

## Nestlé pilots industry-first tech to cut emissions

Nestlé East and Southern Africa Region (ESAR) has unveiled a pilot project that has successfully tested a global-first - an Artificial Intelligence technology that reduces emissions and saves water - at its Babelegi factory in Pretoria.



Source: Supplied

The industrial-scale pilot project is a partnership with The Emissions Capture Company (ECCO) using its proprietary WhiteBoxTM technology, a machine-learning based system that captures Scope 1 carbon dioxide (CO2) emissions and recycles wastewater.

The WhiteBoxTM set-up in Babelegi has been in successful operation for over 8,000 hours, capturing CO2 from flue gas emissions, recycling industrial wastewater and creating sustainable green products. The green products can be sold directly (for animal feed, human food, consumer goods, cosmetics and pharmaceuticals) or used to eliminate sulphur dioxide (SO2) emissions without the need for water.

Data collected from the industrial scale pilot, coupled with industry-first machine learning techniques, demonstrates that the WhiteBoxTM can be calibrated to capture between 25% to 70% of Scope 1 CO2 emissions and recycle available industrial wastewater per site. Much of this is done through direct air capture and energy-efficient gas processing using low-fuel consumption methods.



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Saint-Francis Tohlang, corporate communications and public affairs director at Nestlé ESAR, commented: "This partnership with ECCO demonstrates a significant evolution of our production processes to embrace circular principles at every step. We are extremely proud to be pioneering this industry-first technology on the African continent.

"This success takes us to the next phase where we will be looking to scale this operation to other factories to deliver significant reductions in Scope 1 emissions in ESAR."

Tlohang added that the pilot project employed 15 people from the local community and has the potential to create more jobs when scaled.

ECCO's WhiteBoxTM joins several ongoing long-term projects under Nestlé's RE sustainability initiative that supports the company's sustainability initiatives, strategies as well as its resources to help mitigate sustainability challenges such as waste reduction.

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