# Solar Sierra Leone

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### 2-Minute Verbal Pitch

#### Hon. Chief Minister,

What if Sierra Leone could produce its own solar panels — right here, locally — creating jobs, empowering communities, and generating revenue for the government at the same time?

We propose buying a plug-and-play solar printing system. Initially, ministries operate it, producing high-quality solar modules and training a 25-member cooperative — Solar Sierra Leone. Revenue from the first production phase ensures the government recoups its investment and earns profit.

After this phase, ownership and operations transfer to the cooperative, who will continue production, sales, and job creation.

Each ministry has a clear role:

- Energy: procurement, training, and production
- Works: bamboo and rooftop mounting infrastructure
- Agriculture: bamboo supply and farmer training
- Lands: site allocation and fast-tracked permits
- Labor: formalizing jobs, skills development, and safety

We've built a transparent guarantee framework: ministries sign MoUs, repayments are enforceable, and oversight ensures accountability.

This project isn't just solar — it's a green industry, a revenue stream, and a sustainable workforce. Approving this plan positions Sierra Leone as a regional leader in solar innovation and empowers citizens to own their energy future.

# Chief Minister Overview — Site Impact & Government Assurance

Per project area (e.g., **BawBaw** or **Rokupr**): a 25-member cooperative forms, each member contributing \$10,000. Government runs an initial production phase, sells finished solar modules, and recoups 100% of costs + a 25% profit before transfer. Solar Sierra Leone receives 1% of revenue to coordinate inter-ministerial delivery.

### BawBaw — Coastal Hub

- Government first-run: Operate printer, sell initial output, recover costs + 25% profit.
- Cooperative ownership: After recovery, system and inventory sold to coop.
- Local benefits: Lower-cost flexible solar for households, SMEs, clinics; skilled green jobs.
- Coordination: 1% of revenue to Solar Sierra Leone for inter-ministerial alignment.

### Rokupr — Rural Node

- Government first-run: Production & sales ensure full recovery + profit.
- Rural focus: Off-grid households, agro-processing, fisheries cold chain.
- Skills & jobs: Training pipeline for operators, installers, bamboo fabricators.
- Coordination: 1% of revenue to Solar Sierra Leone.

**TL;DR:** The state does not spend anything it does not recover. Revenue from the first production phase guarantees a profit-positive handoff to the cooperative.

# **One-Page Executive Summary**

Government procures a plug-and-play solar printing system for local production of flexible solar films. Ministries operate first, generate revenue, and train a 25-member cooperative. After initial production, the system and operations are sold to the cooperative at a 25% markup.

### **Government Revenue & Profit**

- Initial production covers full investment plus profit.
- Cooperative buys system + inventory; takes over operations.
- Repayment/recoup secured via legal agreements, revenue-based terms, and collateral.
- 1% of revenue allocated to Solar Sierra Leone for inter-ministerial coordination.

### Ministries' Roles

Ministry	Key Responsibilities	
Energy	Procure system, initial production, training	
Works	Design & install bamboo/rooftop mounting	
Agriculture	Bamboo supply chain & farmer training	
Lands	Sites, registration, permits, compliance	
Labor	Job formalization, certification, safety	

### **Strategic Benefits**

- Local solar manufacturing ecosystem + skilled workforce
- Affordable energy access; resilient communities
- Direct government revenue; proof-of-concept for national scale

# **Guarantees & Accountability Framework**

### 1) Cooperative Ownership & Repayment

- 25-member cooperative legally owns the system after purchase.
- Buyback & Repayment Agreement: total resale price \$250,000 (25% profit to government); payment secured by assets & inventory; optional revenue-share until paid.
- Penalty clauses enforceable against individuals if default occurs.

## 2) Ministries as Facilitators (No Ownership)

Ministry	Role	Timeline	Reporting
Energy	Procure, operate initial production, train coop	60 days	Monthly progress reports
Works	Design/install bamboo & rooftop mounting	90 days	Site surveys + updates
Agriculture	Bamboo supply chain, farmer training	Ongoing	Quarterly performance
Lands	Allocate sites, fast-track permits	30 days	Permit approval log
Labor	Jobs formalization, certification, safety	45 days	Training & employment reports

## 3) Ministries as Initial Producers & Revenue Stream

- State runs initial production, sells finished modules, and recovers costs + profit prior to transfer.
- Training embedded; quality assurance documented; clean handoff.

# 4) Oversight & Accountability

- Government-appointed oversight committee with cooperative reps.
- Transparent dashboard: deliverables, repayments, production & revenue.
- Mediation panel; sanctions for persistent non-compliance.

### 5) Legal & Financial Safeguards

- Registered cooperative (defined ownership shares).
- Conditional title until full payment; audit rights; annual audits.
- Reserve fund from buyback proceeds to ensure continuity.

### 6) Outcome

Secures public funds, delivers accountability, and de-risks national scale-up.

# Ministry of Energy — Proposal

- Plug-and-play solar printing system (R2R; drying; scribing; software)
- Startup materials for demo batch
- Shipping, customs, setup, initial test run
- Buyback Plan: Sale to Cooperative \$250,000; Profit \$50,000+
- Pilots: BawBaw, Rokupr; 1% revenue to Solar Sierra Leone for coordination

# Ministry of Works — Proposal

- Design & engineer bamboo/rooftop mounting structures (to safety standards)
- QC during fabrication/installation; maintenance plans
- Coordinate installs at BawBaw & Rokupr

# Ministry of Agriculture — Proposal

- Scale bamboo cultivation (Kambia + Freetown outskirts)
- Farmer training; sustainable harvesting & treatment
- Supply chain logistics with Works; R&D on durability

# Ministry of Lands — Proposal

- Identify & allocate rooftop/ground sites; expedite land registration
- Fast-track permits; environmental compliance
- Cross-ministerial coordination for timelines

# Ministry of Labor — Proposal

- Formalize jobs & roles within the cooperative
- Curricula + certification for solar manufacturing/installation

# Annex — Site Implementation (BawBaw & Rokupr)

### **Energy** — Site Playbooks

### BawBaw

- Train 25 cooperative members; certify operators & QA leads.
- Initial production run sized to recover full government outlay + 25% profit.
- Handoff package: SOPs, maintenance log, spare parts list, vendor contacts.
- Coordination fee: 1% of revenue to Solar Sierra Leone.

### Rokupr

- Rural-focused product mix (lightweight modules; DC appliances pairing).
- Same recover-then-transfer model; community demo installs prior to handoff.
- Operator rotation to ensure redundancy; safety drills documented.
- 1% coordination fee applied.

### Works — Mounting & Deployment

#### **BawBaw**

- Bamboo frame spec (treated, load-tested; coastal corrosion considerations).
- Rooftop anchor kits; wind uplift & salt-spray mitigation.
- Maintenance schedule: quarterly inspection; rapid-response crew roster.

#### Rokupr

- Ground & rooftop mixed deployments; cyclone tie-downs where relevant.
- Local fabricator onboarding; jig templates for repeatability.
- Spare parts cache at community hub.

### Agriculture — Bamboo Supply Chain

#### BawBaw

- Supplier cluster: Freetown outskirts; kiln/treatment partner lined up.
- Training: sustainable harvesting intervals; anti-pest treatment SOPs.
- Logistics: weekly deliveries; moisture thresholds on acceptance.

#### Rokupr

- Supplier cluster: Kambia; river transport options mapped.
- Community co-ops engaged; micro-payments on delivery checks.
- Stock buffer for seasonal variability.

### Lands — Sites, Permits, Compliance

#### **BawBaw**

- Site list: rooftops (public buildings + SME hubs); ground set-asides.
- Fast-track permit lane; environmental checklist pre-filled.
- GIS pins and simple MOU templates for participating buildings.

### Rokupr

- Village rooftops + agro facilities; community meeting hall as demo.
- Land registry coordination; dispute resolution contact tree.
- Quarterly compliance audit schedule.

# Labor — Jobs, Training, Safety

#### **BawBaw**

- Role map: operators, QA, installers, bamboo fabricators, logistics.
- OSHA-style OHS adapted to local regs; PPE inventory; incident reporting.
- Apprenticeships: 10 seats/quarter; certification tests at handoff.

### Rokupr

- Rural installer track; travel stipends; weekend training cohorts.
- Gender-inclusive recruitment; childcare options at training center.
- Annual wage review; benefits baseline documented.