



Chris Oughton, Director KIC

2020 – The Highlights

I wanted to end this most challenging year on a positive note, and so I'm going to run through 2020's highlights for industry – and I'm not going to mention COVID once – except for that one.

The new port in Kwinana

Great news from the Government that there was a decision about moving the Inner Harbour freight task from Fremantle to Kwinana. The configuration is exactly what industry had been hoping for, and Anketell as the designated major freight route is the logical choice to move port and industry freight from Kwinana to the Tonkin Highway. Most people I talk to say that we should now just get on with building it all – it's been the plan for decades and it just makes sense.

New industries coming to the industrial area

The results of lots and lots of interest from potential new entrant companies over the past two or three years is starting to become apparent. Australia's first waste to energy (WTE) plant, Avertas Energy, is certainly a sight to behold, with all the

cranes and its structure dominating the industrial skyline. The East Rockingham WTE will be Australia's second one and the cranes are arriving on the Office Road site. Tianqi Lithium, Australia's first Lithium hydroxide plant is waiting to be commissioned, and Covalent Lithium's one is moving through its approvals phase. Nickle West's nickel sulphate (for batteries) plant is about to be commissioned. It looks like we are going to see some huge wind turbines on the industrial skyline soonish, after a couple of years' worth of groundwork – what a statement that will make! The FYI Resources (making high purity alumina) and EcoGraf (graphite) projects were announced, BMT Mercury began commissioning its new plant, and the list goes on. Lithium Valley is alive and well!

The success of the KIC Education Development Program (EDP)

This year we again put more than 250 local high school students through our

Years 9-12 industry awareness programs. With the impact of the 'thing' that I said I wouldn't mention, we had to cancel all of the courses scheduled to go ahead in the first half of the year. I'm proud to say that all but a couple of the courses actually got delivered, and both were duplicates of ones we did deliver later in the year. This could not have been achieved without the considerable effort of KIC's Education Development Officer, Debbie Hoey. On behalf of all of the students who did get to participate in the courses, congratulations for a job well done.

Renewable energies and fuels

The production of hydrogen gas for fuel supply has sparked the imagination of investors, and there are at least two companies looking seriously at Kwinana for sites for their operations. Wind turbines, solar power and geothermal power are also emerging as entirely viable renewable energy projects for Kwinana, with sites for all three energy sources firming up.

KIC membership

Our Full member numbers grew from 9 to 14 over the past couple of years, and this is a reflection of the value Kwinana industries place in the KIC. Associate membership has hovered at around 20 for a few years now, and we'll see what happens as the new industries yet to be commissioned begin to consider the benefits of Full member status.

Industrial land availability

Such has been the interest, there is an emerging issue of ready to market heavy industrial land. Whilst this is a good problem to have, because it means new industry is coming (read as jobs and local economic strength), it is a bad problem if we have to start turning industry away because the land isn't available.

The BP announcement

OK, I'll acknowledge that BP is entering a tough phase in its 60+ years of production on its Kwinana site, and it is my fervent hope that the affected workers quickly obtain alternative employment within the industrial

area. I'm sure they will, and KIC is working with its members behind the scenes to assist with maximising the opportunity for this to occur. But have a think about what BP seems to be doing. It wasn't that long ago that the BP Board announced to the world that it was going to pursue a net zero carbon by 2050 strategy. How do you do this when you're in the business of producing and refining crude oil? Well one way is to offset carbon emissions through the production of renewable fuels via renewable energy sources. The BP media announcement made reference to the possibility of producing renewable fuels, such as bio-diesel, at the Kwinana site, whilst operating as an import facility for petroleum fuels. Isn't this the way of the future? I think it is.

To finish up, we, the staff and members of KIC wish everyone a great Christmas break and holidays, and we look forward to 'doing it all again' in 2021.

Chris Oughton

There you go, I said I wouldn't mention COVID-19 again.... Whoops!



KIC would like to thank Robert Tindall, Operations Manager (Kwinana facility) and Emily Pettit, Senior Learning and Development Advisor, Mineral Resources Limited who recently presented welding helmets to the KIC Female Engineering Pre-apprentices who commence in 2021.

Avertas Energy reaches new milestone

Australia's first Energy from Waste facility is taking shape in Perth, a significant national milestone for technology-driven waste processing and green energy generation.

The project reached Financial Close in October 2018 and works on site commenced in November 2018 with the major foundations and civil components, now complete. Work on the mechanical erection of the boiler is well advanced. A major milestone for the facility was the installation of the combustion grates

that occurred in the first half of the year. These are integral to the overall boiler assembly and are a part of the sophisticated technology supplied by Keppel Seghers that is designed as an integrated system to ensure complete combustion and the capture and treatment of emissions.

The project is now entering the next crucial phase where the main boiler waterwalls and the flue gas treatment along with the steam-water circuit are being installed. The main section of the facility is almost at its full height with only the main steam drum and roof to be fitted. The main steam turbine

will also be fitted and connected to the steam-water circuit next year.

The commissioning of the facility is expected to begin in mid-2021 initially with cold commissioning followed by cleaning out of the steam-water circuit a process known as steam blowing. After successful completion of this phase each boiler will be gradually brought online – initially using gas burners – and the turbine synchronised to the Western Power network. Finally, when all sub-systems are commissioned and optimised, waste burning will be progressively increased until full throughput is achieved.



Avertas Energy Facility under construction