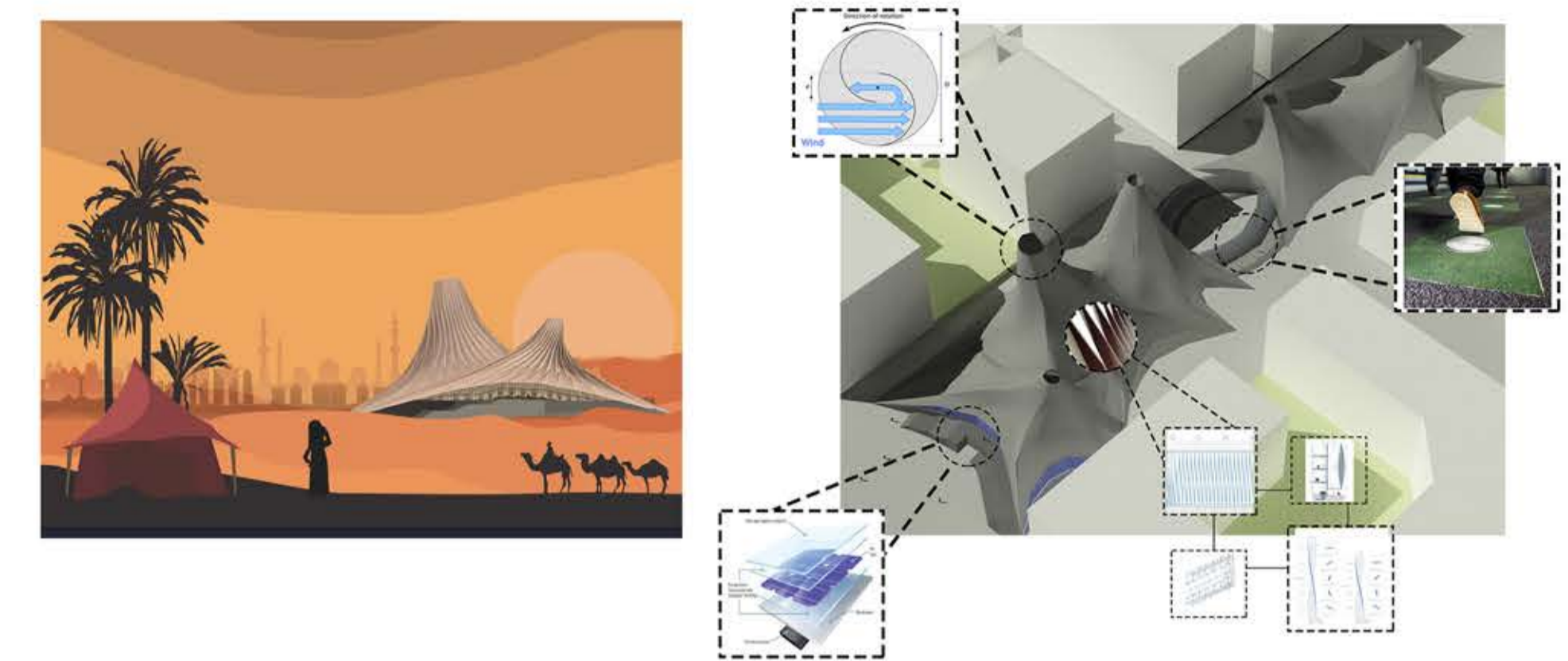




# Technology Used

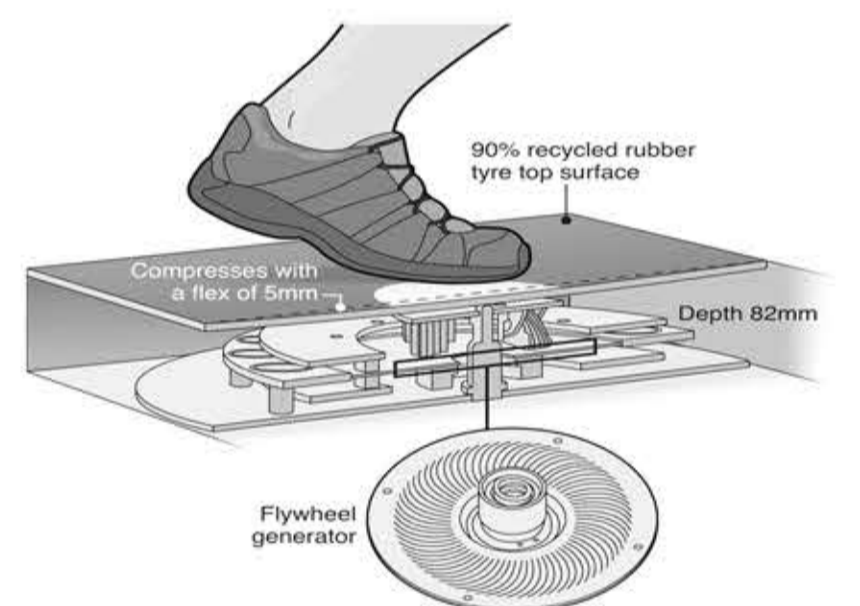
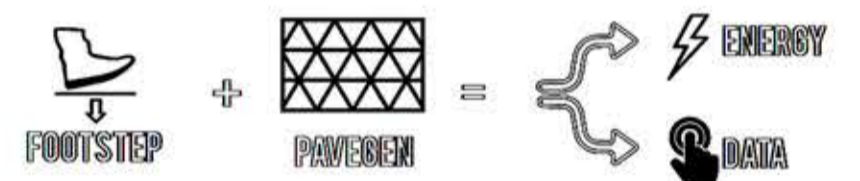
In general, solar energy is used in the design. We suggest solar panel which is located around the building. During the day the panels received and save the energy, by the night the panels will be as an artwork



The shape of our design is like a cone so the air in the upper part of the volume has become heat and move to the top so the natural vent will happen. By moving the air to the upstream Savonius Vertical Wind Turbine will be turned

Savonius wind turbines are a type of vertical-axis wind turbine (VAWT), used for converting the force of the wind into torque on a rotating shaft. The turbine consists of a number of aerofoils, usually-but not always-vertically mounted on a rotating shaft or framework, either ground stationed or tethered in airborne systems

Vertical axis wind turbines are advocated as being capable of catching the wind from all directions, and do not need yaw mechanisms, rudders or downwind coning. Their electrical generators can be positioned close to the ground, and hence easily accessible. Another advantage of VAWTs is that they can be located in closer proximity to each other than can HAWTs. (Ferry & Monoiac)



The new technology proposed in the design is the production of electric flooring. Electronic will be produced when people crossing on that floor. Like all cutting-edge technologies, kinetic tiles are relatively expensive. Today, they cost £80 per square foot which means that installing the tiles in the average kitchen would come close to £6000

Kinetic tiles also currently have a lifespan of just five years, making it difficult to recoup the cost. Even if you are repaving Trafalgar Square or the O2 Arena before a U2 concert, you wouldn't come close to breaking even for the time being (https://theswitch.co.uk/tech/energy-harvesting-tiles)

- PRODUCT SPECIFICATIONS**
- Dimensions: 500mm each edge
  - Power rating: 5 Watts continuous power from footsteps (Voltage: 48V (Range 12V - 48V)
  - Materials: Steel, recycled Aluminium, Composite
  - Minimum order size: 2x4m array
  - Certification: EMC compliant, CE marked, (ULcompliant(<http://www.pavegen.com/product>

