



# Off Grid Organic Food Shed

**We built a tree that can feed your family**



## *Generate Energy*

Energy off-grid with solar PV and wind turbine coupled with a battery storage system.



## *Recycle Waste*

A cradle-to-cradle approach to waste management. All waste produced is recycled within the shed for a zero-waste system.



## *Harvest Water*

Off-grid watering with rainwater harvesting and snow melting.



## *Capture Carbon*

Carbon capture using algae biofilters to remove CO2 pollutants from the air and to release fresh oxygen into the atmosphere.

## *What is an Organic Food Shed and what does it do?*

An off-grid modular vertical ecosystem of organic food production that incorporates the best of Hydroponics, Aquaponics and soil-based growing—producing a variety of plant and fish food sources in a controlled indoor environment.



*Food safety*



*Food security*



*Financially sustainable  
organic food growing  
business model*



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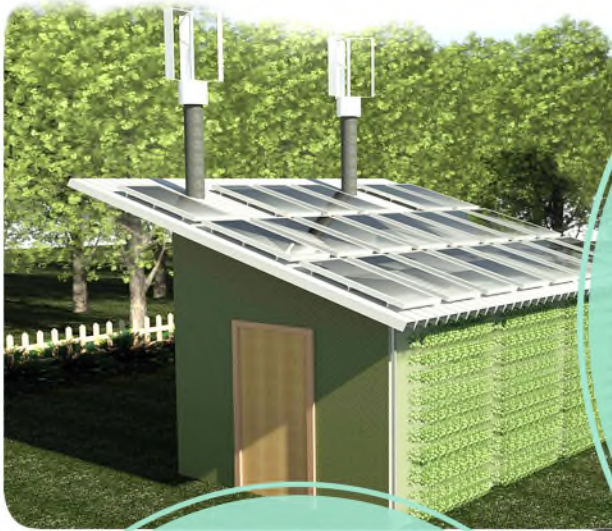


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# The organic food shed is a self sustainable, regenerative food system

It is efficient and requires minimal human assistance as it mimics the closed loop cycles found in nature. With biochar, duckweed, algae, earthworms and vermicomposting, the system generates its own feed for fish and fertilizer for plants, making it both environmentally-friendly and sustainable.

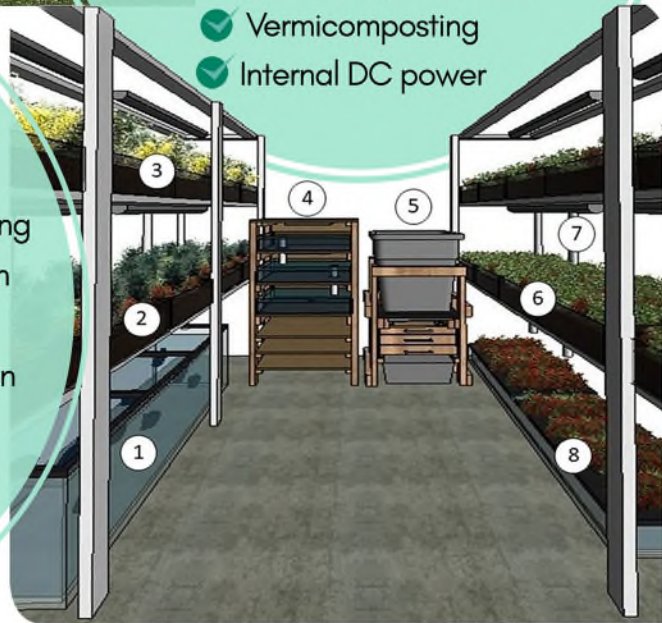


## Features of the Shed

- ✔ Organic certifiable food
- ✔ Year round crops and fish harvest
  - ✔ Passive house design
  - ✔ Algae carbon capture
- ✔ Off-grid for electricity and water
- ✔ Aquatic plants and earthworms cultivation as a fish feed supplement
  - ✔ Zero crop waste
- ✔ Water and air purification
  - ✔ Vermicomposting
  - ✔ Internal DC power

## Components of the Shed

1. Organic aquaculture module
2. Organic aquaponic/vegetable growing
3. Engineered wetland with biofiltration
4. Aquatic nutrients module
5. Auto- harvesting vermicomposting bin
6. Organic soil based growing
7. Automated lighting and watering
8. Natural hydroponic module



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