

PAG-ASA

AN AUTOMATED ROOF SYSTEM



Atmospheric
Water Generator

Typhoon Wind
Turbine

Many of the world's poorest countries suffer from the loss of electricity, drinking water, and shelter every after a catastrophic supertyphoon

Built to last the strongest of storms so typhoon-prone communities can also flourish

HOW THIS LOOKS

TYPHOON WIND TURBINE

Generates 10KW of energy from a maximum wind speed of 43 to 45 m/s

TURBINE CYLINDERS

Captures the wind energy from the storm; spins only with strong winds and generate air flow

UNDERLAYMENT

Provides support to the roof shingles; Made out of robust material

INSULATOR DECK

Transfers energy efficiently to the energy system diffuse and regulate temperature

SOLAR SHINGLES

Captures sunlight and water vapor; has a high albedo effect, radiating sunlight back to the atmosphere

FILTRATION AND CONDENSATION CHAMBER

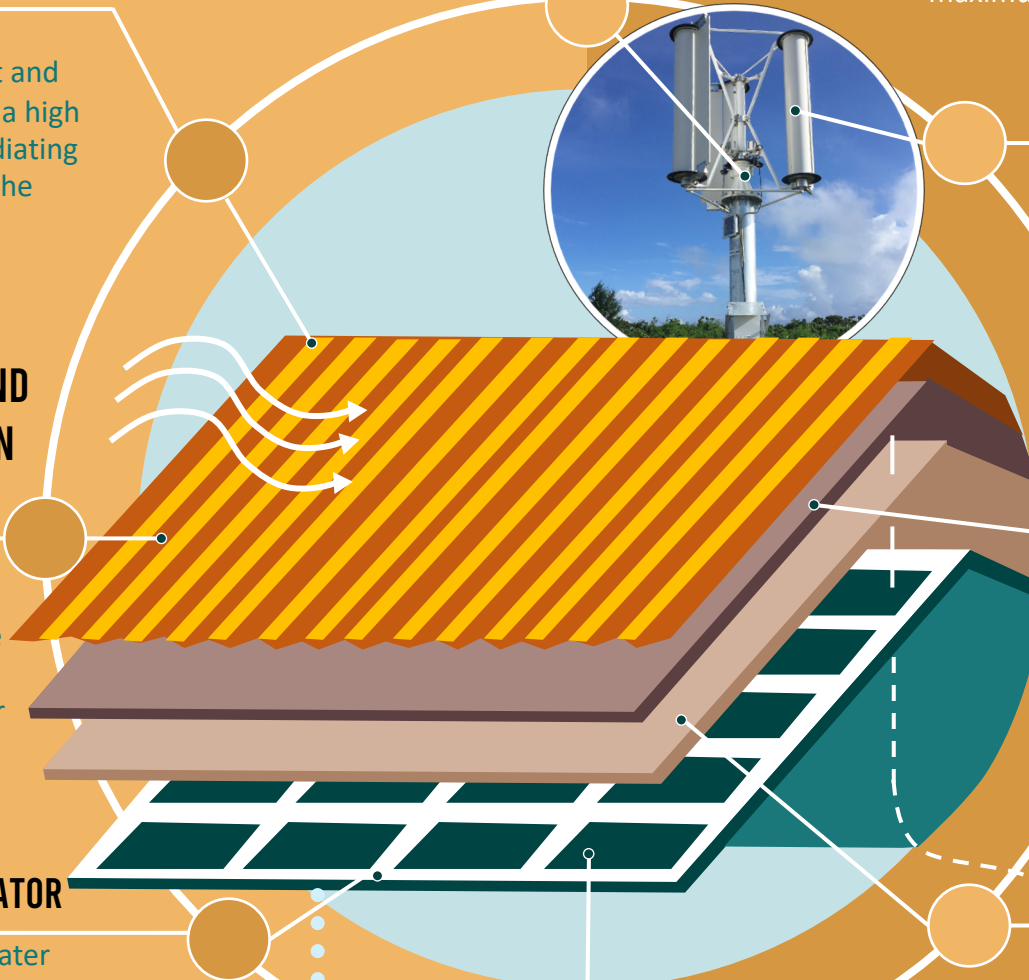
The main framework of the roof; filters and condenses the air into water

ATMOSPHERIC WATER GENERATOR

Generates the water filtration and condensation

ENERGY SYSTEM DIFFUSER

Stores the energy and filters the condensed water

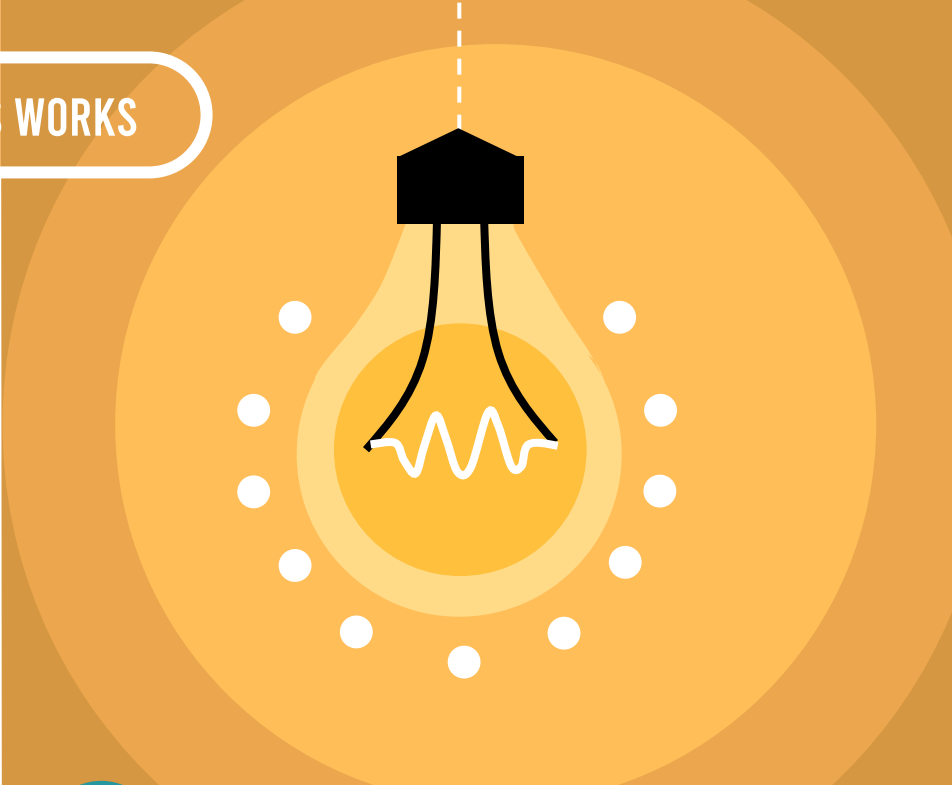


76% of typhoon survivors die out of hunger and thirst than the storm itself.

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HOW THIS WORKS



- 1** The Solar Shingles draw humid ambient air in the atmosphere
- 2** The air is filtered in the Filtration and Condensation Chamber and condensed into water
- 3** The Energy System Diffuser does a second filtration and transports the water into the main pipeline for drinking water

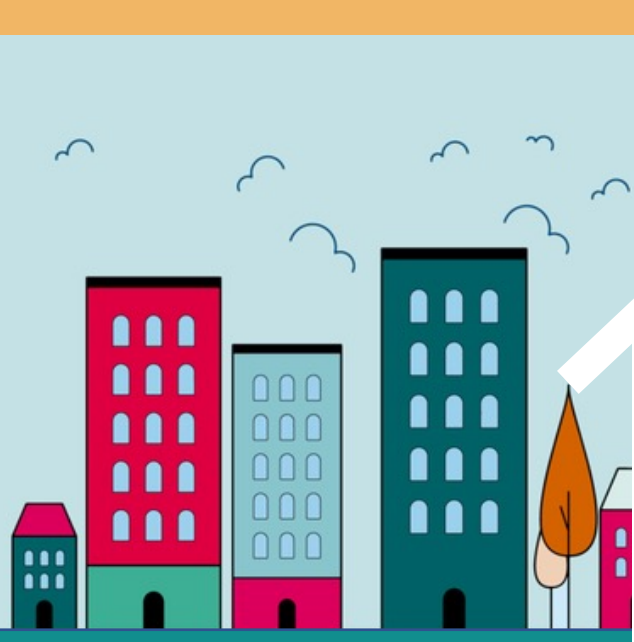
- 1** The storm wind is captured by the cylindrical rotors and generate kinetic energy
- 2** As these cylinders spin, they generate the Magnus effect, converting kinetic energy to electricity
- 3** The energy is then transferred to the main electric circuit of the house, to light it up for years



THIS DESIGN SYSTEM IS FLEXIBLE AND FITS DIFFERENT HOUSE TYPES AND DESIGNS.



THIS WILL BE FULLY-FUNDED BY UNITED NATIONS AND OTHER NON-GOV ORGANIZATIONS.



BUILDING 'HOPE' SO EVERYONE CAN



SEE THE RAINBOW AFTER THE RAIN