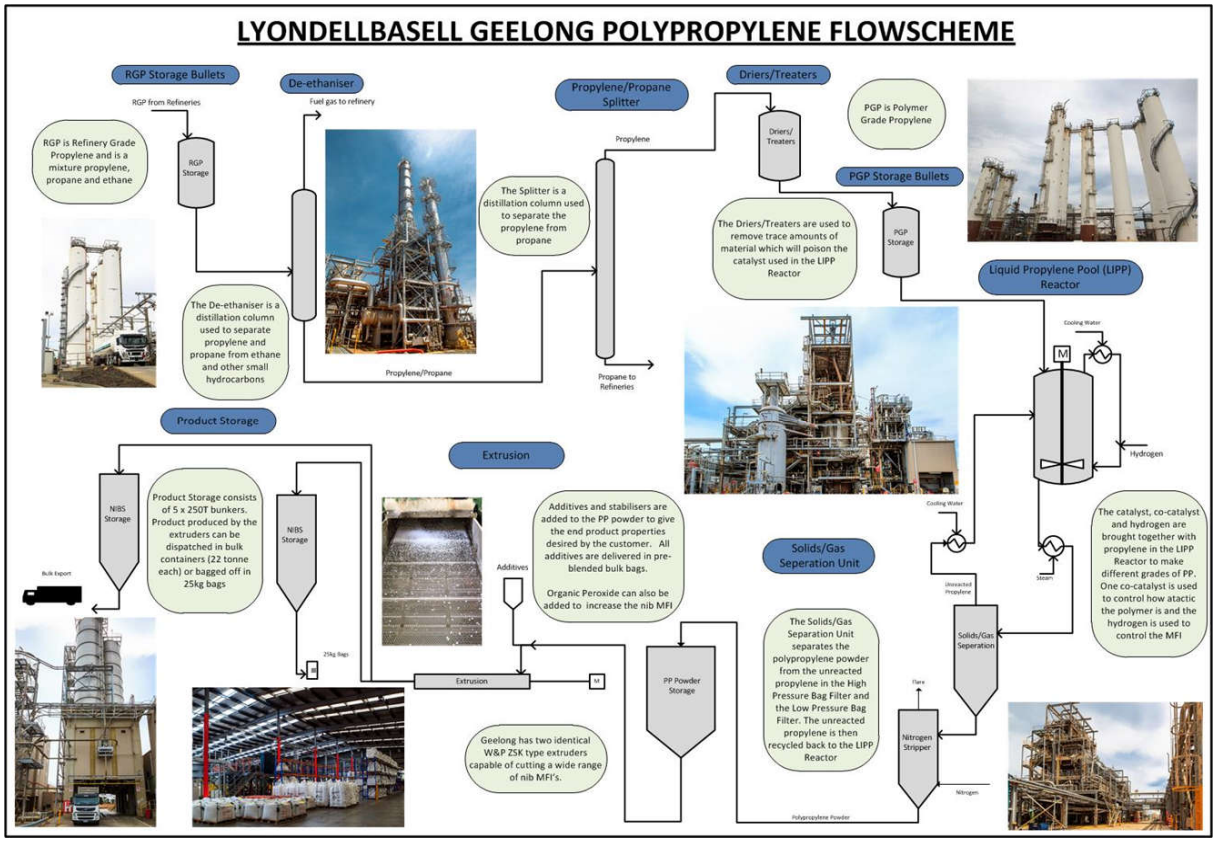
PolyPropylene Unit Plant Tour – Viva Energy, 16th Feb 2023

The Polypropylene Plant Tour was a sell out with a full, 19 attendees, a mix of members, guests and student members. It was great to see quite a few Deakin Engineering students at this plant tour. We were welcomed by the site manager Scott Thomson who gave a brief overview of the Polymer business while his operational team gave a more detail explanation of the polymerisation process. Scott also alerted that Viva Energy is looking to hire talented engineers into the business and this is encouraging for Geelong and for our engineering profession.

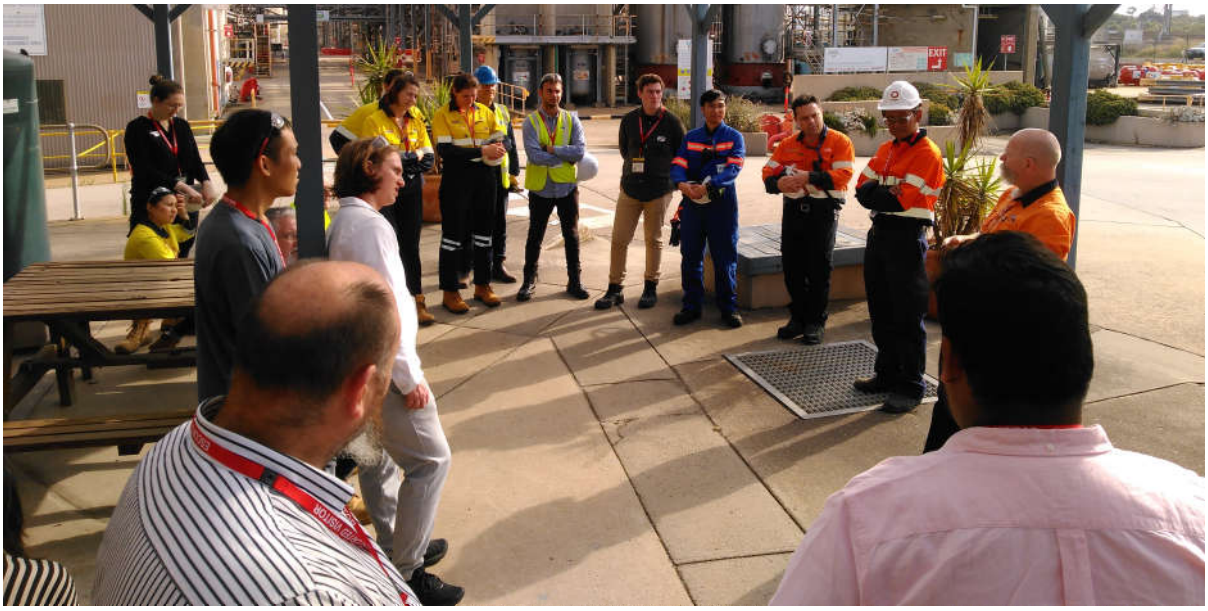
From the outset of the PPU plant tour, it became evident that security, safety and the quality of the product that this unique Viva Energy Polymer plant in Australia produces is achieved through attention to detail.

After being cleared by security and appropriately tagged, the tour, attended by 18 GREG members including associates and student members, assembled in a meeting room where the site manager, Scott Thomson, provided a brief history of the Unit and an overview of the business structure. He also spoke about some of their clients and their use of polypropylene. It became clear at this point that safety and product quality control throughout the production process are the corner stones of the business.

Technical aspects of the business were explained by David, Robo and Rory covering everything from taking supply of refinery grade olefins from the refinery, through the distillation process to separate out the required propylene, the driers, and the liquid propylene pool reactor where a catalyst is introduced to convert propylene monomers to polypropylene polymers. The polypropylene then receives further additives and is compounded to produce the various grades to meet customer requirements before the final treatment process and extrusion and pelletised into pellets. These are then stored prior to shipping out in either bulk containers or bags to customers.



Having had the plant overview explained well in the meeting room made it easier to understand the process onsite. Observing the plant control room when operational was a highlight and having explained the physical lock system for the plant control valves and switches, etc., reinforced the safety culture of the organisation. A plant or site tour is never complete without climbing up and down ladders and steps and hearing the noises of production to bring the subject matter together. This tour fulfilled that requirement also.



The tour concluded with a reminder of the importance of maintaining a safety culture of the highest degree. Our host was then thanked by GREG's President, Bernie, for an excellent tour before we filed out through security.)

Ian Burston