

## **ELECTRIC SANCTUARY**

The Electric Sanctuary is grounded in the belief that architecture, even at its most infrastructural, can serve many purposes at once—technical, ecological, social, and symbolic. At the centre of the project are the guardians: 25 octagonal structures, identical in form, but differentiated in function. These are not generic modules; they are active systems, each contributing to the life of the sanctuary and the village in different ways.

Each guardian includes a triangular photovoltaic array, constructed from flexible monocrystalline panels mounted on a foldable structure made of reinforced vegetal fibre, derived from coconut husks. This petal-like system folds shut during high winds, exposing only the protective backing. The design borrows from traditional Fijian sailing technology, blending cultural memory with passive mechanical resilience. Collectively, the guardians generate 75 kWp of solar energy.

Power is stored in LiFePO<sub>4</sub> batteries housed within specific guardians, which serve as protected energy cores. This allows energy to be distributed across the sanctuary and into nearby village infrastructure, providing a reliable, autonomous energy system.

The guardians also manage water systems. Each captures rainfall over a 12 m² canopy, channeling it into a 3,000-litre terracotta cistern. These are elevated on stone platforms, protecting them during floods and aiding filtration. Water is passed through ceramic filters before being directed to a communal cistern via a gravity-fed system. Over a year, the system collects up to 750,000 litres of clean water. Inside, the cisterns also perform an acoustic function: the slow fall of filtered droplets produces distinct resonances, which change depending on the volume of water inside—turning the cistern into a natural instrument, a kind of environmental gauge that can be "read" by ear.

Each guardian is also a wind instrument. Its vertical bamboo canes are tuned to specific pitches, generating sound when wind flows through them. These tones vary by cane length and diameter, creating a harmonic voice shaped by the climate itself. Some canes are even calibrated to emit a sharp, high-pitched tone when wind speeds exceed 60 km/h—reviving the Davui, the Fijian conch trumpet, as a storm signal. These sounds aren't meant to dominate the landscape. They're gentle and local, perceptible only when walking near the structures, enriching the space without overwhelming it.

To support this complexity, the sanctuary includes a welcome centre and materials lab. The former is a space for learning and exchange, with exhibitions, resources, and a small library. The latter supports local fabrication—binding



