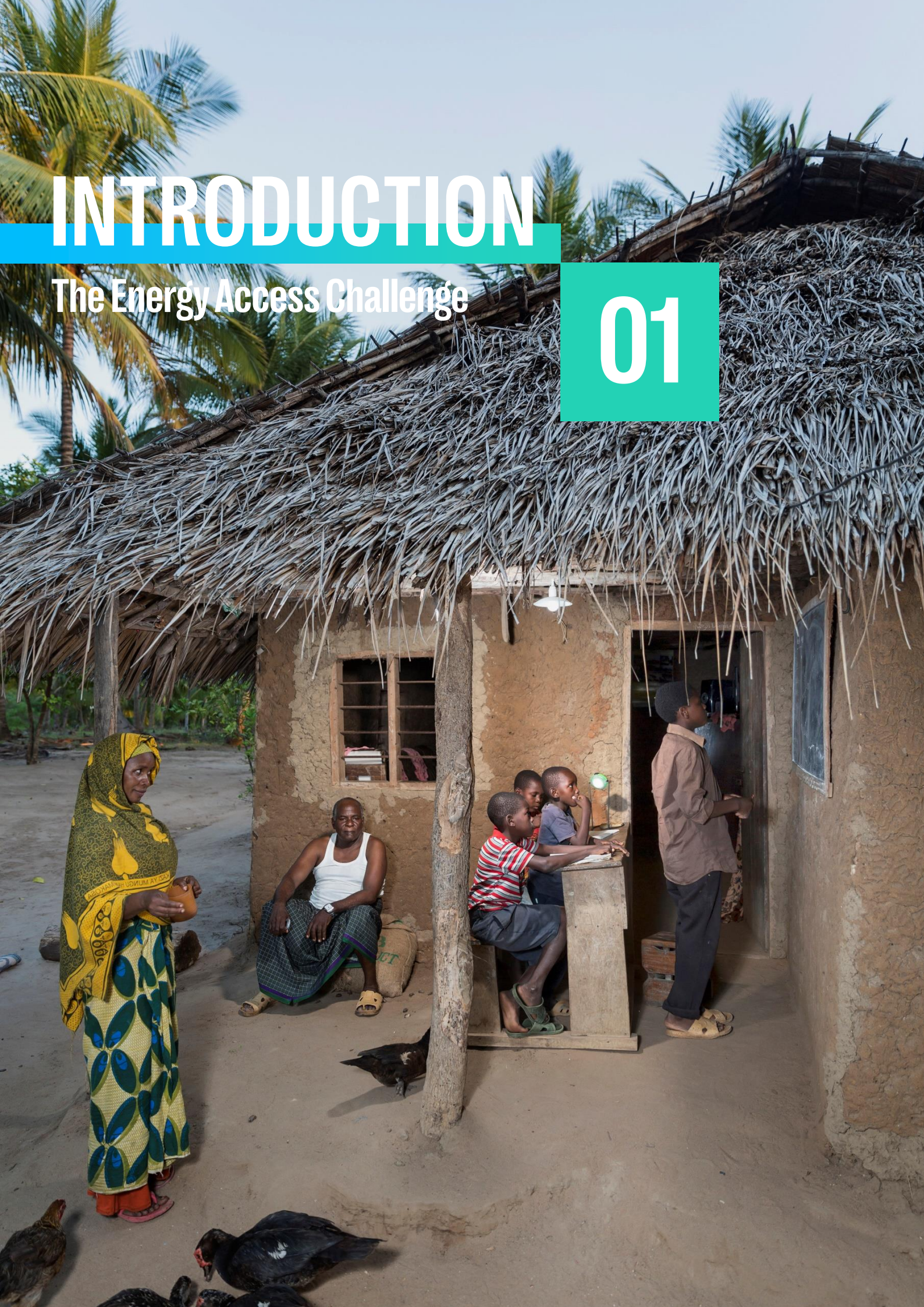
Call to Action

- ***Remember the mission.*** This is about delivering electricity to those who still live without it – a fundamental pillar of human dignity and opportunity. Grant funding must remain anchored in this purpose.
- ***Be bold, with a focus on the goal.*** This is the moment to simplify, scale, and deliver. Energy access is within reach – but only if donors and partners mobilise capital, deploy it through coordinated platforms, and focus on unserved populations.
- ***Be pragmatic, flexible, and supportive – and work together.*** The path to universal access will be challenging. Donors must coordinate effectively with each other and support partners on the ground. Funding approaches should reflect local realities – working pragmatically, flexibly, and in genuine partnership with those best placed to deliver.

INTRODUCTION

The Energy Access Challenge

01



Energy access is not just a market opportunity; it is a *political and social priority*. It is a **foundational determinant of quality of life** – impacting health, education, income, and inclusion. Despite significant progress, it is projected that at the current electrification rate, **over 660 million people** will still be unelectrified by 2030, as illustrated in *Figure 1*. Ambitious initiatives, such as *Mission 300 (M300),* will help – but they will unlikely be sufficient.

Decentralised energy technologies, particularly off-grid solar and mini-grids, are the **fastest, most inclusive, cost-effective** ways to serve underserved communities. It is estimated that to achieve *SDG7*, at least 40% of connections will need to be from standalone solar solutions under a "least-cost" approach to electrification. However, this potential remains **largely untapped** due to a persistent misalignment between the sector's funding approaches and the practical realities of delivering universal energy access.

Funders use grants not merely as financial support, but as deliberate mechanisms to compensate for the development impact generated by private sector electrification efforts. This funding plays a critical role in:

- Accelerating the **speed and scale of access,** particularly for underserved communities, advancing the global ambition outlined in *SDG7*.
- Ensuring **inclusivity** by reaching the most vulnerable and low-income populations, often excluded from market-based solutions, in alignment with the *"Leave No One Behind"* (*LNOB*) principle.
- **Mobilising additional commercial capital** to reduce risk, support scale and enable blended finance structures.
- Supporting the deployment of **higher-tier energy services,** particularly those enabling productive use of energy (PUE) – essential for unlocking economic opportunities, per *ESMAP's Multi-Tier Framework*.

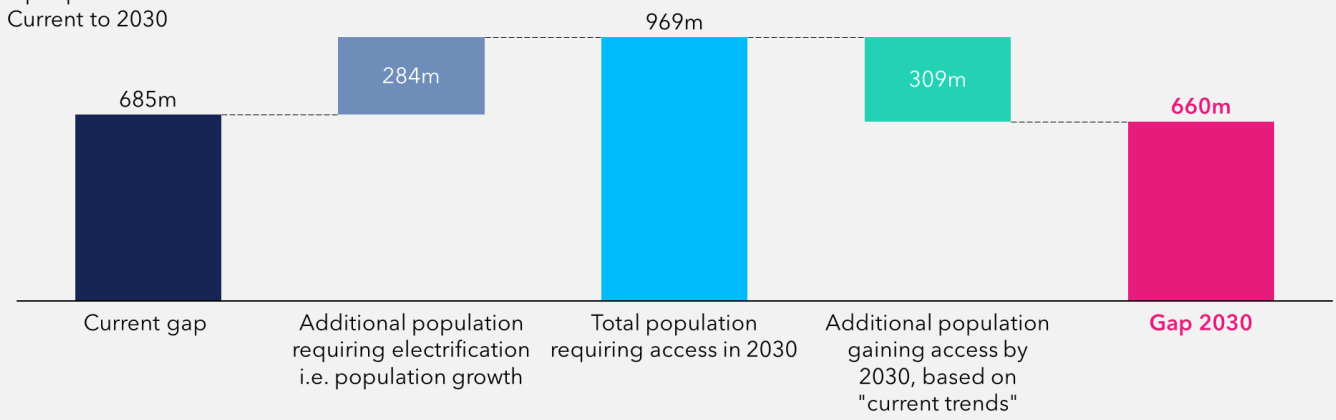
Yet the funding picture is worrying. The industry is projected to require $21 billion by 2030 to reach nearly 400 million people with standalone solar systems *(GOGLA, 2024)*. Instead, investment has been stagnating. Private capital is retreating amid currency volatility, inflationary pressures, affordability constraints and political and regulatory instability. In many markets, companies are delaying growth not due to a lack of demand, but due to the unavailability of risk-tolerant and patient capital.

Concurrently, development finance is shifting and not in favour of universal access. The U.S. is winding down *Power Africa* and the *Millennium Challenge Corporation*, programs that once anchored energy sector reform and infrastructure deployment. Across Europe, donors are reallocating budgets to respond to humanitarian, military and domestic priorities, as well as directing funds to grid-centric and industrial decarbonisation efforts (European Council on Foreign Relations, 2024).

Furthermore, we see that the way grants are targeted, designed and delivered is increasingly out of step with operational realities. Today's grant landscape is **fragmented, risk-averse, compliance-heavy,** and often out of sync with the pace and complexity of markets. Far too frequently, grants that should catalyse innovation and scale have become **bureaucratic, unpredictable** and **inflexible,** offering little adaptability or long-term market development.

Achieving *SDG7* by 2030 won't be possible through passive commitment or fragmented efforts. Yes, it will require significant funding, given the projected shortfall. However, there is a need for greater precision in how concessional resources are utilised. **Every dollar must deliver maximum impact.** This is no longer just a question of capital availability but one of strategic coherence. If left unchanged, the grant ecosystem will underperform, limiting the sector's ability to reach the most vulnerable populations and derailing progress toward *SDG7*.

Figure 1: Pathway to SDG7: Universal Energy Access



Source: Adapted from GOGLA Off-Grid Solar Market Trends Report 2024

Scope of the Paper

For this paper, we define grants as *strategic capital transfers – monetary or in-kind – made without expectation of repayment or financial return, to enable specific social, environmental, or economic outcomes*. From a private sector standpoint, we observe three primary categories:

1. **Delivery-Facing Grants *(primary focus of the paper)*:** These directly fund the implementation of energy services, infrastructure, or other tangible on-the-ground outputs.
2. **Enabling Mechanism Grants:** These grants support underlying risk mitigation and financial viability by reducing barriers to delivery (e.g. blended finance, concessional hedging, tax waivers, guarantees, etc.).
3. **System-Building Grants:** These strengthen the underlying environment in which delivery occurs. They may support ecosystem development, policy reform, capacity building, or data platform development.

While the insights in this paper are broadly applicable across all off-grid technologies, certain sections – particularly those focused on funding instruments – place a greater emphasis on SHS. This reflects:

- The nature of our *current operations*, where SHS make up the majority of our existing portfolio.
- SHS have driven more *off-grid energy connections* and attracted a larger *share of funding*.
- The *distinct funding models* for mini-grids differ in infrastructure investment, long-term revenue and public-private coordination. This merits a dedicated analysis and falls outside the scope of this paper.

Finally, we note that although carbon finance is expected to be a key instrument for supporting energy access in the coming years, we have not undertaken a comprehensive analysis of it as part of this paper.

ENGIE Energy Access & Our Observations

ENGIE Energy Access (EEA) is one of Africa's leading off-grid energy providers. Our range spans solar home systems (10W to 200W), productive use technologies (2kW to 8kW), and mini-grids (20kW to 600kW). We have extensive experience with grants, having submitted over 250 competitive proposals.

Our Objectives: Why Grants in Today's Environment

We developed this paper to share field-grounded observations at a pivotal moment. We propose strategic shifts and practical recommendations to help target, structure, and deploy grants – ensuring that they can deliver maximum impact to *SDG7*. Specifically:

- **Catalyse dialogue and foster collaboration.** This paper is an invitation to engage – to have honest, solutions-focused discussions on how to finance universal access. Through shared dialogue, we believe more coherent, efficient, and impactful funding models can emerge.
- **Influence the current and next generation of grants – and make them work.** With major platforms shifting, this is a rare opportunity to shape how grant capital will be deployed. It is critical that future grants are designed for efficiency and on-the-ground realities.
- **Bring a field operator's voice – and the thinking many share.** This paper draws on insights shared across the industry in various forums, combined with our own field experience, to present a candid perspective on what works, what doesn't, and how grant funding can be reimagined for greater impact.

Relevance Across Stakeholder Groups

While this paper focuses on the strategic use of grant capital, its intent is broader: to inform and engage the diverse actors shaping the future of energy access.

- For **funders and development partners,** it offers a framework for deploying limited resources with greater intentionality, targeting segments that commercial capital cannot reach.
- For **operators**, it reflects the lived realities of delivering sustainable off-grid models in high-cost, low-margin markets and highlights the types of capital alignment required to scale those efforts responsibly.
- For **governments and policymakers,** it speaks to the design of enabling environments and public-private mechanisms that can accelerate national electrification objectives.

Each audience brings a distinct role and perspective – and this paper aims to support a more coordinated, outcomes-driven approach across the ecosystem.

This paper argues that to deliver on the promise of universal energy access by 2030, we must rethink the role of grants, shifting from ad-hoc subsidies to strategic, catalytic investments in resilient, inclusive, and sustainable energy systems. It is time to modernise the funding architecture to unlock the full potential of private sector actors.

KEY OBSERVATIONS

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Observation 1
Energy access is being repositioned as a systemic enabler, but core electrification is at risk

Energy access began as a human right

In the early SDG era, energy was treated as a **basic human right** – a *fundamental enabler of quality of life*. Grant funding reflected this, focusing on delivering Tier 1–2 services to households without electricity and ensuring that households have access to lighting, phone charging, and small appliances. The results were powerful, e.g. one early survey of SHS users found that 97% reported a better quality of life (feeling safer, empowered, included and dignified), with 1 in 7 households reporting an additional $30/month in income *(GOGLA, 2018)*.

Since then, we see a loss of focus and increasing dilution among (well-intentioned) competing priorities

The sector's narrative is being reframed. While *"universal electrification by 2030"* remains the formal target, we have seen a drift towards adjacent goals. These realignments create opportunities for impact but also introduce trade-offs in a resource-constrained environment. We see this trend across three major dimensions.

A. From "basic" to "higher-tier" systems

There is a growing push – from donors, advocates, and global initiatives – to prioritise more advanced energy systems (Tier 3 and above). This has extended to proposals that would exclude Tier 1–2 services from electrification metrics, under a *"Modern Energy Minimum"* standard.

While aiming for higher tiers is aspirational and aligns with long-term development, it does not always reflect the immediate economic realities of most households without electricity. The *World Bank's ESMAP* program has consistently shown that over 70% of the unconnected would see transformative quality-of-life improvements from Tier 1–2 alone. Moreover, as shown in *Figure 2*, even Tier 2 is unaffordable for 97% of households without electricity. Elevating the minimum standard to Tier 3+ would therefore inflate program costs, lead to stranded assets, and render 2030 goals financially unachievable.

We see this disconnect due to several factors – including an undervaluation of quality-of-life outcomes, unrealistic assumptions about rural energy demand, and a bias against standalone systems (explored in *Observation 3*).

B. From "households" to "broader development" goals

Energy is increasingly seen not as a standalone objective, but as a means to achieve broader development outcomes – in health, education, agriculture, digital, and gender. This holistic vision is valuable; however, many programs depend on strong foundations to succeed. For example:

- **PUE:** We have noticed a significant increase in the number of PUE programs. While these programs are generally smaller in dollar terms, they still require effort and resources from across the ecosystem. Further, PUE can struggle when being deployed in isolation – into ecosystems without foundational building blocks. It needs enablers to be in place, including infrastructure, education, access to finance, and functioning markets – which are underdeveloped in much of SSA. Relying heavily on grants to scale PUE without a solid foundation risks low uptake and unsustainable results.
- **Community infrastructure:** We have seen a significant appetite to drive the community infrastructure segment. Before its disbandment, *USAID* focused on electrifying 30,000 healthcare facilities *(USAID, 2022)*, with significant effort and resources deployed to developing models to support. These programs are valuable, but per *Observation 2*, require models, public sector involvement, and long-term O&M structures.

C. From more "commercially attractive" segments towards "hardest-to-reach"

We have seen a substantial increase in discussion and resources aimed at extending access to the hardest-to-reach countries and segments – the *"true" bottom-of-the-pyramid*. We do agree that prioritising these segments is morally important and will be necessary to fully complete *SDG7*. However, these segments and programs, in particular LNOB, often require higher subsidies, complex targeting systems, and intensive administration. In our experience, costs per connection can be 2–4 times higher than in other segments. In principle, *no one should be left behind*. However, in practice, in a constrained funding environment, prioritising the hardest-to-reach populations risks delaying progress toward broader access goals.

Figure 2. Demand by Energy Tier vs Focus

	Tier 1	Tier 1	Tier 2	Tier 3	Tier 4	Tier 5
Capacity 〉	< 3 W	3-50 W	50-200 W	200-800 W	800-2,000 W	> 2,000 W
kWh per month 〉	< 1 kWh	1-3.4 kWh	3.4-8.2 kWh	2.8-23 kWh	23-73 kWh	> 73 kWh
Typical Products (Lighting + Appliances) 〉	Lantern	Light & Charger	SHS + Small Appliances (e.g. TV, fan, computer)	Large SHS + Med Appliances (e.g. fridge, food processor)	Large SHS + High Appliances (e.g. dishwasher, microwave)	Solar Business System (e.g. space heater, vacuum cleaner)
Affordable 〉	74%	22%	1%	Not measured		
Stretch 〉	18%	27%	2%			
Unaffordable 〉	8%	51%	97%	*(nearly all **unaffordable**, if only 3% could afford tier 2)*		
Assessment 〉	Affordable	Stretch	Mostly Unaffordable	Unaffordable	Unaffordable	Unaffordable

Proposed Modern Energy Minimum

If implemented, MEM unaffordable for 97% unconnected

Source: ESMAP (2020), GOGLA (2024) and MEM 'The Metric' (2025)

Further, we see the sector losing its execution discipline

Beyond strategic shifts, the sector as a whole is grappling with an execution gap. Achieving universal access is an extraordinarily complex goal, requiring discipline and operational rigour at every level. Per *Figure 3* below:

- Ideally, we would see an unwavering focus on core objectives, strong performance culture, adaptive resourcing, and prioritisation of scalable solutions.
- In practice, we see the difficulty of maintaining this in a fragmented ecosystem. Ambitions have broadened, initiatives are dispersed, reporting can lack follow-through, accountability has diffused, and we see a tendency to stick to chosen solutions.

The private sector also has opportunities to enhance its role in the execution discipline. Areas such as logistics, product innovation and design, credit management, and building sustainable business and operating models present significant scope for improvement and unlocking these will strengthen impact at scale.

These realities highlight that the execution challenge is not a failure of commitment, but a reflection of structural complexity, resource limitations, and competing priorities.

Ultimately, we see the benefits of household access as the foundational goal that underpins SDG7 and others

Household access is the core of *SDG7*. The international community and governments cannot realistically meet national energy targets without closing household gaps first – politically, financially, or logistically. It is the most visible and politically resonant part of energy access, and the area where public demand is strongest. It is also the segment with the most mature technologies, proven delivery models, and scalable pathways. Importantly, household access serves as the foundational layer for broader energy use: communities cannot thrive, businesses cannot grow, and public services cannot function reliably in the absence of household electrification. As such, closing the household gap is not just a moral imperative – it is the operational prerequisite for the rest of the energy transition.

Tier 1–2 access delivers real, immediate human impact. We have seen firsthand the tangible value that basic household electricity brings:

- *Restoring family time and connection*, where electricity enables households to gather after dark, share meals, and enjoy simple entertainment together – fostering routine, dignity, and resilience.
- *Enabling digital access and inclusion*, where even a small system powers mobile phones, radios, and TVs – linking families to vital information, education, communication, and financial services like mobile money or online banking.
- *Extending productive hours and improving educational outcomes*, where lighting allows children to complete homework at night and enables small business owners to stay open later, knowing their families have light and safety at home.
- *Improving safety and reducing health* risks, as household electrification replaces kerosene and candles, removing exposure to toxic fumes, burns, and the anxiety that comes with living in darkness.

These tangible, human improvements have been sidelined in the race to drive economic transformation. While economic growth is essential, we must not overlook energy's fundamental role in enhancing daily life. Tier 1–2 household electricity is not a compromise – it is the most practical, scalable, and cost-effective entry point for the half a billion people who still lack access, and an essential building block of human development.

We are shifting energy's role faster than we are delivering its fundamentals. Expanding goals and technologies stretches limited capital, focus, and political bandwidth. These directions need not be abandoned – but they require realism and prioritisation.

Figure 3. Execution Discipline: What SDG7 Delivery Might Look Like Under Leading Practice

This figure contrasts five core execution disciplines – illustrating what SDG7 delivery might resemble if managed using typical performance standards, versus what we currently observe on the ground.

Discipline	What leading practice discipline would expect	What we observe on the ground
Obsessive & relentless focus on the core goal	Anything not directly accelerating *SDG7* gets deprioritised. No distractions, no pet projects, no dilution – just ruthless prioritisation	Growing list of priorities diluting focus from household access, significant efforts funneled into goals not tied to *SDG7*
Tight execution roadmap	No vague strategies. A defined set of levers, sequencing, and delivery models – with milestones and accountability throughout	No shared framework to guide sequencing, allocate capital, or course-correct in real time – unclear roadmap to achieve *SDG7* by 2030
Performance-driven culture	Regular reviews, real-time data, "war room" mentality to identify bottlenecks, fix problems, make decisions fast and follow-through	There are scorecards & reviews, but they lack teeth – more "reporting" than "war room", with unresolved bottlenecks, and slow decisions
Sufficient & agile resourcing	Core goals equipped with resources to deliver, then continuous reallocation – flowing to what's delivering, pulled from what's not	Funding insufficient to achieve goals, reallocation between technologies and segments is too infrequent and too slow
Clear accountability & ownership	Clear global accountability for results, with public scorecards and mechanisms to act quickly when delivery slips	Accountability fragmented, with unclear responsibilities around goal-setting, standards & pathways

We recognise that not all leading practices can easily be applied to the *SDG7* context – given its complexity, cross-country scope, and lack of binding authority. Still, key execution disciplines can and should be adapted.

Observation 2
Grant instruments are modernising, but are still not yet built for market realities

2A. Assessment of Grant Instruments

Today, the energy access sector relies on a diverse array of instruments. Donor strategies have grown more sophisticated – shifting from one-off project grants to a mix of results-based financing, risk-sharing facilities, consumer subsidies, and concessional capital. These innovations have played a critical role in expanding access, unlocking private investment, and aligning funding with measurable outcomes.

However, despite this progress, structural misalignments remain between the instruments being deployed and the realities of the markets they aim to serve. Too often, tools are applied uniformly across diverse contexts, operational complexity is overlooked, or implementation mechanisms are fragmented or poorly adapted to scale. *Table 1* below summarises and assesses the major financing instruments in use across the three main areas identified.

Table 1: Assessment of Key Grant Instruments Used in the Energy Access Sector

	Instrument	Strengths	Weaknesses
Delivery-Facing	1. **Up-Front Grants:** Non-repayable funding before results achieved, often to cover upfront costs	✓ Simple and quick to deploy; immediately reduces the company's financing burden	× Lack of performance criteria weakens accountability and dilutes impact. Small, unconditional grants incur high costs
	2. **Results-Based Financing:** Disbursed upon verification of specific results	✓ Ensures accountability and pay-for-performance; companies receive funds only for results	× Pre-financing needed, ties up resources. Without reliable, long-term commitments, securing bank financing is challenging
	3. **End-User Subsidies:** Grants that directly reduce consumer price	✓ Bridge affordability gap for low-income households	× May distort markets, adds pressure on small companies, limited public capacity to manage
Enabling mechanism	4. **Tax Exemptions:** Government policy reducing taxes (e.g. duties VAT,) on products or companies	✓ Lowers costs for all players; immediately makes products more affordable, boosts demand	× Foregoes government revenue; benefits not performance-based and depend on proper implementation
	5. **Concessional Debt:** Donor-funded, low-interest loans	✓ Improves access to debt capital; can scale through local banks	× Requires willing lenders, sufficiently creditworthy borrowers; can be complex
	6. **Concessional Equity:** Capital with lower return expectations	✓ Absorbs early risk and helps attract commercial investors	× Availability fluctuates, can create dependencies that complicates future raises
	7. **Guarantees:** Risk-sharing, where donors cover a portion of losses	✓ Reduces risk for private investors or lenders	× Complex to arrange and administer; can introduce moral hazard
	8. **Concessional Hedging:** Donor-subsidised hedging instruments that protect against currency or interest rate fluctuations	✓ Shields companies and investors from forex or interest-rate volatility; crucial in high-risk macro environments	× Requires financial expertise and partners, and may have limited reach if local financial markets are shallow
	9. **Carbon Finance:** A funding model based on emissions reduction	✓ Guarantees additional funding through carbon credits	× High transaction costs limits accessibility for smaller projects
System-building	10. **Technical assistance:** Non-commercial needs (e.g. regulatory & policy, research)	✓ Addresses operational gaps, amplifies investment effective-ness; benefits entire market	× Indirect and hard to measure; limited immediate connections; doesn't solve capital constraints on its own
	11. **Ecosystem Development:** Grants not tied to one company (e.g. data platforms, training)	✓ Builds sector capacity and demand; tackles market-wide gaps, fosters innovation	× Intangible short-term impact; harder to measure and sustain

2B. Assessment of Key Trends in Grant Instruments

Drawing on our experience across more than 250 grant programs that we have assessed, applied for or been awarded – we have seen firsthand what works, what doesn't, and what's missing with grant funding instruments today. The five trends below highlight both the progress being made and the critical gaps we see.

A. Positive shift toward RBF but extended to less suitable segments. Donors are clearly trending toward RBF. Over $900 million in cumulative RBF commitments have been recorded historically, with more than 50% pledged in the past two years alone (*GOGLA, 2024*). RBF programs tie funding to verified outcomes, but also require companies to pre-finance operations, which can strain cash flow or skew focus toward easily measurable outcomes over long-term results. RBF is highly effective for high-volume, standardised deployments (e.g. household solar), but donors have extended it to less-suitable geographies and segments like healthcare electrification. In our view, powering public infrastructure should be funded through alternative mechanisms, rather than RBF. Overall, grant-makers must be more context-sensitive, matching instruments to the realities of each segment, given different delivery models, risk profiles, and outcome metrics.

B. Welcome support for technical assistance to strengthen the enabling environment (case study on the right).

Donors are increasingly strengthening the overall enabling environment. Newer grant programs invest in building market infrastructure – supporting policy reforms, regulatory capacity, skills training. We have observed this shift in practice: programs like BGFA dedicate funding to institutional and policy support alongside RBF. Historically (prior to cessation), the *Southern African Energy Program* also financed enabling environment and capacity building. By addressing barriers like weak regulations, limited local capacity, or low consumer awareness, these holistic approaches create conditions where grant-funded businesses can thrive long term.

C. At times, overreliance on end-user subsidies.

As pressure mounts to demonstrate social impact, donors are increasingly relying on end-user subsidies. While these subsidies can help address acute affordability barriers, an overreliance on them risks undermining market sustainability and private sector participation. Indeed, when applied broadly or without adequate coordination, they can distort pricing signals, create consumer expectations of heavily discounted or free products and erode incentives for private companies to operate sustainably. Such instances can breed dependency among consumers and even local governments. We have seen cases where a sudden influx of poorly coordinated grant-funded giveaways temporarily boosts access figures, only for many of those systems to fall into disrepair, because neither the consumer nor a company feels responsible for maintenance.

D. Omission of critical financial protections for high-risk markets.

Operating in the OGS sector carries risks, exacerbated primarily due to the credit-based business model. While essential for affordability, this model exposes companies to prolonged vulnerability from income fluctuations, currency depreciation, interest rate hikes, political instability, and climate shocks. These risks further intensify with efforts to connect harder to reach segments. Current mitigations are often costly (e.g. hedging, local currency debt) or unavailable (e.g. political risk insurance for SHS). Few, if any, grant programs offer protections alongside their funding. Some bright spots exist: *AfDB* is deploying partial credit guarantees, and *MIGA* offers insurance for expropriation, contract breach, or currency inconvertibility. But such tools remain underutilised in the energy access grant space. By failing to embed risk protections, programs offload systemic risk onto companies, dampening willingness to enter the hardest markets.

E. Open programs: Broad accessibility vs. control challenges.

An emerging design is "open" programs – which keep eligibility broad to many countries or companies, as opposed to "closed", where a limited number of applicants are selected. These inherently trade off some control for greater inclusivity. On one hand, an open program can attract broader applicants, including smaller players that might be left out of highly selective funds. On the other hand, we find that such breadth is administratively challenging – when virtually anyone can qualify, additional effort is required to verify results and prevent abuse; independent auditing and data checks add complexity and cost. To be clear, we see the pros and cons of each design, but if open programs are pursued, there must be real investment in the systems and tools to provide transparency to the private sector.

While the evolution in grant instruments reflects a more market-friendly and outcomes-based orientation, their impact is being diluted because they are not consistently deployed where they deliver the greatest value per dollar or where they best match the market, policy, and consumer conditions. Without sharper alignment between instrument design and delivery context, we risk inefficiency and missed opportunity.

Case Study: Grant Programs Driving the Enabling Environment

Context

- Succeeding in the off-grid market requires far more than a good product – it depends on building the full organisational capability to scale: the right people, structures, systems, processes and tools.
- We genuinely need to appreciate the challenges of scaling a business in our sector. It involves managing vast field agent networks, mitigating credit and FX risk, navigating health, safety, and political volatility, operating in nascent regulatory environments, and securing long-term capital – particularly for mini-grids.

Grant Programs Overview

- While we're still far from where we need to be, we've made meaningful progress thanks to several donors who understood the scale-up challenge and provided support, including:
  - Programs to develop standards for field agent management
  - Legal support for financing structuring and execution
  - Field agent capacity building to improve collection practices

Why they worked

- ✓ These programs succeeded because they were flexible, context-aware, and responsive to our most immediate pain points.
- ✓ They did not fund direct customer connections – but arguably had greater long-term impact, by strengthening the very foundation needed to grow sustainably.
- ✓ They recognised that scaling energy access is about building organisations capable of delivery at scale.

Observation 3
Grants are falling short where markets don't yet work: Commercial capital alone can't achieve universal energy access

The M300 initiative marks a significant and much-needed commitment to advancing energy access. However, its success hinges not just on the amount of capital pledged, but on whether it is structured and aligned with the depth of Africa's access gap.

Looking back, from 2020 to 2023, the off-grid solar sector attracted approximately $2.7 billion in total funding *(GOGLA, 2024)*, primarily in the form of debt and equity. Grants accounted for only 9-20% of that flow (including *World Bank* RBF programs) – and alarmingly, per *Figure 4*, saw a decline from 2022–23 (though we expect this to course-correct with the wave of upcoming programs).

On the ground, we have seen that where grants have been deployed at the required scale, results will follow. For example, from our own experience:

- In **Mozambique**, when the share of grants in our total capital mix increased from 14% in 2019 to 50% by 2022 – alongside shareholder equity and other sources, annual household connections expanded more than 20-fold – from 14k in 2019 to 358k in 2022.
- In **Zambia**, RBF programs backed by *BGFA* drove a 44% increase in household connections in one year, followed by 37% the next year, reaching over 1 million people over the program lifecycle.
- In **Uganda**, similar RBF structures enabled access for 750,000 people per year, sustained over two years.

Looking ahead, the sector must mobilise $21.3 billion between 2025 and 2030 to electrify 398 million people – the assumed standalone system mix under a least-cost-to-electrify approach *(ESMAP, 2023)*. Based on current trajectories, only $9.3 billion is expected – leaving a **$12 billion shortfall.** As shown in *Figure 4*, grants and subsidies must rise to around **50%** of the mix.

We have distilled insights from our data and experience into four key trends:

A. Promising funding initiatives, but the total amount remains insufficient – and the outlook uncertain.

The most immediate issue is the scale of capital. As noted, there is a projected $12 billion shortfall in the funding required to achieve the off-grid component of *SDG7*. *M300* represents a significant step forward; yet, even if its targets are fully met, we will fall short of achieving universal energy access. Rising sovereign debt distress, shifting donor priorities, and geopolitical realignments – including the retrenchment of major concessional funders – are all contributing to a more difficult environment for concessional capital. *If the remaining gap is not filled, the sector will fall short,* no matter how efficiently funding is deployed.

B. Grant funding's share of the mix is too low to achieve SDG7, given the limitations of commercial capital.

Despite its critical role, grant funding remains too low – just 9–13% of total flows. While this may suffice in markets with high electrification access and a strong enabling environment, it is not suitable for the low-income, geographically dispersed populations that make up much of the remaining unelectrified areas. The economics of serving these customers are fundamentally unviable without subsidy – constrained by affordability, density, and risk. Yet we too often encounter the outdated assumption that private capital will somehow reach even the poorest and most remote areas. This is flawed. Even effective tools like RBF will not be enough in many contexts. In some communities, long-term subsidy models will be essential to maintain affordability.

Figure 4: Overall Funding in the OGS Sector
Equity, Debt, Grants & Subsidies (World Bank RBFs)*
2020-2023 (Actual) and SDG7 Gap, USDm

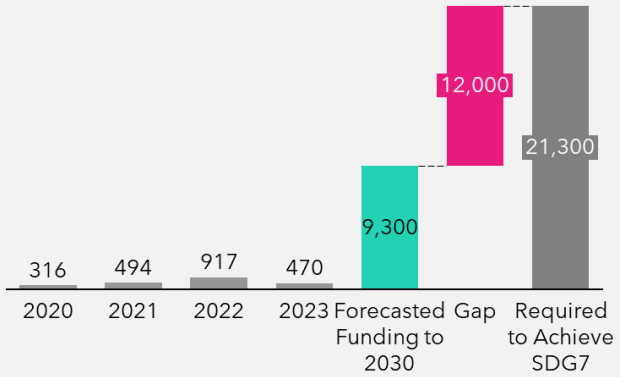
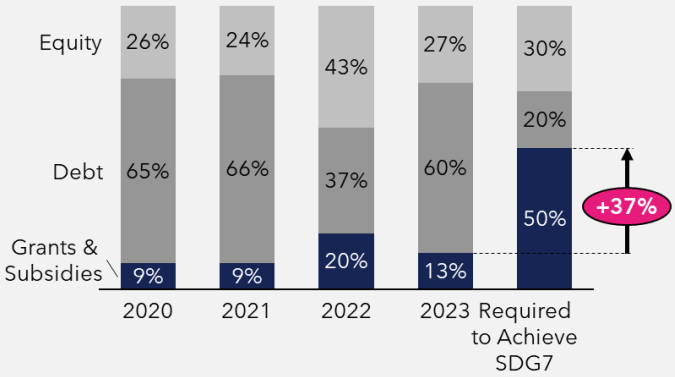


Figure 5: Funding Mix in the OGS Sector
Equity, Debt, Grants & Subsidies (World Bank RBFs)*
2020-2023 (Actual) and SDG7 Gap, % Mix



** Note, for both charts, actuals and forecast include the addition of World Bank programs (RBFs), given their prominence in our sector*
Source: Adapted from GOGLA Off-Grid Solar Market Trends Report 2024

C. In many countries, governments are yet to fully commit or fund rural electrification through off-grid technologies – despite having "least-cost" plans.

Achieving universal access will not be possible without strong public sector commitment. With the significant funding gap unlikely to be filled by international donors, national governments must step up – prioritising and properly resourcing off-grid solutions.

Many governments already have national electrification plans based on integrated, least-cost modelling – thanks to significant support from organisations such as *SEforAll*. But we observe that these plans are rarely fully implemented or adequately funded. In practice, governments continue to focus on the national grid and grid extension. While some administrations have clear plans for mini-grids, SHS has at times been neglected – despite the central role off-grid technologies play in least-cost strategies.

We see several drivers behind this:

- **Donor reliance:** Governments recognise rural electrification as their responsibility but often stop short of full ownership. Instead, at times, they can over-rely on donors and private operators to take the lead, rather than treating it as a national problem that they are ultimately accountable for solving.
- **Reluctance to support the private sector:** Many governments are unwilling to subsidise or truly partner with private actors – even if they're better placed to deliver results. For example, we have seen some abruptly impose unsustainably low tariffs.
- **Standalone systems perceived as inferior:** Although SHS deliver the same service as the grid for households limiting their consumption to lighting, phone charging, and even TVs, they are still often dismissed or seen as inadequate. For example, we have unfortunately heard senior officials dismiss them as "gadgets" or "toys" – perceptions that undermine their proven role in delivering reliable, life-changing access at scale.
- **Underestimating least-cost outcomes:** Policymakers often underestimate the outcomes achievable through least-cost approaches – overlooking that, for example, $1,000 spent on one grid connection could instead fund 20 off-grid connections via $50 RBFs. While valid questions exist regarding grid longevity versus SHS replacement and upgrade needs, these trade-offs are too infrequently seriously or constructively debated by governments.
- **Disconnect between policy intent and execution:** While many governments publicly endorse off-grid solutions, this support often remains at the level of rhetoric rather than implementation. There is a growing gap between talking about off-grid, promoting it, and actually delivering it at scale. Budgetary commitments are often limited, and institutional frameworks lack the coordination needed for consistent follow-through. As a result, promising plans are not backed by the resources or systems required for meaningful impact.

Without deliberate implementation by national governments and sufficient funding for off-grid solutions, progress will unfortunately remain fragmented and slow.

D. We don't yet see a clear, shared theory of change to deliver SDG7.

Finally, while we see substantial activity across the sector, what is still missing is a unified, strategic pathway that shows how the industry will collectively deliver *SDG7* by 2030. Specifically:

- We see *clear ambition* – with governments, donors, and multilaterals publicly committed to achieving *SDG7* by 2030.
- We see a significant *funding gap* – with well-documented shortfalls and broad consensus that grant funding must increase.
- We see a growing *number of programs* – including major initiatives like *M300*, which are positioned as key platforms to help close the gap.
- We see extensive *implementation effort* – with companies, governments, and partners actively deploying resources, often with strong local results.

Yet what remains unclear is how these efforts fit together – how they will be mobilised, sequenced and blended – to move from partial progress to universal access. At present, it feels more like a *"plan to improve"* (albeit significantly) rather than a *"plan to achieve SDG7." M300*, for instance, targets only 300 million of the 600 million unelectrified people, which highlights the gap we still face. Without a coherent theory of change and a shared roadmap to the finish line, even with substantial effort and capital, we risk falling short.

Addressing these issues is not just about increasing capital – it's about *aligning strategy, instruments, and planning* to ensure we achieve *SDG7*. Achieving universal access will require not only scaling existing initiatives but also broadening efforts, such as *M300*, to cover the full breadth of the challenge.

Observation 4
Coordination efforts are emerging, but grant delivery remains fragmented, slow and costly

The launch of *M300* marks a significant shift toward greater coherence in energy access funding. It aims to streamline donor coordination and align resources with national priorities, providing a more unified strategy for energy access.

However, many existing programs remain fragmented, limiting scale and impact. This is evident in the fact that, according to the *World Bank's ESMAP* program, fewer than 15% of facility initiatives are designed for multi-country scalability – despite the clear operational and cost-efficiency advantages of regional approaches.

Beyond fragmentation, grant programs also struggle with poor management and burdensome administration. These inefficiencies have real-world consequences. As illustrated in *Figure 6* below, we have consistently experienced delays in disbursement, frequent contract amendments, and significant internal overhead to manage some programs.

Yet we are not starting from scratch. Encouraging examples demonstrate that well-designed and professionally run grant programs can be catalytic, crowding in private investment, enabling scale, and accelerating access for millions.

A standout example is *SNV's BRILHO* program in Mozambique, a £38 million donor-funded initiative that has successfully enabled over 3 million people to access off-grid solar energy solutions *(SNV, 2024)*. By combining RBF with technical assistance and market-building support, *BRILHO* has mobilised significant private sector investment (£39–41 million), influenced national regulatory frameworks, and earned international recognition, demonstrating what is possible when grant programs are professionally managed and designed for scale.

From our experience, six persistent weaknesses continue to undermine grant effectiveness across the ecosystem:

A. Fragmentation, though with some positive examples
A proliferation of disconnected, overlapping initiatives leads to duplicated efforts, inconsistent reporting demands, and high transaction costs. For example, one East African program spent over $10 million on verification, consultancy, and advisory services. Based on an average cost of $50 per connection, that amount could have electrified over 200,000 households or 1.1 million people. While accountability is essential, the disproportionate cost of process over impact must be urgently addressed. *BGFA is a solid* example, demonstrating how consolidating efforts across countries can significantly reduce duplication and streamline processes, ensuring resources are deployed more effectively *(see case study below)*.

B. Delivery capacity & institutional oversight challenges
Many grant programs lack the operational infrastructure and professional expertise needed to manage grants at scale. Inadequate oversight leads to implementation delays, financial inefficiencies, and missed learning opportunities. While *International Financial Institutions* and *Development Finance Institutions* play a critical role in setting standards and mobilising capital, implementation oversight is often delegated to local representatives or delivery partners. In practice, we have seen this leading to inconsistent application of safeguards and fragmented execution.

C. Disbursement bottlenecks and delays
Disbursement delays are a significant barrier to the timely execution of programs – putting companies at risk and hindering private sector participation. Extended approval timelines, lengthy contract negotiations, and complex compliance mechanisms often result in bottlenecks. The typical cycle involves lengthy fund approval stages, with numerous review rounds across a multitude of stakeholders within donor organisations, local governments, and implementing partners. These stages can extend for months or years, before funds are finally allocated – delaying service delivery and having a negative financial impact on implementers. Prolonged delays disrupt cash flow, stall projects, increase costs, undermine sustainability, forcing businesses to rely on costly bridging finance or adjust their operations, ultimately jeopardising program impact and momentum. In parallel, contract negotiations between donors and implementing partners can be drawn out due to complex legal and compliance frameworks. These delays prevent implementers from mobilising resources quickly, leading to supply chain disruptions, missed opportunities, and slowed impact.

Figure 6: Key Grant Management Indicators Observed by EEA
Internal Database, 2020–2024

Indicator	Our Experience
1. Average disbursement delays post-verification	3-6 months
2. Share of projects requiring significant contract amendments or timeline extensions	~40%
3. Administrative overhead (staff time dedicated to grant compliance)	15–20%

D. Data management & monitoring gaps

Lack of integrated data management systems and effective monitoring frameworks is a persistent challenge in the sector. Many programs struggle with fragmented, inconsistent data collection and reporting processes, which can result in siloed information and inaccurate performance tracking. In many cases, data collection is manual or based on disparate software tools, leading to delays and inaccuracies. This creates major operational inefficiencies. Platforms such as *TFE Energy's Odyssey* and the *Access to Energy Institute's Prospect* demonstrate how digitisation can reduce reporting lag, support adaptive management, and increase transparency.

E. Myopia

Many grant programs suffer from a short-term, one-off approach, focusing on immediate results rather than long-term market sustainability. Grants are often designed with limited timelines, which prevents implementers from planning for sustained growth and scaling solutions. Once the initial phase ends, programs often lack the funding or structure to continue, leaving market gaps and reducing the potential for lasting impact. This is particularly damaging for solar companies, which may struggle to maintain operations when subsidies are abruptly removed. Without a clear path to becoming self-sustaining, they are forced to either scale down or exit the market entirely. The lack of continuity in funding also hinders the ability to secure further equity or debt capital, as investors seek companies with a clear, sustainable growth trajectory. For customers, this often means a sudden increase in product pricing, which can erode trust and make energy access unaffordable.

F. Lack of phased program design and flexibility

Many grant programs are designed as static, one-stage interventions, with limited consideration for how market conditions or customer needs evolve. Typically, they subsidise the initial purchase of basic products but do not support customers as they transition to higher-tier services – creating a structural affordability gap, limiting upgrade pathways and long-term energy growth. At the same time, as markets evolve, funders increasingly seek flexibility to adjust program terms. Yet many current programs lack the mechanisms to do so effectively leading to reactive or uncoordinated changes that disrupt planning and erode private sector confidence. A well-designed *flexible* or *multi-stage approach* – with clear phases, adaptation triggers, and predictable timelines – can balance funder flexibility with the operational certainty implementers need.

Addressing these challenges requires a fundamental and transformational shift. Strengthening professional grant management and aligning priorities will help ensure that donor contributions yield sustainable, impactful results.

Case Study: Beyond the Grid Fund for Africa (BGFA)

A streamlined, adaptive RBF program driving scale and impact across Zambia, Uganda, and Mozambique

Grant Program Overview

- BGFA is a multi-country RBF facility managed by NEFCO, designed to incentivise the deployment of decentralized energy, particularly entry-mid range SHS in last-mile contexts
- EEA has participated across Zambia, Uganda, and Mozambique in various programs since 2018
- Since 2022, EEA deployed over 400k connections across the three countries – reaching nearly 1m people in Zambia, over 67k sales to women-led households in Uganda and 2.03 MW installed

What worked

✓ **Efficient application & onboarding:** Well-defined guidelines, multilingual webinars, and responsive Q&A made the process smooth. The due diligence phase was collaborative, timely, and well-managed.

✓ **Pragmatic & customer-centric engagement:** NEFCO maintained a consistent point of contact, managed changes constructively (e.g. product replacements in Zambia), and demonstrated flexibility aligned with on-ground realities.

✓ **Consolidated donor structure enhancing efficiency:** BGFA's pooled funding model (Sweden, Germany, Norway, Denmark) provided a single, unified interface – reducing duplication and administrative burden, and enabling clearer alignment.

✓ **Proportionate compliance & reporting:** Documentation and audit requirements were reasonable and paired with supportive guidance. The streamlined reporting system reduced internal burden and allowed us to focus on delivery.

✓ **Support beyond financing:** NEFCO facilitated access to strategic networks and technical partners, amplifying the long-term impact of the funding.

What could have been better

– **Alignment:** Minor inconsistencies between NEFCO and technical partners (e.g. REEEP) created ambiguity on frameworks such as the Gender Action Plan. Future programs could benefit from more harmonised oversight and consolidated guidance.

BGFA shows how aligned funders, clear structures, and adaptive management can deliver impact at scale – balancing accountability with the flexibility needed to succeed in dynamic markets.

THE WAY FORWARD

03

This section lays out a forward-looking agenda for rethinking how grant funding is targeted, deployed, and managed, grounded in the core operational and strategic insights presented throughout this paper.

As illustrated in *Figure 7* below, we call for four interconnected shifts that together form a holistic framework to reposition grant funding as a true enabler of scalable, sustainable, and inclusive energy access.

Under each shift, we offer a set of experience-based recommendations, rooted in real-world implementation insights to guide a reimagined grant funding landscape, one that addresses the current needs of the industry.

These recommendations aim to spark a broader and more strategic reconsideration of the future of grant funding for energy access.

Figure 7. Holistic Grant Financing Framework for Energy Access

Shift	From	To
1 Refocused Targeting	Diffused across broad development agendas, weakening its focus on core energy access priorities.	**Refocus grants towards core household electrification to "finish the job" on SDG7 – executing effectively and sequencing economically to ensure maximum impact.**
2 Standardised & Pragmatic Instruments	Grant mechanisms fail to reflect the distinct financial, operational and risk profiles of different energy segments.	**Ensure grant mechanisms are tailored to market segments and risk profiles, while strengthening systemic capacity and governance.**
3 Boosted & Balanced Capital Mix	Grant funding has stagnated where markets still don't yet work, with the significant wave yet to be realised.	**Boost overall sector funding and the role of grants in the mix, calibrate to market maturity, and increase public sector ownership and funding.**
4 Integrated Management	Grant programs remain fragmented, with siloed administration, capacity challenges and high transaction costs.	**Streamline grant management, enhance donor coordination, and implement standardised systems for real-time monitoring, compliance, and disbursement.**

SHIFT 1 | REFOCUS GRANT TARGETING AROUND CORE ACCESS

Recommendation 1A. Refocus financial support on core universal access first (lighting, power, and essential appliances to every household) to "finish the job" on *SDG7*.

Recommendation 1B. Sequence the household segment to balance available funding and the economic realities of serving hardest-to-reach communities.

Recommendation 1C. Recognise and incorporate impact metrics around quality of life in grant funding programs.

Recommendation 1D. Establish a shared standard of execution, with clear accountability, sequenced delivery plans, and real-time progress tracking.

First, we believe the goal should remain firmly focused on core household electrification. Providing a minimum level of electricity to every household is the central objective of *SDG7*. It must be treated as such. Tier 1–2 solar solutions are already reaching hundreds of millions, with proven technologies and delivery models.

We recognise that funders have their own mandates and will continue to direct funding towards other areas. In such cases, funders must be aware of the implications of doing so – *that scarce funding will be diluted, and we risk making only a shallow impact on SDG7 by 2030.*

Secondly, we recommend a sequenced approach to household electrification. In a constrained funding environment, we need to maximise impact. That means focusing first on more commercially viable segments to derive the greatest connections per dollar. Once these are addressed – and if further funding becomes available – we can expand to hardest-to-reach through *LNOB* programs.

Thirdly, quality of life outcomes must be top of mind when prioritising funding. Key indicators could include a reduction of candle or kerosene use, a decrease in energy-related accidents, or improved access to digital services. By integrating these metrics into frameworks, donors can ensure that programs remain focused on human development, and not merely on connection numbers.

Fourth, the sector must adopt a sharper standard of execution – one that emphasises focus and urgency of the *SDG7* challenge. Universal access is a shared goal – and must be managed as such – with (i) **relentless focus,** where resources are concentrated on what directly accelerates access, and non-core initiatives are deprioritised; and (ii) **clear ownership, accountability and execution roadmaps**, supported by a transparent monitoring framework, sequenced delivery models and aligned country-level progress tracking.

Recommendation 2A. Strategically tailor grant funding instruments to distinct market segments and risk profiles.

Recommendation 2B. Reinforce systemic capacity and governance to enable efficient and sustainable delivery.

The instruments used to deploy funding are as important as the funding itself. While in *Shift 1,* we recommend a focus on core household electrification – we recognise that funders will continue to support areas such as PUE and community infrastructure. Given this reality, we consider it crucial that funders select the most effective instruments, apply them to the right segments, and blend them with complementary mechanisms. See *Figure 8* below.

Figure 8. EEA's proposed view on key instruments by segment

		Empower Households …with access to affordable lighting and essential appliances that improve day to day living…	Catalyse Businesses …to boost productivity + incomes through providing energy and energy-enabled tools	Transform Communities …through powering public & social facilities providing essential services
Key Focus Area		Universal energy access (SDG7)	Economic growth through productive use (SDG8)	Social inclusion and sustainable development (SDG1, SDG7)
Purpose/ Outcome		Ensures affordable, reliable, and sustainable energy access for households, improving quality of life and reducing energy poverty	Facilitates business and agricultural growth by providing clean energy for productive use, leading to job creation and economic growth	Focuses on providing continuous energy to vulnerable communities, including schools and clinics, addressing social equity concerns
Strategic Alignment		Aligns with SDG7 for providing energy access to all households	Supports SDG8 by enabling business growth and productivity through energy access	Aligns with SDG1 for social inclusion and SDG7, focusing on vulnerable communities
Instruments	**Segment-Specific**	Results-Based Financing + *Limited* End-User Subsidies	Up-Front Grants + + *Limited* Results-Based Financing	Up-Front Grants + Guarantees & Insurance
	Cross-Cutting	Blended Finance, Technical Assistance, Concessional Hedging & Guarantees, Tax Exemptions & Carbon Finance		

Proposal Features: Segments

We believe that grant instruments should be aligned with the needs of three distinct customer segments:

- **Households:** We see RBF as the key tool for household electrification, offering scalability and accountability. To drive innovation and competition, RBF should allow flexibility in technology and vendor choice. End-user subsidies should focus on closing affordability gaps for households in countries that are close to achieving universal access. In exceptional cases, such as conflict zones or areas affected by extreme weather, the full cost should be borne by national governments through bulk procurement of certified products.
- **Businesses:** Subsidies should be focused on de-risking investments in productive sectors with strong value chain and national economic value. Funders should prioritise catalytic investments in areas that drive structural transformation (e.g., agro-processing, tourism hubs, telecom towers). PUE investments should be linked with complementary services, such as market access and technical support.
- **Public & Community:** For schools, clinics, and water systems, deploy pooled donor funds through government-led procurement. Where private delivery is needed, use guarantees or output-based subsidies to enable service continuity.

Proposal Features: Cross-Cutting Themes

To further maximise the effectiveness of grant funding instruments, systemic enablers must be integrated into program design. While a broader set of mechanisms is assessed in *Observation 2*, we highlight two specific instruments below for additional emphasis:

- **Concessional Risk-Mitigation Instruments:** Effective risk mitigation is critical to enabling private sector delivery in last-mile and high-risk markets. Where possible, mechanisms should be embedded directly into the design of grant programs – specifically concessional hedging and guarantees. Alternatively, standalone risk-mitigation tools must also be made available on a concessional basis, particularly for early-stage or high-risk contexts where the cost of commercial coverage remains prohibitive.
- **Technical Assistance:** For the private sector – given the value we have derived – we advocate for it being expanded. To enable this, funders should consider broader success metrics, not just the number of connections. Outcomes such as operational improvements, mitigated risks, and readiness to enter new markets are critical in strengthening our ability to deploy effectively. For the public sector, improvements in how TA is coordinated and targeted would ensure real capacity is built, rather than duplicating effort.

Recommendation 3A. Achieving universal access requires significant increases in (i) total funding available; and (ii) the share of grant funding in mix, recognising that commercial capital alone will be insufficient for harder-to-reach segments.

Recommendation 3B. Public sector commitment, funding and deliberate implementation of off-grid technologies must be strengthened to fill the grant and subsidy gap.

Recommendation 3C. Tailor the capital mix and instruments to market maturity, with grants deployed more heavily in frontier and emerging markets and gradually reduced as commercial models become viable.

We advocate that a differentiated capital strategy is urgently needed, which will require a fundamental shift in **how much** funding is committed and **how** it is structured.

First, if SDG7 by 2030 is to be achieved, the total amount of funding and the share of grant funding must increase.

This shift is two-fold:

- **Amount:** As noted earlier, even achieving basic household access will require closing a projected $12 billion shortfall for off-grid. Without new funding, we will fall short, particularly in frontier and low-income markets where commercial capital is unlikely to step in.
- **Mix:** We recognise the reality presented by *GOGLA*: achieving *SDG7* by 2030 will require grants or subsidies to account for ~50% of total funding. This is not ideological – it reflects the cost, demand, and risk in underserved markets. Without it, the hardest-to-reach segments will remain unelectrified, and *SDG7* will not be achieved. That said, 50% is a high bar – which is why the sequencing approach in *Shift 1* is essential to maximise impact with limited resources.

We recognise the constraints: aid budgets are tight, global priorities are competing, and long-term commitments are difficult to secure. But the international community has endorsed *SDG7*. Meeting it will require hard decisions and a renewed commitment to resource the goal accordingly.

Second, governments must take greater ownership of off-grid technologies and allocate funds accordingly.

We cannot close the access gap solely through donor finance and private efforts. Governments must embed off-grid technologies into national strategies, allocate domestic budgets accordingly, and partner constructively with private implementers. Without this, off-grid will remain a secondary priority – underfunded, fragmented, and misaligned with national objectives.

Third, the mix must be tailored to market maturity.

Not all markets are the same – and capital strategies must reflect that. A uniform approach wastes resources and limits effectiveness. Instead, per *Figure 9*, we need differentiated capital stacks for the level of access, affordability, and enabling environment of each market:

- **Frontier Markets:** These are the most challenging markets, with low access, limited geographic coverage, high macroeconomic & political risk, infrastructure gaps, and limited competition. Grants should constitute a large portion of the capital stack, backed by committed equity funders. In our experience, for example, in Mozambique – a 50/50 split between grant and equity proved effective, enabling us to reach over a million people in just three years.
- **Emerging Markets:** In these markets, access is moderate, coverage is expanding, there is growing commercial capital and competition, but affordability or inclusion gaps remain. RBFs play a significant role in accelerating deployment, with debt finance also playing a growing role.
- **Peaked or Mature Markets:** These are closing in on universal access and have near full-geographic coverage (e.g. Côte d'Ivoire). Here, grants should play a limited and highly targeted role. Essentially, grant funding shifts to a fine-tuning function – closing remaining last-mile gaps through measures like end-user subsidies and promoting PUE.

This tiered capital approach is not about deploying grants uniformly or unequally, but rather about ensuring that the *structure of capital corresponds to the nature of the challenge*. **This is how we achieve scale:** not by choosing between grant and commercial finance, but by combining them – strategically, with market maturity in mind.

Figure 9. Illustrative Example of Tailoring Mix & Instruments by Market Maturity to Achieve SDG7 by 2030

	Overall Capital Mix				Grant & Subsidy Foucs		
	Grants & Subsidies	Equity	Debt	Overall Objective	Key Instruments	Public Sector Role	Strategic Focus
Frontier	Higher	Moderate	Lower	*De-risk entry and lower the cost-to-serve, attract investment*	*Up front grants, early RBF, TA, subsidised risk mitigations*	*Fund foundational access, enable risk-sharing, incl. off-grid in national plans*	*Market entry, derisking & affordability*
Emerging	Moderate	Moderate	Moderate	*Drive scale, bridge affordability gap, improve unit economics, blend debt to improve capital efficiency*	*RBFs, blended-finance, and credit guarantees*	*Align policies, co-fund scale-up, attract DFIs, enable local debt markets*	*Scaling, transition to commercial viability models*
Mature & Peaked	Lower	Moderate	Higher	*Drive growth with reduce cost of capital, enable advanced electrification & innovation, targeted inclusion*	*End-user subsidies, PUE support and catalytic grants*	*Focus on inclusion and long-term sustainability*	*Last-mile inclusion and equity gaps, PUE & innovation*

Recommendation 4A. Transform the strategic management of grant funding through: (i) consolidating and scaling funding programs; and (ii) establishing independent coordinating entities; (iii) strengthening governance and transparency in "open programs"; and (iv) allow "flexible" or "multi-stage" programs, but with coordination and notice.

Recommendation 4B. Reform grant administration through: (i) standardising application & management systems; (ii) digitising monitoring & real-time dashboards; (iii) harmonising compliance & reporting standards; (iv) and implementing enforceable disbursement service level agreements.

4A. Grant funding must be **strategically managed** to drive scale, alignment, and long-term market development. This means moving beyond fragmented, project-based approaches toward coordinated portfolios that are aligned with national priorities, governed independently, and structured to attract complementary capital.

A detailed breakdown of this recommendation is provided in the table below.

Recommendation	Strategic Aim	Commentary
i. Consolidate and scale funding programs, and implement a unified portfolio approach	**Reduce fragmentation, enable scale, and align funding with national energy plans**	• Transition from scattered, project-based funding to integrated, multi-year programs spanning countries, technologies, and delivery models, anchored in national electrification plans. • This creates predictability for implementers, allows for pipeline development, enables coordinated deployment of capital, better risk pooling and reduces administrative friction across donors.
ii. Establish independent coordinating entities	**Ensure impartiality, coherence, and cross-stakeholder coordination**	• Establish neutral fund managers or grant coordination bodies to manage day-to-day operations and facilitate coordination between donors, governments, and implementers. • Empower these entities to standardise procedures, mediate disputes, enforce alignment with *SDG7* targets, and rigorously monitor performance. • Their independence ensures alignment without politicisation, while also enabling agility in decision-making.
iii. Strengthen governance and transparency in "open programs"	**Embed clear rules, financial controls, and transparent communication**	• If "open programs" are pursued, these need to be carefully managed, controlled and resourced to ensure transparency to participants. • They need to include real investment, including: – Robust systems and up-to-date data to track funding status – Transparent and regular communication with all participants – Strong governance and controls, with clear and regular reporting – Advance notice of changes, ideally 3–6 months, to support planning • Without these foundations, open programs risk confusion, misallocation, and diminished trust from the private sector.
iv. Allow "flexible" or "multi-stage" grants, but with coordination and notice	**Ensure programs remain responsive to changing conditions while preserving predictability and operational planning for implementers**	• While the private sector appreciates certainty, we recognise that funders increasingly seek flexibility to adapt subsidy designs as markets evolve. • We feel that a flexible or multi-stage approach can work – where adjustments are made based on uptake, affordability, or maturity. • For example: – SHS: Grant adjusted periodically for future sales based on volumes, effective use and market outcomes to minimise market distortion* – Mini-grids: Initial capex support for a smaller project, followed by incremental capex as actual demand reaches the generation capacity. • However, flexibility must be accompanied by consultation and communication. Companies plan procurement and pricing based on current terms. Changes should be clearly communicated, not applied retroactively, and ideally come with at least 3–6 months' notice.

** Proposal originally shared by the CEO of Solar Panda (Andy Keith) during a panel discussion at the 2025 GOGLA General Assembly, Nairobi.*

4B. Efficient grant administration is critical to translating funding commitments into timely, on-the-ground results. Enhancing operational systems – through streamlined procedures, clearer accountability, and improved coordination – will reduce friction, accelerate disbursement, and strengthen delivery across the sector.

A detailed breakdown of this recommendation is provided in the table below.

Recommendations	Strategic Aim	Commentary
i. Standardise application and grant management systems	**Lower the administrative burden and increase transparency**	• To streamline the application process and reduce the administrative burden, it's essential to standardise eligibility criteria, documentation, and submission procedures across donor programs. • Harmonising these elements can significantly reduce transaction costs, improve efficiency, and simplify access for implementers. • A unified approach not only expedites due diligence and approvals but also fosters greater transparency and encourages broader participation from diverse actors, ultimately ensuring that more qualified implementers can engage without facing unnecessary barriers.
ii. Digitise monitoring and real-time dashboards	**Improve visibility, accountability, and adaptive learning**	• Adopt digitally enabled systems, such as DMRV (digital monitoring, reporting, and verification) as a core feature of all grant programs. • This includes the use of unified dashboards to track connections, impact metrics (e.g. income, reliability), and performance in real time, enabling more transparent, data-driven, and responsive grant management. • Integrated dashboards also enable funders to aggregate insights across programs and geographies, allowing for smarter, more timely interventions while reducing the reporting burden on implementers.
iii. Harmonise compliance & reporting standards	**Reduce transaction costs and improve consistency**	• Establish sector-wide, standardised compliance and reporting protocols through collaboration with key donor consortia. • This approach will align audit processes, reporting templates, and compliance requirements across programs to reduce the operational burden on grantees, streamline implementation, and promote consistent data collection. • Standardised frameworks will not only enhance cross-program comparisons and improve performance analysis but also strengthen accountability to national governments and guarantee a more accurate tracking of sector progress towards the energy access goal.
iv. Implement enforceable disbursement service level agreements	**Address liquidity bottlenecks and support predictable implementation**	• Embed clear, enforceable service level agreements into all grant contracts to define predictable disbursement timelines tied to verified delivery milestones. • These mechanisms reduce liquidity bottlenecks by ensuring that funds are released in a timely and transparent manner, enabling implementers to plan and execute with confidence. • Where relevant, disbursements should be managed through escrow accounts overseen by an independent program manager or coordination body, ensuring neutrality and rigour in milestone validation. • This structure improves financial flow discipline and supports faster, more reliable program execution in high-risk or capital-constrained environments.

Our Final Reflections

Achieving universal access to electricity is one of the most pressing development challenges of our time.

In Africa, energy access is not just about light or power – *it's about life itself*. It determines whether families can stay connected and feel safe, whether children can study at night, whether entrepreneurs can unlock new income, and whether communities can build resilience against climate and economic shocks. Energy access is the backbone of dignity, opportunity, progress and a basic right. Those of us who have worked on the frontlines understand that behind every connection statistic are real families building better futures. **This human reality is why the world's ambition must now match the urgency of the moment.**

Yet in the rush for reform, we must not lose sight of how far we've come. Over the last 15 years since our journey began, the energy access community has **made remarkable progress**. In 2009, off-grid solar kits and mini-grids were still nascent ideas, facing seemingly insurmountable challenges with funding, pricing and distribution. Today, they are **central to rural electrification.** Off-grid solar systems (including lanterns) have reached *over 560 million people*, providing essential services far beyond the reach of traditional grid infrastructure. This dramatic improvement is due to sustained collaboration between governments, donors, and the private sector. They are proof that **bold partnerships can transform lives.**

As practitioners who have lived through this, we have seen the transformation firsthand – from small pilot projects lighting up a handful of homes to robust national programs bringing power to millions. We have witnessed villages light up for the first time and entrepreneurs thrive thanks to reliable energy. This momentum affirms a simple truth: **universal access is achievable with the right support.**

But the job isn't done. 685 million people in Africa still lack electricity – and today's funding dynamics such as **shrinking grant flows, misaligned priorities, and inflexible mechanisms** threaten to stall, or even reverse, what we have all worked so hard to achieve.

We cannot afford to turn back. If we become complacent or continue business-as-usual, we risk leaving hundreds of millions in the dark. We do not need more rhetoric. We need a **bold realignment of how we finance access.**

A Call to Action for Donors & Policymakers

We are calling for a **decisive shift** – from a fragmented, bureaucratic grant ecosystem to one that is **coherent, catalytic, and purpose-built for delivery.**

This means:

- ***Remember the mission.*** This is about delivering electricity to those who still live without it – a fundamental pillar of human dignity and opportunity. Grant funding must remain anchored in this purpose.
- ***Be bold, with a focus on the goal.*** With fewer than five years to 2030, this is the moment to simplify, scale, and deliver. We cannot close the access gap through incrementalism or isolated projects. We need donors and development partners to mobilise significant capital, channel it through high-impact and coordinated platforms, and focus relentlessly on reaching unserved populations.
- ***Be pragmatic, flexible, supportive, and work together.*** The path to universal access will be challenging. Funding approaches must be well-coordinated and reflect local realities – blending grants with other instruments, adjusting to market maturity, and supporting partners who have demonstrated the capacity to deliver meaningful impact efficiently and at scale.

We must "finish the job" – not incrementally, but through coordinated, determined action.

The trajectory of the past 15 years has shown us what's possible – and what must change.

We invite donors, governments, and partners to step forward – not just as financiers, but as **co-creators** of a future where every household, no matter how remote, has access to **reliable, affordable, and sustainable energy.**

This is the time for development finance to recommit – not just in words, but in structure – to closing the energy access gap and delivering SDG7.

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ABOUT ENGIE ENERGY ACCESS

ENGIE Energy Access is the leading Pay-As-You-Go (PAYGO) and mini-grids solutions provider in Africa. The company develops innovative, off-grid solar solutions for homes, public services and businesses, enabling customers and distribution partners access to clean, affordable energy. The PAYGO solar home systems are financed through affordable instalments and the mini-grids foster economic development by enabling electrical productive use and triggering business opportunities for entrepreneurs in rural communities. ENGIE Energy Access counts over 1,600 employees, has operations in nine countries across Africa (Benin, Côte d'Ivoire, Kenya, Mozambique, Nigeria, Rwanda, Tanzania, Uganda and Zambia), and delivers clean, affordardable energy to more than 3 million customers.

Read more on engie-energyaccess.com

We have a measurable economic, social and environmental impact

16M+
People Impacted

52%
women managers

95%
employees in Africa

100,000
tons of CO_2 emissions for kits sold since 2021

10k+
sales agents

45+ MW
of solar capacity installed

We contribute to the achievement of 12 Sustainable Development Goals

1. Income generation, poverty alleviation
5. Women employment and empowerment
8. Kickstarting businesses and improved productivity
11. Small business and community development
3. Improved water access and less fire risk
6. Adequate access to sanitation and hygiene
9. Better infrastructure incl street lighting
13. Electricity generation without environmental cost
4. Reliable lighting for study
7. Reliable, affordable and clean energy
10. Sustaining income growth and reducing income inequalities
17. Domestic resource mobilization

OUR GUIDING PRINCIPLES

Our Mission
Deliver life-changing, affordable, reliable and sustainable energy solutions with exceptional customer experience.

Our Ambition
Be a leading decentralized energy company that impacts 50 million lives by 2030.

OUR VALUES

BOLD
We dare to innovate and make it happen

CUSTOMER CENTRIC
We pursue an exceptional customer experience

ONE TEAM
We support each other and celebrate diversity

PERFORMANCE DRIVEN
We are empowered to set ambitious targets and deliver results

INTEGRITY
We act with transparency and honesty