



Transforming Uganda's Power System

Regulatory Reform and Market Development for a Clean Energy Future



IMPACT CASE STUDY

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Forewords

Foreword – Ministry of Energy and Mineral Development

Uganda's vision for the energy sector is both ambitious and necessary. Achieving universal access to electricity, advancing the use of renewable energy, and reducing dependence on fossil fuels are central to our national development agenda. At the Ministry of Energy and Mineral Development, we see energy not only as an infrastructure priority, but as a driver of economic growth, social inclusion, and environmental sustainability.

In recent years, Uganda has made important strides toward these goals. Yet, as this report demonstrates, real progress depends not only on setting policy direction, but on ensuring that the systems, institutions, and markets required to deliver on these ambitions are firmly in place. Our partnership with GET.transform has supported this effort by strengthening the enabling environment across critical segments of the electricity sector. From scaling private investment in generation, to expanding access through mini-grids, to enabling new technologies such as distributed solar and electric mobility, this collaboration has focused on turning policy into implementation.

We are particularly encouraged by the progress made in areas that will shape the future of Uganda's energy system. The development of regulatory frameworks for electric vehicle charging infrastructure positions Uganda as a leader in reducing emissions from the transport sector while improving energy efficiency. Similarly, the advancement of distributed generation and net metering create new opportunities for consumers to participate in energy production, increasing resilience and flexibility across the system. At the same time, the strengthening of the mini-grid sector reflects our continued commitment to extending electricity access to rural and underserved communities. By improving regulatory clarity and technical standards, we are creating conditions for sustainable and scalable solutions that complement national grid expansion. These achievements reflect the strength of coordinated action.

Our priority is to build on this foundation - accelerating implementation, attracting further investment, and ensuring that the benefits of Uganda's energy transition are felt across all regions of the country. We remain committed to creating a sector that is inclusive, forward-looking, and aligned with our national development objectives.

Eng. Birimumaso David

Principal Energy Officer – Energy Efficiency and Conservation
Ministry of Energy and Mineral Development of Uganda

Foreword – Electricity Regulatory Authority (ERA)

Uganda’s electricity subsector stands at a decisive juncture. As demand continues to grow and the need for reliable, affordable, and sustainable energy becomes ever more pressing, the role of effective regulation has never been more central. At the Electricity Regulatory Authority, we are committed to ensuring that the sector evolves in a way that balances investment, efficiency, and public interest of all Ugandans.

Over the past years, Uganda has made significant progress in expanding generation capacity and strengthening its electricity infrastructure. However, as this case study highlights, the next phase of development requires a shift in how the sector is structured and governed. Traditional mechanisms that were instrumental in building the market must now evolve to support scale, competition, and integration across an increasingly complex energy landscape.

Our collaboration with GET.transform has contributed meaningfully to this transition. Together, we have worked to strengthen regulatory frameworks across key segments of the electricity supply industry: from competitive procurement of generation capacity to the integration of distributed energy resources, the development of mini-grids, and the emergence of electric mobility.

What distinguishes this work is not only the technical outputs, but the way in which they were developed. Through structured stakeholder engagement, rigorous analysis, and continuous institutional collaboration, we have ensured that the resulting frameworks are grounded in Uganda’s realities and aligned with our long-term sector objectives. This approach has reinforced our capacity as a regulator to respond to emerging challenges while maintaining clarity, transparency, and predictability for all market participants.

These achievements are the result of collective effort. We extend our appreciation to the Ministry of Energy and Mineral Development, sector institutions, private developers, and development partners who have contributed their expertise and commitment throughout this process.

As we look ahead, our focus remains clear: to operationalise these frameworks, deepen private sector participation, and ensure that Uganda’s electricity subsector continues to evolve in a manner that is efficient, resilient, and inclusive. Regulation remains at the core of this transformation not as a constraint, but as an enabler of sustainable growth.

Geofrey Okoboi, PhD

Director Economic Regulation
Electricity Regulatory Authority of Uganda

Introduction

In this series of Impact Case Studies, GET.transform highlights the tangible and sustained outcomes of advancing energy transitions in partnership with high-impact countries and regions. Focusing on both policy and technical reforms, each case examines how tailored advisory support, structured stakeholder dialogue, and hands-on implementation have translated policy ambition into measurable progress on the ground. Rather than presenting isolated success stories, the series distils practical lessons on what has worked, what has not, and why—offering insights that can inform future efforts to enable clean, affordable, and reliable energy systems. Collectively, the case studies demonstrate how targeted technical assistance can generate system-wide effects that extend beyond individual interventions.

This case study focuses on Uganda’s electricity supply industry, which is undergoing a sustained transformation toward universal electricity access, expanded renewable energy deployment, and the integration of emerging low-carbon technologies across generation, distribution, and end-use segments. Uganda’s energy transition is not a story of isolated reforms - it is a story of a system getting ready for the future and learning how to move most effectively. Over the past five years, GET.transform has worked alongside Uganda’s energy institutions to turn policy ambition into something tangible: projects that can be financed, systems that can operate, and markets that can grow.

GET.transform is a technical assistance programme supporting national and regional partners and institutions in advancing their energy sector transformations. It forms part of the European multi-donor platform Global Energy Transformation Programme (GET.pro), and is co-funded by the European Union, Germany, Norway, Sweden, the Netherlands, and Austria.

At the outset of GET.transform’s engagement in Uganda in 2021, the country’s transition was constrained by structural, regulatory, and market-related barriers that limited investment mobilisation and slowed the implementation of national energy policy objectives.

Entrusted with the task to contribute to addressing these challenges in Uganda, GET.transform worked in close partnership with the Electricity Regulatory Authority (ERA), the Ministry of Energy and Mineral Development (MEMD), and a broad range of Ugandan public, private, and development stakeholders, including utilities such as UEDCL and WENRECO, as well as complementary initiatives such as GET.invest and regional programmes supporting decentralised energy access.

We extend our sincere gratitude towards all partners for the trust, the productive collaboration and the impact jointly achieved.

The collaboration adopted a coordinated, systems-oriented approach aimed specifically at strengthening Uganda’s regulatory foundations across the four market segments of Independent Power Producers (IPPs), distributed generation, mini-grids and electric vehicles (EVs).

This approach combined regulatory design support, structured stakeholder engagement, and targeted capacity building within the Ugandan context. Outputs were designed to not only address Uganda's sector-specific bottlenecks but also to improve coherence across the wider electricity supply industry, strengthening consistency in planning, procurement, and system integration nationwide.

The work has helped to strengthen the enabling environment for private sector participation in Uganda's electricity sector and to translate national energy policy objectives into operational, investment-ready regulatory frameworks across multiple emerging market segments. In reflecting on the results yielded, this case study also highlights how these outcomes pave the way for further advances in Uganda's energy transformation.

Partner Testimonials



For example, in some countries, put in place a net metering regulation takes more than 10 years. We are doing it for less than one year because we are not reinventing the wheel. We are picking the leaf on what has worked in other countries and what we need to modify, and we are ready to move. So, it has really enhanced and simplified our work.

Eng. Ziria Tibalwa Waako,
CEO,
Electricity Regulatory Authority (ERA), Uganda



The GET.transform partnership has been instrumental in strengthening Uganda's off grid regulations and standards for mini grids. We were fortunate to have GET.transform as a partner who brings in global experience and lessons learnt from other countries in developing mini grid regulations and standards applicable to Uganda's context.

Peter Kakeeto
Manager Technical Compliance and Monitoring,
Electricity Regulatory Authority (ERA), Uganda



1 Independent Power Producers (IPPs)

1.1 Challenge

Uganda aims to answer to a growing energy demand and realise universal access to sustainable, affordable and quality energy services for all Ugandans. The country needs to unlock private investment to update and expand its energy system. At the centre of this shift stands the Electricity Regulatory Authority (ERA) — the institution tasked with turning Uganda’s growing electricity demand into a pipeline of real, bankable projects. Independent Power Producers (IPPs) have historically played a central role in expanding Uganda’s generation capacity. However, procurement of new capacity has largely been anchored in Feed-in Tariff (REFiT) mechanisms and donor-supported initiatives such as GET FiT. These mechanisms were instrumental in establishing the early renewable energy market. But the success also revealed new limits. Over time, the system began to strain: prices were not always competitive, project timelines stretched toward financial close, and new plants were not always aligned with grid readiness. What had initially unlocked investment was now slowing it down. The core problem was no longer whether Uganda could attract IPPs, but how to do it better, faster, and at lower cost.

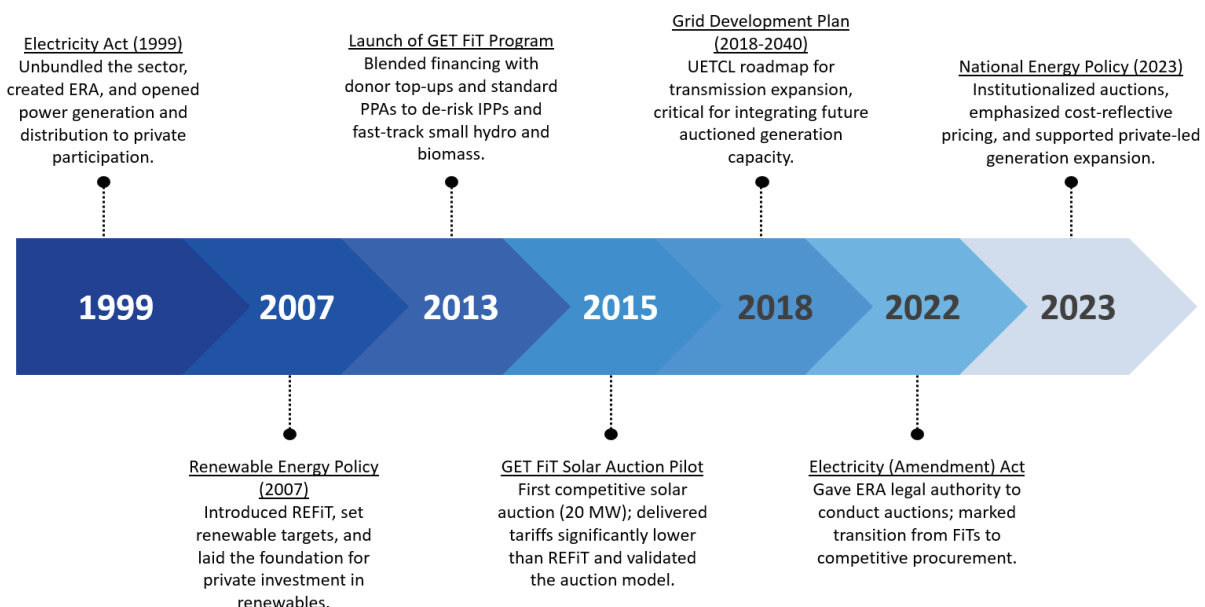


Figure 1: Selected Energy Policy Timeline – Uganda

1.2 Approach

To address these constraints, Uganda’s Electricity Regulatory Authority (ERA) wanted to move from negotiated procurement to competitive renewable energy auctions. But introducing auctions is not just about running tenders — it requires a complete system redesign. ERA decided to partner with GET.transform and joined the [Policy Catalyst Window for Effective Renewable Energy Tendering](#).



Figure 2 Ugandan representatives exchanging on best practices in renewable energy tendering with peers in the Policy Catalyst Window training at the Power Futures Lab in Cape Town, June 2025. © World Bank



Figure 3 Snapshot from the four-day, multi-stakeholder workshop led by ERA with technical support from GET.transform in July 2025. © GIZ

Taking action at the national level, ERA worked with GET.transform on strengthening the enabling environment for IPPs through the design of a competitive renewable energy procurement framework. This was undertaken in two structured phases: the work began with a comprehensive assessment of Uganda’s renewable energy landscape, including policy and regulatory readiness, market dynamics, grid constraints, and investment conditions. This assessment ensured the solution addressed actual barriers and not just theoretical ones. This step was complemented

by benchmarking international best practices in renewable energy auction design to identify applicable models for Uganda's context.

In the second phase, ERA and partners translated these analytical insights into a structured, bankable auction framework intended to complement and gradually evolve the existing REFiT system. The framework design covered key building blocks of auctions, including a framework guide for all applicable renewable energy technologies in the Uganda context (Solar, Biomass, Wind, Geothermal, Hydro and BESS). A strong emphasis was placed on stakeholder engagement throughout the process to garner sector buy-in and alignment. ERA and GET.transform facilitated structured consultations with key sector institutions, including transmission and distribution utilities, environmental authorities, investment agencies, financial institutions, development partners, and private sector developers. These engagements were critical in validating assumptions related to grid readiness, land acquisition bottlenecks, permitting timelines, and investment risk perceptions, which were subsequently integrated into the framework design. Utilities, developers, financiers, and public institutions all helped shape it. Co-creating the framework with the sector ensures it can work in practice, and not just on paper.

1.3 Results / Outlook

Laying the groundwork for scalable investment, Uganda now stands at the threshold of a major change. ERA has developed a new framework that is very close to adoption and sets the stage for a transition from administratively determined procurement toward competitive renewable energy auctions for IPPs. Expected gains include improved clarity on procurement design principles from pre-auctions to post auctions, clear institutional roles and mandates, enhanced alignment between generation planning and grid expansion considerations, and strengthened regulatory inputs supporting transparent and predictable investment processes.

The anticipated impact of this shift is substantial. Competitive procurement is expected to improve price discovery, reduce long-term generation costs, and enhance allocation efficiency for new capacity additions. It is also expected to shorten development timelines by addressing recurring bottlenecks in project approval, grid connection readiness, and contract standardisation. Collectively, these improvements will strengthen investor confidence and create a more predictable pipeline of bankable IPP projects.



Figure 4: Targeted Gains from the New Renewable Energy Auction Framework in Uganda (Source: GET.transform)

A key lesson emerging from the intervention is that while the REFiT and GET FiT frameworks played a critical role in establishing Uganda’s renewable energy market and attracting private sector investment, their long-term scalability and efficiency require further evolution toward more structured and competitive procurement mechanisms. Although Uganda already introduced elements of competitive bidding through the GET FiT Solar Facility, one of the first renewable energy auction initiatives in Sub-Saharan Africa outside South Africa, the broader REFiT framework largely relied on administratively determined tariffs rather than fully competitive auctions across technologies and project categories.

Looking ahead, the groundwork established through this support enables the operationalisation of competitive renewable energy auctions as a central procurement mechanism for future generation capacity. This is expected to deepen private sector participation, improve risk-sharing between public and private actors, and support a more efficient, diversified, and resilient electricity supply industry in Uganda. Uganda can now move toward fully operational auction rounds — turning regulatory progress into real projects on the ground. While the GET.transform Uganda Country Window is closing, it is great to recognise the country’s strong and promising progress in this area. Thanks to internal funding mobilised by the GIZ, GET.transform aims to sustain its support for IPP tendering and is working with ERA on the preparations for a 50 MW tender of solar capacity.

2 Electric Vehicle (EV) Charging Infrastructure

2.1 Challenge

Uganda’s transport sector remains predominantly dependent on fossil fuels, with petroleum products accounting for most of the energy consumption. This use of petroleum exposes the country to volatile prices on the global markets and results in a significant share of urban emissions. At the forefront of Uganda’s electric mobility transition is the Ministry of Energy and Mineral Development (MEMD), shaping how a new sector can grow in a way that is both innovative and system ready. National policy has increasingly prioritised electric mobility as part of a broader energy transition agenda, reflected in the Energy Policy for Uganda 2023, the Energy Efficiency and Conservation Bill 2024, and the Updated Nationally Determined Contribution (NDC).

However, despite strong policy intent and emerging market activity, the development of electric vehicle (EV) charging infrastructure has been constrained by the absence of a comprehensive regulatory and technical framework to guide operations. While EV adoption—particularly electric motorcycles—has grown rapidly in recent years, infrastructure deployment has been fragmented and largely market-driven. This has resulted in uncertainty regarding licensing, tariff structures, technical standards, interoperability, and safety requirements for charging stations. The market was moving faster than the rules. The lack of a unified framework has also limited coordinated planning between stakeholders, including utilities, regulators, urban authorities, and private investors. As a result, investment in charging infrastructure has progressed cautiously, with risks related to grid integration, consumer protection, and system reliability remaining insufficiently addressed.

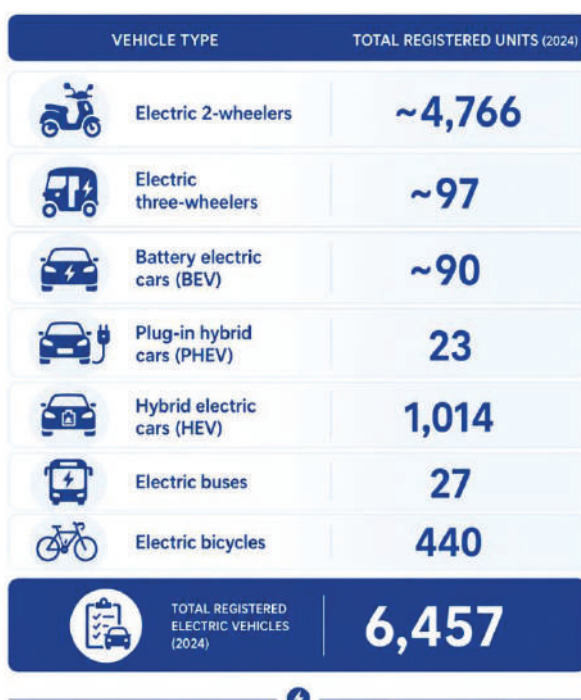


Figure 5: Total Number of Registered Electric Vehicles in Uganda, 2024 (Source for registration figures: Ministry of Works and Transport)

2.2 Approach

The Ministry, faced with the challenge of bringing order, confidence, and coordination to a fast-moving market, partnered with GET.transform and set out to define the foundations of the EV charging ecosystem before fragmentation became a barrier to scale. The partners first thoroughly assessed Uganda’s policy landscape, emerging market dynamics, and technical requirements. One key insight quickly emerged: if managed well, EV charging could become an asset to the grid. By aligning charging with off-peak demand, Uganda could make better use of existing generation capacity.

From there, the focus shifted to designing a framework that could guide the market without constraining it. The approach combined a sector diagnostic, stakeholder consultation, and regulatory design to ensure that the resulting framework was both technically robust and implementation oriented.

Through extensive engagement with utilities, regulators, city authorities, and private operators, the framework was built around a few essential pillars: clear licensing and permitting pathways, technical and safety standards for infrastructure, guidance on tariffs and service provision, and interoperability and data considerations.

Importantly, the approach left space for innovation — including emerging models such as battery swapping and off-grid charging — ensuring the sector could evolve alongside the technology.



Figure 6 Sector consultations and training on E-mobility charging infrastructure building blocks were conducted on 5th June 2025 in Kampala. © GIZ

2.3 Results / Outlook

Uganda now has the foundations of a functioning EV charging market. Where uncertainty once slowed progress, there now are clearer directions for investors, defined roles for institutions and a shared understanding of how the sector should develop.

The regulation has helped lay the groundwork for the growth of electric vehicles (EVs) in Uganda by creating clearer rules for how EV charging stations should be developed and operated. It provides guidance on who can establish and run charging stations, the safety requirements they must follow, and how charging services should be managed to ensure reliability and fairness for consumers.

The regulation introduces standards to ensure that EV charging stations use safe and compatible equipment, allowing drivers to charge their vehicles more easily across different locations. It also provides guidance on pricing and service quality, helping to protect consumers while giving investors and operators greater confidence to invest in EV infrastructure.



Figure 7 Minister of Energy and Mineral Development, Hon. Ruth Nankabirwa, launching Uganda's first public EV charging station in March 2025 © GIZ

This framework is expected to significantly reduce market uncertainty, thereby accelerating private sector investment in charging infrastructure and improving coordination across the transport and energy sectors. It also provides a basis for improved consumer protection, enhanced system safety, and more efficient integration of EV demand into the electricity grid. Over time, this is expected to support broader national objectives, including reductions in greenhouse gas emissions, improved urban air quality, and reduced dependency on imported fossil fuels.

A key lesson is that early-stage EV market development requires a carefully balanced regulatory approach—one that enables innovation while ensuring safety, standardisation, and system reliability but not too stringent to deter organic sector growth. The Ugandan experience demonstrates that regulatory clarity is a critical enabler for unlocking investment in nascent mobility transitions, particularly in contexts where infrastructure ecosystems must evolve in parallel with vehicle adoption.

With the regulatory foundation in place, the next phase will focus on implementation — licensing operators, enforcing standards, and integrating EV demand into grid planning. Over time, EV infrastructure can become not just a new load on the system, but a flexible asset within it.

3 Distributed Generation (DG)

3.1 Challenge

Uganda has enormous solar potential that is largely untapped. Across the country, businesses and households are increasingly interested in generating their own electricity. Technology is available, and demand for reliable power is growing. However, the system is not designed for back-and-forth power flow and trade. The challenge was to move from a centralised model to one where generation could happen across the network and not just within it. Driving this shift are the Electricity Regulatory Authority, the Ministry of Energy and Mineral Development, and the Uganda Electricity Distribution Company Limited (UEDCL), working together to redefine how electricity flows through the system.

However, at the outset of the partnership with GET.transform, distributed generation (DG)—including rooftop solar, embedded generation, and prosumer systems—remained only partially integrated into the national electricity framework. While large-scale renewable energy projects benefited from established rules, smaller-scale generation systems lacked clear and harmonised regulatory pathways.

A key constraint was the absence of fully operationalised net metering and distributed generation frameworks. This limited the ability of consumers to generate electricity for self-consumption and export surplus power to the grid or vice-versa. Subsequently, there were very few prosumers, and the development of decentralised energy markets was slow. In addition, interconnection standards, billing arrangements, and operational procedures were not yet fully standardised, creating uncertainty for both utilities and potential investors. As a result, the uptake of distributed solar systems remained

below the technical and economic potential, despite strong resource availability and growing demand for reliable and affordable electricity solutions.

3.2 Approach

The collaboration focused on the central component of net metering guidelines. ERA, MEMD, UEDCL and GET.transform hosted a stakeholder consultation workshop in August 2025 which provided a vital platform for validating the draft framework. The engagement brought together over 80 sector stakeholders to review proposed provisions aimed at enabling small-scale renewable energy generation and grid export.

The framework had been developed through the GET.transform [Policy Catalyst Distributed Generation \(DG\) Window](#) aimed at building national institutional capacities and sharing international best practices to scale and provide customised technical assistance for DG framework development. Through this mechanism, Uganda’s approach was informed by comparative experiences from other jurisdictions where net metering systems have been successfully introduced, including Lesotho, Namibia, Eswatini, Mozambique, and Kenya. The proposed framework is set to unlock the untapped potential at the edge of the grid. It defines the operational basis for net metering systems up to 500 kW, thus allowing eligible consumers to generate electricity primarily for self-use while exporting surplus energy to the grid, which functions as a virtual storage system. This approach required alignment of technical interconnection rules, metering infrastructure, and utility operational procedures to ensure system reliability and equitable cost allocation.



Figure 8 Impressions from the Net Metering Stakeholder Validation Workshop in August 2025. © ERA

3.3 Results / Outlook

The intervention has contributed to establishing a structured policy foundation for distributed generation in Uganda. The formalised net metering principles and implementation-ready guidelines mark significant steps toward enabling consumers to actively participate in the electricity system as prosumers, thereby decentralising generation and improving overall system flexibility.

The expected impact includes increased deployment of rooftop solar and small-scale renewable systems, improved utilisation of existing grid infrastructure, and reduced pressure on centralised generation assets. Over time, distributed generation is expected to enhance energy security, improve affordability for end users, and support more efficient integration of variable renewable energy into the national grid.

An important lesson from the intervention is that unlocking distributed generation requires more than technical feasibility; it depends on clear regulatory definitions, utility readiness, and well-structured operational mechanisms for billing, interconnection, and settlement. The Ugandan experience demonstrates that targeted policy instruments, when supported by regional knowledge exchange and stakeholder validation, can effectively accelerate the transition toward decentralised energy systems.

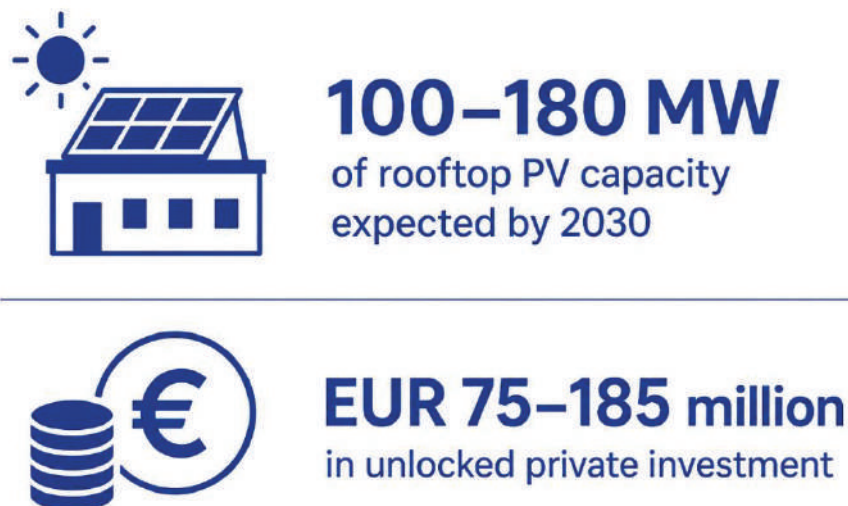


Figure 9: Estimated Market Potentials Enabled by the Distributed Generation Guidelines in Uganda (Source: GET.transform)

The net metering framework paves the way toward a more dynamic distributed energy market. It is expected that it can help realise a potential of 100 – 180 MW rooftop PV by 2030, unlocking EUR 75 – 185 million private investments. Beyond catalysing broader adoption of rooftop solar, the framework can enable future integration of storage and smart grid solutions, and position distributed generation as a core pillar of Uganda’s energy transition strategy. Together, MEMD, ERA, and UEDCL have thus laid the foundations for a more flexible and resilient power system.

4 Mini-Grids

4.1 Challenge

Mini-grids represent a critical pathway for expanding electricity access in Uganda’s rural and hard-to-reach areas, where grid extension remains economically and technically challenging. Leading the effort to expand electricity access beyond the reach of the main grid are the Ministry of Energy and Mineral Development and the Electricity Regulatory Authority. They work together to make rural electrification investable, aiming to turn mini-grids into a scalable solution.

Despite their strategic importance in achieving national universal access targets, mini-grid investment remained limited. Developers faced persistent uncertainty due to unclear licensing and concession terms, unpredictable tariff approval processes and limited clarity on what happens when the main grid arrives. At the same time, technical standards were not fully harmonised, increasing costs and reducing efficiency. The result was a familiar pattern: strong potential, but slow and fragmented deployment.

4.2 Approach

To unlock scale, MEMD and ERA, in partnership with GET.transform, worked on reducing uncertainty and standardising the fundamentals of mini-grid development. These included mini grid cost of service code, engineering, procurement and construction guidelines and grid interconnection guidelines.



Figure 10 Snapshots from the Validation Workshop on Standards for Isolated Grid Systems in May 2023. © GIZ

In collaboration with the promotion of mini-grids project, GET.transform supported the development of the mini-grid concession framework in partnership with the Ministry of Energy and Mineral Development. The framework streamlined mini-grid concession periods for mainland and Islands projects. It clarified institutional roles and mandates, mini-grid licensing framework and the entire

contracting framework largely for a public private partnership mini-grid model. In addition to concession framework development, GET.transform supported institutional capacity development for key government actors, private sector and development partners on best practices for procurement and developing bankable mini-grid projects. This was done in partnership with GET.invest.

As part of peer-to-peer learning, the Electricity Regulatory Authority in partnership with GET.transform hosted the African Forum of Utility Regulators (AFUR) with over 40 regulators from West and East Africa in February 2024 to benchmark Uganda's productive use of mini grid electricity and also showcase the Africa mini grid tariff regulation tool.

4.3 Results / Outlook

With clearer rules and standardised approaches, mini-grid projects become significantly more viable. Uganda now disposes of harmonised technical standards for Engineering, Procurement, and Construction, clearer guidance on service quality and system design and improved alignment between mini-grid deployment and national electrification planning.

This translates into reduced development costs, improved system reliability, and greater confidence for private investors. The impact is already visible, with the standards being applied in national programmes aiming to scale deployment across the country. As a result, the standards have already been deployed in the development stages of the Get Access project steered by the Ministry aiming to develop 100 mini grids across the country.



Figure 11 A 40kWp mini grid system in the Lamwo district, Northern Uganda. © GIZ

A lesson is that mini-grid scale-up is highly dependent on regulatory certainty, particularly regarding long-term concessions, tariff mechanisms, and grid arrival integration rules with a sound technical framework. The stakeholder consultations were conducted with key sector institutions. The work in Uganda reinforces the importance of designing mini-grid frameworks that are flexible enough to support private investment while being robust enough to ensure system integration and consumer protection.

With lower risk comes greater scale. Looking ahead, the strengthened regulatory direction provides a platform for expanding mini-grid deployment as part of a broader integrated electrification strategy. This includes greater harmonisation with grid extension planning, improved integration of renewable hybrid systems, and potential evolution toward performance-based models that reward service quality and efficiency in rural electrification delivery.

5 Conclusion

At the centre of Uganda’s energy transition stand its public institutions — most notably the Ministry of Energy and Mineral Development and the Electricity Regulatory Authority. Their leadership, coordination, and commitment to reform have been the driving forces behind the progress captured in this case study.

Over the past years, these institutions have not only defined Uganda’s energy ambitions of universal access, increased renewable energy deployment, and the integration of emerging technologies but have also taken the necessary steps to translate these ambitions into functioning systems. In partnership with GET.transform, this has meant addressing the underlying constraints that shape how the electricity sector operates in practice.

Across four interconnected market segments — Independent Power Producers, mini-grids, distributed generation, and electric mobility — the work has focused on strengthening the regulatory and institutional foundations required for scale. Each segment presented distinct challenges, but all pointed to a common need: greater clarity, stronger coordination, and frameworks that could move beyond pilots toward system-wide implementation.

The result is a gradual but decisive shift in how Uganda’s electricity supply industry is structured. What was once characterised by fragmented approaches and early-stage mechanisms is evolving into a more coherent and standardised system. Competitive procurement is emerging as a pathway for new generation capacity. Mini-grids are becoming more viable as part of a coordinated electrification strategy. Distributed generation is opening the system to new participants. Electric mobility is beginning to take shape within a defined regulatory space.

Taken together, these developments are improving predictability for investors, strengthening institutional alignment, and creating the conditions for sustained private sector participation.

A defining feature of this progress has been the way in which it was achieved. Rather than introducing isolated solutions, the approach has been embedded, iterative, and stakeholder-driven. Regulatory design has been closely linked with capacity building and continuous consultation, ensuring that frameworks are not only technically robust but also implementable within Uganda’s institutional context. This has reinforced national ownership and strengthened the ability of sector actors to carry reforms forward.

Several cross-cutting lessons emerge. Regulatory reform is most effective when it is not treated as an output but a process that evolves through engagement, testing, and adaptation. Market development across emerging energy segments requires coordinated action, particularly where infrastructure, tariffs, and investment risks are closely interconnected. And while international experience provides valuable guidance, its impact depends on careful adaptation to local realities.

Looking ahead, the focus shifts from design to delivery. The frameworks established through this collaboration now provide a platform for scaling investment and accelerating implementation. Their full impact will depend on continued operationalisation, institutional strengthening, and sustained coordination across the sector.

Uganda's experience demonstrates that energy transitions are not achieved through individual interventions, but through the steady alignment of policy, regulation, and practice. The foundations are now in place. What follows is the opportunity to build on them — toward a more resilient, inclusive, and low-carbon energy system that delivers for all Ugandans.

Looking ahead, the foundations established through this engagement provide a platform for scaling investment and accelerating implementation across Uganda's energy transition agenda. Continued operationalisation of the developed frameworks—supported by institutional strengthening and ongoing coordination—will be critical to fully realise their impact. Over time, these reforms are expected to contribute to a more diversified, resilient, and inclusive energy system in Uganda, supporting progress toward universal access and a low-carbon energy future.



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