

Project Proposal: Nyamweru Village Solar Electrification

Submitted by: Bright Horizon Power

Location: Nyamweru, Uganda (Latitude: 0.6139, Longitude: 30.6586)

Project Duration: June 1 – August 15 (75 days)

Project Overview

Bright Horizon Power proposes the installation of a 40 kW solar mini-grid in Nyamweru, a remote village in western Uganda. The system is designed to serve domestic, educational, and entrepreneurial needs in a community currently without access to modern electricity. The mini-grid will power homes, schools, a water pump station, and key microenterprises.

Financial Overview

Capital Expenditure (CAPEX): \$180,000

Operational Expenditure (OPEX): \$14,000 annually

Total Funding Requested: \$194,000

Sustainability Plan

The project will be managed by a public-private partnership between Bright Horizon and the Nyamweru Village Council. A local maintenance technician will be trained and employed under a performance-based contract. Tariff collection will be managed via mobile money platforms, and a portion of revenues will be allocated for system upgrades and battery replacements.

Projected Impact

Households Connected: 350

Estimated People Impacted: 1,560

Projected CO₂ Emissions Avoided Annually: 120 tons

Productive Uses of Energy: Operation of maize shellers and grain mills, solar refrigeration for dairy farmers, sewing and tailoring shops, and extended hours for local markets and schools.

Bright Horizon's Nyamweru project offers an environmentally responsible and financially sustainable pathway to rural electrification that can be scaled to other underserved regions across Uganda.