Annual Report

2022

The SA Plastics Pact

PLASTICS PACT

Contents

List of acronyms

ACEN	African Circular Economy Network
ARO	African Reclaimers' Organisation
CCBSA	Coca-Cola Beverages South Africa
CGCSA	The Consumer Goods Council of South Africa
COPCO	The Compostable Packaging Council
CSIR	The Council for Scientific, and Industrial Research
DFFE	The Department of Forestry, Fisheries, and the Environment
dtic	The Department of Trade, Industry, and Competition
EMF	The Ellen MacArthur Foundation
EPR	Extended Producer Responsibility
GBCSA	Green Building Council of South Africa
GPAP	Global Plastics Action Partnership
HDPE	High Density Polyethylene (plastic material identification code (MIC) No 2)
HIPS	High Impact Polystyrene
LCA	Life Cycle Assessment
LDPE	Low Density Polyethylene (plastic material identification code (MIC) No 4)
MRF	Material Recovery Facility
NGO	Non-Governmental Organisation
NPAP	National Plastics Action Partnership (in the GPAP network)
OPRL	On-Pack Recycling Label
OZCF	Oranjezicht City Farm
PET	Polyethylene Terephthalate (plastic material identification code (MIC) No 1)
PP	Polypropylene (plastic material identification code (MIC) No 5)
PPE	Personal Protective Equipment
PRO	Producer Responsibility Organisation
PS	Polystyrene (plastic material identification code (MIC) No 6)
PVC	Polyvinyl Chloride (plastic material identification code (MIC) No 3)
SALGA	The South African Local Government Association
SAPRO	South African Plastic Recycling Organisation
SAWPA	South African Waste Pickers Alliance
SST	Sustainable Seas Trust
STI4CE	Science, Technology, and Innovation for a Circular Economy
UJ	University of Johannesburg
UJ-PEETS	UJ - Process, Energy, and Environmental Technology Station
WEF	World Economic Forum
WWF	World Wide Fund for Nature

Definitions

Circular economy

The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. A circular economy keeps products, components, and materials at their highest use and / or value for as long as possible.

Input recycling rate

The input recycling rate is calculated by dividing the tonnes of plastic packaging collected that enters recycling plants, by the total tonnes of plastic packaging manufactured locally (with exports subtracted and imports added).

Output recycling rate

The output recycling rate is calculated by dividing the tonnes of recycled plastic that leaves recycling plants (sold to customers), by the total tonnes of plastic packaging manufactured locally (with exports subtracted and imports added).

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Message from the secretariat

Saloshnee Naidoo
Circular Economy Programme Manager
GreenCape
November 2023

"The members have shown leadership by pioneering this journey towards a circular economy for plastic packaging which is not only good for businesses, but for consumers, communities and the planet."

Key elements for success in achieving circularity is commitment and collaboration of the Pact members. This second annual report, which follows the 2020 baseline report and last year's report (on data from 2021), reports the results of the collective and collaborative action of the members during 2022.

Once again, we have seen incredible commitment from the members to solve key technical challenges through action groups, drive internal organisational change to accelerate circularity, and invest in circular solutions despite challenging economic conditions. We celebrate notable milestones during 2022:

Target 1: Elimination of five of the phase 1 problematic and unnecessary plastics and the decline in the number of LLDPE barrier bags from 91.0 million in 2021 to 68.3 million in the past year.

Target 2: The Pact portfolio now consists of 82.0% of plastic packaging that is recyclable or reusable.

Target 3: Growing support for the informal economy including training of the reclaimers and enterprise development support for SMEs.

Target 4: An increase of 3.2% of recycled content in member packaging from 2021.

We have also seen a major circular breakthrough in SA's polymer resin industry, with the development of the first drop-in resin with recycled content, ASPIRE. As part of our collaboration, we held our first ever CEO breakfast headlined by DFFE's Minister Barbara Creecy, where senior executives of our business members had the opportunity to demonstrate their leadership and commitment to work with government to achieve a circular plastics economy.

In 2024, we will place a bigger focus on the elimination of PET/PVC shrink sleeves on PET containers, with the secretariat committed to providing direct support to retailers to assist in the design of a reuse model to replace barrier bags. Members will continue to focus on finding solutions to address problematic flexible packaging in the multilayer multi-polymer, and PP flexibles. Commitment and action from the upstream sector of our plastic packaging value chain, with an emphasis on design and collaboration with our recyclers, will be instrumental to improve the quality of input recycling streams and ensuring increased recycling rates that will ultimately lead to the target rate. Two new rPET recycling plants Cape Town and Durban, operational in 2024, should eventually double the availability of food grade rPET. It is inspiring to see continued growth of the Pact membership with over 24.4% of the plastic packaging market now part of this journey. As new members join, we recognise that each is on a very different stage of the journey with their own challenges and opportunities. As secretariat, we have repositioned ourselves to deliver maximum value to our members by providing three umbrellas of support; technical support to achieve the common membership goals through action groups, individual member engagements that lend support to shifting members' own strategies that enable circularity while informing decision making of the collective and consumer communications to increase awareness and responsibility of the value chains and consumers.

I commend our members for their continued commitment to the Pact. You have shown leadership by pioneering this journey towards a circular economy for plastic packaging which is not only good for your businesses, but for consumers, our communities and our planet. We are by no means done, and will require the renewed effort and commitment in the next few years to achieve our desired goal. GreenCape, as secretariat, is excited and remains committed to supporting the members on their road ahead to 2025 and beyond.

2

Who is the South African Plastics Pact?

The South African Plastics Pact is a pre-competitive, collaborative group of organisations working for a South Africa where plastic is valued, kept in circulation in our economy and doesn't pollute the environment.

All members have identified a common problem, that our plastic packaging is at times poorly designed meaning that it won't be recycled. Plastic packaging is also generally not valued in our economy, often being landfilled or littered after only one use. To address this problem, SA Plastics Pact members have committed to ambitious 2025 targets that address the full life cycle of plastic packaging from:

- reconsidering what plastic packaging and products we place on the market, (Target 1),
- to plastic packaging designed to not only protect the product but that can also be recycled to have multiple lives in our economy (Target 2),
- to growing the plastic packaging recycling rate in South Africa (Target 3), and
- closing the loop with recycled content specified in their plastic packaging (Target 4).

TARGET 1 – **Taking action** on problematic or unnecessary plastic packaging through elimination, redesign, innovation or alternative (reuse) delivery models

TARGET 2 – **100%** of plastic packaging to be reusable, recyclable or compostable* *(* in closed loop systems)*

TARGET 3 – **70%** of plastic packaging effectively recycled

TARGET 4 – **30%** average recycled content across all plastic packaging

2.1. Business members

The SA Plastics Pact is comprised of business members that span the value chain for plastic packaging. The strength in the collaboration is broad representation from resin producers to packaging manufacturers, brand owners, retailers, collectors and recyclers. Any action and messaging from the SA Plastics Pact is co-designed with full value chain involvement.

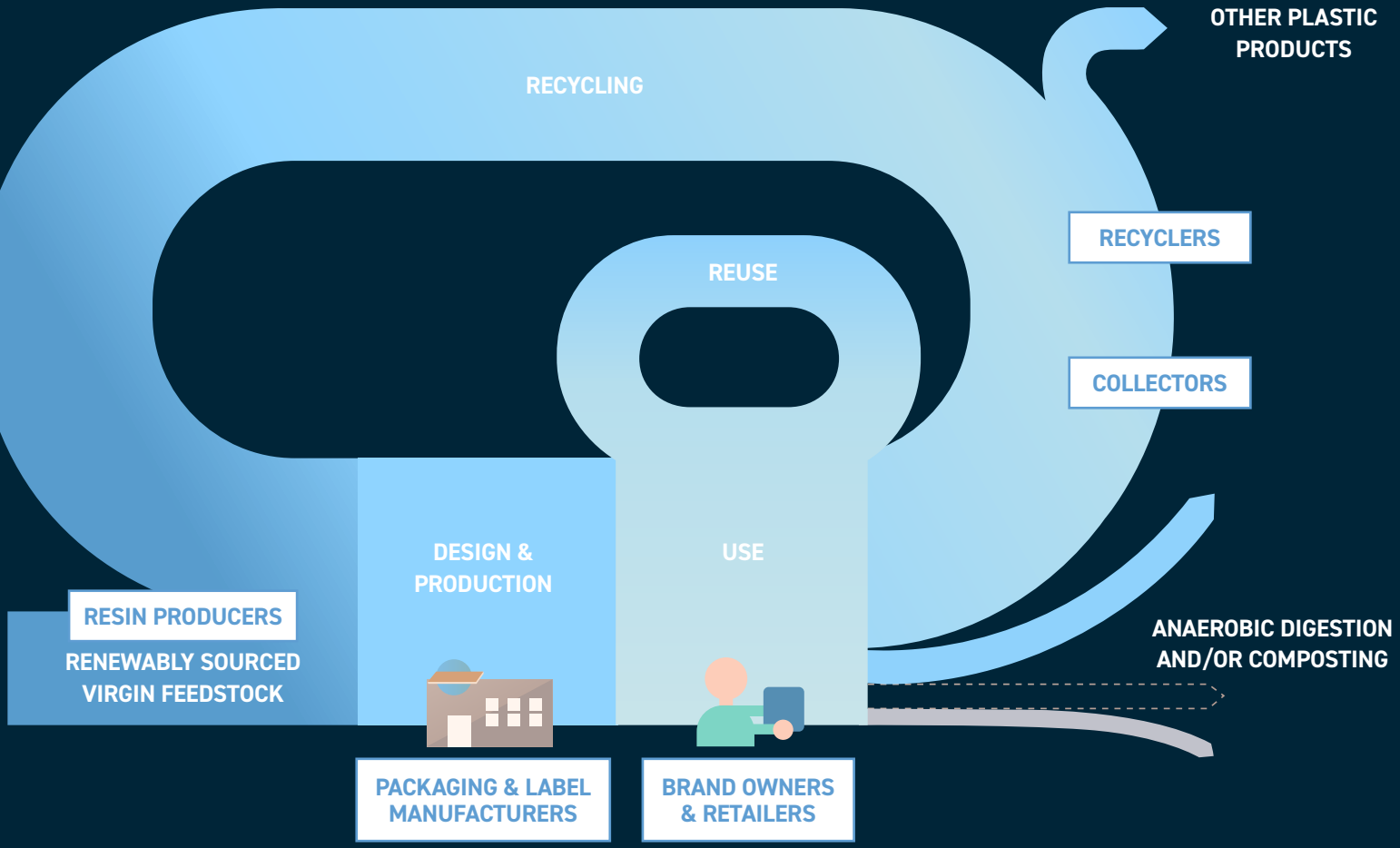


Figure 2.1: SA Plastics Pact members span the value chain for circular plastics which represent resin producers, packaging & label manufacturers, brand owners & retailers, collectors and recyclers.

Resin producers

SAFRIPOL
shaping your world, responsibly
Let's plastic responsibly

ALPLA

Packaging and label manufacturers

CCL

Berry

mpact
smarter, sustainable solutions

100 YEARS NNZ
the packaging network

POLYOAK PACKAGING

UPM RAFLATAC
UPM BIOFORE BEYOND FOSSILS

Brand owners

CHEP
A Brambles Company

Coca-Cola Beverages South Africa

HEINEKEN beverages

NASPERS

MEDIA24

PEPSICO

SIR FRUIT

tuffy

TIGER BRANDS

Unilever

Retailers

CLICKS

MR D

FOOD LOVER'S MARKET

PnP

SPAR

SPUR CORP
LEADING FOR THE GREATER GOOD

SUPERBALIST.COM

takealot.com
shop anything you can imagine

WOOLWORTHS

Collectors

African Reclaimers Organisation
Reclaiming The future

Recyclers

Atlantic Plastic Recycling
THE HOME OF QUALITY POLYETHELENE RECYCLING

extrupet
recycling your world (Pty) Ltd

Myplas
My plastic. My responsibility.

2.2. Supporting members

Supporting members are key enablers of this initiative, having a national influence whether in the policy and regulatory space (government departments) or being implementers of SA's mandatory extended producer responsibility (EPR) schemes, NGOs, industry bodies and key knowledge partners.

Government

National government – Policy and regulatory influence

environment, forestry & fisheries
Department:
Environment, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Local government – Policy and regulatory influence, implementation in waste management

CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Joburg
a world class african city

Producer Responsibility Organisations (PROs) – Extended producer responsibility implementation

petco
Leading Producer Responsibility

Polyco
Making waste work

National industry bodies

Agricultural, and food and beverage production

FRUIT South Africa

CropLife SOUTH AFRICA SUID-AFRIKA

SAN BWA

Brand owners and retailers

consumer goods council of south africa
Helping members trade better.

GS1 South Africa
The Global Language of Business

Plastic producers

Plastics|SA

Plastic recyclers

SAPRO
South African Plastics Recycling Organisation

Knowledge partners

AFRICAN CIRCULAR ECONOMY NETWORK

UNIVERSITY OF JOHANNESBURG

Non-governmental organisations

IUCN

SST

WWF

National industry bodies continued...

Property management and influence in retail

LIBERTY

two°degrees

V&A WATERFRONT CAPE TOWN

Recyclables collection, and informal sector

AFRICAN RECLAIMERS ORGANISATION
Reclaiming The future

Waste management

Institute of Waste Management of Southern Africa

NASPERS

2.3. New members

The SA Plastics Pact has gained five new members over the past year, increasing the number of member organisations to **48**, with **26** business members and **22** supporting members. New business members include Food Lover's Market, Naspers, and Sir Fruit. The Consumer Goods Council of South Africa (CGCSA) and the City of Johannesburg (CoJ) joined as supporting members and can contribute to plastic circularity through industry actions, research, and education.

"Food Lover's Market is committed to joining the collaborative drive towards a circular economy for plastic packaging which sits perfectly within our wider sustainability journey, Earth Lovers. Like many of our social and environmental challenges, South Africa's plastics problem is bigger than any one organisation, and will rely on collective action. We're delighted to be joining the Pact and look forward to working with other organisations towards achieving the ambitious 2025 targets," says Andrew Millson, Managing Executive: Human Capital and Sustainability at Food Lover's Market.

Naspers, global technology investor and operator, as a new member is joined by its subsidiaries, Prosus, Takealot, Mr D, Superbalist and Media24 as Pact members. The collaboration aims to encourage e-commerce businesses to use their reach to influence the broader adoption of circular economy principles.

"We're delighted to join forces with Takealot, Media 24 and the existing SA Plastics Pact members to reduce plastic waste across the value chain. We know that plastic and packaging waste is a global problem that requires local solutions and systems to tackle it successfully. At Naspers, we are committed to being part of the solution as we move faster towards a circular economy for plastics," says Phuthi Mahanyele-Dabengwa, South Africa CEO of Naspers.

FOOD LOVER'S MARKET

2.3. New members continued...

"As a business we are focused on a thoughtful journey towards enhanced sustainability. We would like to drive longer-term meaningful change which will allow us to avoid falling victim to greenwashing and fly-by-night green 'solutions' which often cause more harm than good. We've already implemented some great initiatives but there is a lot more we can do. We look forward to collaborating with the Pact and its members toward the ambitious goals and targets," says Cindy Hunlun, Technical Specialist, Sir Fruit.

CGCSA, represents the consumer packaged goods industry with more than 9 000 member companies, including the retail, wholesale and manufacturing sectors. The CGCSA can play an important role in engaging with more brand owners, retailers and manufacturers and in facilitating growth in a circular economy for plastic packaging in SA.

"The CGCSA is committed to playing a critical role in supporting the creation of an enabling environment for circularity in plastics packaging in South Africa. We are looking forward to collaborating with the existing SA Plastics Pact members as well as our retail, wholesale and manufacturing members toward achieving the targets of the initiative. We want to be part of a collaboration that is steering the country's economy towards one that is job creating and circular," says Matlou Setati, Executive of Food Safety and Sustainability, CGCSA.

The CoJ becomes the second metropolitan municipality to join the SA Plastics Pact after the City of Cape Town. Metropolitan municipalities can play a key role in South Africa's recycling economy, particularly in terms of separation of recyclables at-source to allow collection for recycling.

"The City of Johannesburg is committed to world class service delivery for our customers. This includes the provision of a clean and healthy environment which is devoid of plastic pollution. The transition to a job creating circular economy is at the forefront of our thinking, and being part of the SA Plastics Pact, which is a hub of collaboration and innovation, is an intuitive next step for us to take," says Khosi Baker, Director: Waste Management and Regulation City of Johannesburg.

Expanding membership within the South African Plastics Pact is a focus of the Pact to drive further action towards a circular economy for plastic packaging. The collective effort of a broad array of businesses and organisations is essential to effectively tackle the challenges posed by plastic waste. By enlisting a majority of the market players, the Pact can harness diverse expertise and resources, ensuring that the circular economy principles are embraced across various sectors. This inclusive approach will not only accelerate innovative solutions but also amplify the positive impact on the environment, transforming the plastic packaging landscape into one that aligns to circular economy principles with a positive impact for South Africa.

3 How do we work?

The SA Plastics Pact is member-led and –inspired, working in a collaborative way to address common barriers to greater circularity in the membership's packaging. The core of the Pact is collaboration and engagement, through member action groups, individual member action plan discussions and engagements with both supporting members and key external stakeholders.

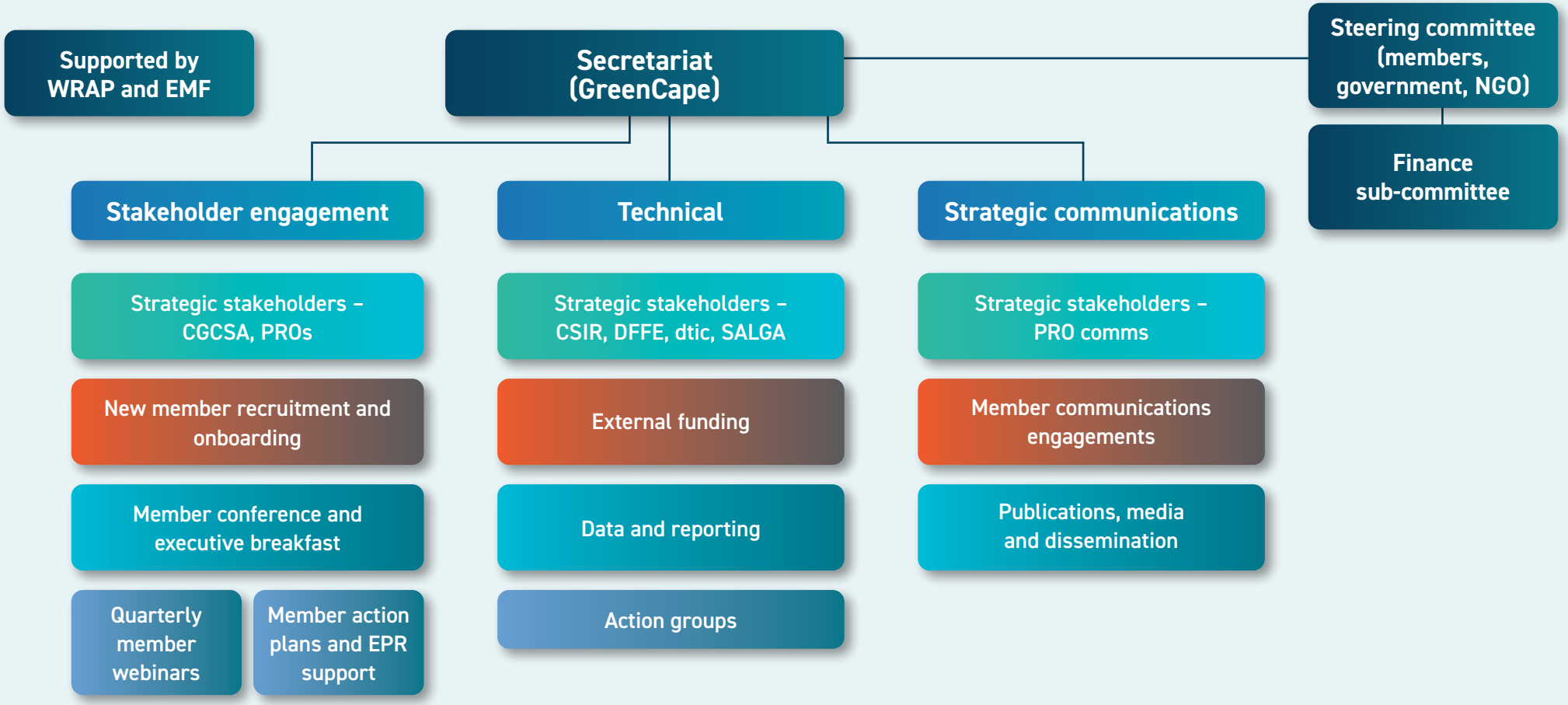


Figure 3.1: SA Plastics Pact governance structure and workstreams

This collaboration and engagement is enabled through three streams: Strategic engagement, Technical and Strategic communications, which are facilitated by GreenCape the Secretariat for the SA Plastics Pact. The Secretariat's activities and the strategic direction of the Pact are guided by the steering committee, which is re-elected every two years. The steering committee includes converters, brand owners, retailers, a recycler, an informal collector organisation, national government and an NGO.

Positioning the SA Plastics Pact – across stakeholder engagement, technical and strategic communications streams

As the SA Plastics Pact we recognise that we are part of South Africa's plastic packaging landscape and as such we regularly share information with key stakeholders in our supporting membership as well as those beyond Pact:

- For our evidence-base – existing information available and needed research: The Council for Scientific and Industrial Research (CSIR) – especially the Science, Technology, and Innovation for a Circular Economy (STI4CE)
- Developments in environmental and industrial policy, as well as enablers for a circular economy: The Department of Forestry, Fisheries, and the Environment (DFFE), and the Department of Trade, Industry, and Competition (the dtic)
- For key developments affecting the retail and manufacturing sectors: The CGCSA
- Tracking challenges and growth in mandatory EPR schemes: DFFE, and the major packaging Producer Responsibility Organisations (PROs)
- Identifying synergies in the municipal space: The South African Local Government Association (SALGA)

Selected activities under each work stream – Stakeholder engagement

Making the circle bigger

As the SA Plastics Pact we maintain regular external engagement through:

- Recruitment of organisations to grow our collective impact towards circularity for plastic packaging in South Africa
- Webinars on key topics such as compliance with competition law while collaborating with competitors towards circularity, and building in business resilience against loadshedding.
- Communication of our members' progress, as well as giving guidance to businesses and consumers on choosing and handling plastic packaging for circularity.

Member action plans

The Secretariat team meets with business members quarterly to work on action plans specific to their packaging portfolios to help drive progress towards Pact targets. Insights from member meetings facilitate the sharing of best practices to fast-track collaborative progress towards targets.

Selected activities under each work stream – Technical

Value-add beyond business member fees

For every rand of funding supplied by SA Plastics Pact members, the Pact secretariat sourced R1.8 from external funders to support members in achieving targets (from January 2020 to March 2024). The Secretariat commits to maintaining low member fees in order to facilitate member investment into the system changes needed to develop a circular economy for plastics packaging in South Africa.

Action groups – collaborative action across the value chain

Action groups are established to address specific opportunities or challenges faced by members. In 2022 and 2023, members participated in the following action groups:

- **Design for Circularity** – aimed at devising clear and accessible guidance to assist our members in designing for circularity, communicating the changes needed and the rationale behind the changes to procurement, marketing, packaging design, and sustainability teams.
- **E-commerce** – this rapidly growing sector in South Africa, has direct interface with consumers on devices, as well as established logistics networks. The action group is exploring opportunities to engage consumers regarding choosing the most circular packaging, the potential to link collectors of dry recyclables to consumers, and the use of logistics networks to achieve greater circularity in packaging and products.
- **Flexibles (multilayer multipolymer)** – these problematic flexibles are not recycled at all or in very small amounts in South Africa. Action group members shared information on packaging changes and available packaging on the market, and ran a pitch event for manufacturers offering alternatives to the problematic flexible packaging on the market.

- **Reuse** – members engaged in brainstorming alternative systems and materials to replace single-use barrier bags used to weigh fruit and vegetables in-store. The behaviour change required by all involved in an alternative system was considered and mechanisms to support change were brainstormed – from considering retail staff engaging with customers at fruit and vegetable aisle, to those weighing produce and operating tills, as well as the behaviour change needed from consumers.

Selected activities under each work stream – Strategic communications

We aim to:

- Celebrate the progress our members make by acknowledging the milestones in our journey towards a circular economy.
- Establish the Pact as a reliable, robust and accurate source of information, helping citizens and other role-players to be part of the transition to a circular economy for plastic packaging.

3.1. Steering committee

Thank you to our steering committee for the time devoted and valuable perspectives shared to guide our collaboration towards our ambitious 2025 targets.

Steering Committee – 2023

Packaging manufacturers

Michelle Penlington (Chair) – Polyoak Packaging: Michelle Penlington joined the Polyoak Packaging Group in 2013 as National Marketing Executive, after spending 14 years with Cadbury Schweppes (now Mondelez) and Premier Foods in the UK, working in brand management, product development and consumer research for some of Britain's most loved food brands.

In 2020 her role at Polyoak expanded to include sustainability, combining her industrial psychology, commercial and project management background with her passion for the environment. Michelle currently serves as a Petco Director and Chairperson of the SA Plastics Pact Steering Committee.

As a wife and mother of two teenagers, life is busy, but time is always made for hiking and road trip adventures. Michelle is also a keen writer and Djembe drumming enthusiast.

Trevor Isaacs – UPM Raflatac: Trevor has worked in one industry since he started working in 1994 and that is the self-adhesive label industry. Over the years he has seen how the industry has developed and now more than ever there is a need for sustainability in the label and packaging industry. Trevor is fortunate to work for the leading self-adhesive label manufacturer, UPM Raflatac, that at its core has a 360° approach to sustainability. Over the last 3 years of being part of the SA Plastics Pact, Trevor has been impacted by the learnings of being a member and strives to fulfil the goals of the Pact.

Brand owners

Blain van Wyk – PepsiCo: Blain has experience in the FMCG industry (food and beverage). He is currently managing PepsiCo's collection and recycling programmes in SA with a focus on solutions for multilayer flexible packaging. He also provides support on environmental policy issues (e.g., EPR and rPET unlocks outside of SA). He sits on the NBI's Advisory Council and both the CGCSA's and Agbiz's Sustainability working groups.

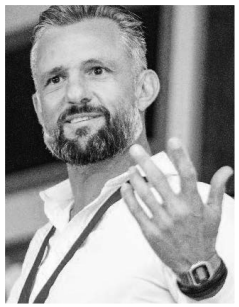
Rowena Gilpin – Unilever: Rowena is responsible for sustainable plastics for Unilever Africa, reporting internally & externally on plastics metrics while coordinating the various work streams that drive progress against Unilever Africa's plastics goals. Before sustainability Rowena held various positions across the supply chain in Planning, International Sourcing & Customer Service.

3.1. Steering committee continued...

Hospitality

Joe Stead – Spur Group: Joe's career at Spur Corporation spans over two decades. She started as a graphic designer and was appointed as studio manager in early 2000s and currently serves as Group Creative Head for the company, overseeing seven beloved South African brands. In 2008 Spur Corporation initiated the group's sustainability program and she was awarded the additional portfolio of Environmental Sustainability Manager and chairs the Environmental Sustainability Committee (ESC). The ESC provides an investigative and operational function to the group and its stakeholders. She has been integral in the development of the Group's sustainability programs, Franchisee engagement through the Green Operational reports and Integrated Reporting.

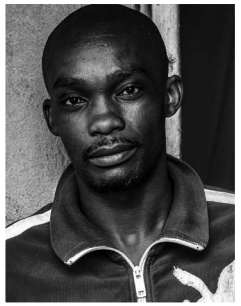
Retailers



Devin Galtrey – SPAR Group: Devin currently serves as the SPAR Group Packaging Manager and is responsible for the Group's Packaging Strategy. Having been involved in the packaging field for 20 years, he is passionate about circular economic systems and inspiring change. Devin is fuelled by collaborating with partners in developing circular systems where materials never become waste and create economic activity in South Africa for our communities.

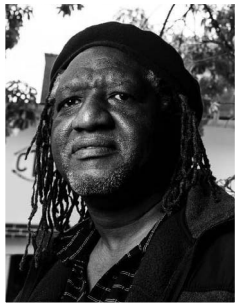
Ralph Jewson – Woolworths: Having worked in various roles across Woolworths and other organisations in product development, manufacturing, strategic sourcing, product and packaging technology, Ralph has developed a good understanding of supply and value chains, systems, strategy as well as packaging across business. Ralph's current focus is on delivering the Woolworths' packaging commitments and Woolworths' Good Business Journey goals and commitments. He is the Lead at Woolworths on EPR, represents Woolworths on the Petco Board, and is a member of multiple working groups run by the packaging PROs.

Collectors



Luyanda Hlatshwayo – The African Reclaimers' Organisation (ARO): Luyanda is a reclaimer based in Johannesburg. He is a founding member of the ARO, and works as a Business Development Manager for ARO. ARO is a member-based organisation representing thousands of reclaimers in South Africa. Luyanda is actively involved in the integration of reclaimers in the plastic and recycling industry, lobbying between government, communities and industries in the recycling value chain. Luyanda is part of the SA Plastics Pact steering committee, and is a South African delegate in the inter-governmental negotiating committee to develop internationally binding instruments to reduce plastic waste.

3.1. Steering committee continued...

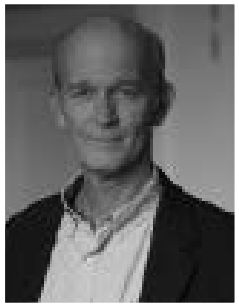


Eli Kodisang – The African Reclaimers' Organisation (ARO): Eli Kodisang worked as a Trade Union educator and organiser for over 17 years in various COSATU unions. He is currently Coordinator at ARO, and Director of Strategy and Planning. Eli is involved in building capacity amongst reclaimers and assisting in crafting strategy, conflict resolution, research and policy. He is currently a PhD candidate in Sociology at Wits University.

Recycler

Johann Conradie – Myplas: Johann co-founded Myplas South Africa in 2012 and today focuses on its financial and technical operations while applying his extensive experience in plastic conversion processes. Myplas' first international partnership recently started up in the US with a $30m HDPE-food grade and LDPE-film grade plant in Minneapolis, Minnesota. Johann is Chair of the South African Plastics Recycling Organisation (SAPRO), and is part of the Board of Plastics SA, as well as the steering committee of the SA Plastics Pact. Johann advocates for a circular economy for plastics as our best strategy for reducing plastic waste in the environment.

NGO



Chris Whyte – ACEN: Chris's vision is to drive a Just Transition to a Circular Economy for Africa inspiring sustainable impacts and outcomes that result in positive benefits for the environment and social upliftment. Chris is currently a Director and Executive Team member of the African Circular Economy Network (ACEN) and co-founder of the ACEN Foundation based in Europe. Specialties: Extensive network in the industry and strong connections in the private and public sector. Research, investigation, collaboration and ultimate packaging of projects towards their successful implementation. Focus on the implementation of viable projects that have commercial benefits and that improve both the social and environmental tiers of sustainable development.

National Government

Dumisani Buthelezi – Department of Forestry, Fisheries, and the Environment (DFFE): Mr Dumisani Buthelezi is currently serving as the Director for General Waste Minimization within the DFFE in South Africa. He holds a master's degree in Geography from the University of KwaZulu-Natal in South Africa. As a general waste specialist, Mr Buthelezi is leading a team that provides guidance and policy direction on all matters that relate to the reduction, collection, recycling and reuse of all general waste streams, including plastic waste. He is part of a team that has developed various policy instruments to address the leakage of plastics into the environment. These include the development of the Plastic Bag Regulations and the extended producer responsibility mechanisms for the paper and packaging sector.

3.1. Steering committee continued...

Mr Buthelezi is fully involved with many other interventions that are directed towards transitioning the plastics sector to sustainable business practices. Some of the interesting areas of interaction include circular economy for plastics, resource efficiency and cleaner production, SMME support and waste picker integration. Mr Buthelezi is actively participating in international programmes on plastic waste, such as the drafting of the global treaty to end plastic waste.

Mr Mulalo Tshikotshi has an honours degree in Environmental Studies from the University of KwaZulu-Natal. He has been working in the DFFE for about 15 years in coastal management and in the Chemicals and Waste Management Branch. Mr. Tshikotshi is currently a Control Environmental Officer within the Directorate – General Waste Minimisation. He has duties and responsibilities to identify priority general waste streams and relevant policies and regulatory interventions to promote the sound management of general waste streams (including plastics) resulting in their reduced release in the environment. This scope of work includes EPR.

Plastics Pact network support

Thais Vojvodic – The Ellen MacArthur Foundation (EMF): Thais integrates the global Plastics Initiative team at EMF, which aims to rethink and redesign the future of plastics based on a circular economy vision. With extensive experience in corporate sustainability in Latin America, Thais joined the Foundation in 2020, moved to London and became responsible for the Plastics Pacts Programme. Thais currently is part of the team supporting an ambitious global plastics treaty.

Thais Graduated in Marketing from ESPM, and holds a master's degree in Human Rights from the University of London.

Megg Humphrey WRAP: Megg Humphrey is a Technical Partnerships Manager, working across WRAP's International initiatives and projects to support on technical and operational topics. She graduated from the University of Leeds, UK, with a Masters and Bachelors in Chemical Engineering and has 9 years of experience working in the plastics field. On completion of the graduate programme, Megg continued to Technical Management and was involved in the full plastics value chain, from working with recyclers and product designers to brand owners and users. Throughout her career, she has worked with stakeholders internationally, including across Europe, the Americas, Africa and Asia supporting partners around the world to work towards plastics circularity from developing design guidance to ensure products placed on the market can be recycled, to working with existing informal waste sector to increase collections and developing end markets for recycled content.

3.1. Steering committee continued...

Andrea Cino – WRAP:
Andrea is an International Partnerships Manager, working with partners around the world, including businesses and governments to develop strategies to promote a circular economy for plastics including elimination, reuse and refill, segregation at source, citizen behaviour and end markets for recycled content. She has 10 years of experience working with governments, businesses, and citizens in designing and delivering initiatives to transition to a more sustainable production and consumption and in managing multistakeholder public-private platforms to work collaboratively towards a circular economy, including the Chilean Plastics Pact. Since 2019 she has focused specifically on initiatives promoting the circular economy for plastics in different regions including the Americas, Africa, Asia, and Europe.

Peter Skelton, WRAP:
Peter has worked at WRAP for over 19 years – engaging leading businesses embed initiatives that deliver efficiencies and environmental benefits in the areas of packaging, food waste prevention, recycling and waste reduction. In 2018, he led on the development and launch of The UK Plastics Pact – the first Plastics Pact – that has inspired 13 more Plastics Pacts globally to help tackle plastic waste and develop a circular plastics economy. Peter is a lead in WRAP's international plastics programme engaging with strategic partners globally to support Plastics Pacts in Asia, Africa, the Americas and Europe.

Steering Committee – 2022 members

We thank the following committee members who stepped down during 2022 for their insights and hard work. We wish you all the best as you focus on other strategic areas in circularity.

Brand owners
- JP Blumenthal – Coca-Cola Beverages South Africa
- Douglas Greig – Tuffy

Retailers
- Andre Nel – Pick n Pay

4

Circular plastics initiatives around the world

WRAP, the EMF's Plastics Initiative and the World Economic Forum's (WEF) Global Plastic Action Partnership (GPAP) are collaborating to drive global action towards a circular economy for plastics.

Through this collaboration, Plastics Pacts and National Plastic Action Partnerships (NPAPs), from more than 20 countries, are brought together to share learnings and best practices helping to accelerate efforts to tackle plastic pollution. Each of these initiatives convenes stakeholders from across the value chain, including businesses, government institutions and civil society, NGOs, and citizens, to work towards a shared vision.

Uniting these programmes in a network promotes the sharing of best practices all over the world, in a pre-competitive space. Global collaboration and knowledge sharing, contextualised to local conditions, is imperative to progress at a faster rate – benefitting from each other's successes and learning from each other's challenges. Around the world, we face many similar challenges when it comes to creating a circular economy for plastics, sharing information and expertise means we can avoid duplication of redundant efforts and we can benefit from proven solutions. Additionally, solutions may exist elsewhere which can be adapted and implemented to other geographies.

This knowledge exchange network comes ahead of the incoming international legally binding instrument to end plastic pollution. The Global Plastics Treaty negotiations are ongoing, with adoption expected in mid-2025. This will change the landscape on an international and country level, increasing pressure on public and private stakeholders to take action on pathways to address plastic pollution. Bringing together this group of initiatives from around the world will allow crucial information to be shared, to support delivery plans and in turn support their members and stakeholders.

WRAP worked with WWF, SAPRO, and GreenCape to develop the South African Plastics Pact and since then has been providing strategic, technical and financial support to help deliver its targets and scale its impact. The SA Plastics Pact benefits greatly from being part of global networks, and the direct support of both WRAP and EMF's expert teams.

Figure 4.1: Circular plastics initiatives around the world in the EMF-WEF-WRAP network

5 SA Plastics Pact – progress towards 2025 targets

5.1. Summary of progress

In 2022, the SA Plastics Pact consisted of **26 business members**, and **22 supporting members**.

- **Nine out of 15** brand owners and retailers reported quantitative data for 2022. The barriers to reporting for the six who were not able to submit reports should be addressed in 2023, to allow reporting of 2023 data in 2024.
- **Four out of the 7** packaging manufacturers, and the resin producer reported quantitative data for 2022

The data reported by brand owners and retailers constitutes **24.4%** of the plastic packaging placed on the market in South Africa.[7]

The data reported by converters constitutes **14.6%** of the plastic packaging placed on the market in South Africa.

Target 1:

Taking action on problematic or unnecessary plastic packaging

2020

99 million problematic or unnecessary items were sold by members in 2020, totalling **1 400 tonnes.**

- PET/PVC shrink sleeves on PET bottles contributed most at **873 tonnes**

* **Note:** these are corrected figures based on updated data from members:

- The data on PET/PVC shrink sleeves on PET bottles was also corrected to include the shrink sleeve + the PET bottle – as this total tonnage of material is rendered not recyclable.
- The barrier bags were under-reported in 2020.

2021

117 million problematic or unnecessary items were sold by SA Plastics Pact members in 2021 – with more complete barrier bag data, at a total of **840 tonnes**.

- Barrier bags constituted **78%** of the units of problematic and unnecessary plastics sold in 2021.

23 million problematic plastic items were no longer on shelf by the end of 2021.

PET/PVC shrink sleeves on PET bottles contributed the highest tonnage at **606 tonnes**.

2022

101 million problematic or unnecessary items were sold by SA Plastics Pact members in 2022, at a total of **1 050 tonnes**.

- **68%** of the items sold were barrier bags.
- Due to market growth, in spite of progress on reducing PET/PVC shrink sleeves on PET bottles, the tonnage of PET bottles and shrink sleeves rose to **801 tonnes**.

115 tonnes (4.47 million) of PET bottles and shrink sleeves (or the equivalent 2023 sales) were rendered recyclable through substitution with alternative shrink sleeve material in 2022.

A further **334 tonnes** (12.0 million; or the equivalent in 2023 sales) will have been shifted to the alternative shrink sleeve by the end of 2023.

Target 2:

100% of plastic packaging is recyclable, reusable, or compostable

2020	2021	2022
80.7% of plastic packaging placed on the market by members was recyclable in South Africa.	**81.2%** of plastic packaging placed on the market by members was recyclable[2] in South Africa.	**82.0%** of plastic packaging placed on the market bymembers was recyclable[2] in South Africa.

Target 3:

70%[1] of plastic packaging effectively recycled by 2025

2020	2021	2022
The input recycling rate was not reported for 2020. The output recycling rate was **29.6%** in 2020.	**41.3%** of plastic packaging placed on the market in SA[2] The output recycling rate was **31.4%** in 2021.	**43.9%** of plastic packaging placed on the market in SA[2] The output recycling rate was **35.0%** in 2022

[1] Input recycling rate

[2] Note: the nett import of filled plastic packaging into SA is not known.

Target 4:

30% average recycled content across all plastic packaging

2020

19.0%

Average recycled content across consumer/primary packaging was **7.63%**.

Average recycled content across retailer/secondary and logistics/ tertiary packaging was **37.0%**.

2021

20.8%

Average recycled content across consumer/primary packaging was **11.7%**.

Average recycled content across retailer /secondary and logistics/ tertiary packaging was largely the same at **37.1%**.

2022

24%

Average recycled content across consumer/primary packaging was **12.3%**.

Average recycled content across retailer/secondary and logistics/ tertiary packaging was **40.7%**.

5.2. Perspective on progress

All are welcome on the journey to circular plastic packaging

The Pact membership has grown and the percentage of South Africa's plastic packaging represented in the Pact membership is now at least 25% of the market. To grow the impact of our collaboration, we aim to increase our membership to represent a greater proportion of the plastic packaging placed on the market in South Africa. As we grow, we will welcome business members who are at different stages of their progress towards circularity.

We have seen our founding members (the class of 2020!) being able to share their early wrestles regarding internal structuring, making packaging changes, and learnings in substituting problematic plastic packaging with recyclable alternatives. The Pact secretariat maintains a database of these changes, which allows new members to move faster towards circularity.

As our Pact packaging portfolio changes, our focus areas for action and the performance required to achieve our targets changes. This creates new challenges and new opportunities that are highlighted by the data our members share confidentially with the secretariat team, and that which is publically reported as we hold ourselves accountable to the commitments we have made as a collective.

5.2. Perspective on progress continued...

A good dataset can define a pathway to circularity in plastic packaging in South Africa

In 2023, the SA Plastics Pact celebrates its fourth year of collaboration to achieve bold targets. Over these four years, the Pact secretariat has seen a marked improvement in the granularity and self-reported accuracy of the data that our members supply. This means that for the first time we have a detailed dataset at our disposal that documents the journey of specific plastic packaging types through our packaging value chain in South Africa. Members not only report on the packaging types by polymer, but also, in some cases, include information on the packaging colour and product types, the label type, and even the label adhesives that impact on the recyclability of packaging types.

Members' packaging under the microscope – inspiring changes in the details that unlocks tonnages of circular plastics

Some members have for the first time engaged with their packaging suppliers on their label adhesives and discovered that recyclers reject formats known to have such adhesives, and that other recyclers have screens that regularly get blocked due to these adhesives. As a result, more than 10 000 tonnes of packaging had to be reported as not recycled in South Africa. We celebrate our members' commitment to circularity that inspires them to assess adhesives used, reconsider colours of their packaging, and allows more voices into the room as they redesign and re-specify packaging for circularity. Recyclers producing high quality recyclate are experts regarding what enters their plants and what will be recycled in their plants. Engaging recyclers early in the packaging design process, generally allows packaging to be designed for the SA system of collecting, sorting, and recycling.

Designing a new system requires commitment, changing resource allocation and time

Packaging redesign and implementation is a carefully considered process that involves many departments in brand owners and retailers. From the technical packaging teams to the sustainability team, the marketing department, finance and procurement, to corporate affairs and strategy. The journey to circularity requires that all teams with their differing perspectives are engaged, and internal goals that at times conflict with the circular packaging approach, are re-aligned to achieve circularity. For example, foiled plastic packaging includes metal components, and sparkly plastic packaging often includes plastic glitter. Both the metal elements (foiling) and plastic sparkles are not compatible with recycling. So while appealing to consumers, and marketing departments, these elements should be designed out of packaging.

Work that was started in 2020, such as substituting PET/PVC shrink on PET bottles and jars with an alternative that doesn't prevent recycling of these formats, is now bearing fruit.

5.2. Perspective on progress continued...

Some of the PET/PVC shrink on PET packaging was removed in 2022, but the majority will be removed in 2023. Again new members are able to access the learnings from the front runners and see faster shifts to circular alternatives to PET/PVC shrink on PET formats.

Shifting a strategic direction of a department, even adding nuance that improves circularity of packaging, requires clear communication of goals and benefits, many robust discussions, training and accessible supporting resources (such as design guidelines including clear rationale for circular choices), as well as performance goals that enable circularity.

Our member champions play an active role in guiding internal structuring for circularity, and together we are developing Design for Circularity guidelines and accompanying resources that are adapted to speak to different departments. The Pact secretariat team also meets regularly with business members to address member-specific challenges and highlight opportunities for greater circularity in approach.

These engagements provide great insight into our members' experience at the leading edge of circular plastic packaging, and allow the secretariat to identify common challenges and opportunities across the membership, that can then be addressed collaboratively.

Scaling impact through collaboration for action – supporting value chain investments

Collaborative action is at the heart of the SA Plastics Pact. We have seen investments for circularity from resin producers, packaging manufacturers, collectors and recyclers. But without a growing demand for more circular plastic packaging, as well as for recycled content in plastic packaging and other plastic products, the investments upstream (resin producers and manufacturers) and downstream in collection and recycling will have not have the desired effect of moving towards a circular economy for plastic packaging.

In the Pact membership, we have seen our brand owners and retailers continue to engage with packaging manufacturers to offer more circular packaging, invest in the modification of filling lines, and even purchase new filling lines to accommodate new more circular packaging types. Some members have also sustained their demand for recycled content in spite of low virgin plastic prices.

It is this sustained demand that sees resin producers and packaging manufacturers commit to more circular plastics, and sees recyclers willing to invest in new wash and decontamination plants, as well as new recycling capacity.

Redesigning the largely linear system for plastic packaging will need investment, so that SA can realise the greater economic development, and increased job opportunities that will be available in a circular economy for plastic packaging.[3]

[3] Benn, H., Velelo, L., Fourie, D. and R. Rossouw. 2022. Economic case for a circular plastics economy in Africa: Findings and recommendations for Côte d'Ivoire, Kenya and South Africa. WWF South Africa, Cape Town, South Africa.

5.2. Perspective on progress continued...

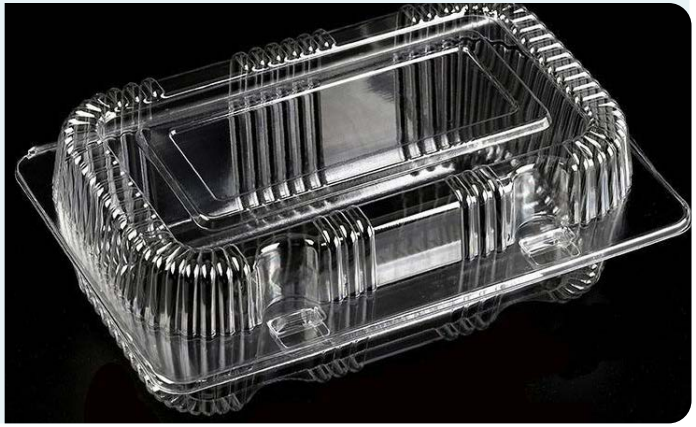
Scaling impact through collaboration for action – a focus on specific packaging types

The Pact's 2022 packaging data reinforces the current focus areas in action groups and member action plan meetings:

- Multilayer multipolymer flexibles, which are not collected for recycling in South Africa, and is the largest barrier of a single packaging type to Pact members not meeting Target 2, constitutes about 3.4% of the members' portfolio.
- Addressing Target 1 items and "red list elements" on packaging that render a pack unrecyclable which accounts for about 4.8% of the members' portfolio
  - Developing the phase two list of problematic and unnecessary plastic packaging and products is needed to increase our collective ambition to prevent plastic leakage into the environment. This could address an additional 3 000 tonnes of plastics in the membership.
- Reuse models to replace barrier bags for weighing fruit and vegetables in store.
- Design for Circularity guidelines and resources to support the members in addressing highly coloured formats, direct printing on packaging, incompatible label materials, and label adhesives.

Recommended additional focus areas for 2024 include

- The PET thermoform (such as fruit and veg punnets, or clear sandwich clam shells) tonnage in the Pact membership is about 2 300 tonnes of consumer packaging. The current national recycling rate for PET thermoform is less than 0.4% output recycling rate. Further collaboration across the value chain is needed to support growth in this new addition to South Africa's recycling economy.
- Retailer packaging in the Pact membership as discussed below.
- Reuse-refill models in low-income settings have seen some growth in South Africa on a hyper-local scale. With growing prices in basic foodstuffs and necessities in other consumer goods, the consumer driver for reuse models is present and likely to intensify. The existing reuse-refill models are able to supply consumer products cheaper than the same products in single-use packaging, as the consumer does not pay for the packaging on each purchase. Such a redesign in business model for the sale of some products takes creativity and innovative operational design to retain the business case for formal retailers.



5.2. Perspective on progress continued...

Scaling impact through collaboration for action – a focus on retailer packaging

Some members have made good progress in rationalising and eliminating plastic packaging from their portfolios, with large reductions in retailer packaging (secondary and tertiary packaging) through direct elimination and shifts towards improved reuse models. Some of the secondary and tertiary plastic packaging types that have been reduced are relatively well collected and recycled in South Africa. This has meant that the percentage adequately recycled packaging in these members' portfolios has decreased. This highlights the need to present plastic packaging data as both an absolute measure (in tonnes) as well as a plastic intensity measure, such as plastic packaging per turnover in Rand, or plastic packaging per tonne of product packaged.

As retailer packaging is not consumer-facing, some organisations have not considered interventions to improve the circularity of these packaging types. There is good potential to both reduce retailer packaging, and to increase the recycled content of retailer packaging in the Pact membership.

Scaling impact through collaboration for action – industry and consumer messaging

There is growing pressure on the plastics industry and value chain to address plastic pollution, keep plastic out of landfill and meet SA's mandatory EPR targets. This pressure has resulted in the proliferation of conflicting messaging to both industry and consumers.

Non-technical industry players and consumers are needed to support and drive circularity in plastic packaging in South Africa.

The SA Plastics Pact membership is actively engaging on conflicting messaging both internally and externally to work towards mutual understanding of the rationale behind the messaging on plastics, as well as the impact that such messaging has on other parts of the value chain.

The SA Plastics Pact membership will be workshopping the development of a communications action group to achieve coherence among member messaging and to influence external stakeholders towards accurate messaging on plastics and circularity to support a circular economy. The aim of the collaboration will also be to pool consumer insights for improved design of consumer messaging for SA Plastics Pact members.

6

Target 1

Taking action on problematic or unnecessary plastic packaging through elimination, redesign, innovation or alternative (reuse) delivery models

The SA Plastics Pact defines problematic plastic[4] in the following way:

- It is not reusable, recyclable (technically and/or economically not recyclable), or compostable.
- It contains, or its manufacturing requires, hazardous chemicals that pose a significant risk to human health or the environment
- It hinders or disrupts the recyclability or composability of other items
- It has a high likelihood of being littered or ending up in the natural environment

Unnecessary plastic:
"Items that can be avoided (or replaced by a reuse model) while maintaining utility. They have limited social utility, for which no alternative is required and which can be phased out without significant behavioural or infrastructural change."[4]

In 2020, the SA Plastics Pact members worked collaboratively in an action group to identify 12 plastic items to be addressed by the end of 2022.

Members were advised to adopt the most suitable solutions by either phasing out the items that are considered unnecessary, replacing the item in question with a more suitable alternative that is recycled in practice, eliminating the packaging through redesign, or innovating by introducing a reusable solution.

The twelve problematic or unnecessary items on the phase 1 list (see next page) were to be eliminated by the end of 2021, with 2 items to be eliminated by the end of 2022 (PET/PVC shrink sleeves on PET bottles, and barrier bags for weighing fruit and vegetables).

[4] The Ellen MacArthur Foundation, adopted by SA Plastics Pact members

01 **OXO DEGRADABLE PLASTIC**

02 **PVC BOTTLES, PALLET WRAP AND LABELS**

03 **SOME SHRINK SLEEVES**

04 **STICKERS ON FRUIT AND VEGETABLES**

05 **THIN (BARRIER) BAGS FOR FRUITS AND VEGETABLES**

06 **THIN (BARRIER) BAGS AT TILLS**

07 **PLASTIC STRAWS**

08 **PLASTIC STIRRERS**

09 **SINGLE-USE PICNIC CUTLERY & PLASTIC PLATES AND BOWLS**

10 **COTTON BUDS WITH PLASTIC STEMS**

11 **LOLLIPOP STICKS**

12 **MICROBEADS IN COSMETICS**

This section provides and overview of the progress that has been made over the past year, and highlights the impactful initiatives and actions undertaken by members.

6.1. Progress

Even though not all members have been able to meet this target, notable progress has been made. The tonnage of phase 1 plastics placed on the market by members decreased from 1,402 tonnes (corrected 2020 figures), to 840.4 tonnes in 2021, with an increase to 1 047 tonnes in 2022 (Figure 6.1).

Approximately 700 tonnes will have been phased out by the end of 2023, leaving about 350 tonnes to be addressed in 2024.

The phase 1 data was recalculated from 2020 to 2022 to reflect the tonnage of PET containers with PET/PVC shrink sleeve placed on the market by members. The PET/PVC shrink sleeve renders the whole bottle-sleeve-cap combination unrecyclable, and therefore the tonnage reported is a better reflection of the problematic items on the phase 1 list. The data is not currently adjusted for sales, and the increase in 2022 is accounted for by growth in sales.

The following items have been eliminated from the Pact members' portfolios:

- PVC pallet wrap
- Plastic stickers on fruit and vegetables
- LDPE microbeads in cosmetics
- Plastic stirrers
- Plastic straws

Two retailers have eliminated earbuds with plastic stems and lollipops with plastic stems.

One of the brand owners has eliminated rigid PVC packaging, thereby avoiding between 8 and 9 tonnes annually of packaging that is not collected for recycling in South Africa.

The largest tonnage of phase 1 plastics remains the PET/PVC shrink sleeves on PET containers, followed by LLDPE barrier bags.

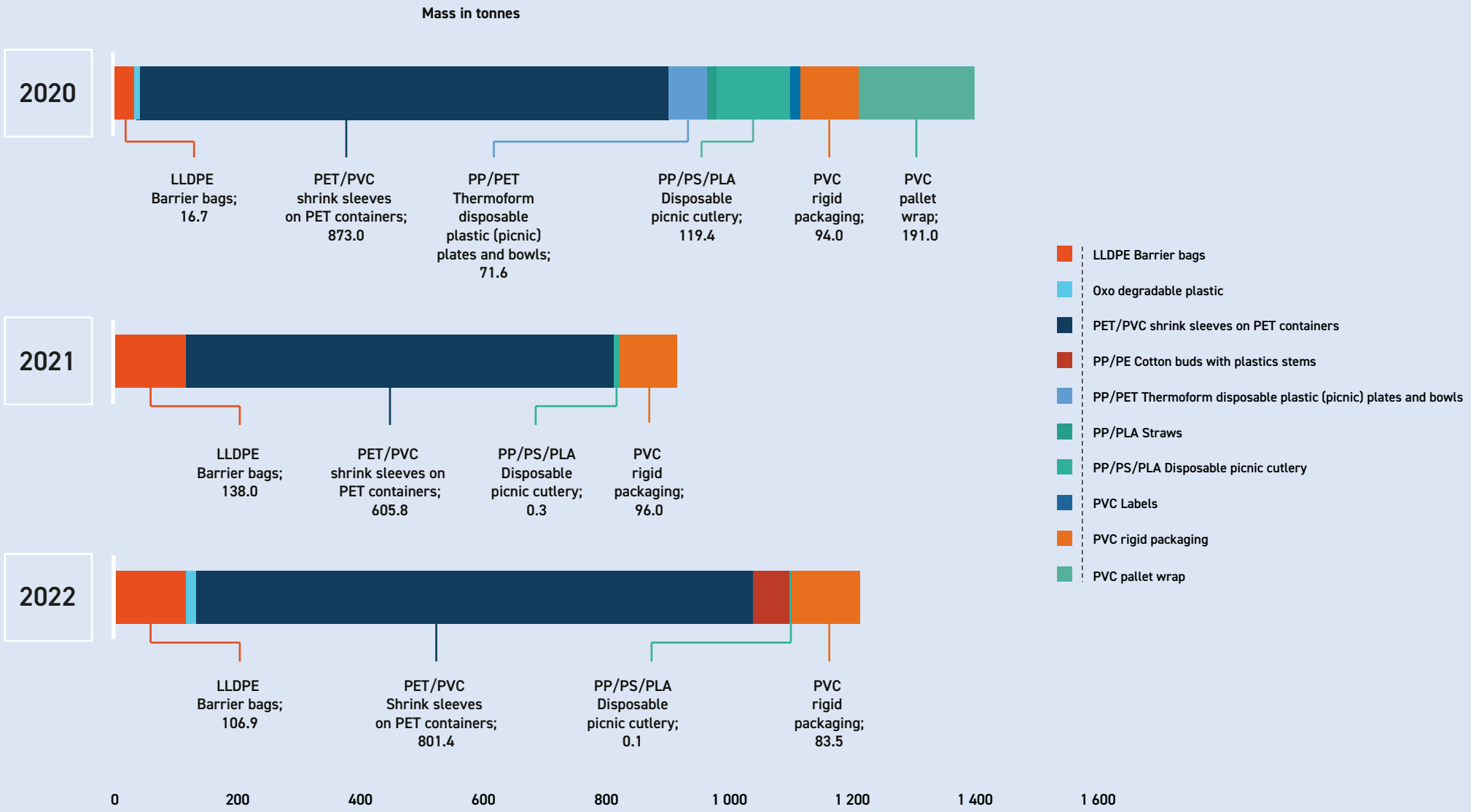


Figure 6.1: Plastics, in tonnes, on the phase 1 list placed on the market by SA Plastics Pact members, 2020-2022

The total number of problematic and/or unnecessary items placed on the market by brand owner and retailer members increased from 99.0 million items in 2020 (corrected data), to 117 million items in 2021, to 101 million items in 2022. The largest number of items is LLDPE barrier bags, which has declined from 91.0 million in 2021 to 68.3 million in 2022.

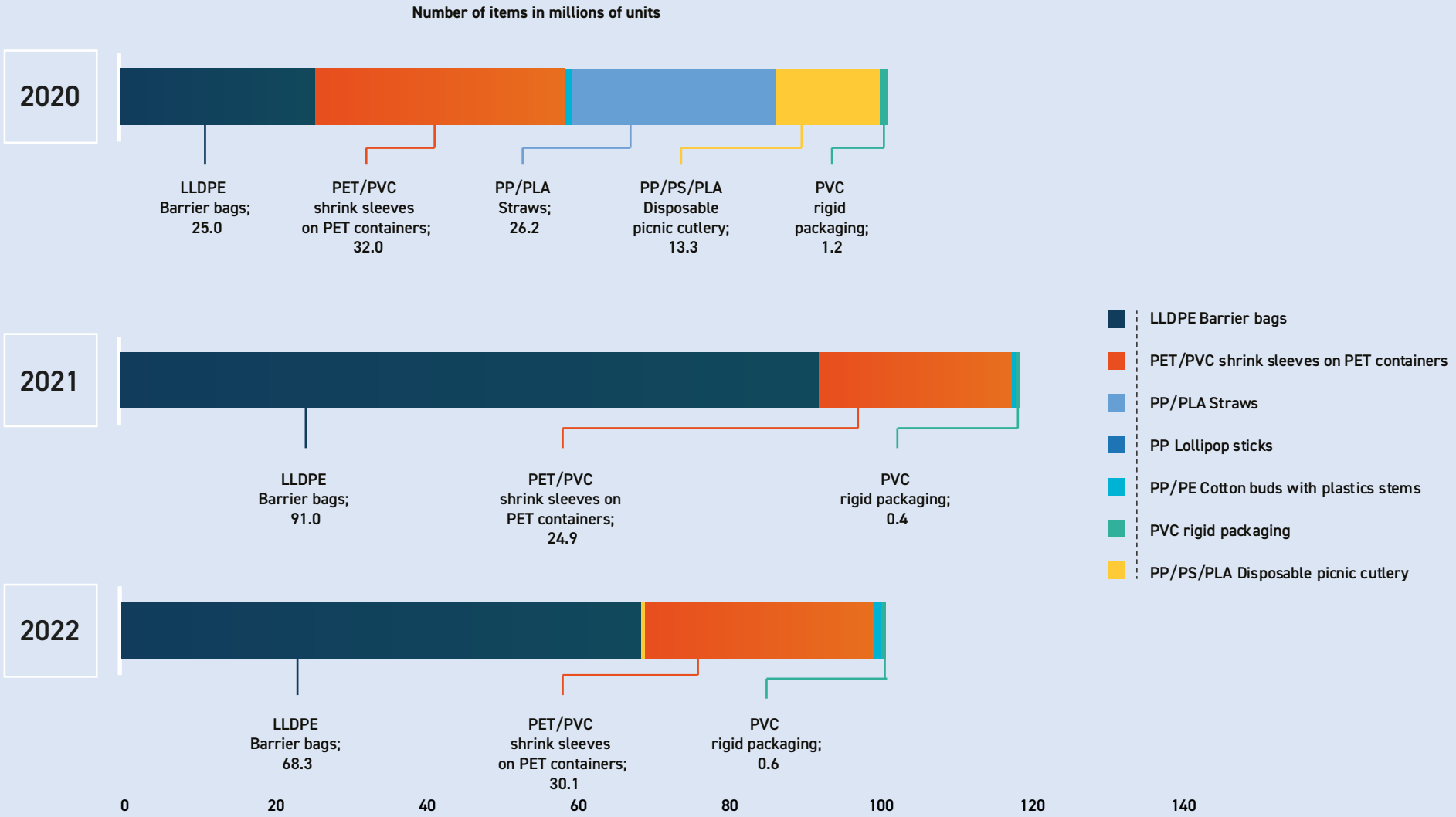


Figure 6.2: Number of units of phase 1 plastics placed on the market by SA Plastics Pact members 2020-2022

In 2022, the largest contributor to the tonnage of phase 1 plastics placed on the market by members is the PET/PVC shrink sleeves on PET bottles, at 77%, followed by barrier bags at 10%, and PVC rigid packaging at 8% (Figure 6.3).

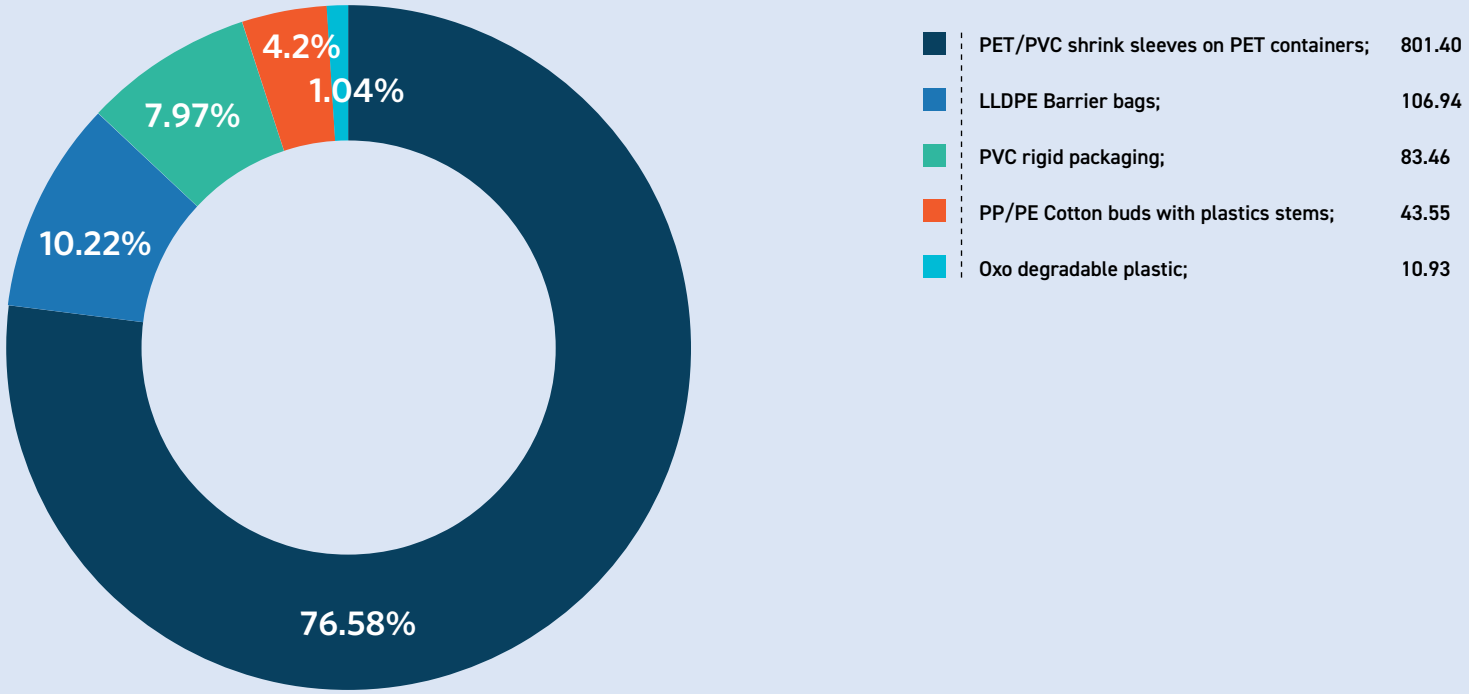


Figure 6.3: Proportion by tonnes of phase 1 items placed on the market in 2022 by Plastics Pact members

6.1.1. PET/PVC shrink sleeves on PET containers

Three brand owners and one retailer removed PET/PVC shrink sleeves on PET bottles by the end of 2022 – these organisations accounted for 2 000 tonnes of PET unrecyclable containers on the market in 2020-2022 (Figure 6.4). The brand owner and retailer members who will not reach the deadline of elimination by the end of 2022 are making progress towards elimination of the PET/PVC shrink sleeves on PET containers.

Figure 6.4: Number of PET bottles with PET/PVC shrink sleeves in the Pact members' portfolios

6.1.2. LLDPE barrier bags at tills and to weigh loose fruit and vegetables

Retailers offer plastic barrier bags to customers for weighing and purchasing loose fruit and vegetables as well as at tills for separating products. These small thin bags have no value at end of life, and are not collected for recycling. Furthermore, even if barrier bags enter recycling plants, they generally get wrapped around equipment or can blow off the line and will not be recycled. Due to the large number of bags used, they have a high chance of escaping the waste stream and ending up in the environment. Barrier bags constitute the largest Target 1 item by number of items placed on the market, with 68.3 million barrier bags placed on the market by retailer members in 2022 (Figure 6.5). This is a reduction of 22.6 million bags in 2021. Barrier bags were under-reported in 2020.

Barriers bags account for 67.5% of Target 1 items by number, and implementing innovative solutions would make a significant contribution toward meeting Target 1.

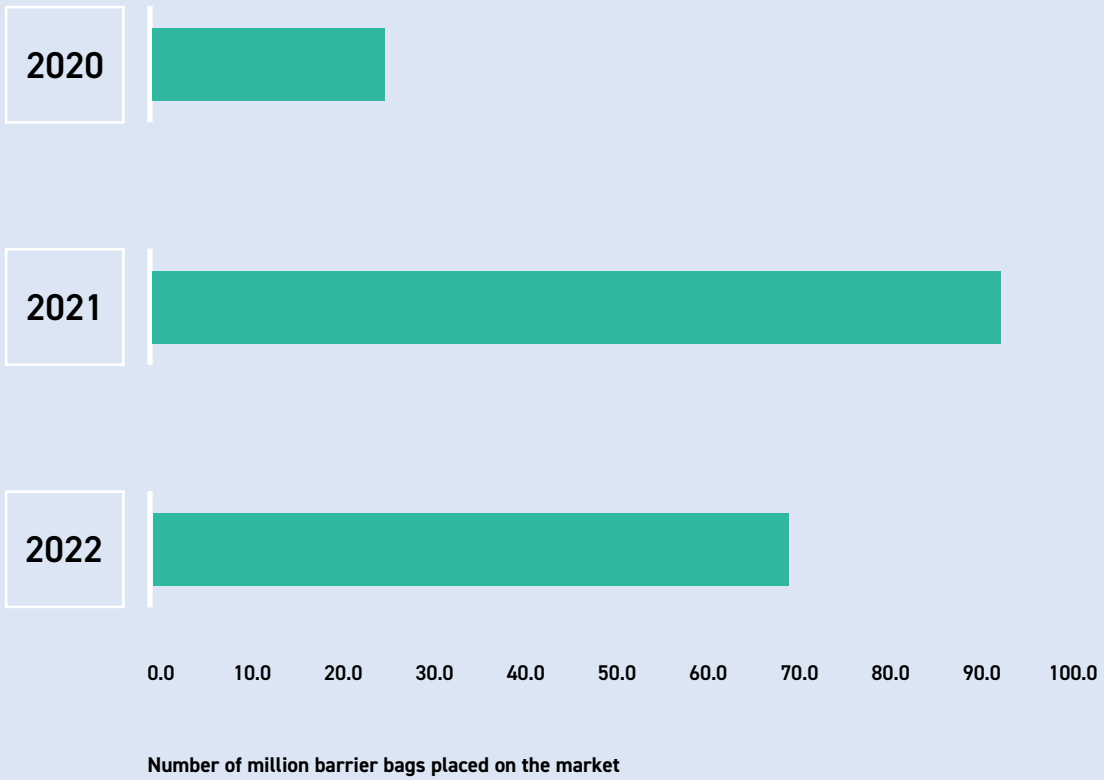


Figure 6.5: Barrier bags placed on the market by SA Plastics Pact retailers, 2020-2022

Addressing barrier bags has been a specifically challenging task for retailers. The SA Plastics Pact had a collaborative barrier bag action group in 2022, with all the retailer members as well as WRAP's behaviour change team participating.

Most progress has been made through elimination of barrier bags at tills. Pick n Pay removed barrier bags at till points, which amounts to a total of 20 million barrier bags eliminated per year. Other retailers have been investigating pilot projects for removing barrier bags altogether and the expectation is that these pilots will launch in the coming year. The retailers are looking into reuse solutions that will replace the bags entirely, rather than replacing the bags with alternative material types. Most of the retailer members already offer reusable fruit and vegetable bags to customers for purchase, and full elimination will result in the elimination of close to 70 million and more than a 100 tonnes of single-use plastic items.

The SA Plastics Pact will continue supporting retailers to develop and implement innovative solutions to this complicated problem. These actions will create momentum and learnings for further action going forward.

6.2. Actions and next steps

The focus in the next year will be on addressing the items on the phase one list remaining in the Pact members' portfolios, as well as finalising the phase two list, which will have partial targets by the end of 2025, and completion targets beyond 2025.

6.2.1. Addressing specific items

- It is expected that 2024 will see substantial movement in phasing out PET/PVC shrink sleeves on PET containers, now that polyolefin alternatives have been tested by brand owners and recyclers.
- To phase out barrier bags, the Pact secretariat will provide direct support to retailers to assist in design of, as well as monitoring and evaluation of pilots to replace barrier bags with a reuse model.
- More direct engagement and support to members on specific items such as PVC rigids, and oxodegradable plastics will be offered to support the phasing out.
- The draft phase two list for members to address has been expanded through consultation with brand owner and retailer members, and will be further discussed and voted on by all Pact members.

6.2.2. Consumer communication to support phasing out problematic and unnecessary plastics

SA Plastics Pact business members have committed to implement changes to improve the circularity of the plastic packaging that they handle in their business operations. Although the socio-economic and environmental benefits of a circular economy for plastic packaging are likely to be greater than these benefits in our current largely linear economy, shifting the system requires investment. And the early movers risk losing market share to competitors who choose not to bear the cost of a change towards more circular plastics.

An action group will be formed to pool consumer insights regarding packaging choices from members' commercial teams, and to devise communication resources on specific items (including the phase one list) to encourage consumers to support the circular choices members are making.

THE QUALITIES THAT MAKE PLASTICS FUNDAMENTAL TO OUR LIVES ARE THE SAME QUALITIES THAT MAKE THEM PROBLEMATIC WHEN THEY ENTER THE ENVIRONMENT

Keep plastics out of the environment by choosing those that can be used many times through refilling or recycling

6.3. Highlights of member actions

Addressing problematic and unnecessary plastics – PET/PVC shrink sleeves on PET bottles

PET/PVC shrink sleeves on PET bottles and jars were voted onto the SA Plastics Pact's phase 1 list of problematic and unnecessary plastics for members to phase out. Recyclable shrink sleeves are now available on the South African market, and the focus has shifted from finding a solution for the problematic shrink sleeves, to facilitating the adoption of the new recyclable shrink sleeve and the collection of PET bottles with the recyclable shrink sleeve.

Petco has formed a working group comprising representatives of the shrink sleeve manufacturers, recyclers and brand owners to explore the roll-out of this recyclable alternative within the sector, and to clearly identify the recyclable shrink sleeves for collectors and recyclers in the country. Producers may only apply this trademark once technical recyclability of the label/bottle combination has been verified by a PET bottle-to-bottle recycler in South Africa. A trademarked logo will be launched in the first quarter of 2024 to clearly communicate the recyclability of the packaging to collectors.

CCL Label has worked with brand owners to change their products out of the PET/PVC shrink sleeves that render PET bottles unrecyclable into polyolefin shrink sleeves. CCL Label was awarded the Petco 2023 Design for Circularity award for the EcoFloat sleeve in recognition of the improved circularity possible for PET bottles in South Africa due to this innovation.

Extrupet has verified the recyclability of PET bottles with the EcoFloat shrink sleeve.

Recycler testing of new packaging materials – essential step in our circularity journey

Extrupet provides testing and verification of new label types and packaging combinations (a full constituted pack including caps/ lids, labels, adhesive, and bottles) in PET bottles and containers, with both lab testing and recycling plant trials. A key development has been the introduction of floatable shrink sleeves for PET bottles and jars, which allows the PET packaging to be recycled through separation of the label which washes off and floats, and the PET packaging which sinks in the washing process prior to recycling.

Clicks addressing problematic and unnecessary plastics

Clicks has developed a strategy for replacing or removing problematic or unnecessary plastic packaging and products while also improving the recyclability of their packaging and using more recycled content.

Achievements include:

- the introduction of paper stemmed earbuds (MyEarth range), which has prevented 4.7 tonnes of plastic stems placed on the market annually since 2020.
- Clicks has also reduced the number of products that are in rigid PVC packaging by 80% from 1.2 million units in 2020 to 240 000 units in 2022.
- Furthermore, paper-stemmed lollipops have replaced plastic-stemmed lollipops in 2023, which will likely be fully removed in 2024.

Priority actions:

- 14 products packaged in laminated doy bags (stand-up pouches) will be moving to a recyclable alternative by the end of 2023, with an additional 30 products to be moved to the recyclable alertnative in 2024.
- 3 products that have PET sleeves on PET bottles will be moving to in mould labelling making them recyclable by the start of 2024.
- Endeavour to implement recyclable PP sleeves to replace PET sleeves through 2024.

Coca-Cola Beverages South Africa addressing problematic and unnecessary plastics

CCBSA has trialled polyolefin sleeves to replace the PET sleeves which render PET bottles unrecyclable. The polyolefin sleeves have been trialled both on the production line and at a recycler, and both trials were successful. All sleeves will be moved from the problematic PET sleeve for PET bottles into the polyolefin sleeve, which does not hinder the recycling of PET bottles, by the end of 2023. The priority action is now to implement this polyolefin sleeve with the agreed upon marking (trademark being developed by Petco) to indicate that the packaging is recyclable.

Pick n Pay addressing problematic and unnecessary plastics

Pick n Pay is working to reduce problematic and/or unnecessary plastic packaging.

Progress on Target 1 items:

- Pick n Pay has removed all plastic barrier bags from till points, which has resulted in the elimination of 20 million small plastic bags that are very unlikely to be recycled.
- Pick n Pay has also introduced paper stemmed earbuds, and removed plastic stemmed earbuds.

Spur addressing problematic and unnecessary plastics

Spur has taken strides in addressing problematic and unnecessary plastic packaging and items through central procurement to effect roll out across the group's restaurant chains.

Over the last four years, Spur has reported a significant reduction in the use of non-renewable packaging material, based on weight. Unnecessary and problematic materials, such as polystyrene and plastic straws, have been removed from the basket of Spur's central procurement partner, Vector. In 2022, 85% of packaging was produced from renewable resources.

In generic stock items such as balloons, docket books, kids' activity packs, menus, reward cards, toothpicks, wristbands, and placemats, Spur has shifted towards renewable materials, with 59% of products by mass being made from renewable materials in 2020, to 78% in 2022. Balloons and balloon sticks were reduced from 47 tonnes to 14 tonnes during the 2020 reporting cycle, and were phased out completely during 2021.

- The use of plastic takeaway cutlery has declined significantly from 119 tonnes in 2020, to only 130 kg in 2022. This represents a reduction of more than 90% and 13 million fewer items of plastic cutlery is being used by Spur.
- Thermoformed takeaway plastic packaging for some of the group's brands has been replaced with paper or bagasse.
- Spur is in the process of replacing PET shrink sleeves on PET bottles with PP shrink sleeves, and is including On-Pack Recycling Labels (OPRLs) on all the Group's on-table sauce brands. These products will roll out over the remainder of 2023.
- Looking ahead, Spur will continue working to replace PET shrink sleeves on PET bottles with PP sleeves for increased recyclability, which will amount to more than 100 tonnes once completed.

Unilever addressing problematic and unnecessary plastics

Unilever Group has made the commitment to reduce virgin plastic usage by 50% by 2025, and to eliminate over 100 000 tonnes of plastic from packaging globally. The company is working towards addressing problematic and/or unnecessary plastic items by using alternative materials or elimination.

Addressing problematic and unnecessary plastics through green mall management solutions

The V&A Waterfront has included a new section in their retail lease agreements under the sustainability annexure – V&A's "Green Lease". The new clause highlights to V&A tenants some of the problematic plastic items published in the SA Plastics Pact's phase 1 list of plastics to phase out. All tenants need to have eliminated these items by the end of 2025. Furthermore, all tenants are requested to engage with their suppliers to reduce secondary and tertiary packaging on products.

Woolworths addressing problematic and unnecessary plastics

Woolworths is committed to phasing out unnecessary single-use plastic in order to address the problem of plastic pollution in the environment. Some achievements over the past year include

Plastic straws

- Plastic straws have been removed from 200ml juice cartons, and replaced with paper straws, which constitutes a reduction of 7.5 tonnes of plastic per year.

PET/PVC shrink sleeves on PET bottles

- There has been a year on year reduction of 53% of PET and PVC shrink sleeves on PET bottles, and over the next year there will be a focus on full elimination to improve the ease of recycling.

Plastic packaging reduction – phasing out unnecessary single-use packaging (consumer packaging)

Woolworths is committed to remove single-use plastic bags from stores, and has achieved the following:

- In 2022, a reduction in the number of plastic bags per transaction by 66% compared to 2021 and the removal of single-use plastic shopping bags from more than 300 stores. The plan is to remove single-use plastic carrier bags from all stores in future.
- Woolworths has also eliminated shopping bags from its online delivery service, Dash, and has started removing plastic courier bags from Fashion, Beauty, and Home online deliveries. The plan is to fully eliminate these courier bags by the end of 2024.
- Woolworths is currently in engagement with internal stakeholders on removal of barrier bags at till points and produce counters.

Plastic packaging reduction – phasing out unnecessary single-use packaging (retailer packaging)

- Mpact has improved its pallet configurations, and thereby reduced the number of pallets and total shrink wrap used by 2.5 tonnes per year. All Mpact pallets are returnable and reused.
- By removing lug liners from core vegetable lines, Pick n Pay was able to save 13.2 tonnes of plastic per year, starting in 2022.

Lug liners are plastic sheeting used protect against spillage, placed in the containers used to move products around the store, and while packaging shelves. Fresh vegetables transported to pack onto shelves are unlikely to leak any liquids or small particles and therefore do not need these liners.

- Pick n Pay has also removed PVC cling wrap from its Simply Cook range (saving 1 tonne per annum).

- All dairy products are now transported from production to distribution centres to stores using interlocking pallets to limit pallet wrap, thereby reducing plastic tertiary packaging

Reducing fossil-fuel-based virgin plastic

- The Woolworths milk bottles placed on the market in 2022 included 104.46 tonnes of virgin renewable content, HDPE synthesised from sugar cane residues.

7

Target 2

100% of plastic packaging is recyclable, reusable, or compostable

Packaging design goes a long way towards determining the 'fate' of the packaging – what happens to it at the end of its usefulness. Packaging that is well-designed for the system as a whole, starting with the protection of the product, to the distribution and sale, to collection, sorting, and recycling into another product, is likely to be collected for recycling, while packaging that is poorly designed for the system will end up in landfill (as the best case) or littered into the environment.

The word "recyclable" is used in different ways depending on whether the packaging system as a whole is in mind (from extraction of raw material to recycling into another product) or if the packaging is seen only as a mechanism to deliver product to consumers. The latter viewpoint, with the producer of the packaging – whether packaging manufacturer or brand owner or retailer placing the product on the market, is no longer compatible with our regulatory environment. The National Extended Producer Responsibility legislation requires that producers take responsibility for their packaging from extraction into its next life, when it is recycled into another product.

The SA Plastics Pact defines 'recyclable packaging' as "packaging or a packaging component is recyclable if its successful post-consumer collection, sorting, and recycling is proven to work in practice and at scale." In order to achieve recycling "in practice and at scale", a threshold of 30% output recycling rate must be achieved on average across the country.[5]

A definition of 'recyclable' that only includes technical recyclability can be misleading as to the potential of the material to be recycled in South Africa. Most materials can be recycled into another product if the producer is willing to pay all costs involved. Some packaging types have limited to no value at end of life, even a negative value as it costs more to collect, sort and sell the packaging material than a collector may earn from selling it. The definition of 'recyclability' as technical recyclability only is not a reflection of the economic feasibility of recycling the packaging in South Africa.

Packaging may also be designed to be reusable, allowing the packaging to be used many times before it needs to be recycled. Packaging may also be compostable. SA Plastics Pact recommends verified home compostability for products that are not currently collected for mechanical recycling. Compostable products can be highly detrimental in existing recycling streams, and there are some claims of compostability that are unverified. The SA Plastics Pact directs members to COPCO – The Compostable Packaging Council for information on the verification process for compostability.

[5] The Ellen MacArthur Foundation, 2021. The New Plastics Economy Plastics Pact Network, Vision & Definitions

7.1. Progress

7.1.1. Recyclability of total packaging portfolio

In 2022, the SA Plastics Pact brand owners and retailers who submitted data accounted for 235 000 tonnes of plastic packaging placed on the market in South Africa, which is 24.4% of locally produced plastic packaging, including both virgin and recycled content.

The Pact members' portfolio by polymer is presented in Figure 7.1. The SA Plastics Pact team consults Plastics SA annually to review the recyclability assessment on plastic packaging formats in South Africa. Plastic packaging that is recycled at greater than 30% output recycling rate is graded as adequate and "recyclable" in South Africa. Plastic packaging that is recycled at an output recycling rate between 15 and 30% is graded as poor recyclability, and less than 15% is graded as limited recyclability.

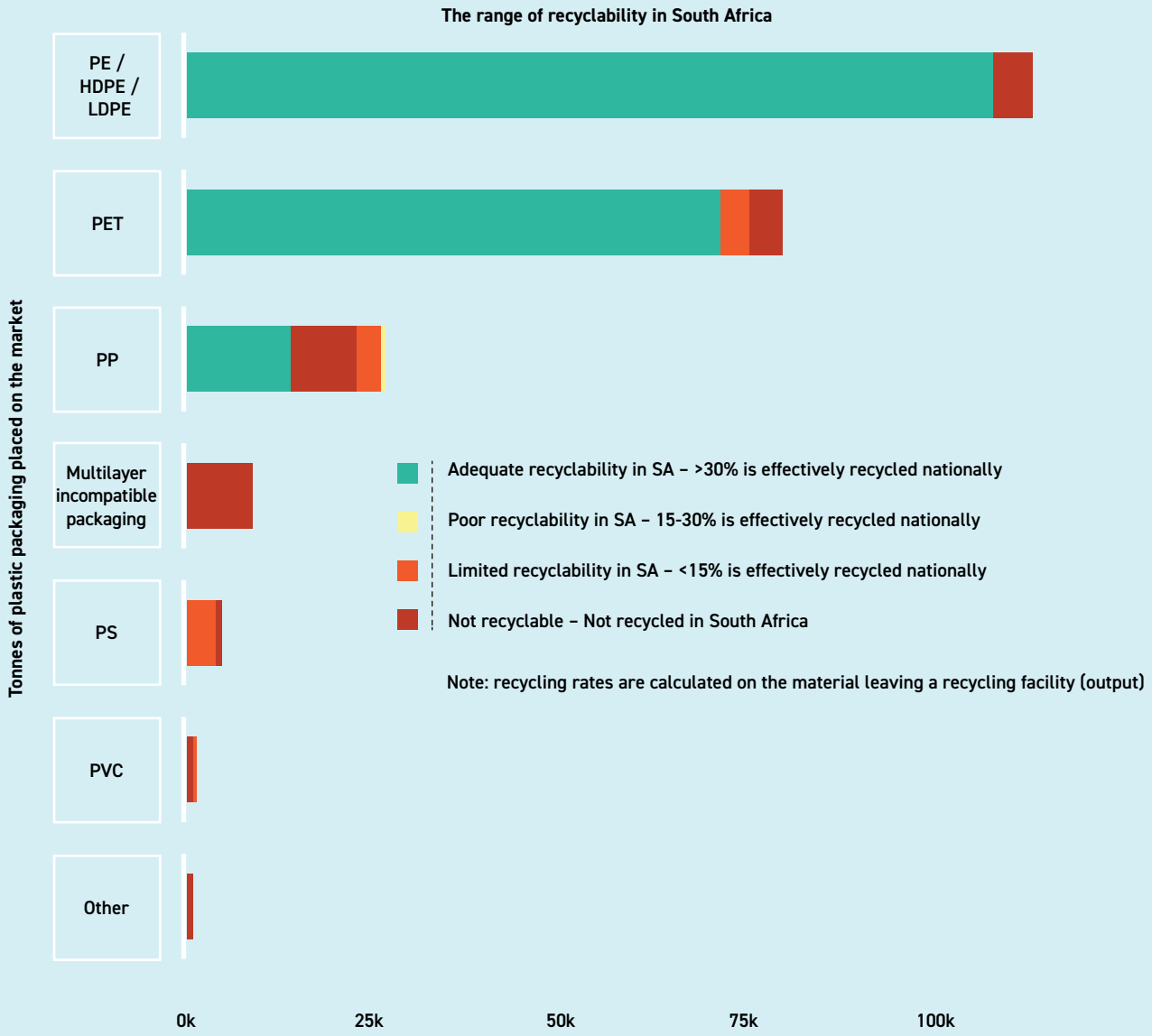


Figure 7.1: The packaging portfolio of SA Plastics Pact members, sorted by recyclability in SA

Most of the HDPE, LDPE and PET packaging placed on the market by members is recyclable, with some formats like PET beverage bottles and white HDPE bottles recycled at well above a 30% output recycling rate.

At the recyclability assessment revised in early 2022, 75.4% of the Pact membership's portfolio is recyclable (adequately recycled). This percentage has decreased from 2021 – 81.2% and 2020 – 80.7%.

However, plastic packaging recycling rates released by Plastics SA in July 2023, report the output recycling rate for PP plastic packaging as 32.9% in 2022. This recycling rate is calculated by dividing the PP plastic packaging recycled in South Africa, by the virgin PP packaging manufactured in South Africa. It is important to note that the nett import of filled plastic packaging is not tracked in South Africa currently. Once EPR reporting has matured, the filled packaging imported should be known.

Based on 2019 market size estimates, the local production of PP rigids is about 79% of the PP packaging manufactured locally, and the PP flexibles 21%. Therefore, the output recycling rates in PP rigid formats have exceeded the 30% threshold and can be considered recyclable in South Africa.

A recalculation of the Target 2 progress including PP rigids as recyclable, increases the percentage recyclability of the Pact portfolio to 82.0%, which exceeds the 2021 result.

A number of factors are responsible for the decrease in the % of recyclable plastic packaging in the Pact member portfolio at the 2021 recyclability assessment:

- We are committed to adding new members to our exciting collaboration. Business members are at different stages of development in their circular economy journey, and some by virtue of their products, have more challenging packaging portfolios to shift to circular alternatives (such as the snack market, cured meats and cheeses).
  - The SA Plastics Pact targets are collaborative targets. Our aim is grow the impact of our collaboration by increasing the proportion of plastic packaging placed on the market in South Africa in our Pact portfolio.
  - The composition of the member portfolio has changed from 2021, as illustrated by the proportion of recyclable PET bottles in the Pact portfolio
- In 2022, the percentage of highly recyclable PET beverage bottles in the total packaging portfolio was 25.2%, while in 2021 and 2020 the percentages were 28.8 and 31.8% (Figure 7.2).
  - Member commitments to reduce plastic usage in their collation and logistics packaging, as well as in retail carrier bags, removes large tonnages of well recycled plastics. The percentage of these members' portfolios then displays a decrease in recyclability of their packaging portfolio, but their plastic 'intensity' or tonnes of plastic packaging used per tonne of product sold shows a marked improvement. To account for this discrepancy in reporting the SA Plastics Pact membership is discussing 2030 targets that include an intensity measure, such as tonnes of plastic packaging per turnover or per tonnes of product sold.

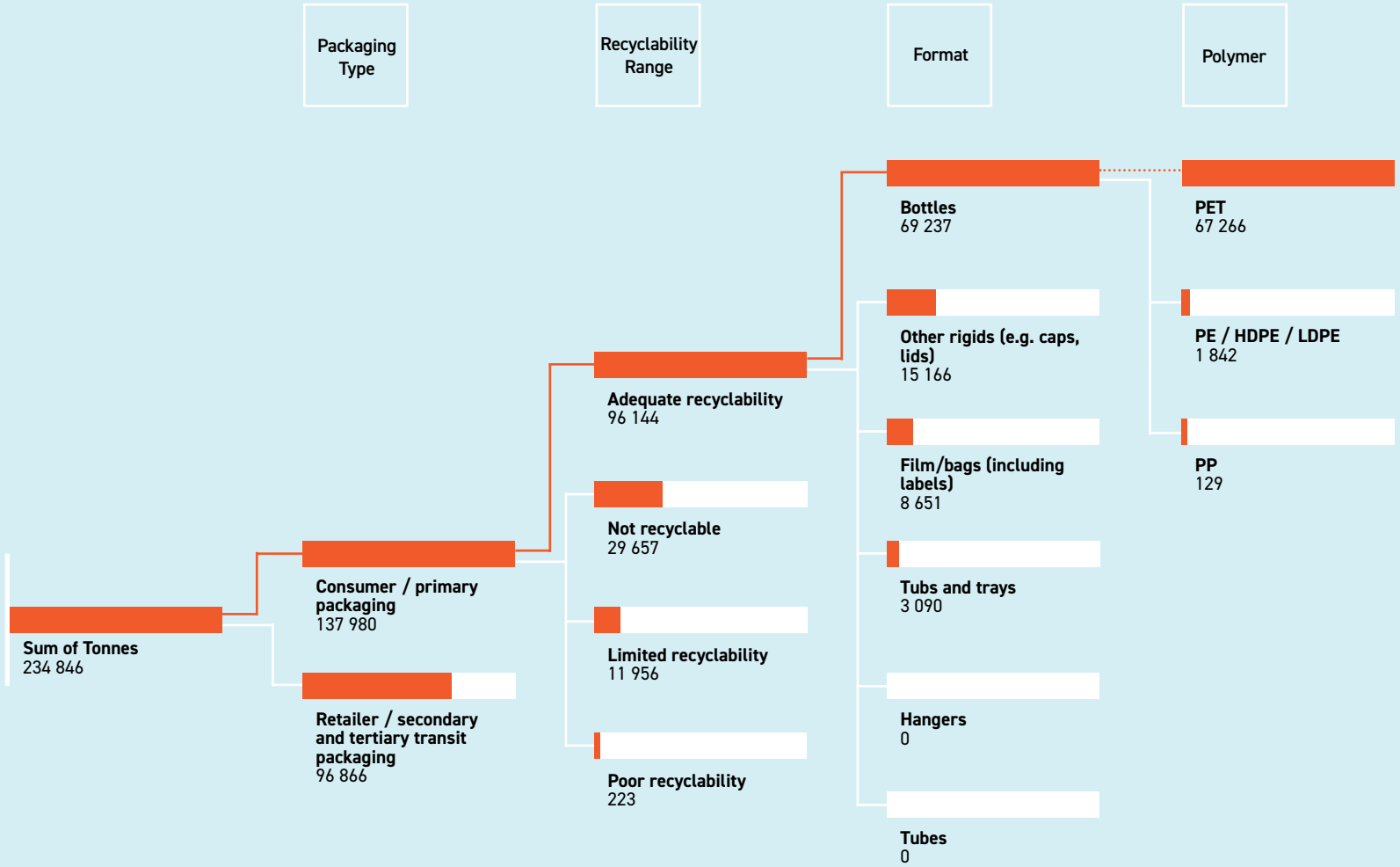


Figure 7.2: Decomposition graph showing the format and polymer composition of the adequately recyclable packaging

7.1.2. Recyclability in consumer (primary) packaging

Consumer packaging is the first layer of packaging in contact with the product including labels, lids or closures, sleeves and any other element attached to the base packaging format. In 2022, 69.8% of the members' consumer packaging is recycled at a greater than 30% output recycling rate in South Africa, with 7.69% in the limited recyclability range, and 22.5% not recyclable in SA. The output recycling rate for PVC packaging was reported as 6.5% in 2022. In the above analysis PVC rigid packaging is included in the limited recyclability category.

7.1.3. Recyclability in retailer (secondary and tertiary) packaging

Retailer packaging is collation packaging (also called secondary packaging), and logistics packaging such as crates and pallets (also called tertiary packaging). With the inclusion of PP rigids as recyclable, the retailer packaging in the membership is 99.2% in the adequate recyclability grading, with 0.72% graded at limited recyclability, with the shift of PVC rigids into the limited recyclability category.

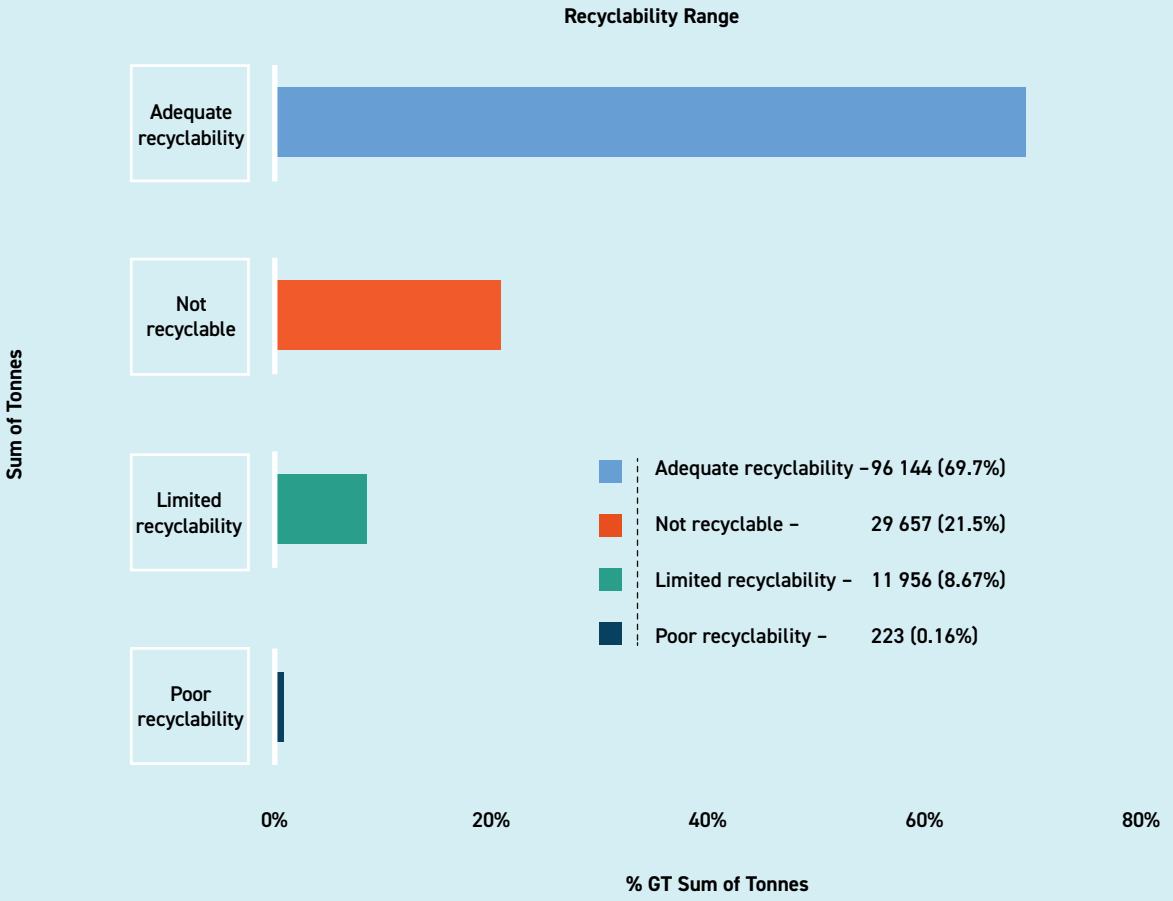


Figure 7.3: The range of recyclability in consumer packaging in 2022

7.1.4. Packaging formats to focus on in 2024

The quickest wins in 2024 for the Pact membership will be in

- shifting the remaining formats in PET/PVC shrink on PET bottles and jars to floatable shrink sleeves that do not disrupt the recycling process
- changing the label adhesive on HD and PP rigid packaging to a wash off adhesive that will not hinder or disrupt the recycling process

In total these changes will move about 11 000 tonnes of packaging into the adequately recyclable category, around 4.8% of the 2022 packaging portfolio.

In the limited recyclability range, recommended actions include

- addressing the remaining PVC rigids has the potential to move an additional 19 tonnes into adequate recyclability

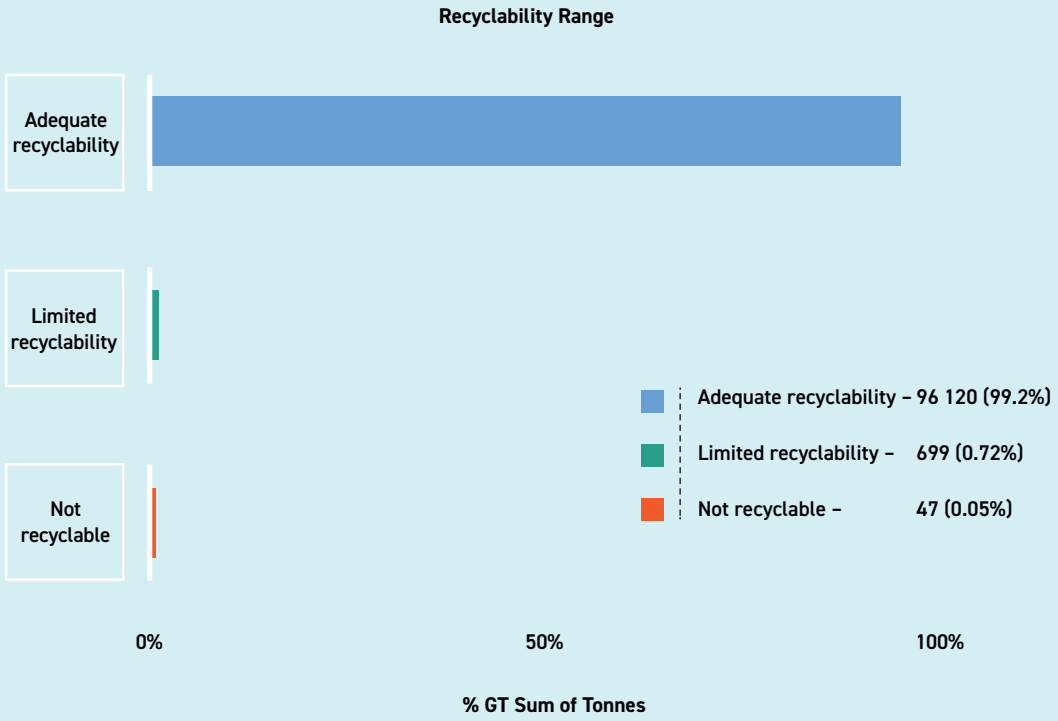


Figure 7.4: Recyclability range for retailer packaging in the Pact membership

- Considering polystyrene (PS) packaging, which comprises the largest tonnage in this category at about 3 800 tonnes. Some members have started phasing PS out of their packaging portfolios due to the lack of value to collectors, meaning that PS is rarely collected for recycling. Furthermore, PS packaging is lightweight and is easily blown out of waste bins and trucks, and is often used for on-the-go packaging, making it highly susceptible to being littered.

In the material that is not currently recycled in South Africa:

- The flexible packaging that is multi-layered with different polymers that are not compatible in recycling, will continue to be a focus. The material is around 8 000 tonnes in the membership portfolio.

- PET thermoform, which is the material used for clear grape punnets, and clear cake domes, is still listed in the not recycled category. The recycling of PET thermoform commenced in SA in 2022 on a small scale, achieving a less than 0.4% output recycling rate nationally. Further investment is needed to grow the recycling plant capacity and the recycling rate to be compliant with EPR targets.
    - Although PET thermoform can include recycled content in food contact packaging, some members have chosen to shift part of their PET thermoform portfolio into PP thermoform, which has a much higher recycling rate and therefore is more likely to achieve EPR recycling targets currently.

7.2. Target 2 – Actions and Next Steps

Under Target 2, members across the value chain and supporting members including PROs as key partners, convened in two action groups aimed at the upstream section of the circular economy value chain – from material selection to packaging design and manufacture.

It must be noted that collectors and recyclers are essential to our action group discussions on packaging material selection and design. In selecting packaging materials that are able to deliver the performance needed from the packaging (for example, to limit or prevent moisture from damaging the product), an essential next step is to confirm the recyclability of the material and envisaged design in South Africa:

- For the first scan: The SA Plastics Pact secretariat in partnership with Plastics SA, updates a plastic packaging recyclability assessment annually to guide members to the most recyclable plastic packaging.

- For novel packaging not referenced in the recyclability assessment: packaging material should be tested with an appropriate recycler who produces high quality recyclate that can be manufactured back into packaging.

7.2.1. The design for circularity action group

This action group has focused on adapting the Consumer Goods Forum's Golden Design Rules (GDRs) to the South African context.

There are many 'Design for Recycling' guidelines available. However, the design principles are not always aligned with a circular economy approach, but rather an approach to recycling that focuses on one additional life for packaging materials (i.e. 'recycling' into products that cannot be recycled again or are very unlikely to be recycled into new products). The circular economy approach aims to keep material at its highest value to make multiple life cycles in our economy possible.

The aim of the action group is to focus on facilitating packaging design changes in streams where there are alternatives available, and the cost of the change is economically feasible:

- Through providing specific information to decision making teams internally to drive more circular choices and changes in packaging. Teams considered include: the executive, procurement, marketing, sustainability and packaging technical teams.

The design guidance that will be produced through this action group will present information at a high-level accessible to non-specialists in plastic packaging, and include links to more detailed information that packaging specialists will require. This will include links to other design guides which also promote circularity in plastic packaging.

7.2.2. The flexibles action group

The flexibles action group has focused on:

- quick wins in shifting PP to LDPE flexibles where possible to rapidly move packaging into the adequate recyclability category, through members sharing their learnings in making such a shift, and
- on recyclable alternatives to PET-PE, PET-PA multilayer packaging. A converters pitch event was held in which converters presented their alternative packaging materials, and their experience in designing packaging suitable for products that need specific barrier properties for protection of the product.

The two action groups will continue to develop very specific member guidance, that can be disseminated to the membership as a whole to facilitate circular packaging choices.

7.3. Reusable Cup Pilot Project at the Oranjezicht City Farm Market

SA Plastics Pact & the V&A Waterfront

The SA Plastics Pact secretariat team, in partnership with the Victoria & Alfred Waterfront (V&A Waterfront), conducted a pilot project for reusable on-the-go beverage cups at the Oranjezicht City Farm (OZCF) Market to test the efficacy of replacing single-use packaging with reusable options. The pilot project was conducted during the 2022/23 financial year.

The OZCF Market runs three days a week, on Wednesday, Saturday and Sunday, and experiences high foot traffic, with anywhere between 2 000 to 8 000 visitors attending the market on any given day. As part of this pilot project, 4 000 beer cups and 4 000 coffee cups were purchased at the start of the project with the intention to trial reuse options for both coffee and beer purchases at the market.

Reuse models

A consultative process was used to develop the reuse model prior to implementing the pilot project, however, there were still many unforeseen changes from the various stakeholders which made this a dynamic project to coordinate. Certain aspects, like the loss rates and enthusiasm of customers were unknown before the project and required the project to be adaptive during implementation.

The initial reuse model (see "Coffee cup reuse model" in Table 7.1) required the customer to pay a deposit and collect the cup separately at a kiosk at the entrance to the market before taking the cup with them to get their beverage of choice. The customer would receive a R5.00 discount on their beverages and a full refund of the deposit money when the cup was returned.

After poor customer engagement in the initial two-week roll-out, particularly on the beer cups, it was decided to split the delivery model. The model remained unchanged for coffee cups but was altered for beer cups. With buy-in from the bar, beer cups would be placed behind the bar, replacing single-use cups. Beer would be served in reusable cups at no extra charge (no deposit). This was understood to be the most convenient option for customers and vendors.

Table 7.1: Applied reuse models during the pilot project at the OZCF Market

Method / Criteria	Name & location	Financial model	Strengths	Weaknesses
Coffee cup reuse model	Deposit-return system from cup dispenser	Deposit money goes to reuse project. Reuse project refunds customers when they return cups	Convenient to vendors. Central control to reuse project	Inconvenient to customers who need to make 2 extra stops on their customer journey to purchase a beverage
Beer cup reuse model	Honesty system from vendor kiosk	Vendors pay for "cups as a service" for the same price as they would pay for single use cups. Customers do not pay a deposit but are requested not to take the cups home	Simple system and very easy to integrate. Can fully replace all single use cups and customer does not have to make a decision or make extra effort	Cups can be easily lost without the cost being covered by a deposit, as customers are not incentivised to return the cups

Coffee cups

Coffee cups were offered on the deposit-return method for 13 market days in which time 385 cups were rented, or on average 30 per day, with a deposit of R30 per cup. Many customers decided to keep this "relatively cheap" reusable cup, which resulted in an average loss rate of 18%. The economic model of the deposit return system for coffee cups was found to be very difficult to achieve. At the lowest break-even point of 6 uses per cup, the cup return rate would need to be 84% (assuming a 50 day or use lifespan) or 88% (assuming a 10 day or use lifespan) in order to break even in terms of cost. This does not include any of the peripheral costs such as labour, washing services, etc.

Consequently, due to technical and viability challenges, it was determined that the coffee cups should rather be made available for sale so that customers retain ownership of their own reusable coffee cups.

Beer cups

The total number of reusable beer cups used was 33 744, with a total loss of 2 997 cups, making the average loss rate ~11%. Although the observed loss rates fluctuated a lot, there was a general average decline in losses over the duration of the project.

Single-use beer cups cost ~R2.60 each while the reusable beer cups cost R7.00 each. In order to recover costs for running the project and to test out business model strategies, a usage fee per cup used was introduced, payable by the bar. In the initial stages of set-up, the bar agreed to pay a R3.00 usage fee for the reusable cups in place of the single-use alternative, however as the project developed, the bar was only willing to pay a R2.00 usage fee per cup. In these scenarios the break-even point for cost was lower and slightly higher than 3 uses respectively. This made feasibility much easier to achieve. The model could still break even with a loss rate as high as 30%.

Key project insights

1. The coffee cup deposit-return model was found to be unviable in these circumstances, the beer cup honesty system was found to be a viable business opportunity.

2. Two staff were hired to run with the implementation of the project. This was seen as a major success of the project, as a new business was created out of this pilot project.

3. One of the project staff took over the project to grow the pilot into a private for-profit business to offer cups as a service to markets and events – another major project success.

4. It is clear that convenience and ease is important to the customer and they would not readily spend extra time and effort to fetch a reusable cup at a third party location

5. It is believed that the beer cup method of reuse could be replicated at other food markets in South Africa and the method could also be expanded to offer cups as a service to events too.

To access the full project report, click here.

7.4. Target 2 – Highlights of member actions

Design for recycling developing policy

The Department of Forestry, Fisheries and the Environment published the Packaging guideline: Recyclability by design for packaging and paper in South Africa" in June 2023. The guideline covers four packaging material streams: glass, metal, paper and plastic. The main purpose of the packaging guideline is to reduce the volume of packaging ending up in landfill sites by improving product design.

The development and compilation of the Packaging Guideline is the result of a collaborative effort between the Government and industry. The first Packaging Guideline was developed by Packaging SA in June 2015 and revised in 2017, 2020 and 2022. The intention is to update this guideline from time to time, as and when it is necessary, because the packaging market is characterised by innovation, new markets for used packaging materials, changing regulations and developments in the areas of labels, glues and other packaging components.

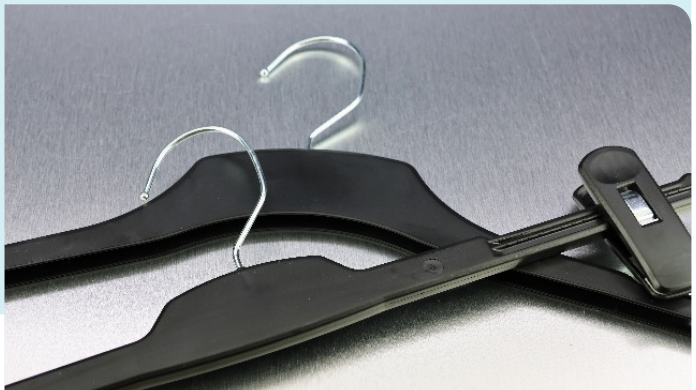
Supporting design for recycling

SAPRO has been working with the SA Plastics Pact on creating a Design for Recycling (D4R) tool to distinguish between recyclable and non-recyclable packaging decisions. It also assists brand owners to automatically generate OPRLs which can be placed onto label designs. The online tool has been launched and can be used for free here. The D4R tool was constructed by Designed For Earth under the direction of SAPRO in partnership with SA Plastics Pact, WWF Nedbank Green Trust and Polyco. The tool seeks to support brands in improving the design of their packaging to fit into the South African recycling economy.

As an additional feature to the D4R tool, SAPRO is working on the SAPRO Platinum Design Principles Certification which awards a badge to qualifying packaging that achieves Best-In-Class recyclability for their packaging item. At the recent SAPRO Awards ceremony, SAPRO launched and awarded the first Platinum Design Principles certification to the Spar Milk Bottle. SAPRO is planning to open applications for other items to achieve the Platinum Design Principles by the end of the year.

Strategic packaging portfolio assessment

- The Clicks packaging team engaged in a full portfolio assessment regarding the ease of recyclability of all packaging placed on the market for in-house brands (excluding pharmaceuticals). The team highlighted where changes were needed to move to packaging that is recycled at a >15 % output recycling rate, and ideally at a >30% output recycling rate. Converters were then actively sourced to consider recyclable options available, and the recommendations were workshopped with the secretariat.
  The secretariat confirmed specifics regarding labels, printing and product contents with Pact recyclers, for feedback to Clicks. This approach has provided insightful knowledge and confirmed the right path to take over the various available options.
- Spur continues to work with suppliers to ensure that design for recycling principles are implemented throughout its value chain. This is done by engaging with the procurement teams and by developing a buying criteria checklist related to the specific packaging materials in question, based on the Global Reporting Initiative framework related to renewable and non-renewable resources as well as Packaging SA and Polyco's Design for Recycling Guidelines.
- Woolworths continues to review packaging formats and materials used, comparing current materials to other available materials that may have greater potential for circularity (to be collected and recycled into other products). This assessment not only considers changes in in material type, but also format and design, including label materials, adhesives and the nature of the printing on the packaging, all of which may affect the recyclability of packaging.



Collaboration for circularity

- Unilever South Africa has been teaming up with expert partners to collaborate with South Africa's recycling communities and develop recyclable plastic packaging on some of their most well-known products.

Reducing plastic packaging

Safripol transitioned most of its local pipe resin customers from a green 25 kg bag packaging to 1.375 tonne reusable bulk bags. This removed 51 tonnes of coloured 25 kg bags from Safripol's packaging in 2022.

Design for reuse

- The Mpact team has designed returnable plastic packaging for a leading cosmetics brand. The new packaging design is currently in trial testing.

- Polyoak Packaging – Reusable display packaging – hangers
  - Polyoak's hanger division, Visconti injection-moulds PS hangers for the clothing retail industry, where they are reused in-store five times on average. Garment retailers either re-circulate the hangers themselves in-store, or partner with Hangerman, Polyoak's hanger reuse programme, to collect, sort and clean hangers for entry back into circulation. Often hangers are perfectly fit for reuse by simply removing size indicator labels and cleaning them thoroughly. Hangerman outsources a portion of this work to organisations for the physically and mentally disadvantaged, enabling them to become economically active citizens in a dignified manner.
  - When damaged hangers reach their end of life, they are recycled into new hangers. In 2022, Visconti recycled 200 tonnes of old hangers into new black hangers containing 50% recycled PS.

Reuse of commercial packaging

- Spur Group restaurants made extensive use of portioning bags (thin plastic barrier bags) to improve efficiency in kitchens, rather than decanting required amounts of ingredients from bulk packaging. These portioning bags were then disposed of to landfill.

- Reuse pilot projects were conducted from October 2022 to May 2023 to remove portioning bags within two of the group's leading brands. Participating restaurants tested reuse models over this period and the case study yielded compelling results, illustrating impact by reducing over 619 991 units/ per month (4 959 928 units reduced over the period). More work will be done in this area to evaluate results and build this into operational best practice. The operational teams are testing different re-usable solutions, such as: stainless steel portioning cups and trays, moulded trays and plastic storage containers.

Reuse of bulk containers

CropLife SA encourages reuse of intermediate bulk containers (600 to 1 000 L) used for technical grade materials. The containers are mostly professionally decontaminated and reused by the manufacturers for the same pesticide.

CropLife SA does not support repurposing of any polymer pesticide containers as a precautionary measure to prevent adverse health and environmental impacts.

Reuse of primary packaging

CCBSA is promoting their refillable PET bottle, as part of their strategy to promote reuse of CCBSA packaging. This strategy also included the addition of more product lines available in returnable glass bottles. CCBSA has over 4 000 tonnes of plastic packaging in their reuse model. The recovery rate of the reusable PET bottle was about 90% in 2022, which includes the removal of damaged bottles, and the losses (bottles not returned).

Design for recycling – changing from mulitpolymer to monopolymer

- Mpact has designed mono-polymer trays in PET to replace multilayer trays which include different polymers. Multilayer multi-polymer trays are not collected for recycling in South Africa. Post-consumer recycling of thermoform trays began in 2022, and is required to be at a 30% output recycling rate by the end of 2025.

- Mpact has introduced a PET bottle 1.5lt to 5Lt with a PET integrated handle. This innovation replaces the need for a separate clip-on handle made from a different polymer type, thereby improving recyclability.

Design for recycling – improving value of packaging at end of life

- ALPLA encourages customers towards more circular choices by screening customer portfolios and presenting better ways to make products recyclable by using a combination of RecyClass, Polyco and Petco Design for Recycling guidelines. Proposals to clients generally include combination of RecyClass and Life Cycle Assessments (LCAs). RecyClass demonstrates recyclability and quality of the recyclate for circularity – the right combination of products (colours, labels, sleeves, materials etc) to offer their clients easily recyclable products for South African recycling streams:
  - ALPLA worked with a brand owner to change bottle caps from black to clear, on a clear bottle. The recycled plastic from these bottles and caps will have a higher value than the black cap and clear bottle combination, and therefore mean that the clear bottle and cap are more likely to be collected for recycling. In 2022, this change improved the recyclability of 68 tonnes of material, including the cap and the bottle.

- All fresh milk bottle caps have been changed to white on Pick n Pay's house brand. The caps were previously a range of colours to

represent the different types of milk, such as full cream or low fat. Making the caps white, the same as the HDPE white bottles means that the recycled plastic produced from the bottles will maintain its white colour, and not be a mixed colour product. The white recycled plastic has a higher value than other colours, as white recycled plastic can be included in more packaging types and products, while other colours can only go into packaging or products that will be darker in colour than the recycled plastic

- All Pick n Pay's PET muffin skillets were made from 40% factory scrap, 30% recycled content, and 30% virgin. Recycling of PET thermoform (like these muffin skillets) only commenced at the end of 2022, with small tonnages collected and currently recycled in South Africa. Pick n Pay chose to move the skillets into PP thermoform, which is recycled at an estimated 20-30% output recycling rate in South Africa. This shift makes 2.6 tonnes of material annually available for recycling in South Africa.

- Tags on Pick n Pay's HDPE citrus bags used to be imported and a mix of plastic types. The tags are now HDPE and sourced from a local manufacturer.

- Tuffy converted an overseas supplier to local in-house production. The change meant they were able to move the flexible packaging on their fragranced refuse bags from PP to the well-recycled LDPE. The updated product and packaging will be on the shelves in quarter 4 of 2023. PP flexible packaging is currently poorly recycled in South Africa, while LDPE is well-recycled at above a 30% output recycling rate.

Design for recycling – label adhesives

Label adhesives that are not water soluble can be very disruptive to recycling processes. At best reducing the amount of plastic that will be recycled in a plant (ie excluding the pieces of plastics with adhesive), and at worst the labels and adhesive block the recycling plant screens. CCL has designed PP wash off labels that may be applied to glass or plastic and separate from the container during a standard bottle washing process. A brand owner can then reuse the container, or include the container in the recycling stream.

CCL has also designed self-adhesive labels (also called pressure sensitive labels) that wash off in the washing process before recycling.

Shifting an industry – design for recycling in pesticide containers

All CropLife South Africa members have agreed in-principle to phase out opaque PET pesticide containers and replace them with heavy gauge or in-line fluorinated HDPE containers by 2025.

CropLife SA aims to continue to assess the market for the presence of 1 L and 5 L opaque PET pesticide containers and to encourage the manufacturers of these pesticides to terminate use of PET as packaging material for their products.

Repurposing packaging

In 2022, Safripol repurposed 17 636 bulk bags by donating used bulk bags from their debagging station in Tulisa Park to Petco for distribution to collection and recycling beneficiaries nationwide. Bulk bags are commonly used by collectors and sorters, and are highly sought after. Buying new bulk bags can be a significant cost for small collectors, especially collectors in the informal sector.

Promoting circularity through e-commerce platforms

Takealot, Media24 and Naspers joined the SA Plastics Pact in early 2023. E-commerce delivery platforms like Takealot and Media24 have a unique opportunity to positively influence upstream (restaurants, sellers) and downstream (consumers) stakeholders and to create momentum toward tackling the problems associated with plastic pollution. This opportunity has been illustrated in the report "The Golden Rules to Scale Sustainable Packaging" published by Naspers. The report takes a comprehensive look at how packaging is used by online delivery platforms and sets out ten golden rules for delivery platforms to move toward more responsible packaging, and identifies solutions to address the barriers to scale circularity in packaging.

Achievements:

- Takealot is exploring the use of reusable pallet wrap in the form of elasticated pallet netting that can provide the same load security as traditional plastic wraps. This solution could eliminate the cost of purchasing and managing used plastic films, and will reduce total plastic usage significantly.
- Media24 (M24) Logistics has replaced plastic void fill with paper void fill and unrecyclable plastic tape with paper tape in their logistics packaging.

8

Target 3

70% of plastic packaging effectively recycled

SA Plastics Pact members sign up to work towards a 70% input recycling rate in South Africa. Although attaining this target is not under the direct control of SA Plastics Pact members, the members commit to working with key stakeholders beyond the membership.

There are certain aspects that assist in growing the national recycling rate[6] that members can influence directly. These include:

- Designing their plastic packaging for recyclability and collaborating to share best practices in packaging design with other Plastics Pact members
- Eliminating problematic plastic items that impact the collection and recycling of other material streams
- Substituting problematic or poorly recycled streams with alternatives that are well recycled in South Africa, and sharing the learnings from the change, such as
  - the alternative packaging-product combinations that were successfully trialled,
  - changes needed to filling lines for the alternative materials, and
  - confirmation from South African recyclers that the alternative material was successfully trialled in their plants.
- Increasing demand for recycled plastic by maximising the use of recycled content in their own packaging and products.
- Maximising the waste separated and collected for recycling in own operations.

A critical element members commit to is ensuring that they are compliant with EPR regulations, and members engage actively with PROs to improve collection and recycling rates. Many Pact members also invest in collection and recycling initiatives above the required EPR fees to their selected PROs in order to boost performance in South Africa's new mandatory EPR system.

Significant further action and collaboration by members as well as the broader value chain will be needed in order to make progress toward the 70% input recycling rate for plastic packaging placed on the South African market.

[6] The input recycling rate is calculated by dividing the tonnes of plastic packaging collected that enters recycling plants by the total tonnes of plastic packaging manufactured locally (with exports subtracted and imports added)

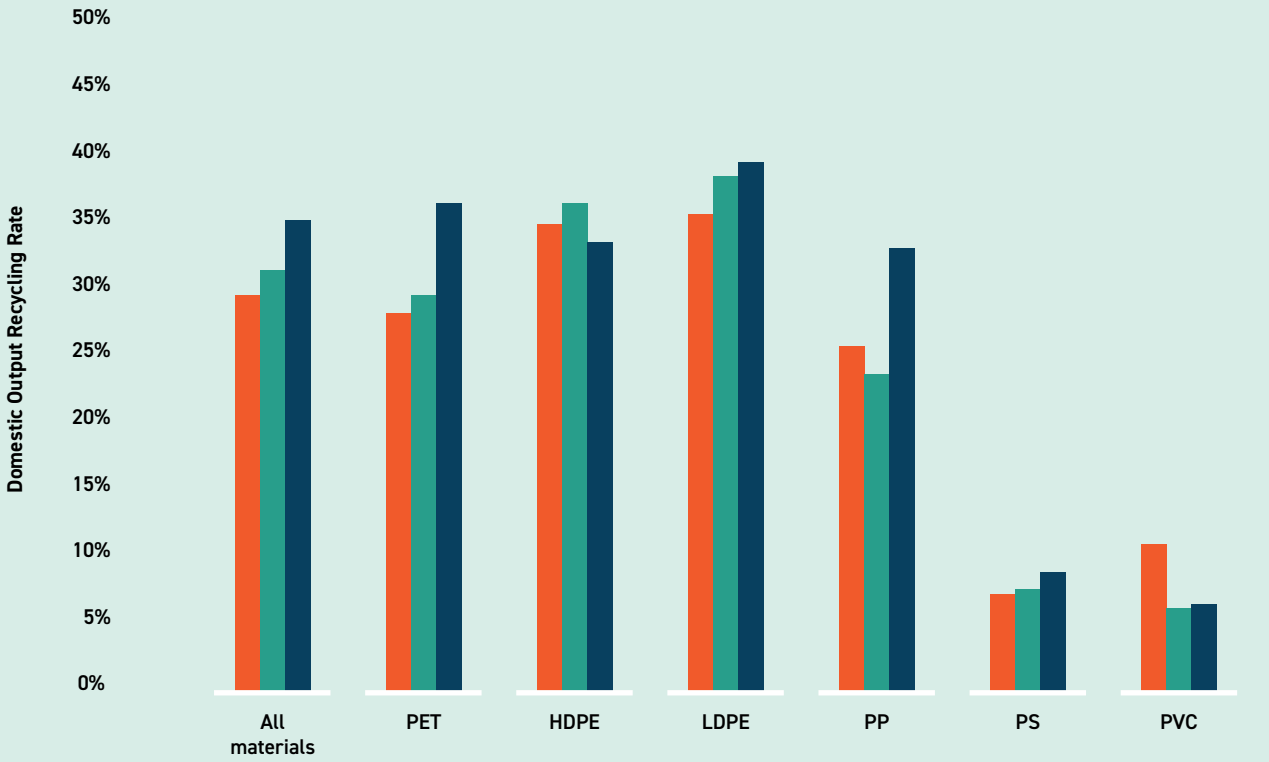
8.1. Progress

The input recycling rate for plastic packaging increased from 41.3% in 2021 to 43.9% in 2022 (Figure 8.1). The output recycling rate for all plastic packaging increased from 29.6% in 2020, to 31.4% in 2021, and 35.0% in 2022 (Figure 8.2). The average percentage loss of weight from input to output of plastic recycling plants decreased by 1% for plastic packaging.

	All materials	LDPE	PET	HDPE	PP	PS	PVC
2021	41.3%	51.5%	47.0%	48.2%	29.9%	9.5%	8.4%
2022	43.9%	49.9%	54.7%	43.9%	43.1%	11.0%	8.8%

Figure 8.1: Input recycling rate for plastic packaging by polymer: 2021-2022
Source: Plastics SA (2023)[7]

[7] Plastics SA (2023) Plastics 2022: An analysis of the South African plastics industry data.



	All materials	PET	HDPE	LDPE	PP	PS	PVC
2020	29.6%	28.4%	34.8%	35.4%	25.8%	7.3%	10.8%
2021	31.4%	29.5%	36.5%	38.2%	23.6%	7.8%	6.2%
2021	35.0%	36.4%	33.5%	39.3%	32.9%	9.0%	6.5%

Figure 8.2: Output recycling rate for plastic packaging by polymer: 2020-2022
Source: Plastics SA (2023)[5]

The recycling rates for plastic packaging reported above display a recovery post-COVID, following the decreased recycling rates in 2020, due to restrictions on collection of recyclables, as well as very low oil prices which resulted in low virgin plastic prices. There was an associated decline in demand for recycled plastic.

The output recycling rate for all plastics has reached pre-COVID levels of 23%, which was recorded in 2018 and 2019, and constitutes the highest recycling rates for plastics recorded in SA.

8.2. Target 3 - Actions and Next Steps

8.2.1. Extended Producer Responsibility

SA's EPR legislation, instituting mandatory EPR in SA for paper, packaging and some single-use products, came into effect on the 5th November 2021. EPR requires producers (which may be packaging manufacturers, brand owners or importers of plastic packaging on products) to take responsibility for the packaging and identified products they place on the market in South Africa, over the full life cycle of the packaging from design to collection, recycling, and in some cases the inclusion of recycled content. EPR is widely applied globally, and recognised as a mechanism to ensure sustained and sufficient investment to grow packaging recycling rates.

The Pact secretariat provides EPR support for members through

- Providing members with an overview of the EPR requirements and the PROs in South Africa, as well as high-level information on EPR reporting required by the largest packaging PROs.
- Ongoing communication with the major packaging PROs including sharing of updates from PROs to members, and sharing member concerns with PROs.

In addition, reporting for SA Plastics Pact has enabled members to be better prepared for EPR reporting.

8.2.2. Pact membership and secretariat actions

- The Pact secretariat in partnership with the City of Johannesburg and Pikitup, as well as ARO, JG Afrika, Pikitup, SAPRO, University of Johannesburg's Process, Energy, and Environmental Technology Station (UJ-PEETS), and WRAP, co-designed a model and operational approaches to facilitate industry-informal sector-municipality co-operation to recover more recyclables from domestic waste streams. This type of partnership is required by the national EPR regulations, and has the potential to build on the strengths of each sector to grow collection of recyclables in South Africa. This co-design project was funded by the Alliance to End Plastic Waste.
- The Pact secretariat partnered with University of Johannesburg to facilitate collaborative discussions to develop the collection service fee to be paid to the informal sector by PROs as required by the National Extended Producer Responsibility Regulations. The group convened has now formed a Governance Committee on informal sector integration, and includes representatives from ARO, DFFE, the PRO Alliance (a grouping of the largest packaging PROs in SA), and the South African Waste Pickers' Association (SAWPA).
  - The collection service fee compensates waste pickers (also called reclaimers) for their service in collecting dry recyclables. All formal collectors do not only earn an income from the sale of dry recyclables, but also charge a service fee to cover their time and operational costs. Waste pickers have been actively recovering recyclables in SA for many years with no compensation for their services, in spite of the fact that the majority of dry recyclables entering recycling plants in SA is collected by waste pickers.

- Many Pact members have invested, above the payment of EPR fees, in support for the informal sector, equipment to aid in collection and sorting of recyclables, and in recycling. Please see Target 3 - Highlights of member actions for more information.

8.2.3. Next steps

There are many possible areas of intervention in growing SA's national recycling rate. Plastics Pact members are prioritising including recycled plastic into packaging, and thereafter looking to include recycled plastic in other plastic products. A high quality recycled plastic is needed to include recycled content in plastic packaging, therefore interventions such as the following are being considered:

Improve quality of inputs to plants

- Separation-at-source to minimise contamination by organics, and other non-compatible materials
- Further separation of materials during sorting, especially in the separation of natural or white (except in PET) packaging, from any coloured packaging or packaging with direct printing
- Investment in sorting technology at recyclers, improved wash plants and other decontamination processes.

However, one of the best approaches to improving the quality of streams entering recycling plants is not looking at interventions once the packaging has already become waste. Not considering the end-of-life of packaging we place on the market, places the burden of collecting and recycling those materials on collectors and recyclers. Collectors and recyclers cannot manage 'waste' packaging that has no value. They will not be able to recover their costs in the sale of their recyclables/ recycled material to their customers.

The upstream sections of the circular economy value chain must be addressed if the national recycling rate is to grow. SA Plastics Pact members are also addressing the following:

- Improved selection of packaging materials – as far as possible choosing materials that are recycled at greater than 30% output recycling rate in SA
- Improved packaging design, considering the combination of all elements of packaging (the closure, the label, adhesives used, printing and inks.
- Consulting with recyclers: Pact members have produced the best results in packaging design for recyclability and inclusion of recycled content by forming partnerships in the design process, including packaging manufacturers, brand owners, and recyclers in a consultative approach.

The Pact Secretariat will continue to source external funding to grow the Pact's positive influence on the national recycling rate in partnership with the SA Plastics Pact members.

8.3. Developing careers and driving Target 3

The informal recyclables collection sector contributes a large proportion of the plastics that are processed by recyclers in South Africa, and are a key part of the value chain.

The informal sector has been reported by the Department of Forestry, Fisheries and the Environment, and the CSIR as employing up to 150 000 people, contributing 80% - 90% of recyclable material collected in 2014.

Watch: The informal sector's essential contribution https://www.youtube.com/watch?v=yJYjE6EGc0Y

Although the informal sector collects a large proportion of the plastics recycled in South Africa, the sector has largely been excluded from industry planning and policies. This changed with the 2020 National Waste Management Strategy requiring municipalities to integrate the informal sector, and the mandatory EPR regulations requiring industry to integrate the informal sector.

One of barriers to integration is a lack of organisation, and here the African Reclaimers' Organisation (ARO) – a Pact Supporting Member – is one of two national informal sector organisations that have played a pivotal role. ARO has more than 6 000 members active in Gauteng, Mpumalanga and Cape Town. ARO is actively facilitating advocacy engagements with government and residents. They do training and also support the registration process of reclaimers to be able to receive the collection service fee paid by producers that is mandated by EPR. In terms of global influence, ARO shares best practice and info with reclaimer groups in Brazil, Colombia, India, Kenya, and Mexico, and has been supporting organisation of reclaimers by reclaimers in Ghana and Kenya. The SAWPA is also active in representing the interest of informal waste pickers.

Watch: Reclaimers' career aspirations https://www.youtube.com/watch?v=XE1H5NQOnNY

Photo Credit: Mark Lewis

Impact case in point: The Alliance to End Plastic Waste (AEPW) is currently funding ARO to run a mini MRF (350 m^2) at a site in Selby. The projected annual tonnes of recyclable plastics sold from ARO operations with Selby as a base is 4 kilotonnes per annum. After 6 months of operation, ARO was processing 350 tonnes per month of plastics through this operation.

Information, educational resources, and case studies on waste picker integration (including projects by ARO) can be found at www.wastepickerintegration.org.

Photo credit: Carvey Barends

8.4. Target 3 - Highlights of member actions

Strategic interventions

Created Regional & National Action Plans to combat plastic waste for the Abidjan convention.

Under the project entitled, 'Assisting the Abidjan Convention to develop a strategy for National and Regional Action Plans to better manage plastics', Sustainable Seas Trust (SST) has compiled a National Action Plan on Plastic Pollution for Côte d'Ivoire. The draft action plan was presented to stakeholders at an international World Environment Day event hosted by UNEP in Abidjan on 5 June 2023. The document is the first of three national action plans to be developed for the Abidjan Convention area. The second, an action plan for Mauritania, is nearing completion and the Abidjan Convention has recently confirmed the third focus country to be the Democratic Republic of Congo. Work on the development of a Regional Action Plan covering the whole Abidjan Convention area is in progress. This action plan is supported by country profiling and the development of a regional database of key stakeholders. To date, Angola, Benin, Cabo Verde, Cameroon, Congo (Republic of), Côte d'Ivoire, Democratic Republic of the Congo (DRC), Equatorial Guinea, Guinea-Bissau, Mauritania, Nigeria, São Tome e Principe, South Africa and The Gambia have been profiled. These country profiles will provide the core upon which to build the regional action plan that will help Abidjan Convention member countries better manage waste, particularly plastic waste. The project is closely aligned with the intergovernmental negotiations aimed at developing an internationally legally binding treaty to combat plastic pollution. This work is scheduled for completion by end October 2023.

Policy developments – Extended producer responsibility

The DFFE's Waste Bureau is developing guidance and interventions to facilitate the development of infrastructure for the recovery, sorting and aggregation of dry recyclables to assist municipalities and PROs in the collaboration on infrastructure required by the EPR regulations to achieve the EPR targets for collection and recycling of identified products (including paper and packaging)." An EPR panel of experts was appointed by the Department in June 2023 and six experts were appointed in the following areas of expertise: financial accounting, product development and trade policy, economics, environmental science/environmental management, project management, monitoring and evaluation, and auditing.

The panel of experts is appointed on a three-year contract which will run until June 2026. The project has the following deliverables:

1. Develop an advisory note on how the EPR regime for South Africa can be supported.
2. Develop advisory note/mechanisms on fostering cooperation among stakeholders in the Chemicals and Waste Sector and the EPR stakeholders to develop shared knowledge and promote innovation and cooperation amongst stakeholders.
3. Develop advisory note/mechanisms on mechanisms to encourage entry by players from historically disadvantaged individuals in the EPR Schemes/value chain.
4. Develop interpretation notes for EPR legislation and guidelines in order to provide clarity to the sector in the various areas of expertise that the Panel will have on a case-by-case basis.
5. Provide recommendations to the Department on areas to be considered for review of the EPR Policy.
6. Separate/delineate roles and responsibilities between critical players in the EPR Schemes implementation value chain.
7. Develop EPR Fee Guideline
8. Review of EPR fees proposals based on EPR fee guidelines, subject to consultation with industry.
9. Capacity building and skills transfer
10. Develop guidelines on how to review annual financial plan, annual budget, interim performance audit report, and annual external performance audit reports, and financial audit report submitted by PRO's.
11. Review the annual financial plan, annual and audited financial reports and budgets

The development of the EPR fee guideline is the first project to be delivered by the panel and a final draft of the EPR fee guideline was developed in August 2023 and two stakeholder consultation workshops on the final draft have been conducted with key National Departments such as National Treasury and The Department of Trade, Industry and the Competition on 6 September 2023 which was followed by an industry stakeholder consultation workshop comprising of PROs, and industry associations on 8 September 2023.

The purpose of the EPR fee guideline is to:

- Assist producers or PROs in meeting their financial obligations in terms of EPR Regulations
- Guide producers and PROs on determining EPR fees
- Provide a consistent mechanism for determining the EPR fees applicable to the identified products
- Ensure transparency, fairness, standardisation, and universality in the EPR fee determination

The final draft EPR fee Guideline will be published for public consultation once approved by Minister.

Innovation partnerships – University of Johannesburg and ARO

UJ is running a series of projects in collaboration with the African Reclaimers Organisation (ARO). One of the objectives is to apply innovative thinking to plastic that is not widely recycled, including plastic materials such as HIPS (high impact polystyrene) and flexible PP (polypropylene) amongst others. UJ PEETS (the Process, Energy and Environmental Technology Station) will be conducting a feasibility study to determine whether these recyclables can be converted

into roofing and floor tiles as requested by the ARO. The second objective is to optimise the design of machines for the shredding, granulating and flaking of plastic recyclables.

Incentivising diversion of recyclables from landfill

The City of Johannesburg and the City of Parma, Italy engaged in a study exchange on the theme of Sustainable Integrated Waste Management facilitated by the EU International Cities Partnership - Acting for a Green and Inclusive Recovery (ICP-AGIR).

The city pairing of Johannesburg and Parma won the South Africa arm of the ICP-AGIR for their Cooperation Action Plan proposal. Informed by Parma's good results with separation at source through a PAYT (Pay-As-You-Throw) approach, the City of Johannesburg is investigating the potential of a KAYT (Know-As-You-Throw) and other waste management approaches through systems research and business modelling in 2023. The KAYT project aims to increase diversion of recyclables and compostable organics from the waste stream in Johannesburg.

Certifying recyclers to handle pesticide containers

In 2022, CropLife South Africa increased their database of certified recyclers to 182, with over 230 people certified to issue certificates of adequate and lawful disposal of pesticide containers through recycling.

Stimulating recycling in other sectors

CropLife SA has engaged the professional pest control sector to catalyse their participation in empty pesticide packaging decontamination and recycling. The responsible Inspectorate has also been requested to question pest control operations on container management. CropLife is committed to continue encouraging professional pest control companies to deliver their used packaging to certified recyclers.

CropLife SA has committed to establish collection and disposal infrastructure for consumer pesticide packaging by the end of 2023. Decontamination protocols for all plastics (and other materials) have been developed and tested against the current packaging in the market and will be available on the CropLife SA website by the end of 2023.

Separation-at-source initiatives in-house

- Clicks is working to ensure that waste is managed effectively and recycled into new resources. The group raises awareness with employees to reduce waste in stores and distribution centres and has rolled out systems to collect recyclable materials in logistics packaging. In 2022 the group diverted 78% of its total waste generated, of which 321 kg of plastic was collected for recycling.

- Liberty two degrees – For the 12 months ended August 2023, the total business activity within the portfolio generated 7,333 tonnes of materials which comprised 3,482 tonnes recyclable material, 3,070 tonnes organic materials and 781 tonnes general waste, resulting in an overall waste diversion ratio of almost 90%.

- A submission for the certification of Net Zero Waste status has been made to the Green Building Council of South Africa (GBCSA). Through industry feedback, local data, and international precedent, the Green Building Council (GBCSA) has acknowledged the limitations of achieving a 100% diversion from landfill. A reduction to 90% has now been incorporated within their rating tool.

- M24 Logistics has invested in onsite conveyor systems sorting and bailing of plastics and cardboard boxes at its warehouses to manage all its inbound packaging. More than 98% of all packaging material is recycled by an external service provider.

- Mpact has implemented processes for sorting and baling of HDPE; PP; PET; and PVC waste generated in its operations. All contaminated waste is cleaned and processed on-site by Mpact Recycling, and up to 20 tonnes per year of plastic waste is converted into agricultural pipes.

- Pick n Pay is working to implement its waste management policy and promote the "avoid, reduce, reuse and recycle'" waste management hierarchy to employees and in its value chain. Pick n Pay actively raises awareness with employees on how to reduce waste in stores, through training for employees in service sectors in-store by Pick n Pay's waste service provider, and have systems in place to collect recyclable material: The tonnages of plastic collected and recycled at Pick n Pay company-owned stores and distribution centres was 1 360 tonnes in 2022.
  - Employees are also educated on industry best-practice and are made aware of the current goals of Pick n Pay's Sustainability Team through internal ESG communication.

- Woolworths has various recycling initiatives at its facilities:
  - Woolworths has rolled out additional reverse vending machines RVM over the past year and now has a total of 8 at stores and 2 at its head office locations. The objective is to change the consumer perception of waste and its value, driving behaviour change. 4 692 tonnes of plastic collected during the reporting period across the RVM footprint.

- Reverse logistics of secondary and tertiary packaging from stores for recycling continues on streams that have been collected for over a decade while other opportunities are being considered to improve diversion rates of streams generated during operations.

- Spur is also focussed on minimising waste generation and diverting waste from landfill through recycling. In 2022 the Spur Cape Town Head office diverted 4 488 kg of waste from landfill, which was collected for recycling by waste management companies.

- Takealot makes use of an external service provider to separate and manage packaging waste generated at its facilities. In 2022 more than 98% was diverted from landfill and 122 tonnes of LDPE was sent for recycling.

Member engagement to increase recycling rates

Polyco is establishing working groups to develop a closer working relationship with members regarding EPR. Polyco's member working groups are streamlined per material type (polymer types 1-7). The aim of the groups is to engage with Polyco members across the value chain to inform members about progress on collection and recycling targets, and to collaborate with members on opportunities within the sector and to collaboratively draw up a road-map for success for all streams.

Increasing recovery of dry recyclables from households

From July 2023, the City of Cape Town expanded its Think Twice door-to-door recyclables collection service to the City Bowl and surrounds. This service entails either a weekly or fortnightly separate recycling collection service for households, offered free of charge.

As a result of this expansion, which is linked to the newly upgraded Woodstock Mini Materials Recovery Facility, more than 12 000 additional households now have access to the Think Twice recycling collection service.

Reclaimer integration in waste management

- In 2022, the University of Johannesburg (UJ) and ARO initiated a pilot for the integration of reclaimers in the waste management of the university, particularly the Auckland Park Bunting Road Campus (APB). Reclaimers started to work on skips at the APB campus after the university's waste management team had worked on them.

- The reclaimers still managed to divert 329 kg of recyclables from the skips in two months which speaks to their ability to salvage recyclable material. Plastic material made up 32% of the diverted recyclables.

- Reclaimers also collected contaminated recyclables which are usually not collected. However, they decontaminated the recyclables before selling to buy back centres in the plastic value chain.

- In partnership with CCBSA and the Alliance to End Plastic Waste, Unilever has been supporting the ARO, which now has around 6 000 reclaimers registered in the Johannesburg area, collecting plastics and other dry recyclables of value.

- Enterprise Room, funded by CCBSA and Unilever, also provide business development support for ARO. Towards the end of 2022, ARO moved into a warehouse for sorting and storing, and were able to rent a baling machine. This has allowed aggregation of baled material in bulk which has improved their access to market, being able to achieve higher prices from larger buy back centres, and is an important step towards integrating informal waste reclaimers into the recycling value chain.

- The ARO team works closely with local residents to partner in separation at source. ARO's separation-at-source programme achieved 70 tonnes for month in August 2023, with a total of 975 tonnes collected from July 2022 to August 2023.

- Heineken has expanded their project Vuselela to the Drakensberg where they are engaging with rural communities about circularity and separation-at-source. Heineken has also run cleanup campaigns in rural KwaZulu-Natal to raise awareness on separation-at-source and opportunities in recycling. Through Vuselela, Heineken has worked with over 100 waste reclaimers who collect all types of plastics; PET, HDPE, LDPE, and PS. Furthermore, they also collect paper and cardboard and other dry recyclables. These reclaimers are indirectly involved in the Blue Economy as they are reducing plastic litter that ends up polluting aquatic ecosystems. In addition, reclaimers get a monthly stipend for their collected material of at least 80 bags of recyclables per month.

- The Unilever Foundation + TRANSFORM has been funding Oxfam which facilitates collection and buy back of dry recyclables through Community-Based Entities (CBEs) in eKurhuleni. The CBE collection was approximately 8 000 tonnes in 2022.

Informal sector support

Safripol

- Safripol sponsored the ARO with a trailer, mobile baler, and a generator to assist ARO to scale-up their collections, especially from rural areas in Mpumalanga. Additionally, in partnership with Petco, 500 wheelie bins were also donated to ARO's separation-at-source programme. The bins are used in Gauteng and Mpumalanga in 8 residential areas, 4 schools, 1 reclaimer site, and the ARO warehouse in Johannesburg. 280 reclaimers were assisted in Mpumalanga, and 250 reclaimers in Gauteng, through the use of the bins, bulking of recyclables for better prices, and improved access to market.

Sustainable Seas Trust

- The project, in partnership with Petco, a South African Producer Responsibility Organisation, supported informal collectors in the Nelson Mandela Bay area by providing basic training to start recycling to more than 100 waste pickers. SST believes that informal collectors play an important role in the collection of recyclable materials, so training them to build sustainable businesses and to collect valuable recyclable materials has benefits for them, their communities and the whole collection and recycling value chain in South Africa. By helping to build working relationships between collectors and municipalities especially, the team at SST believes they can support the important contribution of informal collection to recycling in South Africa and help to alleviate the pressure on municipal landfills. In partnership with Petco, SST also sponsored these collectors with personal protective equipment (PPE), including gloves and boots, to enable them to keep safe while collecting recyclables.

- SST will be expanding their support of the informal collection sector across Africa by initiating a new project focussing on supporting enterprise development endeavours in the sector. This will entail the design of context-appropriate informal recycling business interventions and partnering with local businesses to unlock real and meaningful support to move waste collectors up the value chain through recycling business training, minor equipment support (e.g. bags and PPE), and support in breaking down misconceptions between the informal sector and households and consumers.

Benefitting communities – swapping recyclables for groceries

The City of Cape Town successfully implemented phase 2 of its Swop Shop Project from March 2022 to February 2023, to provide a recyclables collection service to lower income areas, namely Harare (Khayelitsha), Delft, Imizamo Yethu and Nomzamo. An average of 159 participants per month used the swop shop service, with the majority being females (59%). Those younger than 25 years were the best support base, followed by those aged between 26-30 and 51-60 years old. The Swop Shop was also open for use by waste pickers.

The Swop Shop Project entails residents being invited to swop recyclable materials for grocery items at the City's custom built and branded swop shop trailer.

This initiative was initially trialled in 2020 and phase 1 of the trial diverted 98.7 tonnes of recyclables over 5 months, 54% of which were plastics items. Phase 2 of the project diverted 82.7 tonnes of recyclables during a 12-month period. The City has taken important learnings from this trial, specifically that the 6 metre Swop Shop trailer was impractical and expensive to run and maintain. As such, the City has redesigned a much smaller and leaner trailer, which will be constructed and hopefully trialled in the 2023/24 financial year

Enterprise development – SME and waste picker support

In 2023 Petco will be launching the Petco Enterprise Development Fund. This forms part of Petco's renewed focus on capacity building in the informal collection sector, and integrating waste pickers into the formal value chain. The aim is to unlock the supply of recyclables, and therefore of rPET, in underdeveloped areas, while better capacitating Small and Medium Enterprises (SMEs) in the value chain.

Investment in collection and recycling

Polyco invested R22.1 million in large infrastructure in collection and recycling 2022, including funding:

- Balers, cages, and trailer for buyback centres
- Extruders, wash plant establishment and maintenance, and a decontamination plant at recyclers
- Additional production lines for products from recycled plastics
- Enterprise development for small businesses and entrepreneurs to cover infrastructure, equipment and training up to R500 000 per enterprise. Polyco supported 3 organisations in 2022.

This investment resulted in additional capacity in collection and recycling of more than 10 500 tonnes per year.

The PACK-A-CHING project rolls out both mobile and static buyback centre infrastructure to increase collection of dry recyclables in areas where there is limited recovery of recyclables. The business model is a community-based social enterprise and centres are established in low-income and informal areas, thereby providing additional income to community members. In 2022, an additional 3 mobile units were set up, bringing the total number of units to 14. From 2017 to the end of 2022, PACK-A-CHING has facilitated the collection of 8 900 tonnes of recyclables,

established 14 PACK-A-CHING units, created 51 jobs and paid out R 8.8 million for recyclables.

Improving access to market for rural collectors

In March 2021, Enviro Manpro (Pty) Ltd, trading as Man Recycling, partnered with Petco to launch a recyclable waste collection project in the rural areas of Mbashe, in the Eastern Cape. Petco provided start-up cash worth R30 000 and equipment – including a baling machine, trailer, scale, bulk bags and personal protective equipment (PPE). In 2022, Petco provided an additional 16 sets of PPE and also helped the project to gain valuable media exposure on the radio station, Umholobo Wenene.

This support enabled the project to open a buy-back centre in iDutywa, which also services the towns of Elliotdale (30 km away) and Willowvale (90 km away) as well as a holiday resort on the Wild Coast.

Waste from these communities is not regularly collected by the municipality because the harsh gravel roads impede access. The project has also provided basic waste-picker training for 150 rural, unemployed women in and beyond the Mbashe municipal area.

The project diverted over 1 064 tonnes of waste from landfill and the environment over the past two years.

Through efforts like these, in 2022 Petco directly facilitated the collection of 684 tonnes of PET packaging in the Eastern Cape, including the underdeveloped areas on the Wild Coast.

Subsidising logistics to assist collectors far from recycling plants

KX Recycling (Pty) Ltd is a family-owned buy-back centre that started its collection and recycling operations in 2017 and was formally registered in 2018. The family was driven by their desire to create employment opportunities and make the world a better and greener place. Their family motto is "When you refuse to reuse/ recycle it's our Earth that you abuse".

KX Recycling employs nine young people permanently as collectors and sorters, in addition to the 40 waste pickers they buy from. These waste pickers collect mostly from Kimberley, townships such as Galeshewe and Roodepan, from illegal dumps and the Kimberley landfill site.

In 2020 and 2021, Petco supported KX Recycling with a scale and a branded trailer, which has greatly increased their storage capacity as well as improving their financial well-being. Previously the enterprise had to rent a trailer.

In 2022, Petco provided KX Recycling with a transport subsidy, enabling them to increase their PET collections and to establish new customers and expand into new areas around Northern Cape. This has increased their PET collections from 15 to 19 tonnes per month.

Supporting buyback centres as key aggregators of recyclables

- ALPLA provided funding for 4 trucks and 3 balers for material recovery facilities (MRFs) at three buy-back centres in KwaZulu-Natal, and it is expected that this will result in an increase in PET collected from 500 tonnes in 2022, to 3 000 tonnes by the end of 2023.

There are also plans to provide further support for buy-back centres in KwaZulu-Natal and the Eastern Cape through enterprise development funding for sorting facilities in KZN and the Eastern Cape. Other plans include support for a school awareness programme (www.schoolpet.co.za) and a separation at source initiative in 2024. ALPLA anticipates that these initiatives will increase the volumes of collected PET to 19 000 tonnes by the end of 2024.

MRF 1 – Increased collection volumes from around 80 tonnes to 300 tonnes per month between February and July 2023

Bales at MRF 2 – Launched August 2023, collected 60 tonnes in first month of operation

- Safripol supported four buy-back centres in the Vaal Triangle in partnership with Petco. The beneficiaries included Green Ambassadors, Qoqa Community Project, Indaloyami Trading and Sidingulwazi Holdings. The equipment sponsored included 6 m trailers, trolleys, platform scales, office containers, signage boards, and personal protective equipment. The annual tonnage collected across all four buyback centres is 483 tonnes.

Investment to grow a circular economy for plastic packaging – downstream

- CCBSA invested R12 million in both supply (collection) and demand side (recycling) activities.

Supply side investment – boosting collection

CCBSA invested in a transport subsidy scheme to assist 12 buyback centres in rural areas to sell their recyclables at sufficient margin to generate profit. Rural areas are far from recycling markets, and as a result transport costs severely affect the prices that collectors are able to achieve in these areas.

Recovery of dry recyclables

- Between January and December 2022, SST's Operation Clean Spot project facilitated more than 200 clean-ups and removed 13 622 kg of waste from the environment.

- SST has mapped over 3000 recycling business and waste locations all over Africa. The majority of entries are currently South African, and further work is being done to extend this resource. The map can be accessed here.

Demand side investment – supporting recycling

- In order to increase the collection of PET which lagged behind demand in the early parts of 2022, CCBSA assisted a recycling company to purchase material. This allowed an increase of 15 000 tonnes in the plastic recycled by this recycler in 2022.

Growing recycling capacity in South Africa

- There are also plans to start the construction of a new PET bottle-to-bottle recycling plant in Ballito, KwaZulu-Natal. It is expected that construction will commence in late 2023, and completion is planned for quarter 3 2024. The plant will have an output of 35 000 tonnes of recycled PET, and emplioy about 100 people directly, with an estimated 10 000 indirect jobs to be enabled through the investment. ALPLA is investing around 60 million euros (around R1.23 billion) in the plant, thereby strengthening the regional circular economy.

- Currently PET is the only polymer that can be commercially recycled into food-grade material for inclusion in PET food and beverage packaging, and the only one currently being recycled in SA. With growing demand for food-grade PET recyclate driven by the mandatory EPR targets requiring recycled content in PET packaging, Extrupet is doubling its food-grade capacity to more than 60 000 tonnes per year, with a phase 1 investment of R300 million. The new plant will be established in Cape Town in quarter 3 2024, and provide an additional twenty-five jobs in SA's recycling economy.

Growing recycling capacity and improving recyclate quality

Myplas received funding from Polyco in 2022 to establish a decontamination plant to improve the quality of recyclate produced. This improvement to Myplas' recyclate production of around 1 600 tonnes per year will facilitate quicker uptake of recyclate into high quality applications, such as rHDPE and rPP in personal care, home care and agricultural product packaging.

Recycling performance in the agricultural pesticide sector

CropLife SA increased the recovery of empty plastic pesticide packaging from the agricultural sector to close on 85% in 2022.

CropLife's network of collection points will be expanded in Limpopo, Mpumalanga, KwaZulu-Natal, and Eastern Cape in 2023 to reach more farmers in those areas.

Increasing awareness to promote improved recycling

Polyco has a sustained focus on educating industry on EPR and Polyco's role in growing the recycling industry in South Africa through

- Member communications including meetings and webinars
- Press releases and advertising in industry publications
- Exhibiting at industry events such as Propak and WasteCon
- Sponsoring awards that promote recycling and the inclusion of recycled content in plastic products,
  - Eco-Logic Awards
  - Institute of Packaging SA's Gold Pack Awards
  - SAPRO's Best Recycled Plastic Product Awards

Consumer engagement and awareness

- Polyco engages with consumers through their PACK-A-CHING project and the Million+ Plastic Recycling campaign.

- For Global Recycling Day in March, Polyco launched a series of "How To" resources through Million+ to educate consumers how to separate recyclables at home, work, and school. Million+ has 35 000 followers across its social media channels, and had a reach of 1.1 million in 2022.

Awareness to stimulate recycling behaviour

- In 2022, Petco decided that in order for people to take more of an interest in recycling, they needed to make something that was interesting and exciting. The organisation therefore created a limited documentary series featuring the Petco award winners. Entitled 'Message in a Bottle', the series follows a young woman, Lindiwe, and her journey to discover if the bottle she holds in her hand really gets recycled. Her curiosity takes her all over South Africa, from the oldest buy-back centre in the Northern Cape, to a project that promotes collection and encourages education about recycling in Umlazi, KwaZulu-Natal.

- An important part of Safripol's sustainability strategy is driving behavioural change towards the responsible use of plastic. Key to this is consumers taking action to prevent plastic waste from becoming pollution. In August 2022, Safripol launched a 'waste has value' campaign in order to encourage people to realise the value of their plastic waste and stop wasting it. **"It is only waste, if you waste it"**.

  - Safripol has also been developing a platform called LetsPlasticResponsibly.com, which is a community-driven platform that unites environmental and plastic organizations, corporate companies, communities, schools, and individuals in a collaborative effort to tackle the global plastic waste crisis as a unified and unstoppable team. The platform will officially be launched in FY 2024.
    It will serve as a hub for sharing, learning, planning, and taking action, with the primary goal of educating global citizens on the principles of responsible plastic management. By promoting the values of REDUCE, RE-PURPOSE, REUSE, and RECYCLE, the platform aims to inspire behavioural change among all stakeholders, including future generations, towards creating a sustainable future for everyone.

- SST extended its support to the Motherwell Community and Enviro Hub, a buy-back centre in one of Nelson Mandela Bay's poorest and largest townships, by conducting over 20 training workshops for all 18 staff members. Additionally, the team at SST successfully imparted knowledge to 100 children and organised five training events focused on arts and crafts. SST's involvement in the project has informed the organisation's understanding of the economics of recycling, and the economic and social impacts innate to recycling interventions in informal communities. This knowledge will prove critical when working in other informal communities with similar stakeholders. SST subsequently created a visual showpiece of this case study – a now-thriving buy-back centre in a Gqeberha community once suffocated by plastic waste – which can be viewed here.

Educating the next generation

Petco

In partnership with Pick n Pay Schools Club, 500 schools received Petco Grade 4, 5 and 6 workbooks and posters, reaching approximately 375 000 learners.

Schools programme

In partnership with Polyco, Pick n Pay distributed 320 recycling bins to 85 schools made from 8 000 kg of recycled plastic. 2 500 primary schools received educational materials on how to start a recycling programme in their school.

Polyco

- In 2022, Polyco continued their relationship with Pick n Pay School Club and distributed recycling posters and recycling pamphlets to schools across the country. In addition, Polyco selected 84 schools nationwide that are part of the Pick n Pay School Club network and gave them recycling bins that were made from recycled multilayer plastic.

A total of 8 tonnes of recycled plastic was used by MyWaste to make the 320 bins, and the signs on the recycling bins were made by Infinite Industries using more than 213 000 toothpaste tubes. Polyco hosted educational shows at schools with their new recycling mascot, Binnie, to educate children about how to use the recycling bins and how to implement recycling at their school.

- Polyco also engaged with Packa-Ching enterprise owners to identify the schools that they service in order to develop educational materials for these schools. Polyco is providing these schools with bulk bags, clear recycling bags and educational material to enhance their recycling capacity and, in turn, Packa-Ching's collection results.

- To reach schools out of the current network and to support the digitising of educational content, Polyco partnered with Plant the Seed, a nonprofit focused on circular economy education. Polyco supported Plant the Seed in developing a plastic recycling curriculum for primary schools, with the aim of getting plastic recycling education into more schools across South Africa. The curriculum and materials are available online and are supported by teacher resources, making them accessible to and supportive for the educator.

- To reach the high school learner and those thinking about selecting their future careers, Polyco took a stand at the World of Work (WoW) career exhibition in September to educate learners about the recycling industry. WoW's objectives are to create awareness of non-traditional careers for youth development and to showcase critical skills shortages within South Africa's Green Economy. More than 4 000 learners from more than 80 schools attended.

Safripol

Safripol partnered with Isphepho to establish a schools' recycling and education program which has been rolled out in primary and secondary schools in Umlazi. Isphepho School's Separation-at-Source Programme was initiated to encourage schools to be more responsible in taking better care of their living spaces, to raise awareness on the impacts of irresponsible dumping and pollution, and to introduce learners to the concept of 4Rs (reduce, reuse, repurpose, and recycle). Teaching material on pollution, recycling and waste management has been developed for foundation, intermediate and senior phases that is aligned to the national CAPS curriculum. The program has reached 3 690 children in 20 schools.139 tonnes of recyclables was collected from the 20 schools in 2022.

Sustainable Seas Trust

- SST has further engaged in various activities aimed at driving awareness around recycling and increasing the collection of plastics. The organisation provided education to more than 13 000 children, between 1 January and 31 December 2022, on how to repurpose and to separate dry recyclables including plastic for recycling. This was achieved by collaborating with 35 schools and organising 162 school events and 6 workshops. In 2022, SST also created 106 different types of education materials, such as activity sheets, online courses, books and posters, and collected approximately 1800kgs of plastic waste from schools through the Munch-on-the-Move project.

- SST are developing their innovative Munch-on-the-Move project into an educational programme with a supporting massive open online course (MOOC) for educators, which will train teachers on implementing the project in their schools. The MOOC will be housed on SST's unique African Waste Academy platform. The platform will serve as an information-rich portal, resource depository and support facility to all continental and island states of Africa. SST has a comprehensive marketing and communications strategy in place underpinned by a solid understanding of how to reach and engage different target audiences across the packaging value chain.

Pick n Pay

- Pick n Pay is working to implement its waste management policy and promote the "avoid, reduce, reuse and recycle'" waste management hierarchy to employees and in its value chain. Pick n Pay actively raises awareness with employees on how to reduce waste in stores, through training for employees in service sectors in-store by Pick n Pay's waste service provider, and have systems in place to collect recyclable material: The tonnages of plastic collected and recycled at Pick n Pay company-owned stores and distribution centres was 1 360 tonnes in 2022.

- Employees are also educated on industry best-practice and are made aware of the current goals of Pick n Pay's Sustainability Team through internal ESG communication.

Consumer engagement and awareness

- The OPRL is present on 96.2% of products this year which shows a significant improvement compared to last year.

- Pick n Pay has a total of 11 reverse vending machines (RVMs) at 7 sites and from June 2022 to June 2023, 22 000 people have made use of the machines, collecting a total of 19 900kg of recycled material, including plastics, metal and glass.

  - Out of this total weight recycled, the plastic contribution was:
    – 3 927kg in PET,
    – 763kg in HDPE,
    – 290kg in green PET,
    – 172kg in PP, and
    – 115kg in brown PET.
  - Liberty Two Degrees makes use of social media platforms (under the #tag "BE THE CHANGE") to educate their tenants and customers on the ongoing efforts to increase waste diversion away from landfills.
  - The #BeTheChange campaign aimed at educating, inspiring and appealing to all stakeholders to change and join the movement to adopting climate positive practices in their everyday lives,
  - The Recycle Rangers initiative that teaches children the importance of recycling, providing an opportunity to learn how to reuse and repurpose their clothes and create art from recycled material,
  - World Turtle Day where our mascot, Tala the Turtle, encourages the general public to be the change and take control in making a difference in the world we live in by ensuring that waste does not make its way to our oceans.

Schools programme

- In partnership with Polyco, Pick n Pay distributed 320 recycling bins to 85 schools made from 8 000 kg of recycled plastic. 2 500 primary schools received educational materials on how to start a recycling programme in their school.

- All of Woolworths Group's packaging has on-pack recycling labels that clearly communicate how to handle the used packaging materials, i.e. place in a bag for recycling or dispose of in the general waste bin. It is important to make recycling instructions clear for customers, which will ultimately lead to more waste being recycled and less contamination in recycling streams.

- Woolworths raises awareness with customers about recycling through e-mailers, in-store communication on recycling and recyclability, as well as editorial on recycling initiatives.

9

Target 4

30% average recycled content across all plastic packaging

EPR is often only focused on collection and recycling of the identified products at end of life, without requiring producers to specify recycled content in their own products. South Africa's EPR legislation includes recycled content targets, currently only for PET under plastic packaging, but future amendments to the legislation could well include recycled content targets for the other plastic packaging types.

By specifying recycled content in their own packaging and plastic products procured by the organisation, members are not only highlighting their commitment to a circular economy for plastic packaging, but are supporting growth in collection and recycling rates by creating demand for recycled plastics in South Africa.

Recycled content is defined as post-consumer recycled content, which does not include the recycling of factory scrap generated from the same process. "Post-consumer material is material generated by households or by commercial, industrial and institutional facilities in their role as end users of the product which can no longer be used for its intended purpose. This includes returns of material from the distribution chain. ISO14021"(EMF; 2020a)[8].

9.1. Progress

The SA Plastics Pact has remained committed to the inclusion of recycled content even though low virgin plastic prices in 2022 resulted in a decreased demand for recycled content across the industry.

The percentage recycled content in member packaging increased by 3.2% from 2021, with an increase of 0.6% in consumer packaging, and 3.6% in retailer packaging.

Table 9.1: Progress in Target 4 the average post-consumer recycled content in the Pact packaging portfolio

	2020	2021	2022
Average recycled content across the Pact membership	19.0%	20.8%	24.0%
Average recycled content in consumer packaging	7.63%	11.7%	12.3%
Average recycled content in retailer packaging	37.0%	37.1%	40.7%

[8] EMF, 2020a. New Plastics Economy: Plastics Pact, Vision and Definitions.

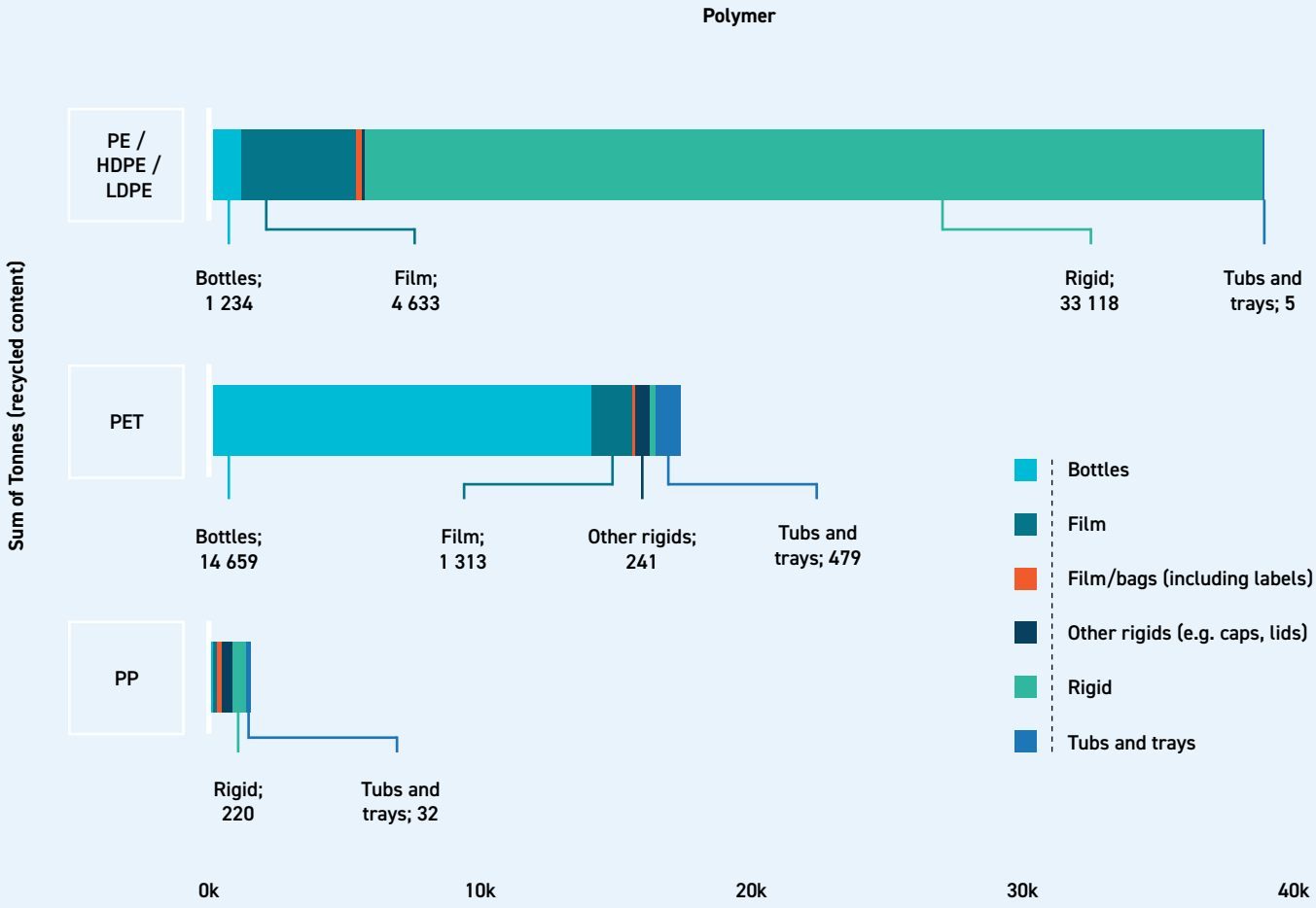


Figure 9.1: Recycled content placed on the market by Pact members in 2022, categorised by polymer and format

The largest tonnage of recycled content was recorded for HDPE rigid packaging, which are crates used as logistics packaging, and accounted for 58% of recycled content in the membership. The next largest tonnage is in PET bottles, at 26% of the recycled content, followed by PE film (including HDPE and LDPE) at 8.23% of the recycled content, which is recycled content in retailer carrier bags.

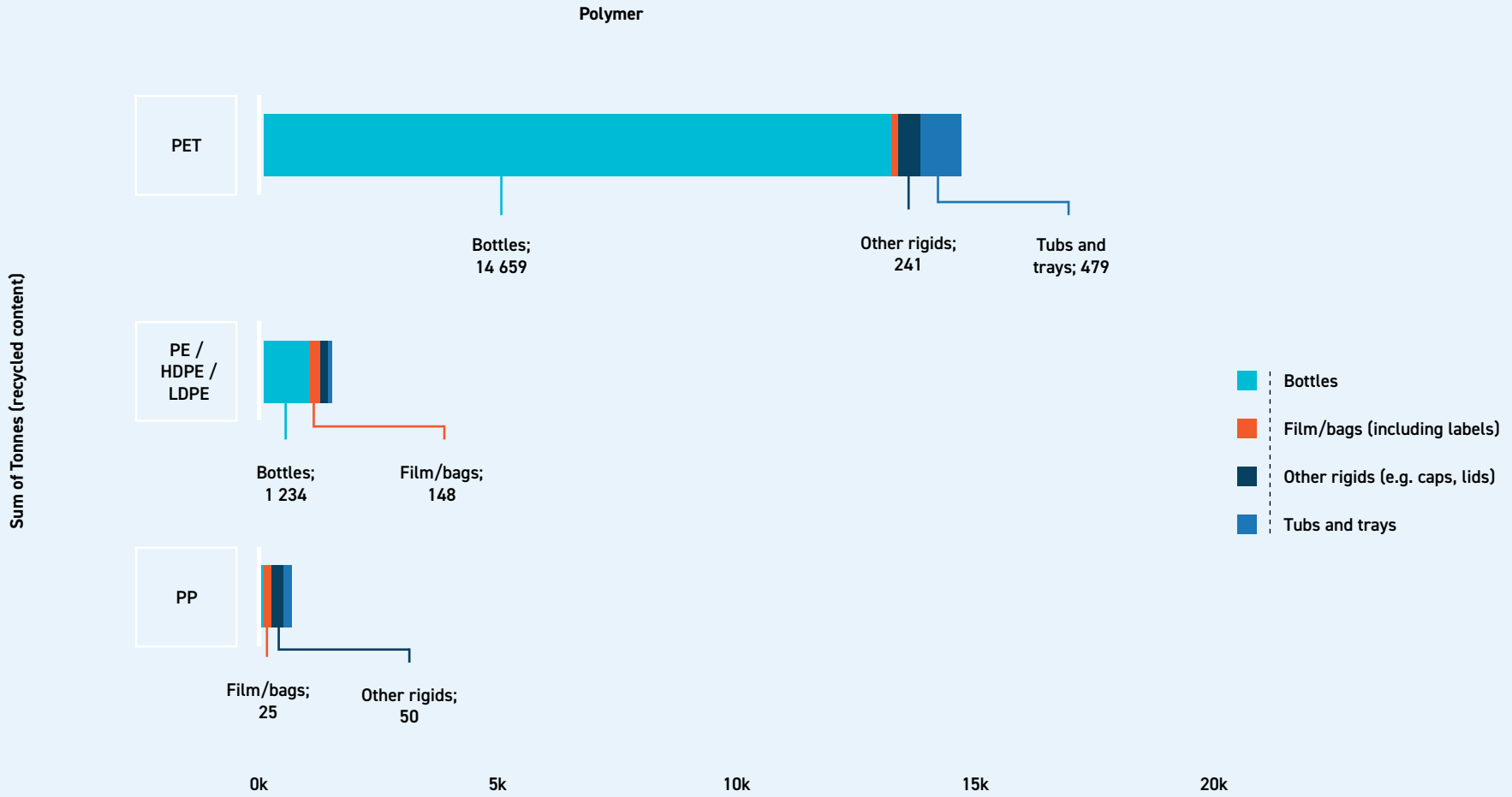


Figure 9.2: Recycled content in consumer packaging placed on the market by Pact members in 2022

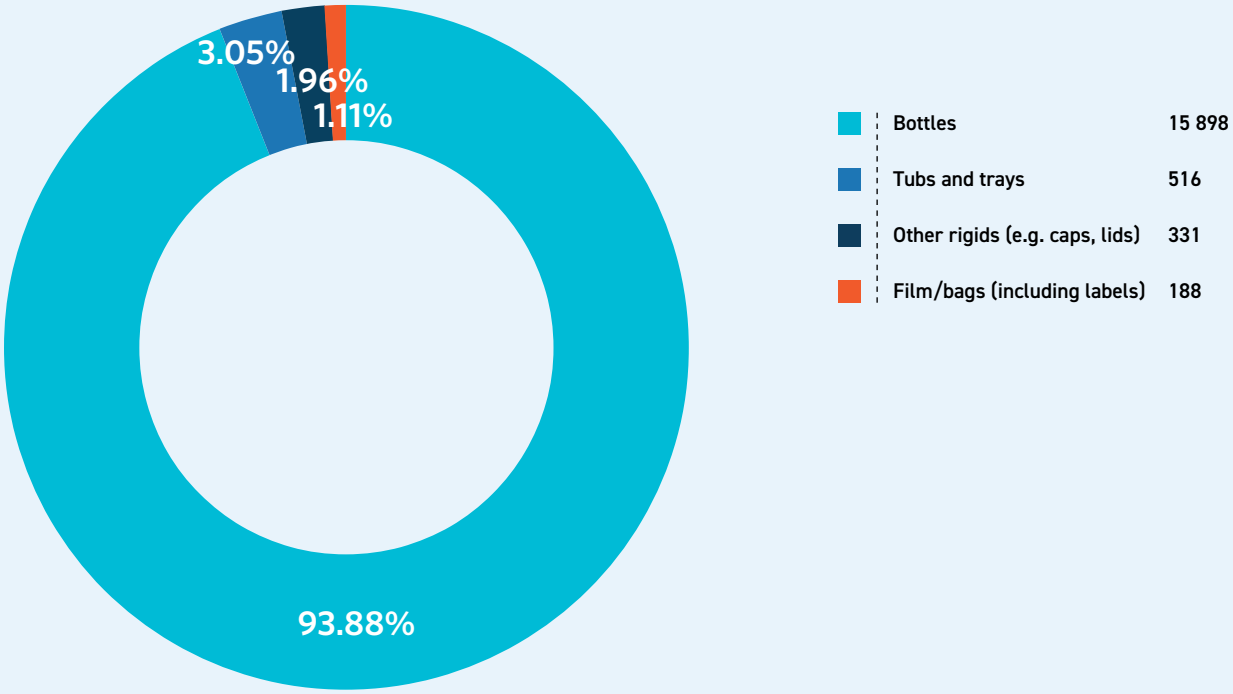


Figure 9.3: Proportion of recycled content in tonnes included by format in consumer (primary) packaging in the Pact membership in 2022

In consumer or primary packaging, the largest tonnage of recycled content is in PET bottles, followed by recycled content in HDPE bottles, and recycled content in PET thermoform.

9.2. Target 4 – Actions and Next steps

Pact members have improved their data collection on retailer packaging, which is both collation packaging used to deliver goods to store and sometimes used in shelf displays or to packaging products for bulk buys (such as purchasing six cans together), and logistics packaging used to transport products to distribution centres and stores. The potential for retailer packaging to include recycled content is high as this packaging is not in direct contact with the product, and often does not need to be aesthetically appealing to customers.

The focus in consumer packaging has been on increasing the percentage inclusion of rPET in all PET packaging. With an additional 75 000 tonnes per year in bottle-to-bottle capacity coming online in the last 6 months of 2024, the availability of food grade rPET will more than double, from the current 30 000 tonnes annually. The two new plants will be in Cape Town and Durban, which will also reduce logistics costs from those 2 centres to the only existing plant in Ekurhuleni.

Recommended focus for member actions in 2024

- Increase recycled content in retailer packaging, with a specific focus on flexibles, such as collation shrink and pallet wrap where a reusable option is not currently feasible

- Increase recycled content in HD and PP personal and home care. Personal care products often have complex packaging combinations which hinder collection and recycling. Personal care packaging should also be a focus of re-design for circularity (a Target 2 action).

9.3. Target 4 - Highlights of member actions

SA's first drop-in resin with recycled content

Safripol is taking active steps in accelerating the transition towards the circular economy of plastics by providing the market with polymer resins containing post-consumer recycled content (PCR).

In 2022 Safripol developed its first recycled content polymer product range, ASPIRE, with ASPIRE 15 and ASPIRE 25, containing 15% and 25% PCR content respectively. Safripol's ASPIRE portfolio, is a pellet blend of PCR PET and virgin PET resins, offering the industry the convenience of a one bag solution ready for conversion into final product. The advantage of the ASPIRE range is its ease of processing during conversion due to its improved homogeneity and consistent thermal history properties for both the PCR and virgin PET pellets. ASPIRE is certified to the British Standards European Norm for plastic recycling traceability, assessment of conformity and recycled content thereby giving customers the confidence that the product complies with mandatory EPR recycled content targets for PET beverage packaging.

SAPRO Awards ceremony for Best Recycled Plastic Product winners

On the 21st of September 2023, SAPRO hosted its 9th biennial Best Recycled Plastic Product Awards ceremony. The gala dinner event was held at the Table Bay Hotel in the V&A Waterfront, where more than a hundred guests gathered to enjoy a fine dining experience, live music, stand-up comedy by Conrad Koch, networking and the announcement of sixteen awards. The guests represented companies of plastic recyclers, plastics converters, brand owners, retailers, and PROs. Bronze, silver and gold was awarded in five categories for Best Recycled Plastic Products, namely; construction and building products, agriculture and related products, household, leisure and consumer related products, personal care products, and other rigid packaging. Gold winners and their products in each category, in order, were; Supreme Mouldings – wall panels, SFG Technologies - planter box (70% PCR),

Incredapeg, MyPlas / Mpact / Unilever – Organics shampoo flip top lid (100% PCR), and PolyOak – Contan bucket (40% PCR). The overall winner was selected from these gold winners, which went to the SFG Technologies planter box.

The SAPRO Awards were generously sponsored by: Erema, Polyco, Winelands Plastics & Imports, Hume Machinery, Plastics SA, Petco and Packaging SA.

Design for inclusion of recycled content

- **Recycled content n personal care and home care**

Personal care and in particular antiseptic products are challenging to move into recycled content, due to the potential for odour tainting of the products, as well as adverse reactions between the contents and the container.

ALPLA's use of 3-layer technology means that the team could convince one of the major players in homecare to include 25% recycled HDPE (rHDPE) in an inner layer of their HDPE bottles, with the possibility to increase to 40% rHDPE in 2023. ALPLA has also supplied one of the major players in personal care products with 30% rHDPE containers by inclusion of the recycled content in the inner layer.

With 3-layer technology, the outer layer remains virgin material which is appealing to customers because it doesn't detract from the aesthetic of the product (i.e. shade variations and black spots)

ALPLA demonstrates the modification in aesthetic of PET bottles and pre-forms with a range of recycled content (from 0-100%) using this display.

- **Mpact**
  - PET preforms are an intermediate product that then can be blown into PET containers, including beverage bottles. Mpact has successfully trialled the inclusion of 20% and 50% rPET in preforms. The previous range of rPET inclusion was 10-15%.
  - In 2023, the inclusion of recycled content in PET and PP products resumed, after shortages in 2022 caused by flooding. Furthermore, additional HD products will include recycled content in 2023.
  - Mpact's PET punnets (thermoformed PET) are now comprised of 100% rPET.
  - The chemical packaging market is challenging to include recycled content in packaging, due to possible negative reactions with the chemical contents. rHDPE was introduced into chemical packaging in 2022 at 10% recycled content. More work needs to be done to improve the quality of recycled HDPE to increase the recycled content in this market.

- **Polyoak Packaging**

  - Driving higher inclusion of post-consumer recyclate (PCR) in non-food packaging is a priority for Polyoak Packaging. Polyoak invested in advanced multilayer co-extrusion injection and blow moulding technology and specialist moulds to enable the inclusion of PCR sandwiched between a virgin inner and outer layer in large buckets and drums used in the agricultural and industrial sector.

Drums for the agricultural chemicals sector

  - Polyoak's specialist drum division, Blowpack, launched its Multilayer PCR Drum with up to 30% PCR. To attain UN Approval, the inner layer and closure comprise virgin HDPE to mitigate the risk of contamination and chemical reaction.
  - Polyoak worked closely with key agricultural customers and recycler, Myplas, to launch initially with an average of 20% dark recycled HDPE in the middle layer, helping to divert 24 tonnes of post-consumer HDPE from landfill in 2022.

Buckets for the paint industry

  - Polyoak's specialist bucket division, Contan, launched South Africa's first multilayer PCR bucket. The middle layer contains 40% recycled PP to reduce carbon footprint whilst driving local demand for recycled PP. Polyoak collaborated with key paint customers and recyclers such as HB Plastics in Gauteng, to divert 55 tonnes of post-consumer PP from landfill in 2022. The roll-out is quickly gaining momentum as brand owners embrace the opportunity for more circular paint buckets.
  - The inner layer, rim and lid are virgin polypropylene to secure lid fitment and prevent leakage. The virgin outer layer enables colour consistency and high quality digital print decoration. This mono material polypropylene bucket is technically recyclable in the standard PP rigids stream, at recyclers who are certified to handle the paint residues.

PET – increasing recycled content

PET is only plastic currently with approved food-grade recycled content in South Africa.

- In 2022, Clicks increased recycled content across 37 products in PET bottles, from 5.34 tonnes of recycled PET to 6.47 tonnes, an increase of 21%. This is an average recycled content of 23% across the applicable lines.
- In 2022, Pick n Pay moved PET punnets (thermoformed PET) for both their exotic mushroom and exotic fruit ranges into PET with 30% recycled content.

Improving recycling rates by growing demand for recycled plastics – consumer packaging

- ALPLA increased recycled content in all products from 1 920 tonnes in 2021 to 4 785 tonnes in 2022, an increase of almost 150%. ALPLA continues to work with their customers to reach an overall percentage of 25% recycled content by 2026.
- All CCL Label products sold in South Africa can include up to 70% post-consumer content. This includes PP and PET labels.
- The SPAR team has been partnering with their packaging suppliers and recyclers (?) to move these ranges:
- Care by Spar lotions and body washes., Care by Spar roll on deodrants, and Prowash laundry liquid from 100% virgin plastic to a minimum of 50% PCR. The rollout of the new packaging began at the end of 2022. And resulted in 206 tonnes of recycled plastic placed on the market in 2022.

- Spur' Group's sauce bottles contain rPET subject to available feedstock. The Group noted a decrease in recycled content in rPET bottles from 47,3% in 2021 to 38,6% in 2022, which is due to availability of recycled stock for the products. Spur Group uses LDPE collation shrink wrap that is made from 70% recycled content (not food contact)

- In an effort to collect and process more plastic than it produces, Unilever South Africa has focussed its activities on direct investment and creating partnerships in recyclables collection, building capacity by buying recycled plastics, and supporting well-designed extended producer responsibility schemes.

Improving recycling rates by growing demand for recycled plastics – non-packaging

- Closing the loop on rubbish bins in Cape Town: The City of Cape Town continued with its Fifty/50 refuse bin procurement programme. Through its Fifty/50 programme, the City uses circular procurement to ensure its citizens have access to refuse bins with recycled content originating from scrapped broken bins, without compromising price, quality, functionality, and longevity. This ensures diversion of plastic waste from its landfills, secures end markets for plastic recyclers, secures offtakes for the City's refuse bin waste and creates circular jobs.
  - During 2022, the City diverted 128 tonnes of refuse bin plastic from landfill through this programme, feeding the plastic into the construction of new refuse bins comprised of 50% recycled content. The coloured recycling bins which the City procures for its internal recycling programmes (110 procured during 2022) are also comprised of a minimum of 25% recycled content.

- Food Lovers' Market started rolling out its new shopping trolleys made in part from recycled content in January 2022. The product, adapted to the South African market, has resulted in a significant reduction in material footprint. In an effort address the recycling challenges facing the country with stagnating recycling rates often due to a lack of demand for recycled content, recycled plastic milk bottles are used to manufacture these trolleys. The trolleys contain a minimum of 50% recycled milk bottles, with the trolley basket at 70% recycled material from milk bottles. Recycled plastic equivalent to 74 plastic 2L milk bottles are used to produce the mini trolley basket, and 152 plastic 2L milk bottles for the classic trolley basket. About 4 500 trolleys are in store at the end of 2023, which is about 509 000 recycled milk bottles living their next life as a shopping trolley. At the end of the trolley's life, the trolley will be recycled into other HDPE products.

- Tuffy has converted a customer's own brand rubbish bags, from 50% virgin: 50% recycled content to 100% recycled content. The bags will be on sale from the fourth quarter of 2023, and will result in 15 tonnes less per month of virgin plastic used, and 180 tonnes per year.

Circular plastics for in-house use:

Woolworths uses equipment, such as lugs (crates on wheels) to move cold chain goods (produce, fruit, diary and protein) through the supply chain, rather than using single use packaging (such as boxes and plastic wrap on reusable crates). The equipment is primarily plastic, and all plastics are 100% recycled content (with 4 392 tonnes of recycled plastic in use in 2022).

- All equipment is recycled at end of life into new Woolworths equipment and returned to the fleet. In 2022, 32 tonnes of plastic equipment were recycled into new Woolworths equipment. Equipment reuse cycles (number of times used) average 4 times in 24 hours, 7 days a week, over the equipment lifespan of about five years, with some equipment lasting more than 10 years. This constitutes a saving of 8 m of pallet wrap every 24 hours.

Increasing recycled content in the pesticide industry

In 2022, an associate member of CropLife South Africa started producing in-line fluorinated 1 L, 5 L and 20 L HDPE pesticide containers including 30% recycled HDPE from the recycling of untinted pesticide containers.

CropLife SA has engaged with other manufacturers of pesticide containers to promote the inclusion of recycled content in their manufacturing, and aims to have engaged with all manufacturers by the end of 2023 to promote recycled content.

A focus on retailer carrier/ shopper bags

Recycled content in Clicks' shopper bags and reusable bags (across rPET and recycled PE) increased from 588 tonnes to 635 tonnes (8%). All single-use shopper bags have been 100% recycled content since 2019. 100% rPET reusable bags were introduced in 2022 with previous years having an average of 68% recycled content.

CCBSA

CCBSA recovers all its end of life crates which are supplier to recyclers in order to make new crates with increased recycled content.

10

Way forward

Plastics – no one size fits all

The problems and the benefits of plastics as a material are a focus of messaging to both industry, and consumers, and often from opposing organisations, with the plastics industry trying to retain the spotlight on the benefits of plastics in multiple applications, and on the other pole, are those calling to phase out all plastics. As the SA Plastics Pact, with members across the value chain, including the plastics industry, brand owners, retailers, collectors and recyclers, we recognise not only the benefits of plastics and the growing socio-economic, and environmental problems associated with plastics, but also the opportunities made possible through unlocking the circular plastics economy in South Africa.

Our point of departure, is that not all plastics are created equal. Some plastics include in their manufacture and in their formulation harmful chemicals that are a hazard to human health and ecosystems, some plastics will likely never have sufficient value at the end of their life to be collected and recycled (even in countries with a long history of EPR and investment in collection and recycling, some plastic packaging like PVC and PS have very low collection and recycling rates).

SA Plastics Pact has a strong focus on the 'upstream' sections of a circular economy

The SA Plastics' Pact does include activities related to the downstream of collection and recycling, but mainly focuses on the upstream segments, being material selection and packaging design, as well as reuse loops, in the circular economy value chain. This emphasis on the upstream sections of the value chain is supported by the growing evidence base pointing to the interventions needed to achieve a circular economy for plastics.

Building the case for global rules in the UN Global Treaty to address plastic pollution

A recent report published by the Nordic Council of Ministers and SYSTEMIQ modelled scenarios to consider the impacts of common global rules across the plastic lifecycle on the impact on plastics stocks and flows, the amount of mismanaged greenhouse gas emissions, costs and jobs[9]. The modelling work was done to assess a range of options on the table for the developing UN Global Treaty to address plastic pollution.

[9] SYSTEMIQ and the Nordic Council of Ministers (2023) Towards Ending Plastic Pollution by 2040 – 15 Global Policy Interventions for Systems Change.

The global Business-As-Usual Scenario resulted in the following by 2040 (with 2019 as the baseline):

- a 66% increase in virgin plastic produced,
- an increase of 86% in mismanaged plastics and,
- 63% more greenhouse gases emitted.

The Global Rules Scenario modelled the application of 13 policy interventions across the plastic lifecycle, with 7 addressing upstream section of the value chain, including reducing virgin plastic production, bans on certain single-use plastics, bans on problematic plastics and harmful chemicals, reuse targets, and plastic product design. An 8th policy regarding the application of EPR to all sectors, also includes the requirement for modulated EPR schemes, which means that products and materials less likely to be circulated will attract higher EPR fees.

The Global Rules Scenario resulted in the following by 2040 (with 2019 as the baseline):

- a 30% reduction in virgin plastic production
- a reduction of 90% in mismanaged plastics
- no increase in greenhouse gas emissions from the 2019 baseline
- and a sevenfold increase in the tonnage of plastics recycled globally.

The model found no decrease in jobs in the Global Rules Scenario, but that the jobs would need to be shifted from virgin plastic production to reuse businesses, collection and recycling.

These results emphasise the necessity of a legally-binding global plastics treaty to address plastic pollution. The discussions towards the Global Treaty continue with the Zero Draft of the Treaty published in September 2023 for discussion at the Intergovernmental Negotiating Committee meeting in Nairobi in November 2023. Some SA Plastics Pact members have joined the South African Business Coalition which is aligned to the global Business Coalition for a Global Plastics Treaty co-convened by EMF and WWF to represent largely brand owners and retailers calling for global common rules across the plastics value chain. The SA Business Coalition also emphasises that our approach to a circular economy for plastics should focus on designing people into the plastics value chain, and recommends that possible actions, to achieve the systemic changes needed, be subject to socio-economic and environmental assessment before implementation.

The SA Plastics Pact is mindful that local data and knowledge is key to developing our pathway to circularity for plastic packaging. The Pathways Model developed by the CSIR in partnership with the Pew Foundation, Oxford University is an excellent resource that can be applied in South Africa to model the impacts of envisaged policy and circular interventions on not only the performance of plastic circulation, but also the jobs supported as a result.

SA Plastics Pact readiness and response to the calls for plastic circularity

In this landscape of growing pressure to retain plastics in circulation and address specific high-leakage points in the value chain, the SA Plastics Pact members are collaborating to make progress towards circularity, as well as reporting on the Pact's collective process. These commitments and actions mean that Pact members are well-established to respond to the global treaty requirements that will result in national action plans.

As the Treaty negotiations continue, SA Plastics Pact members have begun strategizing for beyond 2025, developing 2030 targets, as are all the other Pacts in the Plastics Pact network. For the first time, the Pact has a very detailed dataset clearly demonstrating where our biggest barriers to circularity in plastic packaging are, and in setting 2030 targets, the Pact has a good foundation on which to further build our circular economy for plastic packaging.

Retaining Pact's focus on 2025 targets

In this landscape of calls for systemic change, the SA Plastics Pact is demonstrating that changes in packaging design and the inclusion of higher percentages of recycled content are possible, even in challenging economic times. The Pact has seen collaboration across the membership from reclaimers partnering with brand owners, to retailers sharing their knowledge on alternatives to problematic packaging, and converters, working closely with recyclers and brand owners to develop packaging with increasing recycled content.

The SA Plastics Pact focus areas for the next year, will include:

Target 1:

- Developing and evaluating reuse pilot projects to replace barrier bags for weighing loose fruit and vegetables
- Aiding the elimination of the last of the PET/PVC shrink sleeves on PET bottles
- Developing a phase 2 list of problematic and unnecessary plastics to be phased out

Target 2:

- Design for Circularity guidance and resources for members
- A focus on problematic flexible packaging in the multilayer multipolymer, and PP flexibles
- Scoping a reuse/refill pilot in low-income retail settings

Target 3:

- Building on existing member collaboration in informal sector integration, and the collection and sorting of recyclables

Target 4:

- Increasing recycled content in retailer packaging (collation and logistics packaging, also called secondary and tertiary packaging)
- A focus on rigid packaging in the HD and PP home and personal care markets

The Pact secretariat (GreenCape) continues to source external funding to more than double the funding from business member fees, and grow the impact of the collaboration. All organisations active at a national scale are welcome to join this dynamic group of organisations as we make progress towards circularity in plastic packaging in South Africa.

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The SA Plastics Pact

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