

JIRAMA

Ambatondrazaka, Madagascar

Jiro Sy Rano Malagasy, also known as Jirama, produces, transports and distributes a large part of the electricity in Madagascar. The company also supplies water throughout the country. It covers almost all the public service for water and electricity.

Jules Rakotoarimanana (Production Manager) started to use XBEE in April 2008 in the power plant located in Ambatondrazaka. Said plant has been built in 1959 and is located in downtown. It produces electricity 24 hours a day.



The objective of the XBEE project for the company was to reduce the specific diesel oil consumption and to improve the life span of the generators.

After only five months of regular use of the XBEE Enzyme Fuel Technology, Mr. Rakotoarimanana noticed an improvement of the generators by 6.13% and a reduction of the specific fuel consumption by 1.97%.

Results analysis

The seven electric generators of the power plant were powered with XBEE diesel oil. The four main groups were monitored throughout the evaluation: a Caterpillar D3408B, a Volvo TAD1630G and two Perkins 2006TAG. They operated for 1,188, 1,276, 36 and 1,841 hours respectively. For the analysis of the results, we kept the groups that had worked a minimum of 1,000 hours with XBEE.

	Consumption (g/kWh)			
	Working hours	Without XBEE	With XBEE	Difference
Gr. n°0445	1,188.00	239.89	235.79	-1.71%
Gr. n°2205	1,276.00	239.88	234.05	-2.43%
Gr. n°24169	1,841.00	218.51	214.66	-1.76%
Average	1,435.00	232.76	228.17	-1.97%

