SOLAR SHELTER

ENERGY, SAFETY, TOURISM AND WORKPLACE FOR MAROU

These are the main aspects of our concept, which is primarily intended to serve residents by supporting the development and promotion of their own values and culture. Considering the high demand for electricity, we propose a modular system of foldable photovoltaic panels that meets both the current and future needs of residents and potential tourists. Most of the necessary materials are available locally, as our structures are made of wood as the main construction material. An integral feature of this concept is the adaptability of the buildings for year-round tourist. The ability to convert into a hurricane shelter for both residents and the panels themselves, which, thanks to their design, can also be stored indoors during a disaster.

Energy storage units will help endure the worst periods and speed up the recovery of any hypothetically damaged existing buildings. Thanks to a direct connection of photovoltaic panel roofing between the structures in form, residents and tourists can participate in daily activities of the local community, such as weaving with dried leaves or drinking coffee together, and in times of crisis, find shelter in each of these as separate shelters. The rounded shapes of the buildings and their orientation with the shorter side facing the cyclone winds most likely to approach, significantly reduces the risk of damage. Thanks to the large roof surface and an appropriately sized rainwater harvesting system, we can store almost 1 million liters.