

enviroworks

SPECIAL EDITION: WASTE

Summer 2012/2013

Biannual environmental newsletter of the City of Cape Town

Published by the City of Cape Town Environmental Resource Management Department in partnership with the Solid Waste Department.

What you can do to reduce waste

Why waste is a worry



Zibi – our city's champion against waste

Learn ...

What you can do to minimise waste and save money.

Discover ...

Where you can drop off 'problem' waste – free pull-out poster inside!

Win!

Exciting competition for young artists - win a prize for yourself and your school!



CITY OF CAPE TOWN | IZIBO SASEBANA | ISIBO SASEBANA

THIS CITY WORKS FOR YOU

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Photo: Anya Kovacs.
Thanks to Springfield Convent.

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And the WINNERS are ...

The winners of the give-away books advertised in our previous issue are:

Phoebe Barnard, Celia Bayley and Malefyane Mosadi.

Congratulations, we trust that you will enjoy your copy of *Alien & Invasive Animals: A South African Perspective* by Mike Picker and Charles Griffiths.



A special thanks to **Mrs Malefyane Mosadi**, who wrote a beautiful letter to us about how much she enjoyed our previous issue on invasive aliens, and what she has learned from it. In summary, she had this to say:

"I really enjoyed reading [this] publication. I like the simplicity with which the threat of invasive species is revealed. The hidden threat of invasive species to fauna, flora and South African citizens has been brought to light through the publication. The publication is well researched and well packaged. I'm quite sure that everyone who has read the publication will agree with me that the work on the subject is really an eye-opener."

Our partners in reducing waste and litter

The City of Cape Town has many partners in its waste management efforts, including:



SOIL FOR LIFE



This newsletter is printed on SAPPI Triple Green paper, an environmentally-friendly paper stock made from chlorine-free sugar cane fibre to support sustainable afforestation in South Africa.



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What are we leaving our children?

If we don't change our ways with waste, our children (and their children and all the generations there-after) may look at us as the generation who turned a once beautiful, green planet into little more than a toxic rubbish dump.

Do you know where your waste goes once the refuse truck empties your rubbish bin? Do you know how much extra waste was created in making the products that become your waste, and how much this is costing you? Do you realise that waste has become a huge problem for humankind? Most importantly, do you know how we are seduced into contributing to this problem by the consumer-focused system in which we live?

Until recently, we have not been taught to think twice about waste. But the time has come to start thinking – and acting – very differently about the products that become our waste and how we should deal with them. (Even those of us who recycle shouldn't feel complacent about our actions. We should realise that we are only touching the tip of the iceberg!)

In the popular 2008 animated movie, WALL-E, a lonely little robot spends its life cleaning up a waste-covered earth. Humans had left the planet in a space-ship many years before, planning to return once all the robots had cleaned up the planet and plants had started growing again. Of course, things don't work out quite as easily as that in this enchanting story.

It may have been only a 'simple' movie for children but its message was clear and true: We only have one planet. We cannot continue creating so much waste and using up so much of its resources in the process. We need to find intelligent ways to meet our needs without leaving our descendants little more than a rubbish dump. We need to take pride in our environment.

This issue of Enviroworks explores the topic of waste. Why we are creating so much waste? How we can make smarter decisions to avoid waste? And how we can manage waste in a socially and environmentally responsible way? We have to do this so that we, our children and grandchildren can enjoy life on a clean and sustainable planet now and long into the future.



In short ...

Waste can turn the planet on which your grandchildren will live into a toxic rubbish dump. This edition shows you how to make sure that this does not happen.



Zibi says ...

In this newsletter we use the term 'waste' for what we generally call trash, rubbish, dirt, garbage, junk or even litter.

Waste comes in many shapes and forms but here we are generally talking about the waste we produce at home and at work, industrial waste, building rubble and so on.

However, what you call waste is not important. It's what you do about it that is crucial!



We have to ask ourselves: What kind of earth do we want to leave to our children?

What is waste ...

When we have no further use for something, we throw it away. It becomes 'waste'. But isn't there a better way?

Waste is one of the negative legacies of our 'consumer culture'. It is estimated that each person in a developed country throws away about 1-2 kilograms of waste (such as paper, plastic, metal, glass, food waste and garden clippings) per day on average. This adds up to about 50 tons of waste in your lifetime! And this doesn't include the amount of waste produced by the manufacturers of our goods or by industries such as mining.

In nature there's no such thing as waste

In nature, life works in a circular system where 'waste' generated by one organism becomes food for another. For example, fallen leaves decay and the nutrients are returned to the soil where they decompose and become food for the tree again.

Our industrial society today, however, has developed a linear or straight-line process of producing, consuming and disposing of products (see [page 5](#)). The result is that great amounts of what we call 'waste' go directly into landfill sites. As humans we need to develop our own 'circular system' for waste. We need to realise that all waste has a value and that our natural resources will last longer if we start to re-use and recycle waste.



Zibi says ...

Operating on the principle 'one person's waste is another person's gold', the Integrated Waste Exchange (IWEX) is a free, online system that enables industries, businesses and the public to exchange waste materials. Visit www.capetown.gov.za/iwex to browse the IWEX system and register for free, if you wish to exchange waste.



In short ...

Waste is everything we throw away. We need to reduce the amount (and the harmfulness) of waste we create and we need to manage the waste we do produce in a responsible way, otherwise we will damage our environment and ourselves.

... why should we do something about it ...



Photograph by Mark Lewis

A mountain of waste at a local landfill site forms an unattractive foreground to our beautiful Table Mountain.

When we do not properly manage waste, it causes harm to the natural environment and to living organisms, including ourselves.

Birds and animals are often exposed to pollution (such as plastic bags or oil) which causes them distress or even their death.

For example, as little as one litre of used oil can contaminate one million litres of water. If someone pours toxic chemicals into a natural water system, these chemicals cannot be broken down by the system and will damage all the organisms in such a system.

Another problem is that we are running out of space to deal with all the waste we produce.

Zibi says ...

Recycling tins and cans saves about 95% of the energy needed to make a new can from raw material. It does not matter if cans are crushed, rusted or burnt – they can all be recycled. Currently, 72% of used beverage cans in Southern Africa are recovered. This compares very well with European standards. (Source: www.collect-a-can.co.za)



... and where is it all coming from?

Manufacturers and marketers of 'consumer goods' spend billions of rands on advertising. They persuade us to 'buy more, replace and discard' at an ever increasing rate. In South Africa, R62 billion was spent on advertising last year alone!



Shoppers descend on their local shopping mall just before Christmas.

The age of the 'mall rats'?

Many South Africans increasingly choose to spend their leisure time and hard-earned cash at shopping malls (and on the Internet) to follow the newest fashion item or buy a 'must-have' electronic gadget.

For many of us our consumption of goods has gone far beyond our essential needs. What and how much we choose to buy have been turned into a sign of our social status. And what is seen as the most important measure of

a country's economic development is its gross domestic product (GDP), which is the sum total of goods and services produced by a given country in a given year.

This assumes that the measure of the success of a consumer society is how much it produces and consumes. But GDP is increasingly being questioned as a measure of a country's success and general well-being. Other essential factors such as people's happiness, a sense of belonging, security and non-financial prosperity are used, for

example, in countries like Bhutan. There is strong evidence that after a certain level, increasing industrial production and consumption in a materialist culture do not make people happier.

We're not seeing the whole picture

Every day we make choices which determine how much waste we will produce on a personal (household) level. However, our choices are usually based on incomplete information. We typically see a product for only a short period of its existence: that phase in which the product is useful for us. We may, for example, buy a cool drink in a styrofoam cup and throw the cup into a rubbish bin after we have finished drinking ... comfortable in the knowledge that the bin will be cleaned out later. What we don't see is how the raw materials needed for the cup are extracted from the natural environment and how much waste is created in the process. We also don't see the pollution caused during its manufacture and distribution. Finally, we don't see how our 'disposable' cup can stay with us for a long time. It won't decompose for hundreds of years (see the article on plastic gyres on [page 7](#)) and it has a negative impact on our environment.



Zibi says ...

When shopping, check a product's 'waste footprint' before you buy it. If you can choose, pick the one that has the least amount of waste associated with it, for example, a locally manufactured product that uses the least packaging or at least packaging made from recyclable materials. Check the information on recycling options or recycled content of a product which is usually printed on the back of the product.



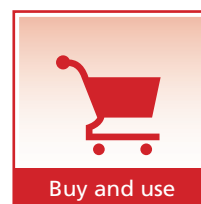
Extraction



Manufacture



Transport



Buy and use



Disposal

Tunnelvision: This is the only part that we usually see. Start thinking 'out of the box' to understand the true waste impact of what you buy.

... where is it all coming from? (continued)

We don't often stop to think where all those goods that are stacked on retail shelves come from in the first place. We also do not consider what they are made of or what processes are involved in their manufacturing. We see the brand new computer but we don't see the actual 'ingredients' built into it (including up to 37 toxic elements, of which most are heavy metals) that come with the purchase of this type of electronic equipment.

The 'No Dirty Gold' campaign found that nearly two million tons of mining waste

is created in the production of one ton of gold. That means that about 20 tons of mine waste is created to make one gold wedding ring. Since this is not a very 'romantic fact', the chances are slim that the sales person at the jewellery store will disclose this information to you.

To understand how much waste and pollution we produce (collectively and individually) and the social and environmental price that we are really paying when we choose to buy unnecessary products, we must consider the waste created upstream – in the extraction,

harvesting, production, packaging, transportation and selling of the products we buy – and not focus exclusively on the period during which the product is useful to us.

Changing the way we choose to buy things is challenging because 'buying stuff' has become a habitual part of our lives. To change this behaviour requires examining ourselves and what we truly value. Everyone needs to become more conscious of the choices that we make in our everyday lives.

Are we 'running out of planets'?

Number of planets needed

If everyone lived like a resident of the following countries, we would need:

USA 4.16 Earths	
Russia 2.73 Earths	
Brazil 1.95 Earths	
China 1.18 Earths	
India 0.49 Earths	
World Avg. 1.51 Earths	

Sources and more information

- www.storyofstuff.org/
- www.footprintnetwork.org/en/index.php/GFN/page/video_overshoot_explained/
- www.globalissues.org/article/238/effects-of-consumerism
- www.extension.umn.edu/distribution/naturalresources/DD5569.html
- www.grida.no/files/publications/vital-waste2/VWG2_p12and13.pdf
- 'Prosperity without growth' by Tim Jackson – www.sd-commission.org.uk/publications.php?id=914

Learn how most of what you buy is 'designed for the dump' and how this affects all of us – watch:



In Annie Leonard's highly informative video about consumerism, *The Story of Stuff*, she states, 'We have become a nation of consumers. Our primary identity has become that of consumer, not mothers, teachers, farmers, but consumers. The primary way that our value is measured and demonstrated is by how much we ... consume.' (See this eye-opening 20-minute video on www.storyofstuff.org/.)



In short ...

Unnecessary and vast volumes of waste are generated as a direct result of our consumption-driven society. We need to understand the upstream waste that is created for all the products we buy and we need to make conscious choices about what we buy.

Looking at waste...

... on a global level...



Governments and citizens across the world are now grappling with the challenge of minimising waste. Unfortunately, we also have to deal with the legacies of waste. One of the most well-known global 'waste' problems is the five plastic gyres (or turning circles) that have formed in our oceans. Of these, the North-Pacific gyre is the largest, being half the size of South Africa. It is estimated that there are six kilograms of plastic for every kilogram of natural plankton in this floating gyre. This plastic, together with other waste, dead fish and trapped marine animals, rotates slowly and grows in size each day. It is estimated that some of the plastic in the gyres will not break down in the lifetimes of the grandchildren of the people who allowed these items to get into the sea.

Sources:

- www.greenpeace.org/international/en/campaigns/oceans/pollution/trash-vortex/
- www.mg.co.za/print/2012-01-06-drowning-in-a-sea-of-waste

In short ...

Across the world, governments are realising that waste is a serious challenge and threat to the well-being of people and the environment alike. In South Africa, legislation has been put in place to help manage and reduce waste wisely.

... on a national level...

In South Africa, our waste management is governed by the National Environmental Management: Waste Act, 2008 (Act 59 of 2008), which came into effect on 1 July 2009. The Waste Act supports the waste hierarchy (see [pages 16 to 18](#)) in its approach to waste management. It promotes cleaner production, waste minimisation, re-use, recycling and waste treatment. Disposal is seen as a last resort in the management of waste.

Source: www.sawic.org.za

... and as a City.

The City of Cape Town has developed a by-law to support waste minimisation and recycling.

By analysing waste trends in and around Cape Town, the Department of Solid Waste launches initiatives to minimise waste. It is estimated that households generate approximately 46% of the waste in the city, industries approximately 27% (including hazardous waste) and the commercial sector (trade waste) approximately 26%.

See the next page for more information on what the City does, in co-operation with its citizens, to manage and minimise waste.



Photograph by Mark Lewis



Zibi says ...

Drop off old batteries at advertised collection points such as Pick n Pay, Woolworths, Spar, Incredible Connection or UniRoss for safe disposal.

However, why don't you rather choose rechargeable batteries as a more sustainable option? They are more expensive to buy but they last much longer and they have a far less negative impact on the environment than disposable batteries. See it as an investment to save!



More information

- The City's solid waste efforts: <http://tinyurl.com/cpksudt>
- The City's by-law on waste: www.capetown.gov.za/en/Pages/IntegratedWasteManagementby-law.aspx

Tackling waste in our city

Imagine 500 rugby fields of rubbish, some already piled about 30 metres high and some increasing in height by about 2,5 metres per day. That is roughly the picture of the City of Cape Town's landfills at present.

The fact is: we are creating waste at a rapid rate and our landfill sites are filling up fast. The City is already investigating the best location for a new regional landfill site. However, it is becoming increasingly difficult to find socially or geologically suitable sites for landfills in Cape Town.

What is a landfill site?

Waste has traditionally been sent to landfill sites (rubbish dumps), where it is disposed of in a scientifically chosen, designed, engineered and managed location. Here it is spread, compacted and covered with sand and builder's rubble to prevent the waste from blowing around, spreading diseases and attracting unwanted animals and insects.

After the waste has been disposed of, it can lie there for hundreds of years while it decays very slowly. When landfill sites are full, they need to be closed and rehabilitated (in other words, restored to a useful, environmentally-sound condition). Although this helps to contain health and environmental pollution, it is a costly process.

Currently, Cape Town's waste is sent to three landfill sites: Vissershok in the north of the city, Bellville South in the central area, and Coastal Park in the south.

The price of litter and illegal dumping

Cleaning up litter and illegally dumped waste can be up to twenty times more expensive than collecting waste from your bin at home or from regular street litter street bins.

The municipality spends large sums of money every year cleaning up waste that is illegally dumped around the city, including on beaches, in stormwater canals, rivers, roadsides and streets, and

on vacant plots. This is a great pity, as that money could rather have been used for things that would benefit the people of Cape Town, such as housing, parks, clinics, schools or public transport.



Above: Waste is separated at one of the City's material recovery facilities.

Below: Heavy machines are needed to deal with volumes of waste at the landfill, including a waste compactor (in the background).



Zibi says ...

I hate litter and this is why: It blocks gutters and drains and causes flooding in streets and houses; it is unhealthy and leads to diseases; it ends up in rivers and seas, harming animals, fish and birds; it makes our neighbourhoods look ugly and uncared for; and it is illegal – people who litter or dump rubbish on roadsides will be fined! Please keep any litter with you until you can 'zap it in a Zibi bin'!



In short ...

Cape Town's waste is disposed of in landfill sites, but these are filling up fast. The City is also spending large amounts of money to clean up illegally dumped waste.

A handy checklist for recycling and disposal

BATTERIES Wet cell batteries - lead batteries used in cars, etc. Dry cell batteries (household waste) – non-rechargeable and rechargeable batteries used in flashlights, cell phones, video cameras etc.	Pick n Pay and Woolworths accept household batteries for disposal and recycling. Landfill sites permitted to handle hazardous waste, such as Visser'shok, accept wet cell batteries. Return car batteries to a supplier who has a take-back programme in place.
BUILDING WASTE	Residents generating building waste are responsible for the removal and disposal of builder's waste at an approved facility. Only vehicles with a carrying capacity of 1,3 tons will be accepted at drop-offs. Most will accept one load of 1,3 tons per day free of charge.
ELECTRONIC WASTE / E-WASTE Electronic waste such as old cell phones, computers, consumer electronic goods and household appliances.	Inappropriately managed and disposed of electronic waste in landfills causes human health and environmental concerns due to the hazardous elements and compounds that are found in manufacturing of the products, such as lead, arsenic, mercury and cadmium. Visit www.ewastealliance.co.za to find who can take your e-waste.
GARDEN WASTE Organic waste from landscaping activities such as soil, grass cuttings, leaves, branches, etc.	Phone the call centre on 0860 010 3089 to arrange special collection of your garden waste, which is subject to the appropriate tariffs. See page 12 to find the nearest drop-off site that accepts garden waste.
GENERAL HOUSEHOLD HAZARDOUS WASTE Toxic, harmful, corrosive, irritant substances such as chemicals, acids, pesticides, etc.	Keep substances separate and store them safely, away from food items, in a container that will prevent breakage - preferably in a cool area. Do not pour substances down the sewer or into the stormwater drain / system. Ensure that the facility is authorised to accept hazardous waste prior to offloading waste from a vehicle.
INK AND TONER (PRINTER) CARTRIDGES Inkjet cartridges are compact and contain liquid ink. Toner cartridges are larger and bulkier and contain dry solid powder.	Valuable non-renewable resources are used to manufacture new cartridges, so try to recycle instead. Do not dispose of cartridges in general landfill sites. Start a cartridge recycling programme in your office. Contact www.greenoffice.co.za for more information.
LIGHTING WASTE Compact Fluorescent Lamps (CFLs) and incandescent bulbs.	Do not throw CFLs away with domestic waste as they contain small quantities of mercury. Keep CFLs separate until they can be safely taken to a drop-off / collection point. Visit the City's website in Services & Departments: Solid Waste pages (www.capetown.gov.za/solidwaste) for an informative leaflet on disposing of CFLs. In the event of breakage, special care must be taken to clean up and contain the mercury powder and glass shards. Wrapping in newspaper is advisable.
PAINT WASTE AND EMPTY PAINT CONTAINERS	Do not discharge paint into stormwater outlets or toilets. Do not burn paint or empty paint containers as they release toxic gases. Rather donate old paint to charities or as a last resort, allow to dry out completely before disposal. Ensure residual paint in containers is stored safely to prevent paint spills and seepage into the ground.
TYRES	Inquire at local tyre dealers to find out who operates a take-back system where you can hand back used tyres. Do not burn or illegally dump used tyres.
MOTOR OILS	Waste oil is an organic material but may contain inorganic substances (metals) and solvents which causes damage to the environment (land and water) if not disposed of properly. Take your used oil to a recycling point, one of the City's drop-off sites or contact the Rose Foundation (www.rosefoundation.org.za) for more information.
COOKING OILS	Do not discard used cooking oil into stormwater drains or down toilets. Explore the option of donating or selling used vegetable/chip oil to reputable biodiesel processors (such as www.green-diesel.co.za or www.biogreen.co.za).





You can recycle ...



PAPER AND CARDBOARD

Flattened and folded cardboard, any paper, newspapers and magazines.



GLASS

Rinsed bottles and jars.



PLASTIC

Any bags, rinsed bottles and containers.



METAL

Rinsed food tins, cans and scrap metal.



JUICE AND MILK CARTONS

Foil-lined juice boxes and milk containers.

Zibi says ...

Separate your waste

It is not easy to recycle contaminated or dirty waste that has been mixed together. If waste is separated at the source (for example at home), it helps with the sorting and extracting of materials later in the recycling process. Start with a twin-bin system: separate your dry, recyclable waste from your other waste (which goes into the municipal bin). If you have a compost heap, compost container or worm farm for your garden waste and/or food waste, little waste needs to go to a landfill. The easiest way is to have a small container on your kitchen countertop, the contents of which is emptied onto your compost heap daily. (Cooked food should not be added to compost heaps or containers as it can create odours and attract pests.)



How to make your own compost heap:

- www.capetown.gov.za/en/Solidwaste2/Pages/Howtomakecompost.aspx



You cannot recycle ...

Please always double-check with your recycler as the list of items that are recyclable is growing.



Wet or very dirty paper or cardboard, such as used tissues, paper towels, food wrappings, paper with spills, paper plates/cups and disposable nappies.



Shiny multi-layered flexible packaging: e.g. chip packets, dog and cat food bags.

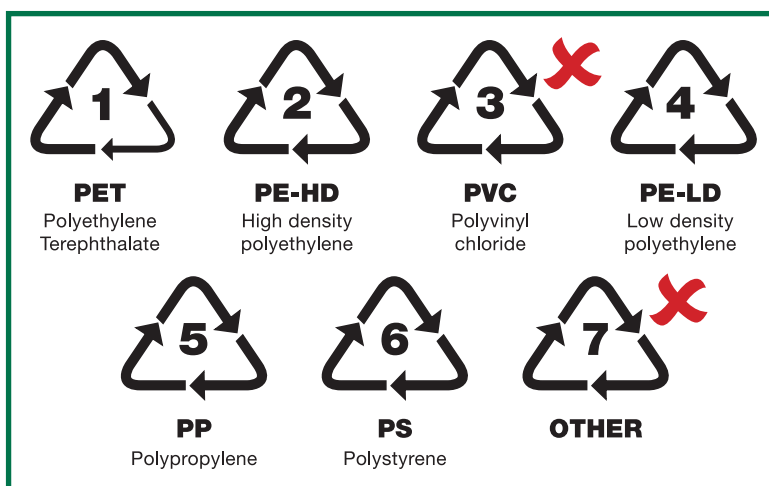


Toothpaste tubes, clear plastic food punnets, dog food bags, washing powder packets, cling wrap or any plastic packaging that does not show you the polymer identification triangle, and **any plastic with 3 or 7 in the identification triangle.**



What else?

- Chemicals, paint, motor oil, acids and solvents, compact fluorescent lamps, batteries and electronic waste (e-waste) should not be put in your normal bin, but dropped off at one of the sites listed on [page 12](#).
- Most of the drop-offs listed on [page 12](#) can take motor oil and e-waste, but not other hazardous wastes at present.
- Organic waste, food scraps, vegetable peels and garden waste should also not be put in your normal bin, but on a compost heap or in your compost container or worm farm.



Sources:

- Smart Living Handbook, www.capetown.gov.za/smartlivinghandbook
- www.wasteplan.co.za/residential-collections

Drop-off points: Where they are and what they'll take

Use this page to find out which drop-off points for waste in your area will accept a specific type of waste you need to recycle or dispose of.

CITY OF CAPE TOWN DROP-OFF SITES

	GARAGE WASTE	CLEAN GARDEN WASTE	MOTOR OIL	CANS AND METAL	PAPER	CARDBOARD	GLASS BOTTLES	PLASTIC	E-WASTE	CLEAN BUILDER'S RUBBLE	POLYSTYRENE	TETRAPAK*
ATHLONE REFUSE TRANSFER STATION Settlers Way GPS Coordinates: 33° 56' 58.65" S and 18°30'55.87" E	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✗
ATLANTIS Dassenberg Road GPS Coordinates: 33°34'23.37" S and 18°28'36.97" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BELHAR Adam Tas Road GPS Coordinates: 33°57'05.13" S and 18°38'07.35" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BELLVILLE SOUTH LANDFILL SITE Sacks Circle, Bellville GPS Coordinates: 33°55'51.28" S and 18°38'51.08" E	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
COASTAL PARK LANDFILL SITE Baden Powell Drive, Muizenberg GPS Coordinates: 34°05'46.78" S and 18°30'12.56" E	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
DE GRENDDEL Cnr 5th Ave and Bertie Genade St, Parow GPS Coordinates: 33°53'38.04" S and 18°34'35.94" E	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DELFT Fabriek Street GPS Coordinates: 33°58'42.76" S and 18°38'33.85" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
GORDON'S BAY Cnr Sir Lowry's Pass Road and Firlands Road GPS Coordinates: 34°08'54.23" S and 18°53'13.57" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
HOUT BAY Main Road, near Mandela Road GPS Coordinates: 34°01'49.90" S and 18°21'26.89" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KILLARNEY Potsdam Road GPS Coordinates: 33°49'48.86" S and 18°31'35.71" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KOMMETJIE Kommetjie Road GPS Coordinates: 34°08'06.32" S and 18°22'07.63" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
KRAAIFONTEIN INTEGRATED WASTE MANAGEMENT FACILITY Cnr Maroela and Sandringham Roads GPS Coordinates: 33°50'17.32" S and 18°44'16.95" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LADIES MILE Ladies Mile Road, Constantia GPS Coordinates: 34°01'48.26" S and 18°26'40.78" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MACASSAR Kramat Road GPS Coordinates: 34°03'34.08" S and 18°44'53.56" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MITCHELLS PLAIN Spine Road GPS Coordinates: 34°04'02.58" S and 18°35'48.36" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RAVENSMOOR Industrial Ring Road GPS Coordinates: 33°55'42.36" S and 18°36'19.36" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
RETREAT 10th Avenue GPS Coordinates: 34°03'38.70" S and 18°28'46.52" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SCHAAPKRAAL Old Schaapkraal Road GPS Coordinates: 34°02'11.4" S and 18°32'4.60" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
SEA POINT Tramway Road GPS Coordinates: 33°55'23.39" S and 18°22'56.53" E	✗	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓
SIMON'S TOWN Blue Waters Close GPS Coordinates: 34°10'45.42" S and 18°25'21.84" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TYGERDAL Orange Street GPS Coordinates: 33°53'37.38" S and 18°32'54.30" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VISSERSHOK LANDFILL SITE Frankdale Road, off N7, Tableview GPS Coordinates: 33°46'28.32" S and 18°32'41.89" E	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓
WELGELEGEN Akademie Street GPS Coordinates: 33°52'23.34" S and 18°34'9.78" E	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WYNBERG Rosmead Avenue GPS Coordinates: 34°00'17.71" S and 18°28'47.69" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
WOODSTOCK Beach Road GPS Coordinates: 33°55'23.64" S and 18°27'12.9" E	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

* Juice and milk cartons

Larger volumes of waste (garage waste, clean garden waste, clean builder's rubble) as well as domestic waste can be disposed of at Council disposal sites, as per approved tariff rates. For more information contact the Call Centre on 086 010 3089 or go to: www.capetown.gov.za/en/Solidwaste2/Documents/2010_11.pdf

E-waste: a challenge like no other

How often do you upgrade to a new cellphone or buy the latest electronic gadget on the market? Electronic waste, or e-waste, is now the fastest growing component of solid waste in the world. It poses some unique challenges that affect all of us.

The number of electronic products discarded globally has skyrocketed recently; 20 to 50 million tons of electronic products are discarded every year. If such a huge figure is hard to imagine, think of it like this: if the estimated amount of e-waste that is generated every year is put into containers on a train, the train would go once around the world!

Electronic waste (e-waste) is the fastest growing component of the municipal solid-waste stream and now makes up five per cent of all municipal solid waste worldwide. This is nearly the same amount as all plastic packaging. However, the problem with e-waste is that it is much more hazardous.

And the problem is only getting worse. Developing countries such as South Africa are expected to triple their e-waste production over the next five years.

We really do have to think twice before replacing 'old' but working technology. And when we do have e-waste that is no longer working, we need to dispose of it in a responsible way. Electronic products and appliances can be dismantled for valuable parts. These parts can be re-used in other machines or recycled as valuable metal and materials. E-waste recycling is a growing industry in South Africa and the electrical and electronic industry, as well as various recycling role players, are already involved.

For private-sector initiatives that offer and organise public e-waste collection events and regular and safe e-waste removal for businesses, please visit www.ewastealliance.co.za.



In short ...

E-waste is a growing problem, and is driven mainly by our desire to upgrade to the 'latest and greatest' technology whenever we can.



The WEEE man is a huge robotic figure made of scrap electrical and electronic equipment. It weighs 3.3 tons and stands seven metres tall – representing the average amount of e-products every single one of us throws away over a lifetime. (Image source: [Steve Mann / Shutterstock.com](http://SteveMann/Shutterstock.com))



Zibi says ...

What is e-waste?

E-waste is the umbrella term for any electrical or electronic items that we no longer want. We produce e-waste every time we upgrade our cellphones, computers, televisions, audio equipment and printers. And these upgrades are happening more frequently than ever before. Cellphones and computers are the biggest problem because they are replaced most often.



More information

- Watch the e-waste alliance movie on: www.youtube.com/watch?v=IXYq0N4kv7Q
- www.greenpeace.org/international/en/campaigns/toxics/electronics/the-e-waste-problem/
- www.pamlin.net/new/?p=483

Teaching Capetonians of all ages to be *wise* about waste

The City of Cape Town's Department of Solid Waste has a public education and awareness programme called *WasteWise*. Its aim is to raise awareness and to encourage all Capetonians to reduce littering, minimise waste, stop illegal dumping and increase recycling.

The *WasteWise* programme incorporates four focus areas:

- "Green Zone" community support initiatives
- Schools' education and waste-minimisation projects
- Public awareness and education
- Support for the implementation of by-laws in the commerce and industry sectors.

Communities

WasteWise supports the training and empowerment of community facilitators in selected pilot 'Green Zone' areas. Partnerships with communities, schools and businesses are formed. They focus on waste reduction, litter minimisation and recycling to uplift the community and maintain health and cleanliness. Green Zones are presently situated in Subcouncil 12 (Mitchells Plain and surrounds); Subcouncil 5 (Bonteheuwel, Valhalla Park and surrounds) and Subcouncil 18 (Grassy Park, Retreat and surrounds).

General Public

Zibi the ostrich forms an integral part of the *WasteWise* public education and communication campaign. Zibi spreads the message, 'Be environmentally responsible: put litter in the bin and not in the gutter and be proud of your own environment.' Zibi encourages responsible litter disposal through his message 'Zap it in a Zibi bin!' Through educational and awareness programmes, Zibi helps fight the irresponsible litterbugs.



Left: Zibi entertaining members of the public.



Right, top and bottom: Members of the *WasteWise* team working with the community.

Business and Industry

WasteWise is also tasked with supporting the implementation of the City's Integrated Waste Management By-law. In this by-law the emphasis shifts from landfill disposal to waste minimisation and recycling. This support will happen through workshops, informational support materials and other means.



Zibi says ...

Cardboard and paper are excellent materials for recycling. It takes 17 trees to make one ton of paper. If paper is recycled, it takes 40% less energy and 30% less water compared to new paper. Recycled paper products are often used to make cardboard for cereal boxes or moulded paper products, such as egg boxes.

Schools

WasteWise has an extensive schools programme that aims to:

- raise waste awareness among educators, learners and their families
- enable educators to encourage awareness and action about the cause and effects of poor waste management and the benefits of responsible waste management
- assist schools with portfolio development and waste minimisation projects
- provide environmental tools to enhance the quality of life.



Learners celebrate at the end of a WasteWise beach clean-up.



In short ...

The City's WasteWise programme aims to reduce littering, minimise waste, stop illegal dumping and increase recycling ... and Zibi is at the forefront of many of their activities!



Young and old take pride in community projects.



Zibi says ...

Recycling a glass bottle saves enough electricity to light a 100 W bulb for four hours. For every ton of glass that is recycled, we save 1,2 tons of raw materials and 114 litres of oil energy. Even more amazing: Eleven plastic bottles can be recycled into a pair of men's pants!



Watch the Zibi school show on YouTube:

<http://tinyurl.com/cjaej8b>



More information about WasteWise:

- <http://tinyurl.com/bt6ezey>

What *you* can do to reduce waste

You can make a big difference to your pocket and the planet by becoming wise about waste. But then you will need to start thinking – and acting – dramatically differently when it comes to waste. Are you up for the challenge?

The process below shows how you can reduce the amount of waste you produce to a minimum. If you act early in the process, your effect will be greater. So don't settle for doing the bare minimum!



1
Rethink
avoid producing
waste in the
first place



2
Reduce
minimise the
amount of
waste you
do produce



3
Re-use
use items as
many times
as possible



4
Recycle
recycle what
you can only
after you have
re-used it



5
Dispose
dispose of what's
left in a
responsible way

WHAT?	WHY?	HOW?
 1 Rethink avoid producing waste in the first place	<i>RETHINK</i> is a key addition to the traditional waste-management approach that asked us to reduce, re-use and recycle waste into resources. It is the only way we can 'get the big picture' of why we are producing so much waste ... and therefore the best way to start changing the root causes of waste. See page 5 to understand why we need to take a step back and <i>RETHINK</i> our approach to consumption and our economy. Annie Leonard's popular videos <i>The Story of Stuff</i> and <i>The Story of Change</i> explore how we can <i>RETHINK</i>.	If we <i>RETHINK</i>, we pause and consider the impact of our actions and decisions on the environment and communities around us. To <i>RETHINK</i> implies that we question and adapt our current ways of thinking and doing. It implies that we change our behaviour not only to minimise the negative impact, but also to bring about a positive impact. To <i>RETHINK</i> often means to innovate and to think outside the box.

WHAT?	WHY?	HOW?
 2 Reduce minimise the amount of waste you do produce	The best thing we can do for resource efficiency is to use less. To REDUCE waste involves stopping waste and pollution before it starts: use less in the first instance – whether it is paper, energy, packaging or any other resource. To REDUCE our consumption we can choose products with less packaging and material to REDUCE the waste we produce and the need to recycle or dispose. Questions such as, ‘Do I really need this?’ or ‘Can I borrow this item instead of purchasing a new one?’ or ‘What is the life span of this product?’ and ‘How can I re-use or repair what I need?’ can help you REDUCE waste.	• Buy in bulk. This gives you more ‘product’ and less packaging. • Buy local produce which requires less packaging to keep fresh and less transport. • Choose returnable or re-usable containers and buy refills and concentrates. • Choose durable products that last, rather than products that soon need to be replaced. • Choose fresh, unprocessed products (such as fresh fruit instead of canned fruit). It’s usually healthier, too! • Avoid over-packaged products such as plastic-wrapped food on polystyrene trays..
 3 Re-use use items as many times as possible	There are many innovative ways in which products we use can have a second life and serve our community again through RE-USE. This includes unwanted and RE-USABLE items such as stationery, sturdy plastic or glass containers, office supplies and books, as well as clothes and shoes.	• RE-USE a product as many times as possible. • Donate used clothes, furniture, toys and books to charities. • Donate ‘waste’ items to schools for art projects, for example toilet roll cores, egg boxes and jars. • Buy glass bottles in sizes and brands that can be returned to shops for deposits and RE-USE.



Zibi says ...

Reduce your household waste by composting your food scraps and separating out your dry packaging waste (bottles, plastic, and so on) and taking this down to your local drop-off site (see [page 12](#) for the one nearest you). If you are fortunate to live in an area where the City provides free weekly collection of your dry recyclables as part of its Think Twice programme, be sure to make use of this convenient service.



In short ...

*By following the process outlined in this section, namely to **RETHINK**, **REDUCE**, **RE-USE**, **RECYCLE** and only then to **DISPOSE**, we can make a huge difference to our planet's well-being – and to our pockets!*



Sources and more information:

- www2.lse.ac.uk/intranet/LSEServices/LSEFacilitiesGuide/recyclingAndEnvironment.aspx

WHAT?	WHY?	HOW?
 4 Recycle recycle what you can only after you have re-used it	To RECYCLE waste into new resources reduces the input (energy and raw materials) as it replaces, or at least decreases, the need to extract and use raw material for the production of new goods. Therefore, it also reduces the amount of waste for disposal. RECYCLING gives us one more chance to divert waste from landfills. Some materials, such as aluminium, can be recycled indefinitely as there is no change in the quality of the material when it is recycled over and over again. Other RECYCLED materials, such as paper, may require a percentage of raw materials (wood fibres) to be added to compensate for the degradation of the recovered material.	• Separate waste at home to recover organic waste, plastic, glass, cans, paper, cardboard and cartons. • Take plastic, glass, cans, paper and cardboard to your local drop-off point (see page 12). • Make compost at home with your garden and kitchen organic waste (except for cooked scrap food, which can attract pests). Garden waste can be composted in a traditional compost heap, garden and kitchen organic waste (fruit and vegetable scraps) can be composted in a composting container, or fed to your worm farm, which turns them into compost and liquid plant fertiliser. Contact details of suppliers can be found at www.urbansprout.co.za/ubergreen-organic-eco-directory • Find out about recycling collection programmes, as well as city-managed and private drop off sites in your area, and decide which is most appropriate for your recycling needs. Some useful information and contact details of drop off sites and recyclers is available on page 12 and at www.capetown.gov.za/solidwaste under the menu items "Drop off sites" and "Recycling Facilities".
 5 Dispose dispose of what's left in a responsible way	Once we have re-used, recycled and recovered everything we could and there is absolutely no further use for something, we need to DISPOSE of our remaining waste in a responsible way. Irresponsible behaviour such as littering, dumping, burning or burying waste can be harmful to the environment. It also looks ugly, and is uncaring and disrespectful to others. Littering and dumping also costs money to manage (to clean up, transport and DISPOSE of correctly) – money that we all pay in the form of rates and taxes.	• Make sure that your wet waste is placed in your municipal bin for collection. • Check the information on the pull-out poster on page 9 to make sure that you do not put any hazardous waste (such as paint, chemicals or CFL light bulbs) in your bin. • Ensure that you put your bin out for weekly collection and that you regularly wash out your bin. Old waste can make your bin stink and turn it into a health hazard to you and your family.



Zibi says ...

With a little bit of creativity, 'waste' can be turned into functional and beautiful items. For example, this attractive wall clock has been made from e-waste such as motherboards and hard drives. Before you just throw away something, ask yourself what completely new item you could possibly create with your 'waste'.





WIN!

If you are under 18, share your creativity with us and stand to win a prize for yourself and your school!

HOW IT WORKS:

Create an A3 or A4 size poster to make people aware of the need to be wise about waste.

HOW TO ENTER:

E-mail your entry to:

enviroworks@capetown.gov.za with 'Poster competition' in the subject line.

Post your entry to:

Enviroworks Poster Competition: WASTE, c/o Michelle Preen, Environmental Resource Management Department, PO Box 16548, Vlaeberg, 8018.

Deliver your entry to:

Michelle Preen, Environmental Resource Management Department, 6th floor, 44 Wale Street, Cape Town.

Remember to add your name, age, contact number and the name of your school.

MAIN PRIZE

Child: Gift voucher for either a fully refurbished PC unit or a laptop up to the value of R2 000 redeemable at one of the Just PC's retail stores.



School: 10 books for the school library (five copies of 'Factopedia' and five 'Queen of Green' environmental storybooks).

OTHER PRIZES

- 10 runners-up will each receive a book and a Zibi book bag.



Rules:

- The competition closes on 30 April 2013.
- Participants must be under the age of 18 years for their category on the closing date.
- All posters must be children's own work.
- Only two posters per child will be allowed.
- The City of Cape Town reserves the right to publish or use all posters, with acknowledgment of the artist.
- Prizes cannot be exchanged and there is no cash option.
- The judges' decision will be final and no correspondence will be entered into.
- An entry implies adherence to these rules.
- E-mailed entries should be in jpeg format and maximum 1 MB in size but should be available in higher resolution on request.
- Please remember to include your name, age, contact number and school if you are e-mailing entries.
- Receipt of entries will not be confirmed.

The closing date for entries is 30 April 2013.



Save money and save the planet with homemade products

By using eco-friendly, everyday products such as water, lemon, vinegar and bicarbonate of soda around the home – rather than expensive store-bought chemicals, you can further reduce your waste ... and save quite a bit of money!



Kitchen / Bathroom cleaning

1. Sprinkle bicarbonate of soda on the surface of your oven and leave it overnight. Wipe with a clean cloth the next day.
2. Mix one tablespoon of bicarbonate of soda with water. Pour it in cups that are stained. Leave it for half an hour. Rinse well.
3. Burnt pots and pans: Pour vinegar and bicarbonate of soda in the pot. Bring it to boil. Let it stand for a while. The burnt part will flake. Remove it by washing in warm water with soap.
4. Cut a lemon in half and rub it on taps and washbasins, it will give the taps and basins a shine. Rinse with clean water.
5. Heat up lemon slices in the oven or microwave oven before you clean it. The steam will remove the dirt and it will leave a citrus smell in the air.
6. To remove stains and smells from a flask, mix a handful of salt with hot water and pour it in the flask. Leave overnight and rinse thoroughly the next day with warm water.
7. Brooms and brushes: Mix a strong solution of salt water. Dip the brushes/ hair of brooms into the mixture and leave overnight. Air dry the next day and brushes/hair will be firm again.
8. Put a quarter cup of bicarbonate of soda into the toilet bowl. Leave for about 30 minutes and clean with a brush.



Removing bad odours

1. Sprinkle bicarbonate of soda on your carpets and leave for a few minutes. Vacuum thoroughly afterwards. This will remove bad odours.
2. Leave a cup of bicarbonate of soda in your cupboards or fridge to absorb bad odours.
3. Fill a glass jar three quarters with bicarbonate of soda. Add 6 to 8 drops of essential oils of your choice. Press a



few holes in the lid of the jar, screw it back on the jar. Use it as air freshener. Shake the jar now and then.

4. Leave brown sugar and cloves in a pudding bowl. This will absorb cigarette smoke odours from a room.
5. Cut a lemon in half and leave it in the fridge to remove bad odours.

Furniture and Windows

1. Make your own furniture polish: Mix a quarter cup of vinegar or lemon juice and half a tablespoon of olive oil. Rub the mixture with a clean cloth on your furniture. You can also add essential oils.
2. Sprinkle salt on any dark wood to remove water stains. Leave overnight. Wipe with a clean cloth.
3. To clean windows and mirrors: Mix two teaspoons of vinegar with 500 ml of water. Use a spray bottle and spray on windows/mirrors. Rub/dry with newspaper. You can also add lemon juice.

Health / Beauty / Clothing

1. Remedy for dandruff: Mix a half a cup of vinegar and one tablespoon of bicarbonate of soda. Rub it on your skin and leave for two minutes. Rinse well with lukewarm water.
2. Remedy for nausea: Mix a tablespoon of bicarbonate of soda, a little vinegar, half a tablespoon of sugar, and half a glass of water together. Stir quickly and drink immediately.
3. Relax in a bath: Add coarse salt to bath water. It will help to relax your muscles.
4. Remedy for eczema: Mix bicarbonate of soda with your washing powder instead of using commercial softener. Wash clothes in lukewarm water, it will make your washing whiter and won't irritate your skin.
5. Use borax instead of bicarbonate of soda to remove stains on clothes.
6. Give your black shoes an extra shine by rubbing them with lemon juice. Brush thoroughly.

PLEASE NOTE:

The hints and tips presented here are done so in good faith. The City of Cape Town and its associated service providers cannot be held responsible for any injuries or claims resulting from use or misuse of the tips or ingredients contained herein.

These tips were put together by WasteWise community facilitators (see [page 14](#) for more information about these facilitators). Excellent ideas by the people, for the people!



Sources and more information:

- City of Cape Town, Smart Living Handbook (4th edition), May 2011, www.capetown.gov.za/smartlivinghandbook