



Solar vs Generator Cost Projection for Church Assumptions

Current generator fuel = ₦40,000/day - Generator runs 24 days/month (~6 days/week) - Monthly fuel spend ≈ ₦960,000 - Yearly fuel spend ≈ ₦11.5m - Proposed solar system ≈ ₦25m (10–12 kW inverter + 60 kWh lithium + panels) - Solar panels last 20–25 years, batteries 7–10 years

5-Year Cost Comparison

	Generator (Fuel + Maintenance)	Generator (Fuel + Maintenance)
Yearly Cost	₦11.5m + ~₦0.5M maint. = ₦12M	0 (after setup)
5-Year Cost	₦60M	₦25M
10-Year Cost	₦120M+	₦35M (with battery replacement)
System Lifespan	Generator ≈ 5–7 years	Panels 20–25 years, Battery 7–10 years

