

Evaporation system reduces wastewater trucking

Darling Downs Power Station, Australia

Case story

Darling Downs is a gas fired combined cycle power station. It is the largest of its type in Australia and can generate a total of 630 MW of electricity.

Every drop of wastewater generated at the plant must be shipped off-site for treatment and disposal by truck. Designers incorporated the most efficient, eco-friendly technologies into the plant to create a low emissions facility. When compared to a coal-fired plant of similar capacity, Darling Downs uses 97% less water, and emits 50% less greenhouse gas.

Alfa Laval's evaporation system is part of this success story. The Alfa Laval wet surface evaporator reduced the need for wastewater trucking by 70%, which reduces costs and carbon emis-sions related to truck transportation. The savings from transportation paid for the evaporator in just one year of operation. To further drive efficiency, designers delivered warm auxiliary water to the wet surface evaporator created by the generation process.



Results

- Reduced wastewater trucking by 70%
- Reduced transportation costs and carbon emissions
- High efficiency by using scavenger heat source for evaporation





Learn more at www.alfalaval.com/wsac



Why Alfa Laval Wet Surface Air Coolers (WSAC)

Maximize uptime

- High reliability
- Minimal maintenance

Cut costs

- Minimal energy consumption
- Reduced maintenance costs

Increase capacity

 WSAC maximizes cooling performance for increased production