



AJ Bush & Sons

A J Bush & Sons are a major Australian meat by-product rendering company with facilities in New South Wales and Queensland.

Long-time project partners

Wiley and AJ Bush & Sons have built a trusted relationship, working together to deliver successful project solutions since 1992.

When AJ Bush relocated their rendering facility to Beaudesert. Wiley were engaged to design, engineer and build the new facility.

The Beaudesert facility was destroyed by fire and Wiley reconstructed the plant, ensuring AJ Bush maintained their operations during project delivery.

AJ Bush received a \$6.2M grant, as part of the Clean Technology Food and Foundries Investment Program. AJ Bush invested in clean technology to improve its production efficiencies and cut energy costs throughout its operations.

Wiley constructed a new Covered Anaerobic Lagoon (CAL) to capture the biogas produced during effluent treatment, for use in firing on-site boilers.

High efficiency boilers and biogas recovery project Services delivered: design, value engineering, construction and project management

Business value created for the client

AJ Bush replaced their aging coal-fired boilers with three of the largest, most energy-efficient package boilers ever installed in Australia—two John Thompson's Europac 15MW coal-fired boilers with spiral-tubes, and a 10 MW Enviropac oil/gas fired boiler. The project has improved energy efficiencies through the capture of biogas from anaerobic ponds, which will fuel the new boilers and reduce their carbon emission intensity by 64%.

The challenging scope Wiley delivered

Wiley worked alongside AJ Bush from the early concept, through to installation and commissioning. Wiley worked closely with John Thompson to produce a 3D scanned model of the entire boiler house (which was to be modified and cleared out, in order to install the new boilers). Using this model extensively throughout the project, ensured the boilers and services were optimally positioned.

An incredible journey together

- Wiley and AJ Bush visited John Thompson's factory in Cape Town and were able to see the boilers being fabricated.
- On completion, each boiler was transported by road to the local port for shipping; a 780km road journey. The entire boiler was wrapped in protective plastic and shipped on a roll-on roll-off vessel bound for Australia. Upon arrival at the Port of Brisbane, the boiler was unloaded on to a special trailer owned by Heavy Haulage Australia. The combined load of the prime mover, trailer and boiler was a massive 141t and delivered to Beaudesert under Police escort; followed by a convoy of elated project partners from AJ Bush and Wiley.
- A heavy lift crane of 450 tonne capacity had been pre-assembled at the site for the lift.
- The installation process was very gradual and methodical, taking 2.5 days to manoeuvre each of the boilers precisely into place.

"This is a great example of the food industry leveraging eco-technologies to create significant reductions in energy consumption and real efficiency improvements." Tom Wiley, Managing Director (at time of project delivery)