**Solar Incinerator**

Narrative

The Solar Incinerator boldly occupies the St Kilda Triangle, stretching from the Palais Theatre forecourt to the Catani Bridge.  Honoring the rich histories of the Triangle and its surrounds, the Solar Incinerator directs attention to the humbly-framed view of and beyond the bridge to the water's edge.  This axial, partially open tunnel, invites people to pass gently from The Slopes, which buffers the site from the Upper Esplanade, down to the gardens and shore line beyond. On this journey are opportunities to take pause and wonder at the shadows cast by the structural silhouette; the pace is slowed.  The Solar Incinerators’ deconstructed form recalls a brief history between the Palais’ interior and the Architectural duo, Walter Burley Griffin and Marion Mahony, to reconnect this small but important place with a wider national narrative. Warped steel fragments dot the Upper Esplanade and bridge surrounds, in an echo of the main structure, creating a compositional continuity and drawing people to the site.

**Technology and Materiality**

A structure composed of steel is proposed, inset with thin film dye sensitized solar cells spanning the incinerators entirety. The harvested sunlight passes through the transparent anode layer into a TiO2 mesh layer which is buffered by a cathode layer. The nanoparticles of the TiO2 are coated with a light absorbing dye that transforms the light photons into electrons. An electrical circuit is aided by an Iodide filler which replaces a passing electrode, in turn sending power to the local grid connection. We propose that 29,000kw/H of energy can be produced per day and 10,585,000kw/per year can be produced. Moreover, the design is environment friendly and will not omit any greenhouse gasses hence signifying and challenge the idea of traditional incinerators and create a new mindset of cleaner and greener energy.