

"During the summer, at day"

Energy production system - Thermal chimney

The radiant sun is reflected in the protective membrane of the public square, visitors benefit from the shadow projected by the opalized roof in ETFE (Ethylene Tetrafluoroethylene). The reflected sun rays heat the 3 metallic spheres at the base of the totems generating heat energy that is easily transmitted through the metal surface of the totems which in turn heat the air inside. The hot air inside the spheres rises through the tubular ducts of the totems towards the turbines in the upper part making them move to generate energy. Likewise, the hot air ascending inside the totems generates a vacuum in the lower part, causing the air found in the square to be sucked through the lower perforations at the base of the totems benefiting this space from a natural system of fresh air due to the continuous circulation of it.

"In summer at night"

Energy production system - Wind power & Thermal chimney

The wind coming from the coast passes through the turbines at the top of the totems, the hot air that still accumulates, but with less force, inside the totems makes the turbines move equally producing energy.

"In winter at day and night"

Energy production system - Wind power

The force of the wind moves the energy generating turbines, the membrane on the square protects visitors from the wind generating a more comfortable micro climate inside the space, allowing cultural and social activities to take place in the plaza despite the cold weather of the winter season.

BREATHING TOTEMS

PUBLIC SQUARE

"Throughout the year, at day and night"

Air purification - Air ionizer technology

Although the square is located between vehicular roads that are a source of pollution for the air, the project proposes the creation of a large green areas surrounding the ring of the square. The totems in the center of the ring of the square absorb the surrounding air, cleaning it by means of the ionized surfaces inside the totems that capture the toxic particles in the air.

The surfaces are ionized naturally by the static energy inherent in the system result of the movement of the energy generating turbines. The clean air filters outwards while the toxic particles captured, by the weight of the accumulation and gravity slide on the interior surfaces of the totems until they accumulate at the base of them.

+ ART
+ ENERGY PRODUCTION
+ CLEAN AIR = PUBLIC SPACE