CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

SMART LIVING AUDIT GUIDE FOR YOUR HOME

Making progress possible. Together.

This Smart Living Audit Guide for your home was developed by the City of Cape Town as part of the City's Smart Living Campaign.

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Every effort has been made to ensure the accuracy and quality of information in this document at the time of development. The City cannot be held responsible and will not be liable for any errors or omissions contained herein.

If you have any comments, suggestions or updates, please send an e-mail to lindie.buirskie@capetown.gov.za.

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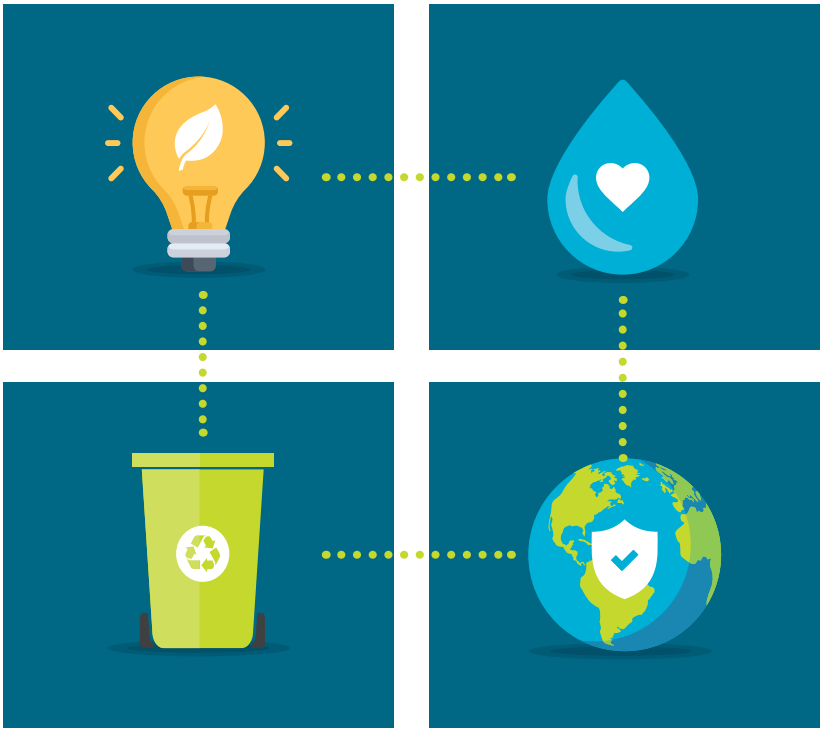
INTRODUCTION

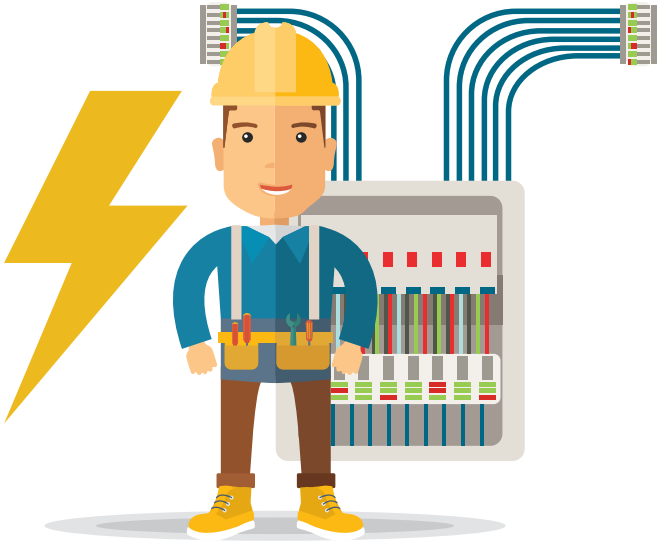
As an owner or manager of a home, you will have to manage your household. This will have implications because people in your household are using resources such as water and energy. We furthermore have a responsibility because our actions have an impact on our environment, leading to challenges such as climate change and loss of resources. If your house is set up as resource efficient as possible, you will be able to keep costs down. This guide can assist you in what to do around your home – saving resources and money.




THE ABILITY
TO SIMPLIFY
MEANS TO
ELIMINATE THE
UNNECESSARY
SO THAT THE
NECESSARY
MAY SPEAK.
- HANS HOFMANN

ENERGY EFFICIENCY

With rising energy costs, it is important to ensure that your home is as energy-efficient as possible. The following actions are recommended to help you save electricity.



1. MEASURE YOUR IMPACT

Do an energy audit to determine where most of your energy is being used – you need to understand which appliances in your home use the most electricity. Ensure you are on the correct electricity tariff that suits your needs.

The following list provides an overview of the average power usage of different appliances and the average number of hours they are used per day.

Appliance	Power use	Ave hrs / day	Units / day
Electric geyser	2 600 watts	4,4 hours*	11,44 units
Electric stove	3 000 watts	2 hours	6 units
Steam iron	1 250 watts	0,8 hours	1 unit
Microwave oven	1 230 watts	0,8 hours	0,98 units
Toaster	1 010 watts	0,8 hours	0,8 units
Fridge with freezer	160 watts	5 hours*	0,8 units
Kettle	1 900 watts	0,3 hours	0,57 units
Vacuum cleaner	1 000 watts	0,5 hours	0,5 units

**It switches on and off to maintain a constant temperature, so it works for a few hours in a day.*

TIP: Keep track of your electricity consumption in units or kilowatt hours (kWh) and rand value.

2. SELECT THE RIGHT LIGHT

Lights use a lot less energy than appliances but are generally switched on for longer periods; keeping a check on this is an easy way to reduce consumption.

Remember that you pay every time you switch the light on, not just when you buy the light. This means that it is important to buy the right light, even if it costs a bit more initially. While incandescent lights are usually the cheapest on the shelf, they use a lot of energy. Make sure you select the most energy-efficient light. It is best to buy LED lights (light-emitting diodes) or maybe CFLs (compact fluorescent lights), but avoid halogen or incandescent lights.

The table below provides a quick overview of different types of light bulbs, with average lifespan, consumption and energy rating.

Incandescent	Halogen	CFL – compact fluorescent light	LED – light-emitting diode
			
1 000 hours	2 000 hours	6 000 hours	20 000 hours
60 watts	70 watts	11 watts	9 watts
Energy rating E	Energy rating D	Energy rating A	Energy rating A+
Cheap when you buy it, but expensive to switch on.	Says it is eco, but still very energy intensive!	Quite efficient, but contains mercury vapour. Dispose of with care.	More expensive to buy, but most efficient to use.
R35 per lamp	R20 per lamp	R30 per lamp	R30 per lamp
R185 per year	R160 per year	R31 per year	R21 per year
AVOID	**AVOID**	**GOOD OPTION**	**BEST OPTION**

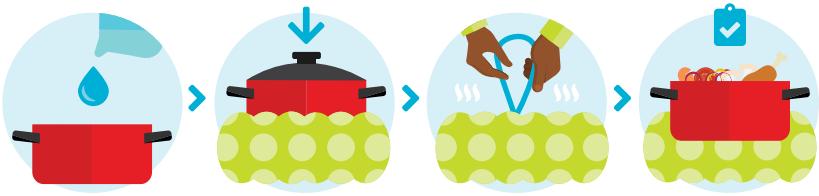
TIP: If the light gets very hot, it is using more energy and costing you **more money**.

Dichroic halogen downlight (GU10)	LED downlight (GU10)	Halogen security light	LED security light with motion sensor
			
1 000 hours	20 000 hours	2 000 hours	20 000 hours
50 watts	5 watts	250 watts	10 watts
Energy rating E	Energy rating A+	Energy rating D/E	Energy rating A+
Cheap when you buy it, but expensive to switch on.	More expensive to buy, but most efficient to use.	Cheap when you buy it, but expensive to switch on.	More expensive to buy, but most efficient to use.
R30 per lamp	R30 per lamp	R200 per lamp	R250 per lamp
R156 per year	R13 per year	R689 per year	R43 per year
AVOID	**GOOD OPTION**	**AVOID**	**GOOD OPTION**

3. COOK SMART

Cooking can use a lot of energy, so it is important to be as efficient as possible and when possible, **use your Smart Cooker** (also known as a Hotbox or Wonderbag).

HOW IT WORKS:



Boil it | Bag it | Stand it | Serve it

A Smart Cooker is an insulated container in which you place a cooking pot for slow cooking. Food is cooked for a third of the normal time on a stove or other heat source. Then it is put into the Smart Cooker where it cooks slowly for several hours, using no electricity, gas, paraffin or wood.

Benefits include better quality meals, saving energy costs, while providing a safe and easy way to cook. Your Smart Cooker can also keep food either hot or cold for up to 12 hours.

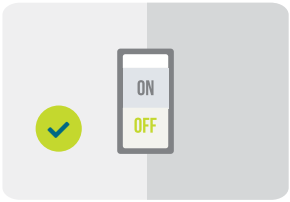
TIP: Consider getting an **induction or gas stove**, which is much more efficient than a standard solid-plate stove.

4. SELECT ENERGY EFFICIENCY

Most light bulbs and appliances should have an energy rating. **Select lights or appliances that have an A or A+ rating**, while avoiding energy-intensive lights and appliances.

5. SWITCH OFF

Remember to **switch off lights and appliances** when not needed, and encourage your guests to do the same (display simple signage).



6. TIPS

The following tips can also assist you in **saving energy at no cost:**

- Keep the fridge door closed.
- Only set the freezer temperature as low as needed.
- Check the seals of your fridge and freezer, and regularly clean the condenser and coils.
- Regular maintenance will help ensure that your appliances work at optimal efficiency.
- Regularly defrost your freezer and fridge.
- Use pots with flat bottoms and tight-fitting lids.
- Keep the lid on the pot when cooking.
- When boiling water, rather use an electric kettle instead of a pot on the stove.
- Boil only the amount of water you need, instead of boiling a full pot or kettle.
- Open the curtains to use natural daylight instead of switching on the light.
- Provide guests with additional blankets or a hot water bottle instead of a heater.
- Seal gaps around doors and windows to keep out the cold air.
- Use a light-coloured paint that will reflect light.
- Set your geyser to between 55 and 60 degrees Celsius.
- Select the most energy-efficient appliances.
- Measure your impact.

TIP: Visit **www.savingelectricity.org.za** to explore more ideas on how you can save electricity and money in Cape Town. From savings tips, to solar water heaters, to solar panels – this handy website has everything you need to know.

The following **low-cost interventions** can help you save energy:

- ☑ LED or CFL lights.
- ☑ Install a low-flow shower head.
- ☑ Install a timer for your geyser.
- ☑ Install motion-sensor security lights.
- ☑ Insulate your geyser and its pipes.
- ☑ Use an insulation cooker, also known as a Smart Cooker, Hotbox or Wonderbag.
- ☑ Make sure you seal off all the draughts in doors and windows to keep the cold air out during winter.

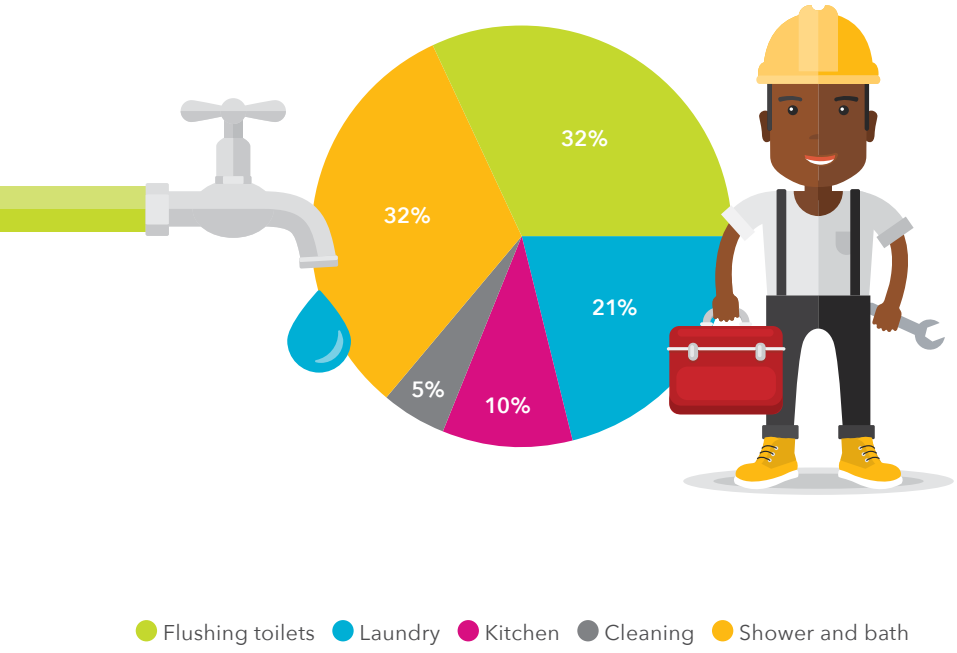
If you can afford to make an **investment to save energy**, consider the following options:

- ☑ An induction stove.
- ☑ A solar water heater or heat pump for heating water.
- ☑ Installation of a skylight to lighten up dark areas of the home.
- ☑ Installation of roof insulation to keep the home warmer in winter and cooler in summer.

WATER CONSERVATION

It is anticipated that Cape Town will receive less rainfall in future due to the impact of climate change, and thus it is important for everybody to help save water.

THE CHART BELOW INDICATES HOW THE AVERAGE HOUSEHOLD SPENDS ITS WATER:



The following actions are recommended to help you save water at your home:

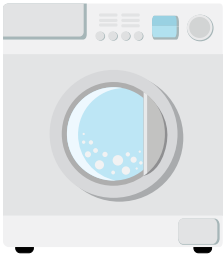
1. CHANGE YOUR SHOWERHEAD

Switch to an **efficient showerhead** which uses no more than 10 litres per minute, as per the City's Water By-law. While a bath could require around 80 litres of water, a three-minute shower with an inefficient showerhead needs 54 litres, but can be as little as 30 litres with an efficient showerhead.

2. CLOSE THE TAP

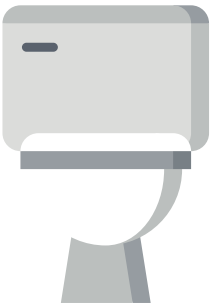
Ensure that you use a cup and **close the tap** while brushing your teeth or shaving.

3. LOAD YOUR LAUNDRY



Wait for a **full load** before running your washing machine. The rinse water of some washing machines can be reused for the next wash cycle or for watering the garden.

4. TAPS AND TOILETS

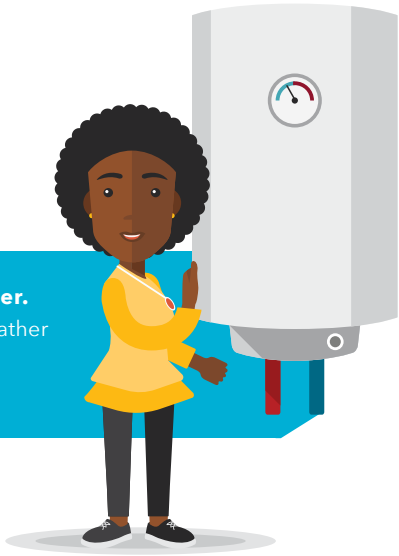


Ensure that your taps and toilets are **water-efficient**. Fit aerators or flow restrictors to reduce flow to no more than 6 litres per minute, as per the City's Water By-law. Toilets need to be a maximum of 9,5 litres per flush.

5. FIND AND FIX LEAKS

Make sure that you know where your **water meter** is and how to read it. Keep track of the amount of water you use each month. **Find and fix any leaks.**

THINKWATER
CARE A LITTLE. SAVE A LOT.



TIP: Visit **www.capetown.gov.za/thinkwater.** Cape Town is in a water scarce region and weather patterns remain uncertain. We all should **THINK WATER** and use water responsibly.

6. TIPS

The following tips can also assist you in **saving water at no cost:**

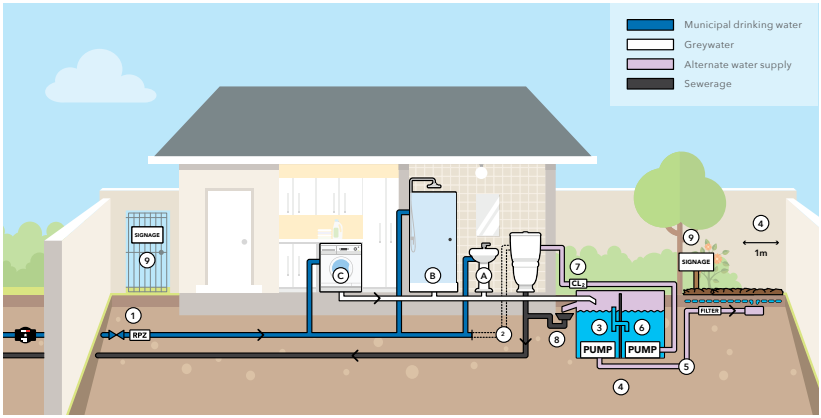
- ☑ Find and fix leaking taps and toilets.
- ☑ Ensure that you have a full load in your washing machine.
- ☑ Use a basin of water when you rinse dishes or vegetables, rather than cleaning them under a running tap.
- ☑ Defrost frozen foods in the fridge or at room temperature rather than placing them under running water.
- ☑ Collect and reuse water from the tap while waiting for the water to heat up or cool down.
- ☑ Close the tap while brushing your teeth.
- ☑ Use a broom rather than a hosepipe to clean paved areas.
- ☑ Do not water your garden between 09:00 and 16:00 or when it is windy.
- ☑ Set your geyser to between 55 and 60 degrees Celsius and ensure that you switch it off when you go away for a long period.
- ☑ Encourage guests to save water through displaying simple signage.
- ☑ Place a water displacement device (i.e. litre bottle) in toilet cistern.
- ☑ Monitor the amount of water used at your home and check for leaks.
- ☑ Ensure that you know where your water meter and stopcock are in case of an emergency.

The following **low-cost interventions** can help you save water:

- ☑ Tap aerators.
- ☑ Flow restrictors.
- ☑ Low-flow or water-efficient showerheads.
- ☑ Water-wise gardening.
- ☑ Permeable paving to ensure that water does not simply run off into stormwater drains.

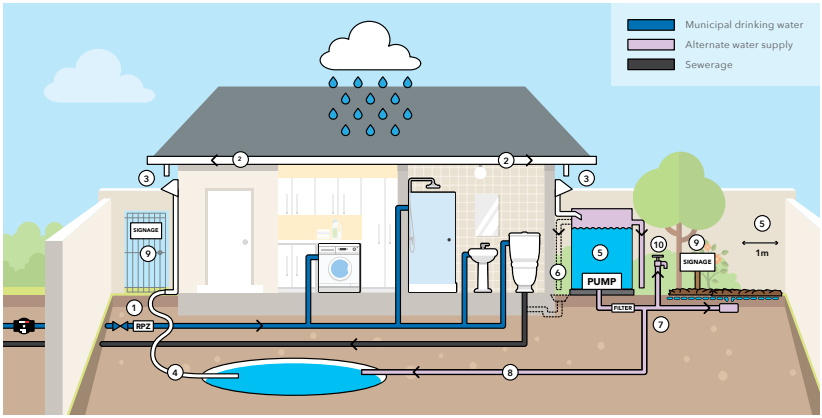
If you can afford to make an **investment to save water**, consider installing a greywater system, rainwater harvesting system or dual-flush toilet system. See the diagrams on the next page for more details.

GREYWATER SYSTEM FOR IRRIGATION AND TOILET FLUSHING



1. Municipal drinking water supply into property fitted with a Reduced Pressure Zone (RPZ) valve back-flow preventer (mandatory).
2. Municipal water supply to cistern must be disconnected.
3. Collection, settlement and filtration of greywater in storage tank/s. All tank installations must comply with national building regulations, SANS 2001-CC2 and manufacturer's specifications. Greywater water must be used within 24 hours. Ensure empty storage tank when going away for longer than 24 hours.
4. Any underground tank installation must be at least 1 m away from the boundary wall and comply with national building regulations.
5. Screen-filtered greywater for drip/subsurface irrigation, under a thick layer of mulch. Not sprayed for health reasons and to reduce evaporation.
6. Collection, disinfection and distribution of greywater in second part of the storage tank.
7. Filtered and disinfected greywater for toilet flushing, using an in-line chlorinator (or equivalent).
8. Storage tank overflow to sewer.
9. Official signage must be weatherproofed, and placed in main thoroughfare e.g. at entrance and at points of use to warn people not to drink this water.

RAINWATER SYSTEM FOR OUTDOOR USE



1. Municipal drinking water supply into property fitted with a Reduced Pressure Zone (RPZ) valve back-flow preventer. Currently not mandatory for systems where there is no connection between the alternative water and municipal drinking water supply. However, it is strongly recommended, as many want to plumb it into the building for indoor use in future and possible contamination to be avoided.
2. Rainwater channeled to storage tank via gutters.
3. Debris diverted by sloped screen.
4. Rainwater for topping up pool or other outdoor use, directly from gutters using gravity feed, via e.g. flexible plastic sleeve (this is one option, and from a tank is another option).
5. Collection of rainwater in storage tank. Installation of tanks can be below or above ground, but must comply with national building regulations, SANS 2001-CC2 and manufacturer's specifications. Any underground tank installation must also be at least 1m away from the boundary wall.
6. Storage tank overflow to stormwater. If rainwater is treated with any chemicals then the overflow must be discharged to the sewer.
7. Rainwater for drip/subsurface irrigation, under a thick layer of mulch, vehicle washing and/or hard surface cleaning.
8. Rainwater for topping up pool. Pool cover as per requirements of water restrictions.
9. Official signage must be weatherproofed, and placed in main thoroughfare e.g. at entrance and at points of use to warn people not to drink this water.
10. This water is not for drinking, cooking or ablution. Preferably, make it a 'demand' tap so that nobody drinks from it or wastes water from it.

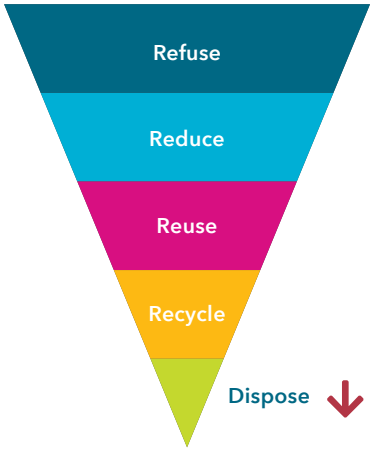
WASTE REDUCTION

The principle of refuse, reduce, reuse and recycle needs to become a way of life, where a closed-loop system rather than a linear system is implemented. The following actions are recommended to help you reduce waste to landfill.

1. REDUCE, REUSE AND RECYCLE

The **waste management hierarchy** on the right indicates that the first option is always to consider how to **reduce** the amount of waste created, then to see what can be **reused**. If this can't be done, then ensure that it is **recycled**, or as a last option **safely disposed** of.

This sequence is very important to help reduce the amount of waste that is created.



2. SEPARATE AT SOURCE

To reduce the waste to landfill it is important to have at least a split-bin system in place – one bin should be allocated to mixed recycling, while the other should be used for waste to landfill (rubbish). A third bin for organic waste from the kitchen and garden is highly recommended for composting purposes.

The following items **CAN** generally be recycled:

- ✓ Plastic bottles and containers
- ✓ Glass bottles
- ✓ Food cans
- ✓ Plastic bags
- ✓ Drinking cans
- ✓ Paper

The following items are generally **NOT recyclable**.

- Dirty paper or cardboard: pizza boxes
- Foil packets: chips packets
- Cigarette butts
- Clingwrap used to cover food
- Plastic coated or wax packaging: milk cartons, dog food bags, potato bags
- Some types of paper: carbon paper, stickers, self-adhesive paper, chemically treated fax or photo paper
- Wet or dirty paper: tissues, paper towel, food wrappings, used paper plates and cups

Ask yourself – ***will it "contaminate or spoil" the other recycling?*** If the answer is yes, then rather place it in the rubbish bin and not with the recycling.

TIP: Try to **wash and squash** the items so that they are clean and take up less space.

3. COMPOSTING

We get our food from the earth, and we need to give back to earth again. This can be done through making compost from organic waste in the kitchen and garden.

You can collect organic waste from your kitchen in a counter top container.

You can add:

- Fruit peels and pips
- Vegetable peels and off-cuts
- Rotten fruit or vegetables
- Leftover salads/leaves
- Tea bags/coffee granules
- Egg shells (crushed)
- Dead flowers (cut up)
- Kitchen towels (torn up)
- Outdated spices

Avoid the following products.

- Oil/fat/grease
- Dairy/cheese/milk
- Meat/chicken/fish
- Leftover cooked food
- Bones
- Plastic/clingwrap
- Metal/tin/glass
- Wax paper
- Glossy magazines
- Diseased plants
- Weeds/pesticides

4. HAZARDOUS WASTE

The following items are hazardous and should not be placed in your normal bin, but disposed of safely in line with local legislation.

- Compact fluorescent lights (CLFs) – they contain mercury vapour
- Batteries – they contain dangerous chemicals
- Electronic waste – anything with a battery or a plug
- Motor oil – this should be dropped off at a petrol garage
- Cooking oil – this can go into your garden
- Old paint or chemical containers

For more information, visit the Smart Living Handbook.

5. ALTERNATIVE CLEANING PRODUCTS

Consider using natural cleaning products instead of buying harsh chemicals that are expensive. More information is available in the Smart Living Handbook.

Avoid hazardous household products by looking for these words on the container or label:

- Non-toxic
- Non-petroleum-based
- Free of ammonia, phosphates and dyes
- Biodegradable
- Ozone-friendly
- Reusable and recyclable
- Enzyme-active
- Organic

6. TIPS

These tips can also assist you in **reducing waste at no cost:**

- Reduce the amount of waste recycled.
- Reuse items whenever possible – repair instead of replacing items.
- Recycle glass bottles and jars, plastic bottles and containers, plastic bags, drinking cans, food cans and paper.
- Start a composting heap at your home with organic waste from your kitchen and garden.
- Serve smaller portions and offer second servings to reduce left-over food.

The following **low cost interventions** can help you reduce your waste to landfill.

- Try to use alternative cleaning products that are healthy for your family and the environment.
- Buy refills and concentrates instead of using disposable items.
- Take a reusable shopping bag along instead of just getting plastic bags.
- If you provide take-away meals, consider using biodegradable packaging or paper bags instead of polystyrene.

BIODIVERSITY PROTECTION

Our natural environment includes rivers, wetlands, coastlines, mountains as well as all the life on earth, such as plants, animals and birds. When one part weakens, or disappears, every other part within this complex web is affected.

TIP: Visit **www.capetown.gov.za/smartliving** to find out more about greener living and making better choices that benefit us and help save our planet.

1. LOCAL IS LEKKER

By planting indigenous and water-wise plants you ensure that you have plants that are most suitable to the local climate and most likely to survive the weather and rainfall patterns. These can include trees, shrubs, herbs and ground covers. Succulents such as vygies or sour figs are easy to propagate – you simply need to cut a side branch and stick it into the damp ground and it can grow!

2. GROW YOUR OWN HERBS AND VEGETABLES

If you start your own herb or vegetable garden you can provide your family and guests with fresh produce at nominal cost. This does not need to take up a lot of space, but could be a lovely way to brighten up your home.

Your garden can either be in the soil, or you can do container gardens. There are also lovely examples of vertical gardens that take up very little space, look lovely and provide fresh herbs.

3. COMPOSTING

Using compost in your garden binds the soil, increases nutrients and helps it to hold water and air. As a result, your plants will grow better. Turning your organic waste into compost also takes some of the pressure off Cape Town's landfill sites.

4. GARDEN BIRDS

In winter there are fewer flowers, berries and insects for local birds to eat. You can help supplement their food supply by setting up a bird table in your garden where they can feed. It is also important to provide water for birds in the dry summer months.

Some foods can be scattered on the ground (e.g. bread and fruit) but others need to be put in some sort of container or feeder. You can make your own feeder or buy one from a pet shop, supermarket or hardware store.

BASICS OF CREATING A SMART HOME

1. DO AN ECO-AUDIT

It is important to do an eco-audit, because it gives you a snapshot of the current situation and can help you determine what needs to be done at your home and where savings can be made in the future. This can be done by filling in the eco-audit form at the start of the process and again at a later time to do a comparison.

2. IF YOU CAN'T MEASURE IT, YOU CAN'T MANAGE IT

Ensure that you keep track of the following for at least six months:

- ☑ **Electricity** – monitor the units **(kWh)** and the **rand value** you spend each month
- ☑ **Water** – monitor the **kilolitres** and the **rand value** you spend each month
- ☑ **Waste** – consider how much waste you generate each week and how much of that can rather be recycled or be used to make compost

If you keep track of your expenses you will gain a better understanding of your home and what areas you need to focus on first. Remember that some things are linked, such as an efficient showerhead that can save both water and electricity due to the reduced consumption.

3. COMPILE AN ACTION PLAN

The audit sheet can spark ideas of what still needs to be done at your home. You can then decide what the main priorities are at your home. At the end of the audit sheet, you need to indicate the most important things.

A) **List the five most important actions** that you need to do at your home. Try to be as specific as possible with practical things, such as installing a solar water heater.

B) **Link these actions to a timeframe**. When do you want to do this? Next week, or next month or by next year? Some things take longer than others, so be realistic.

C) Identify **what you will need** to make this happen and how you aim to do this. This could be saving money to buy something, or working with the local community.

A **SMART action plan** needs to be specific, measurable, attainable, relevant, and time-based. These principles can help you reach your goals.

4. ENGAGE WITH GUESTS

Remember that this is a journey and you need to engage with your guests to explain what you are trying to achieve and why they can assist you in achieving your goals.

Remember that sustainability is a journey, not a destination!

SMART LIVING HOME AUDIT

Answer the following questions to assess how smart your home is, and make a list of the most important things that you need to do at your home.

1.	Energy efficiency	Points	
1.1	**Do you have energy-efficient lights in your home?** Select one.		
	Mostly LED lights	5	
	Mostly compact fluorescent lights (CFLs)	4	
	Some energy-efficient lights (LED and CFLs)	3	
	Still using incandescent or halogen lights	0	
1.2	**Do you use a Smart Cooker (Hotbox or Wonderbag)?** Select one.		
	I use it almost all the time	4	
	I use it about once a week	3	
	I use it only once a month	1	
	I have one, but don't really use it	0	
1.3	**Do you measure your impact?** Select one.		
	I keep track of my monthly consumption in kilowatt hour units (kWh) and rand value. I know exactly how much energy I use	4	
	I sometimes keep track of electricity consumption, but generally know how much I use	3	
	I just buy electricity when I need it and am not sure how much I use	0	
1.4	**Do you switch off lights and appliances that are not needed?**		
	I always switch off and I encourage guests to switch off by displaying signage in their rooms	4	
	I sometimes switch off, but also forget sometimes	3	
	I just leave the lights on	0	
1.5	**I do the following around the house to save energy.** You can get a point for each of the following activities.		
	I remember to close the fridge door	1	
	I set my freezer to the optimal temperature	1	
	I regularly check the seals on my fridge and freezer	1	
	I do regular maintenance on my appliances to ensure that they work at optimal efficiency	1	
	I defrost my freezer/fridge regularly	1	

1.	Energy efficiency	Points	
	I use pots with flat bottoms and tight-fitting lids	1	
	I keep the lid on the pot when cooking	1	
	I use an electric kettle rather than a pot when boiling water	1	
	I only boil the water needed instead of a full pot or kettle	1	
	I open the curtains to use natural daylight instead of switching on the light	1	
	I provide guests with additional blankets or a hot water bottle instead of a heater	1	
	I have sealed the gaps around my doors and windows to keep out the cold air	1	
	I use light-coloured paint in the rooms that reflect light	1	
	I set my hot water geyser to between 55 and 60 degrees Celsius	1	
	I select the most energy-efficient appliances when buying new appliances	1	
	I have motion-sensor or day-night sensor security lights that only switch on when they are needed	1	
	I have a low-flow showerhead	1	
	I have insulated my geyser and pipes	1	
	I have a timer on my geyser to ensure that it switches on and off at certain times	1	
	I use an induction or gas stove instead of solid plate or spiral electrical stove	1	
	I have a skylight in my home to lighten up dark areas	1	
	I have a solar water heater or heat pump for heating water	1	
	I have roof insulation to keep the house warmer in winter and cooler in the summer	1	
TOTAL SCORE		40	

ACTION

I can save energy by doing the following at my home:

2.	Water conservation	Points	
2.1	**Do you have a water-efficient showerhead?** Select one.		
	Yes – it uses less than 10 litres per minute	4	
	No – I don't have a shower, just a bath	2	
	No – I have an old and inefficient showerhead	0	
2.2	**Do you wait for a load of washing?** Select one.		
	Yes, I do a full load of washing and use any water that is left over in my garden or home	4	
	Yes, I only do a full load of washing	3	
	I sometimes use rainwater for doing laundry	2	
	I sometimes just do half a load of washing	1	
	I don't really care and just do washing when I need to	0	
2.3	**I do the following around the house to save water.** You can get a point for each of the following activities that you do at home.		
	I find and fix leaking taps and toilets	1	
	I use a basin of water when I rinse dishes or vegetables rather than rinsing them under a running tap	1	
	I defrost frozen foods in the fridge or at room temperature rather than placing them under a running tap	1	
	I collect and reuse water from the tap while waiting for the water to heat up or cool down	1	
	I always close the tap while brushing my teeth	1	
	I use a broom to clean paved areas rather than a hosepipe	1	
	If I water my garden I do it before 09:00 and after 16:00	1	
	I take note of the water restrictions during the drought to help save water by doing what is expected of me	1	
	I encourage guests to save water through displaying signage	1	
	I have a water displacement device in the toilet cistern	1	
	I monitor the amount of water used at my home and check for leaks	1	
	My toilet uses less than 9,5 litres per flush	1	
	I shower less than two minutes, or do a bucket wash	1	
	If I wash my car I always use a bucket, not a hosepipe	1	
	I have a dual flush toilet system to reduce water consumption	1	
	I know where my water meter and stopcock are in case of an emergency	1	
	I have aerators and flow restrictors on my taps	1	
	I have water-wise plants in my garden	1	

2.	Water conservation	Points	
	I have permeable paving to ensure that water does not simply run off into the stormwater drain	1	
	I have a greywater system so that I can reuse the water from my home	1	
	I have a rainwater harvesting system so that I can collect and use rain water	1	
	I encourage other people to close taps if I see them running	1	
TOTAL SCORE		30	

ACTION

I can save water by doing the following at my home:

3.	Waste reduction	Points	
3.1	**Do you separate your recycling?** Select one.		
	Yes – I have a waste bin and recycling bin	3	
	Yes – I try to keep some things separate	2	
	No – I don't do any recycling	0	
3.2	**Do you do composting?** Select one.		
	Yes – I keep all my organic waste for composting	3	
	Yes – I try to keep some organic waste for composting	2	
	No – I don't do any composting	0	
3.3	**I recycle the following items.** One point for each.		
	Glass bottles and jars	1	
	Plastic bottles, containers and plastic bags	1	
	Tin cans	1	
	Paper and cardboard	1	
3.4	**I do the following around the house to reduce waste to landfill.** You can get a point for each of the following activities.		
	I do not place hazardous waste in the normal bin	1	
	I use natural cleaning products instead of harsh chemicals	1	
	I serve smaller portions of food and offer second servings to reduce left-over food	1	
	I buy refills and concentrates instead of using disposable items	1	
	I provide biodegradable packaging or paper bags instead of polystyrene when providing take-away meals	1	
TOTAL SCORE		15	

ACTION

I can reduce waste to landfill by doing the following at home:

4.	Biodiversity protection	Points	
4.1	**Do you have indigenous and water-wise plants?** Select one.		
	Yes – I have mostly an indigenous and water-wise garden	3	
	No – I have a garden that needs a lot of water	0	
	No – I don't have a garden	0	
4.2	**Do you grow your own herbs and vegetables?** Select one.		
	Yes – I grow most of my own herbs and vegetables	3	
	Yes – I sometimes try to do this on a small scale	2	
	No – I don't have any garden	0	
4.3	**I do the following around the house to protect the environment.** You can get a point for each of the following activities.		
	I compost my organic waste and add it to my garden	1	
	I invite birds to visit my garden by giving them food and water	1	
	I do not harm any wild animals (including snakes), but ensure that they are removed if they are a problem	1	
	I try to buy organic food and vegetables as this reduces toxins	1	
TOTAL SCORE		10	

ACTION

I can protect nature by doing the following at my home:

5.	Action plan	
5.1	**WHAT** can you do? Indicate the five most important next steps that you are going to do at your home.	By **WHEN** can this be done?
A		
B		
C		
D		
E		
5.2	**HOW** do you do this? What do you need to assist you in making this happen?	

	Total score	Points	
1.	Energy efficiency	40	
2.	Water conservation	30	
3.	Waste reduction	15	
4.	Biodiversity protection	10	
5.	Action plan for next steps	5	
TOTAL		**100**	

Name: _____ Date: _____

Reviewed by: _____ Date: _____


THE GREATEST THREAT TO OUR PLANET IS THE BELIEF THAT SOMEONE ELSE WILL SAVE IT.
- ROBERT SWAN

NOTES

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Making progress possible. Together.