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FIFCO Reduces Costa Rican Brewery's Environmental Footprint With GWE Wastewater Treatment Plant

Leading Costa Rican beer and malted beverages company Florida Ice & Farm Company (FIFCO) is reducing its environmental footprint with a new Global Water & Energy (GWE) wastewater treatment plant.



FIFCO, which has over 2,000 brands of beverages sold in 15 countries, produces more than 1.5 million hectoliters^[1] per year, including beer, spirits, juices, carbonated drinks, energy drinks, wine and dairy drinks, expects to double this by 2025.

FIFCO's installation of a new GWE wastewater treatment plant adds further sustainability credentials to a company that is already leading the way in this field. FIFCO Costa Rica was the first Latin American company to receive the certification "Zero Waste to Landfill". (Read more about this certification here.)

To treat the wastewater from the brewing, FIFCO collaborated with Global Water & Energy, a member of Global Water Engineering Group of Companies, to install a wastewater treatment plant at its facility in Heredia, Costa Rica. The process not only treats the wastewater efficiently but also converts organic matter into biogas, which can later be utilized to reduce the fossil fuel dependency of the company.

The system is designed to treat nearly 10,000 kg of organic load per day (kg COD/d)^[2], with treatment efficiencies of approximately 95%.

The plant adds to GWE's more than 400 wastewater treatment plants, waste-to-energy and biogas utilization solutions installed globally, from which almost 140 were delivered to breweries.

GWE's ANUBIX – B methane reactor installed at FIFCO allows the organic content to be converted to 4,800 Nm³/d of biogas, which is equivalent to 3,200 kg of heavy fuel oil/day. Such quantities of oil are worth approximately \$US515,000^[3] a year, which can not only contribute to significant savings but further increase the sustainability of the company.

FIFCO can choose how to best utilize the valuable biogas generated. They can use it to power boilers or Combined Heat and Power (CHP) systems – or they can opt to sell it back to the grid for a profit.

In addition to their Zero Waste Landfill certificate, FIFCO has other strong environmental credentials, and operates under a corporate ethos of “Share with the world a better way of living.” The company has, as one of its seven environmental objectives, “To be a water, waste and carbon positive company through our brands by 2020.”

GWE's wastewater treatment plant is designed to help FIFCO achieve this goal in a way that is financially sound as well as environmentally attuned, and there are a number of features of the plant that are designed for outstanding environmental performance as well as reductions in operating cost.

“FIFCO is an excellent example of a forward-thinking company using technology that is simultaneously environmentally harmonious and financially attractive. We're delighted to assist FIFCO in reducing their environmental footprint and improving their sustainability,” said GWE.

For more information, visit www.globalwe.com.

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[1] A hectoliter is equivalent to 100 liters and is a term used particularly in beer, wine and agricultural industries.

[2] Chemical Oxygen Demand is a measure of the organic content in the water.

[3] This assumes a plant running 330 days a year at full capacity and a Heavy Fuel Oil (HFO), price \$US0,46 per liter.

SOURCE: Global Water & Energy (GWE)