



# Safripol Sustainability Conference 2024

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Title of talk: Response to EPR Implementation and Waste Beneficiation by SA Packaging and Paper Industry

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# Research Objectives

This research was commissioned by **PackagingSA** in 2023 and undertaken by **BMI Research**. The research objectives for the study are as follows:

## Quantitative

- Assess **packaging tonnage** placed on the market by the industry
- Assess the packaging tonnage **available for collection** by industry
- Estimate **tonnage collected** by the industry
- **Forecast collection rate** by industry
- Estimate **beneficiation of collected material** by the packaging industry by packaging category

## Qualitative

- Market opinion on **current PRO landscape**
- **Outlook** of the PRO landscape given the EPR regulations
- **Benefits and challenges** of the introduction of EPR regulations





# Packaging Material Collection and Waste Beneficiation by SA Packaging and Paper Industry

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# Production and Collected Tonnage Forecast

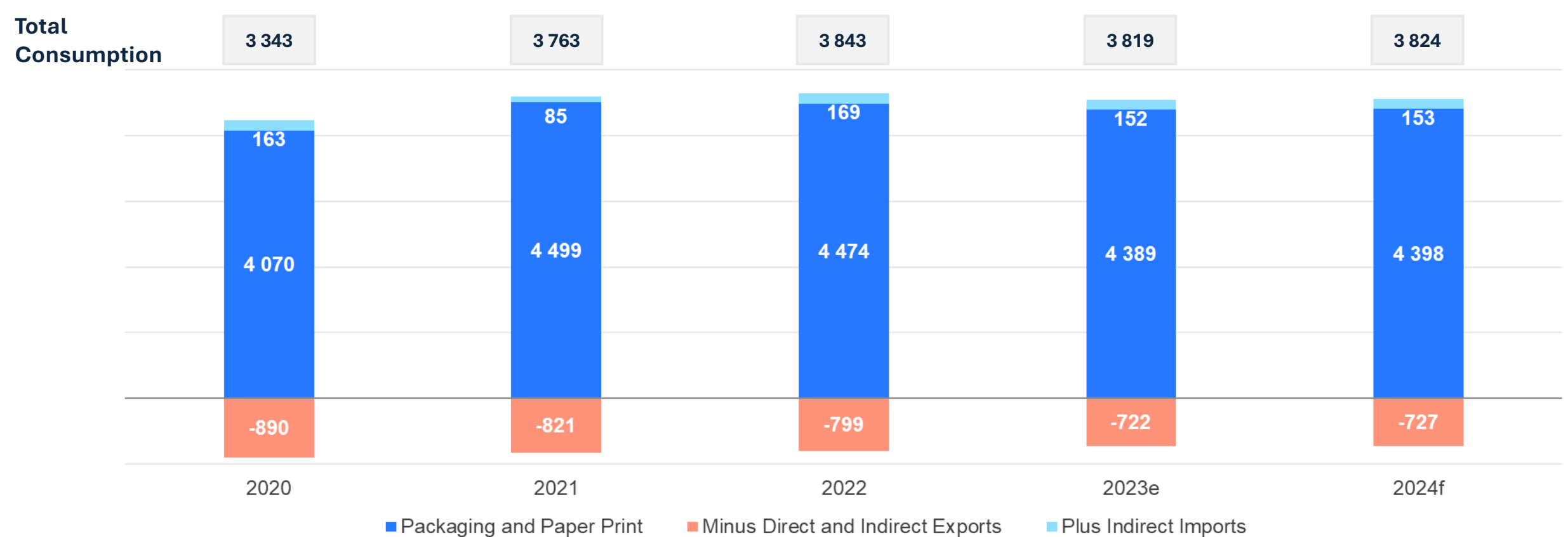




# Production vs. Consumption Industry Volume

Total packaging and paper print consumption continued to **fluctuate in the last 4 years** as the economy has struggled during and after COVID to return to more **regular trading conditions**.

### Annual Production vs Consumption '000 Tons



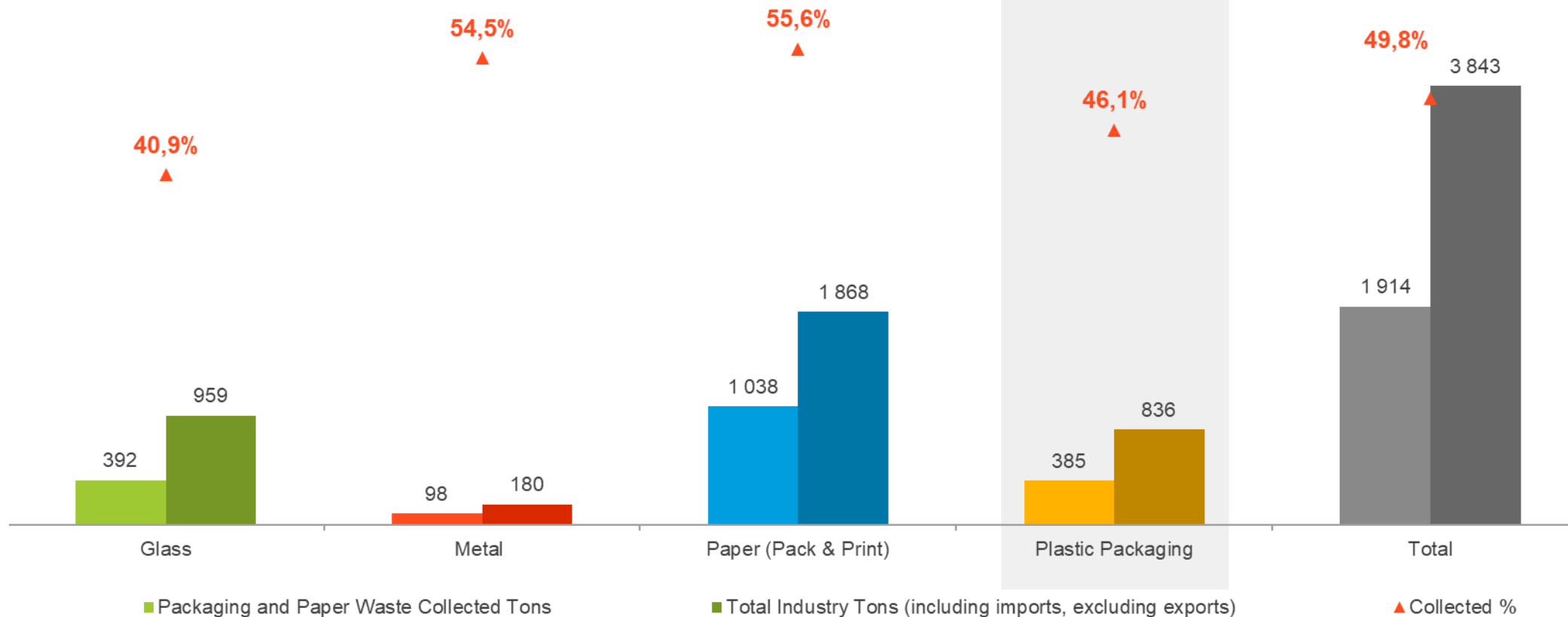
*This data represent total industry data sourced from PROs' submission, BMI Research and other sources*

# 2022 Total Collected Packaging and Paper Print Materials



Glass volume was low due to the industry replenishing of returnable glass pool. **Plastic packaging** industry managed to **collect 46,1%** of the plastic placed into the local market.

**Volume in '000 Tons**



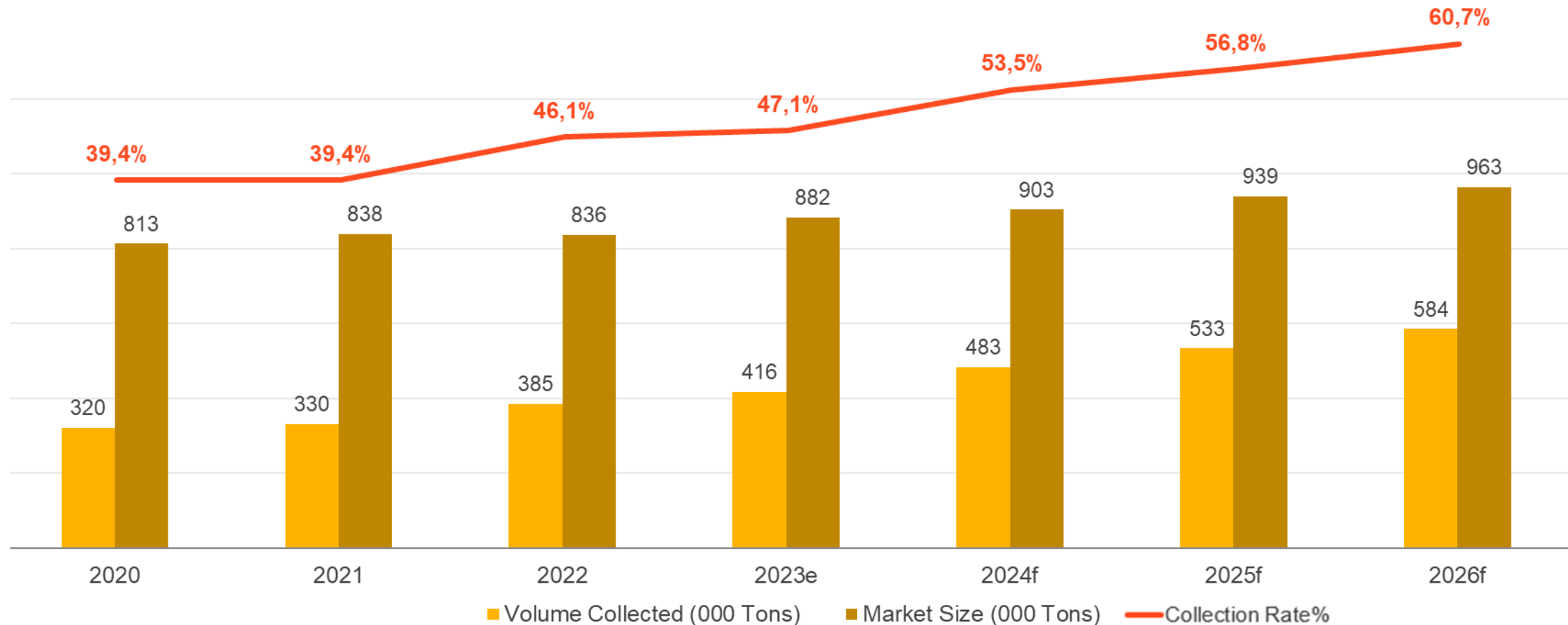
Total industry data sourced from submissions from PROs, estimates from industry associations, BMi forecast models, Packaging Overview 2023 (BMi report published November 2023) amongst other sources



# Plastic Packaging Industry

The volume of plastic packaging placed in the market **declined marginally in 2022 and is expected to recover in 2023**. The volume of plastic packaging waste collected continues to grow faster than production rate, and industry players are planning to continue the upward trend over the next few years, all other factors remaining equal.

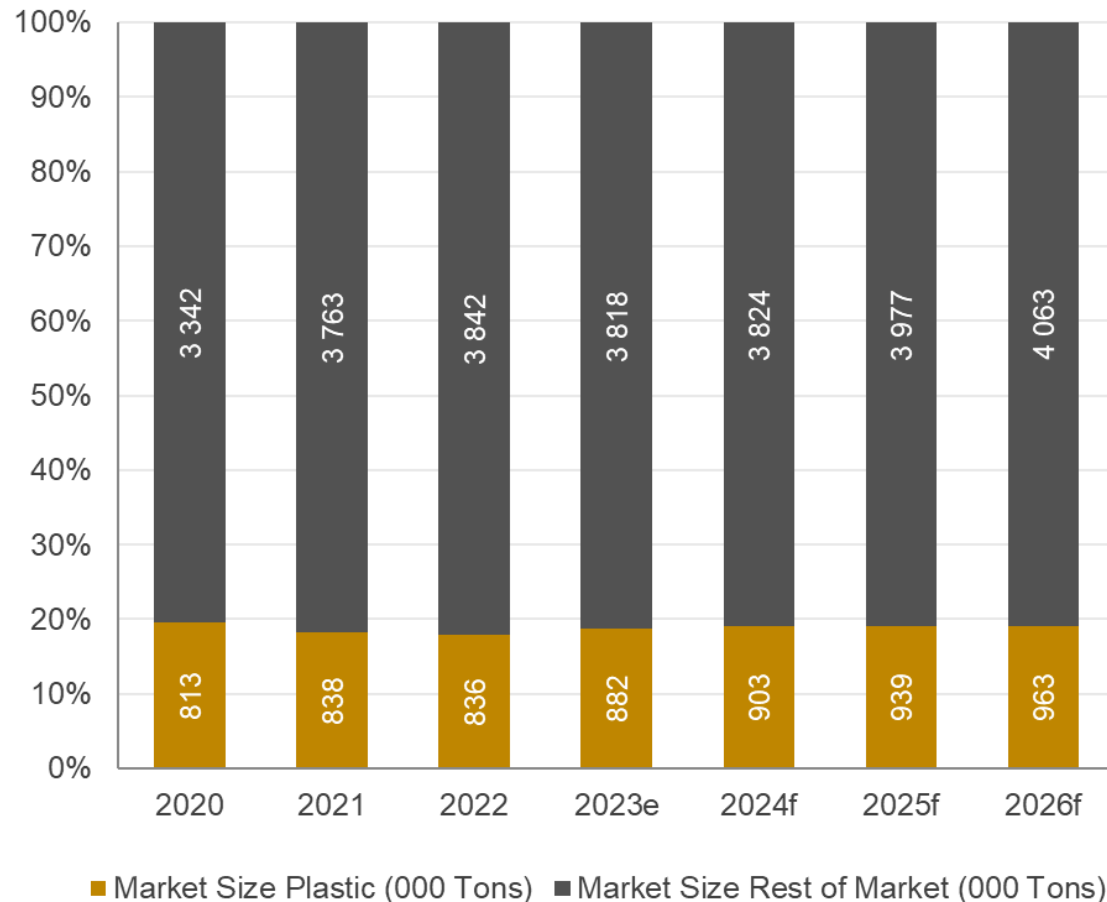
Plastic packaging is light and the industry produces more units per ton compared to alternative packaging materials. Plastic waste is thus more visible in the environment, leading to the pushback against plastic as a packaging type.



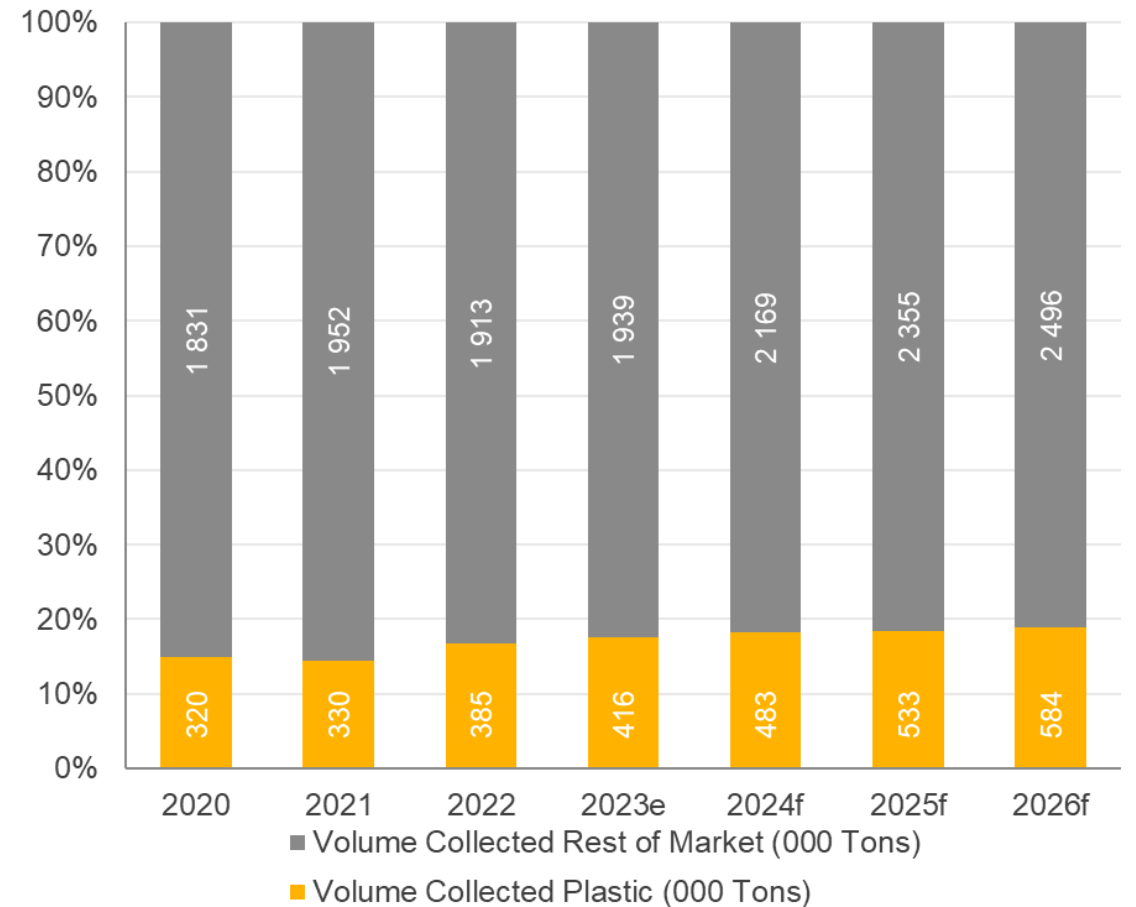


# Plastic Packaging Industry Volume

**Plastic packaging accounted for just over 22% of the total packaging available for collection locally in 2022.**



**Plastic packaging waste accounted for 20% of the total packaging waste collected in 2022.**



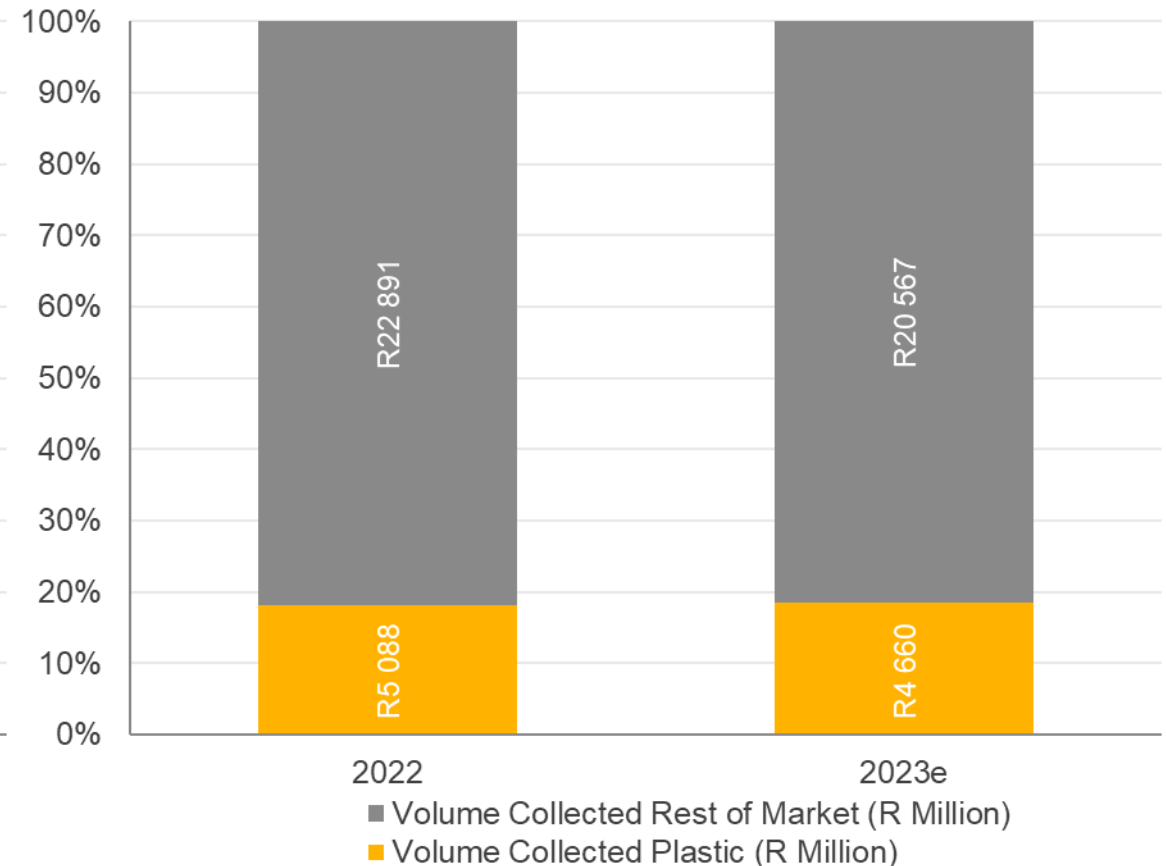
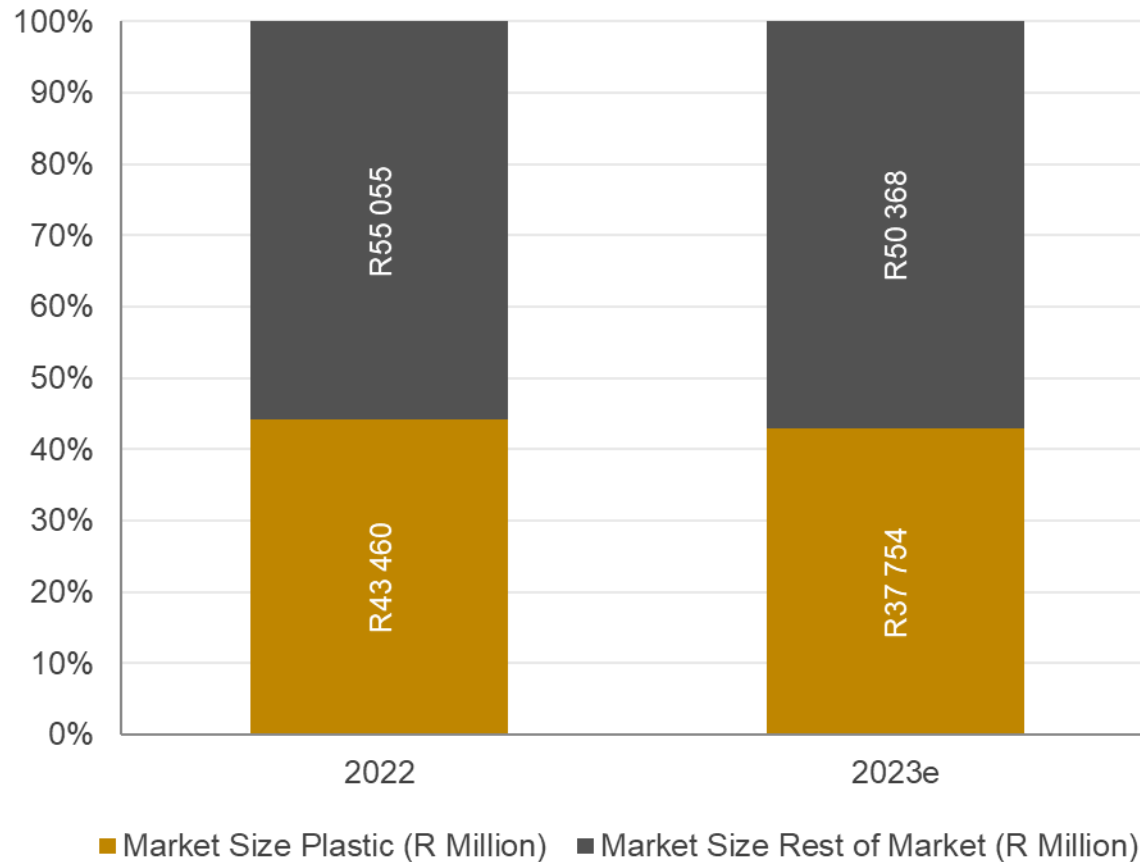




# Plastic Packaging Industry Value

**Plastic packaging accounted for just under 45% of the total packaging value** available for collection locally in 2022. The average price for plastic increased substantially in 2022 and came down in 2023.

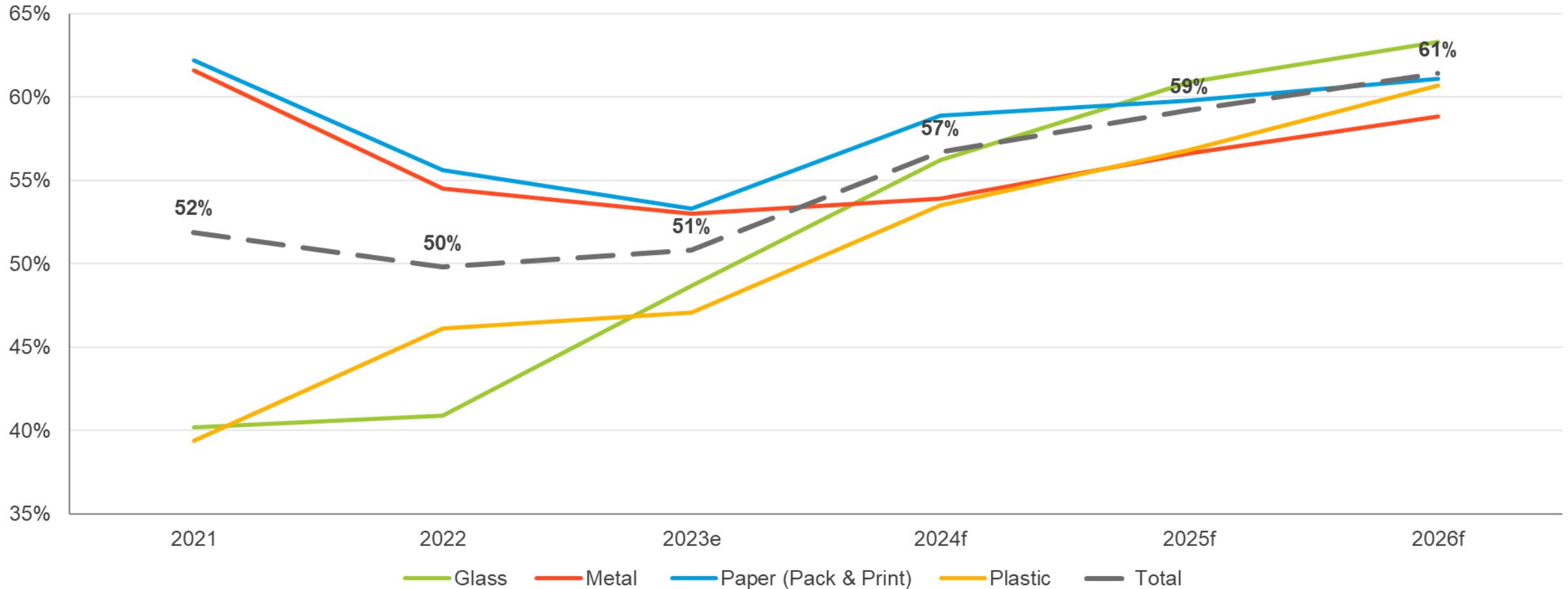
**Plastic packaging waste value accounted for under 20% of the total packaging waste value collected in 2022.**





# Targeted Collection Percentages

The **total collection rate** has **increased steadily over the years**, driven by the industry collecting more packaging waste while the material placed in the market has been more static.

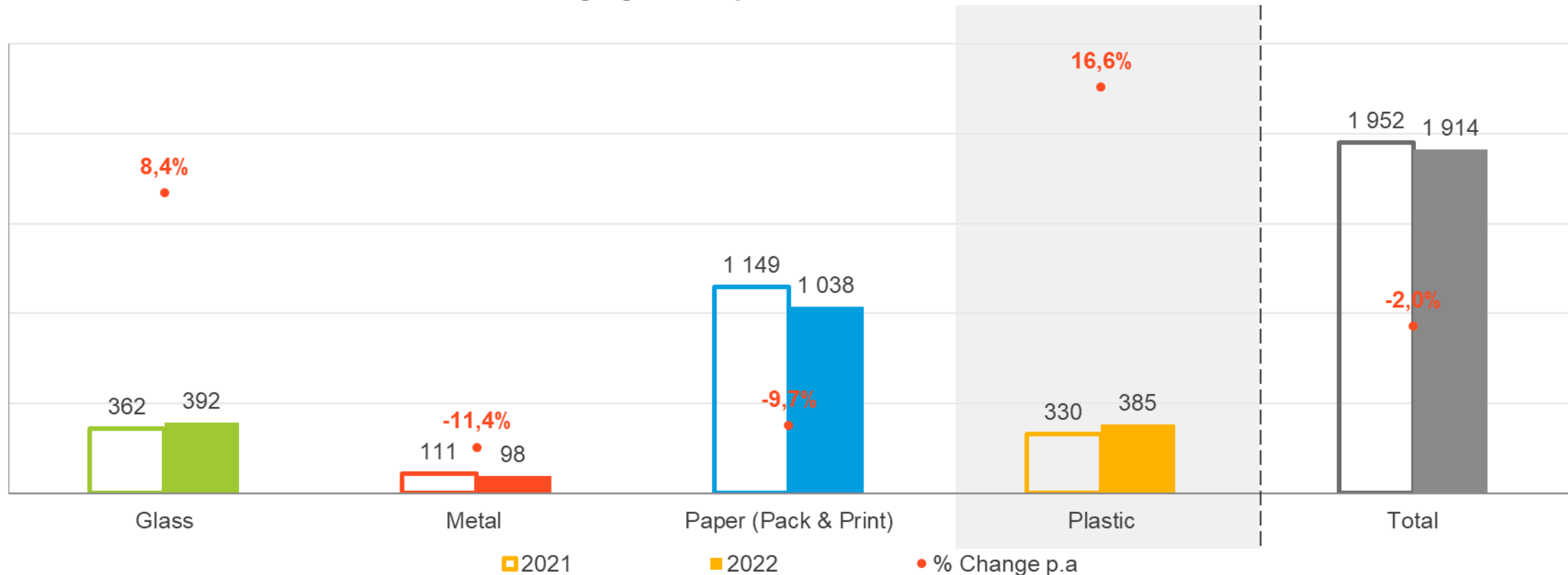




# Tonnage Collected Comparison 2021 vs 2022

The **total volume collected declined by 2,0% in 2022**. The overall decline was driven by the paper (pack & print) category, which represents the bulk of the volume. Volume of **plastic packaging collected rose up by 16,6%**, achieving the highest increase in the industry.

### Collected Packaging and Paper Print Material - '000 Tons



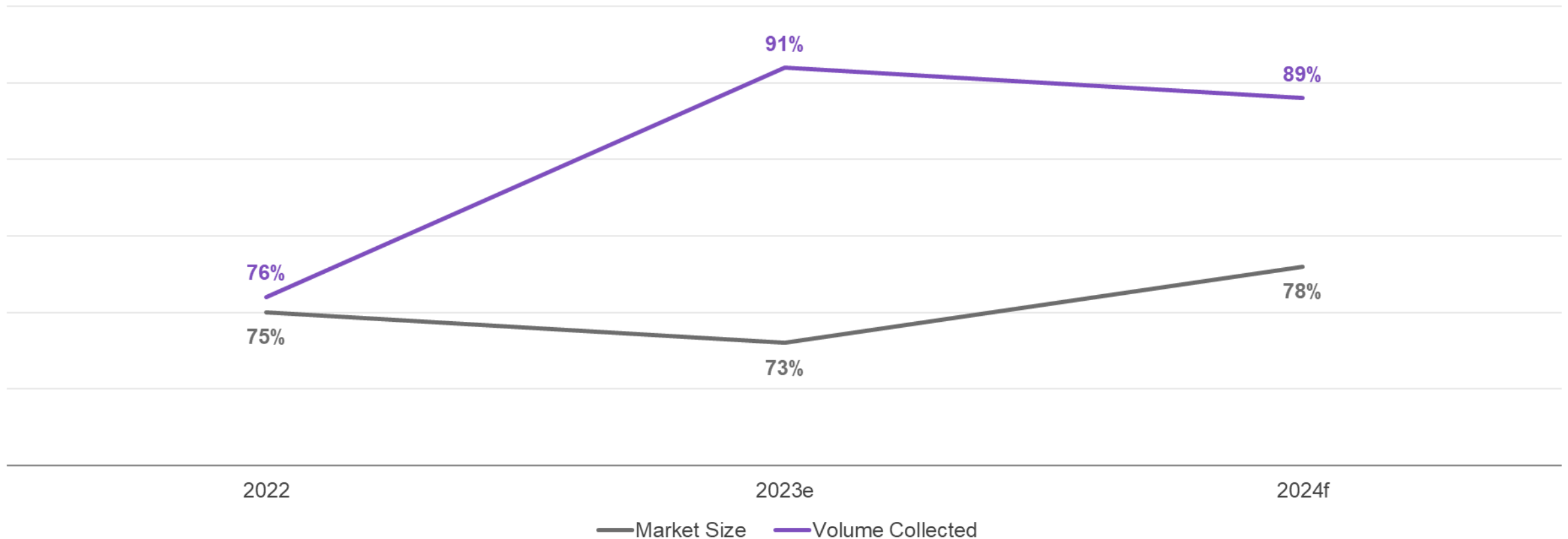
Total industry data sourced from submissions from PROs, estimates from industry associations, BMi forecast models, Packaging Overview 2023 (BMi report published November 2023) amongst other sources



# Collection by Total Industry and PROs

The PRO members represented 75% of all volume placed on the market in 2022. The PROs accounted for 76% of all volume collected for recycling in 2022.

**Market size and collected volume %share of PROs only compared to Total industry data**



# Beneficiation





# Introduction to Beneficiation

There has always been a demand for collected materials in the packaging sector, but not to the degree now being targeted.

Plastic developed demand for selected recycled polymers such as PET re-entering the packaging value chain.

**Waste beneficiation** means **turning waste materials into products of a higher economic value.**

- Involves treating waste to **become the raw materials.**
- **Sustainability** of the finite resources needs **development of a market** to drive the demand for collected materials.
- Collected material is **reintegrated** back into packaging sector as **raw material**
- **Packaging industry** has historically **taken on the responsibility for materials collection**, creating the infrastructure needed to make recycling a **viable component in the packaging value chain** and thus providing a **natural starting point** for the national waste management strategy application for packaging materials.
- **Packaging manufacturers** and **converters** remain the **primary market** for collected materials.

*This assessment is focussed on **packaging only** and excludes paper print.*

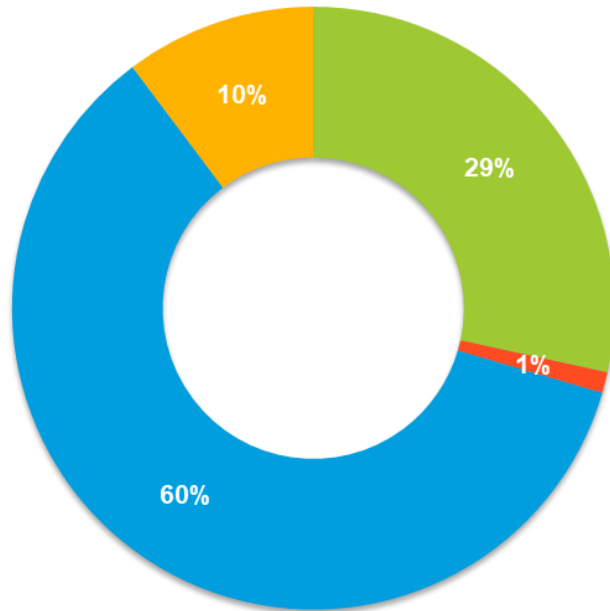


# Beneficiation – Recycled Content Volume

This represents the volume of collected material purchased by packaging converters by packaging type.

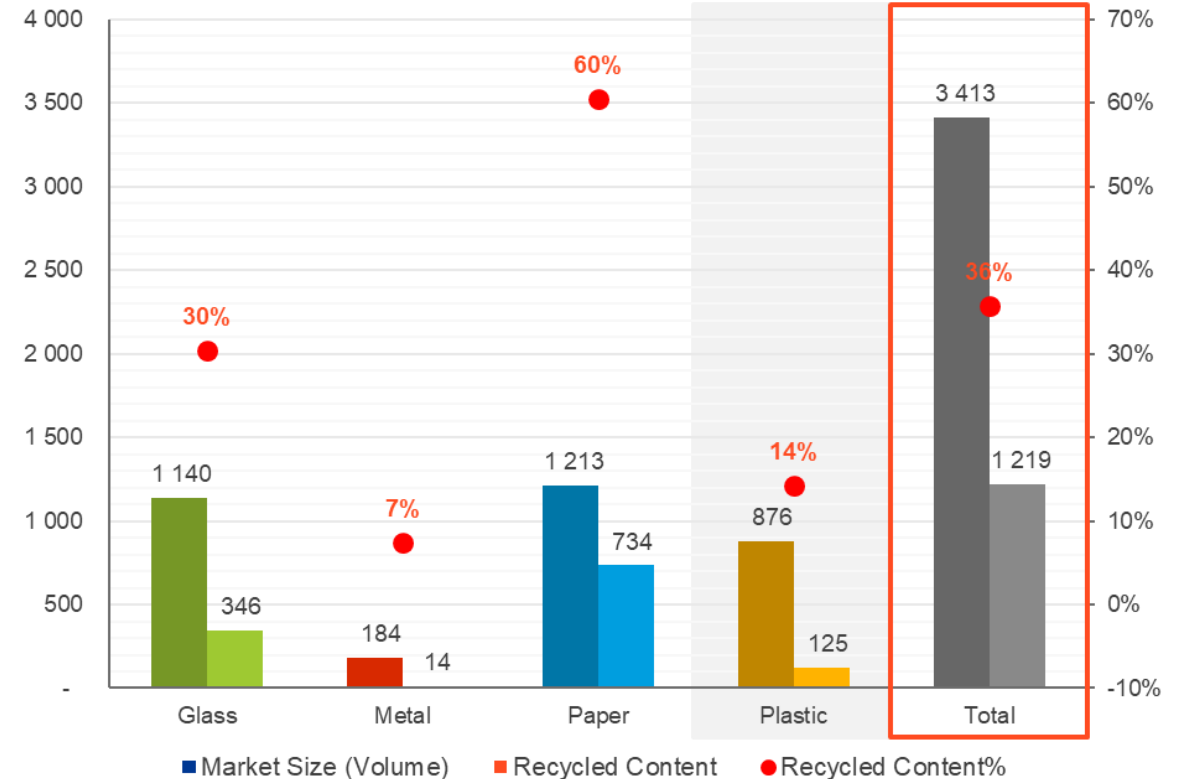
*\*There is user limitation on use of recycled content in food and beverage products.*

2022 Recycled Volume - 1 219 000 Tons



■ Glass ■ Metal ■ Paper ■ Plastic

2022 Volume ('000 Tons)



*In 2022, South African packaging converters and importers placed 3 413 thousand tons of converted packaging products in the market. Of the 3 413 thousand tons, 64% of the raw material was virgin content and the remaining 36% was the incorporation of recycled materials. Importers bring in empty packaging products to be filled locally.*

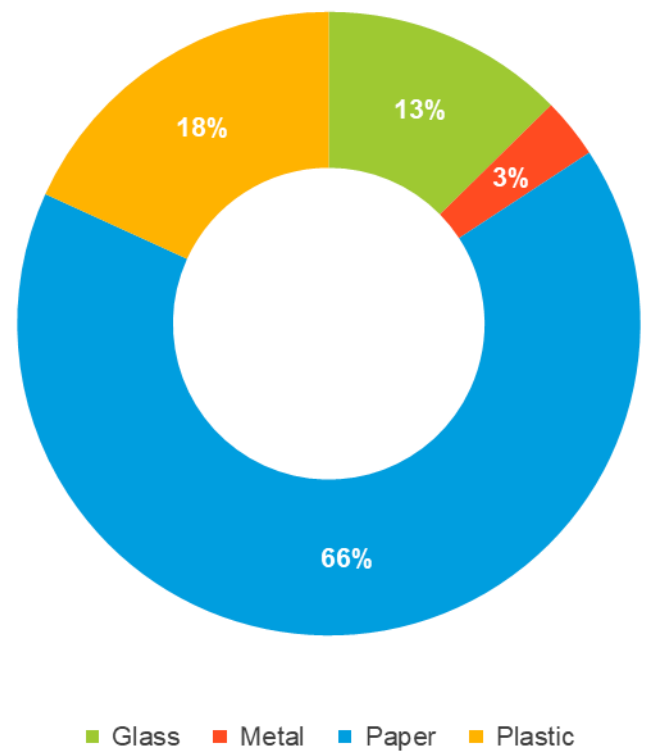


# Beneficiation – Recycled Content Value

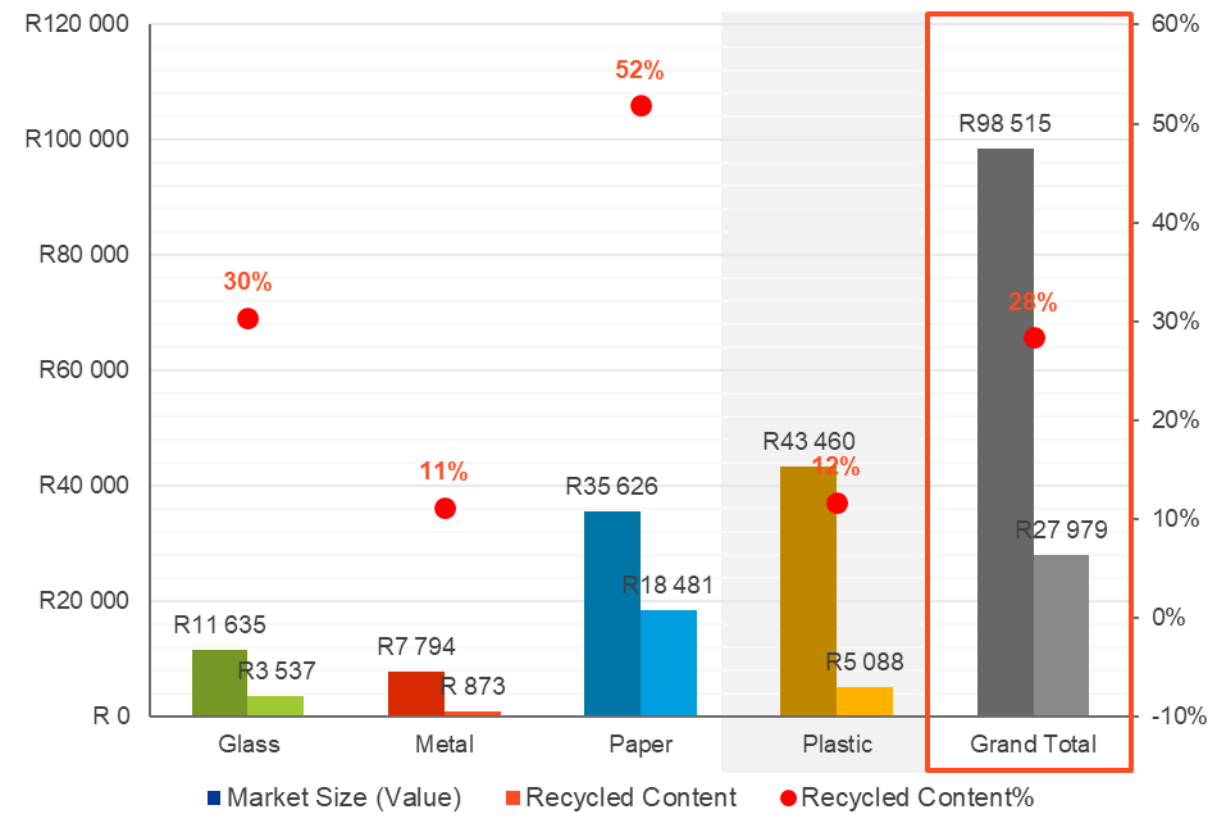
This represents the contribution of recycled material beneficiation by packaging converters to the South African economy.



2022 Value of Recycled Volume - R28 Billion



2022 Value ( R Million)







# Response to EPR Implementation by SA Packaging and Paper Industry

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# Comments about the current PRO structures and their responsibilities



## Summary

- Industry **welcomed the introduction of the EPR regulations** and **worked with DFFE** to accommodate unique South African circumstances.
- PROs **expecting questions to arise** that would need to be addressed once the **regulations came into effect**.
- PROs are **eager to use the framework** provided by the regulations to achieve the aim of a better environment for all.
- There is a lot of **expertise and knowledge** gained over the last years that now resides in the PROs.
- **Intention is to achieve the aims of the legislation to improve the situation** at landfills, improve the economic reality for all involved in the waste collection chain because they agree it is a worthy goal not just to adhere to regulations.
- Many felt that there must be **amendments within this 5-year** period. Issues that have been identified need to be addressed, then remeasured.
- Government and PRO both have **responsibility to inform brand owners**, DFFE doesn't have direct lines of communication and didn't initially have the knowledge, so much of the weight has rested on the PRO shoulders.
- **DFFE is responsible for ensuring registration compliance** if a company chooses not to belong. This is not the responsibility of the PROs.

# Legal Framework



“We must not be ticking the box of the law but not maintaining the spirit of the law. Don’t forget why we are doing this.”

## Challenges

- **Low compliance** – through lack of knowledge and choice not to comply
- Many producers **remain unaware** of the regulations
- **Oversight** (auditing and compliance monitoring) **is lacking / not currently a deterrent**
- **Public participation** did not reach all affected industries

## Suggestions for Change

- **Increase awareness** of regulations to producers – SARS, DFFE, PROs
- **Increase awareness** of penalties for **non-compliance** – DFFE
- **Revisit public participation**, especially to waste collection companies

“Is DFFE capacitated to measure compliance from PRO and of producers?”



# PROs and Members

“Need to work out exactly how many initiatives/PROs can actually be supported, economies of scale.”

## Challenges

- **Lack of PRO registration criteria**
- Dealing with **more than one PRO** per product/waste stream
- PROs can **only audit and work with members**
- There is **no centralised list of producers and importers**
- **Unstable membership base**

## Suggestions for Change

- **Set criteria for PRO registration**
- **Identify non-compliance**, gain economies of scale through pooling of data and resources by:
  - Mandating **one PRO per waste stream**
  - OR Encouraging/mandating PRO collaboration per waste stream**
- **Deregister non-compliant or ineffective PROs**

“Producers need to be responsible; they need to register.”



# Funding Mechanism and EPR Fees

“Great legislation but needs focus on implementing and enforcing”

## Challenges

- Each PRO can propose its **own EPR fee** for each product/waste stream
- Importers cannot always **identify/record** the **products/waste stream**
- Brand owners want to **lower direct collection spend** as they are now paying EPR fees

## Suggestions for Change

- **Apply single EPR fee per waste stream**
- **Extend time period for “container load”** importers to improve data or allow combined category estimates
- **Increase awareness** of necessary spend on final packaging as well as factory waste

“How can we do large plans if our costs are approved annually? Landfills, municipalities don't have waste management plans”



# Data Submissions and Physical Collection Activities

“Our members asked us to expand the range of materials we cover so they can belong to only one PRO”

## Challenges

- Data submissions only **reflect members data**, not yet national data
- System rewards PROs with **lower targets** and small volume base
- Still far from implementing a **satisfactory waste picker fee/subsidy plan**
- **Double counting** and showing a collection rate of more than 100% is possible
- **Minimal separation at source**

## Suggestions for Change

- Work together to **identify non-compliant producers** – PROs per waste stream and DFFE
- **Stabilise membership base** through member terms
- **Measure PROs to EPR target** and to own history
- **Revisit waste picker fee/subsidy plan**
- Encourage **PRO collaboration per waste stream**

“The waste picker service fee is like putting people on payroll without agreeing to the service they provide”

# What is the proposed outlook for PROs going forward given EPR introduction?

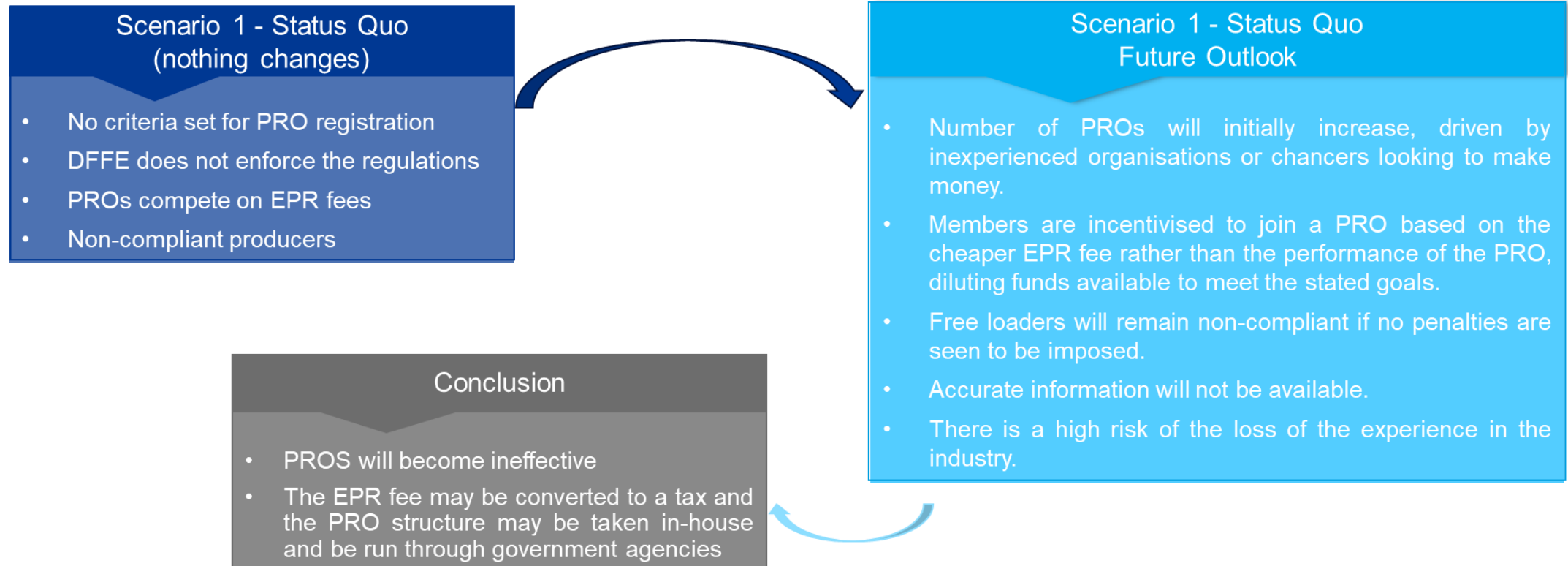
## Status Quo (nothing changes)



### Proposed outlook

The outlook is very dependent on future decisions taken by the department and relevant ministers and few respondents could speculate on the range of possible future scenarios.

However, there was some consensus on a future scenario if no amendments are made to the regulations.





# Thank you

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Any Questions?