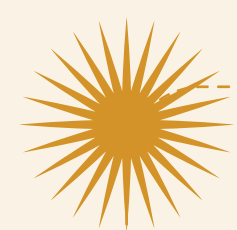




### Hibiscus Ecosystem: Nature's Blueprint

Hibiscus is a natural ecosystem that adapts to changes and remains resilient in times of crisis, often thriving despite them. It's two key strategies to survive and thrive are creating (bio)diversity and fostering cooperation within that (bio)diversity. *Hibiscus* applies a biomimicry approach across the entire project cycle, from the conceptual design through to implementation and operations and management.

The *Hibiscus* system integrates multiple nature-based and renewable energy technologies to function as a self-sustaining, resilient micro-system. Inputs include solar and wind energy, rainwater, and community engagement. Outputs span energy, clean water, stored food, educational, and climate resilience. By combining ecological infrastructure with community-centred design, the *Hibiscus* system aligns technological function with the rhythms and resilience of the local environment.



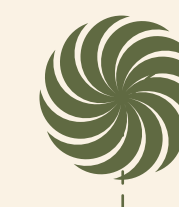
PRODUCTION POTENTIAL  
FROM SOLAR PANELS

84KW



WATER COLLECTED IN  
CONSTRUCTED WETLANDS

930,000LT



PRODUCTION POTENTIAL  
FROM WIND TURBINES

9KW



SunMan PV Flexible Panels

Customisable Textiles

Local Plants

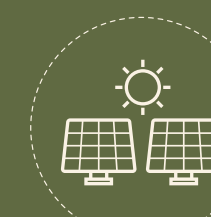
Collapsible Bamboo Pods

Wind Turbines

Raised Bamboo Walkways

Constructed Wetlands

### INPUTS



#### SOLAR ENERGY

via SunMan PV flexible panels  
total installed: 162 units generating 84kW/year



#### WIND ENERGY

from 9 Silent 1000 WindUp 1kW turbines  
total: generating 9kW/year



#### RAINWATER & STORMWATER

collected from roofs and bioswales,  
processed via constructed wetlands



#### LOCAL MATERIALS

such as bamboo and endemic plants



#### SOCIAL INPUT

from community needs and cultural  
traditions, gathered through co-design  
workshops

### OUTPUTS



#### TOTAL ENERGY PRODUCTION

93kW, supporting refrigeration, lighting,  
water processing, and basic infrastructure



#### WATER SUPPLY

930,000 litres per year from  
constructed wetland with collection  
and treatment systems



#### SHELTER & SAFETY

cyclone-resistant thanks to collapsible  
system of 6 mini-pods and 1 big-pod  
that protect and support the life of the  
community during extreme weather



#### SOCIAL VALUE

inclusive spaces for children, elders,  
and vulnerable populations to gather,  
learn, and express cultural traditions  
and future narratives



#### ENVIRONMENTAL BENEFITS

improved biodiversity, reduced erosion,  
carbon-neutral infrastructure, and  
regenerative water cycles

"I can't wait to see my art!"

"It closes like a flower  
when the storm comes."