

**2015** REVIEW OF PETCO ACTIVITIES  
CELEBRATING OUR PEOPLE



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# CELEBRATING THE PETCO PEOPLE

## Making Magic Happen Every Day

It's been 12 years since the inception of PETCO and we couldn't be more proud. In celebration, we honour the people, the companies and the organisations that have made extraordinary contributions to the recycling of post-consumer PET in South Africa.

At PETCO we believe that the most powerful network we have is that of our people - resin producers, brand owners, converters, retailers, consumers, collectors and recyclers - these are achievers that give up their free time, miss being with their families, or cancel going on the date of a lifetime because of a spreadsheet and a deadline.

They make magic happen every day when they design packaging with recycling in mind, increase the quantities of recycled material in new packaging, clean up our beaches, get closer to their target of zero-waste-to-landfill, reduce methane gas emissions and the risk of climate change, create income and skills development opportunities for unemployed people, and raise awareness to create informed and responsible consumers.

More than anything, they make recycling a joy that is shared by more and more people, because it is the right thing to do and because it is making a difference.

In the following pages, you will read about the PET recycling story and the progress of PETCO and its members. As Robert Swan, polar explorer, environmentalist and the first man ever to walk unsupported to both the North and South Poles, once said, "The greatest threat to our planet is the belief that someone else will save it."

**We hope that, like the PETCO people, you are inspired to further action.**

*"If we can re-jig the whole system, if we can agree on a certain palette of materials, have a conversation around the table with the right people, if we can mobilise targeted innovation 'moon-shots', focused on system-wide solutions with the potential to scale globally, and we can continue to improve the economics and the statistics, then we really can put a path forward to change the plastics economy completely."*

**Dame Ellen MacArthur,**  
World Economic Forum,  
Davos 2016.

# CHAIR AND CEO REVIEW

## A Momentous Year

### 2015 was a momentous year for PETCO and PET plastic recycling in two ways:

Firstly, PETCO's efforts over the year led to 1.7 billion PET bottles being collected across South Africa or some 4.7 million bottles recycled each and every day.

Secondly, the organisation recycled an additional 15% of post-consumer bottles in comparison to the previous year, with the total PET market growing by 8.5% to 210 000 tonnes.

While the world is still recovering from the economic recession, PET recycling figures in South Africa continued to grow despite tough trading conditions. PETCO is therefore delighted to announce that, in 2015, it achieved an annual Polyethylene Terephthalate (PET) recycling rate of 52% of post-consumer bottle PET - that's more than half of all post-consumer PET bottles in the market. For the first time, PETCO recycled more bottles than those going into landfill.

We are proud that, for the eleventh successive year, the post-consumer PET bottle-recycling rate increased, despite two of the biggest falls in oil prices seen in recent years. Flake prices declined and rPET fibre has been losing market share to virgin fibre. At an average of \$USD30 per barrel, crude oil is half the price it was just over a year ago, depressing prices all through the chain. In some cases, it is now more expensive to recover plastics and process their hydrocarbons to recycle them than to use virgin crude oil to produce new plastic containers.

Quarter 4 of 2015 also saw significant depreciation in the exchange rate of the Rand against other major currencies, driven by the economic instability created by the removal of the Finance Minister. Project fundamentals remained constrained due to continued low prices of crude oil and therefore of virgin PET. The decline in exchange rates did however offset these fundamentals as indicated by improved margins in both the food and fibre sectors.

Projects therefore remain exposed to increased financial pressure that might arise from any recovery in exchange rates.

The decline in global demand for polyester fibre, and therefore in global fibre prices, has placed significant additional pressure on PETCO's fibre sector partners and we continue to engage with them on this issue.

At the end of 2014, we observed high levels of exports of post-consumer PET bottles and flakes, especially to India. Although these do contribute to our collection targets, they cause bottle prices to rise and divert some of the material that could have gone to local recycling. Luckily, this trend reduced considerably during 2015 with 6 777 tonnes of flake and bottles exported for the year - a 22% decline on the previous year.

The import of PET resin into South Africa was considerable at 57.6KT.

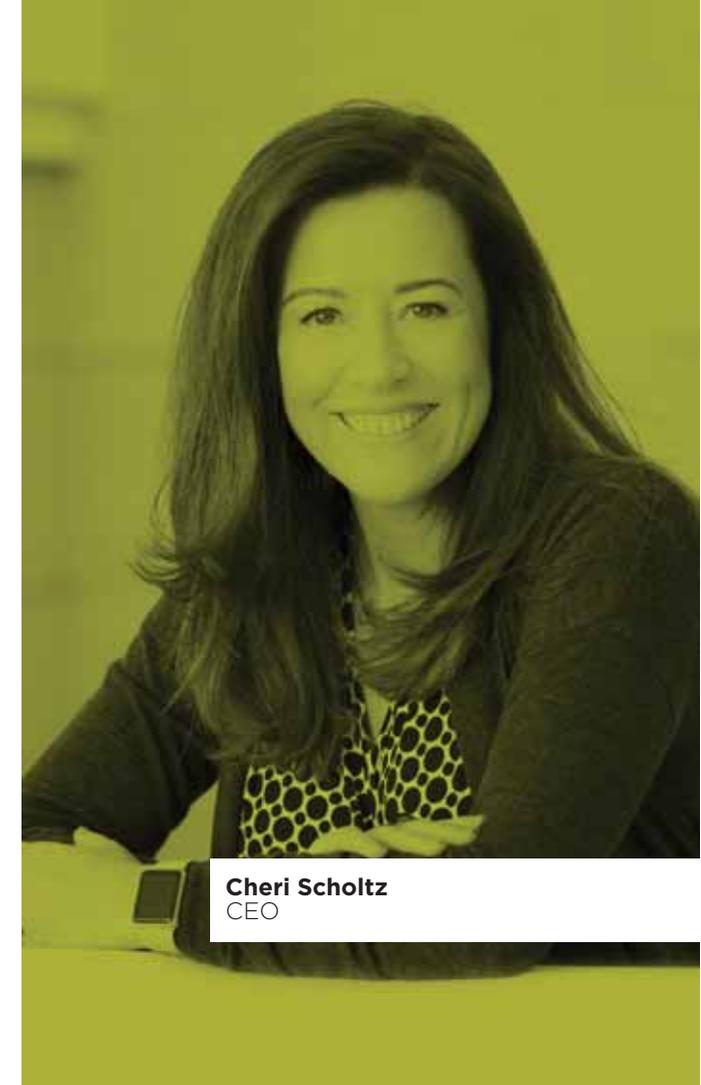
This achievement of a 15% increase in collection volumes on the previous year is thus an excellent result and would not have been possible without the voluntary financial support from PETCO's members who pay a recycling levy of R360/ton. By paying the recycling levy and contributing grants-in-aid, the PET Converters, Bottlers, raw material Producer Hosaf, Brand Owner Coca-Cola Southern Africa, and Retailers Pick n Pay and Woolworths, have all helped PETCO to expand its collection network.

PETCO's ultimate objective is a closed-loop packaging supply chain where post-consumer bottles can be used for new bottles. In May 2015, after years of research, trials and reports, this became a reality with the opening of the first carbonated soft drink grade (CSD) Bottle-2-Bottle recycling plant in Africa. The Minister of Environmental Affairs, Edna Molewa, officially opened the R75 million plant expansion in Wadeville, Johannesburg. With the capability to produce resin that is suitable for the carbonated drink sector, Extrupet's PhoenixPET plant is equipped with Starlinger technology, and supplies an additional 14 000 tonnes of recycled PET resin per year to the PET packaging industry. It will eventually divert an additional 22 000 tonnes of post-consumer PET bottles from landfills each year.

### The year also saw exciting business to business developments:

- In late 2014, SABMiller, The Coca-Cola Company, Coca-Cola Sabco and Shanduka Beverages announced their intention to form Coca-Cola Beverages Africa. With more than 30 bottling plants and over 14 000 employees, Coca-Cola Beverages Africa will be the largest Coca-Cola bottler on the continent, with the scale, capabilities and resources to capture and accelerate top-line growth.
- Astrapak Limited entered into an agreement to dispose of Cinqpet (a division of Astrapak Manufacturing Holdings (Pty) Limited) to Boxmore Plastics SA (Pty) Limited. Cinqpet is a supplier of mainly PET bottles for the non-carbonated soft drink market in Johannesburg and the surrounds. The trend of customers moving in-house to blow their own bottles and consolidating filling facilities in terms of centres of excellence, continues to further impact the sustainability of businesses operating in this market segment.
- Bowler Metcalf announced it would merge its soft-drink bottler Quality Beverages, maker of the Jive brand, with another soft-drink bottler, Shoreline Sales and Distribution, to become a new entity known as Softbev.

**From an administrative perspective, since September 2014, PETCO has assumed full responsibility for the invoicing of levies, previously done by local virgin producer Hosaf and recycled resin producer Extrupet. This administrative change-over had some expected initial hiccups but is now running smoothly and the consolidated system enables members to receive invoices and statements covering all PET levies - from local PET imports to purchases of virgin or rPET.**



**Cheri Scholtz**  
CEO



**Casper Durandt**  
CHAIR

# 2015

## The Top Accomplishments

In celebrating these remarkable results in driving post-consumer PET recycling, we can summarise the years' highlights as follows:

- 1 PETCO increases the audited post-consumer PET bottle-recycling rate in South Africa by 15% YOY, and exceeds the target of 50% by 2% to achieve 52%; this despite two of the biggest falls in oil prices seen in recent years.
- 2 Fully 'closing the loop': South Africa's first carbonated soft drink (CSD) Bottle-2-Bottle plant, Extrupet's new PhoenixPET plant, is officially launched by South Africa's Minister of Environmental Affairs, Ms. Edna Molewa, in May 2015.
- 3 Mpack Polymers commission their new R350-million Bottle-2-Bottle plant in Q3 2015 and begin the manufacture of food-grade recycled PET resin under the brand name Savuka. This follows the signature on a five-year contract between Mpack and PETCO in 2014.
- 4 PETCO wins one of only four Enviro Awards at the 2015 Logistics Achiever Awards, which recognise organisations that have not only minimised the environmental impact within their supply chains, but have successfully complied with both local and international regulations and green practices throughout their supply chain.
- 5 The first carbonated soft drink (CSD) bottle in South Africa is manufactured using PhoenixPET rPET resin (by Little Green Beverages (LGB), manufacturers of the carbonated drink line Refreshhh brand).
- 6 Extrupet's PhoenixPET is recognised as the first recycled PET (rPET) product produced in South Africa to meet the stringent EU safety and compliance requirements set by the European Food Safety Authority (EFSA).
- 7 Woolworths launches their 'RE' denim range of clothing, adopting an innovative manufacturing process using 12 x 500ml recycled plastic bottles to manufacture each pair of recycled denims. This represents the first clothing range made from rPET launched in South Africa by a major retailer.
- 8 Astrapak's 100% food grade rPET Cranberry Apple bottle is entered into the SAPRO (South African Plastics Recycling Organisation) Best Recycled Plastic Product of the Year Competition, representing a shift in the mind-set of manufacturers towards considering recycled plastics as a material of choice.
- 9 Extrupet is nominated as a finalist in the WorldStar Sustainability Awards for 2016 for their PhoenixPET food-grade recycled PET resin; this nomination is a direct result of other key accolades won by PhoenixPET, which include a WorldStar Award in the 'Other' category and the Judge's Gold Sustainability Award at the Gold Pack Awards (the latter of which represents a first for any polymer resin in South Africa).
- 10 PETCO contracted recycling projects encompass 11 projects in a range of categories; PETCO training and enterprise development projects include 27 workshops where a total of 2 059 collectors and municipal employees participate and gain an insight into running successful SMME and Cooperatives; PETCO collection projects support 17 projects with equipment and other infrastructure, enabling the doubling of collection capacity in some instances.
- 11 FTE produces an innovative product for the fruit export industry, in the form of corner pieces for packing fruit boxes onto pallets. These corner pieces are made from (primarily non-food and non-fibre grade) recycled PET, and commercial-scale production and the introduction of the product into new segments of the fruit export industry are scheduled to take place in the near future. Initial tests, using pre-consumer material and thermoform sheeting in the product, look very positive.
- 12 The Tinana Recycling Cooperative is announced as one of the winners of the 2015 SEED Awards, demonstrating that post-consumer PET is not only a valuable resource to produce new PET bottles and other items, but that involvement with

recycling helps to build businesses and create much-needed jobs. (In partnership with the P.E.A.C.E Foundation, PETCO has played an important role in supporting the co-operative towards this success through the provision of trolleys, a baling machine, protective clothing and the raising of additional sponsorship from additional parties.)

- 13 PETCO hosts well-attended Extended Producer Responsibility (EPR) workshops in Cape Town and Johannesburg.
- 14 PETCO launches an engaging and well-received consumer-focused digital campaign as well as a summer social media campaign to increase awareness for recycling amongst South African consumers. PETCO increases the total Advertising Value Equivalent (AVE) for 2015 activities to more than R10 million, representing an 11% increase on the previous year. (Within this, broadcast AVE e.g. television, radio, newspapers, magazines etc., increased by 55%, and online AVE e.g. photos, presentations and video distributed over the Internet, increased by 12%.)
- 15 PETCO revises and re-launches the story of the people behind the recycling of PET in South Africa, those for whom the collection of PET is an economic life-line: [www.petco.co.za/petstory](http://www.petco.co.za/petstory).

***"Plastics are too valuable to throw away. The SA Plastics Recycling Industry is highly motivated by the challenge to recycle more. Our targets are ambitious, but essential if we are to achieve the vision of minimising the amount of plastic sent to landfill."***

**Dr Casper Durandt**,  
Franchise Technical Director,  
Coca-Cola Southern Africa,  
and PETCO Chairman.

The PETCO Board of Directors continues to show commitment and thanks are due to them for their efforts and insight.

It's opportune to extend a very big thank you to Willem Pienaar and Clynt Levin for their commitment and dedication to PET recycling in South Africa - for always being available and for their dedication to the cause over a number of years.

Daniel Schoeman and David Drew have been elected to the PETCO Board representing the Resin Producer and Converter Sectors respectively.

The passing of Steven Bird of Hosaf, who served on the PETCO Board, was a sad time for us. Our thoughts are with his family. Steven contributed greatly to the PETCO Board and his insights and quick wit will be greatly missed.

PETCO enjoys Associate Membership of the Association of European Plastic Recycling and Recovery Organisation (EPRO) and of the Global Product Stewardship Council.

PETCO enjoys the support and collaborative efforts of both Packaging SA (previously PACSA) and PlasticsSA.

So much already done, but still so much more to achieve.

Finally, none of our achievements would have been possible without the tremendous dedication of our members, whose contributions via the recycling levy and grants-in-aid enable PETCO to expand its collection network, fine-tune its programmes, form better relationships with collectors, and strive for evermore small business opportunities that grow entrepreneurs and our recycling tonnages.



Dr Casper Durandt  
CHAIRMAN PETCO



Cheri Scholtz  
CEO PETCO

# ABOUT PETCO

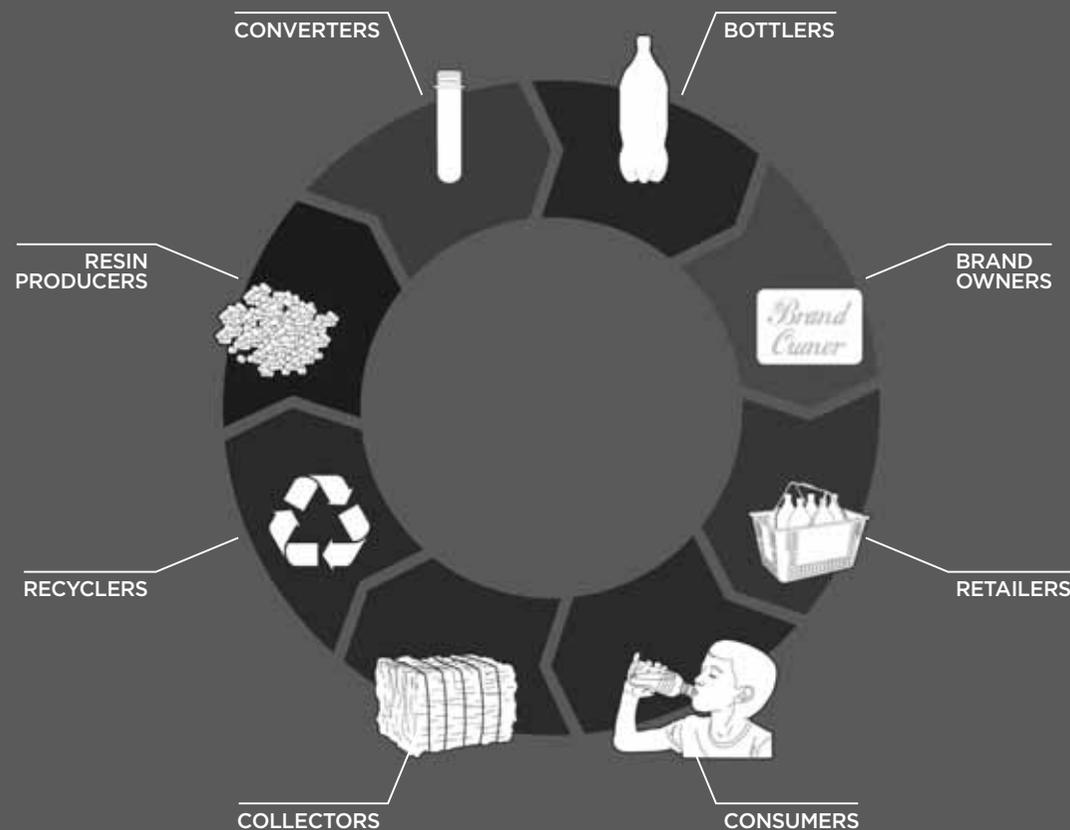
**PETCO is the trading name of the PET Recycling Company (Pty) Ltd, and represents the South African PET plastic industry's joint effort to self-regulate post-consumer polyethylene terephthalate (PET) recycling and end of life solutions.**

**The Company was established in 2004.**

PETCO's unique model is built on the simple principle of an industry driven and financed environmental solution for post-consumer PET plastic. To achieve this everyone involved, from the raw material producers, the converters, brand owners, retailers, consumers and recyclers are playing their part in the solution, with PETCO fulfilling the PET industry's role of Extended Producer Responsibility (EPR).

PETCO is financed by a voluntary recycling levy paid by converters on PET resin purchased. PETCO also receives grants from brand owners, resin producers and retailers. Support for PET recycling efforts ensures an ongoing monetary value for post-consumer PET. This sustains collection interest and reduces the volume of post-consumer PET in the waste stream.

## THE PETCO VALUE CHAIN



By taking responsibility for post-consumer PET recycling, PETCO imposes accountability over the entire life cycle of PET products and packaging. This means that companies which manufacture, import and/or sell PET products and packaging are financially and physically responsible for such products after their useful life.

Ongoing consumer and public education and awareness activities promote environmental responsibility and encourage PET recycling.

PETCO operates throughout South Africa and has offices in Cape Town and Johannesburg.

## OUR JOURNEY THUS FAR

**1998**

The South African PET Plastic Industry recognises the need for an environmental solution for PET, and provides guidance and financial support for post-consumer PET bottle recycling.

**2004**

PETCO is established and financed by the Industry to manage its Extended Producer Responsibility (EPR) in South Africa.

**2005**

9 840 tonnes (16%) of post-consumer PET bottles recycled; recycling levy is introduced.

**2007**

19 734 tonnes (24%) of post-consumer PET bottles recycled; PETCO doubles tonnage of PET recovered and collected.

**2009**

29 048 tonnes (32%) of post-consumer PET bottles recycled; PETCO survives global economic crisis. National Waste Management Act comes into effect; pilot plant produces rPet for food and non-food grade application for the first time.

**2011**

42 562 tonnes (41%) of post-consumer PET bottles recycled; for the first time, PETCO provides support to encourage the export of fibre made in SA from recycled bottles - a sign of the local fibre markets' maturation.

**2013**

59 691 tonnes (48%) of post-consumer PET bottles recycled; PETCO shifts from a partner-based to a project-based model and hosts a successful international colloquium. PETCO is awarded joint winner of the business award in the Mail & Guardian's annual 'Greening the Future' awards.

**2015**

74 360 tonnes (52%) of post-consumer PET bottles recycled; closing the loop in the CSD B2B sector; 1.7 billion bottles recycled creates income for an estimated 50 000 people and skills development opportunities for many.

# PET FACTS

## What is PET?

Polyethylene terephthalate (PET) forms the basis for synthetic fibres like polyester and is also recognised in the packaging industry as the rigid plastic commonly used as beverage bottles for carbonated soft drinks, bottled water, milk, juice, sports and energy drinks; jars, punnets, tubs and trays for food items; bottles for household, personal care and pharmaceutical products; and sheet and film for general packaging.

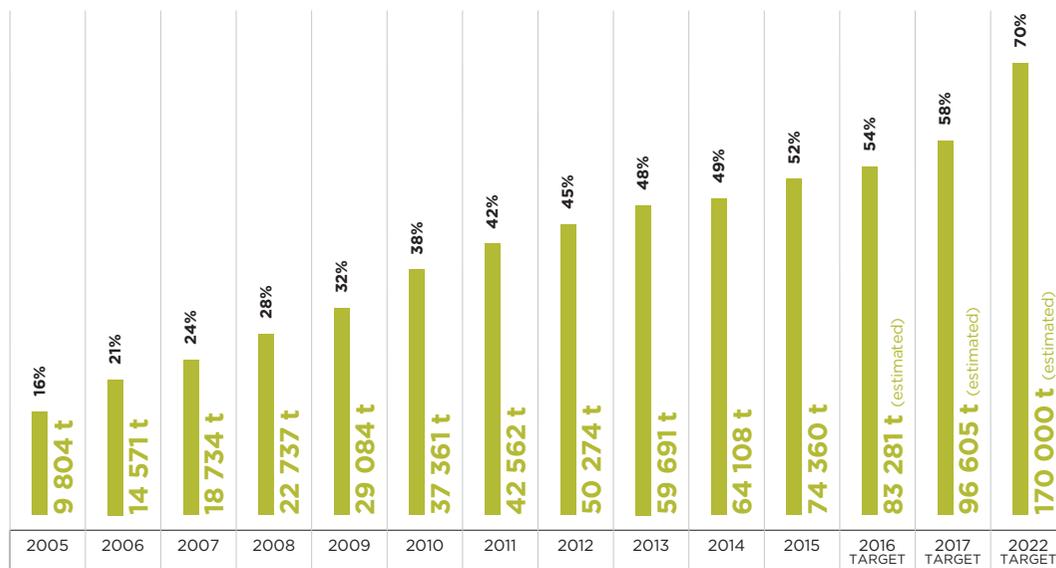
PET is one of the only plastics that can be recycled back into the same products that it was originally intended for, which creates a sound basis for its recovery and recycling. It is 100% safe, hygienic, lightweight and shatterproof.

## What is PET recycling?

PET bottles are made of one of the few polymers that can be recycled into the same form - a new beverage bottle - again and again. This neatly closes the recycling loop and enables 'cradle to cradle' packaging solutions.

### PET recycling has grown steadily in South Africa over the years:

(shown as % of post-consumer PET bottles recycled)



## Who makes PET and how much?

In South Africa, Hosaf makes bottle-grade PET resin. The remainder of the market is supplied from China, South-East Asia and the Middle East. In 2015 approximately 57 600 tonnes of PET were imported. 68% of the PET produced and imported was used in the manufacture of beverage bottles.

Growth of PET usage in South Africa is approximately 8% per annum:

- 140 000 tonnes of PET produced in 2010
- 145 000 tonnes in 2011
- 166 000 tonnes in 2012
- 182 000 tonnes in 2013
- 196 000 tonnes in 2014
- 210 000 tonnes in 2015
- 227 000 tonnes in 2016 (estimated)

## What is recycled PET (rPET) used for?

As with virgin PET, recycled PET (rPET) can be used to make many new products, including polyester staple fibre or filament used for apparel (clothing), home textiles (duvets, pillows, carpeting), automotive parts (carpets, sound insulation, boot linings, seat covers) and industrial end-use items (geotextiles and roof insulation), strapping, fruit carton corner pieces and new PET packaging and bottles for both food and non-food products, closing the loop and creating a circular economy. One that is restorative and regenerative by design. It is generally blended in a ratio of virgin to recycled, depending on the application required.

## How safe is PET?

There has been much confusion about the safety of PET after concerns were raised about the safety of a different kind of plastic, namely the polycarbonate products containing bisphenol A (BPA), which are most often used to make reusable rigid containers and electronic devices.

There is no connection between PET plastic and BPA. BPA is not used in the production of PET material, nor is it used as a chemical building block for any of the materials used in the manufacture of PET.

Phthalates (pronounced tha-lates) are a class of chemicals that include three subsets, each with different properties. Polyethylene terephthalate (PET) belongs to one of these phthalate subsets, but not the one most commonly associated with the term. Orthophthalate is the phthalate subset most commonly referenced and discussed in popular literature and on internet sites, and which has been the subject of some negative press. Often used to make various plastics more flexible, this type of phthalate is also called a plasticiser. PET does not contain plasticisers or orthophthalates. Plasticisers are never substituted for terephthalates used in the manufacture of PET, nor are the two ever mixed. Current research shows that PET does not contain or leach oestrogen-like chemicals such as BPA or other endocrine disrupters.

# WHY PLASTIC BOTTLES ARE NOT TRASH?

## 1. Because they can be recycled and used again and again.

PET packaging can be made from up to 100% recycled PET, recapturing both the material and the embodied energy of the original package. PET can also be recycled multiple times. In 2015, more than 1.7 billion bottles of PET were collected and recycled in South Africa through hundreds of community recycling programmes.

## 2. Because they can be made into new useful products.

Collected PET is processed and re-manufactured into a variety of new materials including fibre and new PET packaging. We've helped to generate R900 million worth of investment in PET recycling infrastructure and R2.9 billion worth of new products containing recycled PET (rPET).

## 3. Because collecting them creates jobs.

Plastic bottles are valuable and create income opportunities for informal collectors. If one person collects 200 bottles per day for 240 days of the year, it amounts to 1 450 kilograms per year. The 74 360 tonnes of post-consumer PET collected in 2015 translates into the creation of an estimated 50 000 income and skills transfer opportunities for informal collectors.

## 4. Because collecting them is good for the environment.

Recycling PET bottles has saved 110 000 tons of carbon, avoided using 460 000 m<sup>3</sup> of landfill space and reduced resource consumption. Recycling plastic bottles further decreases the need for raw materials and saves energy.

# END-USE MARKET DEVELOPMENT

A balance must be maintained between the collection of post-consumer PET bottles on the one hand, and the demand for recycled end-use products on the other. This balance between supply and demand, and installed recycling capacity is critical to keeping the bottle collection and recycling chain intact and to ensuring that the financial benefits continue to reach collectors on the ground. In South Africa, post-consumer PET bottles are collected and recycled into two types of end-use products for the local and export market:

## Bottle-2-Fibre (B2F)

The largest end-use market for post-consumer PET bottles in South Africa is currently the polyester staple fibre market. Polyester staple fibre/filament is used to manufacture apparel (clothing), home textiles (duvets, pillows and carpeting), automotive components (carpets, sound insulation, boot linings and seat covers) as well as industrial applications (geotextiles and insulation).

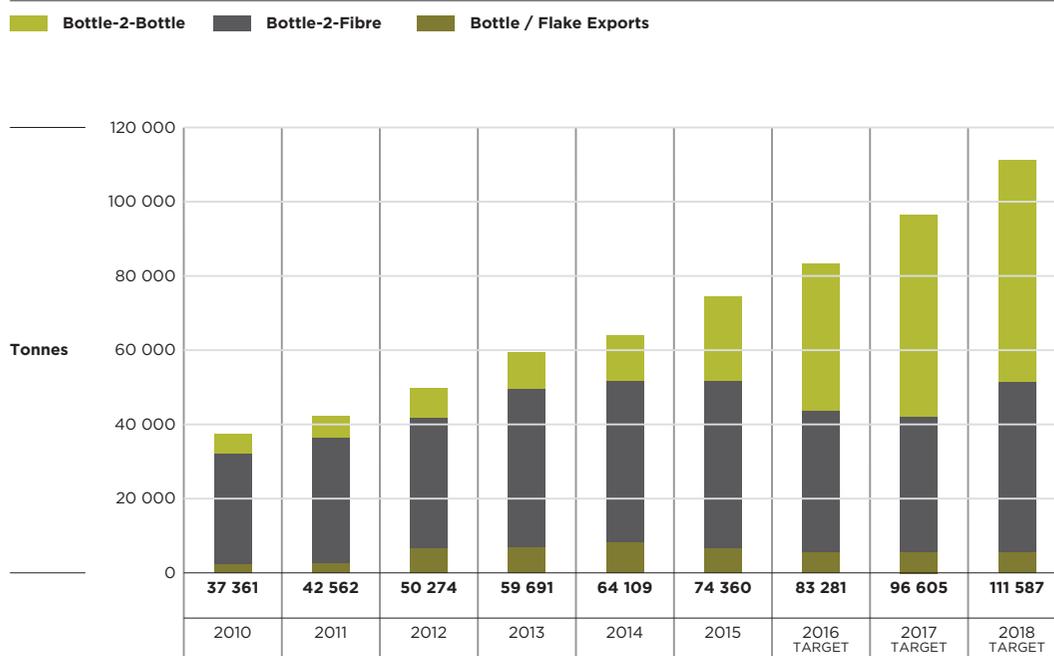
In 2015, approximately 45 000 tonnes of PET, or 61% of the total PET volume collected, was applied in this end-use market.

*“We must continue to develop the market for recycle: creating a higher demand for products made from recycled PET is essential. The greater the demand the more this will “pull through” the supply chain and stimulate activity. This will take considerable investment in infrastructure, innovation and encouragement from both the private and public sector.”*

**Chandru Wadhvani,**  
Joint Managing Director,  
Extrupet Recycling.

## End-use market split for post-consumer PET bottles

Recycled tonnages by end-use since 2010, showing Bottle-2-Bottle, Bottle-2-Fibre (including industrial fibre, fibre exports, etc.) end uses, as well as Bottle and Flake Exports. The growth in the Bottle-2-Bottle end-use market is clearly visible.



## Bottle-2-Bottle (B2B)

A growing end-use market is that of recycling bottles back into packaging. This can, to some degree, be ascribed to the growth in acceptance on the part of many companies of the concept of Extended Producer Responsibility (EPR), as well as the possibility for savings and reputational benefits associated with the use of recycled materials.

The use of recycled resin in food-grade PET packaging entails compliance with extremely stringent standards for health and safety and product quality. Non-food-grade recycled PET is therefore often applied as an input material in the manufacture of packaging and bottles for personal, homecare, pharmaceutical and other uses.

In the food-grade sector, recycled PET resin has been blended with virgin PET in various ratios since 2009 for use in the manufacture of containers and bottles such as sandwich containers, trays, tubs and non-carbonated beverage bottles.

In 2015, approximately 22 000 tonnes, or 30%, of the PET bottles collected were applied in the manufacture of recycled PET resin.

PETCO anticipates that the majority of the future growth in South Africa's end-use markets for recycled PET will come from the Bottle-2-Bottle market, particularly as the awareness grows amongst brand owners of the benefits that can be achieved through the use of recycled PET products. In this regard, we anticipate significant opportunities for investment in Bottle-to-Bottle recycling facilities in South Africa in the coming years.



**Tshepo Mazibuko**  
Managing Director, K1 Recycling

*“From a trolley to second hand bakkie, to a buy back centre, I now employ 13 permanent staff and 5 casual staff and we have over 1 000 people who supply us, of which about 700 are women. I’m collecting over 70 tonnes of PET every month - the township is becoming cleaner and the people are making a living for themselves - they tell me that I have made a difference in their lives and that gives me joy.”*

## END-USE MARKET DEVELOPMENT

**Hundreds of millions of Rands have recently been invested by PETCO's partners to install world-class facilities for expanding Bottle-2-Bottle capacity locally:**

- In May 2015, the first Bottle-2-Bottle recycling plant in Africa, with an additional investment of R75 million and the capability to produce resin that is suitable for the carbonated drink sector, was officially opened by Minister of Environmental Affairs, Edna Molewa in Wadeville, Johannesburg. Extrupet's expanded PhoenixPET plant, equipped with Starlinger technology, will supply an additional 14 000 tonnes of PET resin per year to the PET packaging industry. It will eventually divert an additional 22 000 tonnes of post-consumer PET bottles from landfill.
- Mpac's R350-million state-of-the-art PET recycling operation in Wadeville, Germiston produces recycled PET (rPET) plastic for food grade packaging. Now operational under the name Mpac Polymers, this Bottle-2-Bottle facility will increase the amount of PET bottles collected for recycling by 30,000 tonnes per year. The resin produced in the plant complies with EU regulations regarding food packaging, and has also received approval from Coca-Cola for inclusion in their beverage bottles.

**These are world-class facilities and significant achievements for South Africa and the continent of Africa.**

***"The PET recycling process used by Mpac Polymers transforms used PET bottles into resin, meeting the needs of the most demanding food and beverage packaging applications. This ensures that the material can be reused to make the same bottles from which it came, thereby closing the recycling loop. Our rPET product is known as Savuka - which means revival."***

**John Hunt,**  
Managing Director,  
Mpac Recycling.

## Other end-use applications

While PETCO encourages the processing of post-consumer PET bottles in South Africa in order to promote value addition and employment creation in the local market, we remain aware that, in certain instances, the exchange rate of the Rand against international currencies makes the export of post-consumer PET an attractive proposition.

In 2015, the slowdown in the global economy, and the resultant decline in the demand for PET waste in countries such as China and India, meant that the growth in PET exports from South Africa was lower than in previous years, with approximately 6777 tonnes of PET bottles and flake exported.

PETCO is, on an ongoing basis, actively seeking to develop alternative end-use markets for recycled PET products. As a result, we have during the course of 2015 been actively collaborating with commercial product developers, academic institutions and research organisation such as the Council for Scientific and Industrial Research (CSIR), in investigations into the technical and commercial viability of various end-use products and markets. We trust that some of these products and markets will in the future take up an increasing percentage of the post-consumer PET bottles collected in South Africa.



**Megan Leach**  
Managing Director, Envirowaste Recyclers

***'We have 37 staff members - of which 8 are women. We collect with a fleet of 4 vehicles, with trailers - our agents collect from outlying areas, like Brandfort, Soutpan, Welkom and Virginia. I have learned the hard way; perseverance, long hours - and don't give up on your staff or your pickers. They depend on me and I need to be there for them.'***

# PETCO PROJECTS

## Recycling Projects

In 2015, some 69% of the PETCO budget was spent assisting volume driven projects that support recyclers who have an end-use market in their value chain. Both the number and capacity of our recycling partners has grown significantly over the past 12 years.

Our volume driven project partners are the investors in new plant and equipment that is required to deliver the tonnes of PET recycled each year. PETCO provides funding in support of these partners to ensure that its volume targets are met and that, through adverse economic cycles, these programmes are sustained. Our contracts with the recyclers gives them the confidence to also invest downstream - in collector training, provision of baling machines and support of SMME's.

PETCO closely monitors the market prices and major cost variables in its on-going assessment of subsidy rates, and adjusts these accordingly to ensure no over-subsidy occurs and that its partners do not stall against odds that are so often stacked against those involved in recycling activities.

In order to ensure that funds are distributed as efficiently as possible, mechanisms follow market dynamics closely and automatically determine the level of financial assistance to be provided to a particular end-use.

The cost of the PETCO model to the consumer currently averages at approximately 1 cent per bottle, an amazing achievement by any standard.

As at the end of 2015, PETCO provided support to eight recycling partners who have a combined maximum recycling capacity of approximately 115 000 tonnes per annum. This maximum capacity will be fully operational by 2018.

In 2015, Da Run Fa Chemical Fibre signed an MOU with PETCO to become a contracted recycling partner. This now means that PETCO is partnering with all three manufacturers of polyester staple fibre in South Africa.

With regard to the manufacture of food-grade PET resin, PETCO's newest partner in this market, Mpack Polymers, made significant progress during the year with the commissioning of their Bottle-to-Bottle plant.

### These are our contracted recycling partners:

- Da Run Fa
- Extrupet
- FTE Insight
- Kaytech
- Mpack Polymers
- Propet
- SAFrePET
- Sen Li Da

Collectively these partners purchase post-consumer PET bottles on a nationwide basis, with their footprint growing all the time by:

**R280 million worth of payments made to collectors**

**R600 million injected into the downstream economy**

**74 360 tonnes of post-consumer bottles collected for recycling**

**1.7 billion bottles collected over the year**

**4.7 million bottles collected every day**

## Collection and Training Projects

PETCO spent 5% of its 2015 budget to support initiatives and activities that do not necessarily increase the collection volumes of recycled PET, but contribute to the visible recycling of PET.

### PETCO supports visible recycling in the following ways:

- 1 PET infrastructure and equipment provision
- 2 Collector training and development
- 3 Education and awareness
- 4 Special projects and joint ventures
- 5 Fostering government partnerships
- 6 Building the recycling network

### 1. PET Infrastructure and Equipment Provision

#### We sponsor infrastructure and equipment to aid and grow visible recycling.

PETCO supports projects and initiatives through the sponsorship of infrastructure and equipment with the aim of unlocking collections, helping collectors improve their efficiencies as well as the quantity and quality of PET collected. We also assist with the efficient transportation of baled material.

In partnership with local authorities, schools, Plastics|SA, our Packaging SA partners and NGO's, we have helped to facilitate the opening of over 700 plastic recovery stations throughout South Africa and continue to contribute, via funding allocated to Plastics|SA, and Packaging SA, towards infrastructure at municipal drop off sites across the country.

The focus in 2015 was to provide support in high PET volume areas as identified in conjunction with our bottler members in order to unlock collection and grow capacity in areas where beverages are already distributed. In 2015 we supported 17 projects across seven provinces, sustaining 3613 income opportunities. This brings the number of projects supported in the past decade to 76.

In 2015, we provided the following equipment:

- 1 MACPAK D 14 baling machine (45 tonnes per month capacity) in partnership with Packaging SA and POLYCO
- 1 Harmony baling machine (300 tonnes per month capacity) in partnership with Peninsula Beverages
- 1 weighbridge
- 1 trailer
- 2 shipping containers for storage
- 2 cages
- 10 wheelie bins
- 100 bulk bags
- 2 PET collection bays
- 2 m3 mesh bins
- 2 platform scales
- 17 trollies for 4 projects
- 2 project signage boards
- Masks and gloves for 4 clean-up campaigns
- Supplies for 1 recycle swop shop
- Feather banners for 8 beach clean-up
- Protective clothing for 5 projects
- 1 x Woolpress Hydraulic Double-Box Baling machine

All of our projects are monitored monthly to track their performance and growth as part of our mentoring philosophy and our efforts to move collectors up the value chain.

Here are a few examples of infrastructure and equipment projects that PETCO supported in 2015:

#### **RAINBOW NATION RECYCLING CLUB SOLVES STORAGE PROBLEM WITH PETCO CONTAINER**

The Rainbow Nation Recycling Club in Kini Bay just outside Port Elizabeth comprises a small buy-back centre and a swop shop. The Club works to bring hope to the Clarendon community where recycling is used as a mechanism to teach values such as responsibility by supporting local children who bring in recyclable PET bottles on a weekly basis in exchange for credits. These are then used in the shop to buy essentials and heavily-discounted day-to-day basic consumables. This innovative community development project, staffed by volunteers and supported by various NGOs, offers numerous benefits to the community and children in particular, in addition to the obvious environmental and educational impact. The project encourages children to use their own initiative and helps them learn about responsibility, encapsulating what the programme stands for: 'Tell me and I'll forget; Show me and I may remember; Involve me and I'll understand.'

PETCO donated a twelve metre shipping container in order to provide much needed storage space for the expanding operation.

#### **NOTHING TO WASTE EXPANDS RECYCLING OPERATIONS INTO NEW AREAS**

Nothing to Waste was the second runner-up of the 2014 International Labour Organisation's (ILO) Freestate Entreprize Job Creation Challenge. Vuyelwa Kona collects recyclables from businesses, homeowners and municipality buildings. Her biggest challenge was transporting her materials. PETCO supported Vuyelwa with five trollies to move the recyclables to her site as well as a manual baling machine which enables her to expand into other areas as well as sell her baled PET bottles to a bigger buyer in Bloemfontein.

#### **KRUGER NATIONAL PARK GAINS SECOND INDUSTRY BALING MACHINE**

A baler, sponsored by Packaging SA, PETCO and POLYCO, is now installed at the Skukuza material recycling facility (MRF) of the Kruger National Park. The baler will enable the separation-at-source recycling project to be implemented at all the rest camps in the Park. The south is the busiest part of the Park and higher volumes of post-consumer packaging waste are generated there.

#### **WASTE WANT MOVES UP THE VALUE CHAIN WITH A BALER**

PETCO sponsored Waste Want with a H15 Baler in 2012. Since then, the company's PET collection volumes have increased more than five times and they have expanded their operations to new areas. In 2015, PETCO donated a weighbridge, trollies and protective clothing to assist Waste Want in their expansion. Waste Want is currently implementing separation-at-source projects for the City of Cape Town, Grand West Casino Hotel, and Quality Beverages. Waste Want also supports a shelter for homeless people by providing them with opportunities to collect and sell recycled PET.

#### **NEW TOWN RECYCLING SUPPORTS ITS COLLECTORS WITH NEW PETCO TRAILER**

New Town Recycling in Johannesburg CBD provides a service to a few hundred inner-city street collectors that previously had to push their trollies far distances to sell their recyclables. They also buy from waste pickers on a few landfill sites. New Town Recycling has grown from collecting less than five tonnes per month of post-consumer PET to over 50 tonnes. PETCO sponsored the company with a trailer, which has enabled them to create a number of permanent jobs as well as support a few hundred PET collectors.

## **2. Collector Training and Development**

PETCO sees the role of training and the mentorship of collectors as being critical to improving working conditions and assisting entrepreneurs to grow and sustain their businesses. We also identify with the need to raise awareness in communities and strengthen relationships with government, to encourage the establishment of kerbside collection projects, and to expand existing PET collection into new areas.

During 2015, in partnership with government and industry partners - in particular the Paper Recycling Association of South Africa (PRASA) who have invested considerable resources in the refinement of training material, we:

- Conducted and participated in 27 training and workshop events; a total of 2 059 collectors and municipality employees participated;
- Offered information-sharing workshops across all nine provinces of South Africa and built links with 22 municipalities;
- Facilitated the promotion, establishment and development of waste recycling enterprises for 17 projects;
- Identified and facilitated the formation of co-operatives and offered training to strengthen the collective capacities of more than 20 co-operatives;
- Offered training and skills development in waste identification, sorting and transportation of recyclables, reaching 2 059 collectors;
- Focused on business management training for entrepreneurs and SMMEs - including links to business support, markets and finance in 27 different training and workshop events; and
- Conducted numerous visits to recycling plants, buy-back centres and collectors' operations.

Some examples of training projects that PETCO supported in 2015 include:

#### **NATIONAL ZOO OF SOUTH AFRICA**

PETCO partnered with the National Zoo to implement a separation-at-source recycling project where a 12 member Co-operative was given the opportunity to do the sorting and collections on the zoo grounds. PETCO facilitated the signing of a Cooperation Agreement between the Zoo and the Co-operative. We supported the Co-operative through the sponsoring of protective clothing, five trollies, a platform scale and 50 bulk bags, and we are currently sourcing a small baler. PETCO also assisted with training in basic sorting and identification of recyclables. PETCO further connected the Co-operative to a buyer for the recyclable material and will be monitoring the Co-operative on a monthly basis.

#### **RUSTENBURG'S GREEN MARCH**

The Rustenburg Municipality declared 2015 the year of Green Growth. One of the major challenges in Rustenburg involves illegal dumping and littering. The aim of the Green March event was to create awareness about illegal dumping and littering by encouraging community members, school children and councillors to participate in recycling and waste minimisation. The March was followed by a Collectors' Training Workshop.

### 3. Education and Awareness

Growing awareness and consumer education makes it possible to move from a throwaway culture to a recycling culture. In particular, we work to grow awareness amongst consumers that PET plastic is recyclable and safe to use. We also encourage consumers to participate in kerbside projects (where these exist), and support community projects and drop-off sites that actively recover their post-consumer PET plastic for recycling.

Moving forward, we will look at incorporating regular consumer surveys into our annual calendar to better understand how the South African consumers' understanding of the complexity of the subject is developing and deepening, and what tactics can be used to help shift consumers along the various stages of awareness.

Some examples of education and awareness projects that PETCO supported in 2015 include:

#### CONSUMER MARKETING

Competitions and awards supported in 2015 included the Clean-up and Recycle and Student Design Competitions run by Plastics|SA, the Remake Challenge Design Competition, Woolworths' Making a Difference-through-Design Competition, and the IPSA Student Gold Pack Awards.

In terms of paid-advertising, despite a comparatively small overall marketing budget, PETCO's total combined advertising value equivalent (AVE) for 2015 increased by 11% as compared to 2014.

At the end of 2015, we launched a Summer Social Media campaign, the overall objective of which is to increase awareness for PET recycling (and general recycling) amongst the South African public (while simultaneously increasing awareness of the PETCO message, "Plastic bottles are not trash!").

Examples of messages that consumers receive when they engage with the campaign include:



In October 2015, PETCO sponsored the 'Walking the Daisies' component of the popular annual 'Rocking the Daisies' concert, representing a new target audience for PETCO. ([www.petco.co.za/walkingthedaisies](http://www.petco.co.za/walkingthedaisies))

#### RESOURCE DEVELOPMENT

We created specific PETCO Fact Sheets to align with the Mpact Bottle-2-Bottle launch, planned for 2016, i.e. Who is PETCO, What is Bottle-2-Bottle, and a project sheet on Extrupet's PhoenixPET plant launch (which took place in May 2015), as well as updated existing fact sheets (e.g. Assisting Schools, Universities and Property Owners with Recycling, Recycling for Events, a Guide to Starting Swop Shops, and a basic Environmental Management Guide).

We revised the People Story (which documents the story of PET collection and the people behind the collection: [www.petco.co.za/peoplestory](http://www.petco.co.za/peoplestory)) and started the planning of a Bottle-2-Bottle Story. We developed more promotional material, including a revised generic PETCO booklet, as well as branded feather banners, safety vests and protective overalls.

#### SCHOOLS PROJECTS

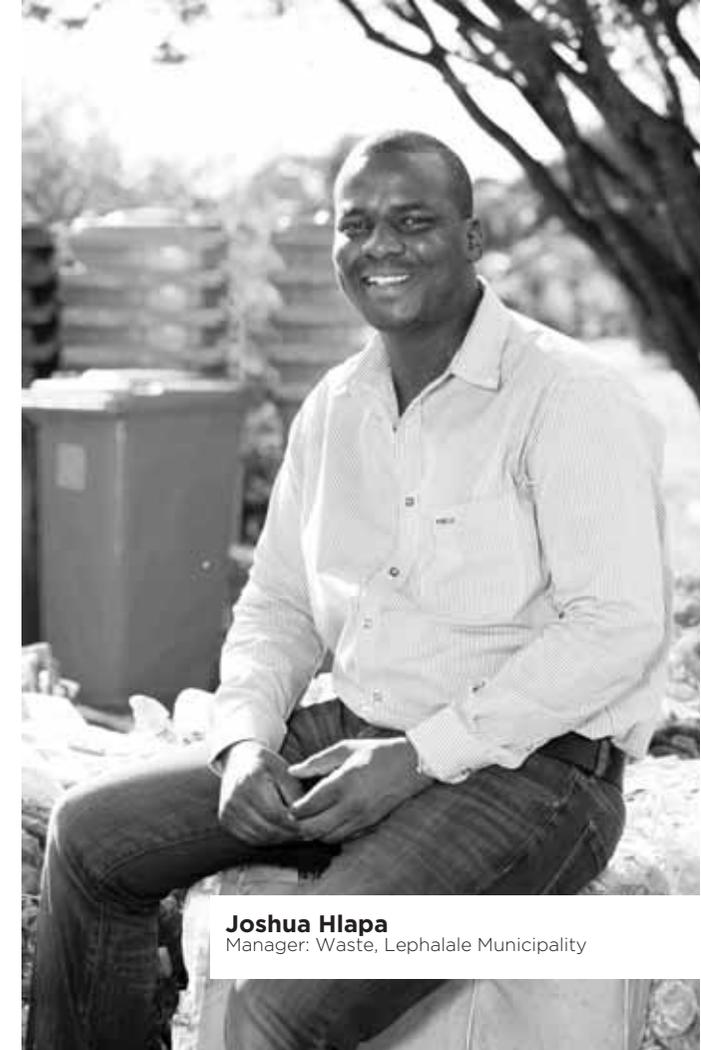
We actively encourage and contribute to the education of learners through national schools recycling competitions and schools collection projects undertaken with our partners.

In 2015, almost 500 schools, over 350 000 children, and 11 000 teachers across four provinces were reached through PETCO's school projects. One of the many projects we supported was the Operation Smile: Million Bottles for Smiles, in partnership with the Waste Trade Company, initiated in 2009 as part of the Company's social responsibility initiative. Since then, the project has grown to include more than 180 schools in the Nelson Mandela Bay Metro.

One of the most fulfilling initiatives over the course of 2015 has been the ABI Schools Recycling Competition. Through this project, over 645 tonnes of recyclable material was collected from 404 schools; over 350 000 learners and 11 000 teachers benefited; and a total of 50 young people were employed in the programme with 10 permanently employed by ABI and partners.

#### UNIVERSITY PROJECTS

We supported the Pretoria University with awareness raising during their Green Week, as well as the University of Cape Town (UCT) and the University of the Western Cape with specific research topics for their graduate programmes. We assisted other Institutes of learning with various projects ranging from awareness raising and information dissemination to outreach programmes.



**Joshua Hlapa**  
Manager: Waste, Lephalale Municipality

*"We do source separation. We give residents a blue bag for storage of PET - the hospitals are also participating as are the military services. Everyone wants to recycle in Lephalale - even the Mayor is recycling. Recycling is hip and happening!"*

#### 4. Special projects and joint ventures

PETCO embraces partnerships and sees the value of collaborative efforts. We undertake a range of projects, from in-kind donations and joint-cause marketing campaigns, to joint ventures with government, other industry bodies, our RAG partners and our Shareholder Members.

Below are some examples of the remarkable joint venture projects that were undertaken in 2015:

##### **THE INTERNATIONAL LABOUR ORGANISATION (ILO) ENTERPRIZE DEVELOPMENT CHALLENGE**

For the third year in a row, the International Labour Organization and PETCO collaborated with partners in the uMhlathuze Municipality about 180 kilometers north-east of Durban, to host the Responsible Tourism Challenge. The Challenge is a sector specific business plan competition implemented with public and private sector partners and is designed to support SMME development and job creation. Under the banner of responsible tourism practices, businesses in the tourism and waste sectors were invited to present their business ideas.

Three waste businesses in the uMhlathuze Municipality won prizes that included both financial and non-financial support.

##### **THE TIHANA RECYCLING AND WASTE MANAGEMENT PRIMARY CO-OPERATIVE**

The Tihana Co-operative was recently announced as one of the winners of the 2015 SEED Awards. This cooperative comprises of five women who collect recyclable waste in the village of Senwabarwana (Limpopo). They use donkey carts and trolleys to collect used plastic bottles (PET), cans and glass. In partnership with the P.E.A.C.E Foundation, PETCO played an important role in supporting the Co-operative through training and by supplying collection trolleys and a manual baling machine.

##### **PENINSULA BEVERAGE COMPANY**

PETCO has partnered with Coca-Cola Peninsula Beverage Company by contributing 50% towards a baling machine for the exclusive use of baling post-consumer PET Plastic bottles.

#### 5. Fostering government partnerships

PETCO actively partners with government on various projects across all nine provinces, thanks to our collection network and the local authorities.

In 2015, PETCO supported various government projects, including:

##### **TRAINING ON WASTE MINIMISATION, SEPARATION AT SOURCE AND RECYCLING**

PETCO was requested by the Department of Environmental Affairs and Development Planning (DEADP) of the Western Cape Government to assist in training their separation-at-source awareness educators on sorting and the basic economics of recycling. 23 Environmental Protection and Infrastructure Programme (EPIP) workers from the Cederberg and Berg River Municipalities attended.

##### **JOB CREATION INITIATIVES**

Government on its own cannot create the number of jobs required to enable the large number of job seekers to find meaningful employment. By engaging with the private sector, the public sector can achieve better value for money for its investment in developmental outcomes. Hence PETCO partnered with the National Department of Small Business Development (DSBD) and the International Labour Organisation (ILO) in a job creation initiative, in partnership with Development Bank of Southern Africa (DBSA).

##### **WORKSHOP PRESENTATIONS**

PETCO was invited to present at a workshop hosted by the Department of Economic Development, Environmental Affairs and Tourism (DEDEAT), District of Waste Management Forum, and the South African Local Government Association (SALGA).

##### **STRATEGIC PLANNING**

The Mpumalanga Department of Agriculture, Rural Development, Land and Environmental Affairs (DARDLA) organised a Waste Summit for all the stakeholders involved in waste management in the Province. These included local municipalities, mining companies, packaging manufacturers and recycling companies. The aim of the summit was for the stakeholders to come up with practical and strategic solutions to address the waste challenges in the Province. PETCO submitted a detailed strategic document highlighting current projects supported, workshops organised and planned initiatives in the Mpumalanga Province.

#### 6. Building the recycling network

As a measure towards achieving an inclusive approach amongst stakeholders of PET recycling, PETCO implements a membership scheme for stakeholders.

There are two categories of PETCO Membership:

- Shareholder Membership
- Associate Membership

##### **SHAREHOLDER MEMBERSHIP**

Shareholder Membership is reserved for companies who pay levies and grants, and for whom shareholding and voting is reserved. Percentage of shareholding in PETCO is allocated according to annual continuous membership contributions, which is calculated every 3 years.

##### **ASSOCIATE MEMBERSHIP**

Our Associate Membership programme involves a diverse group of individuals and companies. It enables anyone from a Not-for-Profit organisation to a school, from a collector to a manufacturer, to become a member of PETCO. The common thread is a belief in recycling.

##### **CATEGORIES OF ASSOCIATE MEMBERS:**

- Reciprocal Members: Industry Associations, Recycling Associations.
- Special Members: Schools, Students, Section 21 Companies, Drop off Centres.
- Friends of PETCO: Suppliers to PETCO, Waste Companies, Recycling Consultants.
- Professional and Corporate Members: Recyclers, Machine Manufacturers, Small Brand Owners, Waste Management Companies, Medium to Small Retailers.

Associate Members are not allocated shares in PETCO and have no voting rights, but many other benefits apply.

##### **MEMBERSHIP WORKSHOPS**

PETCO hosts free nation-wide member workshops, specifically designed to be useful to members' businesses and of benefit to their employees. These workshops help to ensure that members are up to date with the latest offerings from government and the private sector. They are packed with relevant case studies, and information on a range of topics relating to PET plastic recycling and relevant new products.

We hosted four events across the country in 2015, specifically focussed on educating and informing various stakeholder groups about what it means to be a member of PETCO. These included:

- A 'Morning with PETCO and Partners' workshops in PE and Durban, showcasing PETCO's projects and support offerings were extremely well supported. Forming links with the local business chambers in both cases was relevant.
- Thematic workshops entitled 'Spotlight on EPR' were held in JHB and Cape Town. At the workshops we grappled broadly with the topic of Extended Producer Responsibility (EPR).

##### **WORKING WITH PACKAGING DESIGNERS**

PETCO recognises the need for innovators, designers, manufacturers and packaging decision makers to understand how packaging design decisions affect container recyclability, and where feasible to design packaging to be compatible with the broadest range of recycling operations and technologies.

In 2015, we:

- Revised our 'Design for Recyclability' guideline document in line with best practice and knowledge of our current technological capacity. We also contributed to the Design for Recycling packaging designer's reference manual published by Packaging SA.
- Hosted our annual 'Design for Recycling' workshop, and shared current thinking on design for innovation and closed loop systems.
- Engaged brand owners around pack format and design, while stressing complexities and options.
- Empowered students with information about the fundamentals of design for recycling, by delivering lectures to IPSA packaging technology students.

Highlights for 2015 include presenting at the Cape Town World Design Capital 2015 on 'Packaging by Design: Soul Food for the 21st Century', where PETCO enlightened conference-goers on plastic packaging and recycling during the Cape Craft and Design Institute's (CCDI) creative exchange.

##### **PETCO AGM**

PETCO's 2015 AGM was held on Wednesday 27 May at the Quartermain Hotel in Sandton. The event was well attended by a range of shareholder members who were able to reflect on what progress has been made and to ponder the road ahead. Our guest speaker at the AGM was Professor Linda Godfrey of the CSIR, who enlightened shareholders on the changing face of waste management and opportunities in the waste sector in transitioning South Africa to a green economy.

# PETCO AWARDS

At the 11th AGM, PETCO recognised and honoured the people, companies and organisations involved in the PET recycling value chain in South Africa, which not only contributed to advancing PET recycling, but also reflected the principles of EPR and circular economy-thinking in their practices, during the course of 2015.

Here are the worthy winners:

- 1. Best Recycling Information, Awareness and Education Programme:**  
**Gregory Player, Clean C,**  
for his team's beach and community clean-ups, which have helped remove over 100 tonnes of rubbish off the beaches in and around Cape Town.
- 2. Best Product using recycled PET (rPET):**  
**Woolworths,**  
for their 'Re' denim range of clothing that uses 12 x 500ml recycled plastic bottles to manufacture each pair of recycled denims
- 3. 'Designed for Recycling':**  
**Coca-Cola South Africa,**  
for their extensive range of clear bottles (of all sizes) that are designed to be recycling-friendly.
- 4. PETCO Recycling Champion:**  
**Kimberly Recycling,**  
for increasing their total collection of PET to between 60 and 80 tonnes per month and growing their employee numbers from 11 to 45 since their inception nine years ago.
- 5. PET Community Outreach and Upliftment:**  
**K1 Recycling,**  
for the work they have done in supporting and uplifting the Tsietsi Palm Ridge Co-op with the community of Ekurhuleni;  
**Waste Want,**  
for creating a youth co-operative employing people seeking to make a change and get off the streets; and the  
**P.E.A.C.E Foundation (Planning, Education, Agriculture, Cooperatives and Environment),**  
for providing mentorship and stakeholder mobilisation to the Tihana Co-operative (consisting of 5 women, previously working from the Senwabarwana dumpsite).

- 6. Woman PET-trepeneur:**  
**Megan Leach (Envirowaste Recyclers) and Nomlindelo 'Pinky' Modisang (Lindithondo Construction & Projects).**  
These women are tireless in the work they do to uplift and upskill their communities. They are both passionate about recycling and its potential - not only for themselves, but also for their communities and the country.
- 7. PET-trepeneur:**  
**Gcina Makhoba (Mpilenhle Recycling) and Brian Masemola (Boremako Recycling).**  
Having only recently added PET to their recycling efforts, these gentlemen recycled a combined volume of almost 800 tonnes of PET for 2015. Furthermore, Gcina now employs 43 people permanently and Brian employs 15 individuals (six of which are full time).
- 8. PET Recycling Local Authority Initiative:**  
**Lephalale Municipality,**  
for implementing various community waste recovery and avoidance programmes, alongside waste education and awareness programmes, throughout the municipality to encourage behaviour change.
- 9. PETCO's Small- or Medium-sized Business Champion:**  
**Cannibal Glass (Port Elizabeth),**  
for becoming one of largest collectors of PET in PE after they encouraged half of their 5 000 glass collectors to collect PET as well. Their PET tonnages increased from 0 to over 50 tonnes per month in 2 years and it's still growing.

This year, we additionally introduced PETCO's 'Spotlight' media award, created to recognise media excellence in the area of recycling, sustainability and enterprise development, specifically of PET, and its importance within the overall context of the environment. The inaugural winners will be announced at the 2017 PETCO Awards.



# FINANCIAL INFORMATION HIGHLIGHTS

In order to sustain and grow PET bottle collection, consistent demand for post-consumer PET is required. Recycling is a commodity business and, as such, is prone to significant cycles.

Unlike plastics, the steel, paper, glass and cardboard used in packaging are helped enormously by the ability of the original manufacturers to recycle their own material recovered from the waste stream. Polymer manufacturers are unable to offer such a low cost route because of the multiple variations in grades of the different types of polymer produced. Companies specifically set up for this purpose therefore carry out the recycling.

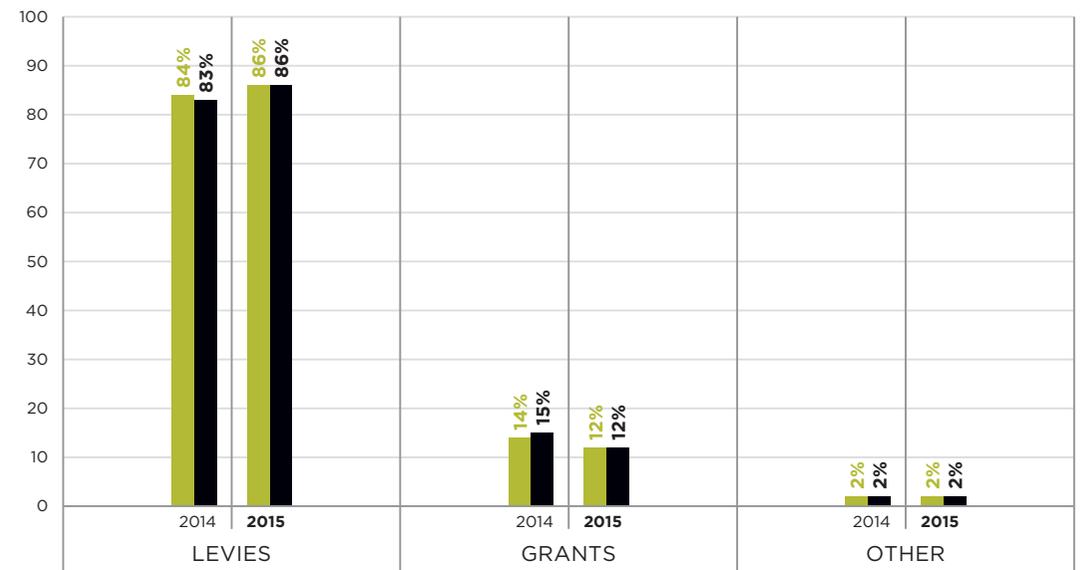
In most cases, this leads to recyclate being produced, which then has to compete with the highs and lows of virgin polymer prices and other end uses (specifically textiles with recycled polyester content that compete with virgin polyester staple fibre). It is great when these prices are high, but when they are low, recyclate often struggles to survive. Hence the PETCO financial model.

## HOW WE UTILISED OUR FUNDS YEAR ON YEAR

### INCOME

(% OF INCOME)

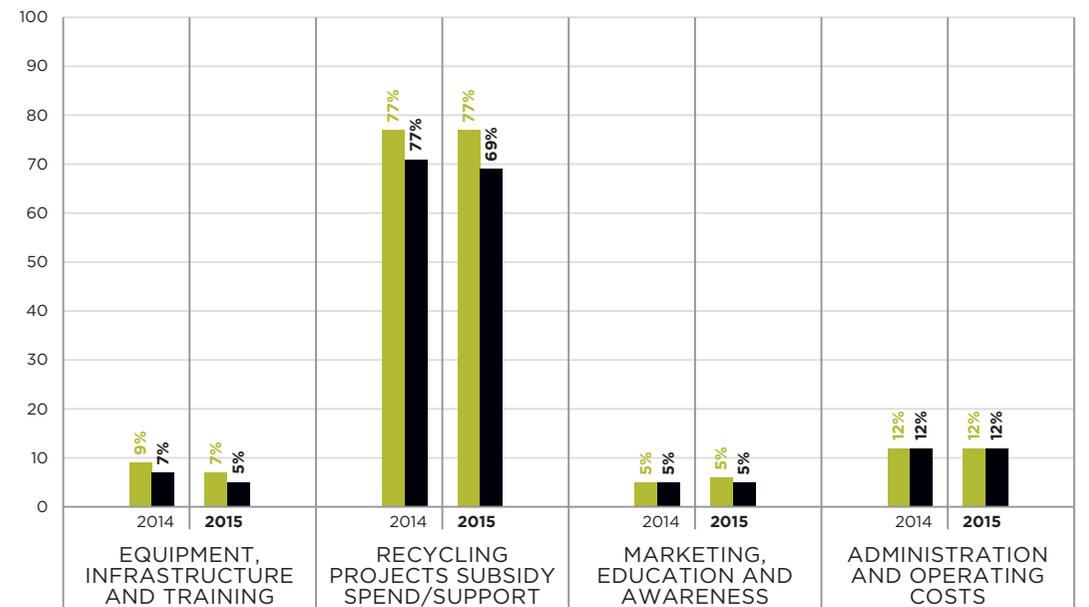
■ BUDGET ■ ACTUAL



### EXPENSES

(% OF INCOME)

■ BUDGET ■ ACTUAL



# WHERE TO FROM HERE?

## The outlook for 2016 and beyond

The key factor influencing the rPET global market currently is the low virgin price of resin - the result of the impact of the low crude oil price on the polyester chain. The impact of the fall in the oil price since mid-2014, its effect on virgin and recovered plastic prices, and the impact on the economics of plastic recycling are significant concerns. Plastics recyclers are particularly vulnerable to changes in market conditions, due to their position in the middle of the supply chain. Lack of control over input quality, availability and cost means that reprocessors are at risk of receiving lower quality material.

It appears likely that global oil prices will remain depressed, in the range of \$40-50, meaning that the pressure on virgin PET prices and therefore on recycling margins, will remain in place.

However, all stakeholders in the plastics industry need to look past recent volatility. As with all commodities, markets tend to move in cycles and the plastics recycling industry is no different.

A business model based on the ability to supply products to a wide range of end markets, and at low cost, is most likely to be resilient and robust in the current environment.

We are particularly focussed on the following areas:

### Research and International Cooperation:

**Waste-2-Energy.** An increasing number of countries are starting to recognise that waste plastic should be regarded as a valuable resource that should ideally be recycled or, where that's not an option, used to fuel Waste-2-Energy facilities. Challenges associated with Waste-2-Energy (WtE) projects include being able to secure long-term contracts beyond the usual three-year period with municipalities, as well as being able to secure off-take agreements for the sale of electricity. PETCO has drafted a discussion document on Waste-2-Energy that is available upon request.

### Integrating the informal collection sector.

A prerequisite for successful plastic waste management is the existence of a legal framework that supports and finances the collection system with the necessary infrastructure, awareness campaigns and training of waste pickers. It is crucial for waste pickers to get organised into groups, cooperatives or other collective entities. The experience of waste co-operatives in Brazil and other countries and the legal framework that supports them, is helpful to our situation.

### Consumer Awareness and Understanding:

We know that consumers are generally willing to recycle, when it is made easy for them to do so, but getting them to be fully efficient and motivated, and to ultimately change behaviour, requires ongoing awareness campaigns and education. While consumers might be aware of the need for change, most residents are not acting on their awareness, and lack understanding of what they can do that would actually make a difference. Residents are also looking for an authoritative voice they can trust to give them accurate and reliable information about how and what to recycle.

By increasing the level of consumer awareness and understanding, we can ensure that households are encouraged to take advantage of recycling processes and procedures as they become available.

We will conduct regular consumer research surveys to create campaigns that move consumers along the five stages of behaviour change, i.e contemplation, preparation, action, maintenance, and relapse.

DEA have established a Chemicals and Waste Awareness Forum and PETCO serves on the steering committee.

### A National Network of Committed Organisations (including Industry, Government and the Private Sector):

Our most valuable stakeholders are our members and our success over the past 12 years is because of their efforts and hard work. Maintaining and growing these relationships is of highest priority.

Our intention is to relook at and revise our Associate Membership programme in order to ensure that we are continuously creating and delivering value and support. We will be creating a toolkit for members to guide them on how best to leverage the PETCO partnership, how to use our logo for maximum exposure, and what member benefits could be better utilised.

We would like to grow the PETCO family beyond the PET value chain, to include organisations and individuals that reflect the principles of EPR and circular economy-thinking.

### Change in Structure: Pty (Ltd) to Non Profit Company (NPC):

PETCO is mandated to use all funds received in promoting and supporting the recycling of PET, and will continue to do so. It is our intention to change the legal structure of PETCO from a Propriety Limited Company (Pty) Ltd to a Not for Profit Company (NPC) which is more congruent with PETCO's mandated objectives and inherent structure. A NPC is a company set up for public benefit, or communal or industry interests, where the income is applied solely to the promotion of the NPC's objectives and no retained funding can be distributed to members.

### Conduit for Enterprise Development:

Over the years PETCO has supported projects with infrastructure, equipment and protective clothing, enhancing working conditions and training for staff and helping collectors improve their collection quantity, quality and transport efficiencies. PETCO has put a system in place to isolate funding that qualifies for enterprise development. Through this, acting as conduit, PETCO can provide qualifying members with the benefit of the Enterprise Development spend on a percentage of their contribution.

### Policy Shifts:

One of our main challenges for 2016 is the uncertainty about the future structure of the Paper and Packaging Industry in light of the new National Environmental Management Waste Amendment Bill from the Department of Environmental Affairs (DEA). The Act and Bill provide for a pricing strategy for waste management charges (with a wide range of potential economic instruments along the product-waste value chain), the establishment of a Waste Management Bureau (WMB) and mechanisms to oversee the disbursement of revenue collected from waste management charges. The DEA would also like to consult on the proposed development of regulations for the separation of waste at source, the banning of plastic waste-to-landfill, a moratorium on new landfill sites, a prohibition of the burning of waste, a regional approach to waste management and disposal. The income from the waste management charges would fund industry and community initiatives to recycle and recover waste streams. The intention is for some of the funding collected to be used to fund industry and community initiatives to recycle and recover waste streams. PETCO has established an internal PET Roadmap Working Group, with representation from the various shareholder categories and other role players and we are working closely with Government and the Paper and Packaging Industry to ensure that all parties are able to meet their respective mandates, without compromising the livelihoods of those who depend on an established and growing recycling industry, or reversing the hard-won environmental gains. PETCO would like to see the formation of a DATA Alliance in the Paper and Packaging Sector enabling the sector to work collectively on developing accurate and meaningful methodology / statistics which are vital for planning, monitoring and evaluation.

### Stakeholder Shifts and Continued Industry Commitment:

Due to the abovementioned policy shifts and plastic falling into the spotlight in terms of the Minister's budget speech, we find that stakeholder engagement and relationships with packaging, plastics, recycling partners, DEA/ WMB will now be crucial.

Now more than ever, the plastics industry needs to speak with one vision and ensure consistent messaging. We need to speak as an organised sector.

The South African plastics industry is an advocate for achieving world-class standards on recycling. To achieve this, everyone involved - from the raw material producers, through to manufacturers, retailers, consumers and recyclers - all need to play their part in the solution and there is a need for PET bottle industry to stay committed to PETCO.

#### **Standardise Waste Management Procedures and Processes:**

Currently waste collection and management is best described as a lottery. Most of the authorities in the South Africa still do not have kerbside plastics collection, even for bottles. Substantial progress on achieving plastics recycling targets will not happen until best practice processes and procedures are adopted nationwide. The higher the targeted recycling rate, the more challenging it will be to collect more bottles. PETCO is excited about the roll out of additional municipal kerbside collection and various projects and partnerships to achieve increased collection. In particular- the Bottle-2-Bottle expansion would require cleaner feedstock and dovetails well with Government's mandate to municipalities to reduce the amount of material going to landfill. The expansion of kerbside collection programmes must however be carefully balanced with the needs of the informal waste pickers, who form an important foundation for the entire value chain.

#### **Embedding Design for Recycling into the Development of Packaging:**

We recognise the need for innovators, designers, manufacturers, and packaging decision makers to understand how packaging design decisions can affect container recyclability and where feasible to design packages to be compatible with the broadest range of recycling operations and technologies. We think it is an exciting opportunity to inspire a generation of designers to profoundly rethink plastic packaging.

#### **Tubs, Trays and Edible Oil:**

Tubs, tray and edible oil bottles are currently not recycled in South Africa. There is potential for other forms of recovery for these pack forms, depending on buy-in from the sector to fund the investment in collection and technology as well as the generation of volumes adequate to keep the lines running efficiently. The issue of tracking 'free riders' coming aboard as PETCO members also comes to the fore, as they are one of the largest end-use sectors of recycled PET for packaging. We continue to encourage these producers to engage with us, as there is now a pressing need for PETCO to represent the entire PET sector as a vehicle for fulfilling their EPR obligations.

#### **End-use Market Development**

Creating higher demand for products made from recycled plastics is essential. The greater the demand, the more this will "pull through" the supply chain and stimulate activity. This will take considerable investment in infrastructure, innovation and encouragement from both private and public sectors. Retailers also have a considerable role to play.

Together with our partners across the PET value chain, we have a vision for an economy in which plastics never become waste. We understand the concrete steps that are required towards achieving the systemic shift needed, based on the principles of a circular economy.

End-use market developments for recycled strapping as well as the export of fibre are opportunities to pursue going forward.

We look forward to the opportunities going forward and anticipate that 2016 will go down in history as the year we further closed the loop in PET recycling in South Africa, obtaining food grade approvals, especially from brand owners such as Coca-Cola.

#### **Industry Developments and Expansion**

We are pleased that the Board of Directors of Hosaf has approved a R700m expansion of their existing plant in Durban, thereby doubling the capacity of PET resin production. This expansion is due to come on stream in 2017.

In another exciting development, a comprehensive set of commitments have been agreed between the Coca-Cola Beverages Africa (CCBA) merger parties - SABMiller plc, The Coca-Cola Company and Gutsche Family Investments - and the South African Government, that will be recommended to the Competition Tribunal in connection with the proposed creation of Africa's largest soft-drink beverage bottling operation.

The commitments address concerns regarding employment, access to retail cooler space for smaller competitors, localisation of production and inputs used in the production of Coca-Cola products and Appletiser brands, economic empowerment and the location of the headquarters.

The company agreed to invest R800 million to support enterprise development for two groups of entrepreneurs:

- Creation of a R400 million fund for enterprise development in the agriculture value chain, particularly to support and train historically disadvantaged developing farmers and small suppliers of inputs to Appletiser and CCBSA products on a competitive and sustainable basis;
- R400 million incremental investment to develop downstream distribution and retail capabilities with associated skills development and training.

This is expected to create an additional 20 000 black-owned retailers.



**Nomlindelo 'Pinky' Modisang**  
Owners, Lindithondo Construction & Projects

*"I am doing recycling in Midvaal. Around where we were staying, there is a need for recycling, so a group of us decided to start picking up recyclables. There are 16 of us and we collect around 6 tonnes of plastic a month, more in summer. People don't always take you seriously as a women - around my community I'm well known for what I am doing because I am saving the planet. One lady who worked for me, is now ready to work on her own and I introduced her to PETCO."*

# CELEBRATING THE PETCO PEOPLE

It's time, once again, to acknowledge and celebrate the incredible people behind this year's many accomplishments. You will find them all listed on the following pages, but that hardly suffices to show our appreciation for the efforts, the creativity and, most of all, the heart they all put into sustaining and expanding our presence. May the coming year bring new recycling partnerships, a more stable economic environment, recovery, and further growth.

## PETCO STAFF

- Cheri Scholtz  
*CEO*
- Alistair Schorn  
*Business Development Manager*
- Belinda Booker  
*Collections and Training Manager*
- Janine Basson  
*Stakeholder Relations Manager*
- Carene Mellor  
*Company Administrator*
- Vainah Mbulo  
*Johannesburg Office Administrator*

## PETCO CONTRACTED RESOURCES

- Martin Niebuhr  
*Accounting and Financial Consultant*
- Annette Schell  
*Levy Manager*
- Deloitte SA  
*Auditors*

## PETCO BOARD OF DIRECTORS

### EXECUTIVE DIRECTORS

- Casper Durandt - Chairman  
*Franchise Technical Director, Coca-Cola Southern Africa; Representing: Brand Owners*
- Greg Morse - Vice Chairman  
*Manufacturing Director: Peninsula Beverages, Representing: Bottlers*
- Steven Bird  
*Sales and Marketing Director: Hosaf; Representing: Resin Producers (January - August 2015)*
- Daniel Schoeman  
*General Manager: Hosaf; Representing: Resin Producers (Dec 2015)*
- Tshidi Ramogase  
*Corporate Affairs Director: SAB Miller / ABI Soft Drinks; Representing: Bottlers*
- Tom McLaughlin  
*Responsible Sourcing: Woolworths Food; Representing: Retailers*
- Andre Nel  
*Sustainability General Manager: Pick 'n Pay; Representing: Retailers (alternate)*
- Clynt Levin  
*Chief Executive Officer: Boxmore; Representing: Converters*
- David Drew  
*Chief Commercial Officer: Boxmore; Representing: Converters (May 2016)*

### NON-EXECUTIVE DIRECTORS

- Vukani Magubane  
*Director of Public Affairs and Communications: Coca-Cola South Africa; Representing: Bottlers*
- Willem Pienaar  
*Managing Director: Nampak Liquid and Petpak, Environmental Expert (Board Appointment)*

Our directors serve a two-year term and are elected after being nominated by the industry sectors they represent. They may avail themselves for re-election.

**Our board are not remunerated and pay their own expenses to attend annual meetings.**



CHERI SCHOLTZ



ALISTAIR SCHORN



BELINDA BOOKER



JANINE BASSON



CARENE MELLOR



VAINAH MBULO

## PETCO PARTNERS AND MEMBERS

### PARTNERS

PETCO acknowledges our partners who share an ambitious vision to shape waste management practices in South Africa:

- Department of Environmental Affairs (DEA)
- Packaging SA
- Paper Recycling Association (PRASA)
- Packaging Council of SA (PACSA)
- National Recycling Forum (NRF)
- Institute of Waste Management SA (IWMSA)
- PlasticsISA
- SA National Bottled Water Association (SANBWA)
- The International Labour Organisation (ILO) - United Nations
- The PEACE Foundation

### SHAREHOLDER MEMBERS

At end-December 2015, there were 23 Shareholder Members of PETCO:

- ABI (SAB Miller)
- Bizee Corporation t/a ATA Agencies
- Bowler PET (Pty) Ltd
- Boxmore Plastics International (Pty) Ltd
- Coca-Cola Canners
- Coca-Cola SA
- Coca-Cola SABCO (Coca-Cola Fortune)
- Coca-Cola Shanduka Beverages
- Hosaf a Division of KAP Manufacturing (Pty) Ltd
- Mpact Plastics
- Nampak Liquid Packaging
- Nioro
- New Age Plastics cc
- Pick n Pay
- Nampak Petpak
- Peninsula Beverage Co (Pty) Ltd
- PETech/Plastech (Astrapak)
- Polyoak Packaging
- Purpleline Plastics
- Split Line Manufacturers
- Tsitsikamma Crystal Water
- Twizza (Azores Manufacturers)
- Woolworths

Shareholder Membership is reserved for companies who pay levies and grants, and for whom shareholding and voting is reserved.

## PETCO PARTNERSHIPS

GOVERNMENT	LOCAL INDUSTRY	INTERNATIONAL INDUSTRY AND AGENCIES	SHAREHOLDERS AND ASSOCIATED MEMBERS
To build policy and practice frameworks that support and grow the green economy.	To harness knowledge, build common interests and increase waste innovation.	To glean knowledge on best practice on how to generate and sustain a creative contribution to innovation and development locally.	To support PET recycling, sustain collection interest and reduce the volume of post-consumer PET in the waste plan.

## OUR SHAREHOLDER MEMBERS ARE THOSE WHO PAY LEVIES AND GRANTS, AND FOR WHOM SHAREHOLDING AND VOTING IS RESERVED:



### ASSOCIATE MEMBERS

Associate Members are companies, organizations and individuals who are non-levy paying and, as part of the PETCO family, subscribe to our values:

- A whale of heritage route
  - Akura
  - Alfrehutch
  - Appletiser SA
  - Beauty and Son Recycling
  - Betha Neland Consulting
  - Beytell Belegging t/a Anti Waste
  - Blue Acqua
  - Bonke Abantu Recycling and Waste Management
  - Brandhouse Beverages
  - Dema Trans Waste Services
  - Ekhmanzi Springs t/a Aquelle
  - eLabel
  - Enviroserv Waste Management
  - Extrupet
  - Garden Route Marketing
  - Gontse Environment and Recycling
  - Green Cape
  - Green Cycle
  - Green Edge Communications
  - Green Recycle
  - Hlobisa Enviro Waste
  - Husky
  - Institute of Packaging South Africa
  - Johannesburg Zoo
  - Kaytech Engineered Fabrics
  - Kimberly Recycling
  - Kronos Southern Africa
  - Limwiz Management and Consulting
  - Mama She's Waste Recyclers
  - Move On Up 1061 t/a Waterval Minerale
  - Mpact Recycling
  - My Waste
  - Oasis Water
  - Perfect Water
  - Pikitup
  - Postwink Recycling Products
  - Propet
  - Pura Fresh Water Co
  - Recycling Solutions t/a Don't Waste Services
  - Remade Recycling
  - SC Johnson and Son Inc
  - Sen li Da Chemical Fibre
  - Silver Stars Trading
  - South African National Bottled Water Association
  - T-CUP
  - The Eco-Smart Box t/a The Recycling Box
  - The SOUL Foundation
  - The Waste Trade Company
  - Trashback
  - Tswelangpele Co-op
  - Tuffy Brands
  - Unilever SA
  - Waste Plan
  - Wildlife & Environmental Society of South Africa
- (As at 1 December 2015)

# Our Board Members

(from top left to bottom right)

ANDRE NEL  
CASPER DURANDT - CHAIRMAN  
CLYNT LEVIN  
DANIEL SCHOEMAN  
DAVID DREW  
GREG MORSE - VICE CHAIRMAN  
TOM MCLAUGHLIN  
TSHIDI RAMOGASE  
VUKANI MAGUBANE



## What do our Stakeholders think about the future?

**Greg Morse** - Bottler Perspective:

*“Going forward, we are very excited to have the possibility of using rPET in B2B applications. We appreciate the investment that has gone into the infrastructure in making this possible.”*

**Andre Nel** - Retail Perspective:

*“We would like to see increased collaboration within the retail sector on non-competitive issues. We would also enjoy an increase in consumer activism and more transparency in supply-chains.”*

**Tom McLaughlin** - Retail Perspective:

*“With the need to create more and better jobs in the field of recycling, it is in the best interests of the packaging supply chain to collaborate and create a circular economy. We need packaging which is fit for purpose and which is also designed for disposal.”*

**David Drew** - Converter Perspective:

*“I believe we will start to see more and more use of rPET in beverages in particular and potentially in brands that will claim their use of rPET publicly. This is also an important change in the market. Some of those using rPET at this point have done so purely from a cost point of view. I think the impact of the new MPact plant on the upstream supply of PC PET will take a while to settle and from a converter point of view it should also have an impact on the market for clean factory scrap.”*

*Unless commitment is made, there are only promises and hopes... but no plans.*

**Peter Drucker**

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# 2015



Supporter of Plastics | SA  
Supporter of Packaging | SA



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