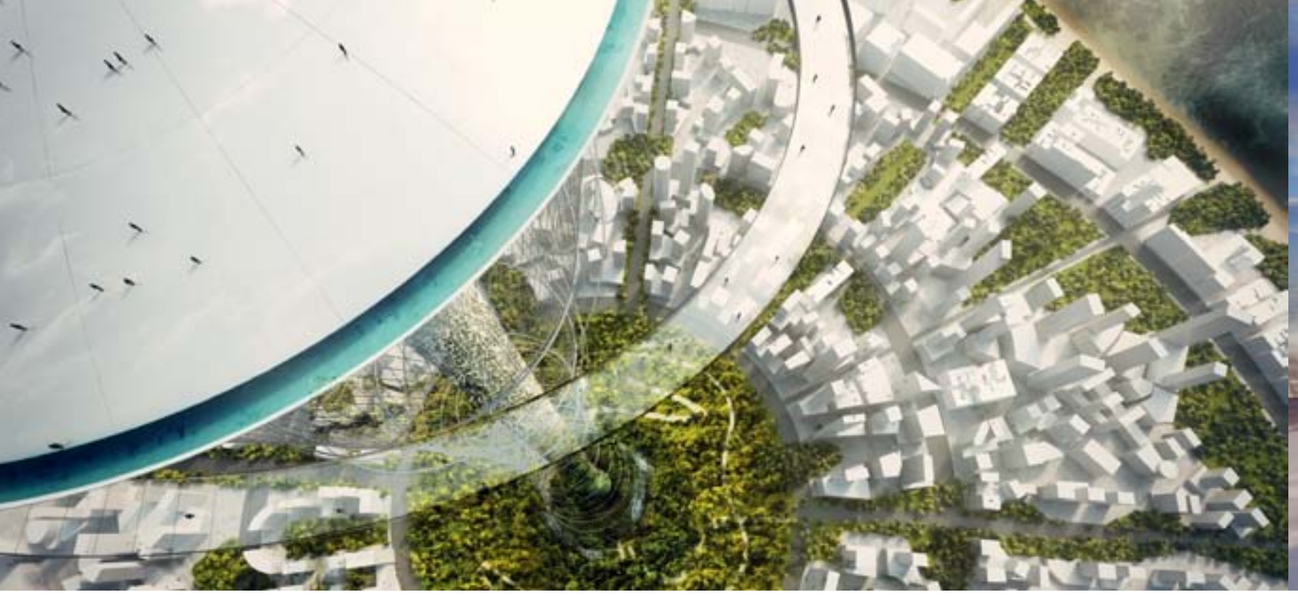
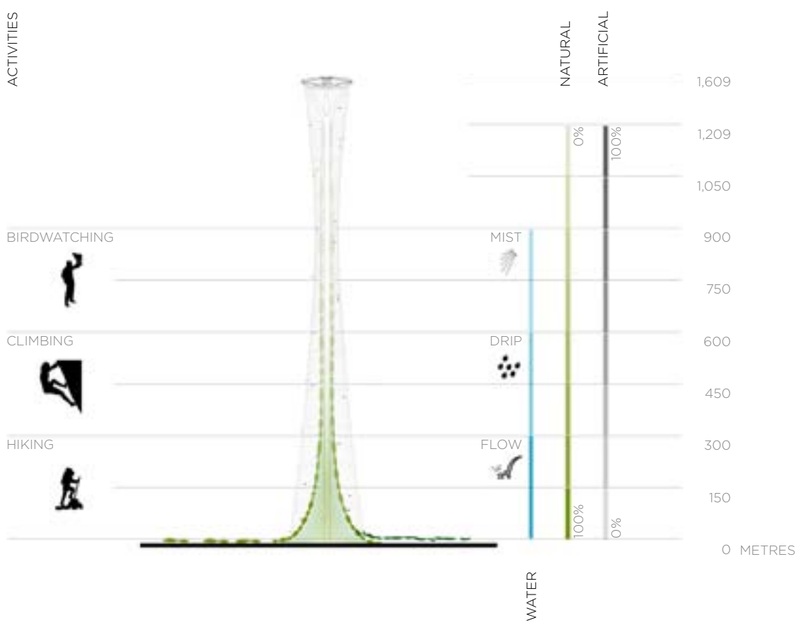


The Mile

Carlo Ratti Associati, Schlaich Bergermann Partner, Atmos



Besides the augmented-reality experiences available in the Mile's circulation capsules, its vertical park will allow for a range of nature-related activities, such as hiking, climbing and birdwatching. Architect Carlo Ratti likens the Mile's green domain to New York's Central Park turned on its end, then rolled and twirled around the mile-high shaft.

About twice the height of today's tallest building, the Burj Khalifa, and taller than the under-construction, kilometre-high Jeddah Tower, the Mile was conceived as a 1,609-metre-tall (1 mile) vertical park topped with a constellation of 'sky decks' offering unprecedented views and thrilling high-altitude experiences. Multifunctional capsules fitted out for meetings, dinners and concerts will shuttle visitors to the top of the tower.

The concept was developed for an undisclosed client by Carlo Ratti Associati in collaboration with German engineers Schlaich Bergermann and British digital design studio Atmos. Although at the time it was not intended for any particular location, the project included advanced feasibility studies from both a financial and an engineering point of view. Notably, the structural solution was devised by the engineering firm that had made possible the stadium for the 1972 Munich Olympics, designed by Frei Otto and Günther Behnisch. The groundbreaking, lightweight design is based on a 20-metre-wide (66 feet) shaft, which is kept in compression and secured to the ground by a net of pre-stressed cables. According to online technology magazine *New Atlas*, 'the tower shaft will have a height-to-width aspect ratio of around 80:1, considerably larger than that of the British Airways i360 in Brighton, UK, which is currently recognized as the world's most slender tower.' The structure will support a natural ecosystem: from base to apex, it will be covered by plants and inhabited by hundreds of animal species. The design team envisions 'the visual and social impact of New York's Central Park contained within the tower's footprint'.