

# 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.

