

# GWE leads the way in green technology



*Green power ... the new Bluetongue Brewery in NSW*

Global Water Engineering has achieved international recognition for an Asia-Pacific cassava plant project that uses advanced technology to reduce pollution, save power and enhance profitability at the same time.

GWE – represented in Australia by CST Wastewater Solutions – partnered Chokyuenyong Industrial in Thailand to cut effluent COD pollution levels at its cassava production plant by more than 95 per cent

while extracting gas from its wastewater to power its boilers and generate electricity for its own use and to sell back to the provincial grid.

The achievement was recognized at This Year's Global Water Awards in Berlin, where GWE CEO Mr Jean Pierre Ombregt received Highly Commended recognition for the installation.

GWE was acknowledged for providing an international model of how it is possible to

attain top environmental standards of wastewater cleanliness while generating green power and carbon credit profits as well. Former UN Secretary General Kofi Annan presided at the event.

It was the first time a GWE project had been entered for the awards, which were established in 2005 to recognise outstanding achievements in the International Water Industry.

"Thailand, as the world's largest exporter of starch, is well placed to show leadership in how to achieve such progress in an environmentally friendly manner," said Mr Ombregt.

The Global Water Engineering group of companies specialises in industrial wastewater solutions and renewable energy solutions.

GWE has completed more than 300 water and waste water projects in more than 60 countries including Asia, Africa, North and South America, Australia, China, Europe (including Eastern Europe) and Russia.

The company is a market leader for anaerobic wastewater treatment and for the transition of biosolids into green energy. GWE's wide range of technologies cover state-of-the-art solutions for water recycling, digestion of biomass and sludge and slurries, biogas production and reuse, bioenergy and carbon credits.

GWE has successfully built and commissioned more than 75 biogas utilisation systems for clients worldwide, including most recently in Australasia at the new Bluetongue Brewery in NSW.

The biogas and wastewater technology has

wide applicability throughout Australasia.

Processing 1200 tons of cassava roots a day, Chockyuenyong Industrial, headed by Tawatchai Yuenyong, uses GWE anaerobic technology supplied by local GWE agent Retech Energy with a capacity of 3200 m<sup>3</sup> effluent a day.

Commissioned and refined over the past three years, the Chockyuenyong installation:

- Cut the Chemical Oxygen Demand (COD) pollution level of influent wastewater from 22,500 mg/l (14,525mg/l Biochemical Oxygen Demand, BOD O<sub>2</sub>) to less than 1125 mg/l.
- Returns up to 2.7 Mw of electricity a year to a provincial power grid, PEA, which serves some areas distant from major generating sources and welcomes fresh input of green power generated locally
- Saves the equivalent of up to 21,000 litres a day of fuel oil by producing up to 34,000 Nm<sup>3</sup> of bio gas, which is used to power the boilers and heating equipment used extensively in cassava drying and processing and to generate electricity for the large amounts of rotating equipment used in processing
- Generates carbon credits under the United Nations' Framework Convention on Climate Change, through which it earns valuable internationally tradeable CER certificates, representing the right to emit one tonne of carbon dioxide or carbon dioxide equivalent.

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