

ARCHITROPISM

\Rightarrow ANEMOTROPISM

 ${\sf Rising} and {\sf rotating} to face the prevailing winds, the highest level of archesserve to capture$ energy via vertical wind turbines. Routed into Masdar's electrical grid, the turbines donate 100% of the energy they produce. The arches contain thousands of lightweight wind turbines behind a thin perforated screen that keeps air speeds high and birds safe.

- HELIOTROPISM

Asthesunarcsthroughthesky, its trajectory is traced by the mechanical colonnade's middle section of arches. These double-arms maximize the amount of shadows cast on the ground surface, effectually cooling down the space, and are powered exclusively by the clock-work gears that are activated by the site's users. At noon and midnight the arches meet their adjacent neighbor to momentarily emulate the idyllic arcade of the Cordoba Mosque.

The column bases are equipped with turning benches, tables, platforms and merry-go-rounds that store, in much the same way as a mechanical watch, the energy generated by the human interaction with the site. These programmed bases create enclaves of activity honed to the various types of visitors to the site and create enough energy to keep the arches turning all year round.

† ANTHROTROPISM