



# ADDRESSING PROBLEMATIC AND UNNECESSARY PLASTICS.





# Overview

Plastics are fundamental to our everyday lives, they are a versatile and low-cost alternative to protect and deliver the products we consume daily. Further benefits include that they are light weight, resulting in reduced carbon emissions in transport compared to other materials, they assist in prolonging shelf life and reduce food waste, and they can be reusable and recyclable. However, we are currently designing plastics and using them in a way that results in them being used once for a short period of time and then disposed of or even littered. In South Africa, less than half of all plastic packaging is collected for recycling, with the remainder being landfilled, or, in the worst case scenario, littered and impacting the natural environment, our cities and people's health.

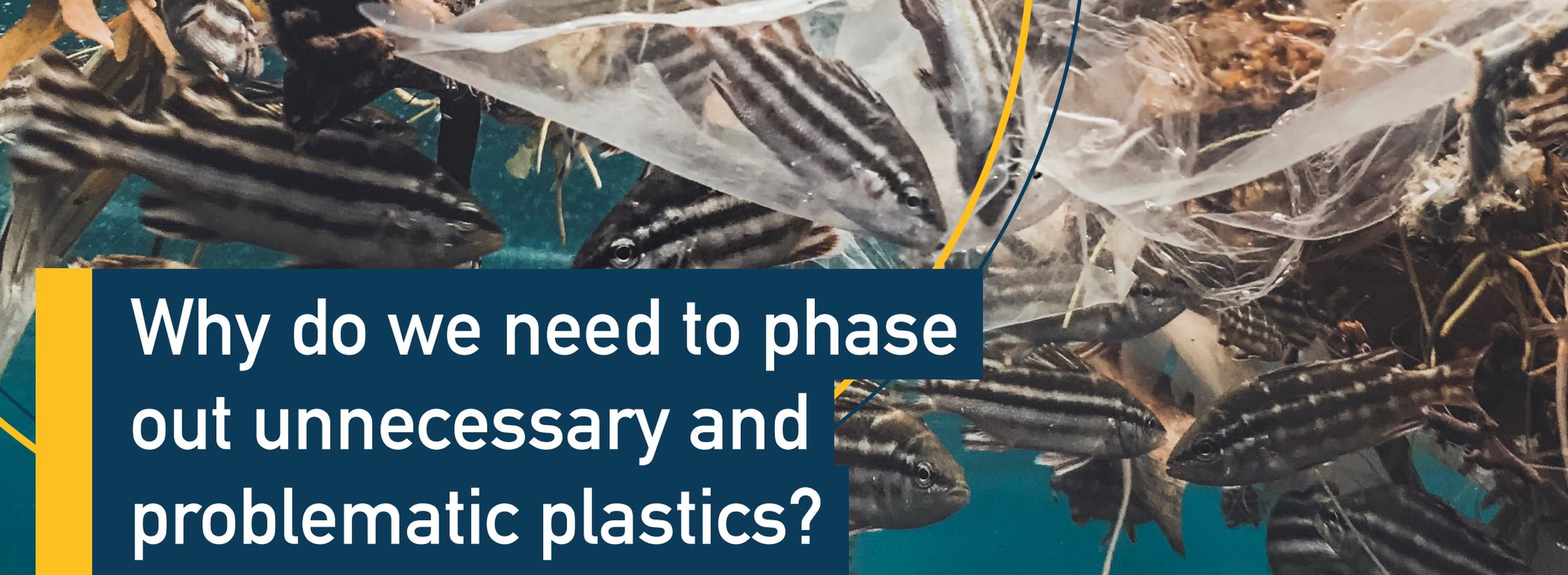
To end plastic pollution, we need to fundamentally rethink the way we design, use and reuse plastic. A systems-level change involving redesign can only be achieved through collaboration across all organisations and individuals that produce and use plastic packaging.

The South African Plastics Pact (SA Plastics Pact) is a collaborative platform that joins businesses, governments, NGOs and industry associations behind a common vision of a circular economy for plastics, by committing to achieve 4 ambitious targets by 2025 to address plastic waste and pollution at its source.

Under **Target 1**, SA Plastics Pact members have pledged to take action **to eliminate problematic or unnecessary packaging items by 2025**. Pact members worked together to identify 12 plastic items to be eliminated by the end of 2022.

Members are required to develop and adopt the best solutions to eliminate the identified problem plastics, through phasing out of the item as unnecessary; substitution with a material that is well recycled in practice; innovation for reuse of the item; or redesign of the product to eliminate the need for packaging. When eliminating these items, unintended consequences must be considered and avoided. Specifically, substituting another material should not create any additional negative environmental impacts nor should food waste be increased as a result of changes in packaging for the South African market.

In addition to the 12 items highlighted in this document as a priority for action, a further list of items will continue to be investigated, which could potentially be included in a phase 2 list. Items identified in a phase 2 list require longer timescales to address, and may also include actions in partnership with other key players to increase the recovery of the items, or to increase recycling capacity or facilitate access to new technologies.

An underwater photograph showing a school of striped fish swimming in clear blue water. In the foreground and background, there is a significant amount of clear plastic waste, including bags and fragments, which the fish appear to be interacting with. The scene is lit with natural light, creating a slightly hazy, blue-tinted atmosphere.

# Why do we need to phase out unnecessary and problematic plastics?

South Africa generates 2.4 million tonnes of plastic waste annually, equivalent to 41 kg/capita/year, which is above the 29 kg/capita/year global average<sup>1</sup>. Out of this only 14% is recycled and around 40% of this waste is mismanaged, with 3% directly leaking into the environment. This means that on average, every citizen leaks at least 1.4kg of plastic to the environment per year.

This leakage of waste into the environment is mostly composed of small plastic items, as well as plastic packaging<sup>2</sup>, which are common sights around communities and cities, in rivers, and on beaches. There are different causes for this leakage, including the lack of available collection services, citizen behaviour and, in some cases, the non-recyclability

of the plastic packaging and items. For those packaging and items that are technically recyclable, but not yet recycled in large amounts, the solution may be focused on improving **collection** and **citizen engagement**. However, for those that are not technically or economically recyclable in practice, we need to rethink their design and delivery model, to reduce the negative impacts of waste plastic.

As a result, the members of the SA Plastics Pact decided to identify and prioritise small plastic items and packaging that are not recycled in practice, whether technically not recyclable or recycled in very small volumes, in South Africa and have alternatives available, for members to remove from circulation over the next two years.

1. [https://www.iucn.org/sites/dev/files/content/documents/southafrica\\_final\\_report\\_2020-compressed.pdf](https://www.iucn.org/sites/dev/files/content/documents/southafrica_final_report_2020-compressed.pdf)

2. University of Cape Town – Dr Takunda Chitaka (2019)

# Scope

The focus of this publication is on plastic items and packaging that are unnecessary and/or problematic. The members considered any plastic packaging under our members' responsibility, as well as any plastic items that our members may brand and sell.

## Definitions

(Source: Ellen MacArthur Foundation; accepted by SA Plastics Pact members)

### Reusable Plastic Packaging or Products

"Designed to be used multiple times for the same purpose. Examples: reusable fruit and vegetable bags or reusable coffee cups"

### 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."

### Problematic plastic



1. It is not reusable, recyclable (technically and/or economically not recyclable) or compostable.



2. It contains, or its manufacturing requires, hazardous chemicals that pose a significant risk to human health or the environment.

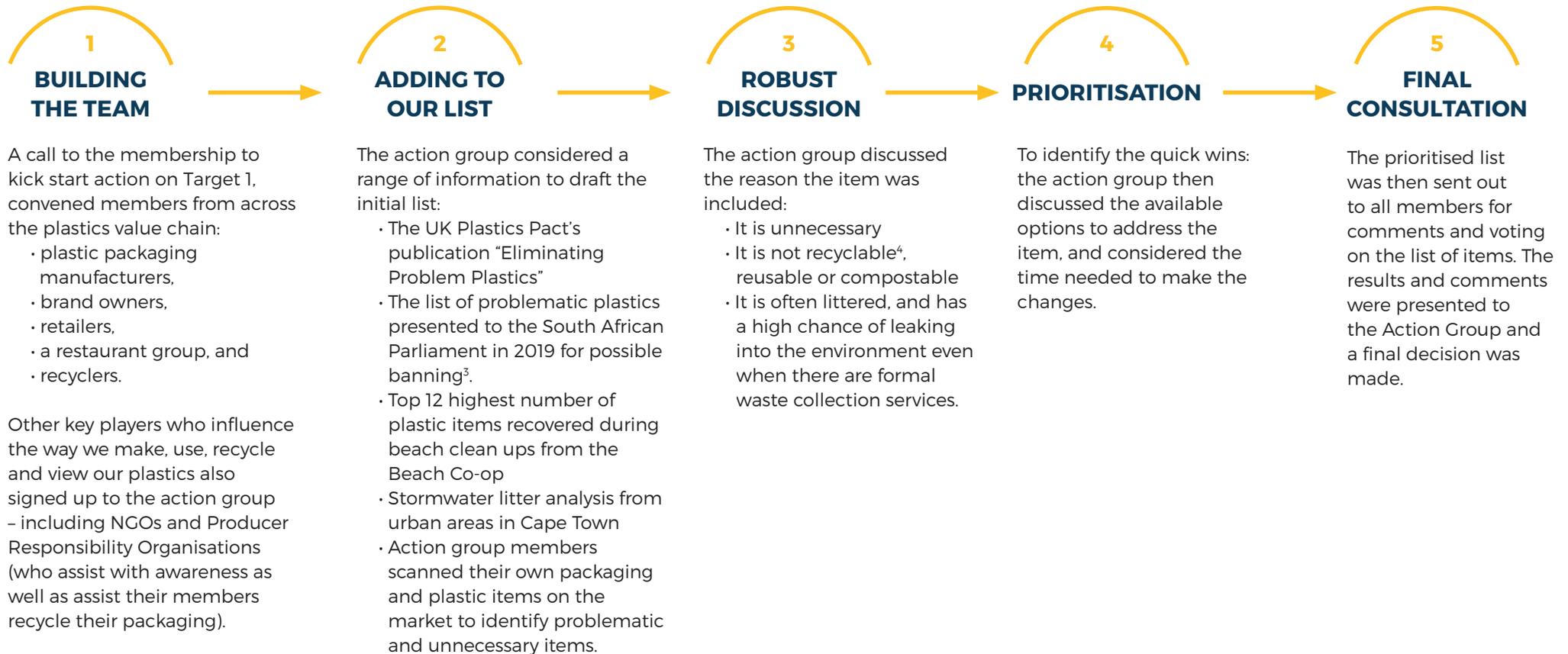
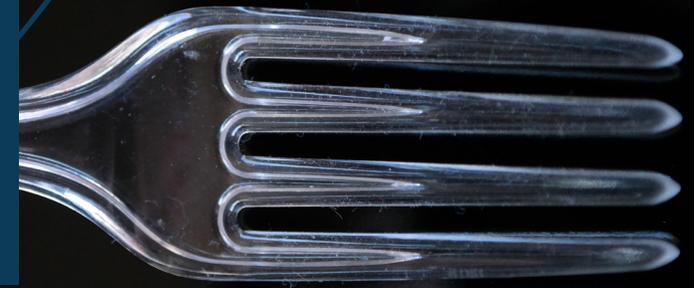


3. It hinders or disrupts the recyclability or compostability of other items.



4. It has a high likelihood of being littered or ending up in the natural environment.

# The process – collaboration to address problematic and unnecessary plastics



3. <https://mg.co.za/article/2019-04-18-00-death-or-taxes-for-polluting-plastic/>

4. Technically and/or economically not recyclable

# Twelve plastic items for phasing out by December 2021

	 <b>01 OXO DEGRADABLE PLASTIC</b>	 <b>02 PVC BOTTLES, PALLET WRAP AND LABELS</b>	 <b>03 SOME SHRINK SLEEVES</b>	 <b>04 STICKERS ON FRUIT AND VEGETABLES</b>
<b>SCOPE</b>	Included in various plastics as an additive that breaks down the plastic faster than normal	Rigid packaging including bottles (except for medicine packaging), pallet shrink wrap and labels	PET and PVC shrink sleeves on PET beverage bottles by December 2021. PET and PVC on all PET bottles by December 2022.	Stickers made from plastic that are currently used directly on individual fruit and vegetables
<b>REASON FOR INCLUSION</b>	Oxo-degradable plastics are normal plastics to which prodegradant additives are added to speed up the breaking up of the plastic in air (due to the oxygen), and by UV light and/or heat. Oxo-degradable plastic packaging is not suited for long-term reuse, recycling at scale or composting. Therefore, it does not allow materials and products to be kept in high-value use <sup>5</sup>	PVC packaging has a very low recycling rate due to the small market size and there are environmental concerns in its production and end of life, as well as the additives included in PVC materials. It also has potential to contaminate and hamper existing recycling streams, i.e. PET (many beverage bottles) and HDPE (often bottles with personal care and home care products) due to the similarities of the bottles in look and feel.	These PET and PVC shrink sleeves on PET bottles must be phased out, even if perforated, because users are unlikely to remove it before recycling and this component disrupts the recycling of PET bottles.	These stickers can end up contaminating composting streams or being littered in the environment. Many producers have simply removed the stickers as unnecessary, and there are existing alternatives which means they can also quickly be replaced or removed.
	 	 		 

5. <https://www.newplasticseconomy.org/assets/doc/Oxo-statement-May2019.pdf>

# Twelve plastic items for phasing out by December 2021



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



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



**07 PLASTIC STRAWS**



**08 PLASTIC STIRRERS**

**SCOPE**

Thin filmed bags offered in shops when buying loose fruit and vegetables will be reduced by 50% from the 2020 baseline.

Thin filmed bags offered in retail shops at till points often to place a barrier between items, e.g. firelighters and other products; fabric softener etc.

All plastic straws

All plastic stirrers

**REASON FOR INCLUSION**

These bags although technically recyclable, can cause problems in recycling plants due to how thin they are, and they have a high probability of being leaked to the environment. Also, they can be avoided by using existing reusable alternatives.

This introduction of these bags was seen as providing additional value add to the customer, however, it is unnecessary. Items can be packed in separate carrier bags if necessary. The thin bags have a high probability of being leaked to the environment and therefore should be removed as an option.

In most circumstances the use of a plastic straw is unnecessary and when used they often end up in the environment, and are not recycled due to their small size. Straws can simply not be offered, replaced by truly compostable option, or members can encourage their customers to use reusable straws.

Plastic stirrers are often littered, or end up in the environment, and are too small to be recycled. Plastic stirrers can be replaced by a reusable option or by another material that has a lower impact on the environment.



# Twelve plastic items for phasing out by December 2021



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



## 10 COTTON BUDS WITH PLASTIC STEMS



## 11 LOLLIPOP STICKS



## 12 MICROBEADS IN COSMETICS

### SCOPE

All disposable, designed for single-use, cutlery & plastic plates and bowls – often used for picnics, functions or events

All cotton earbuds with plastic stems

All plastic lollipop sticks

All plastic microbeads in cosmetics

### REASON FOR INCLUSION

Plastic cutlery, plates and bowls that are designed for one use only are often littered, and are very unlikely to be recycled. They can be replaced by reusable options or by other materials that have a lower impact on the environment.

Cotton earbuds often end up in the environment, and are one of the most common items found littering our beaches and in our rivers. There is no need for the stem to be made of plastic and therefore the plastic can be replaced by an alternative material.

Plastic lollipop sticks are also often littered and will not be recycled in practice. They can be replaced by an alternative material

Plastic microbeads used in cosmetics enter the sewage system, and are not removed during wastewater treatment. The plastic microbeads then flow into rivers or the ocean with the treated wastewater. Plastic microbeads should be eliminated or replaced by non-synthetic materials.



# Inspiration on the impact of addressing unnecessary and problematic plastics

The SA Plastics Pact is one of four Pacts to have published their Phase 1 lists of problematic and unnecessary plastics. The table below compares the commitments of the different Plastics Pacts. All have also identified Phase 2 lists and are continuing work to address problematic and unnecessary plastics.

While acknowledging that what is problematic or unnecessary varies according to the local context, the items identified by other Pacts can provide inspiration for eliminating further items in the South African context.

SA PLASTICS PACT - PHASE 1 PUBLISHED 2021	UK PLASTICS PACT - PHASE 1 PUBLISHED 2019	PORTUGUESE PLASTICS PACT - PHASE 1 PUBLISHED 2020	CHILEAN PLASTICS PACT - PUBLISHED 2020 TO BE ADDRESSED JAN-JUN 2021
<b>PACKAGING MATERIAL TYPES</b>			
Oxo-degradable plastic	Oxo-degradable plastic	Oxo-degradable plastic	
		Packaging not detectable in automatic sorting systems (such as packaging containing carbon black)	
	All polystyrene packaging	Expanded polystyrene packaging, including both takeaway (clamshells and cups) and other packaging (eg. used for meat or vegetables)	All expanded polystyrene packaging – trays for meat, takeaway packaging, and ‘foam’ packaging with electronics and furniture
PVC – bottles, labels, and pallet wrap	All PVC packaging	All PVC packaging	All PVC packaging
<b>PACKAGING FORMATS</b>			
Barrier bags for fruit and vegetables		Ultra-light plastic bags (below 15micons)	Plastic film/ wrap – where it is overpackaging (it is unnecessary)
Barrier bags at the tills			Multi-buy packaging

# Inspiration on the impact of addressing unnecessary and problematic plastics

SA PLASTICS PACT - PHASE 1 PUBLISHED 2021	UK PLASTICS PACT - PHASE 1 PUBLISHED 2019	PORTUGUESE PLASTICS PACT - PHASE 1 PUBLISHED 2020	CHILEAN PLASTICS PACT - PUBLISHED 2020 TO BE ADDRESSED JAN-JUN 2021
<b>PACKAGING COMPONENTS</b>			
PET and PVC shrink sleeves on PET bottles and jars		Disposable plastic trays for fruits, vegetables and bread	
		Plastic "windows" in cardboard boxes	
<b>SMALL PLASTIC ITEMS</b>			
		Plastic balloon sticks	
		Plastic stands in pizza boxes	
		Single use cups - made of paper with a plastic lining	
Plastic stickers on fruit and vegetables			
Plastic straws	Plastic straws	Plastic straws	
Plastic stirrers	Plastic stirrers	Plastic stirrers	
Single-use plastic plates, bowls and cutlery	Single-use plastic plates, bowls and cutlery	Plastic plates (all plastic plates, not just single use?) and cutlery	
Cotton buds with plastic stems	Cotton buds with plastic stems	Cotton buds with plastic stems	
Lollipops with plastic stems		Lollipops with plastic stems	
Plastic microbeads in cosmetics			

# Inspiration on the impact of addressing unnecessary and problematic plastics

**400**  
**MILLION ITEMS**

classed as problematic or unnecessary were sold by Pact members in 2019 (a 40% reduction from 2018).

## THE UK PLASTICS PACT DECEMBER 2020<sup>6</sup>

Founding Pact members have eliminated 300 million plastic items from the market in the UK, totalling 6,800 tonnes of plastics that would not have been recycled, and had a high likelihood of being littered.

Examples of leading UK Plastics Pact members in this space:

**Reckitt Benckiser, General Mills/ Yoplait and Silver Spoon** have all taken steps to remove PVC from their packaging portfolios and **pladis** has removed 100% of PVC from their packaging portfolio. **Lidl** and **Aldi** will have removed black plastic, PVC and EPS from their own label core range food products by the end of 2020.

**Klockner Pentaplast** has replaced a PVC clingfilm with a recycle ready polyolefin that can be recycled at retailer front of store collection points. **Tata Consumer Products** is no longer producing PS lids on disposable paper cups and has replaced this with PP lids which can be recycled.

6. <https://wrap.org.uk/resources/report/uk-plastics-pact-annual-report-2019-20>

# Inspiration on the impact of addressing unnecessary and problematic plastics



## CASE STUDY

### GREINER PACKAGING - REPLICATING SNAPPABILITY IN A PP FORMAT

Greiner worked with tooling suppliers, and with Kiefel to develop a tool that allowed a 'snap and tear' functionality. The goal was to make a product that could easily replace PS through the existing supply chain without major costs being incurred.

Following trials in 2018 with supply chain partners including fellow UK Plastics Pact members YEO Valley and Tesco, they developed a product that met all the critical requirements in terms of functionality. The work exemplified the spirit of collaboration with all parts of the supply chain working together to a solution that moved away from unrecyclable polymers into a fully recyclable format in line with the UK Plastic Pact targets.

The first products hit the shelves in September 2019 with mixed feedback from customers. Greiner and its partners have taken the feedback away and are developing a product with improved 'snap'. This will launch before the end of 2020.

Going into 2021 Greiner will be adding recycled content to some PP products as they work with suppliers to develop and launch rPP products to the market, complementing the range of rPET products already available, as they work towards the UK Plastics Pact goal of 30% recycled content in plastic packaging.

# Inspiration on the impact of addressing unnecessary and problematic plastics

## SA PLASTICS PACT MEMBERS ALREADY COMMITTED TO ELIMINATION OF UNNECESSARY AND PROBLEMATIC PLASTICS



**CLICKS** has phased out PVC bottles and insert trays in gifting, changing to cardboard and PET where needed.



**PICK N PAY** replaced all free plastic straws from the checkouts with paper alternatives. This resulted in a reduction of more than 8 million plastic straws per year.



**WOOLWORTHS** has removed plastic cutlery and straws across trading formats for ready to eat/take way meals. Woolworths has also removed plastic-stemmed earbuds resulting in a total reduction of 3.3 tonnes of plastic on the market.

# Inspiration on the impact of addressing unnecessary and problematic plastics



**SPUR GROUP** has been on a strategic drive to reduce pollution and waste being created by single-use items. The group completely phased out polystyrene

burger clamshells by 2016 and has been in a process of replacing plastic straws (with paper wrappers) through active campaigning since 2017. The group managed to reduce plastic straws from 58 tonnes in 2017 to 14 tonnes in 2019. During the 2018/19 fiscal year, no plastic straws were distributed through the group's logistic partner. The procurement of paper straws increased from just below 2 tonnes to over 50 tonnes over the same period.

Plastic utensils (sealed in a plastic polybag) were reduced from 265 tonnes used in 2018/19, to none in 2020. The procurement of plastic bags has dropped significantly, from 81 tonnes in

2019 to 24 tonnes in 2019, while brown paper bags increased from 56 tonnes to 170 tonnes over the same period.

A review of the last four years indicated more accurate reporting on plastic materials and a significant reduction (69%) in the use of plastic packaging material (measured in weight). Even with a COVID adjustment used in data calculations based on 9 months of business, there is still a significant reduction in non-renewable materials used. The target set for the 2019/20 fiscal year was a 75% reduction in plastic packaging, and 88% was achieved!

Balloons have been phased out of John Dory's and Panarottis, and Spur is currently phasing them out. There was a notable drop during the 2019/20 fiscal from just on 60 tonnes in 2016/17 fiscal year to below 14 tonnes in 2020. The effort to move away from balloons form part of the group's strategic focus on minimising waste by actively removing unnecessary plastic

<b>PLASTIC REDUCTION 71% ↓</b>	<b>INCREASE IN PAPER BAGS AS REPLACEMENT FOR PLASTIC BAGS 25% ↑</b>	<b>REDUCTION IN PLASTIC PACKAGING FROM 2017 BASELINE YEAR 88% ↓</b>
<p>Balloons have reduced from 60 tons in 2017, to 47 tonnes in 2019 to below 14 tonnes in 2020 and are being phased out</p>	<p>Use of <b>paper bags</b> has increased from 170 tonnes in 2019 to 213 tonnes in 2020 with the aim of removing plastic bags</p>	<p>Increase in the use of <b>non-plastic packaging material</b> as a percentage of the total. In 2019, 69% of packaging was not plastic, with a further decrease in plastic packaging in 2020, with 88% not plastic.</p>

7. <https://www.spurcorporation.com/governance-sustainability/environment/>



## Next steps

This list is the first step towards achieving Target 1 of the SA Plastics Pact: Taking action on problematic or unnecessary plastic packaging through elimination, redesign, innovation or alternative (re-use) delivery models. To build on this, more items and materials are now being actively investigated for inclusion on a phase 2 list. Items that are not included in this initial list but are currently under consideration require longer lead-in times, as there is innovation in packaging, business model or product required to solve the problem. These items have been less commonly addressed internationally, and as such the impacts of changes in material or business model are less well known.

Members are required to develop and adopt solutions to address the issues that make these items problematic through reuse, redesign and/or smarter recycling by 2025.

This means that if the reasons why an item is currently considered 'problematic or unnecessary' can be overcome – it should not be included in the phase 2 list.

The further list of items to be investigated will be kept under constant review by The SA Plastics Pact to ensure the target of eliminating problematic or unnecessary plastic packaging is met by 2025.

# Phase 2 List

ITEM	WHY IS IT CONSIDERED PROBLEMATIC?	POSSIBLE MEMBER ACTION
<b>MATERIAL TYPES</b>		
<b>OTHER BIODEGRADABLE PLASTICS (NON-COMPOSTABLE)</b>	Prodegradant additives in plastics, which won't biodegrade to natural compounds, resulting in the release of microplastics. Some of these materials disrupt mechanical recycling.	*Elimination: removal or innovate (if unnecessary) *Substitution: material dependent on the application
<b>PACKAGING ITEMS OR ELEMENTS</b>		
<b>PROBLEMATIC LABELS</b>	Disrupts recycling	*Elimination: removal or innovate (if unnecessary) *Substitution: material dependent on the application (label should not be paper, and should be different density to the main format)
<b>PVC FILM - FOOD CONTACT (CLING FILM)</b>	Alternatives are available - some retailers have successfully moved away from PVC food contact film	*Substitution: other plastic *Substitution: other (longer term - innovation required for material that will be recycled or composted)
<b>BARRIER BAGS - FRUIT AND VEG</b>	Thin filmed barrier bags offered in retail shops for fruit and vegetables. Whilst the product is recyclable, it is likely to not be and has a high likelihood of leakage. There are alternatives to these bags, e.g. fabric reusable bags (may not be recyclable) and / or compostable bags (messaging around the compostibility and link to food waste should be made though). Clear messaging and communication is required.	*Elimination: removal or innovate
<b>GROCERY NET BAGS</b>	Not recycled and have relatively high leakage.	*Eliminate: refill-reuse *Substitution: recyclable or compostable (in practice) material

# Phase 2 List

ITEM	WHY IS IT CONSIDERED PROBLEMATIC?	POSSIBLE MEMBER ACTION
<b>PACKAGING ITEMS OR ELEMENTS</b>		
<b>MARKETING SINGLE PORTION/ DISPENSE PACKS</b>	Not recycled, high likelihood of being disposed on the go and of being littered.	<ul style="list-style-type: none"> <li>*Eliminate: innovation</li> <li>*Eliminate: refill-reuse</li> <li>*Substitution - material that is recyclable (and collected for recycling) or home compostable</li> </ul>
<b>MINI TUBS (PORTION PACKS)</b>	Mini tubs, e.g. mini stock tubs/milk (with foil lid))- all to check with suppliers.	<ul style="list-style-type: none"> <li>*Eliminate: refill-reuse</li> <li>*Substitution: other (longer term - innovation required for material that will be recycled or composted)</li> </ul>
<b>COFFEE PODS (PLASTIC)</b>	The coffee pods are not recycled or recyclable.	<ul style="list-style-type: none"> <li>*Substitution: metal (in a system for collection for recycling)</li> </ul>
<b>PET FOOD BAGS</b>	Not recycled. Do provide functional product benefits	<ul style="list-style-type: none"> <li>*Eliminate: refill-reuse</li> <li>*Substitution: other (longer term - innovation required for material that will be recycled or composted)</li> </ul>
<b>PLASTIC AND METAL DISPENSING PUMPS ON BOTTLES</b>	Not recyclable, even if components are recyclable (recyclers will not dismantle the pack element)	<ul style="list-style-type: none"> <li>*Substitution: other plastic (monomaterial, fully plastic pump)</li> </ul>
<b>POLYSTYRENE TAKEAWAY PACKAGING</b>		<ul style="list-style-type: none"> <li>*Eliminate: refill-reuse</li> <li>*Eliminate: return-reuse</li> <li>*Substitution: compostable (home)</li> </ul>

# Phase 2 List

ITEM	WHY IS IT CONSIDERED PROBLEMATIC?	POSSIBLE MEMBER ACTION
<b>SMALL PLASTIC PRODUCTS</b>		
<b>TEABAGS - REINFORCING MESH</b>	Can lead to micro plastics.	*Substitution: compostable (home)
<b>END 2022: PLASTIC COFFEE CUP LIDS</b>	Often littered as this packaging is used on the go, generally not recycled.	*Eliminate: refill-reuse *Eliminate: return-reuse *Substitution: compostable (home)
<b>END 2022: CABLE TIES</b>	High potential leakage into the environment (small product) and not recycled.	*Eliminate: return-reuse *Eliminate: innovation
<b>END 2023: WIPES (PLASTIC CONTAINING)</b>	High potential leakage into the environment (small product and often used on the go) and not recycled.	*Substitution: compostable (home)



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