



The system is modular, so it can be expanded to meet the needs of the village. Foundation spikes allow for modular expansion of the solar wall, increasing energy and shading capacity without requiring disassembly. As with the dome, the original circumference excavation allows it to expand at its base to 25% more than its original volume. Local youth will be trained in cryo-system monitoring workshops, likewise villagers in solar and water cooling systems. Elders from the community will oversee cultural stewardship and potential.



The installation is intended to have a minimal environmental impact. It is constructed from local soil and does not use or emit combustion fuels or pollutants. LN₂ is non-toxic to the environment and safely returns to the atmosphere. Despite being non-lethal, training and personal protective equipment (PPE) will help us avoid burns. There is no expected harm to the flora and fauna.

To protect the ecosystem, catchment overflow will be used to irrigate surrounding green zones. Solar array alignment reduces shading and erosion during the day. Thermal insulation mitigates heat island effects. The goal is to work in harmony with the natural environment rather than disrupt it



Normally, these buildings and other architectural sites have a pretty high energy consumption so having an option to put in solar panels that can fit with their look can help lessen their environmental impact. The panels are also recyclable so that it can complete the cycle and make it sustainable while still looking aesthetic.

