

Climate Change Focus Group



Narrative 1

2030 – A day in the life of a geoengineer

The high temperatures were crippling. Hot and dry Northerly winds hitting the outskirts of Melbourne had sent temperature climbing. And the City of Whittlesea took the full brunt, being the first large populated area to the north of Melbourne. The Bureau of Meteorology had calculated that for every degree of surface temperature above 43°C, 400 lives in Melbourne would be lost, unless an urban cooling remedy was found. The City of Whittlesea was in a prime location to implement urban cooling initiatives.

Melissa had enrolled into a geoengineering course after witnessing the destructive bushfires of 2019 which claimed the lives of 75 people and 3 billion native animals. After graduating, Melissa Liu had been employed to make of the City of Whittlesea's outer suburbs cooler and greener in the face of extreme heat wave events. She can remember the enthusiasm and determination she brought to this role when she started. Most of all, she enjoyed working closely with the local community to make positive and transformational change.

When talking to residents Melissa would always start by saying, "Paint roofs white to reflect more heat away. Dark surfaces absorb heat. Metal roofs are a much better option than tile because they cool down quickly at night."

Melissa would hand out different roof material for people to feel and touch in the hot sun.

Melissa would then talk about trees. "Plant trees to provide shade and give them lots of water. Water can be banked in the soil between heat events. Trees release water from their leaves like an evaporative cooler, cooling the air. Without water this can't work."

The City of Whittlesea also had a subsidy scheme to help reduce the cost of installing smart rainwater tanks. These large 10,000L tanks captured rainwater and then gently leaked water into the environment to support trees and gardens. Sensors in the ground monitored moisture levels, so there was never any chance of over-watering. During especially hot days special misting sprays would be activated to provide additional cooling. Local birds and other animals would come from all around, even out of town, to enjoy the relief from the heat.

Melissa would visit homes again and again, catching up on the local gossip, but importantly showing people how they were making a difference. With thermal imaging photos taken on hot days and aerial photos she could more easily communicate the community's progress. From multiple generations of humble rice farmer, now to a geoengineer, Melissa would often joke about the irony of her family's tradition, and how it laid the perfect foundation for her new career.