



**CST Wastewater
Solutions**

Environmental partnership chosen to set water reuse and green energy benchmarks at new Bluetongue Brewery

CST Wastewater Solutions has been chosen to provide an extended wastewater treatment system for Pacific Beverages' new Bluetongue brewery in New South Wales.

The \$120 million state-of-the-art brewery now being built on NSW's Central Coast will eventually have an annual capacity of 150 million litres, making it the state's second largest. Pacific Beverages – a joint venture by Coca Cola Amatil and global brewer SAB Miller – has ensured the brewery will boast strict environmental standards and world-class water and energy savings.

“With maximized water and energy conservation, Bluetongue's wastewater treatment installation will set an industry benchmark for environmental concern by a brewery, demonstrating the company's commitment towards operating a truly sustainable world class operation.”

The new brewery's wastewater will pass several pre-treatment steps before entering a GWE ANUBIX-B anaerobic methane reactor in which the wastewater's organic content (COD) is digested by bacteria in a closed

reactor, degrading the compounds and converting them into valuable biogas and cleaned effluent.

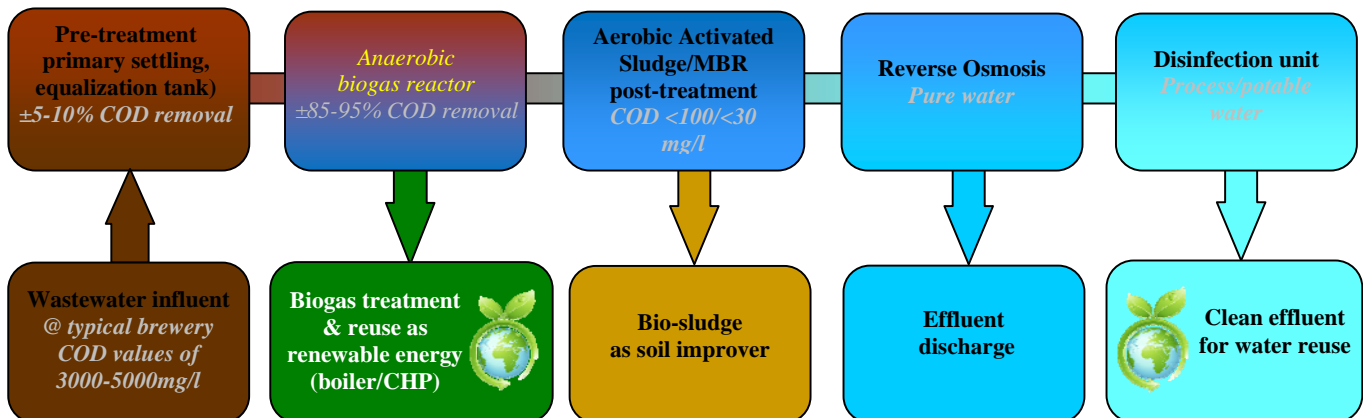
This anaerobic treatment will significantly reduce the brewery's carbon footprint by avoiding the release of carbon dioxide into the atmosphere.

Biogas from the process will be collected and reused as renewable energy to power the brewery's boiler.

Treated effluent will then continue to an aerobic post-treatment stage in which organic content is further reduced by GWE's proprietary MEMBROX Membrane Biological Reactor (MBR) system.

In the water polishing step, the water from the MBR unit is sent through a Reverse Osmosis (RO) installation. Finally the effluent is led to a disinfection and storage unit, where the recycled water is kept for reuse applications.

Typical GWE/CST WWTP for breweries maximizing water & energy conservation



CST and GWE both welcomed the awarding of the wastewater treatment contract by Bluetongue Brewery's owner Pacific Beverages.

CEO Pacific Beverages, Peter McLoughlin says, "Environmental sustainability and employment opportunities are two very key aspects that Pacific Beverages has prioritised through the planning of our new Bluetongue Brewery in Warnervale. We are determined to meet and exceed the expectations of the local community, our customers and consumers in creating a truly world class Brewery that is environmentally friendly both in construction and post commissioning. Partnerships with companies such

as CST Wastewater Solutions and Global Water Engineering will help us to succeed in meeting these objectives.”



Bluetongue was founded in 2003 by four Hunter Valley entrepreneurs to create premium handcrafted Australian beer with the stamp of their local region. In 2007, Pacific Beverages acquired the brewery and its stable of beers, including Bluetongue Premium Lager, Bluetongue Traditional Pilsner and Bondi Blonde. Construction on the new brewery began in December last year when NSW Premier Nathan Rees turned the first sod on site at Burnet Road, Warnervale, exactly a year to the day after Pacific Beverages acquired Bluetongue.