**Inter-weave**

The existing St. Kilda Triangle serves as a car park for the beach and theme park providing most of the parking spaces for the surrounding, acting as a gathering point for those that drive. The foot traffic across and around the site is heavy especially during the weekends where beach goers would visit and residents, or tourists walk around the St. Kilda market.

Inter-weave investigates the opportunities for the site to produce clean energy while giving back the open space to the public for activities and events, offsetting the greenhouse gasses emitted from the use of the car park and surrounding.  The project provides shops, office spaces and amenities for beach goers as well as a museum and a hotel for visitors to St. Kilda.

**Giving back space to the community**Paying close attention to the residential area at north of the site above the slopes, the plane on the first floor extends outwards creating a viewing deck where the museum is housed beneath. This extension not only acts as a green buffer from roads to the Triangle but also as an extension to the front yards of the residents, without having to linger around the residential sidewalk, visitors can linger above the overhang and enjoy the views of the beach or have a picnic on the lawn. An opportunity to interchange ideas and information with each other or sometimes even with the residents of St. Kilda.

**Keeping the sense of space**The Catani slopes has been a landscape feature that exists as part of St. Kilda shoreline for a long time. Part of the existing slope that pedestrians would take to the car park is kept allowing pedestrians from the tram to access the ground floor of the Triangle giving back the sense of space to regular visitors by keeping part of the existing landscape for circulation.

**Extending the beach**The undulating ground level extends from the beach into the Triangle, mimicking the ever-changing movement of sand from the beach. Creating earth mounds and depression that house programs in the Triangle. The depression creates an Amphitheatre space with The Palais Theatre as a back drop while the earth mounds provide the option of play and dynamism through the site. Offering opportunities for the young and old to play and run about or sit and read a book while enjoying the warmth of the sun.

**Teasing the interests of people**Pavilions sit on stilts that contain programs within with roof top terraces, for occupants to enjoy the warmth of the sun above or sit and watch a performance happen. These pavilions houses programs such as an artist residence, classroom and office spaces for the Triangle. With translucent glazing, the pavilion offers an interaction on the upper and lower level. People on the lower level would be curious as to what happens above while the occupants can watch people go by and look at their behavior.

**Over. Under. Around.**Pedestrians entering the site are given the freedom of movement that allows them to walk under pavilions, go over or around the earth mounds and walk up the slopes. The play created from the movement of people circulating around the site on different levels mimics the motion of weaving. Interchanging experiences throughout the different spaces on site.

**Environmental Impact, Clean Energy Above, Around and Under**Organic Photovoltaic Panels (OPV Panels) line the roof and the walls of the Triangle, covering an area of 8900 Meter Square. Unlike traditional opaque Photovoltaic Panels (PV Panels) the OPV Panels allow sunlight to pass through the­m as they are translucent. These panels flexibility allows for them to wrap around buildings and conform to the undulating ground conditions of the site. The OPV Panels generate up to 4000kW of electricity per day at it’s peak. Flexible plates (Piezoelectric Panels) hidden along the façade of the hotel produces electricity when the sea breeze in the day and the land breeze after dark hits them, causing them to bend. Through the bending pressure, these panels produce electricity. With a total area of 540 Meter Square, the Flexible plates generate up to 2500kW per day. Accumulatively, Inter-weave at St. Kilda could potentially generate up to 7000kW per day.

Inter-weave at St. Kilda aims to give back the open space occupied by the car park for decades back to the community through overlapping extensions of the slope and the beach as it creeps up the shoreline. The dynamic ground plane allows for programs and activities to happen, bringing the lively atmosphere to St. Kilda and the immediate surroundings. At the same time, harvesting clean energy under the noses of residents and visitors of St. Kilda at the St. Kilda Triangle.