

Woodlands Dairy commissions additional biomass boiler to further reduce emissions

Woodlands Dairy has commissioned a second biomass boiler that will further increase its use of renewable energy and reduce the dairy manufacturer's carbon emissions.



Woodlands Dairy executives with the new boiler. L-R Owen Gush (OFO), Loyiso Simon (GM Logistics), Lex Gutsche (chairman and OEO), Marisa Maccaferri (marketing executive), Tinus Pretorius (GM Sales), André Adendorff (sustainability manager) and Rick Nel (engineering manager). Source: Supplied

Says André Adendorff, sustainability manager at Woodlands Dairy: "The first biomass boiler was commissioned in 2016 with the main objective to reduce heavy fuel oil (HFO) and electricity usage to generate steam for the plant. By changing over to a biomass boiler, we reduced our electric-boiler consumption by 40% and our HFO consumption by 83%.

"The second biomass boiler will further reduce our HFO usage by approximately 31%, and result in an increase in biomass of approximately 10.7%. The obvious benefit of moving to renewable energy sources for steam generation is the impressive reduction in carbon emissions."



Lactalis invests R140m in new powder plant in the Western Cape 5 Apr 2023



Mitigating risk of disruption

The boiler, nicknamed Bessie, is producing steam, and the team has ironed out standard commissioning issues.

"The aim is to generate a base load of steam to mitigate the risk of disruption to operations when a steam plant fails. If the projected reduction of approximately 31% in fossil fuel (HFO) is achieved, the carbon emissions will be reduced by approximately 1046 t/CO2e per annum," he explains.

The biomass fuel, which consists of wet sawdust and chip timber waste, will be sourced from local timber company MTO, which is within a 70km range from the Woodlands Dairy site.

"Sourcing local renewable biomass reduces the emissions caused by transportation of the biomass. It also ensures working opportunities for the local labour force, generating economic growth for the community," Adendorff says.

For more, visit: https://www.bizcommunity.com