African Union | AUDA-NEPAD AFRICAN UNION DEVELOPMENT AGENCY | GOVERNO DE ANGOLA

III LUANDA FINANCING SUMMIT FOR AFRICA'S INFRASTRUCTURE DEVELOPMENT

Project Investment Prospectus – Luapula Hydropower Project

PROJECT SUMMARY	
Project Name	Luapula Hydropower Project
Location	Zambia, Democratic Republic of Congo | Transboundary hydropower infrastructure on the Luapula River, a shared natural border requiring bilateral cooperation and regional energy integration
Sector	Energy
Sub-Sector	Hydropower | Large-scale transboundary hydropower development supporting Southern African Power Pool regional integration and mining sector energy demands
Development Stage	S2B-Feasibility | Pre-investment stage with prefeasibility completed (2019) and ongoing feasibility studies and ESIA partially funded for investment readiness
Project Sponsor	Governments of Zambia and DRC | Bilateral government sponsorship through inter-utility cooperation framework established by 2015 Memorandum of Understanding
Project Cost	US$ 1,680 million (total Capex from prefeasibility study) | Large-scale hydropower infrastructure investment supporting 789 MW generation capacity for regional energy security
Funding Requirement	Funding of $5.5 million USD provided by NEPAD IPPF and MCDF, with $2 million USD shortfall required to finalize full feasibility studies | Project preparation financing with USD 5.5M secured through NEPAD Infrastructure Project Preparation Facility and Multi-Country Development Facility, requiring USD 2M additional for completion

Project Preparation Cost	USD 7.5 million | Comprehensive preparation phase financing covering ESIA for all three sites and technical studies for feasibility completion
Financing Structure	Blended financing | Development finance institution blended finance structure combining concessional and commercial financing for transboundary infrastructure

FINANCIAL OVERVIEW	
Total Project Cost	US$ 1,680 million (total Capex from prefeasibility study) | Large-scale transboundary hydropower infrastructure investment supporting regional energy security and mining sector development
Capital Structure	Blended financing | Multi-source financing structure combining development finance institution support, government participation, and private sector co-financing
Development Timeline	2015 Inter-Utility MoU; 2019 Prefeasibility completed; 2025 Feasibility studies and ESIA partially funded | Multi-phase development with inter-utility agreement, completed prefeasibility studies, and ongoing preparation for investment decision
Market Demand	Zambia and DRC, secondary offtake by regional utilities (SAPP) | Primary offtake supporting national energy security for Zambia and DRC with secondary regional market access through Southern African Power Pool
Financial Metrics	IRR: IRR 12% - Payback Period: TBA - DSCR: TBA - Expected Equity Return: TBA | Project financial performance indicators with 12% Internal Rate of Return confirmed from prefeasibility analysis
Revenue Model	Pari Passu | Equal treatment revenue sharing model supporting bilateral offtake arrangements between SNEL (DRC) and ZESCO (Zambia)

SUSTAINABILITY AND IMPACT	
Social Impact	Provide affordable and clean energy, reduce power deficits, increase access to electricity, improve network stability, contribute to SAPP energy market capacity, promote regional integration | Comprehensive socio-economic impact through job creation, sustainable industrial development, improved electricity access, and enhanced regional integration supporting mining sector growth

Environmental Impact	Both countries signed and ratified the Paris Agreement with Nationally Determined Contributions (NDCs) - Emissions reduction from renewable energy use supporting low carbon development | Climate change mitigation through renewable energy generation supporting national NDC commitments and transition to cleaner energy mix
Strategic Importance	The Luapula Hydropower Project aligns with several Sustainable Development Goals (SDGs) and the Paris Agreement, promoting sustainable energy initiatives | National and regional energy security priority supporting industrial development, mining sector competitiveness, and climate change mitigation objectives
SDG and Agenda 2063 Alignment	The project is aligned with major objectives such as the SDG 7,8,9,10,11,13,17, Agenda 2063 and Paris Agreement actions (mitigation and adaptation) | Comprehensive alignment with continental and global development frameworks supporting affordable clean energy (SDG 7), sustainable industrialization (SDG 9), climate action (SDG 13), and regional partnerships (SDG 17)

TECHNICAL DETAILS	
Project Description	The Luapula River HPP project aims to develop and promote investment in the exploitation of the hydropower potential on the Luapula River, a shared river and natural border between the DRC and Zambia | Multi-site hydropower development on shared Luapula River supporting regional energy integration, mining sector development, and transboundary cooperation
Technology & Design	To be advised by the feasibility study outcome | Technical specifications and design parameters to be determined through completion of ongoing feasibility studies and technical assessments
Capacity/Size	789 MW | Large-scale generation capacity contributing significantly to Southern African Power Pool regional energy market and supporting mining sector electricity demands
Construction/Preparation Timeline	2015: Inter-Utility MoU; 2019: Prefeasibility completion; 2021: ToR for Mumbotuta feasibility study; 2025: Ongoing funding requirements | Multi-phase preparation timeline with inter-utility cooperation framework, completed prefeasibility studies, and ongoing feasibility development

Offtake Agreements	National Electricity Company of DRC (SNEL), Zambia Electricity Supply Corporation (ZESCO) Limited | Bilateral offtake arrangements with national utilities ensuring power purchase agreements for sustained revenue generation

RISK MANAGEMENT	
Risk Assessment	Construction and Forex Risks | Transboundary hydropower development risks including construction complexity, foreign exchange volatility, and cross-border coordination challenges
Regulatory Risks	Tariff path uncertainty | Regulatory framework risks requiring coordination between national energy regulators and SADC Protocol on Energy compliance
Environmental and Social Safeguards	Resettlement Action Plan (RAP) & Environmental Management Plan (EMP) Compliance with environmental and social impact regulations and community consultations | Comprehensive environmental and social safeguards framework ensuring compliance with international standards and community protection measures

KEY STAKEHOLDERS	
Sponsors	Government of DRC and Zambia | Bilateral government sponsorship providing policy support and regulatory framework for transboundary hydropower development
Investors	AfDB, MCDF | Development finance institutions including African Development Bank and Multi-Country Development Facility with NEPAD Infrastructure Project Preparation Facility support
Implementation Support	Southern African Power Pool (SAPP) coordination | Regional energy coordination through SAPP framework and AUDA-NEPAD technical support for transboundary infrastructure development
Contractors & Operators	TBA | Engineering, procurement, and construction contractors to be determined through competitive procurement processes
Legal and Financial Advisors	TBA | Transaction advisory services to be appointed for legal structuring and financial arrangement development

WAY FORWARD	
Investment Ask	Mobilization of resources for feasibility studies - 2 million gap; Project Structuring - 1 million; Transaction Support &

	Financial Close - 1.0 Million | Immediate financing requirement of USD 2M for feasibility completion, USD 1M for project structuring, and USD 1M for transaction support
Next Steps	Feasibility Study | Completion of comprehensive feasibility studies and ESIA for all sites enabling progression to detailed design and financing arrangements
Implementation Timeline	Project Structuring 18-24 months; Transaction Support & Financial Close 24-30 months | Structured preparation and transaction timeline supporting investment readiness and financial close within 30 months
Contact Information	Jean Madzongwe - jean.madzongwe@sapp.co.zw | Southern African Power Pool coordination contact for project development and regional energy integration support