

Turning Waste into Worth: Spotlight on PET Recycling



PET Recycling in SA



PETCO is the national industry body responsible for managing the PET industry's extended producer responsibility (EPR) in South Africa.

Our mission is to grow the collection and recycling of PET bottles after consumer use. We have done this for a decade and are funded by a voluntary recycling levy paid by industry.

How it is done

PETCO invests all it's funds (not-for-profit) in ensuring and encouraging PET recycling, through

- contracting and financing PET recyclers who collect bottles, process them into rPET in preparation for the manufacture of new products
- consumer education and awareness
- training and joint venture projects
- equipment support and sponsorship
- guidance relating to design for recycling

By way of partnerships through five to ten-year plans with clearly-defined targets.

Contracted Recycling Partners



- Extrupet
- Mpact Polymers
- Sen Li Da
- Kaytech
- FTE Production
- SAFrePET
- Da Run Fa

PET is too valuable to dump in landfill



PET Recycling Process..

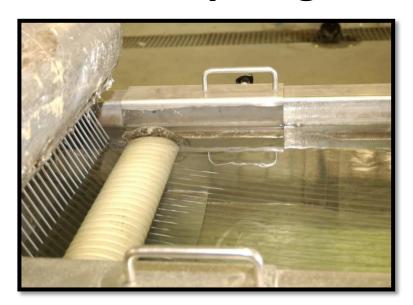


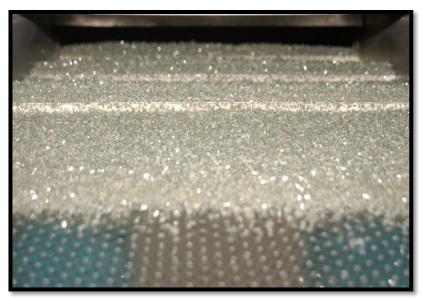






PET Recycling Process..



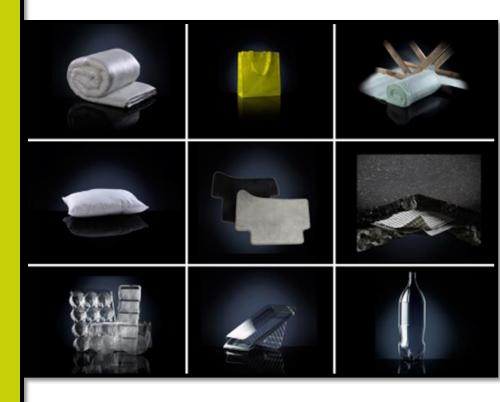






Made into Sorted, bottles thus washed and closing the flaked. loop Made into packaging Spun into Made into fibres many products

End Use markets



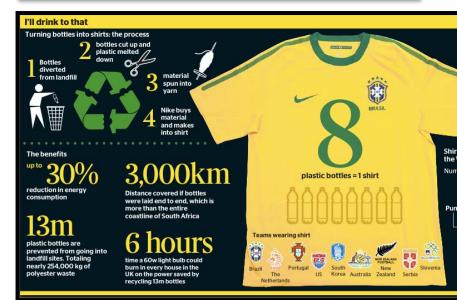
CURRENT END-USES

Products made from recycled PET









Closing The Loop

Made into bottles thus closing the loop

Made into packaging



Visible Recycling Projects

PETCO allocates funding and resources to Education, Awareness, Collection and Training in the following ways:

- PET infrastructure and equipment provision
- Collector training and development
- Education and awareness
- Special projects and joint ventures
- Fostering government partnerships
- Building the recycling network
- Guidance relating to design for recycling (for industry).

Education and Awareness

We aim to increase awareness, education and understanding around Reduction, Reuse and Recycling

- Consumer marketing
- Resource development
- Membership workshops
- Schools projects
- Separation at Source : Cederberg and

Eden District Road show RE





Training and Skills Development

Training, Skills Transfer, Entrepreneurial Development and the Empowerment of SMME's - 2014



- Workshops 9 provinces, 22 municipalities
- Establishment waste recycling enterprises for 17 projects
- Formation of cooperatives and offered training for 11 cooperatives and 2650 collectors
- Focused on business
 management training for
 entrepreneurs and SMMEs -16
 different workshops

Joint Venture Projects

We undertake a range of joint venture projects with Government, Industry Bodies and our Shareholders



Featured Projects





- International Labour
 Organisation (ILO) EnterPRIZE
 Development Challenge
- Bon Accord Material Recovery Facility
- Free State Recycling Projects
- Coca-Cola Fortune Recycling Project
- Masakhane Scrap Metal
- Silver Ink Recycling
- Ikageng Ditamating Vaalpark
- Tihana Recycling
- Inhlanzeko Co-Operative

Ikageng Ditamating Co-Operative



Process and Support

- Co-Operative, 22 members officially the implementer of the separation at source project in Vaalpark
- Government: National DEA; Provincial DESTEA; District Fezile Dabi;
 Municipality Metsimaholo
- Industry: Packaging SA (PETCO;PRASA;CAC;TGRC; POLYCO;Plastics) SA; PSPC) SA Vinyl
- Funding: ILO Competition. PETCO sponsorship (Cages, baling machine, PP)
- Business: Sasol Rejuvenation, Harmony Mines, Safripol





Launch.....







A RECYCLING PROJECT IN VAALPARK



THESE CAN BE RECYCLED?

Beverage cans Food cans Aerosol cans Paint cans Oil cans Screw caps Foil

Wine and Beer Spirits Other alcoholic beverages Food jars Cool drinks Juice bottles

METALS | GLASS | PAPER & BOARD | PLASTICS

Office paper and envelopes Cardboard boxes Magazines Newspapers

Telephone books Junk mail

Milk and juice cartons Paper gift wrap

Bottles and drums

Bags Crates

Buckets and pails

Caps and closures

Tubs and jars

Trays

Foam packaging

Shrink, stetch and other films







THESE CAN NOT BE RECYCLED

Wet, dirty or contaminated items

Cling wrap or disposable nappies

Chemicals, paint, toothpaste tubes

Dog food packets, washing powder packets, chips packets, motor oil containers, acids or solvents

Tihana recycling And Waste Management Co-Operative





Process and Support

- Co-Operative: Thinana Cooperative consists of 5 women, previously working from the Senwabarwana dumpsite.
- Prior to moving to the recycling buyback centre, these women worked from a dumpsite with no protective clothing and little to no access to the markets to sell their waste to
- Industry: PETCO Supported 5 Trollies, manual baler and PP. The use of customised trolleys together with prerequisite machinery has seen this cooperative extensively collect, sort, bale and sell waste to generate income
- Government Support: Municipality and District

Supporters and Donors to Date





















Inhlanzeko Co-Operative





- Co-Operative, Established in 2011. Women owned 10 members implement competitions to house-holds, do door to door collections with trollies in Tembisa
- Government: Municipality Ekurhuleni;
 local Economic Development Department
- Industry: PETCO
- Business: Sasol Rejuvenation, Harmony Mines, Safripol
- Funding: Nets Africa / Oxfam Italia; Gauteng Department of Agriculture and Rural Development – MTK Awards; PETCO co-op of the year 2013 (trollies, baling machine, container



2015 ILO challenge & support to collectors



Abraham Tumaeletsi: Ikageng Ditamating Winner: Waste Recycling

Ikageng Ditamating, a cooperative at Metsimaholo, Sasolburg, is managed by Abram Tumaeletsi, and operates at the landfill site of the Metsimaholo Local Municipality. It could, however, soon relocate to new areas earmarked by the municipality.

The cooperative, with 40 members, picks up and sorts waste materials at the local landfill site. They currently focus on the collection of waste products, such as paper, plastics and bottles. The cooperative receives support from industry role-players, such as PACKSA, PETCO and Wasteplan.

The medium-term goal of Ikageng Ditamating Cooperative is to introduce a collection system for separated household waste in the Vaalpark residential area of Sasolburg, covering some 3 000 homes.





André van Zyl: Rat Race Waste Second Place: Waste Recycling

Having opened its doors in Bloemfontein nine years ago, Rat Race Waste is currently one of the few successful dry waste collectors and buy-back centres in Bloemfontein. Located at 22 Monument Road, Oranjesig, Bloemfontein, Rat Race Waste buys plastics, paper and bottles collected by street pickers from the southern

suburbs of Bloemfontein. The business has three vehicles collecting waste from local businesses, which is brought to their premises and sorted before being sold to larger collectors.

Starting off with only two employees, Rat Race has grown over the years and currently has three vehicles with two trailers and seven permanent employees. Some of the Rat Race Waste employees were street pickers before being employed for their knowledge in sorting waste. Through this innovation, Rat Race Waste is a true pioneering enterprise in the local recycling industry.

2014 PET RECYCLING FIGURES

Local PET market consumption of 194 000 t- 6.6% YOY growth 68% PET resin used in the bottle sector

GROWTH OF PET BOTTLE RECYCLING IN SOUTH AFRICA



% of post-consumer PET bottles collected for recycling.

PET Recycling creates worth: environmentally





- Grew recycling tonnage from 16% to 49% of post-consumer PET bottles (10 year period)
- 2014: Saved 96 771 tonnes of carbon
- 2014: Avoided using 400 000 m³ of landfill space
- Reduced resource consumption

PET Recycling creates worth: Socially





- Creates 44 000 income opportunities annually
- Enables development of collection infrastructure for communities
- Facilitates training and skills transfer, entrepreneurial development and growth of SMMEs
- Grows awareness of recycling in schools and among consumers
- Produces an extensive range of educational material

PET Recycling creates worth: Economically



IN A DECADE, PET RECYCLING HAS RESULTED IN ...

- Investment of R 235 million in support of contracted recyclers
- The payment of a total of R 1.2 billion to collectors by contracted PET recyclers
- Facilitated the creation of R 2.9 billion worth of new products containing rPET back into the market and the economy
- R 900 million worth of investment in infrastructure development, which is set to grow further.





Thank you for your attention. Any questions?

