

Project Proposal: Mamba Village Electrification Initiative

Submitted by: Imexolutions

Location: Mamba Village, Kenya (Latitude: 36.8219, Longitude: 1.2921)

Project Duration: January 5 – January 7 (2 days)

Project Overview

Imexolutions is proposing the deployment of a solar hybrid mini-grid to electrify Mamba Village, located in rural Kenya. The system will provide reliable electricity to households, schools, small businesses, and agricultural processing units in the area. The project aims to bridge the energy gap and empower economic development in the community.

Financial Overview

Capital Expenditure (CAPEX): \$95,000

Operational Expenditure (OPEX): \$12,000 annually

Total Funding Requested: \$107,000

Sustainability Plan

The system will be operated under a community-based ownership model. Imexolutions will provide training to a local maintenance team and integrate mobile payments for tariff collection. After the first year, operations will be transitioned to a local energy cooperative with remote technical support.

Projected Impact

Households Connected: 400

Estimated People Impacted: 1,750

Projected CO₂ Emissions Avoided Annually: 62 tons

Productive Uses of Energy: Cold storage for fish and dairy, solar-powered irrigation for nearby farms, and mobile charging stations for small businesses.