## DUNESCAPE RETURN TO THE PLACE

**FORMING** 

Small-scale solar-driven

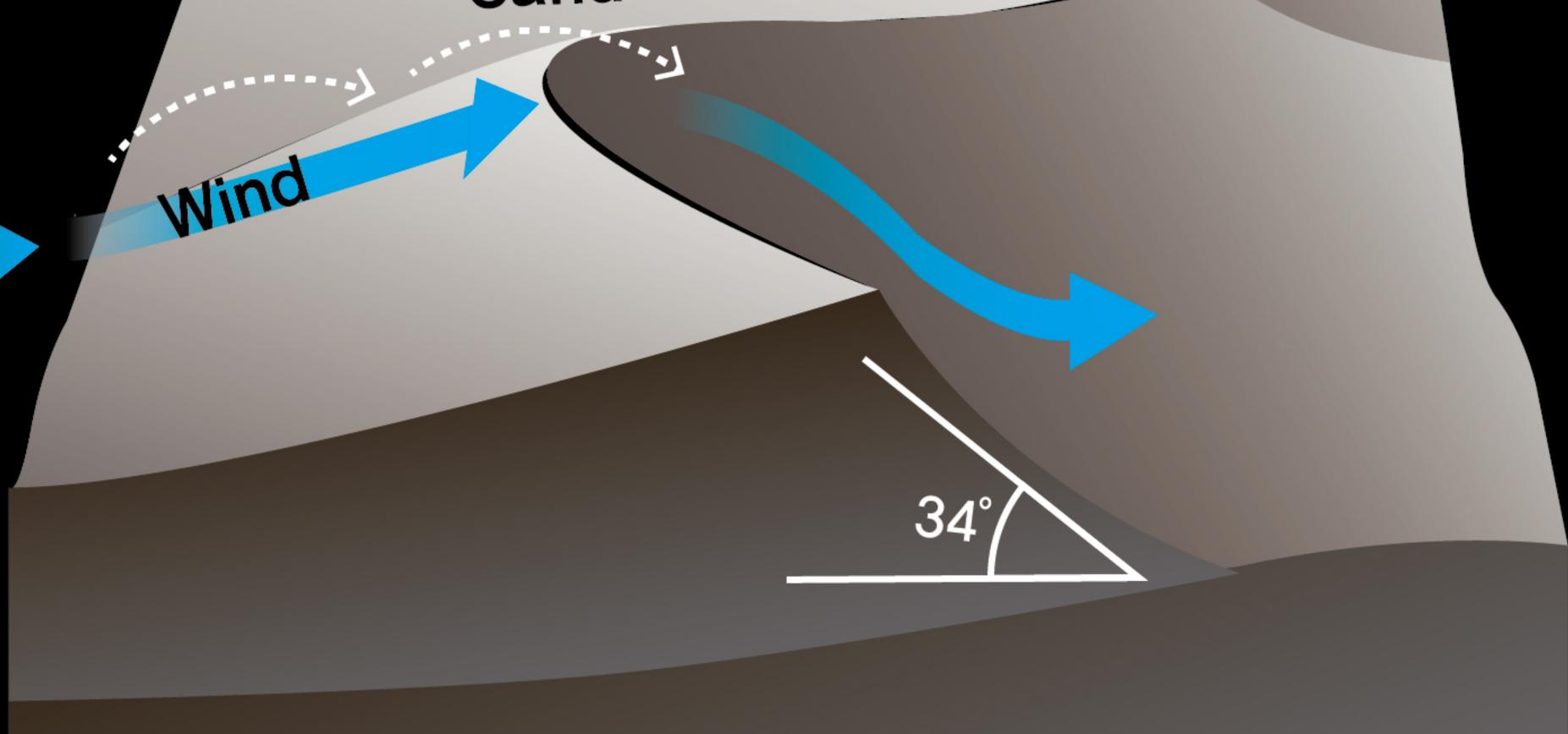
for supply of clean water

at outdoor ablutions.

groundwater desalination plant

The dynamic, undulating forms of sand dunes created by only the wind and the movement of the land, itself is an art well beyond any human creation. The endless suspenseful ridge curves generate emotions of longing and the surfaces present deep contrast based on their relationship with the sun. The specific landscape is calm yet powerful offering the most intriguing art from created by nature.

### Consideration - Tram Path and the Site Qibla Direction Sand + Thermal Mass Scaping of the Dune Ceramis Cladded Reinforced Concrete structure ribs with Ground Granulated Blast Slag(GGBS)



# DUNE LANDSCAPE FORMATION Inspired by the natural topography of the desert climate Repetition of natural curve URBAN CONNECTION Diverse entrance integrated with the existing site streets

#### SUMMARY OF MATERIALS AND TECHNOLOGY



#### PASSIVE COOLING

Wind Tower with Water Cooling Wind Path

Ceramic Cladded Reinforced Concrete structural ribs with Ground Granulated Blast Slag (GGBS) mixed with fly ash.



#### SOLAR ENERGY HARVESTING

CIGS integrated High-efficiency thin film PV Panels For Solar Harvestting

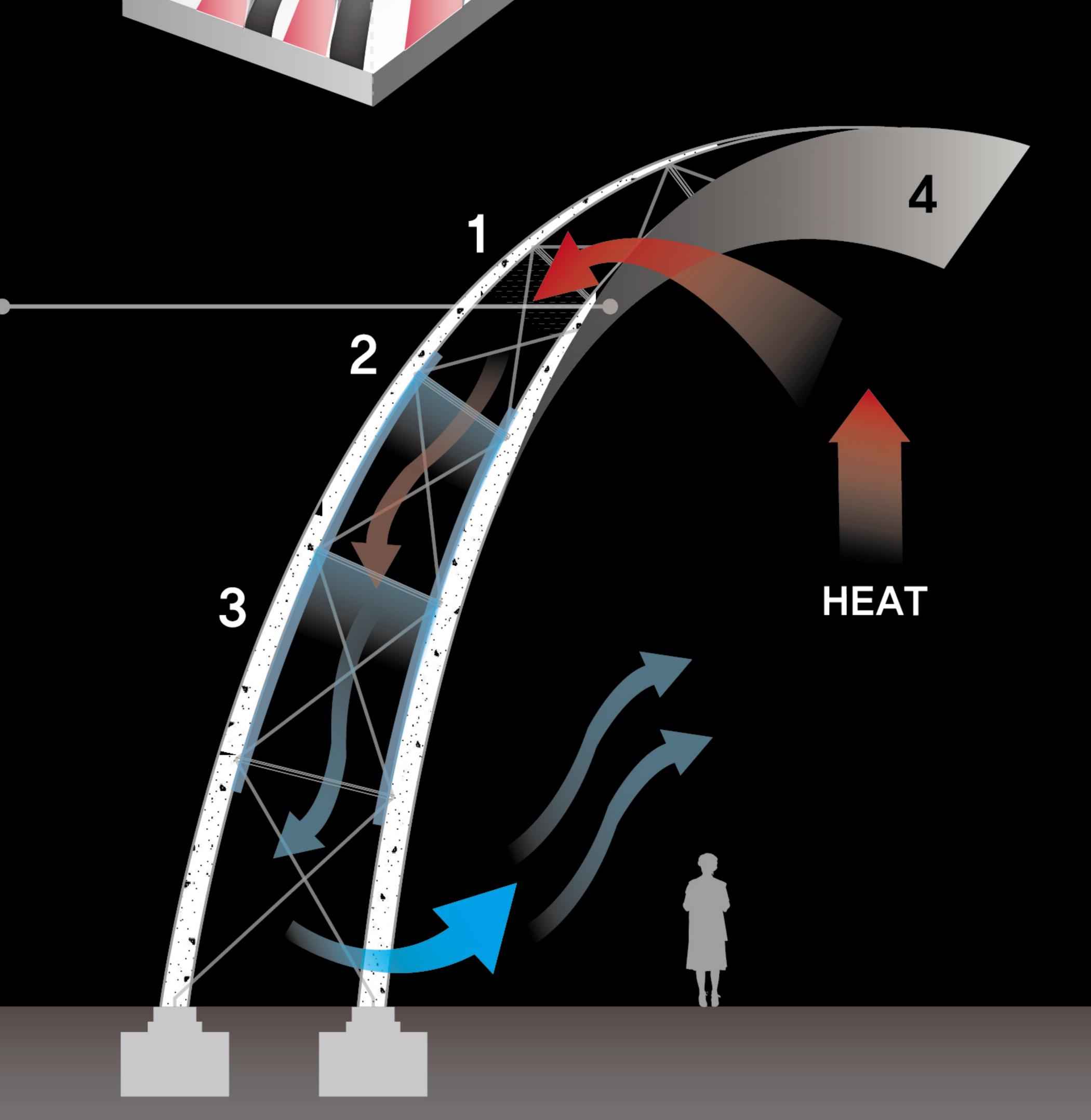
5,528 kWh/day, 2,017 MWh/yr



#### ENERGY STORAGE

Saltwater Batteries for Renewable Energy Storage Aqueous Hybrid Ion (AHI) Battery

> Extruded ceramic • louvers at openings. Traditional Ceramic tiling over concrete structure for maximum thermal mass effect



#### STEEL PLATE FABRICATED PV SUPPORT

(reduced carbon footprint compared to aluminum extrusions)

SECTION DIAGRAM

- 1 SENSOR CONTROLLED LOUVERS
- 2 MIST JETS
- 3 INNER SOCK
- 4 PV PANELS