

Sustainable Packaging Opportunity for Investment in Senegal

September 2022



This study has been funded by UK aid from the UK Government; however, the views expressed do not necessarily reflect the UK government's official policies

Senegal at a glance

Senegal is a West African country with a GDP growth of 5.2% GDP over the last 5 years, a stable currency pegged to Euro and a controlled inflation of 2.2% in 2021



Population

16.7 million

(42% under 30 years old)



Official language

French



Inflation

2.2%



Currency/Exchange rate Francs CFA (XOF)

~XOF 623/USD²



Political system

Presidential system



GDP per capita (PPP)¹

3,321 USD



GDP (CAGR 2016-2021)

23 billions USD (5.2%)



Rating

B+, "stable" - S&P

Ba3 - Moody's

1. As of 2020 2. As of 06 May 2022 | Sources: Ministry of Economy, National Statistics Agency, World Bank, Moody's, S&P

Senegal is a country with...



1

... a business-friendly legal and fiscal framework

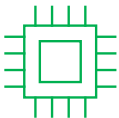
- Adoption in 2021 of a new **Public-Private Partnership (PPP) law**
- Adoption of an **investment code** with specific incentives towards the private sector to stimulate investment
- Creation of 4 Special Economic Zones (SEZ) offering a set of infrastructures and services to companies



2

... an appealing human resource

- **42%** of the population **under the age of 30** i.e. about 7 million people



3

... a modern and performing digital infrastructure

- About **10,000 km** of **optical fiber cable** enmeshing the country and **6 international cables** along its western coast
- **116% mobile penetration** rate
- **90% mobile broadband** coverage



4

... an opening to the world

- Dakar, the capital of Senegal, is westernmost point of **Africa**, which makes it a **hub** that can connect Africa to the rest of the world
- **€600 million investments** in a **new airport** in Diass at 50 km from Dakar and **€200 million** to refurbish regional airports
- **€400 million investments** in a **new 600-hectare port** in **Ndayane**, 75 km from Dakar



5

... recent oil and gas discoveries

- **2,068 million** barrels of **oil** (Sangomar)
- **1,261 billion** standard cubic meters of gas (GTA, Yaakar and Teranga)
- **Production** expected in **2023**



6

... a long political stability

- **4 smooth transitions** and **no military coup** since independence in 1960

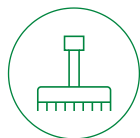
Market trends

Major trends from 'Plan Senegal Emergent' indicate that the following sectors are expected to shape demand for packaging in Senegal

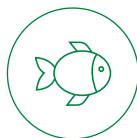
Priority sectors from 'Plan Senegal Emergent' (PAP2A* 2019 - 2023)

Food Sovereignty

Agriculture



Fishing

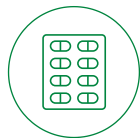


Livestock



Health & Pharma Sovereignty

Pharma



Health



Industrial platforms

FMCG



Textile



Others

Urbanism



Tourism



Digital



Social protection



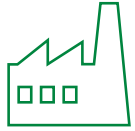
Implications on the packaging market

- ~ **£19 Bn** is being invested by the Government of Senegal and the private sector to achieve the 2023 development objective of the 'PSE' PAP2A.
- National pharmaceutical sector is expected to reach **30% of local needs by 2030** (~ £172m) vs less than 10% in 2021. (~ £17m)
- Agriculture, fishing and breeding are also identified as priority sectors to develop in conjunction with a performing agri-food industry
- Senegal to also execute an ambitious project of building 100,000 housings that will drive demand for cements; tiles etc.

These trends are expected to drive local demand for packaging

* Plan d'Actions Prioritaire Ajusté et Accélééré (Priority Plan Adjusted and Accelerated)

Various stakeholders were engaged to generate an independent assessment on the potential for investment in sustainable packaging



10+

Packaging manufacturers
(both locally and internationally)



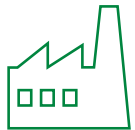
1

Recycling association



2

Government departments
focused on environmental
issues



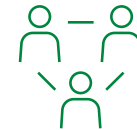
3

Waste management
operators, including collectors,
recyclers and repair/reuse
players



5+














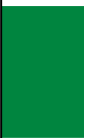


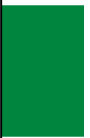


Private sector players
operating in packaging
intensive sectors (agro,
pharma, cosmetics)



2

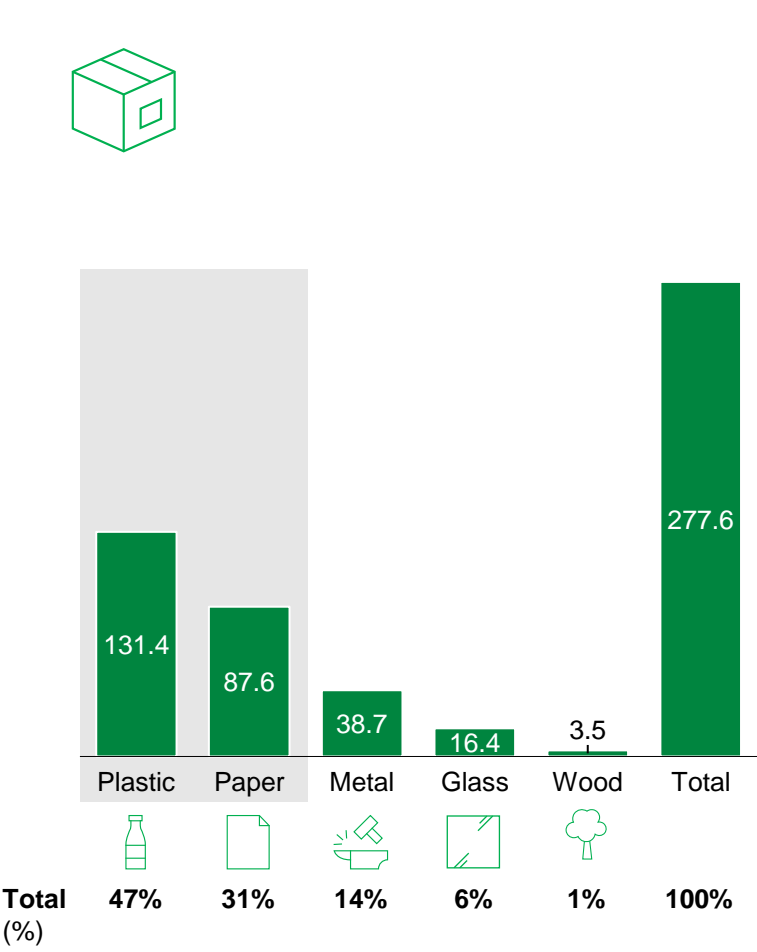
Development partners focused
on the environment
and recycling

There are several players producing packaging materials in Senegal, with no current production of glass

| Material | Major local players | Market share (of total packaging consumption) | Overview | Producers |
|--|--|---|--|---|
|  Paper |  4 | 26% | <p>Most demanded products are bags, carboards and corrugated</p> <p>Industry to support in getting more affordable feedstock</p> |   La Rochette Dakar  Rufsac  |
|  Plastic |  5 | 41% | <p>Domestic production dominated by SIMPA and FUMOA</p> <p>Some initiatives in relation with Circular Economy</p> |  Sipasen  Fumoa  SAPIN  |
|  Metal |  1 | 19% | <p>Domestic production dominated by FUMOA providing metal drums to oil companies</p> |  FUMOA |
|  Wood |  1 | 54% | <p>Demand mostly coming from Agrofood industries</p> <p>Pallets for imports usually reused</p> |  MBAO-BOIS La palette sénégalaise |
|  Glass | N/A | N/A | N/A | No domestic manufacturer as of Q1 2022 |

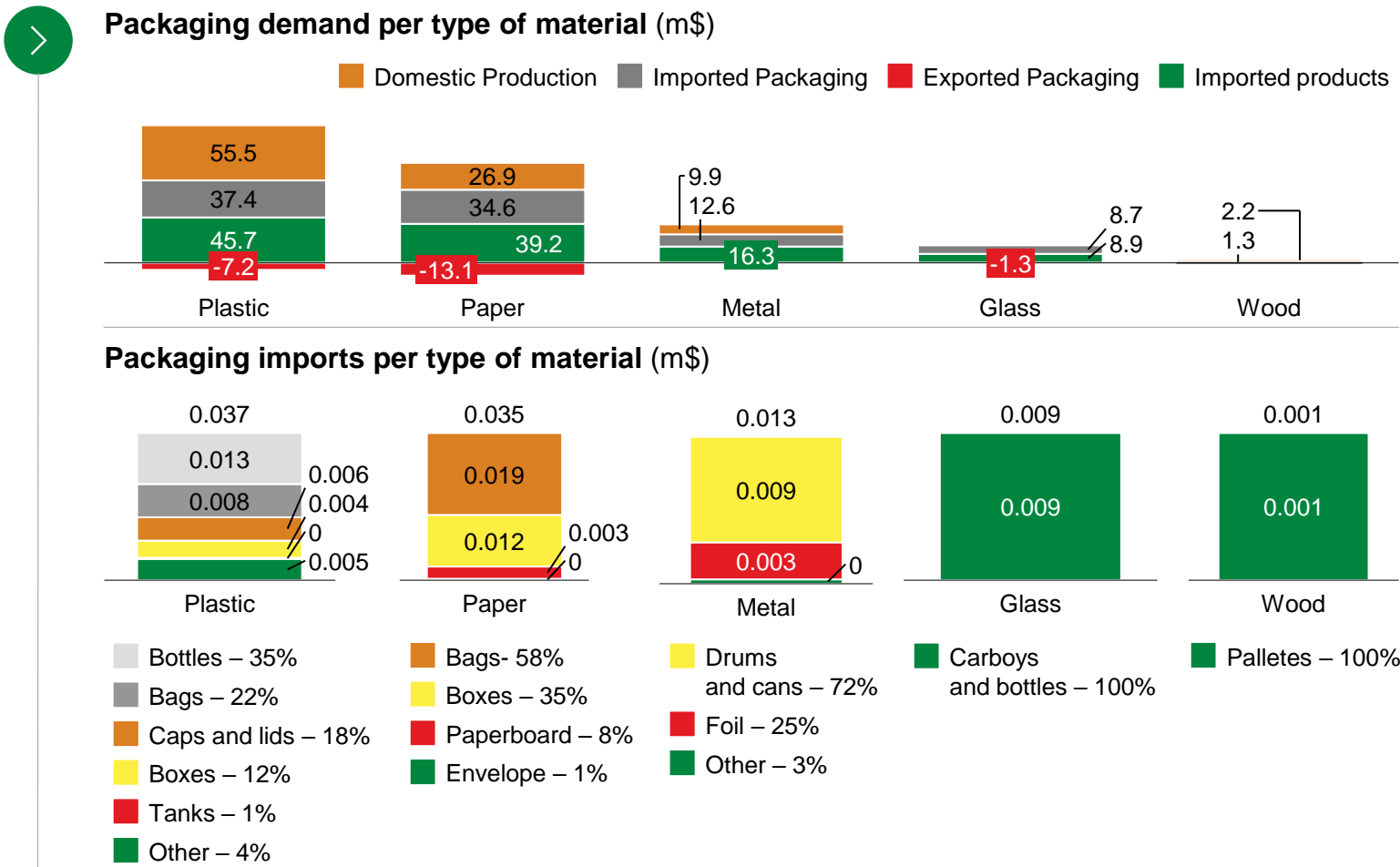
Packaging demand in Senegal

~ 80% of the packaging spend in Senegal covers plastic and paper. Out of which a large portion is currently being imported, particularly bottles, bags, caps and lids for plastics and bags and boxes for paper.



* amounts are in US\$

Source: International Trade Center; Interviews; Packfora benchmarks



Sustainable Packaging

Sustainable packaging refers to the sourcing, development and use of packaging solutions that have minimal environmental impact and ecological footprint

Why Sustainability?



Sustainability is the ability to exist and develop without depleting natural resources for the future.



The concept of sustainability is composed of three pillars: environmental, social and economic – also known informally as profits, planet, and people.



The UN has issued 17 Sustainability goals, they include Economic growth, No poverty, Zero hunger, Clean water and Sanitation, Affordable and clean energy, and Responsible consumption and production, all hoped to be reached by 2030.



Additionally, sustainability enables an organization to attract employees, shareholders and customers who are invested in the goals of sustainability and share these values.

Selected initiative related to sustainable packaging in Senegal



From a few tons per months years ago, we are currently working with around 14 waste management companies that provide about **200 tons** of recycled plastic each month

Hawili Ibrahim, Simpa General Manager, 2015



Senegal: Overview of Regulatory and Policy Environment

Senegal's ambition to regulate plastic waste generation started with a new law on plastics in 2015



2015 Law

- On May 4th, 2015, Senegal passed a first law related to plastic pollution prevention
- The law prescribed (i) **ban on use** of plastic bags having a **thickness of less than 30µm** and (ii) **ban on free distributions** of plastic bags **thicker than 30µm** (Consumers have to pay for it)
- Industrial producers must pay attention to volume of waste they generate; and plastic producers should propose a waste collection mechanism for recycling or disposal

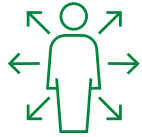
2020 Law

- The Law No. 2020-04 of April 20, 2020 repeals and replaces Law No. 2015 09 of May 4, 2015
- It extends the scope of the ban **to cover a specific range of plastic products regardless of their thickness** (cups; cutleries and plates; checkout bags; straws and beverage sachets) except for essential protection packaging for which there is no alternative (e.g.: plastic film for protection during transport)
- It also includes new provisions such as mandatory deposits on plastic bottles or extended producer responsibility

Based on work to date, the key investment opportunities to explore in Senegal are in recycled plastic and paper based packaging materials

| Material | Insights | Rationale |
|---|--|--|
| Plastic  | Nearly 53% of local plastic demand is met through imports | There is an opportunity for reducing dependency on imports of plastic by developing local converters in Senegal and/or increasing the capacity of existing ones |
| | There exists global demand for recycled materials | Based on experience the maximum customization and value addition happens at the conversion stage |
| | There is substantial potential for job creation in plastic waste collection and recycling industries | Establishing robust plastic waste collection systems would address the growing demand for recycled materials, especially in FMCG industries |
| Paper  | Nearly 40% of local paper demand is met through imports High local demand for bags, cardboards & corrugated boxes | There is growing demand for paper-based packaging due to the global rise in e-commerce and focus on sustainability by companies across industry types, therefore development of a local paper recycling industry would help reduce dependency on imports |
| | Recycling is critical for boosting the sustainability of paper packaging and in reducing reliance on imported pulp | There are existing players in the recycling space in Senegal and potential to increase their capacity to help meet paper packaging demands |

In Senegal, the most attractive investment opportunity for plastic is in boosting plastic recycling



Market opportunity for Senegal

There is strong global demand for recycled plastic polymers and a local market opportunity of ~12 M USD



Senegal's ability to compete on cost

The development of local polymer suppliers (virgin & PCR) will reduce dependency on imports, hence becoming more cost competitive



Senegal's ability to attract investors

Laws have been introduced to strengthen regulations against plastic pollution and to boost recycling. Additionally, the World Bank is investing in a waste collection centre.



Setting up two plastic packaging recycling plants would require an investment of up to \$21Mn, and have the potential to generate revenues of \$17Mn and create 1K jobs



Plastic recycling overview

- Senegal consumes ~ 40K tons of plastic packaging annually (as of 2021)
- There is an opportunity to recycle rigid plastics (PET, HDPE and PP)
- Up to two recycling plants can be set up to process a minimum of 6K tons of plastic (each)

Assumptions

Around 25% of total plastic consumption (40K tons 2021) will be recycled i.e. 10K tons of PCR

Annual plastic consumption is expected at ~55K tons by 2025 @ 8% CAGR

Environmental policy is expected to be strengthened in Senegal over time in line with global trends. This type of investment is increasingly common in countries where there is an Extended Producer Responsibility (EPR) Framework – a policy approach where industrials are responsible for the packaging they place on the market.



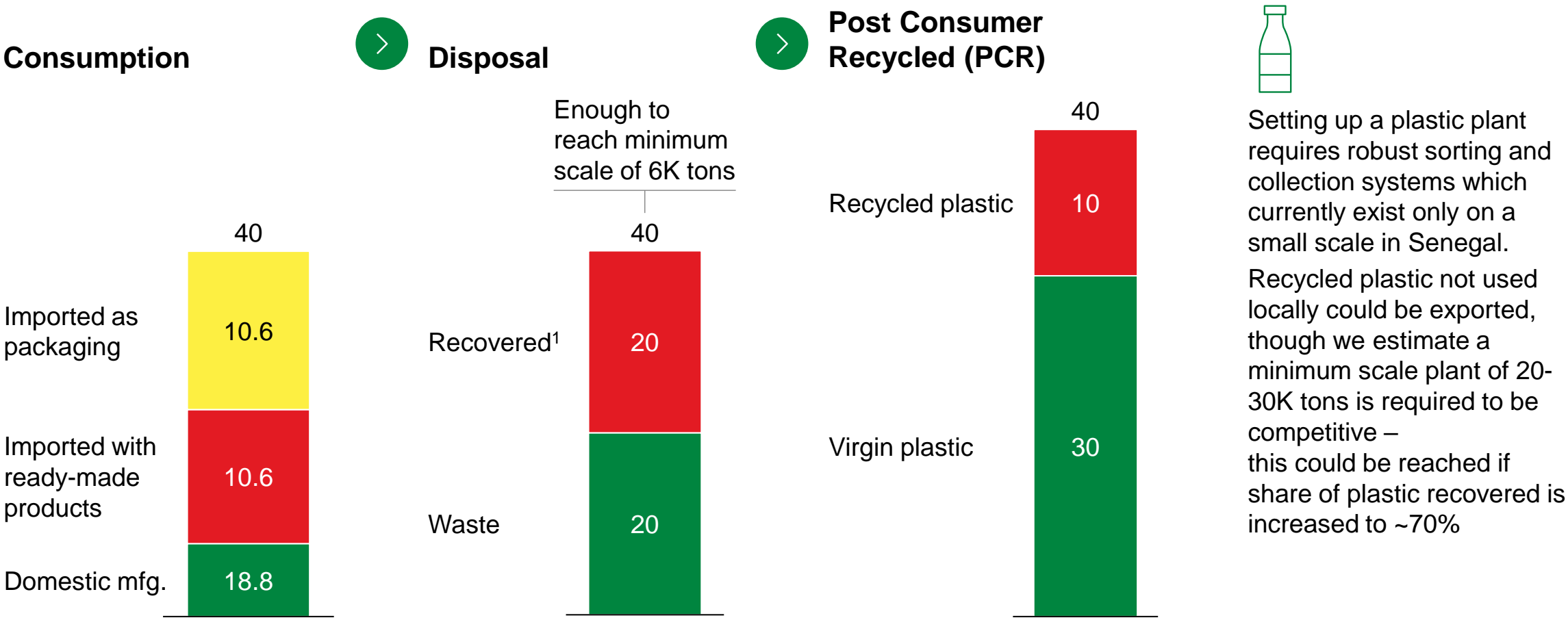
Opportunity size and impact

| | |
|-----------------------|--------------------------------|
| Investment (\$Mn) | ~21 (10.5 / factory) |
| Annual Revenue (\$Mn) | ~17 (8.5 per factory annually) |
| Jobs | ~1000 |



There is an opportunity to recycle up to 20KT of plastic in future

Plastic cycle, 000 tons



1. Recovery rate assumed to be 50%

Source: International trade center, Interviews, Packfora benchmarks ; All figures from 2021 estimates

The most attractive investment opportunities for paper is in boosting paper converters & recycling



Market opportunity for Senegal

Local converters - Paper based daily use products such as cups, plates, and straws replacing conventional plastic based packs. The opportunity lies in importing paper which is then converted into value added items locally. Opportunity size ~ 18M USD.

Recycling - There is a strong global demand for recycled paper and a local market opportunity of ~24 M USD



Senegal's ability to compete on cost

Locally produced items will have wider scope for customization and less challenges around MOQ. The paper conversion sector requires lower investments and skill sets for operation

The development of local feedstock suppliers (virgin Kraft & recycled) will reduce dependency on imports, hence becoming more cost competitive.



Senegal's ability to attract investors

The World Bank is investing in a waste collection centre. This demonstrates existing investment in this space, and provides scope to export recycled paper to neighbouring countries

3-4 established players will provide vote of confidence along with high demand due to growing population and urbanization



Setting up paper packaging recycling plants would require an investment of \$10 Mn, and have the potential to generate revenues of \$14 Mn and create 800 jobs



Plastic recycling overview

- Senegal consumes ~120K tons of paper annually i.e., 80K tons of virgin Kraft paper + 40K tons of recycled paper
- As stated above ~40K tons of recycled paper packaging annually (as of 2021)
- There is an opportunity to recover & recycle Kraft/virgin paper-based PMs
- Up to two recycling plants can be set up to process a minimum of 5K tons of paper (each)



Opportunity size and impact

| | |
|--------------------------|--------------------|
| Investment (\$Mn) | ~10 (Recycled) |
| | ~60 (Virgin Kraft) |
| Revenue (\$Mn) | ~14 (Recycled) |
| Jobs | ~800 |

*Jobs – benchmarked with Indian paper mills, data from Storaenso website (Europe market)



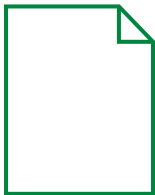
Opportunity to recycle 60K tons of paper for future in phase 2

Paper recycle, 000 tons

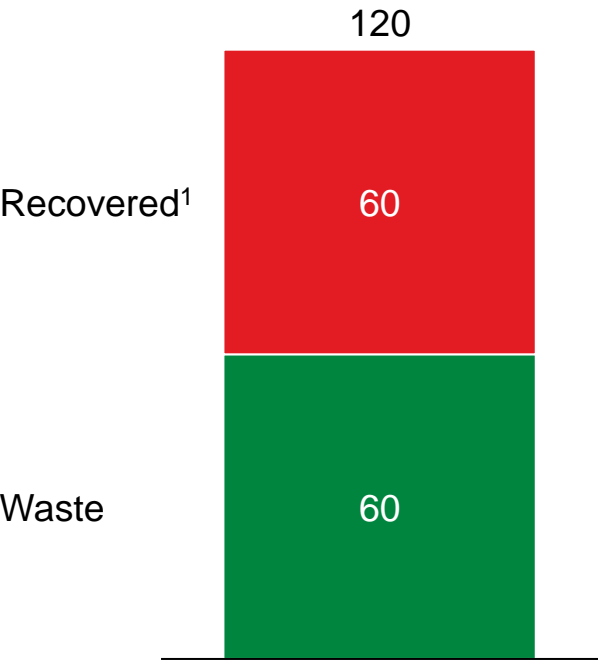
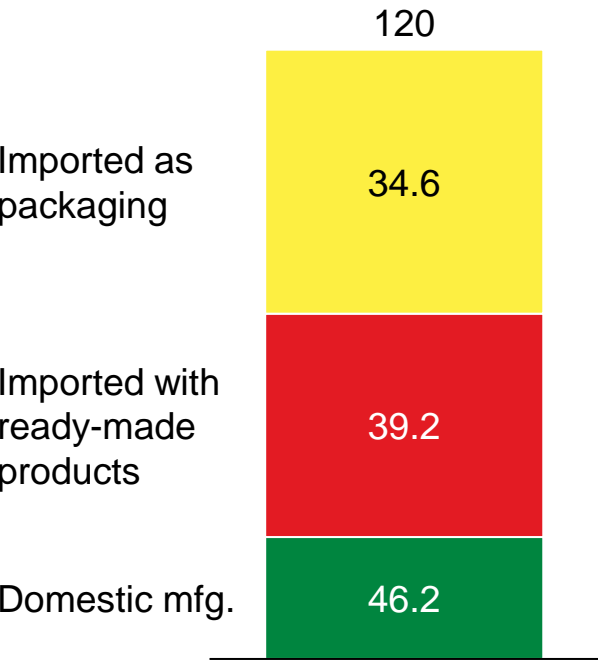
Consumption



Disposal



Enough to reach minimum scale of 20K tons



Setting up a paper recycling plant requires robust collection, sorting & processing systems that may exist only on a small scale in Senegal

If the recovery rate is taken up to 70%, 84K tons of paper could be recycled and would give an opportunity to export to neighboring countries

1. Recovery rate assumed to be 50%

Strong support to Sustainable packaging sector

There is an existing ecosystem supporting the sustainable packaging sector across the public and private sector as well as development agencies.



Government of Senegal

On May 4th, 2015, Senegal passed a law banning the use of plastic bags **thickness of less than 30µm. In 2020, the law was extended to also ban a specific range of plastic products regardless of their thickness** (cups; cutlery and plates; checkout bags; straws and beverage sachets) except for essential protection packaging for which there is no alternative (e.g.: plastic film for protection during transport). It also includes new provisions such as mandatory deposits on plastic bottles or extended producer responsibility



Private Sector

There are a number of private sector initiatives taking place to support the Circular Economy in Senegal, mostly in waste collection and management as well as recycling.



Development Agencies

There are multiple donor funded initiatives taking place in Senegal to support the circular economy. This includes a \$300M World Bank funded programme to set up solid waste management facilities across Senegal.

A selection of companies that operate in Senegal

