



# FINANCIAL MECHANISMS TO REDUCE CONSUMPTION OF SINGLE-USE PLASTIC BAGS SCOPING STUDY IN THE EGYPTIAN CONTEXT



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to accelerate the implementation of Sustainable Consumption and Production, Circular Economy and Blue Economy

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# LIST OF ACRONYMS

EOS	Egyptian Organization for Standardization
EPR	Extended Producer Responsibility
FMCG	Fast Moving Consumer Goods
GAFI	General Authority for Investment and Free Zones
HDPE	High Density Polyethylene
LCA	Life Cycle Assessment
LDPE	Low Density Polyethylene
MoE	Ministry of Environment
MoF	Ministry of Finance
MoTI	Ministry of Trade and Industry
PE	Polyethylene
PLA	Polylactic Acid
PM	Prime Minister
PP	Polypropylene
SMME	Small, Medium and Micro Enterprises
SUPB	Single-Use Plastic Bags
SUPP	Single-Use Plastic Products
SUPSB	Single-Use Plastic Shopping Bags
SWM	Solid Waste Management
UNEP	United National Environment Program
UNIDO	United Nations Industrial Development Organization
WMRA	Waste Management Regulatory Authority

# I. EXECUTIVE SUMMARY

# FINANCIAL MECHANISMS



Financial and economic instruments are increasingly being used to tackle the unchecked consumption and production of single-use plastics, in particular single-use plastic bags (SUPBs). Product taxation, Extended Producer Responsibility (EPR) Schemes, subsidies and tax breaks for producers of alternatives and pricing SUPBs are all instruments which have been invariably used globally to send price signals to incentivize shifts in consumer behavior and alter production patterns to more sustainable alternatives.

In Egypt, many of the aforementioned instruments are enshrined in the Waste Management Law 202 for the year 2020, the Investment Law 17 for the year 2017 and the Small, Medium and Micro Enterprises Law 152 for the year 2020. The Waste Management Regulatory Authority (WMRA) is in the process of taking the necessary steps to set an EPR fee for SUPBs as well as banning their free distribution according to the requirements of the Waste Law. Prime Ministerial decrees have been issued to include the production of alternatives to SUPBs as beneficiaries of financial incentives provided for in the Investment Law. This notwithstanding, a number of obstacles remain that could hinder the ability of such instruments to instigate the desired policy objective of reducing SUPBs consumption. Financial and economic instruments need to be placed within a coherent policy framework otherwise policies could contradict each other or cancel each other out. For example, availing the incentives of the Investment Law to both producers of SUPBs and producers of alternatives is not likely to instigate the desired market shift nor would it even level the playing field since producers of plastic bags benefit from other financial incentives, such as subsidies from the export fund, which are not available to producers of alternatives. Furthermore, there are still some ambiguities regarding eligibility criteria for the incentives in the Investment Law, which makes it not easily accessible to producers of alternatives.

Financial instruments, such as tax breaks and subsidies, need to be accompanied by adequate standards for alternatives to SUPBs. Alternatives to SUPBs come in varying shapes and forms and include also plastic multi-use bags, such as woven and non-woven polypropylene (pp) bags. The policy objective

should be to encourage and incentivize multi-use as opposed to single-use, regardless of the material type, and the structure of incentive schemes needs to reflect such policy objective. Incentivizing reuse keeps materials in circulation for as long as possible and contributes to a more circular economy, which is also a stated objective of the Egyptian government. Standards are also necessary within this coherent policy framework in order not to replace SUPBs with single-use products, which could have similar environmental consequences to SUPBs if not worse. So far, the only standards issued for alternatives are those for compostable bags, which in essence are not multi-use, and there is still a lot of work to be done to complete the set of standards needed for other alternatives.

In the short term, it is unlikely that the financial incentives available in the Investment Law and the Small, Medium and Micro Enterprises Law would instigate the necessary market shifts in favor of producers of alternatives as opposed to producers of SUPBs. The ambiguity regarding eligibility criteria, the limited reach and having the incentives available to the chemical industries as well as green industries neutralize their impact. The incentives which could create changes in consumer behavior in the short term as well as incentivize production of alternatives would be the pricing mechanism and the EPR fees. Both policy principles are enshrined in the Waste Law 202 for the year 2020 and need to be enforced. WMRA has indicated that the price would not be imposed on retailers, but a condition would be set that SUPBs cannot be sold below the cost price. While this could leave room for the price to be lower than what is needed to deter consumption, the EPR fee would be added on top of it to ensure that the price signal would lead to the desired shift to multi-use bags. Hence, all efforts should be geared towards finalizing the necessary decrees needed to enforce the ban on free distribution and implementation of EPR on single-use plastic bags as they remain the easiest to implement and the more likely to have the desired impact on reducing consumption of single-use plastic bags.



## III. INTRODUCTION



## INTRODUCTION

In Egypt, plastic production accounts for almost 3% of GDP and 12% of the industrial sectors production<sup>1</sup>. The Egyptian market consumes around 12.5 billion USD in plastic products annually. Packaging products, including single-use plastic bags, represent a significant portion of the total plastic production amounting to almost 40%<sup>2</sup>. Globally, SUPBs constitute almost 8% of the total plastic consumption<sup>3</sup>. It is estimated that the annual consumption of single-use plastic bags in Egypt amounts to 14 billion bags<sup>4</sup>. SUPB are ubiquitous in the Egyptian environment littering streets, polluting waterways and ending in landfills where they take thousands of years to decompose or are openly burned. The chemicals added to the base plastic to give it desired characteristics are hazardous and when they leak to the food chain or the environment, they pose serious public health and environmental problems.

The government of Egypt has adopted a number of policy measures to tackle the problem of SUPB and reduce their consumption. The Waste Management Law promulgated in 2020 bans the free distribution of SUPB by retailers and imposes an obligation on manufacturers and importers to produce SUPB according to standards issued by the Egyptian Standardization Organization (EOS). Subsequent standards and specifications issued by EOS in November 2022 set a minimum thickness for SUPBs to 50 microns, which effectively bans the production of light weight bags. A national strategy for reducing the consumption of SUPBs was also drafted and endorsed by the cabinet and it set a very ambitious target of reducing consumption of SUPBs from 350 to 50 bags per capita by 2030. The strategy constitutes a main pillar of the government's stated goal of promoting circularity in the Egyptian economy.

In addition to regulatory instruments to reduce consumption of SUPBs, financial mechanisms are also vital policy tools that could play a significant role in reducing consumption. This is essentially done through influencing market dynamics by sending the right price signal to manufacturers, consumers and retailers to shift their consumption and production patterns. Financial mechanisms can include instruments such as taxes, subsidies, Extended Producer Responsibility Schemes, levies or charges on SUPBs among others. Those instruments can make SUPBs more costly and alternatives more affordable thus addressing the market failures by internalizing some of the environmental and social costs associated with SUPB. Those instruments are not mutually exclusive and can complement each other when placed within a coherent policy mix with a clear objective. Financial mechanisms are always implemented within a political, economic, cultural and legal context which influences their applicability in a specific setting and the likelihood of achieving the desired objectives. There are also various modalities for implementing financial mechanisms which have been tried and tested by other countries and which could provide vital lessons learned in the Egyptian context.

This report seeks to provide an overview of the available options for financing mechanisms to reduce consumption of SUPB and the modalities for their implementation in the Egyptian context. The report will zoom in on available alternatives to SUPB in the Egyptian market and how financing mechanisms can be used to promote their production and use within the context of a global drive towards circularity. The report also seeks to provide insights to policy and decision makers as they embark on the next phase of tackling SUPBs consumption by enforcing and putting into effect envisioned policies and regulations.

(1) Plastic Value Chains Mapping and Assessment, USAID, 2017

(2) Study on sustainable alternative material to plastics, UNIDO 2020 available alternatives to single-use plastics

(3) Choosing Policy Instruments, Plastic Policy Simulator, ProBlue, The World Bank Group, 2022

(4) National Strategy for Reduction of Plastic Bags Consumption 2030

# III. CONTEXT



## SUPBs in the Waste Management Law

The Waste Management Law 202/2022 addresses the problems of SUPBs across the supply chain, including upstream and downstream solutions. Article 27 prohibits the manufacturing, import and export of SUPBs unless it is in accordance with the standards and specifications issued by the Minister of Trade and Industry (MoTI) in coordination with the Minister of Environment (MoE)<sup>5</sup>.

Article 27 also addresses the issue of incentives to alternatives to plastics including tax breaks and customs breaks to encourage the manufacturing and import of "environmentally friendly" alternatives to SUPBs. The article stipulates that the Minister of Finance (MoF) shall issue a decree with such incentives and that the executive regulations shall determine the specifications of environmentally friendly alternatives. So far, there has been no decision by the MoF regarding the aforementioned incentives.

The executive regulations of Law 202/2022 were issued in March 2022, and it stipulated for further requirements, including an obligation on retailers to use multi-use bags and to set up incentives to encourage its customers to use those bags. Furthermore, the regulations include an obligation on manufacturers producing biodegradable plastic bags to comply with labeling requirements according to the standards to be issued in this regard.

In regard to financial incentives, the executive regulations of the Law article 19 reiterates the need for the MoF to issue a decree specifying the incentives to be provided to producers of environmentally friendly alternatives to plastic bags. The article however specifies that incentives shall be provided to those setting up facilities to recycle plastic bags or to produce biodegradable plastic bags. In addition, article 19 states that the Waste Management Regulatory Authority shall provide a green label for producers of multi-use plastic bags and producers of biodegradable plastic bags. The specific emphasis on biodegradable bags as a target for incentives could prove problematic as other producers of alternatives might be excluded from the provision of incentives if a strict reading of article 19 is adopted, especially that other alternatives might have a lesser impact on the environment than biodegradable bags.

(5) Egypt SWM Law 202/2022, article 27










## National Strategy for reducing consumption of SUPBs

A strategy for reducing the consumption of SUPBs has also been drafted and endorsed by the Cabinet. The strategy has a number of pillars and also addresses upstream and downstream solutions. The four pillars of the strategy were banning the free distribution of plastic shopping bags, setting a minimum thickness for the bags, reducing the social impacts of policies and capacity building for stakeholders. The strategy set a target of reducing the per capita consumption of SUPBs from 350 to 50 bags per capita by 2030. The strategy envisions that the ban on free distribution would be implemented gradually in the various governorates and that there are actions taken for reducing social impact including the free distribution of multi-use bags as an alternative.

## National Standards for SUP carrier bags

The Egyptian Organisation for Standardisation (EOS) issued the specifications 3040/2022 for SUPBs carrier bags in November 2022. The standards set the minimum microns for SUPBs used for shopping to 50 microns and a decision by the MoTI provided a grace period of six months for plastic bags producers to comply with the requirements of the standards. The grace period ended on the 17th of May 2023 yet SUPBs carrier bags are still being widely distributed freely by retailers, which indicates that no enforcement mechanisms have been set as of the time of writing of this report. The standards exclude any plastic bags that come into direct contact with food items, nor does it apply to bags used for waste collection. The specifications also prescribe that the bags should have handles made from the same material as the bag.

	<b>PETE</b> Polyethylene Terephthalate
	<b>HDPE</b> High-Density Polyethylene
	<b>PVC</b> Polyvinyl Chloride
	<b>LDPE</b> Low-Density Polyethylene
	<b>PP</b> Polypropylene
	<b>PS</b> Polystyrene
	<b>OTHER</b> OTHER

## Incentives in the Investment Law



Law number 72 for the year 2017 is the Egyptian Investment Law. Over the last year, the Ministry of Environment has pushed for the inclusion of sectors that focus on the production of alternatives to plastics under the umbrella of the Investment Law to receive the incentives prescribed in the Investment Law. This is in line with the Ministry's goal of promoting circularity in the Egyptian economy. In March 2022, a Cabinet Decision number 981 for the year 2022 was issued which included provisions to include the manufacturing of alternatives to plastic bags within the list of sectors which are entitled to incentives stipulated in the Law.

Article 11 of the Investment Law provides a set of incentives for projects which have been established following the issuance of the law including the following tax breaks:

- a) 50% of the capital costs for geographic sector A, which includes governorates in most need of development assistance.
- b) 30% of capital costs for geographic sector B, which includes all other governorates.

Article 12 of the Law specifies a set of conditions which need to be met in order for the project to receive the incentives specified in the Law. These include the following:

- a) That a new project is being established.
- b) That the company is established within 3 years of the issuance of the executive regulations of the Law.
- c) That the entity receives a certificate from the General Authority for Investment and Free zones (GAFI) to be entitled for the aforementioned benefits.

While the inclusion of sectors which produce alternatives to plastics within the remit of the Investment Law is a welcome step, many producers might not be able to benefit from the provisions of the Law either because they were established prior to the issuance of the Law or unable to meet any of the other requirements. In addition, it is worth noting that article 11 of the Investment Law includes chemical industries as a priority sector to also benefit from the incentives provided. Given that the plastic industry is a subsector of the chemical industries, producers of SUPBs could also benefit from the incentives provided by the Law. While this levels the playing field, it does not provide the necessary incentives to shift the balance towards producers of alternatives to SUPB.



### Box 1: Regulatory Provisions to address SUPBs

In recognition of the environmental problems posed by SUPBs, the government of Egypt has taken bold steps to reduce their consumption and their presence in the environment. This included provisions in the Waste Law, the issuance of standards for SUPBs setting minimum thickness requirements and the endorsement of a national strategy with a target of reducing consumption to 50 bags per capita by 2030.

Nonetheless, implementation and enforcement of some of the provisions of the Law and other regulatory instruments remain a challenge. Despite a grace period for manufacturers and retailers to stop producing and selling lightweight (less than 50 microns thickness) SUPBs, they are still widely produced and distributed.

Financial mechanisms prescribed in the Waste Law are yet to be put into effect. Tax and custom breaks to producers of alternatives to SUPBs need a decree by the MoF which is yet to be issued. Furthermore, provisions of the executive regulations of the law which seem to specifically mention biodegradable bags producers as beneficiaries of the incentive scheme to be issued by MoF could lead to exclusion of other more environmentally friendly alternatives.

PM decree 981 to include manufacturers of alternatives to SUP under the umbrella of the Investment Law 72/2017 was a positive development. However, the fact that producers of SUPBs can also benefit from the incentives of Law 72 limits the potential of such inclusion to incentivise the necessary market shifts to reduce consumption of SUPBs. Furthermore, the incentives included in Law 72 are conditioned by a set of requirements that might be difficult for many producers of alternatives to SUPBs to meet.

#### Box 1 Regulatory Provisions to address SUPB

### Incentives in Law 152 for Small, Medium and Micro Enterprises

There are no specific provisions in Law 152 that single out producers of alternatives to SUPBs or green industries in general. However, the Law applies to all businesses that could be classified as SMMEs which is based on the amount of declared capital. Given that many of the producers of alternatives could fall under the definition of SMMEs, they could potentially be eligible for incentives provided for in the Law. Some of the incentives are similar to those included in the Investment Law, such as tax breaks and partial reimbursement for infrastructure costs. One significant provision is however the allowance for SMMEs to have low-income tax rates which are set as lump sum payments depending on earnings rather than a percentage of profits. These tax provisions could potentially be of much higher value than the tax breaks on capital expenditure in the Investment Law.

**IV. AVAILABLE  
ALTERNATIVES TO  
SUPBS IN THE  
EGYPTIAN MARKET**





The challenges posed by SUPBs are stemming from two characteristics. One is the singularity of use, which leads to unchecked consumption, littering of streets and waterways putting pressure on waste systems and public health implications and hinders the move towards circular economy solutions. This is problematic irrespective of the material of the bag and whether it is made of plastic or not. The other dimension is the material composition with plastic being problematic due to the fact that it is non-biodegradable and is often mixed with toxic chemicals that can leak into the environment and the food chain. Invariably SUPBs are fossil fuel based contributing to numerous environmental burdens including climate change.



For the purpose of this scoping study, alternatives to SUPBs are classified into multi-use and single-use alternatives. It is important to note that alternatives to SUPBs are not all created equal when it comes to their environmental impact. The impact will vary depending on the characteristics of each alternative. However, multi-use bags will generally have a lesser environmental impact than single-use alternatives. Replacing SUPBs with other single-use alternatives does not represent an optimal solution<sup>6</sup>.

Nevertheless, whether a bag is single-use or multi-use will depend on a number of factors, including existing standards, consumer behavior and physical characteristics of the bag not just its material composition. Hence the classification of bags is not always straightforward and what is presented in the report is simply based on observation of how bags are commonly used.

Multi-Use Bags	
 <p>Figure 1 Textile Woven Bag</p>  <p>Figure 2 PP Woven Bag</p>	<p><b>Woven Bags</b></p> <p>As the name indicates, woven bags are made from fabrics which have been woven together. Individual fabric threads are joined together through a process of weaving. Woven bags are strong, sturdy and very durable and have been historically used in Egypt and kept by households as prized possessions, so their multi-use credentials are clear. However, depending on the material they are made of they can also be inflexible for printing and coloring so not always a preferred option by retailers. Woven Polypropylene (PP) bags are more flexible than ones made of textile and could allow for more flexibility for branding purposes. Woven bags however are generally more expensive simply due to the lengthy process of making them which is not efficient at large scale production.</p>

(6) United Nations Environment Programme (2021). Addressing Single-use Plastic Products Pollution Using a Life Cycle Approach. Nairobi.

Multi-Use Bags	
 <p data-bbox="280 763 587 792">Figure 3 Non-Woven PP Bag</p>	<p data-bbox="916 320 1150 349" style="text-align: center;"><b>Non-Woven PP Bag</b></p> <p data-bbox="683 416 1382 663">A non-woven PP bag is made from plastic film synthetic fiber that is made to look and feel like textile. It is made through extrusion where fibers are spun and merged together under heat as opposed to woven bags where a process of weaving is used to merge fabrics. In general, woven PP is stronger than non-woven PP and hence it is expected to have a longer lifetime and be used more times than non-woven PP.</p> <p data-bbox="683 707 1382 1099">However, in the absence of quality standards there is a risk that non-woven bags could still be lightweight and of poor quality that they cause similar problems to SUPBs. In Kenya, following a ban in 2017 on SUPBs, the government followed up two years later with a ban on non-woven PP after it noticed that producers were producing and distributing non-woven bags and promoting them as “environmentally friendly” while in fact they were equally causing littering and harming the environment. It is worth noting that the ban was temporary until the standardization authority in Kenya issued clear standards for non-woven PP.</p>
 <p data-bbox="284 1709 584 1738">Figure 4 Paper Carrier Bags</p>	<p data-bbox="963 1211 1102 1240" style="text-align: center;"><b>Paper Bags</b></p> <p data-bbox="683 1312 1382 1704">Paper bags are often promoted as a more environmentally friendly alternative to plastic bags. This stems primarily from the fact that paper bags are biodegradable while plastic bags take much longer to biodegrade. However, the impact of paper bags could be more than plastic depending on how often they are reused, how paper is produced and where they end up in the waste stream. For example, paper bags that end up in a landfill might have a bigger climate change impact as opposed to plastic which is largely inert. Luckily in Egypt, paper is often recycled, and it is rare to find paper bags in landfills as they fetch value in the recycling market.</p> <p data-bbox="683 1749 1382 2029">However, paper bags are certainly less durable than the alternatives described above and could be easily torn or spoiled. Due to its properties, it could be argued that paper bags lie on the border between multi and single-use. Paper bags are a common alternative at high-end retailers in the FMCG market and high-end fashion but are not a common mass market alternative when it comes to shopping bags due to their high price.</p>

Multi-Use Bags	
 <p>Figure 5 Cotton Bags</p>	<p style="text-align: center;"><b>Cotton Bags</b></p> <p>Cotton bags could be considered a subcategory of the woven bags as the fabric is bonded together using weaving. Cotton bags are very sturdy and durable and are intended to be used many times. However, one problem with cotton bags is that taking into account a full life cycle assessment (LCA) would reveal that they would need to be used more than a hundred times to have a lesser overall environmental impact than SUPBs. This is primarily stemming from the cotton farming process and the use of fertilizers and water<sup>7</sup>. Woven PP bags in particular are often marketed as more environmentally friendly than cotton bags due to this fact.</p>
Single-Use Alternative Bags	
 <p>Figure 6 Biodegradable Carrier Bags</p>	<p style="text-align: center;"><b>Biodegradable Plastic Bags</b></p> <p>It is important to discern between the various types of products which are usually lumped together under the umbrella phrase of biodegradable plastic as they can have different characteristics and physical properties and accordingly varying environmental impact. Biodegradable plastic bags currently available in the Egyptian market are still single-use as they are commonly lightweight bags of around 10 microns. While they could potentially solve some of the problems associated with non-biodegradable plastic, they are unlikely to solve problems associated with littering of streets and clogging of waterways because of their light weight.</p>

(7) UK Environment Agency, Life Cycle Assessment of Carrier Bags, 2011

**Biodegradable:** Capable of decomposing under a natural biological process of organic matter and is completely or partially converted to water, CO<sub>2</sub>/methane, energy and new biomass by microorganisms (bacteria and fungi).

**Compostable:** Capable of biodegrading under specified conditions and timescales, usually only encountered in an industrial facility. For a bag to be defined as compostable, it needs to be completely free from in-organic material. Some countries have regulated the labelling of compostable bag by indicating for example that the bag needs to 90% decompose within 12 weeks<sup>8</sup>.

**Oxo-degradable-bags:** Although sometimes these are grouped under the category of biodegradable, they are actually not biodegradable. These bags are made from normal polymers such as polyethylene which is mixed with additives to make it breakdown and then it can biodegrade due to oxidation. This could potentially be more harmful as plastic is broken into small pieces making it easier to leak into food systems and the environment and the additives added could potentially cause harm to public health and environment. These types of bags started appearing in the Egyptian market around the time when Egypt was hosting the COP27 in Sharm El Sheikh and were being marketed as “environmentally friendly” bags. The government however took steps to ban such bags and globally they are now frowned upon.

## Box 2: Assessment of alternatives to SUPB

Alternatives to SUPBs come in various forms and shapes and most are available in the Egyptian market. In general, multi-use bags have a lesser environmental impact, regardless of the material they are made of, than single-use bags. They contribute to conservation of resources and set a good example of how circular economy solutions could work. Setting financial incentive schemes for alternatives should take this into account and not treat all alternatives as equal. Single-use alternatives, especially those marketed as biodegradable or made of bioplastic have their own challenges and could potentially lead to the same problems caused by SUPBs.

Data about production capacities, market share, pricing, material composition and chemical characteristics of alternatives is not generally available and needs to be obtained prior to establishing a financial mechanism to support alternatives. The decision by the MoF to incentivise alternatives needs to be preceded by detailed analysis of the alternatives market and the incentives should be modulated to reflect the environmental impact of each alternative.

In addition, standards for all alternatives need to be issued by EOS in order to avoid confusion among consumers and false labelling by manufacturers. This clarity is needed prior to the adoption of a financial mechanism scheme to support alternatives. Non-woven PP bags are becoming more and more visible in the market, yet they are produced with varying standards, and some are light weight and have similar characteristics to SUPBs.

### Box 2 Assessment of alternatives to SUPB

(8) UK Standards for Compostable Bags

**V. OPTIONS FOR  
FINANCIAL  
INSTRUMENTS TO  
TACKLE THE PROBLEM  
OF SUPB**



## Taxes on Virgin Plastic Material

Plastic raisins are the main raw material for the production of plastic bags. A tax is an upstream financial instrument commonly used globally to reduce the consumption of SUPBs and other SUPPs by targeting the source. The tax also provides financial resources to the treasury to cover some of the costs related to waste collection, recycling and disposal of SUPBs. In the Mena region, Tunisia and Morocco have adopted such taxes on virgin plastic importation and manufacturing with 5% and 1% tax rates, respectively. Both countries have used the funds generated through the tax to develop and upgrade their waste systems<sup>9</sup>.

There is currently no provision for imposing taxation on plastic raisins in Egypt and it would require a legal text to impose such a tax. It is unlikely that with the current economic conditions and the strong powerful lobby of the plastic industry that there would be a political will to impose such a tax. Imposing a tax on raw material would also lead to implications on pricing of all plastic products not only SUPBs and some of these products, such as irrigation pipes, might be strategic industries that the government would not want to impose economic penalties on. A tax would lead to price increases which would in turn make alternatives to plastic more competitive.

## EPR

Extended Producer Responsibility (EPR) is an environmental policy by which producers of products assume responsibility for the end-of-life phase of their products life cycle. This responsibility could entail changes in the design of products to make them easier to recycle and/or responsibility for collection and recycling of the products once they become waste. EPR constitutes one of the main

policy instruments for driving towards circularity in the economy. The Waste Management Law includes provisions for the establishment of EPR schemes for priority products according to a Prime Minister Decree to be issued specifying all details regarding the design of the EPR system, including the EPR fees to be paid by producers<sup>10</sup>. EPR however is most commonly used for other single-use plastic products which could be commonly collected and recycled. EPR systems are complex systems that do not have the simplicity of taxes. They require a lengthy process of design and consultation with all stakeholders to identify the most suitable system. However, they essentially lead to the internalization of environmental costs which is then commonly passed on to the consumer. By shifting the financial burden of dealing with SUPBs to the consumer, a price signal is sent to encourage shifting of behavior and a reduction in consumption of SUPBs. WMRA is currently working on setting up EPR systems for packaging material and other priority products and it is likely that SUPBs would come under the provisions of the Prime Minister decree once issued. Commonly EPR incentivizes design changes particularly in packaging products.

(9) Plastic Atlas, 2020

(10) Law 202/2022 article 17



## Financial Incentives to Producers of Alternatives to SUPBs

Financial incentives to producers of alternatives could be grouped into direct subsidies or tax breaks and other relief from governmental obligations such as governmental fees, duties, land acquisition fees etc. Both options in theory should have the same impact as they make the production of alternatives more competitive with SUPBs. As indicated above, the Waste Management Law already provides for a decree to be issued by MoF detailing the financial incentives to be available to producers of alternatives. This decree is yet to be issued and would require careful thinking to ensure that alternatives are clearly defined and that the incentives are modulated to reflect the varying environmental impact of the different available alternatives. Clear standards for each alternative would also need to be issued by EOS to avoid false environmental claims and to level the playing field.



As mentioned above, there are some incentives available to producers of alternatives in the Investment Law no 72 for the year 2017. However, the incentives are unlikely to lead to the policy objective of reducing consumption of SUPBs since producers of SUPBs are also entitled to the same benefits as producers of alternatives.

## Pricing SUPBs

Pricing SUPBs is one of the most common policies to incentivize reduction in consumption of SUPBs. Many countries have put a price on SUPBs, and many have successfully managed to significantly reduce their consumption. A 5p levy on SUPB in Ireland has led to a reduction of more than 85% in SUPBs consumption. As indicated before, Law 202/2022 bans the free distribution of SUPBs and hence points towards the adoption of the pricing option. However, neither the Law nor the executive regulations specify how the pricing mechanism should work and how it should be organized and so far, SUPBs are still available for free at most retailers. International experience however points towards various options for setting SUPBs charges as well as fee collection modalities that could be considered in the Egyptian context.

An obvious decision could be that the price should be explicitly set by the government. This would likely require a decree or decision by the MoTI in coordination with WMRA. The advantage of this model would be that the government would guarantee a level playing field and be able to test the impact of the policy frequently and adjust the fees accordingly overtime.

A second option would be that the government leaves it to the discretion of the retailers to set the price as they please so long as the SUPBs are not sold for free. The challenge with such an option would be that some retailers could set the price low that it does not have any impact on consumption and the varying prices by various retailers would be confusing to consumers. In some countries such as the UK, the government also does not collect the revenue from the charges and leaves up to the discretion of retailers to spend the revenue on environmental and social causes. However, this is a rare practice and is not commonly applied in other countries.

A third option would be that the government stipulates that the SUPBs should at minimum be sold at its cost price. This option could be problematic in terms of enforcement as it would be difficult to verify if the price retailers set indeed reflects the true cost of the SUPBs. In addition, many retailers in Egypt produce their own bags which means that the cost might be internalized within the cost structure for the retailer. In such cases, the cost might be low and accordingly, the price would be low thus not sending the necessary price signal to consumers to reduce their consumption of SUPBs.

In setting the charge, the government could also set a flat fee for all SUPBs or set variable charges depending on the characteristics of the SUPBs. Such modulated fees could for example vary depending on the recycled content of the bag, its environmental impact, its size or weight, etc. These systems are complex systems which also require careful design and strict enforcement mechanisms.

### Box 3: Financial mechanisms options

There are various options for financial instruments to incentivize the reduction of SUPBs. While taxes on virgin material could be the easiest to apply and enforce, within the current economic climate it is unlikely that such an option would be a preferred option. The impacts of the tax would go beyond SUPBs industry and might touch other industries that the government does not want to burden.

EPR systems are stipulated in the Waste Law, yet they are complex systems that require lengthy processes to be designed and set up. SUPBs are not commonly the subject of specific EPR schemes and are often dealt with separately or within EPR schemes for packaging material in general.

The most obvious option would be imposing charges/levies on SUPBs at the point of retail. This option sends a direct signal to consumers to change behavior and shift towards alternatives to SUPBs. Charges should be set at a rate that discourages consumption. If they are set too low, they are unlikely to achieve the desired objective of reducing consumption. The various government entities should move ahead to set and announce the SUPBs charge amount to put effect to the ban on free distribution in the Law.

Incentives to alternative bag producers need to be placed within a coherent policy framework. This shall include clear standards for alternatives, disincentivizing the production of SUPBs and communication strategies that enable consumers to understand the varying environmental impacts of the different alternatives.



## **VI. CONCLUSIONS AND RECOMMENDATIONS**

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## Conclusions and Recommendations

Egypt has taken significant regulatory measures to reduce consumption of SUPBs as part of its declared effort to drive the economy towards circular solutions. The provisions of the Law and the issuance of the standards send powerful messages to induce shifts in the market. However, **enforcement mechanisms** are currently still lacking, and several provisions are yet to be put into effect. This is particularly the case when it comes to financial mechanisms, such as financial incentives to alternative bags producers and pricing of SUPBs. Enforcement is not the responsibility of WMRA on its own and other governmental entities need to play a role in enforcing the provisions of the Law. Enforcement needs to be anchored to other regulatory processes to ensure that progressive policies stipulated in the Law are being put into effect. For example, anchoring to industrial licenses or import/export licenses to incentivize compliance.

A decision on the **pricing policy** mechanism and modality for implementation needs to be taken. There are various options for pricing SUPBs and there has been no clear announcement so far as to what the pricing policy would be. The easiest option would be for the SUPBs prices to be unified and set centrally rather than leaving it to the discretion of retailers as this would be confusing to consumers and difficult to monitor.

The decree by the MoF regarding incentives to alternative bag producers needs to be preceded by a number of steps. These include **clear standards** for each type of alternative and classification of alternatives according to their environmental impact. Products which are used multiple times invariably have a lesser environmental impact than products which are only used once, regardless of the material they are made of. This points in the direction that financial incentives to alternatives should be focused on **multi-use alternatives** rather than only biodegradable options as the executive regulations of the law seems to imply. In the absence of clarity as to what products need to be incentivized, their material composition, physical characteristics, cost, availability in the market, etc., it will be difficult to set up a system for financial incentives.

**Coherent policies** are needed to avoid sending mixed signals or nullifying the impact of stated policies. Availing incentives in the Investment Law to both producers of SUPBs and producers of alternatives are unlikely to have an impact on changing production patterns. Similarly, singling out biodegradable bags for receiving incentives while the objective is to encourage reuse is not conducive to achieving policy objectives.

**Communication and education** are vital for encouraging reuse. While efforts are underway for information campaigns, it is imperative that messages are concrete and based on analysis of existing context and scientific knowledge. For example, consumers should know how many times they need to reuse a bag for it to have a substantial positive environmental impact compared to alternatives.

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