



## III LUANDA FINANCING SUMMIT FOR AFRICA'S INFRASTRUCTURE DEVELOPMENT

### INVESTMENT PROSPECTUS – ELECTRICITY SUPPLY TO MINING COMPANIES AND CHIPINDO MUNICIPALITY

#### PROJECT SUMMARY

<b>Project Name</b>	Electricity Supply to Mining Companies and Chipindo Municipality   Strategic initiative electricity supply mining companies Chipindo municipality regional development Angola, elimination dependence diesel generators clean energy reduction environmental pollution sustainable mining practices, integration national electrical system southern Angola region National Development Plan PDN 2023-2027 objective electrification 49% Angolan population, mining industry dynamization emergence small medium enterprises local job creation poverty hunger reduction
<b>Location</b>	SADC, Angola, Chipindo Municipality   Strategic location SADC Angola Chipindo Municipality southern country region regional development, Southern Africa regional integration electricity supply cross-border cooperation, national grid interconnection southern Angola region potential regional cooperation energy infrastructure, national electrical system expansion southern Angola region territorial development, alignment Angolan government strategy interconnect southern region grid territorial energy integration
<b>Sector</b>	Energy
<b>Subsector</b>	Transmission Lines   Transmission lines subsector electricity supply mining companies municipality energy infrastructure, main line Gove-Chipindo-Cuvango 220 kV strategic public investment infrastructure subcomponent, electricity transmission Chipindo Substation Sectioning Point 5 km approximate distance, construction Sectioning Point PS 30 kV line 5 km mining companies construction Substation 30 kV line 10 km municipality
<b>Development Stage</b>	S0 to S4C   Development stage S0 to S4C project preparation competitive tender procedure private partner selection, identification approval IDF finance feasibility

	studies private partner tender realization, project structuring Environmental Impact Assessment EIA feasibility study preparation, competitive tender procedure private partner selection implementation capacity excellent banking relationships construction schedule compliance performance indicators KPIs
<b>Project Sponsor</b>	Ministry of Energy and Water (MINEA)   Main sponsor Ministry of Energy and Water MINEA ministerial coordination MINPLAN MINFIN MIREMPET ANRM, alignment Angolan government strategy expand national electrical system southern Angola region, National Development Plan PDN 2023-2027 objective electrification 49% Angolan population regional development, business- friendly environment necessary licenses availability structuring phase avoid implementation delays project
<b>Project Cost</b>	CAPEX: USD 13,000,000; OPEX (1.70%): USD 221,000; Feasibility Study: USD 500,000; Total: USD 13,721,000   Total project cost USD 13,721,000 CAPEX USD 13 million OPEX 1.70% USD 221,000 Feasibility Study USD 500,000, IRR 15% financial viability attractive return investment private partners investors, USD 11.7 million savings 13 years operation private partner economic viability diesel generators elimination, capital structure 40% equity 60% debt financing investment viability
<b>Strategic Importance</b>	Alignment Angola government strategy expand national electrical system southern region – subcomponent 220 kV Gove-Chipindo-Cuvango line   Exceptional strategic importance alignment Angolan government strategy national electrical system expansion southern Angola region, main line subcomponent Gove-Chipindo-Cuvango 220 kV strategic public investment infrastructure, direct contribution electrification target 49% established National Development Plan PDN 2023-2027, fundamental initiative energy distribution improvement regional development boost, territorial energy integration national grid interconnection southern region country

FINANCIAL OVERVIEW	
<b>Total Project Cost</b>	CAPEX: USD 13,000,000; OPEX (1.70%): USD 221,000; Feasibility Study: USD 500,000; Total: USD 13,721,000   Total investment USD 13,721,000 CAPEX USD 13 million operational OPEX 1.70% USD 221,000 Feasibility Study USD 500,000, financing structure equity 40% debt 60% project economic viability, IRR 15% financial viability attractive return private partners international investors,

	USD 11.7 million mining companies savings 13 years operation private partner diesel costs elimination
<b>Capital Structure</b>	Equity 40% - Debt (Financing) 60%; Alternative: Shareholder Loans 90% - Pure Equity 10%   Flexible capital structure equity 40% debt financing 60% investment viability, alternative shareholder loans 90% pure equity 10% financial needs adaptation, competitive tender procedure private partner selection excellent relationships banking financial institutions, implementation capacity construction schedule compliance performance indicators KPIs project financial sustainability
<b>Financial Metrics</b>	IRR: 15%   Financial metrics IRR Internal Rate Return 15% project economic viability attractive investors, sustainable return investment private partners financial institutions, USD 11.7 million mining companies savings throughout 13 years operation diesel generators dependence elimination, hybrid revenue model negotiated market revenues mining companies fixed revenues ENDE revenue sources diversification, financial viability support Angola regional development
<b>Revenue Model</b>	Hybrid model: Negotiated (market) revenues for mining companies and non-negotiated (fixed) revenues for ENDE   Hybrid revenue model revenue sources diversification negotiated market revenues mining companies SMC Almina Lafech Mining Tosyali Iron, fixed revenues ENDE National Electricity Distribution Company financial stability, current demand 680,238.40 KWh/month projected 13,894,638.40 KWh/month significant energy consumption growth, financial sustainability operations electricity supply mining companies municipality Chipindo
<b>Market Demand</b>	Current: 680,238.40 KWh/month; Projected: 13,894,638.40 KWh/month   Market demand current 680,238.40 KWh/month projected 13,894,638.40 KWh/month exponential growth energy demand, 4 mining companies SMC Almina Lafech Mining Tosyali Iron electricity supply gold iron, mining industry dynamization small medium enterprises emergence local job creation, diesel generators dependence elimination clean energy environmental pollution reduction sustainable mining practices
<b>Economic Returns</b>	USD 11.7 million diesel savings mining companies over 13 years operation   Economic viability demonstrated USD 11.7 million mining companies savings throughout 13 years private partner operation diesel generators costs elimination, operational efficiency improvement clean energy transition, mining companies SMC Almina Lafech Mining Tosyali Iron operational costs reduction competitive advantage, local economic development multiplier effects

	mining industry dynamization, job creation small medium enterprises development regional economic growth
<b>Financing Requirements</b>	USD 13,721,000 (94.75% of CAPEX)   Financing requirements USD 13,721,000 representing 94.75% CAPEX financing structure equity 40% debt 60%, alternative shareholder loans 90% pure equity 10% capital structure flexibility, hybrid revenue model negotiated market mining companies revenues fixed ENDE revenues financial sustainability, competitive tender procedure private partner excellent banking relationships capabilities construction schedule compliance KPIs

SUSTAINABILITY AND IMPACT	
<b>Social Impact</b>	Project implementation will have significant social impact in the region. By dynamizing mining industry, it will boost emergence of small and medium enterprises, generating local jobs   Transformative social impact mining industry dynamization boost small medium enterprises emergence local job creation Chipindo region, poverty hunger reduction contribution general improvement living conditions southern Angola region, regional development territorial energy integration national grid interconnection, local economy strengthening investment attraction sustainable job creation growth, communities quality life improvement modern sustainable energy access
<b>Environmental Impact</b>	Chipindo project will have significantly positive environmental impact. By eliminating dependence on diesel generators for clean energy, it will contribute directly to environmental pollution reduction   Exceptionally positive environmental impact diesel generators dependence elimination clean energy direct environmental pollution reduction, mining operations alignment sustainable environmentally responsible practices, USD 11.7 million mining companies savings 13 years operation fossil fuels costs elimination, greenhouse gas emissions reduction climate change mitigation contribution, low carbon economy transition sustainable mining practices green development
<b>Strategic Importance</b>	Full alignment with Angolan government strategy expand national electrical system southern region – subcomponent 220 kV Gove-Chipindo-Cuvango line   Exceptional strategic importance alignment Angolan government strategy national electrical system expansion southern Angola region, main line subcomponent Gove-Chipindo-Cuvango 220 kV strategic public investment infrastructure, direct contribution electrification target 49% established National Development Plan PDN 2023-2027, fundamental initiative energy

	<p>distribution improvement regional development boost, territorial energy integration national grid interconnection southern region country</p>
<b>Regional Development</b>	<p>Direct contribution regional development through electrification southern Angola region   Transformative regional development direct contribution southern Angola region electrification territorial energy integration, national grid interconnection southern region country energy infrastructure development, investment attraction local economy dynamization sustainable job creation, mining value chain strengthening gold iron small medium enterprises support, SADC Angola regional integration electricity supply cross-border cooperation potential Southern Africa regional expansion</p>
<b>SDGs and Agenda 2063 Alignment</b>	<p>SDG 7: Affordable and Clean Energy; SDG 13: Climate Action; Agenda 2063: Aspirations 1 and 7   Strategic alignment SDG 7 Affordable Clean Energy reliable sustainable modern affordable energy access mining companies municipality, SDG 13 Climate Action greenhouse gas emissions reduction diesel elimination clean energy transition, Agenda 2063 Aspiration 1 Prosperous Africa inclusive growth sustainable development local economy dynamization, Agenda 2063 Aspiration 7 Sustainable Resilient Economies climate change resilient clean energy transition environmentally responsible practices</p>
<b>Pilot Initiative</b>	<p>Strategic pilot initiative demonstration viability electricity supply mining companies municipality southern Angola region   Pilot project strategic demonstration electricity supply viability mining companies municipality southern Angola region, current demand 680,238.40 KWh/month projected 13,894,638.40 KWh/month exponential energy consumption growth, 30 kV transmission capacity Sectioning Point mining companies Substation municipality, model replication potential other Angola regions national development territorial energy integration</p>
<b>Long-term Sustainability</b>	<p>Sustainable operation hybrid revenue model regional economic development   Long-term sustainability sustainable operation hybrid revenue model negotiated mining companies revenues fixed ENDE revenues, regional economic development mining industry dynamization, clean energy transition environmentally responsible sustainable practices, mining value chain strengthening small medium enterprises support, sustainable development objectives contribution SDG 7 SDG 13 Agenda 2063 prosperous sustainable Africa</p>

TECHNICAL DETAILS	
<b>Project Description</b>	Project consists of electricity transmission from future Chipindo Substation (SE) to Sectioning Point, with approximate distance of 5 KM   Technical description electricity transmission future Chipindo Substation SE Sectioning Point approximate distance 5 km energy supply, objective provide electricity gold iron mining companies Chipindo SMC Almina Lafech Mining Tosyali Iron municipality 30 kV substation construction, main line Gove-Chipindo-Cuvango 220 kV strategic public investment infrastructure subcomponent, diesel generators dependence elimination clean energy sustainable mining practices
<b>Technology and Design</b>	Part of main line Gove-Chipindo-Cuvango. Construction Sectioning Point (PS) 30 kV and 5 km line mining companies; Substation 30 kV and 10 km line municipality   Advanced technology design main line Gove-Chipindo-Cuvango 220 kV public investment initiative, private partner scope two parts construction Sectioning Point PS 30 kV line 5 km associated mining companies energy supply, Substation 30 kV construction line approximately 10 km electricity municipality inhabitants, modern efficient transmission infrastructure reliable electricity supply
<b>Beneficiary Mining Companies</b>	SMC, Almina, Lafech Mining, Tosyali Iron   Beneficiary mining companies SMC Almina Lafech Mining Tosyali Iron electricity supply gold iron Chipindo, diesel generators dependence elimination clean energy operational costs reduction, USD 11.7 million mining companies savings throughout 13 years private partner operation economic viability, sustainable mining practices operations alignment environmentally responsible, Chipindo region mining industry dynamization local economic development
<b>Capacity/Size</b>	Pilot Initiative   Strategic pilot initiative demonstration viability electricity supply mining companies municipality southern Angola region, current demand 680,238.40 KWh/month projected 13,894,638.40 KWh/month exponential energy consumption growth, 30 kV transmission capacity Sectioning Point mining companies Substation municipality, model replication potential other Angola regions national development territorial energy integration
<b>Infrastructure Components</b>	Sectioning Point 30 kV + 5 km line (mining companies); Substation 30 kV + 10 km line (municipality)   Infrastructure components Sectioning Point PS 30 kV line 5 km associated specific energy supply mining companies SMC Almina Lafech Mining Tosyali Iron, Substation 30 kV line approximately 10 km electricity Chipindo municipality inhabitants, modern transmission infrastructure advanced

	technology reliable efficient electricity supply guarantee, national electrical system integration southern Angola region
<b>Construction/Preparation Schedule</b>	Feasibility studies preparation followed by phased implementation   Construction preparation schedule IDF identification approval finance technical economic environmental social feasibility studies, competitive tender procedure realization private partner selection implementation capacity excellent banking relationships, phased construction Sectioning Point mining companies Substation municipality, transmission system implementation diesel generators dependence elimination
<b>Purchase and Sale Agreements</b>	Hybrid model negotiated mining companies revenues fixed ENDE revenues   Purchase sale agreements hybrid model negotiated market revenues mining companies SMC Almina Lafech Mining Tosyali Iron price flexibility, fixed revenues ENDE National Electricity Distribution Company financial stability, electricity supply contracts project economic viability guarantee, revenue sources diversification private partner operations financial sustainability

RISK MANAGEMENT	
<b>Risk Assessment</b>	Financing Risk: Private; Licensing Risk: Public; Demand Risk: Private; Political Risk: Public   Risk assessment private financing risk competitive tender procedure private partner selection excellent banking relationships, public licensing risk business-friendly environment necessary licenses availability structuring phase, private demand risk projected growth 680,238.40 KWh/month to 13,894,638.40 KWh/month, public political risk Angolan government stability regional development support
<b>Mitigation Measures</b>	Implement competitive tender procedure select private partner with greatest capacity implement project – excellent banking relationships and capabilities meet construction schedules and KPIs   Mitigation measures implement competitive tender procedure private partner selection demonstrate greatest capacity implement project excellent relationships banking financial institutions, capabilities meet construction schedules as well as performance indicators KPIs project, business-friendly environment provide necessary licenses structuring phase avoid implementation delays, contractual guarantees private partners investment protection
<b>Regulatory Risks</b>	Ministerial coordination MINEA-MINPLAN-MINFIN-MIREMPET-ANRM ensure stable regulatory environment   Regulatory risks mitigated ministerial coordination MINEA Ministry Energy Water MINPLAN Planning MINFIN Finance

	<p>MIREMPET Mineral Resources ANRM, stable regulatory environment favorable private investment project development, necessary licenses availability structuring phase guarantee implementation schedule compliance, legal framework support public-private partnerships Angola energy sector</p>
<b>Environmental and Social Safeguards</b>	<p>Environmental Impact Assessment (EIA) during feasibility study preparation ensure project benefits communities sustainable development   Environmental social safeguards Environmental Impact Assessment EIA during feasibility study preparation ensure project benefits communities sustainable development, diesel generators dependence elimination clean energy environmental pollution reduction, sustainable mining practices operations alignment environmentally responsible, local communities consultation participation project development social economic benefits region</p>
<b>Technical Risk</b>	<p>National electrical system integration main line Gove-Chipindo-Cuvango 220 kV   Technical risk mitigated national electrical system integration main line Gove-Chipindo-Cuvango 220 kV strategic public investment infrastructure, 30 kV transmission technology proven reliable Sectioning Point mining companies Substation municipality, technical coordination private partner national authorities system compatibility guarantee, transmission infrastructure operation maintenance international quality standards</p>
<b>Market Risk</b>	<p>Strong demand growth projection 680,238.40 KWh/month to 13,894,638.40 KWh/month mining companies operations   Market risk minimized through strong demand growth projection current 680,238.40 KWh/month projected 13,894,638.40 KWh/month mining companies SMC Almina Lafech Mining Tosyali Iron, mining industry dynamization small medium enterprises development economic growth, hybrid revenue model diversification negotiated mining companies revenues fixed ENDE utility revenues, government support mining sector development policy framework</p>
<b>Financial Risk Mitigation</b>	<p>Strong financial returns IRR 15% and USD 11.7 million diesel savings attractive economics   Financial viability demonstrated IRR 15% attractive returns private investors international financial institutions, USD 11.7 million mining companies savings diesel generators elimination strong economic justification, flexible capital structure options 40% equity 60% debt alternative 90% shareholder loans 10% equity, government support policy framework, preparation funding USD 500,000 IDF, competitive tender process ensures optimal private partner selection financial capacity</p>



KEY STAKEHOLDERS	
<b>Sponsors</b>	<p>MINEA-MINPLAN-MINFIN-MIREMPET-ANRM  </p> <p>Government sponsors MINEA Ministry of Energy and Water main sponsor ministerial coordination, MINPLAN Ministry of Planning alignment National Development Plan PDN 2023-2027 objective electrification 49%, MINFIN Ministry of Finance financing structure investment support, MIREMPET Ministry of Mineral Resources Petroleum and Gas mining sector coordination, ANRM National Agency of Mineral Resources mining licensing regulation</p>
<b>Investors</b>	<p>AFD-AfDB-AFC-World Bank-EU   International investors</p> <p>AFD French Development Agency bilateral cooperation France-Angola, AfDB African Development Bank regional development financing Africa, AFC Africa Finance Corporation African infrastructure investment, World Bank sustainable development support, EU European Union Africa development cooperation programs, international financing sources diversification Angola energy project support</p>
<b>Direct Beneficiaries</b>	<p>4 mining companies (SMC, Almina, Lafech Mining, Tosyali Iron) and Chipindo municipality   Direct beneficiaries 4 mining companies SMC Almina Lafech Mining Tosyali Iron electricity supply gold iron diesel generators dependence elimination, Chipindo municipality local population modern sustainable energy access quality life improvement, USD 11.7 million mining companies savings 13 years operation economic viability, local economy dynamization small medium enterprises emergence job creation</p>
<b>Private Partner</b>	<p>To be selected through competitive tender procedure  </p> <p>Private partner selection through competitive tender procedure implementation capacity excellent banking relationships financial institutions, capabilities meet construction schedules performance indicators KPIs project, energy sector experience electricity transmission distribution, capital structure 40% equity 60% debt financing, construction operation responsibility Sectioning Point Substation transmission system</p>
<b>Contractors and Operators</b>	<p>Selected private partner responsible transmission system construction operation  </p> <p>Contractors operators selected private partner competitive tender procedure responsible transmission system construction operation, specialized construction companies electrical infrastructure transmission 30 kV, technical operators system maintenance reliable efficient electricity supply guarantee, local subcontractors contracts job creation technical capacity development region</p>

<b>Legal and Financial Consultants</b>	PPP project legal financial structuring support   Legal financial consultants public-private partnership project legal financial structuring support, legal advisory concession contracts electricity supply agreements, financial consultancy capital structure IRR 15% economic viability, technical environmental social due diligence, regulatory advisory environmental licensing Environmental Impact Assessment EIA
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PATH FORWARD	
<b>Investment Ask</b>	USD 13,721,000 total investment electricity transmission infrastructure   Equity financing requirements 40% approximately USD 5.5 million private partner contribution, debt financing 60% approximately USD 8.2 million banking financial institutions, alternative financing structure 90% shareholder loans 10% pure equity flexibility, preparation funding USD 500,000 IDF Infrastructure Development Fund feasibility studies, competitive tender procedure private partner selection excellent banking relationships construction capabilities
<b>Next Steps</b>	IDF identification approval feasibility studies USD 500,000, competitive tender procedure private partner selection, phased construction implementation   Feasibility studies preparation technical economic environmental social assessment IDF Infrastructure Development Fund financing, competitive tender procedure private partner selection implementation capacity excellent banking relationships, phased construction Sectioning Point mining companies Substation municipality, transmission system implementation diesel generators dependence elimination clean energy transition sustainable mining practices
<b>Implementation Timeline</b>	Phased preparation and implementation schedule   Phase 1 IDF approval USD 500,000 feasibility studies technical economic environmental preparation 12 months, Phase 2 competitive tender procedure private partner selection

	financing structuring 6 months, Phase 3 construction implementation Sectioning Point Substation transmission system 18 months, Phase 4 testing commissioning operations start electricity supply mining companies municipality, total project timeline 36 months preparation to operations
<b>Success Metrics</b>	Performance indicators KPIs project quality electricity supply, social impacts mining industry dynamization small medium enterprises emergence job creation, environmental impacts pollution reduction diesel generators elimination, USD 11.7 million mining companies savings 13 years operation, electrification objective 49% contribution PDN 2023-2027   Performance monitoring evaluation project KPIs quality electricity supply, social impacts mining industry dynamization small medium enterprises emergence job creation, environmental impacts pollution reduction diesel generators elimination, USD 11.7 million mining companies savings 13 years operation, electrification objective 49% contribution PDN 2023-2027
<b>Model Replication</b>	Model replication potential other Angola regions national development   Model replication potential other Angola regions national development territorial energy integration, national electrical system expansion mining industrial development support, Chipindo pilot project lessons learned application other municipalities, Angola energy sector strengthening economic diversification oil dependence reduction, sustainable development objectives contribution Agenda 2063
<b>Regional Integration</b>	SADC regional integration energy cooperation Southern Africa   SADC Angola regional integration energy cooperation Southern Africa cross-border infrastructure development, regional electricity cooperation potential national systems interconnection, experiences sharing best practices mining sector energy supply, SADC regional economic integration contribution bilateral relations strengthening, Southern Africa regional development objectives energy sustainability support
<b>Long-term Sustainability</b>	Sustainable operation hybrid revenue model regional economic development   Long-term sustainability sustainable operation hybrid revenue model negotiated mining companies revenues fixed ENDE revenues, regional economic development mining industry dynamization, clean energy transition environmentally responsible sustainable practices, mining value chain strengthening small medium enterprises support, sustainable development objectives contribution SDG 7 SDG 13 Agenda 2063 prosperous sustainable Africa

Contact Information	<p><b>Ministry of Energy and Water (MINEA)</b></p> <p><b>Project:</b> Electricity Supply to Mining Companies and Chipindo Municipality</p> <p><b>Main Sponsor:</b> Ministry of Energy and Water (MINEA)</p> <p><b>Location:</b> SADC, Angola, Chipindo Municipality</p> <p><b>Sector:</b> Energy - Transmission Lines</p> <p><b>Investment:</b> USD 13,721,000</p> <p><b>Status:</b> S0-S4C Preparation and Feasibility Studies</p> <p><b>Email:</b> <a href="mailto:minea@governo.gov.ao">minea@governo.gov.ao</a></p> <p><b>Phone:</b> +244 222 310 200</p> <p><b>Website:</b> <a href="http://www.minea.gov.ao">www.minea.gov.ao</a></p>
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