Marou, Naviti Island



TRANSPORTATION

4m x 14m

Lautoka, Fiji 👝

LAGI 2025 FIJI LAND ART FOR A CHANGING CLIMATE ENERGY FOREST CONCEPT

The current design of the Energy Tree is modular. It consists of three main functional components: solar photovoltaic (PV) panels at the top, a still in the middle, and a rainwater harvesting tower at the bottom. The solar photovoltaic panels are manufactured using a proven monocrystalline silicon process. They are tilted at an angle of 19 degrees based on the sun's altitude angle in Fiji to achieve maximum efficiency. The still is surrounded by clear tempered glass. This glass allows the still to fully absorb the sun's heat while preventing people from getting injured in the event of damage. The water tower part is made of stainless steel and coated with a fluorocarbon baked enamel finish. This coating ensures a service life of more than 25 years and protection against corrosion from the humid climate and salt. In addition, the design utilizes a horizontally connected Dendriform structure. This structure can withstand the weight of the tanks and ensure safety in the event of an earthquake. To prevent ecological damage caused by the foundation, we intentionally left gaps between the Energy Trees. These gaps effectively reduce wind pressure and allow the structure to withstand typhoons.

STRUCTURE

WATER

ENERGY



Based on the Solar Altitude Angle in Fiji

PHOTOVOLTAIC OPTIMUM EFFICIENCY

SUSTAINABILITY



MINIMAL GROUND DISTURBANCE



EXPANDABILITY





AVOID FLOODING/ STRENGTHEN SOIL



STORM RESILIENCE



PHOTOVOLTAIC WASTE HEAT REUSE





CENTRALIZED ENERGY STORAGE

Marou

REPLICABILITY/ RECYCLE