







Project Investment Prospectus – Angola-Namibia Transmission Interconnection (ANNA)

PROJECT SUMMARY	
Project Name	The Angola-Namibia Transmission Interconnection Project (ANNA)
Location	Angola, Namibia   Cross-border transmission infrastructure connecting Southern African power systems through SAPP regional integration framework enabling regional power trade
Sector	Energy
Sub-Sector	Transmission   High-voltage transmission infrastructure enabling cross-border electricity trade and regional power pool development within Southern African Power Pool framework
Development Stage	Structuring stage stage S3A   Advanced project structuring phase with ESIA completed for both countries and ready for tendering process
Project Sponsor	Namibia Power Corporation Proprietary Limited of Namibia & Rede Nacional de Transporte de Electricidade E.P of Angola   Bilateral utility partnership between NamPower and RNT enabling coordinated cross-border transmission development and operation
Project Cost	Total nominal: USD 470m (Excluding VAT) NamPower portion nominal: USD 60m (Excluding VAT) RNT portion nominal: USD 410 (Excluding VAT)   Comprehensive transmission infrastructure investment with Angola portion representing majority of total cost reflecting transmission line routing and substation requirements

Funding Requirement	USD 60m (Excluding VAT)   Immediate funding requirement for Namibian section enabling coordinated implementation with Angola portion
Project Preparation Cost	TBA   Project preparation costs to be confirmed during tendering phase and contractor selection
Financing Structure	Blended financing   Public Financing (debt & equity) structure combining development finance institution support with government participation enabling cross-border infrastructure development

FINANCIAL OVERVIEW	
Total Project Cost	Total nominal: USD 470m (Excluding VAT) NamPower portion nominal: USD 60m (Excluding VAT) RNT portion nominal: USD 410 (Excluding VAT)   366 km of 400 kV transmission line development requiring significant capital investment for cross-border transmission corridor establishment
Capital Structure	Public Financing (debt & equity)   Blended financing approach combining development finance institution debt with utility equity participation supporting cross-border infrastructure development
Financial Metrics	- IRR:TBA - Payback Period:TBA - DSCR: TBA - Expected Equity Return: TBA   Financial performance indicators to be confirmed during tendering phase with technical and financial proposal evaluation
Revenue Model	Pari Passu   Revenue sharing arrangement between NamPower and RNT enabling proportional cost recovery and benefit distribution from transmission corridor operation

## Social Impact Realisation of the envisaged Port to Port Road corridor between Angola and Namibia (Namibe port in Angola to Walvis Bay port in Namibia) Provision of health, education, electricity and telecommunication access, and other services to communities along the common border, who for decades been deprived of socio-economic developments. Stimulation of tourism in the Skeleton Coast – Iona Transfrontier Park (transboundary tourism) Connection of Angola to the regional transmission network, and enabling Angola to be an operating member of the Southern African Power Pool (SAPP), Gender sensitiveness score:TBA Rural-urban connectivity score:TBA Provides electricity access to clean energy, reduces power deficits, promotes economic growth

	in Angola and Namibia, and contributes to reducing electricity tarriffs.   Comprehensive regional development impact supporting cross-border economic integration and enabling Angola's integration into SAPP regional power trading framework
Environmental Impact	Indirect environmental benefits could be achieved as a result of the Project. The environmental benefits could potentially be realised as a result of: Potential increased hydro power from the Kwanza River and the additional path for hydropower in Democratic Republic of Congo, Potential increased renewable energy penetration due to cross-border renewable energy trading, Potential increased renewable energy penetration due to increased energy system stability, Potential reduced need for spinning reserves (typically from carbon-based generators) as backup for intermittent generation, due to increased energy security, A resultant benefit of reduced CO2 emissions in the region.   Environmental assessment conducted for both Namibian and Angolan sections aligned with DBSA Environmental and Social Safeguards Standards, IFC Performance Standards, and World Bank Environmental and Social Framework ensuring comprehensive environmental compliance
SDG and Agenda 2063 Alignment	Approximately 290 mega litres of diesel will be displaced from the diesel generation plants, annually (Assuming 10 kWh/L). Approximately 138 tonnes of CO2 will be displaced from the diesel generation plants, annually (Assuming 0.047 Kg/kWh or 0.47 Kg/L). Approximately 250,000 houses will have access to cleaner energy and reliable supply (Assuming 30 kWh per household per day, 10,950 kWh per household per year) ANNA interconnector will enable the high penetration of RE in the region, where other countries will utilize the Kwanza River as a battery.)   Strong alignment with AU Agenda 2063 aspirations for continental integration and connectivity while supporting SDG 7 (Affordable and Clean Energy) through renewable energy penetration and regional power trading enabling sustainable development across Southern Africa

TECHNICAL DETAILS	
Technology & Design	TBA   Technology specifications to be confirmed during tendering phase with technical proposal evaluation and contractor selection
Capacity/Size	366 km of 400 kV   High-voltage transmission line connecting Angola grid to Namibia grid via planned Lubango and Cahama substations in Angola with planned Kunene substation in Namibia establishing transmission corridor

Construction/Preparation Timeline	NamPower: 1-Jan-25 to 31 Dec 2028 RNT: 1-Jan-24 to 2031   Coordinated implementation timeline with NamPower Namibian section completion by 2028 and RNT Angola section completion by 2031 enabling phased commissioning
Offtake Agreements	The Project to enter into PPAs with only RNT and NamPower, who will on sell to regional utilities and other participants within SAPP.   Power Purchase Agreement framework between utilities enabling regional power trading and on-selling to Southern African Power Pool participants

RISK MANAGEMENT	
Risk Assessment	Incorrect construction cost estimates: Fixed price contracts. Risk of cost overruns to lie with the EPC contractor through a fixed price EPC contract, supported by liquidated damages, payment guarantees and a performance bond. Experienced EPC contractor to be appointed Suitability of design: Design risk should be transferred to the EPC Contactor, however, the Contacting Authority should ensure design standards and quality are met. This can be achieved through an Owners Engineer and being prescriptive in the RFP rules' oversight or oversight of any of the environmental permitting requirements will result in the project delay and potential budget overrun. he project team / utilities should clearly and frequently communicate environmental commitments to assure compliance during construction Delay or failure in obtaining way leaves and/or servitudes: Risk allocation to be determined on whether land acquisition falls within the responsibility of the Contracting Authority, or whether this risk is to be passed to the EPC contractor. If the former, land acquisition to commence as soon as the project is approved. If the latter this would need to be factored into the timing of completion of the construction works   Comprehensive risk mitigation framework through fixed-price EPC contracting, experienced contractor selection, design quality assurance, environmental compliance monitoring, and coordinated land acquisition planning
Regulatory Risks	Failure of the project to comply with licence conditions: implement an Environmental Management System.  Implement all mitigation measures in the approved ESMP. Assign compliance responsibility to dedicated person. Do environmental awareness training with all EPC staff. Regulatory compliance framework through Environmental Management System implementation, ESMP mitigation measures, dedicated compliance oversight, and contractor environmental training ensuring license condition adherence

<b>Environmental and Social</b>
Safeguards

Environmental and Social Impact Assessment (ESIA) was conducted for the Project to meet the international lender standards for environmentally and socially sustainable development as well as the national legal requirements in Namibia and Angola. Separate ESIAs were undertaken for both the Namibian and Angolan sections of the proposed Project and were aligned with the Development Bank of South Africa (DBSA) Environmental and Social Safeguards Standards (ESSS), which is closely linked to the Performance Standards of the International Finance Corporation (IFC), World Bank Environmental and Social Framework (World Bank, 2017) and country-specific legal requirements. | Comprehensive environmental and social safeguards framework ensuring compliance with international lender standards through DBSA ESSS alignment, IFC Performance Standards adherence, World Bank ESF compliance, and national legal requirements in both countries

KEY STAKEHOLDERS	
Sponsors	Namibia Power Corporation Proprietary Limited of Namibia & Rede Nacional de Transporte de Electricidade E.P of Angola   Bilateral utility sponsorship providing institutional capacity and operational expertise for cross-border transmission development and long-term operation
Investors	World Bank   Development finance institution support providing international development finance expertise and safeguards compliance framework
Contractors & Operators	TBA   Contractor selection through tendering process with technical and financial proposal evaluation ensuring experienced EPC contractor appointment
Legal and Financial Advisors	Zutari, Jay Govender (previously of Cliffe Dekker Hofmeyr) and, J Maynard, led by Zutari.   Professional advisory team led by Zutari providing technical, legal, and financial advisory support for project structuring and implementation

WAY FORWARD	
Investment Ask	USD60 million-Namibian section of transmission   Immediate investment requirement for Namibian transmission section enabling coordinated cross-border infrastructure development
Next Steps	Tendering (Technical &Financial proposal)   Implementation roadmap: conduct tendering process for technical and

	financial proposal evaluation, contractor selection, and project commencement coordination between NamPower and RNT
Contact Information	SAPP PAU 24 Golden Stairs Road EmeraldHill Harare, Zimbabwe Jean Madzongwe jean.madzongwe@sapp.co.zw   Project coordination through Southern African Power Pool Project Advisory Unit providing regional coordination and technical oversight for cross-border transmission development