



# SURGE

## CONCEPT: AWE & ENLIGHTENMENT



J.M.W. Turner 'Steam-Boat off a Harbour's Mouth, 1842

The sense of light and air formed by the stirring brush strokes and the alternating cool and warm light sources tends to disintegrate the form, thus creating infinite space and unpredictable magical light. The painter Joseph Mallord William Turner was keen to capture order in the force of turbulence and chaos, which is closely related to scientific discoveries that change our original perception of nature.

Technological progress has brought about changes in the times, viewing has become a visual metaphor, and a new language has been born in an attempt to explore and explain the hidden forces of nature. Lofty things are not only about the magical power of nature, but also about creative ways for human beings to challenge nature.

SURGE represented the awe of nature, the pursuit of the spirit of classical aesthetics and recognition of technological innovation. The aim of this proposal is to make full use of the natural resources, and synergies as a whole between nature, human and culture.

### Green Portal

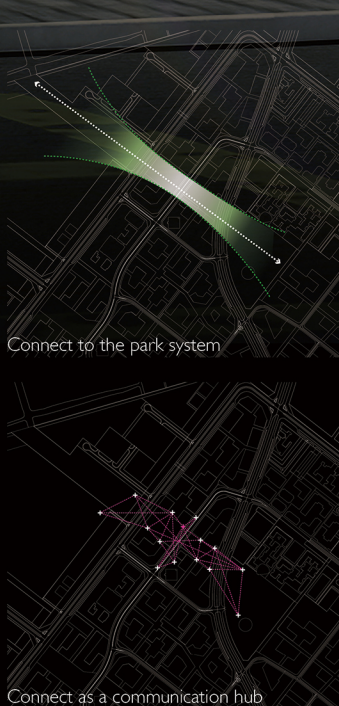
In order to enhance air movement in linear parks and the streets, SURGE followed the direction of the prevailing wind and urban fabric, 38 degrees counter-clockwise of the north axis corresponding to existing planning. Inspired by local climate and the unique traditional Arab aesthetics, the proposal is trying to create an oasis of high aesthetic and ecological value, which is supported by extraordinary technologies in the field of engineering and energy to create a good microclimate in the site, maintain the ecological balance, and provide energy for the surrounding area. SURGE will be an effective connection in the Green finger park system and a new epochal landmark of Masdar city, Abu Dhabi.

### Resource Habitat

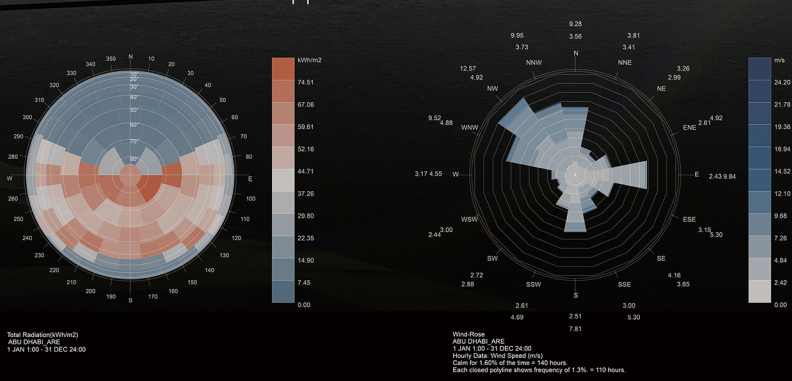
SURGE combines a number of cutting-edge technological innovations into a simple design that captures the infinite energy contained in nature through a variety of energy collection methods. The annual output of 9,582,345MWh of clean energy will be used by the surrounding residential, commercial and research and development institutions, and will become the driving core of the region in the future to attract the convergence of technology and resources, and form a natural, cultural and technological habitat, which is in line with the UAE's ambition and vision for future exploration.

### Connected Entity

SURGE's unique scale and visual image reminds people of the enormous, awesome power of nature, triggers people's perception and thinking of existence. As a "shaded oasis", this is a place for passage, gathering, relaxation and contemplation. The proposal combines historical and future perspectives to express respect to the great heritage of Arab art and culture. The energy output of the utilization of natural resources reflects the pursuit of human exploring and co-existing with nature. Innovation and progress are the results of the combination of people and ideas in new ways. As a world range hub, an open, respectful and inclusive "core" where diversity, ideas and inspiration come together, SURGE has great potentials in innovation and viability of sustainable developments.



### Environment Oriented Approach



An integral part of the design process was figuring out a way to conceptualize an installation that could harness energy but cause minimal disturbance to the site. Because the site is not an environmentally sensitive habitat area, large scale installations can be built on the sandy soil of the site by applying independent foundations for each column.

The unit itself captures light and winds, connected to each other to form a light-wind penetrating shelter that filters violent sunlight, meanwhile enhance air movement, channelling pleasant breeze in the site, reduce water demand for irrigation of the park, which is suited to a hot and dry climate.

SURGE does not produce emissions – greenhouse or otherwise – nor any physical or airborne waste products. The structure is composed of recycled and renewable materials and, whenever possible, local materials with low transit impact.

