

The Future of Zero Waste to Landfill and the New Carbon Tax

South Africa is fast approaching a situation of running out of landfill space; the inevitable “day full” is on our doorstep. The roll-out of the country’s carbon tax – which is geared towards reducing carbon emissions by 34% by 2020 and 42% by 2025 - will change the way that companies do business.

This was the message from Wasteplan CEO Bertie Lourens in a presentation at the 2019 SAPICS Conference. Lourens noted that, year after year, South Africa, which is the world’s 169th most populous country, has ranked as the 17th dirtiest energy producer on the planet - out-polluting the UK and France. *“The carbon tax is an attempt to mitigate this consumer behaviour and reduce high greenhouse gas emissions while stimulating investor appetite for low carbon alternatives. As of June 1, 2019, South Africa started rolling out the Carbon Tax Bill, which will be implemented in stages and phased in over time to ensure a smooth transition,”* he explained.

Lourens summarised the carbon tax roll out for SAPICS delegates: *“Phase 1 will run from implementation up to December 2022. The initial marginal carbon tax rate will be R120 per tonne of CO₂e (carbon dioxide equivalent). With the below thresholds in mind, the effective tax rate is much lower and ranges between R6 and R48 per tonne. A basic percentage-based threshold (up to 60%) applies for the first phase of implementation that is not tax payable, in order to help businesses transition and adopt low carbon alternatives. Additional tax-free allowances include an additional allowance of up to 10% for process emissions; an additional allowance for trade exposed sectors, to a maximum of 10%; and an additional allowance of up to 5% based on performance against emissions intensity benchmarks. These benchmarks will be developed in due course. There is also a carbon offsets allowance of 5 to 10% per cent, depending on sector, and an additional 5% tax-free allowance for companies participating in phase 1 of the carbon budgeting system. As part of the tax, the carbon offset mechanism also allows companies to participate in a market-based approach to reduce emissions.*

Ensuring Right Reporting

“Carbon emissions are submitted to the Department of Environmental Affairs (DEA) through legislation known as the National Greenhouse Gas Emission Reporting Regulation (NGER). Here, companies that rely on energy generation from their own equipment are obligated to report on all business-related activities for tax purposes.

“Once the carbon tax has been calculated, it will be paid to (and administered by) National Treasury, which will determine any further tax allowances, based on trade exposure, business performance, etc. At this point the process could become quite abstruse and bogged down by litigative complexities, and you’ll need some expert assistance,” he cautioned SAPICS delegates.

“We would recommend getting experts to help you navigate the tricky terrain of tax law.” He stated that there were things businesses could do now to anticipate this burden and reduce their waste to landfill so that less of the business is exposed to heavy carbon taxability, including investing in renewable energy, cool carbon projects and biogas digesters, and reducing waste to landfill.

“Africa is uniquely poised to leapfrog fossil fuel, carbon heavy systems and adopt wind, solar and water energy on sustainable, large-scale levels,” Lourens asserted.

“The tax will take all your activities into account, including the activities related to your waste disposal on site,” he informed SAPICS attendees.

As a means of offsetting their carbon footprint, he recommended that companies invest in effective and environmentally sustainable projects that come in under the marginal carbon tax rate of R120 for every tonne of CO₂e. *“These partnerships are not only financially incentivising; they help support worthwhile green initiatives in other parts of the world.”*

The biogas digester is a well proven technology that converts organic waste into a clean and sustainable energy source. Lourens explained that when organic waste such as discarded food waste is landfilled, it produces methane gas, which is many times more potent than CO₂. Biogas digesters have been around in South African

since 2014. *“Unfortunately, many of the installations did not perform, with several facilities having closed-down or running with severe performance constraints. The most important lesson for successful implementation is the selection of an experienced local operational partner that can assist in the development process from start to finish,”* he advised.

Lourens said that the Western Cape Government has implemented legislation that will completely ban organic waste to landfill by 2028, which will force companies to implement solutions for the waste.

“New innovations are making Zero Waste to Landfill a reality. It requires an integrative approach with separation at source and effective down-stream waste management practises. This approach maximises recyclables recovery, while organic waste is isolated and treated using composting or biogas. The remaining waste consisting mainly of unrecyclable plastic packaging can then be converted, either into energy (such as electricity or oil) using Pyrolysis or, into bricks or concrete to build much needed infrastructure. The waste-to-energy landscape in South Africa is still in a vulnerable state, but we believe this will all soon change as our economy is shifting to a low carbon economy,” he concluded.