

Capital Electrical Experts (CEE)

Executive Summary – 10 MW Solar PV (Zambia), scalable to 30 MW

Renewable Energy • Data Centres • Components • Efficiency

1) Opportunity & Context

CEE is developing a 10 MW utility-scale solar PV project in Zambia with a clear path to expand to 30 MW. The project targets stable offtake under ZESCO/ERB-aligned frameworks and proximity to an MV/HV substation for efficient interconnection. The plant will deliver dependable energy, reduce load deficits, and enable clean power for commercial and data centre growth.

2) Project Snapshot (10 MW, scalable to 30 MW)

Capacity	10 MWp (Phase 1); expansion to 30 MWp (Phase 2)
Location	Zambia; site near MV/HV substation; final GPS on file
Technology	Tier-1 modules, string inverters, SCADA; fixed-tilt or SAT per LCOE
Performance	PR $\geq$ 80%; availability $\geq$ 98% (target)
Timeline	Licensing & PPA 2025–2026; Construction 2027–2028; COD Q4 2028
Impact	~15,000 households powered; ~21,000 tCO ₂ e avoided per year

3) Development & Permitting Plan

- SPV & Land: Secure land rights and wayleaves; confirm access & geotech.
- Grid: Submit connection enquiry; complete grid impact/feasibility studies with ZESCO.
- ESIA: Conduct scoping, consultations, and submit to ZEMA for approval.
- Licensing & PPA: Apply for ERB Generation License; negotiate PPA and tariff approval.
- Financing: Structure debt/equity; reach Financial Close; EPC contracting and NTP.
- Construction & COD: 12–24 months EPC; testing, commissioning, COD and operations.

4) Near-Term (0–3 months) Focus

- Confirm land status, GPS, and nearest substation grid point.
- Submit ZESCO grid connection enquiry.
- ESIA scoping with ZEMA; prepare TOR and consultations schedule.
- Local council planning checklist; stakeholder mapping.
- Shortlist: surveyor, geotech, ESIA consultant, legal; issue RFPs.
- Refresh investor pack: one-pager timeline, ranges, risk register.

Contact

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