

ATMOSPHERIC MOISTURE MACHINE

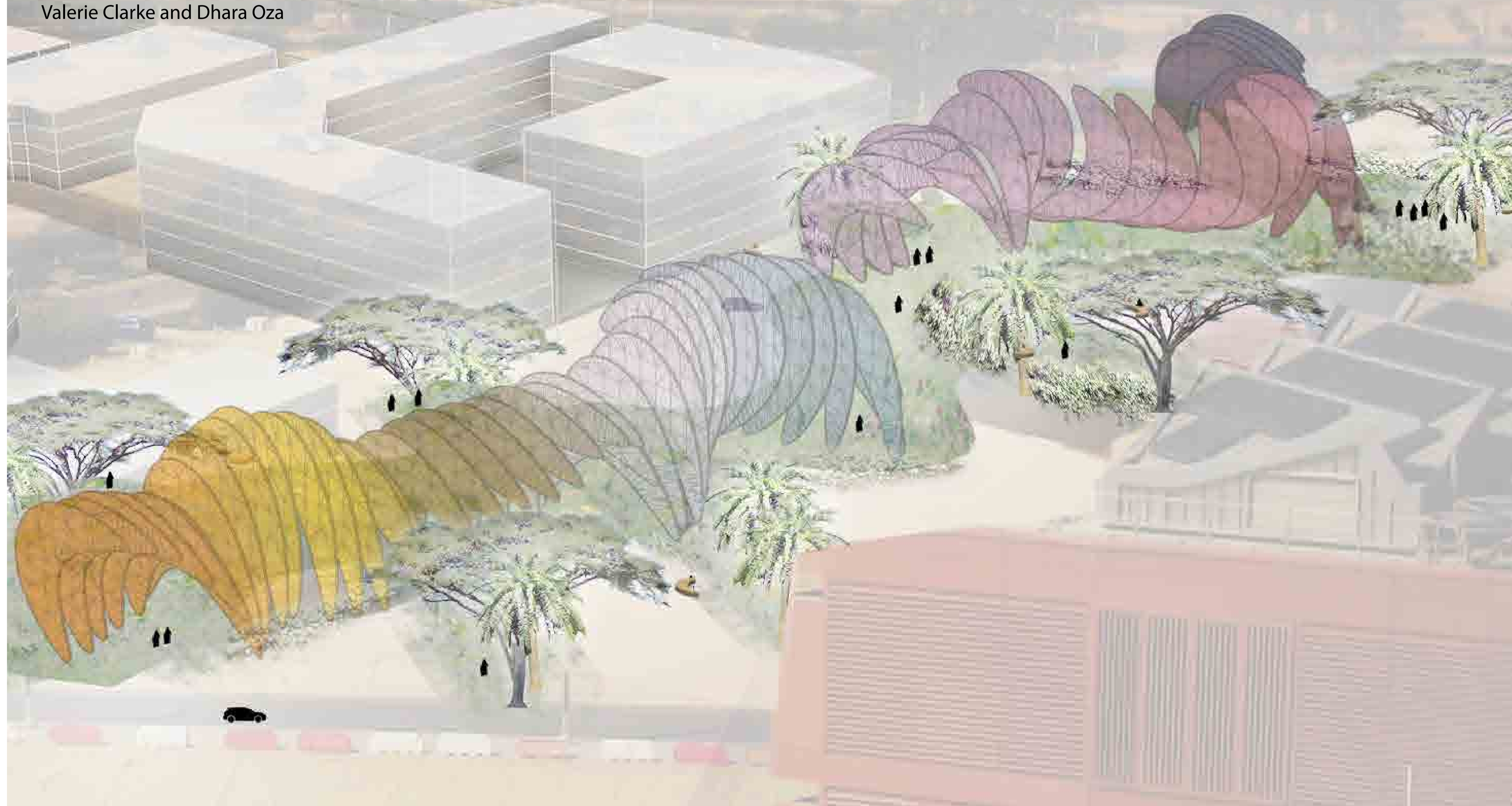
The atmospheric moisture machine creating an opportunity to collect water from thin air

Water in the United Arab Emirate is in very short supply. The UAE is one of the top 10 most water-scarce countries in the world and has one of the highest per capita water usages globally. The atmospheric moisture machine gives Masdar City the opportunity to collect water from thin air and increase water supply in an area with desert-like conditions.

Harvesting humidity is a passive process. The renewable energy generated is supplied by **the wind**. The proposed **mesh panels** capture **the humidity** converting it to fresh water. In addition, **the water** moves by gravity through these mesh panels to the underground cistern, so no pumps or electricity are required to either generate or to move the water. The collected water is further used to increase **the vegetation** on the site while creating a new cooler and wetter **micro climate**. The water is then dispersed through an irrigation system throughout the site. The environmental impact of installing and maintaining the technology is minimal. Once the component parts and technical supervision have been secured, construction of humidity harvesting technology is relatively straightforward and can be undertaken on site.

This result is a new form of **public space**, one that is more scenic and comfortable for cohabitation in Masdar City.

Valerie Clarke and Dhara Oza



site plan proposal for Masdar City

