

## QUICK FACTS ON WASTE MANAGEMENT

### LITTER

Litter and illegal dumping have environmental, social and economic effects.

- Social/Human health impacts:
  - It is unsightly and can be smelly and dirty.
  - Can promote the transmission of disease. E.g.
    - ↳ Tyres and containers can provide perfect places for mosquitos to breed.
    - ↳ Contaminated medical waste can spread diseases.
  - Can physically harm people e.g. sharp objects can be picked up by kids which can then harm them or they may eat something that can get them sick.
- Environmental impacts:
  - Litter can trap, suffocate, strangle and poison wildlife including domestic animals. E.g. Cows may die from eating plastics
  - Contamination of soil and water
  - Blockage of storm water drains thereby leading to floods.
  - Cigarette butts could also start fires which may have an impact on the environment as well as humans.
- Economic impacts
  - It costs municipalities a lot of money to clean up illegal dumping areas and litter.
  - Property prices can be lowered by litter and illegal dumping in the area.
  - Tourism can also be affected as an area becomes unsightly and smelly, few tourists would visit the area.

### RECYCLING

#### Why do we recycle?

- Conserve natural resources by re-using the waste for the manufacture of new items instead of using natural resources all the time.
- To save landfill airspace so that our landfill sites can last for longer and not need additional land which we can use for other things e.g. agriculture, housing etc.
- Contribute towards reducing the contributors to global warming (landfill gas).
- Saves energy. The production of some products from recycled materials uses far less energy than the production of the same product from raw materials.
- Reduces pollution which could have resulted in the disposal of the material.
- Creates jobs. The involvement of people in the value chain creates additional job opportunities.

## Waste and Recycling Facts

*"A clean man in a dirty town is a dirty man".*

1. The Constitution of South Africa guarantees everyone the right of access to an environment that is not harmful to their health and wellbeing and to have the natural environment protected for the benefit of current and future generations
2. South Africa generated 108 million tonnes of waste in 2011, and 59 million tonnes of that was general waste <sup>i</sup>
3. Approximately 98 million tonnes of waste generated in 2011 was landfilled in South Africa
4. Only 10% of waste generated in South Africa is being recycled annually<sup>ii</sup>
5. 65% of waste generated in SA is recyclable
6. Gauteng Province contributes about 45% of the total waste generated in the country
7. An average person in SA generates about 1 tonne of waste per year and about 3 kg per day.
8. An average person in SA will throw about 900 times their adult body weight of waste in their life time (assuming a life expectancy of 56 years and an average adult body weight of 62 kg).
9. [Recycling](#) 1 ton of [paper](#) saves 17 mature trees, 26, 498 litres of water, 2.3 m<sup>3</sup> of landfill space, 238.48 litres of oil, and 4000 kilowatt hours of electricity.
10. Cigarette butts are the most littered item in the world, with 4.5 trillion discarded annually.
11. After South Africa introduced levy system on plastic carry-bags in 2002, more and more people buy durable bags for reuse when doing shopping. The program has raised millions of Rands in revenue.
12. Waste management contributed over R2.4bn of the GDP in 2011<sup>iii</sup>
13. Over 1 million tonnes of plastic are thrown away in South Africa each year.
14. Plastic bags do not biodegrade. Light breaks them down into smaller and smaller particles that pollute the environment and are expensive and difficult to remove.
15. Approximately 88% of the energy is saved when plastic is made from plastic rather than from the raw materials of gas and oil.

16. Tyres in stockpiles can serve as a breeding ground for mosquitoes and a habitat for rodents.  
Recycling of this waste stream can significantly avoid these problems.
17. Less than 5% of people in South Africa separate their waste at household level.
18. South Africa has over 1500 waste disposal sites. This can be significantly reduced if waste recycling is prioritised.<sup>iv</sup>
19. While landfill gas (Methane) is a good fuel, most waste disposal facilities in South Africa are not efficiently collecting it and utilising the opportunity that comes with harvesting it.
20. Waste incinerators create more CO<sub>2</sub> emissions than coal, oil, or natural gas-fuelled power plants.<sup>17</sup>
21. It has been estimated that recycling, re-use, and composting create six to ten times as many jobs as waste incineration and landfills.
22. Recycling saves 3 to 5 times the energy generated by waste-to-energy plants, even without counting the wasted energy in the burned materials.
23. Recycling steel and tin cans saves 74% of the [energy](#) used to make them.
24. Recycling one aluminum can saves enough energy to run a 100 watt light bulb for 20 hours, a computer for 3 hours, and a TV for 2 hours.
25. Of 3.1 million tonnes of metal waste generated, 80% of that was recycled in 2011
26. 32% of Glass waste generated in 2011 was recycled
27. Recycling 1 ton of mixed paper saves the energy equivalent of 185 gallons of oil.<sup>19</sup>
28. Aluminum can be recycled forever with no loss of quality.<sup>14</sup>
29. Recycling aluminum creates 97% less water pollution than making new metal from ore.<sup>14</sup>
30. Every ton of glass containers recycled saves over a ton of natural resources.
31. For every 10% recycled glass used to make new glass containers, energy costs drop 2-3 percent.

32. The energy saved by recycling one glass bottle can light a 100-watt light bulb for four hours or run a computer for 30 minutes.<sup>28</sup>
33. 1.2 million tonnes of virgin polymers were converted and 228 057 tonnes of plastics were recycled<sup>v</sup>
34. Because plastic water bottles are shielded from sunlight in landfills, they will not decompose for thousands of years.<sup>35</sup>
35. Recycling one million laptops saves enough energy to power over 3000 homes in a year.<sup>38</sup>
36. Recycling one million cell phones allows 35,274 pounds of copper, 772 pounds of silver, 75 pounds of gold, and 33 pounds of palladium to be recovered.<sup>38</sup>

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<sup>i</sup> National Waste Information Baseline, 2011

<sup>ii</sup> National Waste Information Baseline, 2011

<sup>iii</sup> National Waste Information Baseline, 2011

<sup>iv</sup> Waste License database

<sup>v</sup> 2010 Survey: PlasticsSA