



# STRENGTHENING THE FINANCIAL AND BUSINESS LANDSCAPE FOR UGANDA'S RENEWABLE ENERGY SECTOR

## EXECUTIVE SUMMARY

Uganda's renewable energy sector has achieved significant progress in expanding generation capacity and improving electricity access, largely through the development of hydropower, solar, biomass, and emerging hybrid systems. However, the renewable energy ecosystem, comprising financing institutions, developers, distributors, service providers, manufacturers, and supporting infrastructure, remains underdeveloped and constrained by structural, financial, and regulatory barriers.

Despite strong policy intent and growing demand for clean energy solutions, private sector investment in renewable energy enterprises remains limited, particularly for small and medium-sized enterprises (SMEs), early-stage developers, off-grid operators, clean cooking companies, and productive use of energy businesses. This is mainly due to the high cost of capital, limited access to long-term and local currency financing, perceived investment risk, fragmented markets, and regulatory uncertainty.

Renewable energy is central to Uganda's development strategy, energy security, and climate resilience. While Uganda has prioritised electricity generation and rural electrification, the sustainability and scalability of the sector depend on a robust finance and business ecosystem that enables enterprises to innovate, grow, and deliver energy services efficiently.

A well-functioning financial and business landscape is necessary to move the sector beyond donor dependence toward commercial viability and long-term sustainability.

## POLICY CONTEXT

Uganda's policy and strategy environment provides a strong foundation for renewable energy development through;

- **The Energy Policy for Uganda (2023)**<sup>1</sup>, which promotes private sector participation, renewable energy investment, and universal access.
- **Uganda Energy Credit Capitalisation Company (UECCC)**, a government company established to provide credit support instruments, including but not limited to partial credit guarantees, lines of credit to participating financial institutions, result-based grants, and technical assistance/transaction advisory services to private sector players (local financial institutions and private energy companies) to facilitate the provision of credit to the renewable energy sector<sup>2</sup>.
- **The Sustainable Energy Development Programme**, one of the NDP III programmes, is led and implemented by the Ministry of Energy and Mineral Development (MEMD) with its agencies and partners such as the Uganda Electricity Transmission Company Limited (UETCL), Uganda Electricity Generation Company Limited, Uganda Electricity Distribution Company Limited (UEDCL), and the Electricity Regulatory Authority (ERA)<sup>3</sup>.
- **The Uganda Green Growth Development Strategy (UGGDS) 2017/18 -2030/31**, a comprehensive roadmap designed to include green growth principles across key economic sectors- agriculture, energy, urban development, and natural

resource management<sup>4</sup>. The National Development Plan (NDP III and forthcoming NDP IV)<sup>5</sup>, which positions energy as a key enabler of industrialisation, value addition, and job creation.

- **National Electrification Strategy (NES) 2022<sup>6</sup>** provides a long-term framework for achieving universal access to electricity through a least-cost, spatially targeted approach that combines grid extension, mini-grids, and off-grid solutions.
- **Uganda Energy Transition Plan 2023<sup>7</sup>** outlines a pathway for shifting the energy system toward low-carbon, climate-resilient, and inclusive development while supporting economic growth.
- **Renewable Energy policy 2007<sup>8</sup>** was developed to increase the use of renewable energy resources in the national energy mix in order to reduce dependence on traditional biomass, improve energy security, and support sustainable socio-economic development. The policy promotes the development and utilisation of renewable energy technologies including hydropower, solar, wind, geothermal, and modern biomass, while also addressing institutional, regulatory, and financing barriers to renewable energy uptake.

**However, these frameworks have focused more on generation and access targets than on enterprise development, market deepening, and financial ecosystem reform.**



## FINANCIAL AND BUSINESS LANDSCAPE

Renewable energy enterprises in Uganda face persistent financing constraints, driven by high interest rates, with average lending rates at 21.3% over the past decade and inflation averaging 5.9%, the real cost of borrowing is prohibitively high, deterring businesses from pursuing green initiatives<sup>9</sup>, short loan tenures, limited access to local-currency financing, and stringent collateral requirements. The scarcity of patient capital and venture financing particularly affects early-stage and locally owned SMEs, limiting innovation, enterprise growth, and domestic value addition within the sector.

Perceived and real risks, including regulatory uncertainty, policy inconsistency, weak contract enforcement, and payment risks, further constrain investment<sup>10</sup>. Coupled with exposure to foreign exchange volatility and limited project preparation, these risks have reduced bankability, often leading financial institutions to overestimate risk and underinvest in otherwise viable renewable energy projects.

The renewable energy sector is also characterised by fragmented markets and weak business infrastructure, limiting private sector investment, remaining low, sourcing only 3.4% (nearly \$26.5 million). This stands in contrast to regional counterparts like Djibouti (24.2%), Kenya (19.9%), and Rwanda(11.2%)<sup>11</sup>.

Disjointed supply chains, limited access to business development services and market intelligence, limited economies of scale, inadequate distribution and after-sales networks, especially in rural areas, and minimal local manufacturing capacity further constrain enterprise competitiveness. In addition, the sector remains heavily dependent on donor and grant financing, which, while critical for early market development, has restricted scalability and commercial sustainability.

Many enterprises struggle to transition from pilot-based, grant-supported models to fully commercial operations<sup>12</sup>.

Regulatory and institutional gaps also continue to impede sector growth. Lengthy licensing processes, overlapping mandates among government agencies, weak inter-agency coordination, and limited incentives for domestic financial institutions to engage in renewable energy financing have created an uneven and inefficient enabling environment for investment.

The renewable energy financial and business landscape remains constrained by an imbalanced financing structure. While public finance institutions, development partners, and climate finance mechanisms play a dominant role, private commercial capital participation remains limited, and domestic financial institutions have low exposure to renewable energy portfolios such as green funds, green loans, debt-for-nature swaps, sustainable investment funds, and carbon markets. This overreliance on concessional and external financing limits market maturity, restricts innovation, and slows the scaling of renewable energy enterprises.

## RECOMMENDATIONS

**Establish new and scale up existing dedicated renewable energy finance windows** within national development banks and public financial institutions. Some of these include debt instruments (green and SDG bonds), carbon finance, and debt-for-nature swaps; all of which have the potential to bridge the financial gap in climate-resilient investments and align with global sustainability goals.

Expanding blended finance mechanisms that combine public, concessional, and private capital, and promoting local-currency lending to reduce foreign exchange risks. In addition, the use of patient capital instruments, such as concessional equity, quasi equity, and pension funds, is necessary to support early-stage

and innovative renewable energy enterprises that are underserved by traditional financing models.

Furthermore, support consumer financing mechanisms, including group loans, micro-credit, results-based financing, energy-as-a-service models, and pay-as-you-go models, for people to afford the subsidised clean-cooking technologies, smart agricultural technologies, and others<sup>13</sup>.

**De-risk Renewable Energy Investments** by scaling up credit guarantees, partial risk guarantees, and first-loss facilities can incentivise domestic commercial bank lending; while standardising and strengthening power purchase agreements and off-take arrangements will improve revenue certainty, this will foster Public-Private Partnerships because financial burdens and operational responsibilities are shared, whilst leveraging the strengths of both the public and private sectors.

Clear, transparent and predictable policy implementation is also critical to enhancing regulatory confidence and reducing perceived investment risks.

**Simplify and streamline licensing, permitting, and approval processes**, as well as providing targeted tax incentives and duty exemptions for renewable energy equipment, components, and inputs for local manufacturing to improve enterprise competitiveness and strengthen domestic value chains. Promoting industrial clusters and special economic zones dedicated to renewable energy can further support economies of scale, skills development, and service provision.

**Build the technical capacity of commercial banks, microfinance institutions, local enterprises and SACCOs**, by investing in business development services, incubation, and acceleration programmes, which can enhance the capacity of renewable energy SMEs as seen from Stanbic Bank Uganda that has a Financial Literacy Incubator, which has successfully

upskilled over 1,000 SACCO board members in financial literacy and business skills, specifically in relation to energy issues<sup>14</sup> to assess renewable energy projects, combined with regulatory incentives such as refinancing facilities or capital relief, can encourage increased lending.

**Strengthen Data, Transparency, and Market Intelligence** will enhance investor confidence and policy effectiveness. Establishing a national renewable energy investment and market data platform, improving visibility and awareness of investment opportunities, project pipelines, and consistent reporting on finance flows and market performance are critical steps.

**Establish clear risk assessment, monitoring, and oversight frameworks for renewable energy-related investments**, transparent tracking tools, mechanisms, and well-defined criteria for project selection and evaluation are essential to directing resources toward high-impact, renewable energy-aligned interventions. Achieving this will require targeted capacity building for government institutions and financial actors, alongside the use of digital systems to monitor fund flows and project outcomes in real time, thereby improving efficiency, accountability, and stakeholder confidence.

**Strengthen regional collaboration within the East African Community (EAC)** to mobilise cross-border green financing. Regional initiatives such as joint green bonds and harmonised carbon credit markets can attract larger-scale investments, promote economies of scale, and improve the efficiency of project implementation and evaluation.

Coordinated engagement with neighbouring countries on shared renewable-energy challenges, knowledge exchange enables more centralised and effective coordination of financing efforts.



This policy brief analyses the renewable energy Finance and Business Landscape in Uganda as a follow-up to the discussions during the Renewable Energy Conference and Expo 2024.

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