**PROJECT PROPOSAL**

**TITLE: Living Sculpture for Sustainable Resilience in Marou Village”**

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1. Executive Summary

A brief overview of the proposal—highlight the vision, the core solution, and the expected impact.

Example:

This proposal presents a visionary approach to empowering Marou Village with an aesthetically integrated energy and water system. Designed as a functional artwork embedded in the natural landscape, our project provides clean electricity and potable water for 67 households while enhancing local tourism and cultural identity.

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2. Context and Problem Statement

Summary of the climate change threats facing Marou Village.

Key challenges: energy insecurity, lack of clean water, vulnerability to natural disasters, dependence on unsustainable tourism.

The need for a resilient, sustainable, and community-centered solution.

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3. Design Concept

Describe your design in detail: What is it? What does it look like? How does it work?

How does it blend with the landscape and local culture?

Artistic inspiration and symbolism (if applicable).

Community involvement in design and implementation.

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4. Technical Overview

Energy System: e.g., solar panels, wind turbines, battery storage—how it will generate and store power.

Water System: e.g., rainwater harvesting, atmospheric water generators, desalination using renewable energy.

Grid independence / resilience during disasters.

Materials and construction techniques, especially with respect to sustainability and durability in a coastal climate.

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5. Social and Economic Impact

How it improves livelihoods: reliable water and electricity, reduced health risks, increased tourism, local job creation.

Community training and capacity-building components.

Role in youth and women empowerment.

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6. Sustainability and Replicability

Environmental sustainability: minimal ecological footprint, zero-emission systems.

Economic sustainability: low maintenance, locally sourced materials where possible.

Potential for replication in other island and coastal communities across the Pacific and beyond.

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7. Tourism and Cultural Integration

How the design becomes a destination and storytelling space.

Integration with local traditions, crafts, and Fijian heritage.

Opportunities for eco-tourism and cultural tourism.

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8. Budget and Timeline

High-level budget estimate (if required).

Phases of implementation with a rough timeline (e.g., design finalization, procurement, construction, community training, launch).

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9. Partners and Team

Your team: backgrounds, roles, and relevant experience.

Local and international partners, NGOs, technical consultants.

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10. Monitoring and Evaluation

How the success of the project will be measured:

Electricity generation and usage

Drinking water availability

Economic and social benefits

Tourist visits and community satisfaction

**SOLAR POWER SYSTEM MAROU**

**Schematic layout description for the solar power system intended for Marou Village**

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Title: Solar Power System – Te Mana o Marou

Layout Orientation: Landscape (A1 - 594mm × 841mm)

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**Section 1: Solar Generation (Top-Left)**

Label: “Sunlight Harvesting Zone”

24x Solar PV panels mounted on raised aluminum structures facing north-west

Each panel rated at 350W

Ground beneath planted with native, low-height vegetation

Solar radiation symbols (sunshine arrows hitting the panels)

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**Section 2: Power Conditioning Unit (Middle-Top)**

Label: “Inverter & Controller Hub”

Arrows from panels pointing to a structure housing:

MPPT charge controller

Hybrid inverter (DC to AC conversion)

Surge protection

Monitoring screen with Wi-Fi symbol (remote data sharing)

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**Section 3: Battery Bank (Right-Middle)**

Label: “Energy Storage Zone”

20x lithium-ion battery units in ventilated, secure structure

Cooling fan indicators

Backup power indicator icon

Label: “Nighttime & Cloudy Day Resilience”

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**Section 4:**

Each with individual smart meters and energy-saving LED bulbs

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**Section 5: System Monitoring & Education Panel (Bottom-Left)**

Label: “Empowerment & Learning Zone”

Interactive digital display for education and monitoring

Connected to mobile devices (symbolized with tablets)

Local youth observing real-time energy use and learning

**Legend (Bottom Center)**

Solar Panel

Inverter

Battery

Cable

Smart meter

Household

Community Use

Eco-lodge

Control system

**Detailed schematic layout description for the water system with filtration and treatment works, designed for a landscape-oriented A1 (594mm × 841mm) poster.**

**Title: Solar-Powered Water Purification System – Te Mana o Marou**

Layout Orientation: Landscape (A1 – 594mm × 841mm)\*\*

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**Section 1: Water Source (Top-Left)**

Label: “Raw Water Intake”

Illustration of a borehole well, rainwater collection tank, or shallow spring

Inlet pipes leading from the water source

Mesh filters at the intake to remove large debris

Optional solar-powered pump at the wellhead

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**Section 2: Pre-Filtration Unit (Top-Center)**

Label: “Sediment Removal Zone”

Cylindrical sand and gravel filter

First-stage sedimentation tank

Flow arrow from source to this stage

Settling chamber with sludge outlet

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**Section 3: Filtration & Treatment Unit (Middle-Right)**

Label: “Purification Zone”

Multi-stage cartridge filters

Activated carbon

Ceramic filter

UV sterilization chamber (solar-powered with battery backup)

Alternative: solar distillation unit or reverse osmosis membrane (if seawater/brackish)

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**Section 4: Storage & Distribution (Bottom-Center)**

Label: “Safe Water Storage & Access”

10,000L elevated storage tank with cover

Pipe network to:

67 households

Community tap stands

Clinic

Eco-lodges

Tap symbols, hand-washing stations, labeled “Safe Drinking Water”

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**Section 5: Solar Power Link (Bottom-Left)**

Label: “Energy for Clean Water”

Dedicated solar panel array (or linked to main solar system)

Arrows connecting solar panels to:

Water pump

UV treatment

Monitoring sensors

Battery backup included in isolated box

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**Section 6: Monitoring & Maintenance (Top-Right**)

Label: “System Dashboard & Community Training”

Local trained technicians shown inspecting system

Real-time water quality sensors

App dashboard display for flow, storage level, and contamination detection

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**Legend (Bottom Bar)**

Solar Panel

Raw Water Source

Pre-Filter

UV Unit

Storage Tank

Pipe Network

Distribution Points

Monitoring Display

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