

# Reduce Your



## Product

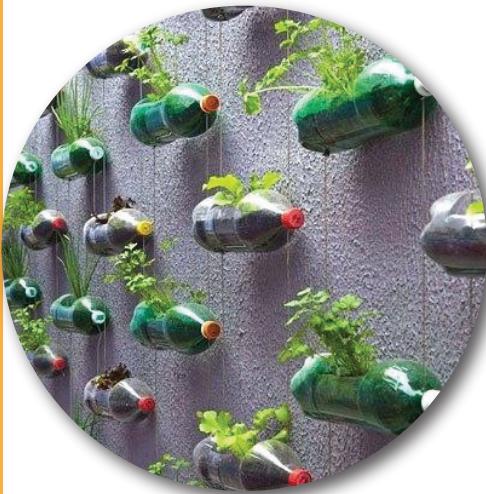
## Commonly Recyclable in South Africa?



Bottled water/ cooldrink		Yes	Re-usable bottle
Polystyrene coffee cup		No	Re-usable cup
Plastic straw		No	Re-usable straw
Plastic bread bag		Yes	Paper bag or cloth bag
Plastic carrier bag		Yes	Re-usable shopping bag
Cling wrap		No	Wax wrap
Heat sealed packaging		No	Currently no alternative
Trays, code 2		Yes	Loose items, mesh bags
Plastic toothbrush		No	Bamboo toothbrush
Polystyrene take-aways		No	Take your own container
Chip packets		No	Currently no alternative
Sweets individually wrapped		No	Currently no alternative
Earbuds - plastic sticks		No	Earbuds - paper sticks
Suckers - plastic sticks		No	Suckers - paper sticks
Thin plastic produce bags		No	Re-usable bags
Plastic cutlery		No	Take your own

# Re-Use Your

# Plastics

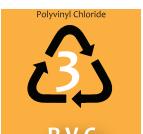
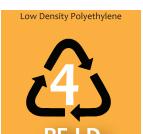




# Recycle Your



## Polymer Code      Product      Description      Can be recycled into:

		Bottles and jars for cooldrink, detergent, juice, water and food.	
		Bottles for milk, juice, shampoo, shopping bags, containers and bottle tops.	
		Cling film. Clear jars and bottles for toiletries, food and medication.	
		Bags for frozen vegetables and bread, toilet paper packs and milk sachets.	
		Yoghurt, margarine and ice cream tubs. Clear and metalised films for sweets.	
		Take-away containers, food trays for meat, fruit and vegetables, seedling trays.	
		Multi-layered materials for long-life products.	



INCORPORATING



Helping people to care for our ocean

# How PLASTICS Are Made

Most plastics originate from oil, natural gas or coal.

In **SOUTH AFRICA** the gas comes from **COAL**.

1.

Sasol makes **ETHYLENE** and **PROPYLENE GAS**  from the refining of **COAL** at the factory in Sasolburg.



2.

Two companies, Sasol Polymers and Safrapol **POLYMERISE** these **GASES** into **POLYMERS** called **POLYETHYLENE** and **POLYPROPYLENE (PP)**



These polymers are now in a **POWDER FORM**.

Hosaf polymerise Polyethylene terephthalate (**PET**) from **IMPORTED CHEMICALS**.

3.

In the **GRANULATION PLANT** additives and fillers are **ADDED TO THE POWDER**.

This compound is granulated, bagged and ready to be sold to **CONVERTERS**.

Converters make the **GRANULES (NURDLES)** into different plastic products.



4.

**SPECIALISED EQUIPMENT** melts, compresses and cools the plastic granules during the **FORMING** process, also called:

- blow moulding
- extrusion
- injection moulding
- rotational moulding and
- thermoforming



# PLASTICS

## Recycling Sequence

**1**  
**COLLECTION**  
of plastics.

**2**  
**SORTING** of  
different  
plastics.

**3**  
The plastic items  
are **CUT UP** into  
smaller pieces  
using a shredder  
or granulator.

**4**  
Granulated flakes are  
put through a  
**WASH PLANT**  
to remove labels,  
residual contents  
and soil.



**8**  
The pellets are  
bagged to be sold  
to a **CONVERTER**  
who will use them to  
produce new plastic  
products.

**7**  
The strings are  
**WATER COOLED**  
and chopped into  
pellets by a  
revolving cutter.

**6**  
After drying, the granules are  
fed into an **EXTRUDER**.  
They are melted and  
extruded through a  
multi-hole die to make  
continuous strings.