SOUTH AFRICA
EXTENDED PRODUCER RESPONSIBILITY FOR PLASTIC PACKAGING IN SOUTH AFRICA
A SYNTHESIS REPORT ON POLICY RECOMMENDATIONS

This report has been produced in collaboration with these partners to develop EPR policy recommendations for plastic packaging in South Africa.

DEPARTMENT OF ENVIRONMENT, FORESTRY AND FISHERIES

5 May 2021

NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT, 2008
(ACT NO. 59 OF 2008)

AMENDMENTS TO THE REGULATIONS AND NOTICES REGARDING EXTENDED PRODUCER RESPONSIBILITY, 2020

1. Barbara Dallas Creecy, Minister of Forestry, Fisheries and the Environment, hereby in terms of sections 18(1), 18(3) and 69(1)(b), (g), (w), (y), (a), (dd) and (ee) of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008), amend the Regulations regarding extended producer responsibility and Notices in respect of the extended producer responsibility scheme for the electrical and electronic equipment sector, the lighting sector, and the paper, packaging and some single use products, published in Government Notices R.1184, R.1185, R.1186 and R.1187 of Government Gazettes 43879, 43880, 43881 and 43882 of 5 November 2020 respectively, as set out in the Schedule hereto.

BARBARA DALLAS CREECY
MINISTER OF FORESTRY, FISHERIES AND THE ENVIRONMENT
This synthesis report flowed from the technical report, *Extended Producer Responsibility for plastic packaging in South Africa: A technical report on policy recommendations*. It reviews extended producer responsibility best practice and summarises key features of other EPR policies from around the world. It provides an overview of key perspectives from a series of expert interviews and a wider stakeholder engagement process on EPR policy for plastic packaging in South Africa. High-level recommendations for strengthening – and implementing – EPR policy for plastic packaging in South Africa are presented up-front.
ABBREVIATIONS AND ACRONYMS

- DFFE: Department of Forestry, Fisheries and the Environment
- EPR: Extended producer responsibility
- IUCN: International Union for Conservation of Nature
- NWMS: National Waste Management Strategy
- OPRL: On-pack recycling labels
- PRO: Producer Responsibility Organisation
- SAWIS: South African Waste Information System

LIST OF FIGURES

- Figure 1: The basic EPR model for improving circularity 19
- Figure 2: EPR policy and stakeholders in the plastic packaging value chain 24
- Figure 3: Overview of inputs and feedback from the stakeholder engagement process 40

LIST OF TABLES

- Table 1: The Producer Responsibility Organisation (PRO) market and governance structure 9
- Table 2: Stakeholder roles and responsibilities 10
- Table 3: EPR policy instruments 11
- Table 4: EPR compliance 12
- Table 5: Advantages and disadvantages of individual and collective responsibility 23
- Table 6: Summary of stakeholder roles and responsibilities under an EPR policy 25
- Table 7: Centralised versus competitive PRO market structure 26
- Table 8: Application of EPR fees 27
- Table 9: EPR case studies for packaging 30
- Table 10: Material organisations in South Africa that cover some plastic packaging materials and formats 34
PROJECT AND POLICY PROCESS TIMELINE

2020

May: Funding received from Swedish Environmental Protection Agency

June–August: Desktop research

June–August: The government’s draft EPR Regulations are published for comment (by the public and private sector). The usual one-month period for comments was extended until the end of August (DFFE, 2020a).

August–September: Interviews with experts

October: Invitations to stakeholders for an introductory webinar on EPR and the project (the invitation included a survey to gauge expertise and the expectations of stakeholders for the webinar and upcoming workshops)

3 November: Webinar: Principles of EPR and project to develop recommendations for an EPR policy framework for plastic packaging

6 November: Draft EPR policy recommendations shared with stakeholders for initial feedback in a structured survey and invitations to attend one of three workshops

November: Feedback from stakeholders on draft EPR policy recommendations used to design the thematic areas for the workshops – Producer Responsibility Organisation (PRO) structure, roles and responsibilities, EPR policy instruments (EPR fees and targets) and EPR compliance

November: The government published the EPR Regulations (DEFF, 2020b). However, following the response from the affected industry stakeholders, the Minister appointed an industry task team to recommend amendments.

24, 26 November: EPR interactive stakeholder workshops

and 1 December

December to: Complete workshop report and monitoring and evaluation

January 2021

2021

February–March: Incorporated workshop feedback and expert interview analysis in EPR policy recommendations reports (technical and synthesis reports)

March: The government published the amended EPR Regulations for public comment (DFFE, 2021a), giving one month for comments to be submitted.

April: Closure of the project

May: The government published the final EPR Regulations, which came into effect on 5 May 2021.
A MANDATORY EPR POLICY IN SOUTH AFRICA: KEY RECOMMENDATIONS

This section provides recommendations for a mandatory extended producer responsibility (EPR) policy for plastic packaging in South Africa. The recommendations are based on the desktop analysis of EPR best practice, country case studies, inputs and feedback from the stakeholder engagement process, and the EPR expert interviews (these aspects are discussed later in the report).

These recommendations could inform future amendments of the EPR Regulations and policy process, provide new ideas and perspectives to further refine and support the implementation of EPR policy in South Africa, and inform EPR implementation plans now that the EPR Regulations have come into effect. However, it is the sole prerogative of the Department of Forestry, Fisheries and the Environment (DFFE) whether to incorporate the recommendations, in part or as a whole, into the EPR or any other policy document.
INTRODUCTION

This synthesis report on extended producer responsibility (EPR) policy recommendations for plastic packaging in South Africa was published as part of a partnership project, *EPR policy framework for accelerating the transition to a Circular Plastics Economy in South Africa*.

PROJECT PARTNERS

The project was funded by the Swedish Environmental Protection Agency and carried out by WWF South Africa, the International Union for Conservation of Nature (IUCN) South Africa and the Department of Forestry, Fisheries and the Environment (DFFE). The objective was to accelerate and support the transition to a circular plastics economy in South Africa, by providing recommendations for a mandatory EPR policy for plastic packaging to the DFFE. While the DFFE-led EPR regulation process deals with packaging more broadly, this project focused specifically on plastic packaging. The aim was to enhance institutional and technical capacity at the national government level and to enrich and strengthen the implementation of EPR policy for plastic packaging in South Africa.

KEY RECOMMENDATIONS

Key recommendations, which are the outcomes of the processes followed during the project, are provided for the following policy themes:

- The PRO market and governance structure (Table 1)
- Stakeholder roles and responsibilities (Table 2)
- EPR policy instruments (Table 3)
- EPR compliance (Table 4).
### Definition of producer

- The EPR Regulations need to clearly define the **producer** (obliged company):
  - An entity that has control over plastic packaging design characteristics, such as material type, colour, shape, weight and complexity (number and type of different materials).
  - An entity that puts plastic packaging onto the **consumer-facing** market.
- This definition could apply to converters, brand owners, retailers and importers of plastic packaging.

### PRO market structure

- The DFFE should promote a long-term goal of establishing one, centralised PRO, with dedicated and specialised material departments for all packaging.
- The DFFE should host inclusive stakeholder engagements specifically on the topic of the PRO market structure and develop guidelines for establishing a PRO to support implementation.

### PRO governance structure

- PRO governance structures should be transparent, accountable and representative of all stakeholders in the value chain, including producers (obliged companies), municipalities, the government, recyclers and informal waste reclaimers.
- The PRO should be established as a non-profit entity, but its performance should be measured as a for-profit entity.
- It is recommended that the DFFE should host stakeholder workshops to improve stakeholder awareness on establishing PROs, their roles and responsibilities, different structures and the advantages and disadvantages of one vs multiple PROs.
- It is also recommended that the DFFE should develop guidelines on the governance structure of a PRO.

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**Who are “producers”?**

Producers are defined as stakeholders who hold responsibility for and influence over the design and production of packaging products, and who place those products on the market. The exact definition can vary from country to country, but in most cases it includes importers, fillers, brand owners and retailers with their own brands. Under an EPR policy, producers are also referred to as **obliged companies**.

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**What is the consumer-facing market?**

The consumer-facing market could be defined as the market for “shelf-facing consumers” or the consumption phase of the packaging’s life cycle, prior to it being discarded.
### Table 2: Stakeholder Roles and Responsibilities

<table>
<thead>
<tr>
<th>Policy Subtheme</th>
<th>Recommendations</th>
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</table>
| **Government authorities** |  ■ Enforce compliance with the EPR Regulations and enact penalties.  
■ Ensure policy alignment and coherence between the EPR Regulations, waste management policies and other circular economy policies across different departments and levels of government (vertical and horizontal alignment).  
■ Build the capacity of and enforce the South African Waste Information System (SAWIS), with support from Statistics South Africa (Stats SA). |
| **Municipalities** |  ■ Must be responsible for the collection of wet/residual waste.  
■ Must be responsible for ensuring that the collection of obliged material has taken place in line with EPR targets.  
■ Create an enabling environment to support collaboration between relevant stakeholders and the integration of informal waste reclaimers, for effective and efficient collection of obliged material.  
■ It is recommended that the DFFE should host annual stakeholder engagements between PROs, producers (obliged companies), municipalities and informal waste reclaimers to support collaboration and develop context-specific solutions for the collection of obliged material.  
■ It is also recommended that the DFFE should investigate and develop collaboration models and guidelines for supporting the collection of obliged material. |
| **Obliged companies / producers** |  ■ Register with a PRO and pay EPR fees.  
■ Implement eco-design principles and on-pack recycling labels (OPRLs) for improved circularity of products and packaging.  
■ Fulfil monitoring and reporting obligations to the PRO. |
| **Producer Responsibility Organisations (PROs)** |  ■ Fulfil EPR obligations on behalf of members.  
■ Collect and administer all EPR fees received from members.  
■ Support the collection of obliged materials by collaborating with municipalities and informal waste reclaimers.  
■ Support the integration of informal waste reclaimers in accordance with the Waste Picker Integration Guidelines for South Africa, in collaboration with municipalities.  
■ Conduct public information and awareness programmes.  
■ Fulfil all monitoring, reporting and auditing obligations regarding waste management data, progress on EPR targets, labelling claims and the collection and utilisation of EPR fees. |
| **Waste management operators, recyclers and the informal sector** |  ■ Fulfil waste management tenders, contracts and agreements and provide efficient and effective sustainable waste management services.  
■ Provide waste management data to clients for monitoring, reporting and auditing purposes. |
| **Consumers** |  ■ Avoid, reduce and minimise plastic packaging waste.  
■ Dispose of plastic packaging waste sustainably via separation at source (s@s). |
### TABLE 3: EPR POLICY INSTRUMENTS

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<tr>
<th>POLICY SUBTHEME</th>
<th>RECOMMENDATIONS</th>
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<tr>
<td><strong>EPR fees</strong></td>
<td>EPR fees cover the full net costs of the PRO’s EPR activities, including:</td>
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<td>- Collection, transportation, sorting, reuse, recycling and/or final disposal of materials in a sustainable manner.</td>
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<td>- Administrative, monitoring and reporting and operational costs of the PRO.</td>
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<td>- Costs of public information and awareness campaigns.</td>
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<td>- Costs associated with preventing plastic packaging waste and littering.</td>
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<td>The following additional research is recommended:</td>
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<td>- A baseline assessment of expected collection costs based on the cost per tonne of the municipal waste collection system, and baseline assessments of costs associated with the other PRO activities listed above.</td>
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<td>- Investigate the baseline cost of using EPR fees to subsidise upstream activities (such as research and development and eco-design) and downstream activities (such as the integration of informal waste reclaimers and subsidies to the secondary material market).</td>
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<td>- Review the cost coverage outlined above on a continual basis to account for external market shocks.</td>
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<td><strong>EPR fee differentiation</strong></td>
<td>It is recommended that basic EPR fee differentiation be implemented according to the material type and format and its recyclability, in practice and at scale. Higher fees should be charged on less recyclable materials and formats, to incentivise eco-design and sustainable material and format choices.</td>
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<td>Guidance for packaging design is currently under development, within Operation Phakisa: Chemicals and Waste Economy, to classify what constitutes “recycled” in practice and at scale. This needs to be based on internationally recognised definitions as provided by the International Organization of Standardization (ISO) or the Ellen MacArthur Foundation.</td>
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<td>Further recommendations related to EPR fee differentiation include:</td>
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<td>- Research should be conducted to determine different pricing thresholds for different material and format recyclability levels, which should be used to develop an EPR Fee Modulation Guideline for a PRO. This process should involve all value chain stakeholders including all levels of government (national, subnational and local) and should be supported by other information instruments, such as the Operation Phakisa packaging design guidelines, currently under development.</td>
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<td>- Further provision should be made for the option to increase the degree and complexity of eco-modulation of EPR fees after the first five years of implementation, depending on the needs of the market and the success of the EPR policy.</td>
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<td><strong>EPR targets</strong></td>
<td>Develop clear and agreed-upon definitions, methodologies, baselines (pre-Covid 2019) and data requirements for each EPR target. This should be done in an inclusive stakeholder engagement process.</td>
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<td>- Targets should have an agreed-upon margin for errors, potentially between 3% and 5%.</td>
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<td>- Targets should be ambitious and be developed for each material type.</td>
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<td>- Collection and landfill diversion targets should be prioritised in the initial implementation phase of the EPR Regulations.</td>
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<td>- Data management is crucial to monitor progress on the targets. It is recommended that either a central data repository be developed or that the capacity and enforcement of, and trust in, SAWIS, with support from Stats SA, be strengthened.</td>
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### TABLE 4: EPR COMPLIANCE

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<tr>
<th>POLICY SUBTHEME</th>
<th>RECOMMENDATIONS</th>
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<tbody>
<tr>
<td><strong>Monitoring and reporting</strong></td>
<td>- All stakeholders across the value chain should be required to report on material flow data into a centralised data management system.</td>
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<td>- The centralised data management system should be managed either by an independent clearing house or by SAWIS.</td>
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<td>- If SAWIS is used as the preferred data management system, then the capacity and enforcement of, and trust in, SAWIS must be improved with the support of Stats SA.</td>
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<td>- Obligated companies (producers) should be required to register with and pay fees to a PRO.</td>
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<td>- Obligated companies should be required to report material flow data to PROs.</td>
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<td>- PROs should monitor producer registration, EPR fee payments and use, and material flow data. Any sensitive information that might be a competitiveness concern must be aggregated before being reported to government authorities.</td>
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<td>- PROs should employ independent third-party auditors to audit all the relevant EPR data, including waste management data and material flows, appropriate collection and use of EPR fees, label certification and verification, and progress towards EPR targets.</td>
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<td>- PROs and the central data management system (SAWIS or an independent body) should report to government authorities, annually, providing aggregated data for the overall EPR system and performance against national EPR targets.</td>
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<td>- PROs and the central data management system (SAWIS or an independent body) should report non-compliance and free riders to government authorities.</td>
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<tr>
<td><strong>Enforcement</strong></td>
<td>- The government must ensure a clear understanding among all stakeholders of their roles, responsibilities and reporting requirements.</td>
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<td>- The government should implement penalties, such as fines, suspension of producer licences, banning of packaging from the market and suspension of PRO accreditation before implementing jail time. Jail sentences should only be used for repeat offenders.</td>
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<td>- If PROs fail to meet EPR targets, there should be a review process in place to understand why, rather than implementing penalties right away.</td>
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<td>- The performance of municipalities also needs to be monitored and enforced.</td>
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**What is a “free rider”?**

A free rider is a person or company who benefits from the actions or efforts of another in relation to an EPR scheme without fully complying with the requirements of the EPR scheme.
BACKGROUND TO THE PROJECT

This research was undertaken to accelerate and support the transition to a circular plastics economy in South Africa by providing recommendations for a mandatory EPR policy for plastic packaging to the Department of Forestry, Fisheries and the Environment (DFFE). While the DFFE-led EPR regulation process deals with packaging more broadly (DFFE, 2021b), this project focuses specifically on plastic packaging.

The aim is to enhance institutional and technical capacity at national government level and to assist in strengthening future amendments to EPR policy for plastics packaging in South Africa. The project also seeks to support the effective implementation of EPR policy for plastic packaging.
Plastic is deeply ingrained in modern society and plays a critical role in our day-to-day lives. From food to transport, clothing to technology, leisure to healthcare and sport to culture, it is difficult to imagine a world without plastic. However, society has failed to account for the negative environmental and socio-economic impacts of our growing dependence on plastic and the pollution it causes.

Extended producer responsibility (EPR) is a policy principle that extends producers’ responsibility for their products and packaging to the end-of-life stage of these products to ensure sustainable waste management (Bünemann and Brinkmann, 2019; Van Rossem et al., 2006). It also provides incentive mechanisms for product redesign or eco-design, and for increased repairability, reusability or recyclability. EPR, therefore, plays a critical role in supporting the transition to a circular economy and in addressing the plastic pollution crisis (Bünemann and Brinkmann, 2019; Van Rossem et al., 2006).

The objective of this report is to identify EPR best practices for plastic packaging (by way of a review of EPR literature and country case studies, expert interviews and extensive stakeholder engagement) to support EPR policy and its implementation in South Africa. The research methodology comprised desktop research and a literature review, a stakeholder engagement process and interviews with EPR experts.

Desktop Research and Literature Review

The initial phase of the project began with a desktop study and literature review, focusing on best practices and international case studies on EPR policies for plastic packaging. The literature review informed the initial development of this EPR synthesis report and accompanying EPR technical report (available on request), including proposed recommendations. These recommendations were discussed during a broader stakeholder engagement process, which helped to refine the final recommendations provided in the two reports.
STAKEHOLDER ENGAGEMENT PROCESS AND EPR EXPERT INTERVIEWS

A broader stakeholder engagement process was conducted online by means of a series of expert interviews, an introductory webinar, two surveys and three interactive stakeholder workshops. These provided an inclusive, participatory process for engaging with industry and other key stakeholders to improve awareness of EPR policy and obtain key stakeholder inputs into the draft EPR policy recommendations.

Altogether 26 semi-structured interviews with international and local EPR experts were conducted between August and September 2020. The interviewees were selected based on their expertise, familiarity with EPR and referrals by fellow interviewees. The interview responses were used to substantiate the final EPR policy recommendations, with key perspectives summarised in the section “A mandatory EPR policy in South Africa: Key recommendations” (page 7–12). Interviewees were kept anonymous and prior consent was obtained before attributing any comments to a particular interviewee.

The introductory webinar, hosted on 3 November 2020, provided stakeholders with the necessary background context to the project and research findings on EPR best practice. This allowed more time for deeper engagement during the online stakeholder workshops.

Two online stakeholder surveys were also conducted: the first to gauge stakeholders’ general understanding and awareness of EPR policy, and the second to obtain written input and feedback on the draft EPR policy recommendations shared with stakeholders. This feedback was used to inform the design of the online interactive workshops.

Three identical interactive online stakeholder workshops were hosted on 24 and 26 November and 1 December 2020. Provision was made for those stakeholders who did not have access to the internet or who faced other connectivity barriers by hosting them at the WWF South Africa Johannesburg office. The online workshops were designed as an interactive avenue for engaging with stakeholders and inviting their feedback on the draft EPR policy recommendations. Their inputs and feedback were used to strengthen the final EPR policy recommendations, while areas of consensus, divergence and uncertainty among stakeholders were captured in the section “EPR stakeholder engagement feedback” (page 37–43).
THE ROLE OF EPR IN A CIRCULAR ECONOMY

Extended producer responsibility (EPR) is increasingly being recognised as a cornerstone policy principle for a range of preventative environmental policies and a transition to a circular economy, rather than as a policy instrument solely designed as a glorified deposit-refund or take-back system (Pouikli, 2020; Van Rossem et al., 2006).
While not a silver bullet, EPR can support and strengthen the enabling environment for effective sustainable waste management and the transition to a circular economy.

EPR is based on the “polluter pays” principle and extends the responsibilities of the producer (obliged company) to all parts of the life cycle of their product or packaging, with a particular focus on end-of-life management, where the collection, sorting, reuse, recycling and/or final disposal of the product is achieved in a sustainable manner (Basel Convention, 2019; Bünemann and Brinkmann, 2019; Gupt and Sahay, 2015; Lindhqvist, 2000; OECD, 2016; Van Rossem et al., 2006; Watkins and Gionfra, 2019).

Traditionally, EPR policy focused on the end-of-life management of products and packaging to improve sustainable waste management (Van Rossem et al., 2006). This resulted in the misconception that EPR is limited to the post-consumer phase of the product or packaging life cycle (OECD, 2001). However, EPR literature (Lindhqvist, 2000; OECD, 2016; Pouikli, 2020; Van Rossem et al., 2006) suggests that EPR has a broader purpose: to improve the environmental sustainability of products, packaging and production systems across their entire life cycles. EPR is, therefore, recognised as a cornerstone policy principle for the transition to a circular economy (Pouikli, 2020; Van Rossem et al., 2006). Figure 1 provides an illustration of the EPR model and how it contributes to supporting a circular economy.

Through EPR fees and establishing targets, EPR policies create incentive mechanisms for producers to improve the sustainability and circularity of their packaging and production processes, and to reduce their environmental impacts, particularly with regard to waste (Basel Convention, 2019; Bünemann and Brinkmann, 2019; Gupt and Sahay, 2015; Lindhqvist, 2000; OECD, 2016; Van Rossem et al., 2006; Watkins and Gionfra, 2019). Therefore, EPR policy can foster the operational implementation of sustainable and circular product design and facilitate the partial or complete closing of material loops (Pouikli, 2020). This is a core EPR principle that distinguishes it from the average take-back scheme. Box 1 summarises how EPR can strengthen sustainable waste management and support the transition to a circular plastics economy.
FIGURE 1: THE BASIC EPR MODEL FOR IMPROVING CIRCULARITY

Source: Adapted from Bünemann and Brinkmann (2019)
The South African State of Waste Report (DEA, 2018) recognises EPR as the preferred economic instrument to reduce waste generation, increase waste diversion from landfill and improve sustainable waste management (Pienaar and Werner, 2020). The National Waste Management Strategy (NWMS) 2020 (DFFE, 2020c) also recognises EPR as a critical component that underpins the overall strategic approach to minimising waste and making the transition to a circular economy in South Africa. EPR is, therefore, a cornerstone policy for a circular economy as it supports the principles of redesigning for environmental sustainability, eliminating waste and ensuring that materials retain their highest value and remain in the economy (Pouikli, 2020).

**BOX 1: HOW EPR POLICY CAN STRENGTHEN SUSTAINABLE WASTE MANAGEMENT AND SUPPORT A CIRCULAR PLASTICS ECONOMY**

1. Supporting more reliable logistics by providing more resources and infrastructure for sustainable waste management.
2. Supporting demand for secondary resource materials, thereby increasing the collection, separation and recycling of waste, which, in turn, foster the transition to a circular economy.
3. Encouraging producers and consumers to make more sustainable choices by providing a pricing mechanism that internalises the cost of waste.
4. Through the pricing mechanism, encouraging producers to redesign their products and packaging for the post-consumer phase of the product life cycle.
5. Increasing producers’ responsibility and awareness of the issues related to the end-of-life management and external costs of their products.

Sources: Bünnemann and Brinkmann (2019); Gupt and Sahay (2015); Lindhqvist (2000); OECD (2016); Peck (2003); Van Rossem et al. (2006); Watkins and Gionfra (2019)

**What is the purpose of EPR?**

The broader purpose of EPR is to improve the environmental sustainability of products, packaging and production systems across their entire life cycles. EPR policy can facilitate the closing of material loops, which distinguishes it from the average take-back scheme.

**What are the principles of EPR?**

EPR is a cornerstone policy for a circular economy, which rests on three principles: redesigning for environmental sustainability, eliminating waste, and preserving the value of materials to keep them in the economy.
EPR BEST PRACTICE

This section highlights best practice with regard to the types of responsibilities under EPR, the respective roles and responsibilities of stakeholders along the plastic packaging value chain and the various PRO models and market structures that can be implemented.

It also discusses monitoring, reporting and compliance. The section concludes with a comparison of four case studies on EPR schemes used in countries from the developing and the developed world.
INTERNATIONAL EPR BEST PRACTICE FOR PLASTIC PACKAGING

EPR policy should ideally be goal oriented rather than overly prescriptive and should be environmentally, socially and economically sustainable.

The basics of any EPR policy should, as a minimum requirement, ensure that:

- Every producer or obliged company becomes responsible for the end-of-life management of their packaging, either individually or collectively.
- Obligated companies who join a collective EPR scheme pay a fee for financing the collection, sorting, reuse, recycling and/or final disposal of their products (Bünemann and Brinkmann, 2019; European Commission, 2014; Watkins et al., 2017; Watkins and Gionfra, 2019).

An EPR policy and legal framework should clearly outline (Bünemann and Brinkmann, 2019):

- The objectives, scope and targets of the EPR policy
- The obligations, roles and responsibilities of all stakeholders involved
- A framework for establishing a Producer Responsibility Organisation (PRO)
- The EPR fee cost coverage of activities and differentiation or modulation based on various characteristics of the packaging and end-of-life systems and infrastructure available
- Monitoring, enforcement, compliance and penalty mechanisms
- The timeline for implementation.

INDIVIDUAL VS COLLECTIVE RESPONSIBILITY

When implementing an EPR policy, obliged companies can fulfil their product end-of-life management responsibilities either individually or collectively. Individual responsibility is when an obliged company fulfils its EPR obligations on its own and for its products only. Collective responsibility is when obliged companies collectively fulfil their EPR obligations, regardless of brand, via a PRO (Bünemann and Brinkmann, 2019; OECD, 2016; Pouikli, 2020; Van Rossem et al., 2006; Watkins et al., 2017). The PRO is then responsible for fulfilling the obligations of obliged companies. Individual and collective responsibility both have their own advantages and disadvantages, summarised in Table 5.

ROLES AND RESPONSIBILITIES OF DIFFERENT STAKEHOLDERS

A successful EPR policy requires clear legislation and collaboration between all stakeholders in the packaging and waste management value chains (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016; Pouikli, 2020; Watkins et al., 2017; Watkins and Gionfra, 2019). Figure 2 illustrates where the critical stakeholders are in the packaging value chain, including the government, municipalities, producers (importers, brand owners and retailers), waste management operators (including informal sector and recyclers), PROs and consumers. Table 6 summarises some of the generic stakeholder responsibilities under an EPR policy, but these might differ for different countries.
### Table 5: Advantages and Disadvantages of Individual and Collective Responsibility

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<th>Individual Responsibility</th>
<th>Collective Responsibility</th>
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<tr>
<td><strong>Advantages</strong></td>
<td>■ Greater incentive for eco-design and redesigning packaging for improved reusability and recyclability.</td>
<td>■ Potentially relatively lower costs for each obliged company.</td>
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<tr>
<td></td>
<td>■ Potentially relatively lower costs for each obliged company.</td>
<td>■ Lower administrative burden related to monitoring, compliance and enforcement of EPR policies.</td>
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<td></td>
<td>■ Lower administrative burden related to monitoring, compliance and enforcement of EPR policies.</td>
<td>■ Greater and more equitable distribution of end-of-life activities between urban and rural areas and packaging materials.</td>
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<tr>
<td></td>
<td>■ Greater and more equitable distribution of end-of-life activities between urban and rural areas and packaging materials.</td>
<td>■ Potentially less incentive for eco-design and redesigning packaging for improved reusability and recyclability.</td>
</tr>
<tr>
<td><strong>Disadvantages</strong></td>
<td>■ High administrative burden related to monitoring, compliance and enforcement of EPR polices on individual obliged companies.</td>
<td>■ Potentially less incentive for eco-design and redesigning packaging for improved reusability and recyclability.</td>
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<td>■ High risk of free riding and concentration of end-of-life activities in urban areas.</td>
<td>■ Could potentially lead to “averaging of costs” (EPR fees) between producers (obliged companies), leading to free riding in respect of eco-design rather than compliance. Some producers may not redesign their packaging, while others will.</td>
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<td>■ Individual obliged companies could face relatively higher end-of-life costs and effort, potentially leading to a duplication of effort and investment.</td>
<td>■ Risk of potential anti-competitiveness behaviour by PROs that can create regulatory and market-entry barriers for new or small-scale producers.</td>
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</tbody>
</table>

Sources: Bünemann and Brinkmann (2019); OECD (2016); Pouikli (2020); Van Rossem et al. (2006); Watkins et al. (2017)

### Exploring Different PRO Models

A PRO can be established, organised and managed in different ways (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016), as one of the following:

- **Industry-led non-profit entities**, which are most common around the world and often required by legislation. The legal form can be an anonymous society, in which producers (obliged companies) are shareholders or a professional association.

- **Industry-led for-profit entities**, which are seen occasionally and are mostly common in the absence of legislation requiring otherwise. They are usually set up as a private firm, with investors seeking to make a profit.

- **Public agency** or part of an existing government structure, which is the least common model, in which the public authority has a dominant role.

There are no clear advantages or disadvantages in the literature that support a non-profit or for-profit PRO model over the other (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016). In addition, there does not appear to be any significant or visible difference in PROs’ costs or performance. However, the main argument in favour of a non-profit PRO model is that PROs serve the general interest of the public and should not, therefore, make a profit from their activities. This becomes particularly relevant in a developing country context where for-profit waste management activities might neglect areas with limited access (such as rural areas) or materials that are difficult to collect, reuse or recycle. The counter-argument is that a for-profit PRO model would be more economically efficient.
FIGURE 2: EPR POLICY AND STAKEHOLDERS IN THE PLASTIC PACKAGING VALUE CHAIN

Source: Adapted from Bünemann and Brinkmann (2019)
The PRO market can be established as either a monopolistic one, where there is a single, centralised PRO for a particular product, packaging or material type; or it can be more competitive, where there are several PROs for a particular product, packaging or material type that compete with one another (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016). Note that this does not mean that the PROs control the post-consumer material market for plastics; it simply means that there is either a single PRO or multiple PROs for plastic packaging. The centralised versus competitive debate has several diverging arguments in favour of one market structure over the other, as summarised in Table 7.

TABLE 6: SUMMARY OF STAKEHOLDER ROLES AND RESPONSIBILITIES UNDER AN EPR POLICY

<table>
<thead>
<tr>
<th>STAKEHOLDER</th>
<th>RESPONSIBILITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government authorities</strong></td>
<td>Legislation, supervision and enforcement of EPR policy and law.</td>
</tr>
<tr>
<td><strong>Obliged companies / Producers</strong></td>
<td>Fulfil EPR obligations of collection, sorting and/or reuse/recycling of packaging waste. This is primarily done individually, or collectively through a PRO, in which case the producer must pay the EPR fee to the PRO.</td>
</tr>
<tr>
<td><strong>PROs</strong></td>
<td>Collect EPR fees from members and implement EPR obligations (collection, sorting and/or reuse/recycling) on behalf of obliged companies.</td>
</tr>
<tr>
<td><strong>Municipalities</strong></td>
<td>This varies drastically from country to country. South Africa’s EPR Regulations, which were published on 5 November 2020, proposed that municipalities will not be responsible for the collection of obliged material. The amended regulations were published in May 2021.</td>
</tr>
<tr>
<td><strong>Waste management operators</strong></td>
<td>Receive funds from the EPR system via a PRO and are responsible for handling packaging waste (collection, sorting and recycling).</td>
</tr>
<tr>
<td><strong>Consumers</strong></td>
<td>Responsible for avoiding, reducing and minimising their waste. They need to be informed by the EPR system / PRO about strategies for waste reduction and proper separation, return and/or disposal of packaging.</td>
</tr>
</tbody>
</table>

Sources: Bünemann and Brinkmann (2019); European Commission (2014); OECD (2016); Van Rossem et al. (2006); Watkins and Gionfra (2019)
TABLE 7: CENTRALISED VERSUS COMPETITIVE PRO MARKET STRUCTURE

<table>
<thead>
<tr>
<th>STRUCTURE OF A CENTRALISED PRO MARKET</th>
<th>STRUCTURE OF A COMPETITIVE PRO MARKET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can lead to efficiency through economies of scale, and to reduced administrative burden and data and compliance reporting (less burden on obliged companies having to pay multiple PROs for multiple packaging products and materials).</td>
<td>Competition triggers cost efficiency (at the individual PRO level) and avoids suboptimal functioning. This can reduce PRO costs and, therefore, EPR fees for obliged companies.</td>
</tr>
<tr>
<td>All EPR obligations are centralised, which avoids duplication of efforts and investment, and all producers (obliged companies) are linked to one system, which leads to greater simplicity of the system.</td>
<td>Maintains PRO market flexibility and efficiency by allowing for different approaches to reach EPR targets (innovation) and diversifying the demand for waste management services.</td>
</tr>
<tr>
<td>Improved transparency and ease of monitoring and evaluating compliance and performance against EPR targets, and control of free riders.</td>
<td>Avoids risks associated with monopolistic market structures, such as high costs and inefficiencies.</td>
</tr>
<tr>
<td>Avoids “cherry picking” and ensures fair distribution of waste management obligations.</td>
<td>A competitive PRO market can lead to a “race to the bottom” for cost competitiveness, which can result in some geographical areas or waste types being left out of the system.</td>
</tr>
</tbody>
</table>

Sources: European Commission (2014); Kaffine and O’Reilly (2015)

What are “externalities”? 

If a consumer buys a plastic item, the price they pay does not reflect the environmental and socio-economic externalities or true costs of environmental and socio-economic damage in nature from plastics. These externalities or “damage” costs need to be internalised or “included” in the costs charged for plastic in the market place. This is what EPR does: it includes the costs of avoiding the damage, i.e. the costs for collection, sorting, recycling and upstream interventions to design packaging to be recycled or reused.

Although, once again, there is no empirical evidence to support one market structure over the other, the focus should be on establishing a level playing field to ensure that PROs implement their EPR obligations as efficiently and fairly as possible. This can be achieved by establishing a policy framework that ensures fair competition along the value chain, with clear rules and standards for PROs (European Commission, 2014).

EPR FEES

EPR fees are paid by obliged companies to a PRO, which uses these fees to implement EPR obligations on their behalf. EPR fees should, ideally, be designed to internalise the externalities of waste in nature. However, as a minimum requirement, they should cover the full (or partial) costs of the end-of-life management of packaging (Bünemann and Brinkmann, 2019; European Commission, 2014; Kaffine and O’Reilly, 2015; OECD, 2016; Pouikli, 2020; Watkins et al., 2017; Watkins and Gionfra, 2019).

The full-cost approach includes (European Commission, 2014; Kaffine and O’Reilly, 2015; OECD, 2016; Pouikli, 2020; Watkins et al., 2017; Watkins and Gionfra, 2019):

- Costs related to collecting, transporting, sorting, reusing/recycling and final disposal of materials in a sustainable manner
- Administrative, reporting and operational costs of the PRO
- Costs of public information and awareness campaigns, such as on-pack recycling labels (OPRLs)
- Costs related to waste and litter prevention.

The partial-cost approach only covers some of the costs listed above. EPR fees can also be applied in different ways depending on the degree of fee differentiation between material types. These are summarised in Table 8.
### Table 8: Application of EPR Fees

<table>
<thead>
<tr>
<th>Application</th>
<th>Determinants</th>
<th>Advantages and Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Average EPR fees</strong></td>
<td>PROs can apply an average fee to all their members, based on:</td>
<td>- Applying an average fee to all producers (obliged companies) effectively allows for the cross-subsidisation of different materials – those that are easier to collect and recycle subsidise those that are harder to collect or recycle.</td>
</tr>
<tr>
<td></td>
<td>- The amount of product or packaging they place onto the market</td>
<td>- The disadvantage of this approach is that there is more chance of free riding with regard to eco-design, as there is less incentive for an individual producer to redesign their products.</td>
</tr>
<tr>
<td></td>
<td>- Their market share or annual revenue</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The material type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Waste management infrastructure</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The availability and cost of waste management operators.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This is normally associated with a small amount of differentiation between broad material categories, such as plastic, paper, glass and metal, for example, and the associated end-of-life management costs of these materials.</td>
<td></td>
</tr>
<tr>
<td><strong>Differentiated EPR fees</strong></td>
<td>PROs can apply differentiated fees to different materials, based on:</td>
<td>- Applying differentiated fees adds complexity to the system but can provide a stronger price signal to encourage eco-design.</td>
</tr>
<tr>
<td></td>
<td>- The recyclability of the material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Cost of end-of-life management of each material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- The producer’s market share</td>
<td></td>
</tr>
<tr>
<td><strong>Eco-modulation</strong></td>
<td>EPR fees can be further differentiated according to very specific characteristics, including:</td>
<td>- While eco-modulation can provide a greater incentive for eco-design and reduce free riding, it adds complexity to the EPR system.</td>
</tr>
<tr>
<td></td>
<td>- The material type and composition (repairability, reusability, recyclability, biodegradability, compostability)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Secondary-use value and weight of the material</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- EPR targets related to collection and recycling rates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Existence of deposit-refund schemes.</td>
<td></td>
</tr>
</tbody>
</table>

Sources: Bünnemann and Brinkmann (2019); European Commission (2014); Kaffine and O’Reilly (2015); OECD (2016); Pouikli (2020); Watkins and Gionfra (2019)

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**What is biodegradable plastic?**

Biodegradable plastic is plastic that will degrade completely into substances found in nature. The definition of biodegradable does not include a specific timeframe or specific environmental conditions for breakdown (bpiworld.org/composting).

**What is compostable plastic?**

Compostable plastic is a subset of biodegradable plastic. Compostable plastic breaks down and becomes usable, non-toxic soil conditioner under controlled conditions, in a timeframe comparable to that of other compostable materials (ISO 17088:2012(en), Specifications for compostable plastics).

**What is secondary-use value?**

Secondary-use value is more than just the price of secondary material. It refers to a material’s recyclability, suitability as a recycled material and the market price of the recycled material.
EPR TARGETS

EPR targets are a critical element of any EPR policy as they dictate the level of investment, and, in turn, the fees required to meet the targets. Targets should be based on: (a) which obliged materials are covered by the EPR policy; (b) the geographical coverage of the scheme (South Africa’s EPR Regulations propose national coverage); (c) the waste hierarchy; and (d) who bears the responsibility for collection – contracted service providers or municipalities. In South Africa, the producer (obliged company) has the responsibility for collection of all plastic packaging, which can be implemented via a PRO, contracting waste management operators or individually.

It is equally critical that targets are clearly defined, with clear methodologies and data requirements. Examples of EPR targets include:

- **Collection rates** based on the amount of packaging placed on the market versus the amount collected.
- **Recycling targets** based on the amount of material collected for recycling (input recycling target) and/or the amount of material that is actually recycled (output recycling target) versus the amount placed on the market.
- **Landfill diversion targets** based on the amount of packaging material prevented from going to landfill.
- **Recycled content targets** based on the amount of recycled material versus virgin material used to produce another product or package (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016; Pouikli, 2020; Watkins et al., 2017; Watkins and Gionfra, 2019).
MONITORING, REPORTING AND COMPLIANCE

Establishing a monitoring and reporting framework or system is critical to the success of any EPR policy (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016; Watkins and Gionfra, 2019). Monitoring and reporting are not only important for measuring progress against EPR targets or the effectiveness and efficiency of sustainable waste management more broadly, but also play a critical role in ensuring compliance with EPR law.

Best practice suggests that a monitoring and reporting system should record and track relevant packaging material data (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016; Watkins and Gionfra, 2019), including:

- Packaging that is introduced or placed onto the market each year by individual producers (obliged companies), aggregated at the PRO level.
- Packaging material flows (type and weight), including packaging material that is collected, sorted, reused, recycled and sent to landfill. This ideally should be reported by the relevant stakeholders at each stage of the value chain via a centralised online reporting system.

Given competitiveness concerns about such data, it is suggested that producers report data to an independent governing body, such as a PRO or centralised authority/clearinghouse (with oversight from the Competition Commission), and that it remains confidential. Only aggregated data for all a PRO’s members would then be reported under the EPR monitoring and reporting system. To ensure compliance, the monitoring and reporting system should be audited, either by independent auditors or by government authorities. Data from individual producers and PROs would also be audited. The financial audits of PROs should be made available to government authorities.

In addition, a monitoring and reporting system can help to ensure that:

- Free riding is prevented or minimised (via national registries, for example).
- All stakeholders, particularly producers and PROs, are fulfilling their EPR obligations effectively and fairly.
- EPR fees are paid by producers and used appropriately by PROs.
- There is a level playing field for PROs, with no detrimental competitiveness impacts.

Best practice suggests that an independent, centralised authority, or “clearinghouse” should be established to govern the monitoring, reporting and compliance system and implement the tasks and responsibilities outlined above (Bünemann and Brinkmann, 2019; European Commission, 2014; OECD, 2016). Germany, for example, has recently established the Central Packaging Register Foundation (ZSVR) (lucid.verpackungsregister.org), where all producers must register their company and report relevant data regarding their EPR obligations. The ZSVR is also responsible for auditing data and ensuring compliance with EPR law (Bünemann and Brinkmann, 2019; ZSVR, n.d.).

Best practice calls for a neutral body that can be managed by one of the following (European Commission, 2014; OECD, 2016):

- A national public body
- An independent auditing company
- A joint, multi-stakeholder body that is co-governed by different EPR stakeholders (producers, PROs, public authorities, municipalities, and waste management operators, including the informal sector and recyclers).
## INTERNATIONAL EPR CASE STUDIES FOR PACKAGING

Table 9 presents a comparison of the various EPR schemes that are in place in selected developing countries in South East Asia and South America (Chile and Malaysia) and developed countries in Europe. Specific EPR principles are discussed in each country.

### TABLE 9: EPR CASE STUDIES FOR PACKAGING

<table>
<thead>
<tr>
<th>EPR PRINCIPLES</th>
<th>CHILE</th>
<th>MALAYSIA</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Current EPR status</strong></td>
<td>Draft mandatory EPR regulations approved by the Council of Ministers in May 2020.</td>
<td>Voluntary EPR system for packaging in place, with mandatory system under development.</td>
</tr>
<tr>
<td><strong>Materials covered / obliged materials</strong></td>
<td>Packaging: beverage cartons, metal, paper and cardboard, plastic and glass.</td>
<td>All packaging materials.</td>
</tr>
<tr>
<td><strong>Producers / obliged companies</strong></td>
<td>Individual responsibility or join PRO. Provide proof of compliance and register with Pollutant Release and Transfer Register (RETC).</td>
<td>Ten consumer brand companies have formed a voluntary PRO in Malaysia.</td>
</tr>
<tr>
<td><strong>PROs</strong></td>
<td>PROs must integrate municipalities and informal waste pickers into their EPR system.</td>
<td>Not formalised yet. Recommendations: Non-profit and one PRO for all packaging material.</td>
</tr>
<tr>
<td><strong>Government authorities and municipalities</strong></td>
<td>Implement policy for the “Inclusion of Waste Pickers 2016–2020”.</td>
<td>Municipalities are responsible for collection in non-Act states, while in Act states, the public authority, SWCorps, is responsible for collection.</td>
</tr>
<tr>
<td><strong>Waste management operators</strong></td>
<td>Informal waste pickers can register under the RETC.</td>
<td>Collect waste from households and receive payment for collection services via a property tax.</td>
</tr>
<tr>
<td><strong>EPR targets</strong></td>
<td>Different material targets, which increase from 5% (2022) to 60% by 2030. Door-to-door collection to increase from 10% to 85% of population by 2030.</td>
<td>There is a national recycling rate target of 30%.</td>
</tr>
<tr>
<td><strong>EPR fees</strong></td>
<td>EPR fees will be modulated based on criteria related to the ease of recovery and recycling of material.</td>
<td>Still in early stage of EPR fee discussion.</td>
</tr>
<tr>
<td><strong>EPR reporting requirements</strong></td>
<td>The PROs have to report annually and the reports are reviewed by independent experts.</td>
<td>The Public Cleansing Management Corporations are responsible for the monitoring of waste management practices.</td>
</tr>
</tbody>
</table>

Sources: Bünemann and Brinkmann (2019); European Commission (2014); Lee (2020); MMA (2019); PWA (2020a); PWA (2020b); Silva (2020); Thornton (2019); Watkins et al. (2017); WWF Malaysia (2020); ZSVR (n.d.)
Table 9 presents a comparison of the various EPR schemes that are in place in selected developing countries in South East Asia and South America (Chile and Malaysia) and developed countries in Europe. Specific EPR principles are discussed in each country.

<table>
<thead>
<tr>
<th>EPR PRINCIPLES</th>
<th>GERMANY</th>
<th>BELGIUM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Producers / obliged companies</td>
<td>Join a Central Agency Packaging Register (ZSVR); join PRO of their choice. Report annually on total weight of packaging placed on market.</td>
<td>Producers are required to join the Fost Plus PRO.</td>
</tr>
<tr>
<td>PROs</td>
<td>Germany has transitioned from a single, non-profit PRO to several for-profit PROs, operating in competition with one another.</td>
<td>One central, non-profit PRO: Fost Plus. The PRO coordinates, contracts and pays municipalities for collection services, and finances recycling services.</td>
</tr>
<tr>
<td>Government authorities and municipalities</td>
<td>The EPR system exists in parallel with municipal waste management and municipalities are not part of the EPR system.</td>
<td>Municipalities have contracts with PROs and are responsible for collecting packaging waste from households.</td>
</tr>
<tr>
<td>Waste management operators</td>
<td>Contracted by PROs or individual producers.</td>
<td>Responsible for fulfilling waste management contracts with Fost Plus.</td>
</tr>
<tr>
<td>EPR targets</td>
<td>New recycling targets under the 2019 Packaging Act, which increase targets from 80% (2019) to 90% (2022). The recycling target for plastic packaging will increase from 60% (2018) to 90% (2022).</td>
<td>The EPR legislation sets out general targets for recycling (80%) and recovery (90%) of household packaging waste.</td>
</tr>
</tbody>
</table>
| EPR fees                        | EPR fee modulation based on a product or material’s sortability, recyclability, recycled content, and existence of sorting and recycling infrastructure. | Partial modulation of EPR fees based on:  
  ■ Amount of packaging placed onto market  
  ■ Recyclability of the packaging material. |
| EPR reporting requirements      | The ZSVR is responsible for registering producers, receiving and verifying data reported by producers and PROs, and for monitoring and enforcing how producers are participating in the EPR system. | Fost Plus is responsible for auditing collection and recycling data from waste management companies. The Interregional Packaging Commission (IRPC) authorises and audits Fost Plus. |

Sources: Bünemann and Brinkmann (2019); European Commission (2014); Lee (2020); MMA (2019); PWA (2020a); PWA (2020b); Silva (2020); Thornton (2019); Watkins et al. (2017); WWF Malaysia (2020); ZSVR (n.d.)
EPR IN SOUTH AFRICA

This section provides an overview of the previous voluntary EPR approach in South Africa, identifying some of its successes and challenges. It then goes on to discuss the policy context and legal framework for mandatory EPR in South Africa, and the role of informal waste reclaimers.
WHERE WE STARTED:
A VOLUNTARY EPR SCHEME

Since the early 2000s, South Africa has had a voluntary EPR scheme in place, with material organisations for different plastics material types.

Voluntary EPR schemes are common in developing countries and smaller regions where they are essentially established as pilot projects. These are normally focused on smaller geographic regions, a particular type of packaging or material, or specific brands. Producers (obliged companies) normally work together to implement voluntary projects related to EPR and improve sustainable waste management (Bünemann and Brinkmann, 2019).

Generally, PROs are responsible for collecting, managing and disbursing voluntary EPR fees and ensuring that material collection targets are met on behalf of their members – plastic producers and converters (Bünemann et al., 2020). Table 10 shows the material organisations in the previous voluntary EPR scheme in South Africa, with the material types for which they are responsible. The closest organisation operating as a PRO for plastic packaging is PETCO.

South Africa’s voluntary EPR scheme has been replaced by a mandatory EPR scheme with regulations published in late 2020 (DFFE, 2020c). The regulations were originally published in November 2020 but implementation was postponed following a call for further industry engagement. The amended regulations were published in May 2021.

TABLE 10: MATERIAL ORGANISATIONS IN SOUTH AFRICA THAT COVER SOME PLASTIC PACKAGING MATERIALS AND FORMATS

<table>
<thead>
<tr>
<th>MATERIAL ORGANISATION</th>
<th>ESTABLISHED</th>
<th>PLASTIC PACKAGING</th>
</tr>
</thead>
<tbody>
<tr>
<td>The PET Recycling Company (PETCO)</td>
<td>2004</td>
<td>PET beverage bottles</td>
</tr>
<tr>
<td>Polyolefin Responsibility Organisation NPC (Polyco)</td>
<td>2011</td>
<td>Polyolefin packaging: Low-density polyethylene (LDPE), linear low-density polyethylene (LLDPE), high-density polyethylene (HDPE) and polypropylene (PP)</td>
</tr>
<tr>
<td>Polystyrene Association (PSA) (also merged with Expanded Polystyrene Association of Southern Africa)</td>
<td>2009</td>
<td>Expanded polystyrene (EPS), extruded polystyrene (XPS) and high-impact polystyrene (HIPS)</td>
</tr>
<tr>
<td>Southern African Vinyls Association</td>
<td>2009</td>
<td>All polyvinyl chloride applications</td>
</tr>
</tbody>
</table>

Source: Sadan and De Kock (2020)
The most prominent of these Acts are the National Environmental Management: Waste Act 59 of 2008 (the Waste Act) and the National Waste Management Strategy (NWMS) 2020 (DFFE, 2020c). Section 28 of the Waste Act required the Paper and Packaging, Electrical and Electronic and Lighting industries to prepare and submit Industry Waste Management Plans for government review and approval (IUCN, 2020). Producers (obliged companies) in each of the respective industries were then required to register with and subscribe to at least one approved waste management plan (IUCN, 2020).

However, the waste management plans for the aforementioned industries were not approved because they did not comply with the criteria required. A “new approach” was then implemented through section 18 of the Waste Act, which set out requirements for EPR Regulations for the aforementioned industries. EPR Regulations for the Paper and Packaging industry were gazetted on 5 November 2020. Following the gazettement of the EPR Regulations, strong feedback provided by industry stakeholders prompted a withdrawal of the gazetted regulations for further and additional consultation in order to iron out any outstanding issues.

A new task team with stakeholders drawn from affected industry representative bodies and government was established to engage on the required amendments. The amended regulations were published in May 2021.

**EPR LEGAL FRAMEWORK**

South Africa has various Acts, regulations and strategies aimed at supporting and strengthening sustainable waste management and the transition to a circular economy (Creecy, 2020).

Informal waste reclaimers play a critical role in sustainable waste management in South Africa. It is critical that EPR policy integrates rather than excludes informal waste reclaimers (Godfrey et al., 2016). The Waste Picker Integration Guidelines (DFFE and DSI, 2020) are equally critical to support the integration of informal waste reclaimers into the EPR system and should be considered in EPR policy development and regulations. The Waste Picker Integration Guidelines are also important to assist PROs in effectively and equitably integrating and building working relationships with the informal sector.

**BOX 2: THE ROLE OF THE INFORMAL WASTE COLLECTION SECTOR IN SOUTH AFRICA**

Informal waste reclaimers play a critical role in sustainable waste management in South Africa. It is critical that EPR policy integrates rather than excludes informal waste reclaimers (Godfrey et al., 2016). The Waste Picker Integration Guidelines (DFFE and DSI, 2020) are equally critical to support the integration of informal waste reclaimers into the EPR system and should be considered in EPR policy development and regulations. The Waste Picker Integration Guidelines are also important to assist PROs in effectively and equitably integrating and building working relationships with the informal sector.
WWF SOUTH AFRICA EXTENDED PRODUCER RESPONSIBILITY FOR PLASTIC PACKAGING IN SOUTH AFRICA: A SYNTHESIS REPORT ON POLICY RECOMMENDATIONS
WWF South Africa and IUCN engaged with the plastics value chain stakeholders on the proposed EPR policy recommendations. The engagement was primarily built on the content from desktop research, the analysis of best practice from across the globe and within South Africa, and interviews with experts.

The process allowed for stakeholder participation: more than 200 stakeholders could provide input into the proposed recommendations and highlighted concerns and uncertainties.

This section provides a detailed overview of stakeholder inputs and feedback – not those of the project team – on the proposed EPR recommendations.
STAKEHOLDER INPUTS AND FEEDBACK

This section provides an overview of inputs and feedback from the project’s stakeholder engagement process, via surveys and workshops, with more than 200 stakeholders.

Areas of consensus and divergence among stakeholder opinions have been identified across three broad themes:

1. The PRO market and governance structure
2. Stakeholder roles and responsibilities, opportunities for collaboration and EPR targets
3. Monitoring, reporting and compliance.

Remaining challenges and uncertainties are also identified under each theme.

The key messages for each theme are summarised on page 40–43. Box 3 summarises alternative suggestions from stakeholders regarding the PRO market and governance structure.

**BOX 3: ALTERNATIVE SUGGESTIONS FOR THE PRO MARKET AND GOVERNANCE STRUCTURE**

Alternative suggestions regarding the PRO market and governance structure included the following:

- Establish a central administrative body, with a network of independent material PROs.
- Establish a handful of large multimaterial PROs based on material or collection types and their relative efficiencies. One PRO could be established for industrial and commercial packaging and another for consumer packaging.
THEME 1: ESTABLISHING A SINGLE, CENTRALISED PRO

The focus of the first workshop discussion topic and related survey questions was the draft recommendation that there should be one, centralised PRO for all plastic packaging material types, with existing PROs and/or material organisations forming dedicated “material departments”. The discussion also covered the PRO’s governance structure. For detailed key messages, refer to Section 7 of the technical report.

THEME 2: STAKEHOLDER ROLES AND RESPONSIBILITIES, COLLABORATION AND EPR TARGETS

The focus of the second workshop discussion topic and related survey questions was the draft recommendations related to stakeholder roles and responsibilities and opportunities for collaboration, particularly with regard to the collection of obliged material. The discussion focused on which targets should be included or excluded, rather than on the value of the target itself.

THEME 3: MONITORING, REPORTING AND COMPLIANCE

The focus of the third and final discussion topic and related survey questions was the draft recommendations related to EPR monitoring, reporting and compliance, and the potential establishment of a centralised clearinghouse.
### AREAS OF CONSENSUS

<table>
<thead>
<tr>
<th>PRO market and governance structure</th>
<th>Roles and responsibilities, opportunities for collaboration and EPR targets</th>
<th>EPR monitoring, reporting and compliance</th>
</tr>
</thead>
</table>
| Potential benefits of having one, centralised PRO for plastic packaging:  
  ▪ Reduced costs, complexity and administrative burden for the broader EPR system  
  ▪ Prevent duplication of effort and investment by multiple PROs  
  ▪ Leverage the knowledge, expertise and resources of existing PROs. | Stakeholders agreed on the following:  
  ▪ Clear definitions are required in the EPR Regulations for the roles and responsibilities of different stakeholders.  
  ▪ Collaboration between various stakeholders needs to be customised to the specific context of each municipality.  
  ▪ Establishing a single, centralised PRO to facilitate collaboration would be advantageous.  
  ▪ Policy incoherence and misalignment exists with regard to the collection of waste, particularly between the Constitution, the NWMS and the EPR Regulations.  
  ▪ Behaviour change is required throughout the value chain, from producer to municipality to final consumer.  
  ▪ EPR targets should be clearly defined, with clear and agreed-upon methodologies, baselines and data requirements, via an inclusive and representative stakeholder process.  
  ▪ Implementing EPR fee differentiation for different material types is important, while more complex eco-modulation will be critical for the future.  
  ▪ Integration of informal waste reclaimers is essential to the success of the EPR policy. | Regarding a central, independent clearinghouse, these were areas of consensus:  
  ▪ It should be responsible for monitoring and compliance across the broader EPR system.  
  ▪ It should be a non-profit organisation and have an inclusive and representative governance structure. Transparency in this regard was a paramount consideration.  
  ▪ Financing and the cost of implementing it remain a concern.  
  ▪ The risk of free riders is significant. This risk can be reduced by establishing a registry for producers and obliged material/waste.  
  ▪ There were concerns about competitiveness and confidentiality when it comes to reporting of material placed onto the market and other sensitive data. An information protection system needs to be built into monitoring, reporting and compliance requirements.  
  ▪ Penalties for non-compliance should include banning products from the market or rescinding producers’ licences to operate, rather than imposing jail sentences and fines. |
### Areas of Divergence

<table>
<thead>
<tr>
<th>PRO market and governance structure</th>
<th>Roles and responsibilities, opportunities for collaboration and EPR targets</th>
<th>EPR monitoring, reporting and compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential disadvantages of having one, centralised PRO for plastic packaging:</td>
<td>Stakeholders did not agree on the following:</td>
<td>▪ There was no agreement on where a central clearinghouse should be located.</td>
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<td>▪ Increased administrative costs and, therefore, higher EPR fees</td>
<td>▪ The collection of obliged material:</td>
<td>▪ There was divergence on whether monitoring and compliance activities should be the responsibility of the PRO(s).</td>
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<td>▪ Loss of focus, expertise and missed opportunities per material type</td>
<td>▪ According to their constitutional mandate and the NWMS, collection is the sole responsibility of municipalities.</td>
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<tr>
<td>▪ Increased compliance and control risks</td>
<td>▪ Collection of obliged material is the responsibility of the producer/PRO(s).</td>
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<td>▪ Lack of competition and the danger of creating a monopoly.</td>
<td>▪ Collection of obliged material is a shared responsibility.</td>
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<td>▪ Ambition vs achievability of EPR targets.</td>
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<td></td>
<td>▪ Consumers:</td>
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<td>▪ Consumers need to take more responsibility.</td>
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<td>▪ Consumer responsibility was beyond the scope of EPR other than to implement awareness raising and education campaigns.</td>
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<td>▪ Integration of the informal sector is the responsibility of producers/PROs, national government and municipalities – a shared responsibility.</td>
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<td>▪ The EPR Regulations are too prescriptive.</td>
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<td>▪ Stakeholders require more detailed roadmaps for implementing EPR Regulations and meeting the targets.</td>
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## Stakeholder Recommendations

<table>
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<tr>
<th>PRO market and governance structure</th>
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</table>
| Stakeholder recommendations to strengthen the PRO market and governance structure included the following: | **Collection and collaboration**  
- Address policy incoherence and misalignment, particularly on the responsibility of collection of obliged material.  
- Divide responsibility for collection between municipalities and producers/PRO(s) according to two household waste streams:  
  - Wet/residual waste (municipalities)  
  - Obliged material (producers/PROs).  
- Collection services should take the municipal context into account.  
**Integration of informal reclaimers**  
- Investigate a hybrid payment system to include a living wage / service fee in addition to the market value of material collected.  
- Consider implementing decentralised collection systems, where all obliged materials are collected by the informal sector and brought to small "stock-piling" centres. | Stakeholder recommendations to strengthen EPR monitoring, reporting and compliance included the following:  
- Clearly define monitoring and reporting requirements.  
- The monitoring and compliance system should monitor EPR fees and ensure that all producers are either joining a PRO or implementing EPR responsibilities on their own.  
- Establish a virtual reporting and monitoring system, for the whole value chain.  
- Ensure easy accessibility to the monitoring and reporting system for all stakeholders.  
- Define specialised material departments for the clearinghouse.  
- Develop "unit/weight" conversion tables to streamline reporting for producers. |
| - Closely manage costs and EPR fees for each material type  
- Conduct a cost analysis for a centralised PRO  
- Integrate generic, operational elements  
- Integrate existing PROs to take advantage of their expertise, networks and knowledge, and facilitate cohesion, collaboration and alignment at a higher level  
- Link the centralised PRO to a centralised monitoring, reporting and compliance system  
- Expand the scope of a centralised PRO to become a centralised PRO for all packaging materials  
- Establish an inclusive and representative governance structure, which includes informal waste reclaimers and civil society  
- Establish an expert advisory panel with skills across the value chain  
- Packaging SA could potentially play the role of a centralised PRO but might be better suited as a centralised clearinghouse for monitoring, reporting and compliance. |  
**Targets**  
- To be defined and established via an inclusive stakeholder process.  
- Conduct a cost analysis to determine investment needs for realising targets.  
- Include a "repurpose rate target" in the EPR Regulations.  
- Explore the possibility of establishing collection targets for municipalities. |
The following remaining challenges and uncertainties were identified:

- The definition of “producer” needs to be clarified, with a clearer outline of producers’ responsibilities and how they relate to those of the PRO.
- Further engagement about a PRO, its establishment and roles and responsibilities is required.

Remaining challenges and uncertainties included the following:

- Stakeholder roles and responsibilities need to be defined and clarified, particularly with regard to collection.
- Collaboration is needed between producers/PROs, municipalities and informal sector stakeholders.
- The concern that “integration” of the informal sector might lead to “formalisation”, which is not desired by informal sector stakeholders.
- Separation at source (s@s) and consumer behaviour.
- Definition of targets, of calculation methodologies used to calculate the targets, and of the level of ambition.
- Lack of infrastructure and costs associated with achieving targets.
- Implementing monitoring, reporting, and compliance responsibilities.
- Economic viability (related to the value of secondary material in relation to virgin material) and financing requirements.
- If EPR fees are passed on to consumers, it will lead to higher prices on certain items.

Remaining challenges and uncertainties were identified as:

- Stakeholder roles and responsibilities regarding monitoring and reporting.
- Implementation of auditing requirements for producers.
- Additional administrative burden and costs from reporting and compliance to PROs and government for the broader EPR system, resulting in increased EPR fees.
- Municipal reporting requirements and obligations.
The three workshop discussion themes and their key outcomes were used to inform the analysis of the expert interviews, specifically drawing out areas of consensus, divergence and additional recommendations for each of them.

The expert interview analysis and outcomes are discussed in more detail in this section, focusing on four key contexts in the EPR sphere.
INTERVIEW ANALYSIS: PERSPECTIVES FROM EXPERTS

Based on the feedback received during the stakeholder consultation process, the project team developed an interview analysis methodology comprising key contexts, with corresponding themes and keywords used to analyse the interviews.

The project team conducted semi-structured interviews with 26 national and international EPR experts. The interviewees were selected based on their expertise, familiarity with the concepts of EPR and recommendations by fellow interviewees. All the interviews were conducted online, transcribed and subsequently analysed based on four key contexts:

- The PRO market and governance structure
- Stakeholder roles and the responsibilities of various actors
- EPR policy instruments
- EPR compliance.

THE PRO MARKET AND GOVERNANCE STRUCTURE

Three key subthemes emerged from the analysis of interviewees’ views on the PRO market and governance structure: definition of producer, PRO market structure and PRO governance structure.

Definition of producer

Experts agreed that the definition of “producer” is a critical aspect of any EPR policy but can be complex depending on the characteristics of a particular value chain. There was general agreement that the producer (obliged company) should be defined as an entity that either has control over the design characteristics of the packaging or that places the packaging onto the consumer market.

By using this definition, the EPR policy can influence stakeholders who have the authority to redesign their packaging, to factor in the circularity aspects. This definition would generally include brand owners, retailers and importers of packaging.

- Some stakeholders suggested including converters in the definition of producer – given their position in the value chain – but as non-fee-paying producers.
- Another suggestion was to identify and define the producers according to the particular value chain for each obliged material type, albeit recognising significant administrative costs.

PRO market structure

For PRO market structure, most experts suggested establishing a centralised PRO for plastic packaging, with dedicated material departments. Several advantages of having one, centralised PRO were highlighted, the most prominent being a reduced administrative burden and complexity, avoiding duplication of effort and investment, and economies of scale. It was noted that such a decision should ultimately be left to producers as they are responsible for establishing PROs, and that the PRO market could eventually evolve into one, central body over time.

However, one expert cautioned against being “too prescriptive in setting up one super-entity that’s supposed to be able to do everything but then cannot”. There was also general agreement that the PRO be established as a non-profit entity.
but managed and evaluated as a for-profit entity to ensure effective and efficient execution of its responsibilities. This would also apply if multiple PROs were established.

**PRO governance structure**

When it came to PRO governance structure, there was agreement that a PRO requires a transparent and accountable governance structure to ensure the effective collection of fees, utilisation of funds and fulfilment of obligations. Good governance is also associated with fulfilling the necessary monitoring, reporting and compliance requirements while addressing any business concerns surrounding competition and sensitive information.

There were, however, different views as to stakeholder representation on a PRO’s governance structure. Some suggested limiting representation to obliged companies only, while others suggested that it should be inclusive and representative of all stakeholders along the value chain.

**STAKEHOLDER ROLES AND THE RESPONSIBILITIES OF VARIOUS ACTORS**

In relation to roles and responsibilities, the subthemes that emerged from the interview analysis were the responsibilities of municipalities and PROs, responsibility for integrating the informal sector, and clarity in policy on the roles and responsibilities of stakeholders.

**Producer Responsibility Organisations (PROs)**

As in the stakeholder workshops, there were significant disagreements regarding the responsibility of collection of obliged material. In terms of the responsibilities of PROs, experts generally agreed that PROs should, as a minimum, be responsible for:

- Monitoring and reporting activities (including data management) for their members
- Information and awareness campaigns
- Sorting, recovery, reuse/recycling and disposing of obliged material.

**Municipalities**

Some experts noted the constitutional mandate of municipalities to provide a safe and healthy environment for citizens. However, not all associated this provision with municipalities being physically responsible for the collection of obliged materials under the EPR Regulations.

Whereas some experts argued that municipalities should be responsible for implementing collection activities and have their own collection targets, others suggested that “municipalities’ constitutional mandate should not be taken so literally”. Instead, they argued that municipalities could retain their responsibility for collection by ensuring that collection took place and could “give the right to collect obliged material to PROs”, making them physically responsible for collection. However, this would be dependent on the specific context of a particular municipality.

Allocating collection responsibility along waste streams – municipalities taking responsibility for wet/residual waste, while obliged materials would be the responsibility of PROs – was also suggested.

The same contestations regarding collection responsibility emerged when discussing the roles and responsibilities of municipalities. In addition to those points already mentioned, experts identified the creation of a wider, enabling environment to ensure that collection takes place as a municipal responsibility. Other suggestions included using EPR fees to subsidise collection activities at municipalities; making municipalities responsible for collecting low-value waste and PROs for high-value waste; and making municipalities responsible for collection, while holding PROs responsible for ensuring a secondary market to drive collection.

Experts agreed that collaboration between PROs and municipalities was critical for the successful implementation of EPR, regardless of who was ultimately responsible for collection. Making collection a shared responsibility between municipalities and PROs was also identified as an area to spur collaboration to find solutions specific to a given municipality’s context. It was also agreed that municipalities have a data management responsibility and should improve their reporting into the South African Waste Information System (SAWIS) more broadly to ensure sustainable waste management.
Integrating the informal sector

The responsibility for integrating the informal sector into the EPR system was also a hotly contested topic. Most experts agreed that the informal sector plays a critical role in collection and needs to be integrated into the EPR system. It was pointed out that integration would not only improve the effectiveness and efficiency of the EPR system but would also help to improve the living standards and livelihoods of informal waste reclaimers. Experts acknowledged the importance of the Waste Picker Integration Guidelines (DFFE and DSI, 2020) and aligning them with EPR Regulations and their implementation.

However, a representative of the informal sector cautioned that the informal sector did not want to be formalised under the EPR policy as this could take away their autonomy as informal entrepreneurs. It was also understood that the informal sector did not want to receive a “living wage” either, as this would most likely increase the number of free riders – people becoming informal waste collectors just to receive some kind of wage, without taking collection of materials seriously. In addition, a living wage would more than likely “only benefit documented reclaimers, which is a very, very low number” (roughly 15%). Instead of a living wage, receiving “higher, more stable and standardised prices for the material they recover” was identified as the best solution by the informal sector representative.

In addition, a potential hybrid payment system was suggested, where reclaimers could receive a basic service fee for collecting obliged material in addition to being paid the market value for the material collected. It was once more agreed that collaboration between various stakeholders was necessary to devise context-specific “integration solutions”. Further engagement in this regard is recommended to develop workable models.

However, there was a general divergence among experts as to who – municipalities or PROs – was ultimately responsible for integrating informal reclaimers. It was suggested using EPR fees, and even perhaps municipal revenue from refuse taxes, to subsidise informal sector integration, either through a basic service fee or by subsidising the secondary material market to improve and stabilise prices. There were also suggestions that the informal sector needed better representation and could potentially unionise or bid for collection rights in certain areas, as is being done in Chile.

Clarity in policy on the roles and responsibilities of stakeholders

Discussions on roles and responsibilities, particularly concerning collection and integration of the informal sector, raised concerns related to policy coherence (or alignment), or the lack thereof. For example, the Waste Act and the NWMS state that municipalities are responsible for collection, while the EPR Regulations state that PROs (and by extension obliged companies) are responsible. Experts also noted that some municipal by-laws might create barriers to collection.

Some also suggested that minimum criteria or standards for informal sector integration need to be legislated over and above the integration guidelines. Experts also noted the need for additional legislation to support the EPR Regulations, such as eco-labelling and certification standards/regulations on material properties, such as recyclability, compostability and biodegradability. Experts were divided on the option of implementing a tax on virgin plastic raw materials (to support the secondary material market).

EPR POLICY INSTRUMENTS

When discussing EPR policy instruments, the subthemes that emerged to guide the interview analysis were fees, eco-modulation and targets.

EPR fees

There was general agreement that EPR fees should, as a minimum, cover the costs of material recovery (post-collection), sorting, reuse/recycling, final disposal, and the administration costs of the PRO. Some experts suggested that the EPR fees should cover the full net costs of EPR activities while some were of the view that the fees should be based on the external cost of packaging pollution in the environment.

One expert suggested an approach based on the carbon tax model, where EPR fees are levied on waste output, i.e. the amount of waste that either goes to landfill or ends up in the environment. This should provide a strong incentive to improve the circularity of packaging as the EPR fee paid by the producer (obliged company) would be directly proportional to the waste output.

Other suggestions included determining the fees based on the corresponding investment and cost
requirements to meet the EPR targets; that the EPR fees could be used to subsidise activities both up- and downstream; and that EPR fees be tax deductible. Some concerns were raised that high EPR fees would be passed on to consumers, with a negative effect on the affordability of basic goods. However, the counter-view was that it is not necessarily a bad thing if understood from a “user pays” principle and if the consumer has cheaper, sustainable alternatives.

**EPR targets**

Experts agreed that EPR targets are a critical aspect of any EPR policy as they influence the fees, infrastructure investment and collaboration among stakeholders. There was also agreement that there needs to be agreed-upon definitions, methodologies, data requirements and baselines for all EPR targets and that these should be captured in the EPR Regulations. There also needs to be specific targets for each material type. However, the targets for the collection rate and the output recycling rate cannot be identical, as was outlined in the draft EPR Regulations in 2020. This is because recycling is a function of collection, meaning that not all the material collected automatically gets recycled. Experts also agreed that data management, reporting and monitoring were critical elements for measuring progress towards achieving the targets.

With regard to ambition, some experts preferred that the targets be set at ambitious levels, whereas others preferred that they be set at practical and achievable levels. Introducing a 3 to 5% margin for error was suggested as a means to provide some flexibility to PROs/producers. There was a relatively broad spectrum on specifics related to different types of targets that could form part of the regulations. These include:

- Setting a range of different targets as they are all interrelated
- Prioritising collection targets in the initial phase since achieving other targets are dependent on collection rates
- Including collection point targets (household access to collection points and recycling bins) and collection targets for municipalities, given the discrepancy over the responsibility for collection
- Implementing only a landfill diversion target and allowing producers to decide how best to achieve it. However, in this case other targets, like collection or recycling targets, would be irrelevant if an ambitious landfill diversion target was set, because PROs would have to meet those targets to some degree or other if they wanted to achieve the final landfill diversion target.

“So, a PRO may report on the percentage that was reused, the percentage that was actually recycled, the percentage that went into waste-to-energy and that’s fine. They can break down however they see fit, but ultimately it speaks to what was diverted from landfill ...”

**Eco-modulation**

Eco-modulation was seen as an important approach to promote recyclability through fee differentiation. There was general agreement among experts that there should be some degree of EPR fee differentiation between different material types, particularly in the short term. Most agreed that recyclability was a critical characteristic for fee differentiation but that there needed to be regulation on minimum standards for defining recyclability and other characteristics, such as biodegradability and compostability.

Fee differentiation could even be based on company size so as not to disproportionately affect small producers, suggested one expert. The “collectability” of material was highlighted by one expert as an important factor to consider.

There was some disagreement on the utility of eco-modulation. While some supported eco-modulation from the outset, others felt that it was too complicated to introduce in the initial phase of regulation and that it comes with a significant administrative burden. However, implementing an alternative EPR fee framework, based on material consumption as a function of waste output recycling, would avoid the administrative burden of eco-modulation by reducing the number of variables to monitor.

The ability of eco-modulation to prevent free riders was also recognised as one of its advantages.

**EPR COMPLIANCE**

On EPR compliance, the subthemes that emerged from the interview analysis were the need for a centralised, independent clearinghouse for compliance management, data requirements, monitoring and reporting responsibilities and enforcement of the EPR Regulations.
Centralised independent clearinghouse

There were differing views on the need for a centralised independent clearinghouse. Some experts suggested that an independent body was critical to ensure credibility throughout an EPR system and that the government did not have the capacity to undertake those responsibilities.

Although SAWIS was identified as a centralised repository for waste data in South Africa, accuracy of the data input was questioned. Others argued that the government, specifically the DFFE, should play this role as there are systems already in place to do so. One expert suggested including “Statistics South Africa as a key stakeholder in SAWIS to strengthen its capacity”.

Some experts suggested that the PROs should play the role of a central clearinghouse with independent, third-party auditors. All experts agreed that sensitivity and competitiveness concerns should be managed carefully and that the audit should be conducted by a third party.

Data requirements

In terms of data requirements, there was general agreement that material flow data needed to be collected and closely monitored. Some suggested that it was most important to monitor collection and landfill diversion data (as with the targets) to reduce waste in nature and promote circularity.

Data availability related to imported packaging. Filled packaging was identified as a critical gap that needs to be addressed. To support effective data management, experts highlighted investment in infrastructure (weighbridges and ICT systems) and related resources (technology, training and skills development). An accreditation mechanism for PROs responsible for collecting data from producers (obliged companies) was emphasised to ensure credibility of the data. This data should be aggregated across producers or PROs before being made publicly available.

Experts also agreed that a third party should be responsible for auditing data. However, there were divergent views on who should be responsible for data management, with experts suggesting different stakeholders. To ensure a balanced system with comprehensive access to data, the importance of a centralised online system where all stakeholders could provide data was highlighted.

Most experts indicated that research into baselines is still required, while a handful said there was enough data currently to formulate baselines. In general, waste characterisation and data management needs to be improved. This includes municipalities, who “also need to improve their data management and reporting”, particularly if they remain responsible for collection.

Monitoring and reporting

Experts identified monitoring and reporting of data as critical to ensure compliance within the EPR system. Some suggested that all stakeholders should be responsible for monitoring and reporting on material flows, while others suggested this was the responsibility of the PRO or a central clearinghouse.

A few experts suggested that, ideally, PROs should report into SAWIS, but concerns were raised about its suitability for reporting and monitoring under the EPR system. Should SAWIS be used in this regard, it is critical that the government – with support from Statistics South Africa – improve, increase the capacity of and build trust and transparency in SAWIS and the Waste Bureau. A centralised online data management, reporting and monitoring system could also be developed and managed by a central clearinghouse. There was also agreement among experts on having clear definitions, methodologies, data requirements and standardised reporting requirements for better transparency and trust in the monitoring and reporting system.

Enforcement

Experts agreed that enforcement would be critical for a successful EPR system in South Africa. The government needs to ensure that all stakeholders have a clear understanding of what is required from them in term of roles and responsibilities, monitoring and reporting requirements and so on. One expert suggested that the government should not “throw someone in jail because the recycling rate was 71 instead of x, but should carry penalties”, such as suspension of licences or PRO accreditations, or banning products from the market as initial suggestions.

If PROs (and by extension, producers) do not meet certain targets on an ongoing basis, then the government should hold a consultative review process to understand the challenges PROs (or obliged companies) face before implementing penalties. If there are valid reasons for not meeting EPR targets, then the government should identify how best to address those.

Experts also suggested that the performance of municipalities needs to be monitored and enforced, especially regarding the collection of obliged material, if they hold that responsibility.
CONCLUSIONS

1. Extended Producer Responsibility (EPR) is a policy principle that makes producers responsible for the end-of-life management of their products and/or packaging. Setting targets and charging fees provide incentive mechanisms to improve eco-design, repairability, reusability and/or recyclability of products and packaging. EPR, therefore, is a critical policy for supporting a transition to a circular economy.

2. This synthesis report and the EPR technical report (available on request) provide recommendations for a mandatory EPR policy for plastic packaging. Both reports were published as part of a project that aims to accelerate and support the transition to a circular plastics economy in South Africa. The recommendations were developed through a desktop review of international best practice and further refined for the South African context via an inclusive, participatory stakeholder engagement process.

3. The EPR Regulations need to clearly define the producer as an entity that has control over plastic packaging design characteristics, such as material type, colour, shape, weight and complexity (number and type of different materials), and that puts plastic packaging onto the consumer-facing market.

4. While the decision should ultimately be left to obliged companies (producers), the DFFE should promote a long-term goal of establishing one, centralised PRO, with dedicated and specialised material departments for all packaging. Alternatively, the market should establish a network of PROs with a centralised administration office. PRO governance structures should be transparent, accountable and representative of all value chain stakeholders.

5. Collaboration between PROs, municipalities and informal waste reclaimers is critical to ensure the effective and efficient collection of obliged material.

6. EPR fees should cover the full net costs of the PRO’s EPR activities. There should be basic EPR fee differentiation according to the material type and format and its recyclability in practice and at scale.

7. Clear and agreed-upon definitions, methodologies, baselines (pre-Covid 2019) and data requirements need to be developed for each EPR target. This should be done in an inclusive stakeholder engagement process.

8. Data management is crucial for monitoring progress on the targets. It is recommended that either a central data repository be developed or that the trust in and capacity and enforcement of SAWIS, with support from Statistics South Africa, be strengthened.
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EPR IS A KEY POLICY INSTRUMENT TO ADDRESS INCREASING VOLUMES OF PLASTIC POLLUTION AND ENSURE A TRANSPARENT AND ACCOUNTABLE INDUSTRY AND GOVERNMENT