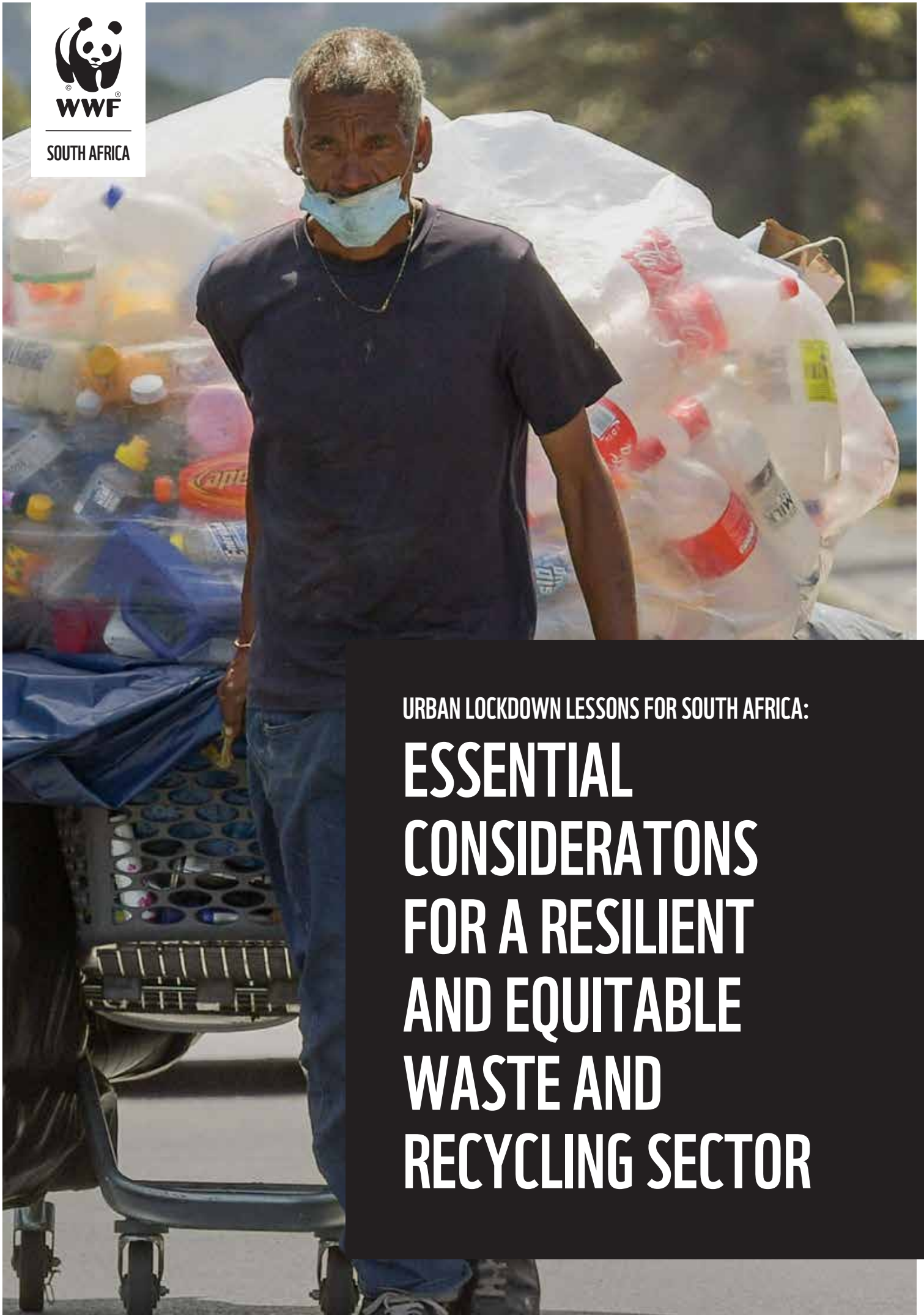




WWF

SOUTH AFRICA



URBAN LOCKDOWN LESSONS FOR SOUTH AFRICA:

ESSENTIAL CONSIDERATIONS FOR A RESILIENT AND EQUITABLE WASTE AND RECYCLING SECTOR

Author:

Lethabo Pholoto

Editor:

Sue Northam-Ras

Reviewers:

Lorren de Kock (WWF), Zaynab Sadan (WWF), Chris Whyte (Chris Whyte and Associates CC)

Cover photo:

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Design and layout:

Farm Design

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For more information, contact: Lethabo Pholoto
Email: lpholoto@wwf.org.za or info@wwf.org.za

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About the report:

This report is part of a larger project entitled “EPR policy framework for accelerating the transition to circular plastic economy in South Africa” conducted by WWF South Africa, the International Union for Conservation of Nature (IUCN) and the South African Department of Environment, Forestry and Fisheries (DEFF). The outcomes of this project aim to provide policy recommendations for extended producer responsibility (EPR) for plastic packaging, as well as supporting the effective implementation of South Africa's EPR regulations. The on-the-ground socio-economic impacts and experiences of the waste sector during the pandemic, as covered in this report, contribute to this broader EPR project on how extraordinary, unprecedented crises can be effectively factored into policy processes as a way to address the sector's systemic fragilities and transition the sector to a circular plastics economy.

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KEY TAKEAWAYS

- Pressures from the Covid-19 crisis and lockdown have put South Africa's already overly strained and unsustainable waste services and recycling sector to test, as well as deepening the scope of economic, social, and environmental challenges.
- As Covid-19 and the lockdowns persist, both historical shortcomings and new vulnerabilities within the waste and recycling sector are exposed. The pandemic presents an opportunity to understand and address inequalities that exist throughout the waste value chain which contribute directly to the instabilities of the downstream activities of recovery and recycling.
- Exclusion of the informal waste and recycling activities from essential services regulations at the beginning of the lockdown have exacerbated the struggle of the downstream sector and resulted in severely disrupted livelihoods and a further imbalanced value chain.
- There is a pressing need for an enhanced and resilient waste management system that aids in preserving and ensuring continuity of good health and safety for all citizens, while benefiting the economy and the environment.
- It is crucial that ongoing national policy and legislation processes consider how extraordinary, unprecedented crises can be effectively factored into these processes as a way to address the waste sector's systemic fragilities, to reflect the value of all role players in the waste value chain and hence to advance the transition towards a circular economy.
- Urgent finalisation and appropriate inclusive implementation of the mandatory extended producer responsibility (EPR) system which addresses the need for direct financial investments from government and sector-specific industries will respond to many of the sector's challenges.

INTRODUCTION

South Africa's waste services and recycling sector has been under tremendous strain, particularly in the past three years. Ongoing pressures from the coronavirus lockdown regulations have further deepened the scope of challenges, raising questions of the sector's future viability.

GLOBAL AND LOCAL CONTEXT

Both globally and in South Africa, the waste and recycling economy has shown fragility for a while, notably from 2018. Factors that have emerged and continue to hinder growth globally include the constant supply and demand disparities evident in large investments concentrated at expanding unsustainable upstream production practices with minimal investment in end-of-life solutions or circular interventions (Feitt and Muffett, 2020; De Kock, 2020).

Another major factor is the recycled material pricing issues. These pricing fluctuations are underscored by frequent oil geopolitics, competition between virgin and recycled materials, logistical costs, saturated and insufficient recycling end-markets. In addition, the implementation of China's National Sword policy of 2018¹ has further affected global recycling movements and markets, ultimately impeding on the sector's viability and feasibility (Brooks, Wang and Jammbeck, 2018).

Since March 11, 2020 when Covid-19 was declared a global pandemic by the World Health Organisation (WHO), and lockdown was implemented in South Africa from March 27, 2020, the resulting impacts have since exerted unprecedented pressure onto this already economically vulnerable sector.

¹ The National Sword is a policy implemented in China to ban certain recyclable materials importation.

**27 MARCH
2020**

**HARD LOCKDOWN
BEGAN IN SOUTH
AFRICA SINCE THE
COVID-19 STATE
OF DISASTER WAS
ANNOUNCED IN
MID MARCH**





THE WASTE SECTOR'S PRE-EXISTING OBSTACLES

- Municipalities are mandated to manage excessive, ever-increasing waste volumes with inadequate and outdated waste management infrastructure, aggravated by ineffective public sector capital misdirection.
- Collectors and recyclers function with limited economic resources, as well as limited infrastructure and expertise and low levels of support from the rest of the waste industry to effectively manage excessive volumes of the material post-consumption.
- Limited to no secondary markets for some of the materials recovered from waste collection and sorting activities, further escalated by China's National Sword policy to ban the importation of waste.
- Constant geopolitical stressors and market instabilities in interconnected industries, such as the oil and petrochemical industry, result in economic recession for recycling businesses due to low market value of recyclate and increased virgin plastic material production.
- The waste sector provides livelihood opportunities for a substantial number of individuals throughout the country including the informal collectors, yet they are hardly compensated or recognised for the valuable service they provide in the value chain.

PANDEMIC-INDUCED LOCAL PRESSURES

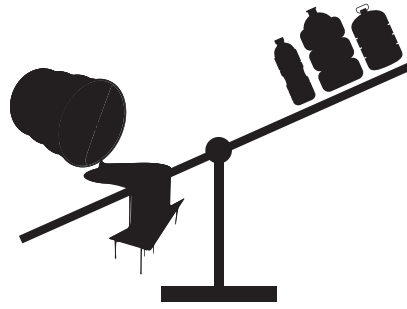
Throughout the different levels of lockdown, waste generation continued while the end-of-life systems for proper waste management were inefficient or collapsing. This imbalance was most evident during lockdown alert levels 5 and 4 whereby only municipal waste collection operated as an essential service, routing more waste to the predominantly non-compliant landfills (Sadan and De Kock, 2020). Formal private recycling collection services could only operate with a permit (CoCT, 2020), while informal waste reclaimers² were prohibited from operating (Samson, 2020).

The limited recycling end-markets in the country were temporarily shut down, while the plastic recycling sector was affected by additional factors like the low oil prices – resulting in cheaper virgin plastic – that negatively affected the economic viability of collecting and recycling post-consumer plastic material. These direct pressures from the Covid-19 crisis, coupled with pre-existing setbacks such as the fluctuating oil market, imbalanced supply and demand, and the Chinese recyclables importation ban have resulted in significant functional and socio-economic declines, exacerbating the strain on the sector.

POLICY-ENABLED PROGRESSION

Despite the ongoing impacts from Covid-19, the creation and amendment of key national strategies, policies and legislation underpinning the waste services and recycling sector have taken place. These include the updated and approved National Waste Management Strategy (NWMS) of 2020³; the mandatory extended producer responsibility (EPR) regulations of 2020 for the paper and packaging, e-waste and lighting industries (DEFF 2020); and the development of Industry Master Plans for Growth at the Department of Trade, Industry and Competition (DTIC) such as the Plastics Industry Masterplan of 2020.

These policy progressions hold great significance in shaping the future direction of the waste sector and enabling the overly strained waste management system and the struggling recycling economy as well as ultimately influencing advancements to transition towards a circular economy.



LOW OIL PRICES RESULT IN LOWER COST AND INCREASED PRODUCTION OF VIRGIN PLASTIC MATERIALS, IT ALSO CAUSES ECONOMIC RECESSION FOR RECYCLING DUE TO LOW MARKET VALUE

EPR LEGISLATION IN SOUTH AFRICA

High volumes of waste generated in South Africa still end up in landfills, even more so during the Covid-19 crisis. Landfilling has proven to be an ineffective and unsustainable end-of-life treatment method, and this is in contrast with sector-wide engagements to move towards a circular economy for materials.

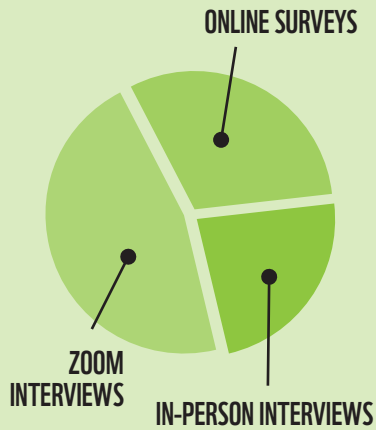
The draft mandatory extended producer responsibility (EPR) regulations were initially proposed in June 2020 and published in November 2020. These EPR regulations require that material producers take both physical and financial responsibility for their products throughout the product's life cycle – from raw material extraction through to the post-consumer end-of-life phase.

Implementation of the EPR regulation was postponed to allow the affected producers to make further input into the process. It is planned that the regulations will be gazetted in May 2021, with mandatory registration of all producers and producer responsibility organisations (PROs) to happen by November 2021.

² Informal waste reclaimers, also known as waste pickers, collect recyclable materials salvaged from landfills or streets/kerbside bins. They then sell these recovered materials to earn a living.

³ The NWMS and the EPR revisions fall under DEFF's National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) (RSA, 2009). The pieces of policy and legislation referred to are the ones under development or amendment during the Covid-19 pandemic.

WWF STUDY ON THE IMPACTS OF LOCKDOWN ON THE WASTE SERVICES AND RECYCLING SECTOR



WASTE BUSINESSES

5 SMMEs
LESS THAN 50 FORMAL EMPLOYEES

4 LARGE BUSINESSES
MORE THAN 50 EMPLOYEES AND MULTIPLE BRANCHES



INFORMAL RECLAIMERS

1 ORGANISATION
AFRICAN RECLAIMERS ORGANISATION WHICH REPRESENTS BETWEEN 5 500 AND 9 000 RECLAIMERS IN SA

RESEARCH NEED

The long-standing, myriad of challenges in the waste services and recycling sector underscore its under-valued downstream position in the value chain compared to the higher value upstream activities – such as raw material extraction, polymer production, manufacturing and retail. Despite this undervalued end-of-life status quo, the waste and recycling sector has served essential roles in the country’s economy that contribute to waste minimisation, recovery and recycling of materials that would alternatively be discarded at landfills and often adding to pollution of the natural environment. However, Covid-19 and the lockdowns have revealed a pressing need for an enhanced and resilient waste and recycling system to preserve the continuity of good health and safety for citizens, as well as benefiting the economy and the environment.

To achieve this, it is crucial that the current policy and legislation progressions consider key lessons from the Covid-19 pandemic and thus that response and recovery measures are positioned in a way that supports the efficacy of the sector both in the medium to long-term and during crisis.

While all the recent waste policies and legislation are essential, the urgent finalisation and appropriate inclusive implementation of the mandatory EPR will directly respond to many of the sector’s challenges.

This report presents first-hand insights underpinning the socio-economic impacts from Covid-19 lockdowns experienced by key role players in the waste services and recycling sector.

RESEARCH FOCUS

This waste and recycling sector study focuses on four main areas of impact from South Africa’s lockdown: economic activities, employment and

income/revenue losses, Covid-19 relief packages and changes in working conditions implemented within the sector.

Impacts of the lockdown were investigated in the City of Cape Town (CoCT) and the City of Johannesburg (CoJ) metropolitan municipalities. During the pandemic, the two metros were declared Covid-19 hotspots, along with a few other metros. These impacts have been considered over a period of eight months, from the beginning of the lockdown in South Africa to the time which data was collected – the end of March through to November 2020.

RESEARCH APPROACH

Firstly, a desktop study explored the scope and progression of impacts from the Covid-19 pandemic on waste management, recycling economies and the responsive measures being adopted. Reports, policy briefs and news articles relating to the subject under investigation were used as a basis for the desktop research as well as reviewing ongoing initiatives pertaining to waste and recycling during Covid-19.

Due to the changed ways of working during the lockdown, several data collection techniques were adopted. These included online and in-person semi-structured interviews, an online survey and direct engagements in virtual proceedings in the United Nations’ Emergency Appeal on the Impact of Covid-19. Guiding questions were developed to collect insights from identified participants.

The participants included waste departments at the two metros, formal and informal waste collectors, and recycling businesses. In total, thirteen responses were captured between September and November 2020. The data analysis method adopted entailed grouping common or contradictory responses together to discern emerging themes.

LOCKDOWN IMPACTS ON WASTE SERVICES AND THE RECYCLING ECONOMY

While the distortions from Covid-19 and the lockdown impacts remain uncertain, the systemic challenges experienced are overwhelming. This section discusses the findings from the interviews and survey conducted.

IMPACT OF INTERCONNECTED INDUSTRIES AND SECTORS

Many value chains and sectors' operations have been altered from the lockdowns and some have a direct bearing on the recycling economy (de Nicola *et al.* 2020). Some of these include the impacts from reduced activity in the commercial and hospitality sectors, as well as the interrelated oil industry.

According to Feitt and Muffett (2020) the plummeting oil prices have impacted and are continuing to affect the price and viability of recycled plastics. As a by-product of the carbon intensive yet cost-effective oil industry (or coal industry in the South African context), plastic materials and products require re-design upstream and proper end-of-life treatment downstream in order to address the overwhelming problem of plastics pollution. With the oil market decline throughout most of the pandemic period, virgin plastic prices dropped dramatically, making it a cheaper option than the more expensive recycled content, known as recyclate. In addition, single-use plastic product consumption increased in line with the necessitated use of personal protective equipment (PPE) such as single-use masks and gloves, and other safety and packaging items (Haque *et al.* 2021). The volumes of single-use plastics going to landfills, or littered, has

also increased due to reduced recycling activity during lockdown.

This increase in supply of cheap virgin plastic to meet the demand for various sectors has resulted in a lack of demand for recyclate (Euripidou 2020). At the time of this study, the waste and recycling small, medium, and micro-enterprises⁴ (SMMEs) and informal reclaimers interviewed had, for most of the lockdown, resorted to stockpiling the materials they collect hoping for a pick-up in demand and subsequent improved value in the collected materials.

In the case of informal waste reclaimers, stockpiling was difficult throughout the lockdown as it implied loss of cash flow and also limitations on how much they could store due to the lack of space for bulky items or suitable premises for storage of recyclables.

In addition, buyers and processors of recyclable materials have no formal contracts with the informal collectors. Thus, while the financial impact on recycling processors was tough, the impact on waste collectors was devastating. This is not an issue only revealed during the hard lockdown though. In essence, when recyclable material buyers close for maintenance, or have an oversupply, they simply stop buying the recovered materials from collectors.

⁴ Small medium and micro enterprises private include buy-back centres and smaller businesses involved in collection, sorting and resale of recyclables to bigger recycling processors and remanufacturers.



The private waste collection businesses and informal waste reclaimers interviewed highlighted between 30% and 50% decline in recyclable material volumes. This volume decline and subsequent loss of earnings was due to temporary shutdowns, or permanent closures, in the hospitality and commercial sectors with whom many had recycling collection contracts. Furthermore, some hotels converted into isolation/quarantine sites for infected persons, which then produced contaminated waste that could not be collected and recycled due to the health risk.

INCOME LOSSES AND UNEMPLOYMENT RATES DURING THE LOCKDOWN

The country's pre-existing socio-economic vulnerabilities are immense, especially high levels of poverty and unemployment. The pandemic has exacerbated such socio-economic challenges.

In the first two months of the lockdown, April and May 2020, income losses for the whole economy were estimated between R89 billion and R96 billion in both formal and informal sectors (UNDP 2020). In the third quarter of 2020, July to September, unemployment rates increased by 2.2 million whereby the lockdown impact contributed massively raising the country's unemployment rate to over 11 million people (Statistics SA, 2020). Moreover, unemployment

predictions continue to put the country's 'post-coronavirus' unemployment rates even higher (Stoddard 2020).

While data on the exact income losses and unemployment rates specific to the waste services and recycling sector nationally are not available yet, workforces in the sector have and will continue to lose jobs and livelihoods if left unsupported.

The nine private waste services and recycling businesses sampled for this study employed a total of 6 979 people prior to lockdown, including both formal and casual staff. As a result of the impact on operations, three of these businesses have implemented retrenchments, particularly of casual staff, and two cited they were still planning to carry out retrenchments. Therefore, out of the nine businesses, workforce reductions were ongoing in five businesses.

In addition, five out of the nine businesses reduced working hours for all staff. In these businesses, employees could only work four days out of five working days and all overtime work was stopped. Measures such as forced leave and salary reductions were also implemented as a way of scaling down on expenditures by these impacted recycling businesses.

Four respondents also knew of permanent closures of other waste and recycling business who were already struggling economically prior to the lockdown.

R89–96 bn

INCOMES LOSSES FOR THE FIRST TWO MONTHS OF LOCKDOWN FOR THE WHOLE ECONOMY IN BOTH INFORMAL AND INFORMAL SECTORS

2,2m

INCREASE IN UNEMPLOYMENT IN SOUTH AFRICA (FROM JULY TO SEPTEMBER 2020)



STRIKINGLY, BOTH REPRESENTATIVES OF THE TWO CITIES AND THE LARGER RECYCLING BUSINESSES INTERVIEWED, NOTED THAT SUPPORT AND RIGOROUS RECOVERY PLANS FOR SMALLER RECYCLING BUSINESSES AND INFORMAL RECLAIMERS SHOULD BE A KEY PRIORITY AS THEY ARE HARDEST HIT BY THIS CRISIS.

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IMPACTS ON HEALTH FROM HOUSEHOLD GENERAL WASTE

During the lockdowns, households have become the main point of waste generation and waste collection. There has also been an increase in general waste being mixed with contaminated and infectious waste associated with Covid-19 confirmed by both municipal officials and recyclables collectors. This increase in mixed waste is due to a lack of separation at source systems as well as temporary closures of many community recycling drop-off points and recycling centres. This has raised an additional challenge for both formal and informal waste operators who have had to sustain the continuity of effective waste management and recycling services, while simultaneously avoiding the risk of exposure to the virus.

Waste and recycling workers have been, and are often still, exposed to unsafe/hazardous waste streams with potential contamination from single-use surgical masks, gloves, and tissues in the household waste of infected and potentially infected people. This is problematic for waste operators encountering these items who have not previously worked with these hazardous waste streams and who are not trained to handle such items. While most municipal and private waste operators have the necessary protective gear and other health and safety measures when conducting their work, informal reclaimers who don't have the correct PPE are at the highest health risk of contracting the virus.

“THERE HAS BEEN A NUMBER OF INSTANCES WHERE WE RECEIVED PPE WASTE WITH THE RECYCLABLES OR PEOPLE ACCIDENTALLY DELIVERING MEDICAL WASTE CRATES.”

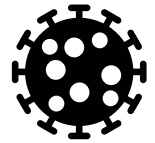
- Myplas, a plastic recycling company in Cape Town

IMPACT ON MUNICIPAL OPERATIONS AND SERVICE DELIVERY

Although municipal waste collection was deemed an essential service and thus allowed to operate throughout all levels of lockdown, it continued to function with a reduced workforce due to certain guidelines and regulations. During the strict alert levels 5 and 4, measures to mitigate health risks included putting older staff and those with comorbidities on forced leave. This remained the case throughout the lockdown and changes were made once clearer ways to manage Covid-19 associated risk emerged. A general trend is that there have been growing numbers of infections and deaths of municipal waste operators due to Covid-19, particularly between alert level 5 and 3. This resulted in ineffective and inconsistent refuse collection.

Respondents from the CoJ and Pikitup, the official integrated waste management service provider to the CoJ, confirmed that they had to temporarily shut down at least four depots during the first month of the lockdown. The CoJ municipality respondents added that because of the anxiety from these Covid-19 experiences, skepticism arose amongst the remaining municipal waste collectors in taking up overtime work which ultimately decreased service delivery.

On the waste disposal side, though specific numbers were not available, both CoCT and CoJ municipalities experienced a decline in overall waste going to landfills especially during the hard lockdown period. The decline in general waste tonnages produced is linked to the commercial shutdowns, less activity in cities due to job and income losses, school closures, and temporary relocation of many city dwellers back to their hometowns. While commercial waste had been reduced, household waste was still being generated and perhaps increased due to a larger number of people staying at home. However, the disruptions and delays to municipal waste collection schedules often resulted in household waste overflows, spillage of waste from uncollected bins and increased on-street litter in some areas (Ryan *et al.* 2020). This created an additional health and sanitation risk due to the rotting of organic waste which in turn attracts pests, with the potential for this waste to cause further land, air and water pollution.



97

POSITIVE CASES

2

DEATHS

14

RECOVERIES

COVID-19
STATISTICS FROM
PIKITUP AS AT
6 JULY 2020

IMPACT ON PRIVATE WASTE BUSINESSES

Depending on the service offering, formal businesses involved in waste or recycling collection operated throughout the lockdown period although they were all required to obtain an essential services permit from the relevant authorities. Along with the need to implement the necessary precautionary and safety measures such as PPE, sanitising stations, and education and training for staff to be able to work safely during the pandemic, private collection operations were most severely disrupted for about two weeks at the start of the lockdown. Therefore, most businesses were temporarily closed.

Emerging from the hard lockdown period, business closures, scaling down on workforce capacity, and reducing the number of working days or hours have and continue to be the common approach. This has been especially so for small and medium-sized recycling enterprises who have on average been more adversely affected than the larger businesses.

Upstream of collection and sorting operations, businesses continue to struggle with resale of some recyclables, especially plastics which remained impractical to resell while oil prices are unprecedentedly low. Another effect is from continual closures of clients' operations, especially on the supply side, and overall reduction in general waste generation which expropriated annual revenues between 15% (for larger businesses) and up to 50% (for smaller businesses).

This is even more alarming considering that the recycling sector had already seen closures of multiple recycling businesses in 2019, even before the Covid-19 crisis. These previous closures were associated with supply and demand imbalances and the overall economic non-viability of the sector (Sadan and Pholoto, 2020).

IMPACT ON INFORMAL WASTE RECLAIMERS

During the month-long lockdown under level 5 restrictions, informal waste reclaimers were excluded from essential services regulations with the result that they were not allowed to operate and hence could not generate any income. This had far-reaching social, economic and

environmental impacts as livelihood sources were interrupted and fewer recyclable materials were reclaimed and hence this usually recycled waste was probably sent to landfills. It is said that the informal waste reclaimers are responsible for sorting and selling between 80 and 90% of our country's recycles (Samson, 2020). The impact of the hard lockdown was even more concerning from a livelihood perspective, as the informal waste sector consists of approximately 215 000 reclaimers who survive from their daily earnings. Thus, they were forced to go for two weeks or more without their usual income, which meant no food for thousands of families.

In the subsequent lockdown alert levels, reclaimers were allowed to operate. However, while salvaging recyclables they have the closest direct contact with all forms of waste than other collectors, yet they continued to work without PPE, gloves and sanitisers, nor the necessary education and training to protect themselves from the virus. The lack of basic social support from government and industry for the informal sector inevitably increases vulnerability. Additionally, as stockpiling of recyclables has become more sensible for most informal reclaimers, especially ones working collectively, they lack storage space for these collected items.

IMPACT ON THE ENVIRONMENT

Within the ongoing lockdown, there has been an increase in volumes of mixed waste and a decline in recycling activity due to sector-wide impacts experienced. While the metros interviewed confirmed reduced waste collection service delivery, the study conducted by Ryan *et al.* (2020) during the lockdown shows that there has been an increase in street litter from uncollected, overflowing bins. Moreover, when the interviewees in this study were asked about general changes observed in waste handling during the lockdown, most of them noted an increase in illegal dumping, especially in middle and low-income communities.

Essentially, these waste collection changes during the lockdown contribute to waste leaking into different environments, ranging from rivers to parks and beaches. Moreover, while items like single-use masks, gloves and tissues associated with precautionary measures against the virus remain highly necessary, they are increasingly found in watercourses and other natural environments, increasing the scope and complexity of the waste management and pollution challenge.

80-90%
THE PERCENTAGE
OF SOUTH
AFRICA'S
WASTE THAT
INFORMAL WASTE
RECLAIMERS ARE
SORTING AND
SELLING FOR
RECYCLING



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In summary, most of the challenges experienced during the lockdown are not entirely new to the waste and recycling sector but they are all additional factors to the pre-existing obstacles. Prior to the pandemic, response scarcely addressed the much-needed direct financial investment in proper waste management measures including stimulating demand for recyclate, effective separation at source and recycling infrastructure as the key needs.



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THE EFFICACY OF RESPONSE AND RECOVERY MEASURES

In response to the Covid-19 crisis, the government adopted emergency response and long-term recovery measures. The private sector also offered emergency support to severely impacted groups within the sector. The interviewees had varying responses to the efficacy of these support measures.

GOVERNMENT RESPONSE MEASURES

The government launched a Covid-19 SMME Support Intervention in March 2020, which consisted of a Debt Relief Fund and a Business Growth Resilience Facility to help alleviate the severity of the Covid-19 and lockdown impacts on small businesses. The loans were made available to the waste and recycling SMMEs, but none of the SMMEs interviewed benefited from this opportunity. The reasons for this included the SMMEs disagreeing with the loan repayment terms, businesses not meeting the requirements and in some instances lack of awareness. Most of these SMMEs found this approach by government to be highly exclusionary and incapable to effectively respond to the plight.

The Unemployment Insurance Fund (UIF) Covid-19 Temporary Employer/Employee Relief Scheme (TERS) was used broadly by businesses in the sector. Seven out of 10 the businesses engaged used it to cover salaries of formal and casual workers. However, the administration process was generally found to have been inefficient. The long waiting period and concerns about what is left in the UIF fund were some of the matters raised by the waste and recycling businesses. Owing to their informal working conditions, reclaimers did not benefit from this support measure.

Additionally, support was availed through the Solidarity Fund which works closely with the government. This measure entailed initiatives that addressed the health, humanitarian, and social effects for those highly impacted by Covid-19. As informal reclaimers' livelihoods were severely affected, efforts to help them benefit from this response fund were made through the DEFF.

The CoJ municipality officials and the African Reclaimers Organisation (ARO) representative noted that they collaborated to distribute food parcels to informal reclaimers in various communities.

PRIVATE SECTOR AND CIVIL SOCIETY RESPONSE

Several private sector entities and corporate clients (for private recycling businesses) developed support initiatives ranging from financial support, food parcels and vouchers, to PPE donations from which both waste and recycling businesses and informal reclaimers benefited. Industry bodies and some producer responsibility organisations (PROs) supported their members by providing procedures, protocols and guidance for operations during the pandemic. This support extended to connecting relevant members within the recycling network in terms of supply and demand. For instance, processors who ran out of or started to accept recycling feedstock were connected with

Waste and recycling SMMEs that understood the terms and qualified but opted not to apply for the Relief Fund contend that loans should not be classified as relief initiatives because if they are unable to generate income during the crisis, then they will not be able to pay back the "relief loan" even at low interest rate, which is counter intuitive and not very helpful in the medium- to long-term.

collectors who had the recyclable materials needed within the network. Five waste and recycling businesses who benefited found these to have been valuable support initiatives by the industry and PROs.

Another form of beneficial support was received by two SMMEs which entailed their inclusion in an enterprise development programme from investment and banking corporations where business mentorship was provided. This helped them with making informed decisions around the practicality of taking out loans in their current financial standing.

The ARO representatives confirmed that support for the informal sector had not reached all reclaimers in the country at the time of this study as plans to expand the scope of the support were still underway. Some of the support that was already being provided to the informal reclaimers included donations of food vouchers or packages, PPE and sanitisers, as well as engagement with households to request them to separate and store recyclables for informal reclaimers. These efforts were made, through various initiatives, by the private sector in coordination with municipalities, academia, NGOs and the general public.

SUPPORT FROM ENGAGEMENTS WITH LOCAL COMMUNITIES

Moreover, through engagements and collaborations in different communities during Covid-19, the SMMEs and informal reclaimers interviewed in this study were supported from many private households. For the SMMEs, many households from which they regularly collected recyclables offered food and PPE donations for their casual employees.

In an effort to support more reclaimers, members of the ARO also formed a Solidarity Group Fund to raise funds and donations from households in some parts of Johannesburg. The support ranged from food parcels, PPE, hand washing stations and sanitisers to asking that residents properly separate their recyclables and contaminated waste to help mitigate risk from infections.

It is clear from the many ways in which support was provided during the lockdowns that both government and industry responded with urgency to most of the short-term needs during this crisis. In this same sense, there needs to be urgent implementation of direct solutions, addressing the overall viability of the sector in the medium to long-term.

COLLABORATING IN EQUITABLE SOLUTIONS FOR THE BENEFIT OF PEOPLE, THE ECONOMY AND THE ENVIRONMENT

Inclusion of and collaborating with the informal reclaimers in equitable solutions which consider the services they provide is key. The Auckland Park and Brixton (Johannesburg) resident-reclaimer recycling pilot supported by Unilever and University of the Witwatersrand serves as a good example. The “Recycling with Reclaimers” project is the first in the country to start paying individual reclaimers a service fee and the initiative ensued during the lockdown. Reclaimers collect separated recyclables from households, the recyclables get weighed and reclaimers are paid R0.50 service fee (by Unilever) per kilogramme of recyclables collected (ARO, 2020). Thereafter, reclaimers go and sell the same recyclables to buyers of their choice. This serves as a crucial step towards fully recognising the value of the informal sector in the economy. The EPR system should scale-up similar initiatives nationwide to aid a more resilient downstream sector and the transition to a more circular economy.

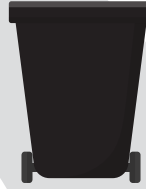
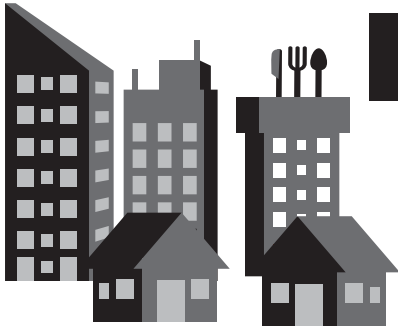


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PLASTIC RECYCLING VALUE CHAIN

EACH PERSON PRODUCES APPROXIMATELY 50 KG OF WASTE PER YEAR

COLLECTION POINT



RECLAIMERS COLLECTING LITTER



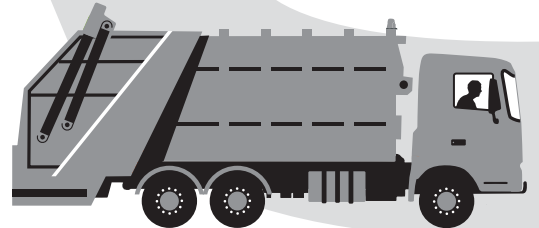
PRODUCTION OF PRODUCTS FROM RECYCLATE AND VIRGIN PLASTIC



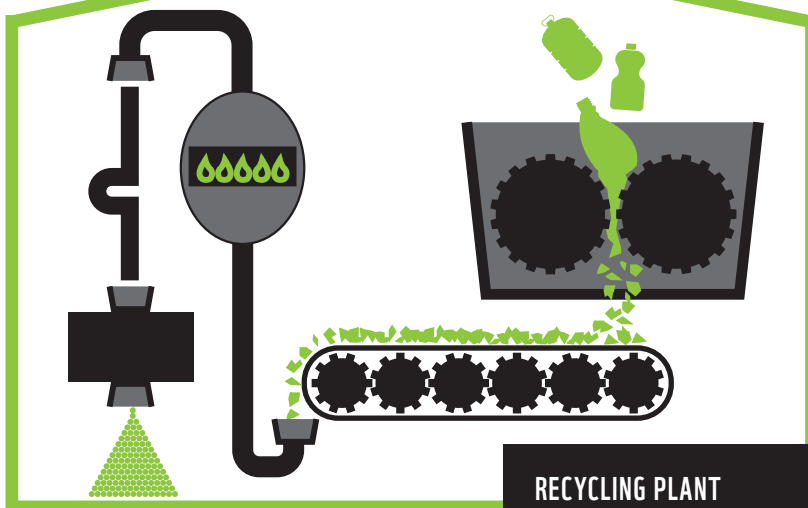
RECYCLATE FOR EXPORT



MUNICIPAL COLLECTION TO LANDFILL



35% OF HOUSEHOLDS HAVE NO ACCESS TO WEEKLY WASTE COLLECTION



RECLAIMERS AND PRIVATE RECYCLABLE COLLECTORS

UP TO 215 000 RECLAIMERS RECOVER BETWEEN 80-90% OF PLASTIC AND PACKAGING WASTE ANNUALLY



EACH RECLAIMER COLLECTS +/- 200KG OF RECYCLABLES DAILY



RECLAIMERS AT LANDFILLS



59 MILLION TONNES OF GENERAL WASTE TO LANDFILL ANNUALLY (IN 2017)

BUY-BACK CENTRES AND MATERIAL RECOVERY FACILITIES



LARGE COLLECTORS COMPACTING



ESSENTIAL CONSIDERATIONS FOR WASTE SECTOR RESILIENCE

As Covid-19 and the lockdowns persist, both historical shortcomings and new vulnerabilities within the waste services and recycling sector are exposed. However, it has provided an opportunity to adequately address the inequalities that exist throughout the waste value chain, which contribute directly to the instabilities of the downstream activities.



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Timely and effective policy and industry actions that support the sustainability of, and build resilience within, the waste services and recycling sector are essential going forward. The following considerations at government and industry level will aid in increasing the pace for economic and social recovery while establishing essential foundations towards a circular economy for the waste sector and the country.

STAKEHOLDERS	ESSENTIAL CONSIDERATIONS
National government	<ul style="list-style-type: none"> ▪ Adopt a systemic approach at national government level to address medium to long-term economic recovery plans aligned with, and responding to, the on-the-ground impacts and including all key role players in the waste and recycling value chain.
National Treasury	<ul style="list-style-type: none"> ▪ Implement sector-specific tax incentives (such as reduced rates) or an emergency fund for the waste services and recycling sector SMMEs and/or direct non-refundable financial support.
Department of Environment, Forestry and Fisheries National Treasury Sector-specific industry bodies	<ul style="list-style-type: none"> ▪ Encourage investment in the growth and development of secondary resource markets for recycled material through a combination of economic instruments (such as a tax on certain plastic products that do not have minimum recycled content) and regulatory instruments (such as targets in the EPR regulations). ▪ Government – legislate green public procurement requirements to increase demand for recycled material/products. ▪ Industry – support and invest in product design for recycling and reuse, procurement of post-consumer recycled material, commit to EPR targets, and explore close-loop recycling systems to ensure better resilience in the markets and more job opportunities.
Department of Environment, Forestry and Fisheries Department of Small Business Development	<ul style="list-style-type: none"> ▪ Introduce business assistance and mentorship programmes for SMMEs in the waste and recycling sector through the processes of frameworks for recovery. This measure will contribute to the economic development and resilience of the hardest hit recycling businesses and the waste sector at large.
Department of Environment, Forestry and Fisheries Sector-specific industry bodies	<ul style="list-style-type: none"> ▪ Invest in adequate and sufficient waste management infrastructure as part of Government’s infrastructure-led Economic Reconstruction and Recovery Plan and EPR. This can include availing recycling storage facilities for informal reclaimers and recycling SMMEs for recovered recyclables in cases of future crises or emergency. ▪ Industry and municipalities could repurpose existing vacant spaces or buildings in communities and cities for temporary storage use.
Department of Environment, Forestry and Fisheries Sector-specific industry bodies	<ul style="list-style-type: none"> ▪ Integrate informal reclaimers and consider small recycling collection businesses in the EPR system. Ensure informal collectors are remunerated for services rendered and their working conditions are improved. This can include recommended purchasing prices for recyclables (in terms of both value and quantity) which remain in place even during tough times.
Department of Environment, Forestry and Fisheries Local government Sector-specific industry bodies	<ul style="list-style-type: none"> ▪ Accelerate the implementation of an effective and inclusive EPR scheme. Roll out of separation at source systems and eradicate unsound waste management practices, along with providing the necessary education and outreach for improved general household waste management including separation of Covid-19 PPE waste.
Department of Environment, Forestry and Fisheries Waste sector-specific industry bodies	<ul style="list-style-type: none"> ▪ Provide enabling education and training support to informal reclaimers and reclaimer organisations and expand/accelerate ongoing PPE distributions for better waste handling during crisis.

CONCLUSION

The ongoing Covid-19 crisis extends beyond the human health and wellbeing scope into material production and consumption systems and their economic standing. While the experiences of the pandemic have been undesirable on a broader scale, they have certainly offered all stakeholders an opportunity to understand the depth of challenges which have hindered growth within the recycling economy and distorted waste management even before the pandemic. These new challenges have heightened inequalities in the entire value chain, making the downstream waste and recycling sector even more vulnerable which could impede the transition towards a circular economy.

This policy brief identifies that national recovery plans aimed at the waste services and recycling sector adopt a holistic response to match the scope and complexity.

Factoring the hardest lessons into the ongoing legislation proceedings, more especially the EPR provide key initial steps towards transformation and building resilience. Considering equity and placing the marginalized waste reclaimers and severely impacted recycling SMMEs at the centre of economic recovery will drive sustainability and ensure resilience against other forms of large-scale sector shocks in future.



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REFERENCES

ARO, African Reclaimers Organisation. 2020. ARO-Unilever-Wits University Reclaimer Integration Pilot Project. *ARO Projects*. 16 May 2020.

Brooks, A. L. Wang, S. and Jambeck, J. R. 2018. The Chinese import ban and its impact on global plastic waste trade. *Science Advances*, 4(6) eaat0131.

CoCT, City of Cape Town Waste Management. 2020. City's waste management during lockdown: What residents need to know.

DEFF, Department of Environment, Forestry and Fisheries. 2020. National Environmental Management: Waste Act, 2008 (Act No.59 Of 2008) Extended Producer Responsibility Regulations.

Goyena, R. and Fallis, A. 2020. Impact of Coronavirus (COVID-19) on the African economy. *Journal of Chemical Information and Modeling*, 53(9), pp. 1689–1699. doi: 10.1017/CBO9781107415324.004.

Ryan, P.G., Maclean, K. and Weideman, E.A., 2020. The impact of the COVID-19 lockdown on urban street litter in South Africa. *Environmental Processes*, 7(4), pp.1303-1312.

Sadan, Z. and Pholoto, L. 2020. The awkward intersection of planetary and human health: choking on plastic. *News24*. 3 August 2020. news24/columnists/guestcolumn/opinion-the-awkward-intersection-of-planetary-and-human-health-choking-on-plastic.

Sadan, Z. and De Kock, L. 2020. Plastics: Facts and Futures: Moving beyond pollution management towards a circular plastics economy in South Africa. WWF South Africa, Cape Town, South Africa.

Samson, M. 2020. South Africa's response to COVID-19 worsens the plight of waste reclaimers. *The Conversation*, 1 April 2020. theconversation.com/south-africas-response-to-covid-19-worsens-the-plight-of-waste-reclaimers-135072.

Steven Feitt; Carroll Muffett (2020) PANDEMIC CRISIS, SYSTEMIC DECLINE *Why Exploiting the COVID-19 Crisis Will Not Save the Oil, Gas, and Plastic Industries*.

UNDP, United Nations Development Programme. 2020. Covid-19 Rapid Emergency Needs Assessment for the most Vulnerable groups.

De Nicola, F, Timms, J. and Akhlaque, A. 2020. How is Covid-19 transforming global value chains? Lessons from Ethiopia and Vietnam.


De Kock, L. 2020. It's all talk and no action: Time for South Africa's plastics industry to put its money where its mouth is. *Daily Maverick*, 4 November 2020. dailymaverick.co.za/article/2020-11-04-its-all-talk-and-no-action-time-for-sas-plastics-industry-to-put-its-money-where-its-mouth-is.

Statistics South Africa, 2020. Quarterly Labour Force Survey (QLFS) – Q3: 2020. Media Release.

Stoddard, E. 2020. National tragedy: Third-quarter data show unemployment rate hit record high of 30.8%. *Daily Maverick*, 12 November 2020. dailymaverick.co.za/article/2020-11-12-national-tragedy-third-quarter-data-show-unemployment-rate-hit-record-high-of-30-8.

Haque, M.S., Sharif, S., Masnoon, A. and Rashid, E., SARS-CoV-2 pandemic-induced PPE and single-use plastic waste generation scenario. *Waste Management & Research*, p.0734242X20980828.

Euripidou, R. Reusables are just as safe: The Covid-19 pandemic is accelerating single-use plastic pollution. *Greenpeace*, 24 June 2020. greenpeace.org/africa/en/blogs/11485/reusables-are-just-as-safe-the-covid-19-pandemic-is-accelerating-single-use-plastic-pollution.



**URGENT IMPLEMENTATION
OF AN INCLUSIVE EXTENDED
PRODUCER RESPONSIBILITY
SYSTEM WILL ENABLE A
RESILIENT, CIRCULAR WASTE
AND RECYCLING SECTOR.**

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1st Floor, Bridge House, Boundary Terraces, Mariendahl Lane, Newlands, Cape Town.
PO Box 23273, Claremont 7735 T: +27 21 657 6600 E: info@wwf.org.za wwf.org.za