SIDE-WIND PANELS

They are driven by wind power from the side of almost all directions. The parabola shape responses to its resistant to the wind and rotates along one diagonal axis whenever there is wind passing by.

PANELS FOR FLEXIBLE EVENTS

Composed of accessible panels with various degrees of curvature, they are structurally safe for people to walk on and gather, and encourage the exploration of different ways of occupancy.

FLAT PANELS FOR MAIN ACCESS PATH

Flat panels define the common pedestrian flow path on site, which distributed around the entrance and connect to the water taxi terminal.

FRONT-WIND TRIGGERED PANELS

Front-wind panels take advantage of prevailing wind from southwest. The wind hits the panel from a nearly perpendicular direction, pushing the panel flexing vertically up and down.

[RIPPLE]

ENERGY SENSOR

Ripple employs natural power as well as human engagement as its kinetic power source onsite. Movements in the surrounding environment - prevailing wind, birds' intermittent resting, people walking or activities above the panel - trigger the panel's vibration which is passed down to energy cells below through connecting rods. Each panel is 4m x 4m, with a supporting of 10 x 10 rods transferring partial movements into individual piezoelectric generator cells. The spring at the bottom of each rod helps to detain the vibration cycle and confine the movement of the panel within different levels depending on the occupiablity. Through piezoelectric generators in each cell kinetic energy is converted into electricity, which is then collected through the conduits underneath to the grid.

SIDE-WIND PANELS

PANELS FOR FLEXIBLE EVENTS

FLAT PANELS FOR MAIN ACCESS PATH

FRONT-WIND TRIGGERED PANELS