



Unleashing Potential



POWERING PROSPERITY: AN URGENT NEED FOR REFORMS IN THE NATIONAL STRATEGY FOR AFFORDABLE AND STABLE ELECTRICITY IN UGANDA

POLICY PAPER

AUTHORS:

KAYEMBA JOSEPH
KIBERU JONAH



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Executive Summary

Uganda's aspiration for economic transformation, as articulated in Vision 2040, is critically hampered by a deeply challenged electricity sector, characterized by high costs, unreliable supply, and stark inequities in access. The core of Uganda's productive sector, its SMEs and informal enterprises which employ the majority of the workforce is particularly vulnerable to frequent outages and some of the highest tariffs in East Africa, stifling growth and competitiveness. While the country has commendably expanded its generation capacity to approximately 2,053 Mega Watts (MW), predominantly from hydropower, this supply is underutilized due to transmission bottlenecks and a fragile distribution network. The recent transition from the private concessionaire, Umeme, back to full State control under Uganda Electricity Distribution Company Limited (UEDCL) has exposed systemic vulnerabilities, with service reliability reportedly deteriorating and worsening power interruptions for businesses and households alike.

This situation is compounded by a profound paradox. Uganda exports electricity to neighboring nations while a significant portion of its own population, particularly in rural areas where access remains below 25%, lives in energy poverty. The sector's key challenges are multifaceted, including inadequate and aging infrastructure leading to technical losses, prohibitive costs that discourage legal connection and consumption, and a pronounced urban-rural access divide. Further hindering progress are

policy and institutional gaps, such as fragmented planning, weak regulatory enforcement, and a lack of a cohesive long-term national energy strategy to synchronize efforts across generation, transmission, and distribution.

Despite these challenges, significant opportunities exist for reform and growth. Uganda possesses vast untapped renewable energy potential from solar, wind, and geothermal sources, which can diversify the energy mix and reduce reliance on climate-vulnerable hydropower. Decentralized solutions like mini-grids offer a rapid pathway to rural electrification, while enhanced private sector engagement through predictable regulations and public-private partnerships can mobilize crucial investment. Learning from regional peers like Kenya's successful geothermal diversification and Rwanda's accountable utility models, Uganda can chart a new course. This necessitates the urgent formulation of a comprehensive National Energy Strategy to address critical policy gaps in long-term planning, energy transition focus, and institutional capacity. Key recommendations must center on strategic investments in grid modernization and smart technologies, a decisive reduction in connection fees and tariffs to boost affordability, and strong incentives for renewable energy investment and private sector participation. Seizing this moment for decisive reform is imperative to transform Uganda's electricity sector from a constraint into a reliable, affordable, and inclusive foundation for national prosperity.

Key Words: *Electricity, Energy, Uganda, Affordability, Reliability, Strategy, Power, Outages.*

Introduction

The United Nations Sustainable Development Goal 7 (SDG7) aims to ensure access to affordable, reliable, sustainable and modern energy for all by 2030. However, globally, 759 million people, 84% still do not have access to electricity (SEforALL, 2025). As of 2024, approximately 43% of Africa's population, equivalent to about 600 million people lacked access to electricity, with nearly 590 million of them living in Sub-Saharan Africa (RES4AFRICA & ENEL, 2025). This report highlights that over the period from 2012 to 2022, Africa's electricity generation capacity grew at an average rate of just over 2% per year, which is below the global average of 2.5%. On the other hand, some African countries including Egypt, Morocco, and Tunisia have achieved 100% electricity access (ECP, 2022). Some Sub-Saharan African countries such as South Africa, Ethiopia, and Uganda have also made notable progress, but their electricity sector is still challenged with affordability, and stability (World Bank & ESMAP, 2025). In Uganda, electricity is central to its development agenda, underpinning industrial growth, Small and Medium Enterprises (SMEs) sustainability, education, health, digital transformation, and the entire economy as reflected in Vision 2040.

For twenty years, Umeme managed the electricity distribution network in Uganda. The distribution concession officially ended on 31st March 2025 (Umeme, 2025), marking the conclusion of Umeme Limited's mandate which operated under the supervision of the Electricity Regulatory Authority (ERA) and the Ministry of Energy and Mineral Development. The concession, signed in 2005, was part of the broader energy sector reforms intended to improve efficiency, expand access, and attract private investment. During its tenure, Umeme made notable investments in network expansion, contributing to modest improvements in power reliability and customer service across urban areas. However, persistent challenges such as frequent outages, system losses, and tariff concerns remained key public issues throughout the concession period.

Despite these limitations, the level of power supply stability under Umeme was relatively more predictable compared to the current situation following the Uganda Electricity Distribution Company Limited (UEDCL) takeover. Power interruptions, which had existed since the days of Umeme, have reportedly worsened since UEDCL assumed control in April 2025. Many consumers across sectors experience more frequent and prolonged outages, affecting businesses, industries, and households alike. This deterioration highlights the urgent need for robust operational reforms, investment in modern distribution infrastructure, and enhanced institutional capacity to restore efficiency and public confidence in Uganda's electricity distribution system.

Current Electricity Generation

Uganda's Vision 2040 emphasizes reliable and affordable energy as a driver of structural transformation from a peasant to a modern and prosperous society (NPA, 2024). Over the past two decades, Uganda has implemented substantial reforms to improve generation, transmission, and distribution systems. With the commissioning of Karuma Hydropower Plant (600 Megawatts) and Isimba Hydropower Plant (183 MW), Uganda's installed generation capacity has tremendously increased. The Total Installed Generation Capacity has grown from 60 MW in 1954, 400 MW in 2000 to 2052.7 MW as of January 2025 (ERA, 2025), with hydropower accounting for about 83.5% of the energy mix. Uganda's electricity sub-sector has expanded significantly, growing from just three generation plants in 2001 to over 45 plants today (ERA, 2025). Uganda's power generation is mainly diversified across four different sources as follows (ERA, 2025) as shown in figure 1 below:

Figure 1: Power Generation Capacity in Uganda




Source: Adapted from ERA (2025). Uganda Energy Transition Plan.

Though the government has an ambitious target to increase generation capacity to 52,000MW by 2040, with 80% connected to the main grid (NREP, 2024), effective utilization remains below capacity due to transmission bottlenecks, delayed grid expansion, and low consumption rates, particularly among rural households, in addition to loss of public trust in which several consumers are resorting to solar power and others having two power sources due to unreliability of hydroelectric power.

Electricity Tariffs by Consumer Category

Table 1 below presents the approved electricity tariffs for various consumer categories in Uganda, as determined by the Electricity Regulatory Authority (ERA). The tariffs vary according to consumer type: domestic, commercial, industrial, and public institutions and are further differentiated by time-of-use periods (Average, Peak, Shoulder, and Off-Peak).

Table 1: Approved End-User Electricity Tariff Schedule for UEDCL for the Fourth Quarter (October-December) 2025

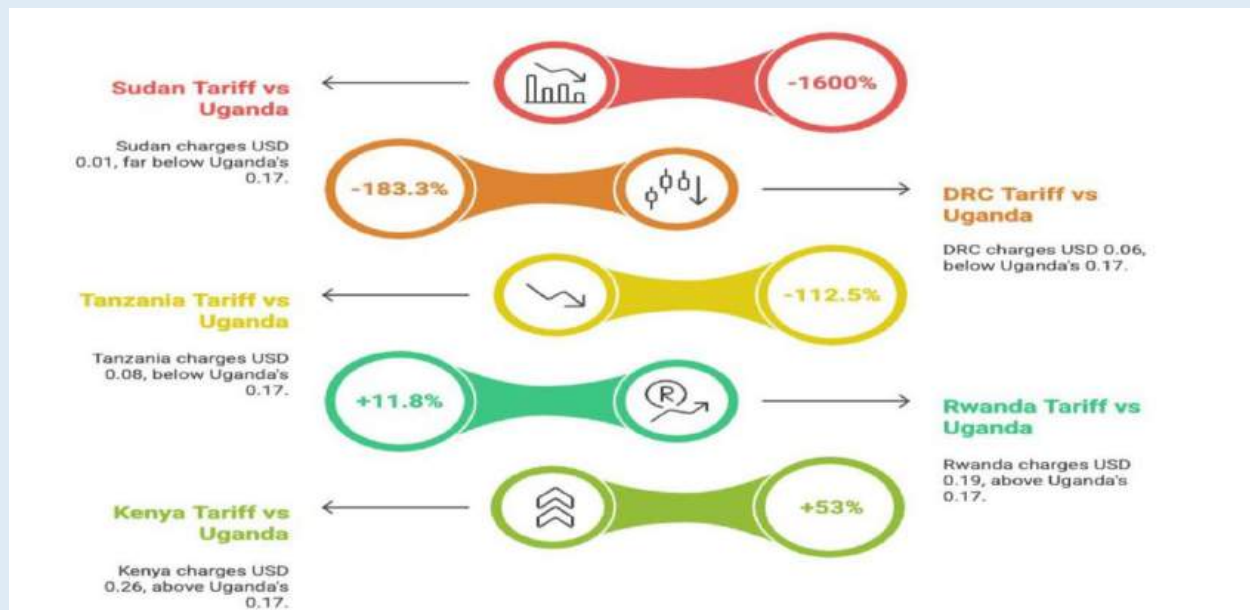
DOMESTIC CONSUMERS - CODE 10.1					
Low voltage single phase supplied at 240 volts					
Lifeline - First 15 Units (Ush/kWh)*	250.0				
Energy Units between 16 - 80 (Ush/kWh)	756.2				
Energy Units between 81 - 150 (Ush/kWh)	412.0				
Energy Units above 150 (Ush/kWh)	756.2				
COMMERCIAL CONSUMERS - CODE 10.2		Average	Peak	Shoulder	Off-Peak
Three-phase low voltage load not exceeding 100 Amperes					
Energy Charge (Ush/kWh)		546.4	650.8	546.4	414.0
MEDIUM INDUSTRIAL CONSUMERS (Manufacturing) - CODE 20.1		Average	Peak	Shoulder	Off-Peak
Low Voltage 415 Volts, with maximum demand up to 500 KVA					
Energy Charge (Ush/kWh)		355.1	428.0	355.1	275.6
MEDIUM CONSUMERS (Service) - CODE 20.2		Average	Peak	Shoulder	Off-Peak
Low Voltage 415 Volts, with maximum demand up to 500 KVA					
Energy Charge (Ush/kWh)		412.8	497.5	412.8	320.4
LARGE INDUSTRIAL CONSUMERS (Manufacturing) - CODE 30.1		Average	Peak	Shoulder	Off-Peak
High Voltage 11,000 Volts or 33,000 Volts, with maximum demand exceeding 500 KVA but up to 1,500 KVA					
Block 1: Energy Charge (Ush/kWh)		300.4	370.5	300.4	231.6
Block 2: (Declining Block*): Energy Charge (Ush/kWh)		282.9	349.0	282.9	218.1
LARGE CONSUMERS (Service) - CODE 30.2		Average	Peak	Shoulder	Off-Peak
High Voltage 11,000 Volts or 33,000 Volts, with the maximum demand exceeding 500 KVA but up to 1,500 KVA					
Energy Charge (Ush/kWh)		348.7	420.5	348.7	278.2
EXTRA-LARGE INDUSTRIAL CONSUMERS - CODE 40		Average	Peak	Shoulder	Off-Peak
High Voltage 11,000 Volts or 33,000 Volts, with an Average Demand of at least 1,500 KVA and dealing in manufacturing					
Energy Charge (Ush/kWh)		203.6	229.1	203.6	184.6
PUBLIC AMENITIES - CODE 50					
Public Hospitals, and Street Lighting provided by Municipalities/Cities/Towns.					
Energy Charge (Ush/kWh)	360.0				

Source: Adapted from ERA (2025). Uganda Energy Transition Plan.

Uganda's domestic tariff averages UGX250 -UGX 756.2 per kilowatt-hour (ERA, 2025), among the highest in the East African region (World Population Review, 2025). This has prompted increased electricity theft and illegal connections, losing revenue.

Figure 2 compares electricity tariffs across selected East African countries relative to Uganda's 2024 average rate. It highlights the regional differences in electricity costs, showing countries with both lower and higher tariffs than Uganda.

Figure 2: Regional Electricity Tariffs by 2024



Source: Adapted from World Population Review (2025), Cost of Electricity by Country

Electricity Access and Distribution

Uganda's energy mix which is dominated by hydropower is supplemented by other sources including thermal, solar, and biomass, though these remain underdeveloped. With such energy options, Uganda's energy consumption per capita remains low, around 30 times lower than the average in advanced economies (IEA, 2023).

Electricity access in Uganda has improved but remains uneven. The National Development Plan IV (2025/26-2029/30) targets 60% national access by 2030 and universal access by 2040 (NPA, 2024). As of 2024, total access stood at about 57%, with 28% grid-connected and 29% relying on off-grid solutions¹ (Electricity Regulatory Authority, 2024). Despite such developments, the urban-rural divide remains pronounced. While Uganda's urban electricity access rate stands at 76.4%,

¹ Grid connections refer to electricity supplied through the national power network, reaching homes, businesses, and industries via transmission and distribution lines, for example, power supplied by UEDCL from major plants like Karuma, Bujagaali, Kiira among other dams.

Off-grid connections operate independently of the national grid, often using renewable sources such as solar mini-grids or solar home systems, common in rural areas like Karamoja, Ntungamo, Buvuma Islands etc. where grid extension is costly.

rural access remains low at 42.4%, leaving a large portion of the population in energy poverty, with approximately 23.5 million people still lacking access to electricity (World Bank, 2023). Limited infrastructure, high connection costs, and dispersed settlements continue to impede rural electrification. Although the Electricity Connection Policy (ECP) launched in 2018 sought to subsidize connections for low-income households, funding constraints have slowed implementation.

Electricity access rates reveal deep inequalities in Uganda's power supply chain. Urban centers such as Kampala, Wakiso, Masaka, Jinja, Gulu, Iganga, Mbarara, Arua, Mbale, Lira, among other business areas are relatively well served, while rural communities remain off-grid or depend on informal connections and standalone solar systems. The Electricity Regulatory Authority (ERA) continues to adjust tariffs to ensure cost recovery, but high end-user prices, among the highest in the East African region discourage consumption and expansion. The handover from Umeme to UEDCL, while justified, has exposed the fragility of Uganda's power distribution infrastructure, particularly in the maintenance of transformers, feeder lines, and customer response systems. Table 2 below summarizes the major companies that have managed Uganda's electricity distribution network over time.

Table 2: Evolution and Trend of Electricity Distribution Management in Uganda (1948-2025)

Period	Main Entity	Role	Ownership / Notes
1948 - 2001	Uganda Electricity Board (UEB)	Generation, transmission, and distribution (single utility)	Government-owned vertically integrated utility
2001 - Present	Uganda Electricity Generation Company Limited (UEGCL)	Power generation	Government-owned (successor of UEB generation assets)
2001 - Present	Uganda Electricity Transmission Company Limited (UETCL)	Transmission / bulk supply	Government-owned (successor of UEB transmission assets)
2001 - Present	Uganda Electricity Distribution Company Limited (UEDCL)	Distribution asset ownership & retail oversight	Government-owned (successor of UEB distribution assets)
2005 - 2025	Umeme Limited	Operates, maintains, and invests in distribution network under a concession	Private operator; assets owned by UEDCL; 20-year concession
2024 - Present	Rural concessionaires (e.g., KIL, KRECS, BECS, WENRECo, PACMECS, KIS)	Operate rural distribution networks	Licensed by ERA; UEDCL retains ownership; some concessions have been taken back in 2024-2025
2025 →	UEDCL	Distribution operator & asset owner (post-Umeme)	Government-owned; expected to assume operational control or assign new operators

Source: Adapted from (UEDCL, 2025); ERA, 2025).

In 2005, the Ministry of Finance, Planning and Economic Development on behalf of the Uganda government signed a concession with Umeme Limited as part of the broader energy sector reforms intended to improve efficiency, expand access, and attract private investment. During its tenure, Umeme made notable investments in network expansion, contributing to modest improvements in electricity reliability and customer service across urban areas. However, persistent challenges such as frequent outages, system losses, and tariff concerns remained key public issues throughout the concession period.

The government of Uganda through the Ministry of Energy and Mineral Development terminated Umeme's 20-year electricity distribution concession upon its expiry on 31 March 2025. Umeme handed over its distribution assets to Uganda Electricity Distribution Company Limited (UEDCL), a State-owned company, signifying a shift back to public-sector control (Electricity Regulatory Authority, 2025). There was a significant disagreement between Umeme Limited and the Government of Uganda over the valuation of assets to be compensated at the end of the concession. The Auditor General's report valued the buyout at USD 118 million (Shs430 billion), considerably lower than the

USD 190 million (Shs700 billion) initially approved by the Parliament but finally Umeme exited². Operational wise, Umeme used a prepaid electricity system known as "Yaka," a Luganda word which can be loosely translated as "Be powered by light," however, UEDCL changed the name of the system to "Light," giving hope to Ugandans never to lament electricity challenges.

Despite limitations, the level of power supply stability under Umeme was relatively more predictable compared to the current situation following UEDCL's takeover. Power interruptions, which had existed since the days of the Uganda Electricity Board (UEB), have reportedly worsened since UEDCL assumed control in April 2025. Uganda's electricity sector stands at a defining crossroads, manifested by frequent and prolonged power blackouts, voltage fluctuations, delayed connections, and intensified maintenance delays, disrupting essential services, businesses, households, and affecting the quality of life across the country. This deterioration highlights the urgent need for robust operational reforms, investment in modern distribution infrastructure, and enhanced institutional capacity to restore efficiency and public confidence in Uganda's electricity distribution system.

² How the \$118 million Umeme buyout became a governance crisis: <https://hl.nu/1jloJ>

The Paradox of Power Export Amid Energy Poverty

Uganda's electricity sector presents a striking paradox. Despite being an exporter of electricity to neighboring countries such as Kenya, Tanzania, the Democratic Republic of Congo (DRC), and Rwanda (UBOS, 2024), many Ugandans continue to face high electricity tariffs, frequent outages, and low access rates, especially in rural areas. This contradiction raises questions about the alignment between Uganda's energy policies, domestic needs, and development priorities. Uganda exports power while millions of its citizens live in energy poverty. This imbalance reflects structural weaknesses in the transmission and distribution systems, not a true abundance of electricity.

Key Challenges Hindering the Energy Sector

- i. Uganda's electricity crisis is multifaceted. Inadequate infrastructure remains the most pressing issue. The grid suffers from outdated transmission lines and overloaded transformers, leading to technical losses and frequent outages. The transition to UEDCL has been marked by insufficient spare parts, limited logistics, and understaffed regional teams, which slow repair times and prolong blackouts.
- ii. Affordability remains a key constraint to electricity access. High energy costs continue to burden both households and industries. The tariff structure, affected by high generation and operational costs reduces affordability, pushing many consumers to limit usage or seek alternative energy sources.
- iii. The process of acquiring new electricity connection is too bureaucratic, requiring to wait for months or years after payment, worsened by the high cost of the pole and connection fees. To procure one electric pole, it costs close to UGX 3,000,000 or even more as sometimes a client uses a broker who is usually a staff of the electricity company, hoping to get the service in the shortest time possible, which often doesn't yield as expected. However, the cost of electricity connection is lower in case the client goes to the offices of the company directly or use the right application recommended channels. For instance, one pole single phase connection, including labour, transport and inspection can cost up to UGX 2,200,000 or more (ERA, 2020) but many clients bypass the normal criteria and opt for brokers. The cost of electricity and the initial connection fee remain prohibitive for many consumers especially in rural areas.
- iv. Reliability is another major challenge. Frequent outages, voltage fluctuations, and inadequate maintenance undermine industrial productivity. Many businesses experience power outages between four to seven times a week, with some facing daily interruptions and certain manufacturers reporting up to 15 outages a day, making continuous production

nearly impossible (UMA, 2025). The unreliability of electricity discourages investment, slows the pace of industrialization, and severely affects profit margins. Figure 3 below presents a public notice from UEDCL informing electricity consumers of a planned shutdown. Such alerts occur almost daily, affecting wide areas, and reflect the persistent challenges faced by electricity consumers on a regular basis.

Figure 3: Shut Down Public Notice from UEDCL



Extracted from UEDCL: <https://h1.nu/1jlpw>

- v. Energy access inequality persists. Urban residents are far more likely to be connected to the grid, while rural households remain in darkness. The Rural Electrification Program (REP) has achieved progress but at a slow pace due to limited financing and logistical barriers.
- vi. Policy gaps and weak regulatory enforcement hinder coordination across agencies. The absence of a unified National Energy Strategy means that generation, transmission, and distribution plans are often implemented in isolation. Weak enforcement also enables inefficiency, corruption, and delays in sectoral reforms.
- vii. For many Ugandan households, especially in rural and peri-urban areas, electricity is perceived as a luxury rather than a basic necessity. The high unit cost of power, combined with additional expenses such as connection fees discourage lawful access to the grid. As a result, some consumers resort to illegal connections, meter bypassing, or direct tapping from distribution lines as a coping mechanism to reduce their energy expenditure. Such practices are particularly common in informal settlements and trading centers where

enforcement is weak and income levels are low. The phenomenon is both an economic response to unaffordable tariffs and a symptom of social inequity in energy access. Particularly, electricity theft in Uganda occurs in multiple forms, including:

- **Meter tampering**, where consumers alter or bypass meters to reduce recorded consumption.
- **Illegal connections**, where individuals connect directly to the grid without authorization.
- **Power diversion**, where large consumers manipulate infrastructure to underreport usage.

Impact of Electricity Challenges on Micro, Small, and Medium Enterprises (MSMEs) in Uganda

Micro, Small and Medium Enterprises (MSMEs) which heavily rely on electricity are the lifeblood of Uganda's economy, accounting for over 90% of private sector firms (MTIC et al., 2025) . MSMEs employ over 2.5 million people and generate 80% of manufactured output which contributes 20% to Uganda's Gross Domestic Product (MoFPED, 2025). Their vitality directly impacts the livelihoods of countless families and communities across our country. However, these enterprises, along with emerging domestic industries, which form the core of Uganda's productive sector operate on thin profit margins, making them heavily reliant on hydroelectric power as the main source of energy. Alternative sources such as diesel and solar remain unaffordable for most small businesses. Some companies report spending an additional UGX 30 million per month on generator fuel alone (UMA, 2025).

In a study by Scott & Darko (2014) on Electricity Insecurity and Manufacturing SMEs, the informal sector in Africa creates 93% of new jobs, a figure nearly identical to Uganda's. Despite this significant role, Micro, Small, and Medium Enterprises (MSMEs) face a major challenge in electricity, with at least 84.2% citing frequent outages and high costs as primary constraints. The report further indicates that these electricity outages cause MSMEs in Uganda to lose 9.4% of their annual sales income. Compounding the problem of unreliable supply is the high cost of access; for instance, purchasing a single wooden electricity pole for approximately UGX 3,000,000 represents more than half of an individual's annual income, given Uganda's per capita income is estimated at less than UGX 7,000,000. This makes electricity connection profoundly unaffordable. For MSMEs like beauty salons, welding and maize milling businesses, and laundries, these power outages and high costs severely limit profitability. The consequences extend beyond business, affecting daily life and potentially igniting increased crime rates and social evils such as robbery, theft, and prostitution as people struggle to earn a living. Additionally, beyond the cost of power

itself, consumers are charged a fixed meter service fee of approximately USD 1 per month, regardless of whether they use any electricity, making it even more expensive for domestic users.

The combination of high electricity tariffs and backup energy expenses makes Uganda's manufacturing sector increasingly expensive to operate. Electricity tariffs range between UGX 546.4 and UGX 203.6 per kilo Watt-hour (kWh) for commercial consumers and industrial consumers respectively (ERA, 2025), a charge which is among the highest in East Africa (*see figure 2 to compare Uganda and other East African countries*). This is exacerbated by common power instability and voltage fluctuations that disrupt production. Unfortunately, electricity challenges mostly impact vulnerable groups such as youth and women who own and operate MSMEs. Notably, 38.5% of these enterprises are owned by individuals aged 18 to 30, with female ownership at 50.3% (MoFPED, 2025). Given the high unemployment rate in Uganda, 12.3% among the working-age population (15 years and above), and the alarming 42.6% of youth aged 15-24 who are Not in Employment, Education, or Training (NEET) (UBOS, 2024), fighting unemployment may remain a myth in Uganda if electricity challenges are not effectively addressed. It is imperative for the government to establish an enabling environment for businesses by addressing energy supply inefficiencies to encourage entrepreneurship which will tremendously eradicate unemployment.

Opportunities for Reform and Growth

Despite numerous challenges, Uganda holds vast opportunities to reform and modernize its energy sector. The country is richly endowed with renewable energy potential including, waterfalls, solar, wind, geothermal, and biomass that remains largely untapped. Expanding investment in decentralized solar mini-grids could significantly improve rural electrification while reducing dependence on hydroelectricity, which is vulnerable to climatic variability.

Private sector engagement is equally crucial. Encouraging private investment through predictable regulatory frameworks and risk-sharing mechanisms can attract capital for grid expansion and technology innovation. The government can leverage public-private partnerships to rehabilitate networks, install smart metering systems, and develop renewable generation capacity.

Regional integration offers another pathway for reform. As part of the East African power pool, Uganda can expand its cross-border electricity trade to optimize generation capacity and stabilize supply. Strategic energy diplomacy with neighboring countries can transform Uganda into a net power exporter while ensuring redundancy during domestic shortfalls.

International Best Practices in Energy Strategy

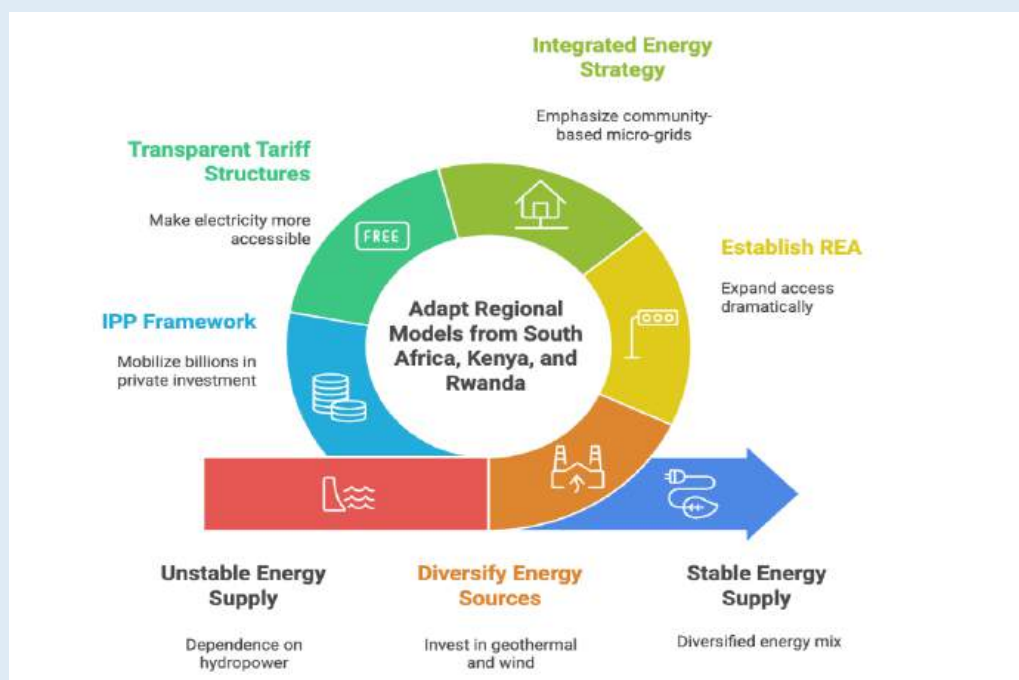
Lessons from regional peers provide valuable guidance. Kenya, for instance, has successfully diversified its energy mix through geothermal and wind investments, reducing dependence on hydropower and stabilizing supply. The establishment of an independent Rural Electrification Authority (REA) and targeted subsidies for low-income households have expanded access dramatically.

Rwanda's integrated energy strategy emphasizes community-based micro-grids and performance contracts for utilities, ensuring accountability and service reliability. The government's focus on transparent tariff structures and technology adoption has made electricity more accessible even in remote districts.

South Africa, though facing its challenges, provides insight into large-scale grid management and renewable integration. Its Independent Power Producer (IPP) framework has mobilized billions in private investment, showing how transparent tendering and regulatory certainty can attract capital.

Uganda can adapt these models by institutionalizing accountability, diversifying its energy sources, and fostering private sector partnerships under a coherent national policy as summarized in figure 4 below:

Figure 4: Adapting Regional Energy Models



Source: Proposed by Gateway Research Centre, 2025

Policy Gaps and the Need for a National Energy Strategy

Uganda's energy sector faces critical policy gaps that hinder the achievement of affordable, reliable, and sustainable electricity for all. Despite ongoing efforts, the lack of a cohesive, long-term national energy strategy results in fragmented planning, inefficiencies, and slow progress in electrification. A comprehensive national strategy is urgently needed to address these challenges, guide sector development, and ensure equitable energy access across the country. Such a strategy would provide the necessary framework for effective policy implementation and sustainable growth.

Uganda's Current Energy Strategy

Uganda's current energy strategy is primarily outlined in the National Energy Policy (2002) and the Uganda Vision 2040, which focus on providing sustainable, affordable, and reliable electricity across the country. The Renewable Energy Policy and the National Electrification Strategy (2018) further detail steps to increase electrification, particularly in rural areas. Key aspects of the existing strategy are shown in figure 5 below.

Figure 5: Key Aspects of the National Electrification Strategy (2018)



Source: Adapted from *Renewable Energy Policy and the National Electrification Strategy (2018)*

Policy Gaps in the Current Strategy

1. **Comprehensive Long-Term Planning:** While there are individual initiatives, there is no cohesive, integrated national energy strategy that coordinates all energy sub-sectors and aligns them with broader socio-economic development goals.
2. **Coordination Between Policies:** There is a gap in aligning energy policies with broader national strategies, such as those focused on rural development, climate change, and industrialization. The policies are sometimes fragmented and lack synchronization across sectors.
3. **Clear Focus on Energy Transition:** There is limited focus on the transition to cleaner and more sustainable energy in the context of climate change. While renewable energy is encouraged, there's not enough emphasis on scaling up energy storage, demand-side management, or decarbonizing energy-intensive sectors.
4. **Customer-Centric Services:** There is insufficient attention to improving customer engagement, service quality, and responsiveness to power outages or connection challenges. This includes a lack of real-time communication and feedback mechanisms for customers.
5. **Institutional Capacity:** Weak coordination and capacity within local and regional authorities to implement energy policies effectively. Local governments and communities need more involvement in mapping energy access challenges and implementing solutions.
6. **Financial Sustainability:** While the strategy encourages private sector investment, there's still a significant gap in terms of financial mechanisms to attract and retain investment, particularly in off-grid solutions for rural areas. Additionally, tariffs and pricing policies need to be structured in a way that promotes both affordability and long-term sustainability for service providers.

Policy Recommendations for Achieving an Affordable, Reliable, and Inclusive Electricity System in Uganda

- i. To achieve an affordable and stable electricity system, Uganda should adopt decisive and inclusive policy measures. The government should establish a National Energy Steering Committee under the Ministry of Energy and Mineral Development to coordinate all actors and draft the comprehensive National Energy Strategy.
- ii. Investments in grid rehabilitation and smart technologies must be prioritized to reduce technical losses and improve outage response. UEDCL and ERA should implement modern asset management systems and strengthen its human resource capacity to ensure efficient service delivery.
- iii. The Electricity Regulatory Authority should enforce transparent tariff reviews that balance cost recovery with affordability, introducing targeted subsidies for low-income consumers and small enterprises.
- iv. The Ministry of Energy should also incentivize renewable energy investments through tax relief, guaranteed power purchase agreements, and concessional financing.
- v. Expanding mini-grids and off-grid solutions by UEDCL can accelerate rural electrification, while regional power trading can improve stability and optimize costs.
- vi. Development partners should provide technical and financial support for infrastructure upgrades and institutional reforms, ensuring accountability and efficiency.
- vii. Public sensitization and community participation are essential to sustain reforms. UEDCL engaging citizens in planning and protecting power infrastructure can reduce vandalism, build trust, and strengthen collective ownership of Uganda's energy future.
- viii. Diversifying the energy mix to include more renewable and off-grid solutions that reduce vulnerability to hydrological shocks.
- ix. UEDCL and ERA should reduce connection fees and electricity tariffs by 50% to increase access and affordability.
- x. To improve power reliability and customer satisfaction, UEDCL should implement an online portal that provides real-time updates on anticipated outages to enable users plan and prepare in advance. This portal should also track the progress of reported complaints, offering daily automated updates on resolution status. In addition, UEDCL must ensure 24/7 online customer support with reliable toll-free services to address queries and concerns promptly. To maintain high service standards, regular weekly field visits should be conducted as part of a comprehensive Total Quality Management (TQM) framework, which incorporates customer feedback and effective complaint management mechanisms. These steps will enhance transparency, responsiveness, and overall service quality.

Conclusion

Powering prosperity in Uganda requires more than generating megawatts, it demands building a reliable, affordable, and inclusive electricity ecosystem that supports people, enterprises, and public institutions. The post-Umeme transition has revealed major vulnerabilities in the distribution system, but it also offers an opportunity to rebuild stronger. A cohesive National Energy Strategy, supported by decisive leadership, sound regulation, grassroots community engagement, and private sector participation, can transform Uganda's electricity sector into a driver of sustainable development.

If Uganda seizes this moment to invest wisely, reform decisively, and plan holistically, stable and affordable electricity will cease to be a privilege and become a foundation for national prosperity. The time for a comprehensive National Energy Strategy is now.

The current challenge is not merely about adding generation capacity but ensuring affordable, stable, and efficiently managed power distribution that supports every sector of Uganda's economy. Every Ugandan should have access to safe, dependable, and reasonably priced energy, whether they live in urban or rural areas.

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