

Alpha HPA: Pedal to the Metal

A global demand for the high-purity alumina essential for high-tech electronics – think LED lighting and displays, semiconductors and lithiumion batteries – is set to make pioneering Australian company Alpha HPA a leading manufacturer in the worldwide drive to net zero.

Alpha HPA's Gladstone facility sustainably produces 99.99% pure aluminium oxides, hydroxides, nitrates and sulphates for a range of electronics industries. Importantly, the carbon footprint of its process is up to 70% lower compared to traditional methods of high purity alumina production thanks to their unique, proprietary processing technology. The production facility operates on 100% renewable energy, and their ability to recycle their materials on a 100% basis make them a near zero waste facility. That means Alpha HPA will play a pivotal role in decarbonising supply chains in the push to net zero.

"Our products are key ingredients in technologies that help lower the world's carbon emissions," says Rob Williamson, Alpha HPA's Executive Director and Chief Operating Officer.

When its new, 10-hectare, state-of the-art facility is operational in 2027, Alpha HPA will be the largest single refinery of its kind in the world, producing 10,000 tonnes of high-purity alumina and other products per year.

But for this growing business with an expanding global customer base, it's important that the benefits flow both ways in the Central Queensland city and beyond. Gladstone was chosen as the site for the refinery because of its long history as an industrial powerhouse, with one of the busiest multicommodity ports in Australia and a community with ready-made engineering and technical skill sets.

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"We chose to be here in Gladstone because the region has a great industrial circular economy that is very supportive of industries like these," says Mr Williamson. "On top of that, you've got a fantastic workforce that is glive to these kinds of industries."

The company has about 87 employees in Gladstone and Brisbane; by the time the expansion of the refinery is complete, it will have generated more than 300 jobs during construction and more than 120 additional permanent jobs.

"Alpha HPA also helps the local community by supporting local training organisations, both with our time and with financial support," says Mr Williamson. "We do this to help build up the skills in the community that we need to run our new technology."

The company has received a \$400 million Australian Government debt facility and another \$65 million in federal and Queensland government grants, which has helped attract investment to fund the Gladstone development.



