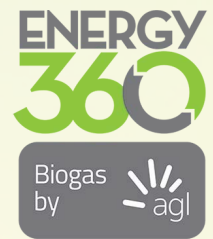


# CASE STUDY

## Wastewater treatment plant and energy generation



**Client** | JBS Foods  
**Project completion** | 2023  
**Location** | JBS Beef City, Queensland

### ABOUT

JBS Australia, is the largest and most respected meat and food processor in Australia with more than 14,000 team members and a strong portfolio of leading beef, lamb, pork, salmon and value-added branded products.

**A NET ZERO** – turnkey solution: JBS wants to be part of the solution by becoming **Net Zero by 2040** by replacing natural gas as its process heat source with renewable gas, capturing in site wastewater emissions, JBS can achieve this critical goal.

### THE SOLUTION

Energy360 to deliver a Bioenergy System for the BeefCity processing plant which will cover existing wastewater lagoons to capture naturally emitted biogas and displace natural gas in a boiler, reducing greenhouse gas emissions and utility costs.

### WHAT HAPPENS?

The by-product from the processing plant and waste water, are directed to a single Covered Anaerobic Pond (CAL) and from a valve on the CAL, the biogas is captured, dried, cleaned and pumped under low pressure to the plant where it fires a boiler, as a renewable energy source, displacing costly natural gas supply.

This renewable gas will displace natural gas and provide JBS Beef City with significant natural gas cost savings and Greenhouse Gas (GHG) abatement.

### WHAT DID ENERGY360 DO?

- Energy360 design, delivery and build - Biogas delivery system
- Energy360 Project manager
- Pond covers, Cal diaphragm pressure relief valve & intensifier
- Energy360 OEF-100 emergency flare
- Biogas pipeline, burner and boiler modifications
- All electrical and on site SCADA integration

### THE RESULT

- Provides renewable gas to client at almost 65TJs per year
- Expected natural gas savings of more than \$1M per year
- Reduces emissions by over 34,000 tonnes of carbon dioxide equivalent
- Client has registered under the ERF for ACCUs to reduce CO<sub>2</sub>-e at an expected value of \$0.3M

