AU AIP WATER INVESTMENT SUMMIT: PROJECT SHOWCASE

PROGRAMME/ PROJECT OVERVIEW	
Project Name	Lesotho Highlands Water Project PHASE II SCHEME - OXBOW
Location	Lesotho, Butha-Buthe
Involved countries	Lesotho, South Africa
Sub-Sector	Hydropower Generation and Water Transfer
Project description (Goals and expected outcomes)	The 80MW Scheme is intended to enhance energy security, promote sustainable development and stimulate local economic growth. The expected outcomes include energy independence for Lesotho & green economy catalyst that support investments in industry, agribusiness, and tourism.
Technological details/ innovation	The scheme houses Pelton turbines, modern electro-mechanical equipment with SCADA-enabled controls and designed for easy access and modular maintenance, reducing O&M downtime. Flexible for future grid integration SAPP.
Governance improvements/innovation	LHDA Board of Director in consultation with the Lesotho Highlands Water Commission (LHWC) in line with po.
IMPLEMENTATION & KEY PLAYERS	
Lead institution	Lesotho Highlands Development Authority (LHDA)
Implementing agent(s)	LHDA on behalf of the Government of Lesotho (GoL) and RSA
Sponsors / Investors / Contractors / Advisors	Government of Lesotho Republic of South Africa
PROJECT TIMELINE & DEVELOPMENT STAGE	
Year of preparation, estimated start & end dates	Bankable Feasibility Complete Design and ESIA commenced in January 2025
Current development stage	Engineering Design Phase Environmental Impact and Social Assessment (ESIA)
PROJECT RATIONALE & STRATEGIC IMPORTANCE	
Alignment with national/regional plans, SDGs, Agenda 2063	Alignment with Lesotho National Strategic Development Plan (NSDP II) and SADC Protocols, SDGs, AU Agenda 2063 Alignment.
Contribution to NDCs and alignment with NAPs / Adaptation and Mitigation measures	Aligned with Lesotho NDC mitigation + adaptation measures, and supports NAP priorities, replaces fossil fuel imports, provides climate-resilient hydropower, secures water-energy synergy and is eligible for GCF/Adaptation Fund.
Paradigm shift potential (scalability, replicability)	Drives multi-purpose water-energy policy integration & PPP frameworks and provides stable renewable peak-power & predictable water-energy outputs
FINANCIAL & INVESTMENT DETAILS	
Total project cost, currency	**CAPEX**: ~USD 1500 million
Funding already raised (amount & sources)	Engineering Design and ESIA funded from the State budget.
Proposed revenue model	PPA with LEC – fixed tariff with indexation, covering full cost recover
Financial metrics (IRR, Payback Period, DSCR, NPV) available? Y/N, date	**Debt-to-Equity Ratio**: ~70:30. **DSCR (Debt Service Coverage Ratio):** Target ≥ 1.3x **Project IRR:** ~12-14% **Equity IRR**: ~15-18% **NPV @ 8% WACC**: Positive (~USD 80-120M)

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Economic performance (Benefit-Cost Ratio) Y/N, date	N
INVESTMENT ASK & WAY FORWARD	
Remaining investment required: project component & type (Loan/Equity/Grant/Guarantee /insurance)	▪ Total Remaining Investment Required: USD 952 M ▪ Major Components: Powerhouse, tunnels, transmission, RAP & social programs ▪ Funding Mix Needed: ~60% DFI loans, ~20% government equity, ~10% climate funds, ~10% PPP equity
Opportunity for bundling with other projects (Y/N, date)	Floating Solar (Katse & Mohale Reservoirs) → Hybrid hydro-solar PPAs improve grid stability & attract climate finance.
Next steps	Complete Design and ESIA, structure financing model, engage Communities & Stakeholders and finalise procurement model
TARGET GROUPS & SOCIAL IMPACT	
Direct beneficiary population per project component	▪ **Direct Beneficiaries**: ~5,000 locals (jobs, SME contracts, RAP/CSR benefits) ▪ **Indirect Beneficiaries**: ~250,000+ households gain reliable clean power ▪ **Women & Youth: Prioritised in employment**, SME opportunities, social benefits ▪ **Gender-Responsive Safeguards**: RAP, CSR, GBV prevention
Social & gender impact assessment (Y/N, date)	**TBC**
Job creation estimate / local economic benefit assessment	▪ ~500–700 jobs during construction (with 70–80% local hiring). ▪ 50–70 permanent jobs for O&M (technical & support roles).
SUSTAINABILITY & ENVIRONMENTAL ANALYSIS	
Environmental compliance & climate assessment (Y/N, date)	Full ESIA to ensure biodiversity protection, water quality management, and RAP implementation in progress.
Environmental impact assessment (Y/N, date)	N: Pending the Outcome of ESIA
ESG performance (Y/N, date)	N: Pending the Outcome of ESIA
Safeguards & community engagement (Y/N, date)	**Safeguards**: Full compliance with national law, LHDA policy, IFC/WB standards, and ORASECOM agreements → low-risk, climate-aligned project.
RISK MANAGEMENT	
Main risks & mitigation measures	Social & environmental approvals (ESIA/RAP), Tariff & off-taker risk (LEC) High upfront cost, Geotechnical & tunnelling risk.
Constraints or bottlenecks to finance	Environmental & social approvals, sovereign guarantee or PRG, High capex, foreign exchange & debt sustainability risk, Competing demand for DFI capital
CONTACT INFORMATION	
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