

SUSTAINABILITY



Sustainability leads the way for the future of waste management

We can no longer look at waste management with a linear view. We now are seeing national, as well as global leaders placing more focus on awareness around the 'throw away culture' that many businesses, individuals, and households have – and for good reason.

By Kate Stubbs, Group Marketing Director at Interwaste

South Africa generates over 122 million tons of waste each year and with 90% of this waste being disposed to near over-capacitated landfill sites – do we have what it takes to change this figure and make a difference? What if a waste crisis occurred – could we manage?

Waste is a universal issue given the broader challenges it brings, affecting both human health and livelihoods. It has a negative impact on the environment and ultimately economies, when not examined and managed correctly. If we take that over 90% of waste in low-income countries is merely



SUSTAINABILITY

being discarded or burned, not only are we seeing valuable resources being lost, but the environment is affected as well. This means it is now crucial for industries to look at 2021 as a year of exploring innovative and sustainable solutions, where resilience is at the forefront of its decisions.

Of course, locally we are seeing new technologies and legislation beginning to transform traditional operations within the industry; however, how this is managed will become key to their ability to remain resilient.

As a result, I believe countries, governments and companies alike will have to focus on five important aspects if they want to find the most strategic approach to managing their resources and waste. More importantly though, is turning this waste into a sustainable resource and actively creating alternatives from existing waste streams to reduce and reuse them?

1 Circular economy is key

If we really want to encourage the 'nothing wasted' mindset, investing in a circular economy model must be taken seriously. Whilst still a relatively new concept in Africa, this model offers significant opportunities to truly deliver far more inclusive growth for the economy and includes an increase in job opportunities as well as positive environmental practices – all of which are needed for sustainable growth.

As more consumers become more aware (and concerned) about product sustainability, the need for companies to demonstrate how the full life cycle of their products – including how these products can be either reformative, restorative, or regenerated within the system – will be at the forefront of business strategy. And that is the circular economy.

It means business must examine how to strip out all unnecessary waste materials, energy losses and related carbon emissions – across their supply chain

and find solutions to ensure these materials, energy, and resources can be 'fed' back into the cycle.

This must start now! So, this year I truly believe many businesses will be examining ways to 'design' waste out of an economic system to deliver continued life on their products beyond (and following) its initial use.

2 The digital evolution

We know the pandemic has fuelled many industries into a Fourth Industrial Revolution (4IR) world at a rapid pace.

As a result, it has become essential for our industry sector to stay focused on achieving sustainable and innovative solutions to remain competitive through these unprecedented times. Artificial Intelligence (AI) will likely lead the way when it comes to shining the light on inefficiencies that exist across the value chain. As an example, AI applications are able to identify various waste types that are presented and structure the information, through analytics, to increase transparency and automation in recycling and other alternative processing solutions, in real-time.

Digitisation also has the potential to reshape South Africa – and those organisations that do not drive their own digital business transformation, will be left behind. The waste sector is no different where we will see digitisation of waste collection becoming more relevant, providing important benefits, like being able to efficiently guide waste collection routes, making collection of waste as well as recycling materials fuel efficient and, more importantly, reducing the use of energy. Today, so many complex industrial processes can be automated, and we must embrace this.

3 Tackling the mounting plastic waste

2021 will see an increase in plastic pollution. With the pandemic encouraging single-use plastic, as





SUSTAINABILITY

well as the massive increase in PPE, this has all contributed to a significant rise in waste – on an already mounting problem.

With South Africa only recycling 10% of its waste, the 'zero waste to landfill' goal becomes ambitious. However, through minimisation, recycling, reuse, and recovery of this waste, as well as beneficiation technologies, we can still build a circular economy and really tackle this challenge. However, central to this is the diversion of 90% of waste from landfills. Of course, the catalyst will be creating facilities that can deal with valuable waste in a more efficient manner.

4 Government efforts

We are seeing legislations such as the new Extended Producer Responsibility (EPR) regulation being implemented, where manufacturers, those that ultimately produce waste, are now required to take responsibility for these products following the sale thereof.

This means that even from the production stage, the producer must put strategies in place to reuse, recycle and recover energy from the product. Furthermore, carbon tax and carbon credits will also lead the way in this – where we know carbon credits will be sold to carbon taxpayers to reduce their carbon tax liability. These efforts are good, but we need more, and we need the support of the private sector.

5 Renewable energy

South Africa's looming energy crisis has been on the agenda for several years now and with the recent statement indicating that load shedding will continue until September this year, and electricity prices are set to rise, alternative options need to be considered.

As a result, the conversation around renewable energy is a critical one – not only to help tackle the

energy crises faced by the country – but to curb waste issues as well.

While nuclear power continues to be debated, there are alternative solutions. For example, the conversion of waste to energy through repurposing waste, which can't be recycled or reused, is an energy source alternative that can, and must, be done. Think of the benefit of 500 tons of waste being converted to 12.6-megawatts of energy – reducing reliance on landfills and helping solve South Africa's energy crisis at the same time? If we consider that by 2050 the country's energy needs will be more than double, then alternative solutions are critical.

The waste sector today goes far beyond traditional recycling. In fact, as the year progresses, our industry will become more focused on resilience and long-term sustainability. Certainly, if we encourage stronger adherence to global standards and tackle these with a long-term view – we will take South Africa's waste industry into a greener and more profitable future. ■



Kate Stubbs, Group Marketing Director at Interwaste.

