

A J BUSH & SONS

Biogas recovery

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

With the pressures of the carbon tax, A J Bush were finding it challenging to remain competitive. They identified the need to significantly decrease their energy consumption and carbon emissions.

Beauresert, Queensland
Advisory services, design, engineering, construction, project management

Project scope

This world-class biogas recovery project involved improving the efficiency of one existing boiler and sourcing two new highly efficient boilers. To qualify for a government grant, the project needed to be completed within two years, placing constraints on lead times and production schedules.

How the project solution works:

- A new anaerobic pond was designed, constructed and covered to collect biogas, previously released to the atmosphere as methane
- The captured biogas fuels a new boiler to raise process steam
- With all ponds covered, there are no effluent treatment pond emissions
- The biogas captured reduces the quantity of coal needed to meet process steam demand
- Inefficient coal-fired boilers were upgraded or replaced with high-efficiency boilers

Business value to client

This biogas harvesting solution delivered significant business value for A J Bush, including:

- Reducing direct carbon liability
- Increasing energy efficiencies
- Decreasing emissions in the energy-intensive rendering process—an essential service element of the Australian meat processing industry.

Wiley assessed site data and developed a solution to meet the client's requirements by converting their largest carbon-emitting process into a high-value fuel source.

This environmental gain would qualify for a CTIP grant, whilst dramatically improving their wastewater treatment process. Wiley also assisted the client in securing \$6.2M of government funding; sourced from the Clean Technology Food and Foundries Investment Program.

