

As part of the FIJI Lagi 2025 competition, our proposal envisions a solar park that integrates Building-Integrated Photovoltaic (BIPV) technology in a flexible, landscape-responsive layout. The project aligns with the competition's central aim: to develop climate-adaptive and community-enhancing architectural interventions that support sustainable futures in the South Pacific region. Our design responds to these values through a hybrid infrastructural and ecological system that blends renewable energy generation, water management, and community utility.

The configuration and form of the photovoltaic panels were directly inspired by the local terrain contours and the traditional calmness and ease-of-use of fishing nets. This visual and conceptual metaphor of the fishing net informed not only the aesthetics but the technical logic of the design: modularity, flexibility, and lightness.

To ensure feasibility and replicability, the system is organized on a 5 m x 5 m grid. Each grid cell contains one of two core elements:

A water retention and filtration module – This consists of a funnel that collects rainwater, directing it through a biological filtration system toward planted areas.

Sphelar BIPV solar panels – These are spherical solar cells embedded in lightweight, semi-transparent panels. Unlike traditional flat PV modules, Sphelar technology captures sunlight from all directions, making it highly effective even under diffuse or low-angle light conditions—ideal for the unpredictable weather and soft daylight in tropical climates like Fiji's. These panels provide localized energy for lighting, charging, and other daily needs of the nearby communities.









