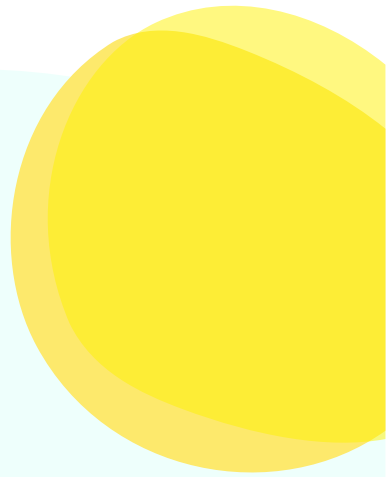




MINISTRY OF
ENVIRONMENT

SINGLE-USE PLASTIC PHASE-OUT PLAN

2020 - 2023





FOREWORD

Disposable plastics or Single Use Plastic (SUP) has become one of the most challenging issues facing the fragile yet pristine nature of the Maldives. The complex, interconnected symbiosis of these natural systems, supporting life on this archipelago across the equator is at the very core of the foundation sustaining the livelihoods, employment and the economy of this nation.

Acknowledging the magnitude of the issue, this plan has been formulated through meticulous effort and planning to deliver this inherited natural beauty, we call our home to the future environmental stewards, our children and their children as a gift to cherish.

As we look to embark on this crucial mission of decoupling Single Use Plastics from our lifestyle, I call for collaboration and support from the entire spectrum of our society.

May this nation be blessed as a sanctuary of peace and harmony for its dwellers and living beings.

Dr. Hussain Rasheed Hassan
Minister of Environment

ACKNOWLEDGMENTS

The policies and strategies included in this Plan reflect the government policies in the National Strategic Action Plan (NSAP 2019-2023) and the government's commitment to phase out single use plastic in Maldives by 2023.

This plan has been formulated with a collaborative effort by numerous individuals from various Government agencies and civil societies.

We acknowledge the technical support and constructive feedback received from stakeholders and colleagues, especially the valuable members of the Plastic Phase-out Committee. Stated below are the 10 members of the Plastic Committee comprising of government and civil societies that were appointed by the Ministry of Environment:

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Abbreviations

CIF- Cost, Insurance and Freight
DRS- Deposit Refund System
EPA- Environmental Protection Agency
EPR- Extended Producer Responsibility
EU- European Union
GDP- Gross Domestic Product
HS- Harmonised System
MBI- Market Based Instruments
MIRA- Maldives Income Revenue Authority
MoEn- Ministry of Environment
MoED- Ministry of Economic Development
MoEd- Ministry of Education
MVR- Maldivian Rufiyaa
MWSC- Maldives Water Sewerage Company
PO- Presidents Office
RIC-Resin Identification Code
RO- Reverse Osmosis
SAP- Strategic Action Plan
SUP- Single Use Plastic
SIDS- Small Island Developing States
SWOT- Strength, Weaknesses, Opportunities, Threats
WAMCO- Waste Management Corporation

1.

EXECUTIVE SUMMARY

This document outlines the strategic implementation plan for Single-Use Plastic (SUP) Phase-out in the Maldives by 2023.

This phase-out plan is a national initiative to phase-out the production, import and consumption of certain single-use plastics in the Maldives and promote the use of sustainable alternatives, in the effort to protect human health and the vulnerable marine environment of the country. In addition, by using strategic awareness and educational campaigns, the aim of this plan is to reduce the consumption of single-use plastics by nudging consumers to shift away from SUPs and towards more sustainable alternatives.

The single-use plastic phase-out plan comprises of 6 different policies, including ban of selected SUPs, implementing Market Based Instruments, strengthening data collection, introducing Extended Producer Responsibility (EPR), sustainable provision of alternatives as well as conducting education and awareness activities. Each policy and their underlying strategies address a different aspect of the fight against single-use plastic and the throw away culture that has developed within the Maldivian society over the years.

The convenience of single-use plastic is the main reason for the high consumption of SUP

products. Most of the time SUPs end up as litter; contributing to the pollution of the environment and degradation of the aesthetic beauty of the country.

Policy 1 of this plan focuses on reduction of such waste by banning the import, production and sale of specific SUPs that have affordable alternatives available, as not to cause an inconvenience to the public, businesses as well as government agencies.

Policy 2 comprises of three main Market Based Instruments including implementation of tariffs, levies, incentives and business facilitations. This policy focuses on reduction in consumption and in turn the production and import of SUP products, as well as introducing and encouraging the use of sustainable alternatives in the Maldivian market.

One of the main obstacles in developing the phase-out plan was the collection of data on the various types of SUPs that most commonly end up littering our environment. Import data of various SUPs were reviewed in order to support the estimated data of the waste produced by the distribution and consumption of SUPs by the Maldivian market.

Policy 3 focuses on setting future targets for plastic packaging reduction through improved data collection of imports.

Policy 4 (Extended Producer Responsibility) focuses on responsible collection mechanisms to be set up by business entities through mechanisms such as deposit refund system and other product stewardship programs.

Among the products that are currently allowed in the Maldivian market, the responsibility of managing or contributing to managing the waste generated once the end of the life cycle of the product is reached, will be placed on the business entities that benefit from the sale and profit of these SUPs.

Policy 5 involves the provision of sustainable alternatives and is directly linked to the duty exemption strategy of Policy 2. The main objective is to make the use of refillable water bottles convenient for the public, to ensure accessibility to water once bottled water less than 1 litre in size have been phased-out.

Policy 6 targets to educate the public regarding the products that will be banned or phased-out. Activities under Policy 6 also aims to make the public aware about the long- and short-term impact of single-use plastic on our environment as well as human health. The main objective of this policy is to help the public, government and business entities understand the potential positive impact of a collective effort to make a conscious choice to use eco-friendly alternatives instead of single-use plastics.

The single-use plastic phase-out plan aims to reduce the impact of single-use plastic on our environment, health and economy through implementation of the activities outlined under the six policies. Hence it is of great significance that the objectives of this plan are achieved through a coordinated effort by the implementing agencies, monitoring agencies and other stakeholders.



2. INTRODUCTION

*3. VISION &
OBJECTIVES*

4. TARGETS

2. INTRO- DUCTION

The single-use plastic phase-out plan is a commitment of the Government of Maldives to phase-out SUP's in the Maldives by 2023, as per the Maldives Parliamentary Resolution of 2019 (1-~~2~~ /2019/EC) and His Excellency President Ibrahim Mohamed Solih's declaration at the 74th session of the United Nations General Assembly (UNGA) in 2019.

Furthermore, SUP phase-out plan is in alignment with the National Strategic Action Plan (NSAP 2019-2023) of the Government of the Maldives as well as the Sustainable Development Goals (SDG) 14 and 15 to affirm the Maldives commitment to phase-out single-use plastic by 2023.

The Ministry of Environment appointed a plastic phase-out committee of 10 members from government and civil societies to help formulate this Single-Use Plastic Phase-out Plan.

2.1: Definition of Single-Use Plastics (SUP)'s

Single-use plastics (SUPs) or disposable plastics are those that are intended to be used for one-time purpose only, regardless of whether they are recyclable or non-recyclable. They may otherwise be labelled as bioplastics, biodegradable or compostable. Based on the chemical characteristics and uses in production, the two main categories of plastics are thermoplastics and thermosets.

1. Thermoplastics can be melted when heated, and hardened when cooled. These characteristics are reversible, and therefore they can be reheated, frozen and reshaped repeatedly (UNEP, 2018).

2. Thermosets, on the other hand cannot be reshaped and moulded after they are formed, as they undergo a chemical reaction when they are heated and create a three-dimensional network (UNEP, 2018).

Figure 1.1 illustrates the two categories of plastics. These two categories are further divided into a variety of plastics that have different Resin Identification Codes (RIC). Resin Identification Codes allow for the identification of the resin type that the product is made out of, and it helps in consistent recycling of plastic products. Figure 1.2 identifies the types of resins commonly used in the production of single-use plastics.

The RIC's are labelled numerically from 1- 7, as indicated below:

- 1 - Polyethylene terephthalate (PET)
- 2 - High density polyethylene (HDPE)
- 3 - Polyvinyl chloride (PVC)
- 4 - Low-density polyethylene (LDPE)
- 5 - Polypropylene (PP)
- 6 - Polystyrene (PS)
- 7 - Other plastics, such as acrylic, nylon, polycarbonate, polylactic acid (PLA) and multilayer combinations of different resins

THERMOPLASTICS

- Polyethylene terephthalate (PET)
- Polypropylene (PP)
- Low-density polyethylene (LDPE)
- Polystyrene (PS)
- Expanded Polystyrene (EPS)
- Polyvinyl chloride (PVC)
- Polycarbonate (PC)
- High density polyethylene (HDPE)
- Polypropylene (PP)
- Polylactic acid (PLA)
- Polyhydroxyalkanoates (PHA)

THERMOSETS

- Polyurethane PUR
- Phenolic resins
- Epoxy resins
- Silicone
- Vinyl ester
- Acrylic resins
- Urea formaldehyde UF resins

Figure 1.1

Plastic Categories

(Source: Adapted from Single Use Plastics: A Roadmap to Sustainability, UNEP, 2018).

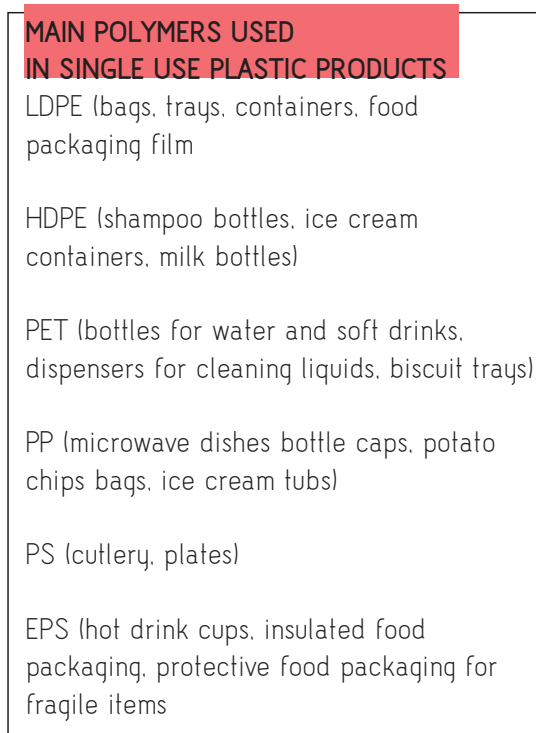


Figure 1.2:
Single Use Applications
(Source: (Adapted from Single Use Plastics: A Roadmap to Sustainability, UNEP, 2018).

2.2: Bioplastics, Biodegradable plastics and Compostable plastics

Bioplastics and plastic products that are labelled as biodegradable or compostable are fully or partly made from renewable biomass. These products can be completely broken down by microbes only under specific conditions within a reasonable timeframe. Moreover, the scientific research regarding the impact of plastic products labelled as bioplastics, compostable or biodegradable plastic products on the soil and marine environment are not conclusive, regardless of whether the plastic products are derived from fossil fuel or biomass. Therefore, for the purposes of this plan, and due to the ultimate priority of protecting the marine environment of the Maldives, products labelled as bioplastics, compostable, or biodegradable plastics are also considered as SUP's if the use is intended for one time only.

3.

VISION & OBJECTIVES

VISION

To ensure Maldivian seas are clean from plastic pollution and to promote sustainable lifestyles.

OBJECTIVES

ENVIRONMENTAL OBJECTIVES

1. Reduce ocean plastics and marine pollution
2. Segregate plastic waste from the waste stream
3. Reduce public littering of SUP's via improvement in collection of plastic waste
4. Apply proportionate policy measures for management of different SUP's by identifying the SUP's imported, produced and consumed in the Maldives
5. High utilization of products and materials in the form of recovery and recycling (material recovery and substitution of virgin materials, and consequently minimise the impacts of extraction and processing of these materials) Closing material loops

SOCIOECONOMIC OBJECTIVES

1. Change consumer behaviour and switch to sustainable alternatives
2. Reduce public/taxpayers' burden on waste management
3. Reduce impacts on the fisheries and tourism sectors from SUP waste pollution
4. Minimize adverse health impacts from plastics
Promote new business models and circular economy
5. Improve public well-being and improve aesthetics

4. TARGETS

SHORT-TERM TARGETS

1. Enact the national Single Use Plastic Phase-out Regulation in 2021
2. Initiate a national data collection mechanism to identify product packaging of imported products, in order to monitor SUP's imported into Maldives i.e. to capture the quantity of SUP's put in the market in 2020
3. Achieve 85% collection rates of SUP waste in the Maldives to prevent leakage to the marine environment by 2023
4. Set national reduction targets for SUP's by 2023

LONG-TERM TARGETS

1. Provide a wide variety of affordable, accessible and reusable non-plastic alternatives to consumers in Maldives by 2030
2. Formulate a legal framework to regulate and promote circular economy for different sectors in Maldives by 2030
3. Establish an adequate plastic recycling facility in Maldives that has pre-sorting, sorting and recycling technologies by 2030



5. PRODUCT IDENTIFICATION

5. PRODUCT IDENTIFICATION

For the purposes of the SUP Plan, a list of the most commonly consumed and littered single-use plastics on land, coastal and marine environments in Maldives were identified and agreed on by the Plastic Committee. The committee ranked the products according to each product's impact on the ecosystem, biodiversity, human health and availability of alternatives in the market.

In addition to the list and matrix of identified priority single-use plastics, more products have been included, such as single-use coffee cups and decorations (such as balloons, plastic banners, canvas and others).

The following table 1 provides the list of single-use plastic products that have been identified to be affected by the Plan.

Table 1:

list of single-use plastic products that have been identified to be affected by the Plan.

#	Product Category	HS Code	Other items in HS code
1	Plastic drinking straws	3917220010	
2	Single-use plastic plates, cups, cutlery, and stirrers	3924100000	Foam cups
3	Plastic shopping bags	3923291000	Plastic bag with nylon string, plastic bag without string, plastic zip-lock bag and plastic sanitary bag
4	Plastic food containers	3923300000	Polystyrene lunch box, storage box, plastic drum and pallets, polystyrene baskets and sacks used to transport agricultural crops (applicable for duty exemption)
5	All imported and produced P.E.T beverage containers	2202101200 Soft drink 2201100099 Mineral water 2201100098 Sparkling water 3907610000 P.ET Resin 3923300000 Plastic water bottle	
6	Plastic wrappers on food and drinks.	2106909018 + various codes	Candy, snacks, biscuits, crisp packets
7	Single-use coffee cups	3924100000 Foam cup	90 other products with the same HS code in Customs database
8	Single-use plastic decorations	8801000000, 9503000099, 3926909010	Balloons, balloon sticks, plastic banners
9	Cotton bud sticks	5601210011, 5601210012	
10	Plastic packaging and products used in beauty and hygiene	9619001000, 9619009011, 9619009013, 3402200099, 3402200011, 3305100000, 3401300000, 3304991010	Sanitary napkins, baby diapers, adult diapers, liquid detergent, liquid cleaners, shampoo, shower gel, lotions

An underwater photograph of a coral reef. In the foreground, there is a large, dense colony of sea anemones with thick, yellowish-green tentacles. Several clownfish, characterized by their bright orange bodies with white stripes, are swimming among the anemones. The background shows more of the reef structure and a few other fish in the clear blue water.

*6. KEY POLICIES
AND STRATEGIES
FOR SUP
PHASEOUT
IN MALDIVES*

*7. POLICIES,
STRATEGIES
AND ACTION
PLAN*

6. KEY POLICIES AND STRATEGIES FOR SUP PHASEOUT IN MALDIVES

With regard to the broad spectrum of SUP products and their uses, as well as the unique geographic and socio-economic context of the nation, it is of note that multiple policy instruments are required for effectively achieving the targets of this plan.

This means that proportionate and tailored policy measures will be applied for different products, under different target timelines based on the feasibility within the target deadline of 2023.

Therefore, in addition to the environmental and health impacts from single-use plastics, the following considerations are given for products covered under the phase-out strategy:

- Do these products contribute to significant pollution on land and the marine environment?
- Do importers, producers and consumers have access to readily available and affordable non-plastic or reusable alternatives for those products?
- Socio-economic context of Maldives including consumption patterns

6.1: Guiding principles and cross cutting strategies

Policy instruments can be broadly categorised into three areas:

- 1. Command and control (CAC):** Command and control instruments refer to environmental policies that rely on regulations (permission, prohibition, standard setting and enforcement)
- 2. Economic instruments:** Economic instruments refer to financial incentives or market-based instruments (MBI's) of cost internalisation
- 3. Informative instruments:** Informative instruments refer to education, awareness and policy advocacy measures.

This Plan uses all three policy instruments in proportionate measures for effective phase-out of SUP's in the Maldives.

There are a total of 6 Policy Goals for the above products, which fall into the above 3 policy instruments.

Policy Goal 1: Ban the import, production and sale of specific SUP products

Policy Goal 2: Market Based Instruments (MIBs)

Policy Goal 3: Improving national waste data and setting national collection and reduction targets for key SUP's

Policy Goal 4: Extended Producer Responsibility (EPR)

Policy Goal 5: Provision of sustainable alternatives

Policy Goal 6: Education and awareness

7. POLICIES, STRATEGIES AND ACTION PLAN

7.1

Policy 1: Ban the Import, Production and Sale of Specific SUP Products

The first policy is the ban of import, production and sale of specific SUP products in the Maldives. The prohibition of specific products is of the command and control type of policy instrument and addresses the SUPs that are commonly found as litter as well contributes to marine pollution. These are SUPs that have affordable and easily available alternatives in the market of the Maldives. The first 9 product types will be under a ban for all distribution and selling effective from June 2021. The following 12 products have been identified for import, production and consumption ban in and into the Maldives.

Table 2:*List of SUP products placed under ban.*

#	Product	Date	Scope	Examples of Alternatives
1	Plastic drinking straws	1 June 21	Nationwide	Silicone, metal, paper, bamboo
2	Single-use plastic plates, cups, cutlery, and stirrers	1 June 21	Nationwide	Non-plastic single-use cutleries made from bamboo or any other biomass
3	Styrofoam lunch box	1 June 21	Nationwide	Aluminium foil containers, paper, sugar pulp boxes, or reusable packaging or container
4	Plastic shopping bags below 30 30 cm (including oxo-degradable and synthetic polymer based degradable plastics)	1 June 21	Nationwide	<p>Reusable plastic bags made from recycled PET, PP, Nylon</p> <p>Reusable Low density and High-Density bags from Polyethylene, LDPE, HDPE and PET</p> <p>Long life bags made from lightweight synthetic fabrics (nylon, polypropylene or polyester)</p> <p>Compostable and biodegradable bags fitting UNI EN13432 standards and ASTM D 6400:</p>
5	All imported and locally produced beverages in PET bottles below 500 ml (water, carbonated and non-carbonated drinks)	1 June 21	Nationwide	Water dispensers, filtration systems, reusable bottles, refilling stations
6	Imported sweet arecanuts in plastic wrapping	1 June 21	Nationwide	Paper packaging
7	Single-use plastic cups below 250 ml	1 June 21	Nationwide	Reusable cups, cups made from natural fibres
8	Cotton buds with plastic stems	1 June 21	Nationwide	Bamboo or paper sticks
9	Shampoo and soap bottles in plastic packaging that are 50 ml and below	1 June 21	Nationwide	Provision on plastic free packaging on all toiletries

Table 2 (Continued):

List of SUP products placed under ban.

#	Product	Date	Scope	Examples of Alternatives
10	Plastic shopping bags below 50-micron thickness (including oxo-degradable and synthetic polymer based degradable plastics)	1 Dec 22	Nationwide	Reusable plastic bags made from recycled PET, PP, Nylon Reusable Low density and High-Density bags from Polyethylene, LDPE, HDPE and PET Long life bags made from lightweight synthetic fabrics (nylon, polypropylene or polyester). Compostable and biodegradable bags fitting UNI EN13432 standards and ASTM D 6400:
11	Shampoo and soap bottles in plastic packaging from 50 ml to 200 ml	1 Dec 22	Nationwide	
12	All imported and locally produced water that is 1 litre and below packed in P.E.T packaging	1 Dec 22	Nationwide	Water dispensers, filtration systems, reusable bottles, refilling stations

***NOTE: All plastic packaging less than 30X30 cm used in the cottage industries such as for packaging of local foods and delicacies are exempted.**

It is important to note that packaging (plastic containers and plastic packets) used by local cottage industries such as for packing of Maldivian delicacies (i.e. fried leaves or *Thehuli Faiy*, pickled vegetables or *Asaara*, etc.), bakery products, fish exports and agricultural products will be exempted from this ban. Instead, a different set of measures will be taken since blanket ban will disproportionately affect small and medium sized businesses, within which the largest affected segment will be women.

Table 3:
Action Plan for Policy 1.

Main Action	Date	Implementing Agency	Monitoring Agency	Detail
Announcement of banned products, timeline and fines	Dec 20	MoED	MoEn	Public announcement about product bans and the fining system
Registration and declaration of stock, and submission of in-house stock clearance plan by importers and businesses	Dec 20	MoED	MoEn	EPA to incorporate environmental production verification to mandate, and set up registration and monitoring mechanisms for stock clearances and distribution
Incorporating banned products into the list of Prohibited and Restricted Items for Import	Dec 20	MoED	MoEn	Amendment of the Prohibited and Restricted Items for Import
Implementation of import ban	June 21	Customs	MoEn	Customs in charge of product verification at import border, data entry, reporting to EPA
In-house stock clearance	Dec 21	MoED	MoEn	MoED to establish monitoring and reporting system
Full ban on selling and distribution	Dec 21	MoED	MoEn	EPA to verify of in-house stock clearance

7.2: Policy 2: Market Based Instruments (MBI's)

Policy two uses various market based or economic instruments to discourage the consumption of different types of single-use plastics while simultaneously providing incentives to change to environmentally friendly alternatives. Market based strategies under this policy include:

Increase in tariff for various SUP's

Duty exemption for alternatives to SUP's

Levies from consumers for sale of SUP's

Incentives and Business facilitations targeting local businesses and SME's that import, manufacture and sell SUP's

7.2.1: Increase in tariff

Implement the following increases in tariffs from **June 2021**:

1. Set 400 tariff for plastic shopping bags of more than 30 30 cm long (including bags labelled as biodegradable, oxo-biodegradable or compostable, and bags made from polypropylene strips (HS code 6305339012) and polyethene strips (HS code 6305339014))
2. Set 400 tariff for PET raw materials, empty PET bottles and mineral water in PET packaging
3. Set 400 tariff for balloons, plastic balloon sticks and single-use plastic party decorations

Tariff increases from **2022** onwards:

4. For plastic shopping bags above 50-micron thickness, the tariff increase to 400 will be set from 2022 onwards (including bags labelled as biodegradable, oxo-biodegradable or compostable, and bags made from polypropylene strips (HS code 6305339012) and polyethene strips (HS code 6305339014)).

• **Note: The reason for the 1 year delay for plastic bags based on thickness is to allow relevant Maldivian authorities to get the necessary procedures in place to test the thickness of the bags.**

7.2.2: Duty Exemptions

Implement the following tariff exemptions from June 2021:

- Bags made from reused fabric
- Reusable bags made calico, hemp, jute, cotton and canvas
- Shopping bags of more than 30 30 cm long; made from biomass (biodegradable), i.e starch, gelatin, etc. that are third-party certified according to UNI EN13432 and ASTM D6400 standards for industrial composting and Vincotte Certification Programme for home composting
- Plastic packaging free beauty and household cleaning products
- Cutlery made from bamboo or any biomass that complies with the ASTM D6400 standard
- Metal, silicon, bamboo & other non-plastic straws
- Bamboo or plastic-free toothbrushes
- Water filtration systems (standards set by MoEn)
- Reusable diapers

With regard to duty exemptions for alternatives, it is important that an environmental product verification system or an environmental standards verification system is established which allows for duty exemption for verified, sustainable alternatives to SUP's. This would provide an incentive for importers to supply non-plastic products and also make it easier for importers and businesses to identify products that are subject for duty exemption.

Furthermore, a verification system will also assure consumers that the products in the market are genuine sustainable alternatives. This will also prevent consumers from being misled by false green advertising and marketing. In addition, the system will aid various government agencies in harmonising tariffs for sustainable alternatives to SUP's.

7.2.3: Levies

The following products will have a MVR 2 levied at point of sale for per item, from **June 2021**

1. Plastic shopping bags over 30 30 cm long in length (including bags labelled as biodegradable, oxo-biodegradable or compostable, and bags made from polypropylene strips (HS code 6305339012) and polyethene strips (HS code 6305339014);
2. Balloons, balloon sticks, single use plastic decorations and banners
3. Plastic sachets and small sized condiment tubs from cafe's, restaurants and food delivery stations

Products that will have a MVR 2 levy from **2022** onwards:

4. Plastic shopping bags over 50-microns thick (including bags labelled as biodegradable, oxo-biodegradable or compostable, and bags made from polypropylene strips (HS code 6305339012) and polyethene strips (HS code 6305339014)

***Note: The reason for the 1 year delay for these bags is to allow the Maldivian authorities to get the necessary procedures in place to test the thickness of the bags.**

7.2.4: Incentives and business facilitation

The provision of incentives and business facilitation is to be rolled out in two phases. The first phase involves the identification and registration of key importers and businesses engaged in the provision of plastic free alternatives and the second phase involves the development of a business facilitation and expansion programme.

Phase 1: The identification and registration of key importers and businesses engaged in the provision of plastic free alternatives

- The identification of businesses and rollout of the business facilitation programme can be planned accordingly:
- Identification and registration of local businesses and SME's that use single-use plastic packaging to sell food and drinks by **June 2021**
- Identification and registration of SME's that depend on SUP's for product manufacturing, packaging or marketing by **June 2021**.
- Development of incentivisation programme by **January 2022** and rollout by **June 2022**
- Identification of importers and businesses of beauty products with plastic microbeads by **December 2021**

Phase 2: Development of a business facilitation and expansion programme.

- Government to prepare Plan for business facilitation programme in liaison with financing organisations by December 2021, and rollout by June 2022 for the following businesses:
- Businesses and NGO's investing in plastic-free alternatives (plastic-free menstrual products, diapers)
- For businesses providing plastic-free packaging of goods and services (food, beauty products, household utilities, etc.)
- Businesses providing Product Service System (PSS) e.g. provision of water as a service by leasing or renting of water filtration systems
- Businesses involved in plastic collection, recycling or exporting

Table 4:
Action Plan for Policy 2.

Main Action	Date	Implementing Agency	Monitoring Agency	Detail
Amend Import Export Law	By June 20	MoED	MoEn	MoED to incorporate affected products into <i>Import Export Law</i>
Product verification and standards setting	Jan 21	MoEn	EPA	MoEn to create an environmental product standards verification and registration system into the overall administrative system of EPA
Implementing new tariff system of identified products	From June 21	MoED	Customs	Customs to verify and monitor product declarations and reporting breaches to EPA
Implementation of levies selected items	From June 2021*	MoF	MIRA	MoF to develop product taxation system in liaison with MIRA and integrate into the general taxation system.
Registration of importers and businesses	By June 2021	MoED	EPA	MoED to identify and register key importers and businesses engaged in plastic-free alternatives
Business Facilitation Plan	By June 2022	MoED	MoEn	MoED to develop a business facilitation plan for businesses engaged in provision of plastic-free alternatives
Initiation of Business Facilitation and Incentivisation programme	By June 2022	MoED	MoEn	MoED to launch business facilitation programme

7.3: Policy 3: Strengthening National Waste Database and Setting Reduction Targets for Plastic Packaging

The total number of imports and production for the identified key SUP products were collected for the past 5 years. While customs manages import data and keeps track of materials based on the Harmonised Commodity Coding and Description System (HS) code, they are not prompted by any regulation to track the import of specific plastic items apart from what is required by the HS. This allows for inaccurate estimation of waste produced in the Maldives based on import data of raw materials and SUPs, since the import data identifies the product and not the variety of packaging it is imported in. In order to use import data in national waste monitoring, plastic reduction and collection, HS codes for products in plastic packaging need to be differentiated from the similar products in other types of packing. This is crucial to address as reduction targets for certain products can only be set after understanding the market data.

Policy 3 focuses on two main strategies:

- Strengthen National Import Data

- Determine National Reduction and Collection Targets by 2023

7.3.1: Strengthen National Import Data

Enhancing customs data classification system by introducing new code classification for packaged products by December 2021

- Juice in cartons
- Juice in glass
- Water in plastic packaging
- Water in glass packaging
- Soft drinks in glass
- Soft drinks in plastic packaging
- Single use coffee cups
- Reusable menstrual products
- Reusable diapers
- Toothbrush from bamboo or non-plastic
- Plastic Packaging free shampoo or soap
- Jams in plastics packaging
- Jellies in plastic packaging
- Peanut butter in plastic packaging
- Honey in plastic
- Cooking oil in plastic
- Soy sauce in plastic packaging
- Body oil and hair oil in plastic
- Single use Plastic party decorations

By December 2021, Customs should start classifying products further by the product packaging. All importers need to declare materials with plastic packaging, and Customs need to update inventory of HS codes for plastic packaging.

Imports of water in plastic package should be monitored until 2023 as water above 330 ml will be allowed to import after 2021, and water above 500 ml will be allowed for import until 2022.

Soft drinks in plastic packaging above 330 ml will be allowed for import.

7.3.2: Determine national reduction and collection targets by 2023

Determine national reduction and collection targets for 2030 based on data collected.

Table 4:

Action Plan for Policy 3 .

Main Action	Date	Implementing Agency	Monitoring Agency	Detail
Develop new HS codes for products	By Dec 21	Customs	MoEn	Customs to develop new HS code classifications for products identified in the SUP phase-out plan
Yearly analysis data and submission to EPA	By June 22	Customs	MoEn	Customs to analyse data yearly and submit to EPA
Receive data sets every year	By June 22	EPA	MoEn	MoEn Monitoring and verification of import descriptions and products
Analyse data	By Dec 22	EPA	MoEn	Analyse data from 2020 to 2022 and set national collection and reduction targets for key products identified in Table 1

7.4: Policy 4: Extended Producer Responsibility (EPR)

EPR is a policy which can be classified as having both regulatory (CAC) and economic policy elements. This is because EPR obliges producers to take physical or financial responsibility for the post-consumer phase of certain goods that is set under a specific regulation. EPR can also provide incentives to producers to prevent waste at the source, promote sustainable product design and achieve public recycling and material management goals (OCED, 2019).

Policy 4 involves passing **legislation on Producer Responsibility on Packaging** by **December 2021**, whereby the roles and responsibilities of importers, producers and distributors take full or partial economic and physical responsibility for the environmental product design, separate collection and end-of life management of single-use plastic products.

7.4.1: Definition of Producers under EPR Plastic Products covered under EPR

- All importers and producers of plastic bottles primarily made of polymer material
- All importers and producers of recyclable single-use plastic food and drink containers (e.g. yoghurt cups and tubs, containers for spices and condiments)
- All importers and producers of fragile plastics (noodles packets, crisps, sweets, biscuits, plastic wrapping around tissues, toilet paper wrappings)
- All importers and producers of containers for household cleaning products and beauty products

Table 6:
Action Plan for Policy 4.

Main Action	Date	Implementing Agency	Monitoring Agency	Detail
Development of EPR scheme with complementary administrative schemes such as DRS	By June 21	MoEn	PO	Draft Producer Responsibility on Packaging Regulation and submit to the AG office. Allocation of roles and responsibilities of producers, government, WAMCO. Finalise the financing mechanism Devise material and financial flows of implementing a DRS in Maldives, and allocate roles and responsibilities of the Producers under EPR.
Development of EPR scheme with complementary administrative schemes such as DRS	By Aug 21	AG	MoEn/PO	AG office, in liaison with MoEn to ensure that EPR regulation is sent to Parliament.
Provision of local food products in plastic-free packaging	By Dec 21	Producers	MFDA	Producers to register their products and packaging methods every six months for monitoring and verification of packaging types
Separate collection and transfer infrastructure for plastics	By Dec 21	Producers	EPA	Set up collection mechanisms and infrastructure for the separate collection, transfer and extraction of single-use plastics identified in the EPR Regulation, from the general waste stream
BATNEEC in RWMF facilities and 1 recycling facility in Maldives for fitting local scale	By Dec 21	Producers	MoEn	Conduct feasibility study for establishing a recycling facility in Maldives Set up the financing mechanism in liaison with government
	By Dec 23	Producers		Provision of sorting technologies and material recovery technologies in at least 1 RMWF

7.4.2: Deposit Refund System (DRS)

Another cross-cutting environmental policy tool is the Deposit Refund System (DRS), which is implemented as a complementary administrative instrument alongside EPR. DRS is also a market-based instrument, which imposes a deposit on top of the price of the product, which then gets refunded to the consumer once the product or packaging gets returned for safe disposal and recycling.

The following steps need to be taken in order to implement this:

- 1) Choose the system operator, whether PRO model or SIDS model by January 2021
- 2) Design the DRS system and identify the material and financial flows by March 2021
- 3) Identify roles and responsibilities of producer, importers, distributors, waste management service providers, and monitoring authorities (e.g. MIRA, MoEn, MoED) by March 2021
- 4) Include provisions for DRS with clear cut roles and responsibilities in the EPR regulation by March 2021
- 5) Implementation in December 2021

7.5: Policy 5: Sustainable Provision of Alternatives

Policy 5 aims to phase out problematic SUP's in the Maldives through various elements including regulatory, informative and economic policy instruments. The majority of the actions outlined in Table 6 deal with the provision of safe, potable water by using infrastructure and awareness, as well as economic policy instruments.

Once the government has ensured the establishment and operations of RO plants in all inhabited islands, it will be possible for the government to phase-out production of PET water bottles under 5 litres and single-use water bottles under 18 litres. However, such a decision requires considerations from the angle of water security, as the Maldives is a country that has scarce water resources. Adequate contingency plans need to be prepared for emergencies such as natural disasters and hazardous events that may potentially affect the functionality of RO plants and water security of certain islands and atolls or national water security.

In the absence of safe and potable water in all the inhabited islands in the Maldives, numerous islands face water shortages especially during the dry monsoon. Water production and bottling companies have been catering to the public's demand for safe potable water for many years, in the process also creating a lot of waste. The model where water production companies provide public water in plastic bottles is not environmentally sustainable. As the public has become very dependent on bottled water as a primary source of drinking water, discouraging the public from bottled or mineralised water is going to be a challenge. Therefore, it is key to seek sustainable alternative business models

where water is no longer bottled in single-use plastic.

There are several ways to engage with plastic-free water provision or facilitate financing mechanisms for such initiatives. The government will liaise with importers and businesses engaged in the provision of water filtration products by incentivising them through pardoning tariffs for water filtration systems, or opt for business facilitation whereby government provides incentives for businesses to thrive and expand in order to cater to the wider public.

In addition, for households that demand drinking water with the filtration and mineralisation level as bottled water, such households can be provided with water filtration systems through various initiatives by the government as well as the private sector. One option would be for service providers to facilitate water filtration systems as part of a Product Service System (PSS), whereby customers will pay for a service rather than for the water filtration product either through monthly instalments, or renting the product for a monthly fee. Service providers can integrate the cost of provision of water filtration systems into their existing fee structure without overburdening the public. Moreover, the government will seek the option of liaising with financial institutions in devising financial schemes for households to acquire the filtrations systems at an affordable cost.

Table 7:
Action Plan for Policy 5.

Main Action	Time	Implementing Agency	Monitoring Agency	Detail
Mandatory provision of soap and shampoo bottles above 200 ml in tourist facilities	Dec 22	MoEn	MoEn	MoT to inform and monitor all tourist facilities
Provision of plastic-free or reusable packaging for water, personal hygiene and beauty products, in all tourist facilities	Dec 21	Tourist Facilities	MoT	MoT and MoEn to publish list of facilities that provide plastic-free water, hygiene and water products to incentive sustainability performance
Mandatory provision of non-plastic sea sickness bag on all public and private sea transport in Maldives	Dec 21	MTA	MoEn	Provision of the best alternative to plastic vomit bags, provision of sea sickness pills on journeys longer than 2 hours on all sea transport
Mandatory provision of reusable carrier bags at all supermarkets	June 21	MoED	MoEn	Business council under MoED to take the lead
Provision of refill stations in all public and private schools	Dec 21	MoED	MoEn	MoEd to allocate budget by August 2020 for public schools and monitor the provision in both private and public schools
Provision of refill stations in hospitals and clinics	Dec 21	MoH	MoEn	MoH to allocate budget by August 2020 for public hospitals and monitor the provision in public and private hospitals and clinics

Continued in next page

Table 7 (continued):
Action Plan for Policy 5.

Main Action	Time	Implementing Agency	Monitoring Agency	Detail
Provision of refill stations in mosques, parks, bus stops and ferry terminals	Dec 21	Councils	MoEn	Councils to budget for provision in government owned mosques and parks in inhabited islands
Provision of refill stations in all cafes, restaurants	Dec 21	Cafe' and restaurant owners	MoED	MoED to maintain a registry and monitor all cafes and restaurants
Development of a new Business Model for public water provision (including the harmonization of plumbing standards in liaison with relevant authorities)	By Jan 22	MWSC, STELCO, FNC	MoEn	Producers in liaison with the MoEn to develop a cost-effective business model for public water provision that is free from plastic packaging
Installation of water filtration systems in all households in Greater Male' Area	By Dec 22	MWSC	MoEn	MWSC in liaison with business providers and financing institutions to install water filtration systems in all households in Greater Male' Area

7.5: Policy 6: Education and Awareness

Table 7:
Action Plan for Policy 6.

Main Action	Time	Implementing Agency	Monitoring Agency	Detail
Development of communication plan and public awareness campaign on SUP phase-out Plan	By Dec 20	MoEn	PO	MoEn to liaise with PSM and other media agencies to create awareness about the SUP Phase-out plan
Anti-littering campaigns targeted nationwide	By April 21	WAMCO	MoEn	Develop strategic visual awareness material (videos, commercials, social media campaigns, workshops) on littering
Public campaign on drinking tap water and safety of tap water	By Dec 21	MWSC Fenaka Stelco	MoEn	MWSC to conduct regular water quality and safety tests and create public awareness
Increase public confidence and usage in piped water	By Dec 20	MWSC Fenaka Stelco	MoEn	MWSC to conduct regular water quality and safety tests and create public awareness
Information on waste segregation, collection and return stations in supermarkets and public area	March 21	Producers	WAMCO	Producers, in liaison with WAMCO to create awareness about collection points for single use plastic waste
Targeted anti-littering campaigns	March 21	MoEn		

*8. STAKEHOLDER
ANALYSIS*

*9. IMPLEMENTATION,
MONITORING
AND REVIEW*

8. STAKEHOLDER ANALYSIS

The stakeholder analysis is conducted via two key steps

1) stakeholder identification and prioritization

2) assessment of stakeholder influence, interest and perceptions.

Around 230 stakeholders from the government, private sector, and general public have been consulted during the preparation of the SUP Phase-out Plan. The list of stakeholders are attached in Appendix 1.

8.1: Stakeholder Influence, Impact and Attitudes

Stakeholder Power Interest Grid (refer to Annex) was used to assess the influence of key stakeholders and the potential impacts on stakeholders from the recommendations outlined in the SUP Phase-out in the Maldives.

9.

IMPLEMENTATION, MONITORING AND REVIEW

For the Maldives to embark on the phase-out of single-use plastics is an ambitious but a much needed action. The single-use plastic phase-out plan is the initiative required by government agencies and the private sector to reduce the nation's plastic footprint. The political will and support for the implementation of this plan ensures the commitment for financial and institutional support. Identifying the roles and responsibilities of stakeholders will ensure that the environmental, social and economic objectives of phasing out single-use plastics are met and the impact of plastics and plastic pollution is greatly reduced throughout the country. This plan will also enable the government to establish a baseline for the amount of plastic waste produced throughout the country, therein help guide the government and private sector to establish realistic goals of completely phasing out single-use plastics in Maldives.

Hence, for the successful phase-out of single use plastics in the country, it is crucial that the responsible implementing agencies and institutions outlined in this document work together with the Ministry of Environment, and the Environment Protection Agency to fulfil the required roles and responsibilities outlined in this plan.

Each policy of the plan is subcategorized into key activities with the implementing and monitoring agencies identified for each key activity separately. Even though the implementing and monitoring agencies each come with their own set of responsibilities, the overall monitoring of the implementation of this plan will fall under the mandate of the Ministry of Environment. Ensuring that all the key components of this plan are aligned and working in synergy to achieve the short- and long-term goals of this plan.

A review of the key activities will be part of the progress assessment of the plan. The key activities will be reviewed periodically with stakeholder agencies to identify the obstacles faced by government agencies, private sector as well as the general public. The issues identified will be addressed through support of various stakeholder agencies to ensure that through implementation of this plan the groundwork for phasing out SUPs is established. Similarly, in order to strengthen the legal framework of phasing out SUPs, reviewing the policy and its key activities will highlight where amendments to relevant laws and regulations are required.

The targets of this plan are set till the end of the year 2023, after the timeline of this plan is completed a new policy directive will be set for the next five years. As the commitment to offset the pollution and negative impacts from plastic pollution still remain paramount to the nation and its marine life, and moving forward it will remain unchanged.



10. REFERENCES
11. ANNEXES

10.

REFERENCES

- Allsopp, M., Walters, A., Santillo, D., & Johnston, P. (2006). *Plastic debris in the world's oceans*. CDE Consulting. (2015). *Maldives Visitor Survey February* (2015).
- Common Seas (2019). *Plastic Drawdown. A New Approach to Addressing Plastic Pollution from Source to Ocean*.
- Fullerton, D., & Kinnaman, T. C. (1995). *Garbage, Recycling, and Illicit Burning or Dumping*. *Journal of Environmental Economics and Management*.
- Geyer, R., Jambeck, J. R., & Law, K. L. (2017). *Production, use, and fate of all plastics ever made*. *Science advances*, 3(7), e1700782. doi:10.1126/sciadv.1700782
- Gourmelon, G. (2015, January 27). *Global Plastic Production Rises, Recycling Lags* | *Worldwatch Institute*. <http://www.worldwatch.org/global-plastic-production-rises-recycling-lags-0>
- GreenTech Consultant Pvt.Ltd, Riyan Pvt.Ltd, & CDE Pvt. Ltd. (2010). *Consultancy on Social Assessment for the Solid Waste Management Component (International Development Association (IDA) funded Maldives Environmental Management Project (MEMP))*.
- Hogg, D., Elliott, T., Croasdel, S., Ballinger, A., Vergunst, T., Cullen, C., & Bendali, L. (2011). *Options and feasibility of a European refund system for metal beverage cans*. *Final Report, Eunomia, Brussels*, 108pp. Retrieved from http://www.embopar.pt/folder/documento/98_Options_20and_20Feasibility_20of_20a_20European_20Refund_20System_20for_20Metal_20Beverage_20Cans_Final_20Report.pdf
- Ismail and Hussein (2019). *Assessment of Alternatives to Single Use Plastics*.
- Jeftic, L., Sheavly, S. B., Adler, E., & Meith, N. (2009). *Marine litter: a global challenge*. Nairobi, Kenya: *Regional Seas, United Nations Environment Programme*.
- Lindhqvist, T. (1992). *Extended Producer Responsibility*. In Lindhqvist, T. *Extended Producer Responsibility as a Strategy to Promote Cleaner Products* (pp. 1–5). Lund: *Department of Industrial Environmental Economics, Lund University*.
- Lindhqvist, T. (2000). *Extended Producer Responsibility in Cleaner Production: Policy Principle to Promote Environmental Improvements of Product Systems*. IIIEE, *Lund University*.
- McKinsey Center for Business and Environment, & Ocean Conservancy. (2015). *Stemming the Tide: Land-based strategies for a plastic free ocean*.
- Miller, G. T., & Spoolman, S. E. (2012). *Living in the Environment* (Seventeenth Edition). S.I.: *Brooks Cole*. Ministry of Environment and Construction. (2004). *State of the environment, Maldives 2004*.
- Ministry of Environment and Energy. (2015). *Kuni Manage Kurumuge Gaumeesi Siyaasathu*
- Ministry of Finance and Treasury (2015). *Statistical Pocketbook of Maldives 2015*.
- Ministry of Home Affairs and Environment. (2004). *Identification of Existing Barriers to the Provision of Effective Solid Waste Management Services within the Maldives and Recommendations for their Removal*. Retrieved from <http://www.globalislands.net/userfiles/Maldives6.pdf>
- Nashfa, Hawwa (2016). *Implementing a Deposit Refund System for P.E.T bottles in the Maldives*. Retrieved from <http://lup.lub.lu.se/luur/download?func=downloadFile&recordId=8895457&fileId=8895458> OECD. (2001). *Extended Producer Responsibility: A Guidance Manual for Governments*. OECD Publishing, Paris.
- Peterson, C. (2013). *Assessment of solid waste management practices and its vulnerability to climate risks in Maldives Tourism Sector*. Report Submitted to Ministry of Tourism, Arts and Culture. Retrieved from http://www.tourism.gov.mv/downloads/tap/2014/Solid_Waste.pdf
- PricewaterhouseCoopers, Albrecht, P., Brodersen, J., Horst, D. W., & Scherf, M. (2011). *Reuse and Recycling Systems for Selected Beverage Packaging from a Sustainability Perspective: An analysis of the ecological, economic and social impacts of reuse and recycling systems and approaches to solutions for further development*. Retrieved from http://www.duh.de/fileadmin/user_upload/download/Projektinformation/Kreislaufwirtschaft/PwC-Study_reading_version.pdf
- Project Aware (2020). *Dive Against Debris Data Submission*. Retrieved from <https://www.projectaware.org/debris-data/male-house-reef-rasfannu-1>
- Raynaud, J., Richens, J., Russell, A., United Nations Environment Programme, Plastic Disclosure Project, & Trucost (Firm). (2014). *Valuing plastic: the business case for measuring, managing and disclosing plastic use in the consumer goods industry*.
- Slav, Irina (2019). *How much Crude Oil Does Plastic Really Consume?* Retrieved from <https://oilprice.com/Energy/Energy-General/How-Much-Crude-Oil-Does-Plastic-Production-Really-Consume.html>
- Strategic Action Plan (2019). *Government of Maldives*. Retrieved from <https://storage.googleapis.com/presidency.gov.mv/Documents/SAP2019-2023.pdf>
- UNEP (2018). *Single Use Plastics. A Roadmap for Sustainability*. Retrieved from https://wedocs.unep.org/bitstream/handle/20.500.11822/25496/singleUsePlastic_sustainability.pdf
- Vedung, E. (1997). *Public policy and program evaluation*. New Brunswick, N.J.: *Transaction Publishers*.
- Walls, M. (2006). *The Role of Economics in Extended Producer Responsibility: Making Policy Choices and Setting Policy Goals*. *Resources for the Future Discussion Paper*, 06–08.
- Walls, M. (2011). *Deposit-refund systems in practice and theory*. *Resources for the Future Discussion Paper*, (11–47). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1980142
- Wamco. (2017). *Annual Report*.
- World Economic Forum. (2016). *The New Plastics Economy Rethinking the Future of Plastics*.

11.

ANNEXES

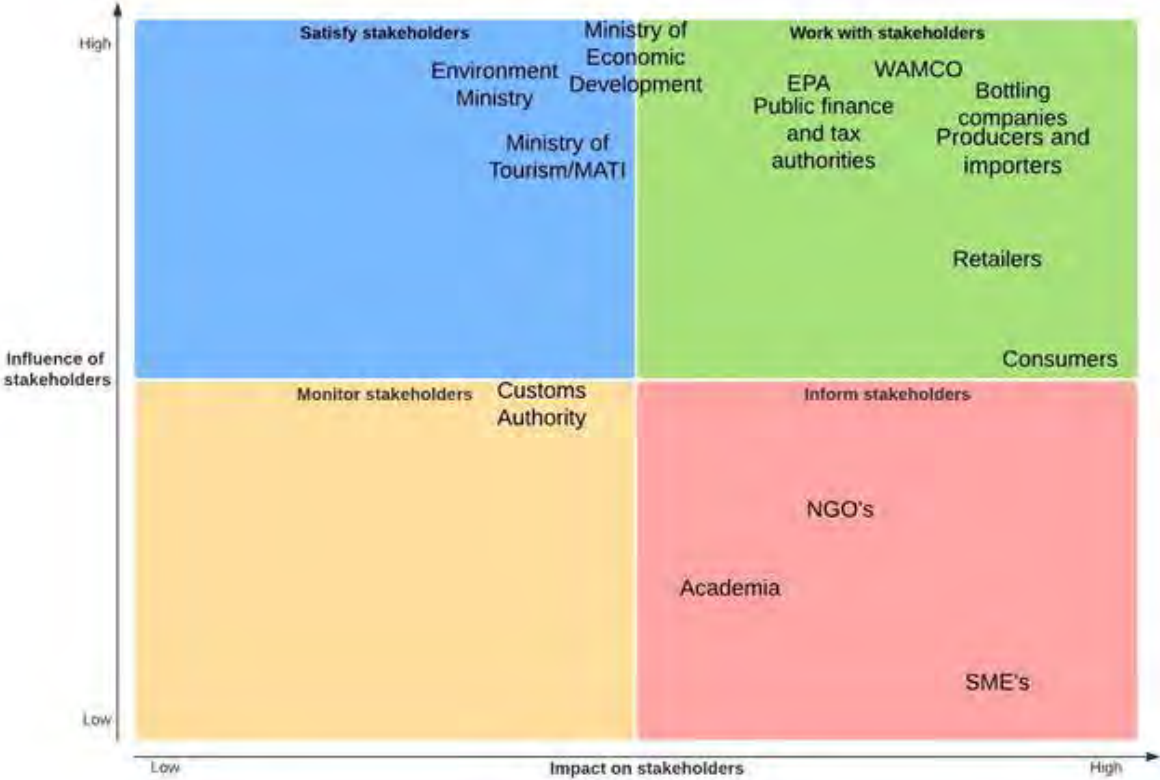
List of Stakeholders

Ministry of Environment
Environmental Protection Agency
President's Office
Ministry of Economic Development
Maldives Inland Revenue Authority
Maldives Customs Authority
Ministry of Education
Ministry of Housing and Urban Development
Ministry of National Planning and Infrastructure
Ministry of Fisheries, Marine Resources and Agriculture
Local Government Authority
Ministry of Finance
Ministry of Health
Health Protection Agency
Ministry of Tourism

All importers, wholesale and retail of identified SUP products in the plan, including MWSC, Coca Cola, Happy Market, STO, Agora, VB Mart etc
Food packing and processing organisations
Fisheries and agriculture sector
Tourism sector, MMPRC,
Guesthouse Association of Maldives

Parley for the Oceans
Plastic Noon Gotheh
Zero Waste Maldives
Save the Beach Maldives
Live and Learn Environment Maldives
Eco care
General Public

Stakeholder Power Interest Grid





MINISTRY OF
ENVIRONMENT