



ECOTECH AFRICA

Applied Environmental Technology

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HOW MUCH RUBBISH SOUTH AFRICANS DUMP EACH DAY?



A report by the World Bank details which countries produce the most garbage every day - and where South Africa fits into the picture. According to the report, South Africa produces 54 425 tonnes of trash every day - the 15th highest rate in the world.

However, on a per capita basis - the amount produced per household every day - this equates to two kilograms, putting South Africa at number 38 globally. By 2025, the World Bank predicts South Africa will drop to 20th on the list with 72 146 tonnes per day, as other countries' rates of trash generation is expected to outstrip our own. SA is expected to maintain a per capita generation of waste at two kilograms per day, which would place it at 40th on the list.

The World Bank defines municipal solid waste as including non-hazardous waste generated in households, commercial and business establishments, institutions, and non-hazardous industrial process wastes, agricultural wastes and sewage sludge. **Global picture.** Understandably, the biggest and most industrialised nations in the world are the biggest producers of waste - but the USA and China are far ahead of the rest. By 2025, the World Bank predicts that China will overtake the USA, and outstrip its waste generation by double (700,000 tonnes for the USA, and 1.4 million tonnes for China).

If it can't be reduced, reused, repaired, rebuilt, refurbished, refinished, resold, recycled or composted, then it should be restricted, redesigned or removed from production.

Pete Seeger



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Waste Measurement Warnings

Waste generation is one of the many metrics used by analysts and researchers to determine potential future problems associated urbanisation. The World Bank noted that the amount of municipal solid waste is growing faster than the rate of urbanization in the world, with around three billion urban residents generating 1.2 kg of waste per day - and these levels are expected to double by 2025.

Almost half of global solid waste (46%) is organic material, with 17% being paper, 10% plastic, 5% glass and 4% metal. Alarming, the World Bank's disposal data shows that only a paltry 1% of all waste gets recycled, with the bulk (59%) ending up in landfills or being dumped (33%)

Waste generation - and ineffective removal - can pose a massive risk, drawing parasites which can spread diseases, as well as cases of toxic waste, where harmful chemicals can be injected into the environment.

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15 Biggest Waste Generating Countries (Tonnes per day)

1	USA	624 700
2	China	520 548
3	Brazil	149 096
4	Japan	144 466
5	Germany	127 816
6	India	109 589
7	Russia	100 027
8	Mexico	99 014
9	United Kingdom	97 342
10	France	90 493
11	Italy	89 096
12	Turkey	86 301
13	Spain	72 137
14	Indonesia	61 644
15	South Africa	53 425

Because of its location and a severe lack of recycling facilities, the twin island nation of Trinidad and Tobago – along with many other Caribbean islands – hold the top dishonour of producing the most waste per capita – 14.4kgs, more than 10 times the global average.

According to local reports, uncontrollable littering, particularly of plastics, has led to a rise in mosquitoes in the region, which has brought its own health problems. By 2025, the World Bank predicts that the islands will reduce its waste generation somewhat, though will still lead with 10kg per capita per day.

15 Biggest Waste Generating Countries (Kg per Capita per day)

1	Trinidad & Tobago	14.40
2	Kuwait	5.72
3	Antigua	5.50
4	St Kitts	5.45
5	Guyana	5.33
6	Sri Lanka	5.10
7	Barbados	4.75
8	St Lucia	4.35
9	Solomon Islands	4.30
10	Tonga	3.71
11	New Zealand	3.68
12	Ireland	3.58
13	Vanuatu	3.28
14	Bahamas	3.25
15	Seychelles	2.98
38	South Africa	2.00





WASTE MANAGEMENT

Ecotech Africa is committed to building a greener future for South Africa. With a holistic approach to waste management and environmental responsibility, providing you with a complete management system for all your waste streams. Ecotech Africa offers a total Waste Management Service that not only includes waste disposal services, but has a strong focus on optimization and beneficiation through recycling of various waste streams.

National Legislation dictates through the National Waste Management Act (Act 59 of 2008) in Charter 3 that the principle of Reduce, Re-Use, and Recycle must be the principle whereby any Waste Management Plan (WMP) is executed and implemented for any industry. It is with this in mind that Ecotech Africa drafted its business model with regards to Waste Management, Minimization and Beneficiation.

Integrated Waste Management

Waste is broadly defined by the Department of Water Affairs in 1994 as: "an undesirable or superfluous by-product, emission, residue or remainder of any process or activity". Our approach is to view a client's waste holistically, that is, to endeavor to deal with the entire spectrum of issues and challenges surrounding a client's waste. Client's, on the other hand, need to view their products holistically as part of product stewardship, for by law, clients remain responsible for their products from 'cradle to grave'. An integrated approach to waste management should therefore take into account the full life cycle of a product, including the impact from manufacturing processes, product use and final disposal.

Ecotech Africa approach to Integrated Waste Management

- ✓ Waste Assessment
- ✓ Waste Plan
- ✓ Avoidance and Reduction
- ✓ On-site Management
- ✓ Waste Segregation, Minimization and Beneficiation
- ✓ Monitoring and Recording
- ✓ Auditing and Control

Services

We offer a full range of services and products to satisfy **all waste removal, handling and management requirements**. Our focus is on the future and environmentally sustainable waste management and related services in the waste management. We are aligning ourselves to this hierarchy to promote recycling, reuse and reduction of waste. Ecotech Africa's unique business model is set on how we apply and manage our resources to provide the most efficient, cost effective and compliant service to suit our customers' specific waste requirements.

- ✓ Management Services
- ✓ Logistics
- ✓ Segregation, Recycling and Disposal of Waste
- ✓ Optimization and Beneficiation of Waste

On-Site Waste Management

Our on site waste management service provides our clients with piece of mind that legislative requirement are met with regards to Waste, Environmental and Health & Safety Legislation and Regulations. Through effective on site waste management we reduce disposal of beneficial waste, establish an income for the client, ensure legal compliance and assist with the effective implementation of the clients integrated waste management plan. We supply our customer with detailed reports which can be supplied incorporated in the WMP.



PROJECT

ASBESTOS REMOVAL

Ecotech Africa was contracted by Letaba Estates to remove roof sheeting from a 120 housing units on their farm located outside Tzaneen. The residents were vacated to new accommodation units and thus these old buildings needed to be demolished to prevent vagrants moving in.

Due to the construction of the units removal was made very difficult as the roof supports were made up of only one ring at the top which after removal of one sheet could cause the whole roof to collapse. This problem was overcome by our projects team to ensure safety of personnel on site and minimize the risk of asbestos becoming airborne if sheets should break.

The 120 units were removed in only 12 days and we are very pleased with the outcome of the project. 99 tons of asbestos safely disposed of at landfill.



ELECTRA MINING 2018 WILL WE SEE YOU THERE?



Electra Mining Africa offers a rich heritage of exhibition experience that has been built and nurtured over almost five decades. Loyal to the industry, full of tradition but also embracing latest technologies, trends and innovations.

ENVIRONMENTAL CALLANDER WORLD OCEANS DAY 8 JUNE 2018



World Oceans Day is an annual observation to honour, help protect, and conserve the world's oceans. The ocean provides us with many resources and services including oxygen, climate regulation, food sources, medicine, and more. World Oceans Day also provides an opportunity to take personal and community action to conserve the ocean and its resources.

2018: The conservation action theme for World Oceans Day 2018 will be preventing plastic pollution and encouraging solutions for a healthy ocean.

Ecotech Africa will be exhibiting at Electra Mining from 10 - 14 September 2018 come and visit us at Hall M2 Stand 59.

Give us a call or visit our website for more information about our services and products

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