

THE PALM PALAIS



SITING OF THE INSTALLATION WITHIN THE CITY OF PORT PHILLIP ST KILDA TRIANGLE MASTERPLAN (2016), 1:2000

The Palm Palais is an energy-generating artwork, a flexible space in which people can use their environment for leisure as they wish under a grove of swaying palms. The project references Cedric Price's iconic 'Fun Palace', an interactive space which was enabled by technology and user-customisation. 'Palais', French for palace, acknowledges the infamous theatre designed by Walter Burley Griffin that is adjacent to the site.

The palm tree is symbolic of Catani's vision for St Kilda. The palm becomes a fitting vertical element to provide structure to a public space and is the equivalent of Price's endlessly-repurposed structure which could be flexibly adapted for different cultural uses. To generate clean energy, hybrid piezo/triboelectric collars are fitted underneath the head of each palm tree to capture the mechanical energy from swaying palm leaves, producing electricity that can be stored and that powers outdoor led lighting.

Price's 'Fun Palace' also strongly emphasised the ability for its users to appropriate the space to suit their uses, including but not limited to: open-air cinemas, exhibitions, theatres and markets. Hence, the palm trees are arranged in a regular 12 m grid, in between which, solar Sphelar shade sails could be hung and vertical surfaces for movie projections or backdrops could be mounted. For flexibility, power is distributed through an elevated frame, which also houses the cables distributing power to underground cell storage.

As users traverse this gridded grove of power-generating palms, the ground floor generates electricity through piezoelectric pavers. Reflecting the ambitions for St Kilda Triangle to be part of a vibrant cultural entertainment precinct, the ground surface is transformed into an abstracted pattern, derived from a collage of histories, fictions and identities drawn from the site and its surroundings.

The Palm Palais is a complementary landscape and artwork to the Palais Theatre, offering a public meeting space which can be endlessly repurposed according to the community's needs. It takes advantage of a windy, beach-side site in which palms are often swaying in the breeze, and suggests that this way of harvesting clean energy could also be implemented along Catani's palm tree boulevards and esplanade plantings throughout St Kilda.

Energy Technologies: High Output Piezo/Triboelectric Hybrid Generators,
Sphelar solar textiles, Piezoelectric pavers
Estimated kWh per year: 749 000 kWh



THE PALM PALAIS, AN ENERGY-GENERATING PUBLIC SPACE THAT IS COMPLEMENTARY TO LUNA PARK AND THE PALAIS THEATRE