East Asia and Pacific Region: **MARINE PLASTICS SERIES**

Toward a National Single-use Plastics Roadmap in Vietnam:

Strategic Options for Reducing Priority Single-use Plastics

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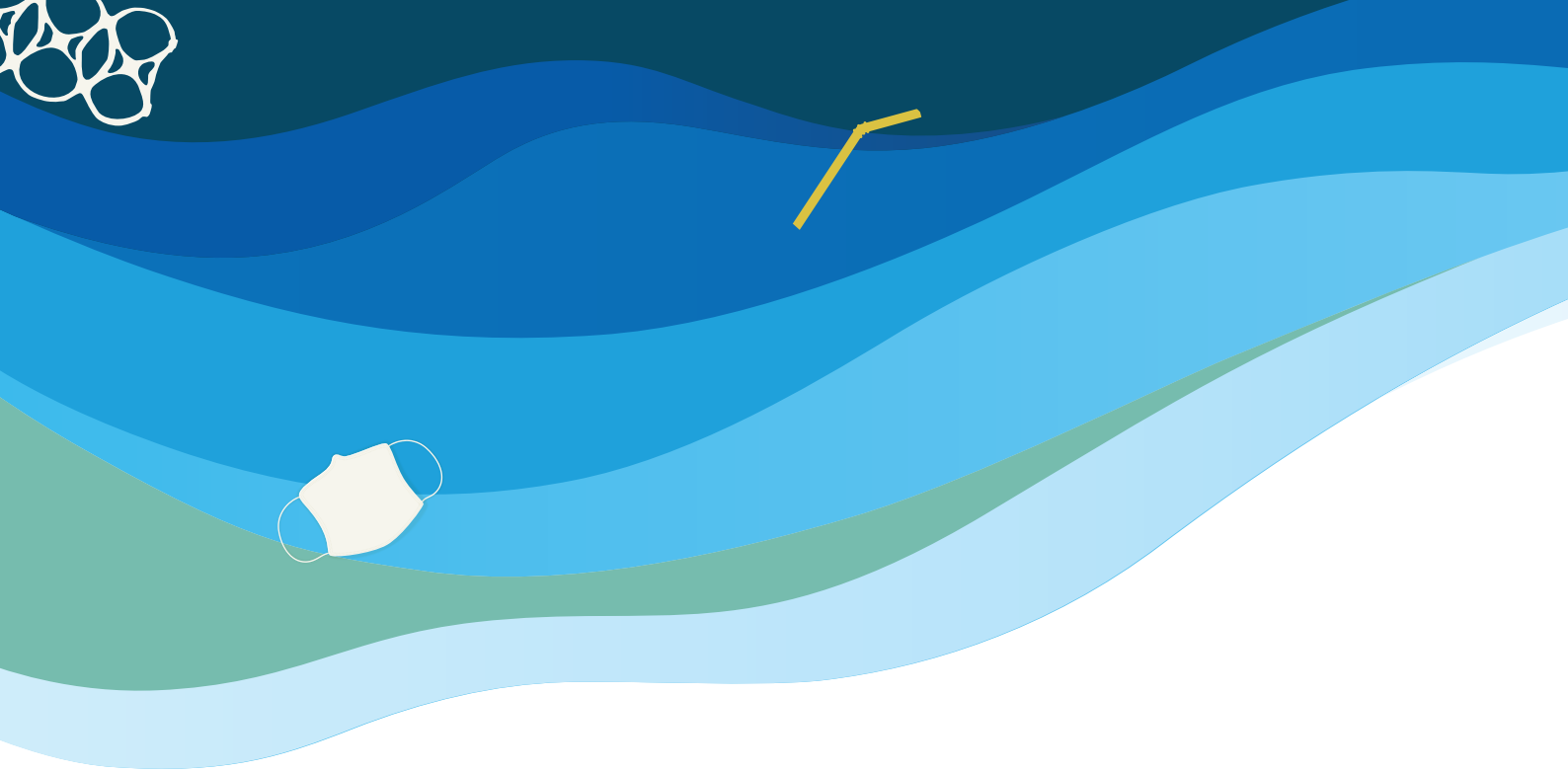

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ABBREVIATIONS

ASEAN	Association of Southeast Asian Nations
DARD	Department of Agriculture and Rural Development
DOCST	Department of Culture, Sports, and Tourism
DOIT	Department of Industry and Trade
DONRE	Department of Natural Resources and Environment
EPR	Extended Producer Responsibility
EPS	Expanded Polystyrene
EU	European Union
GHG	Greenhouse Gas
HDPE	High-density Polyethylene
LDPE	Low-density Polyethylene
LLDPE	Linear Low-density Polyethylene
MOCST	Ministry of Culture, Sports, and Tourism
MOF	Ministry of Finance
MOIT	Ministry of Industry and Trade
MONRE	Ministry of Natural Resources and Environment
MU	Multi-use
NGO	Non-governmental organization
NPAP	National Plastic Action Partnership
NYC	New York City
PC	People's Committee
PE	Polyethylene
PET	Polyethylene Terephthalate
PLA	Polylactic Acid
PP	Polypropylene
PPC	Provincial People's Committee
PS	Polystyrene
SCPO	Sustainable Consumption and Production Office
SUP	Single-use plastic
UK	United Kingdom
UNWTO	United Nations World Tourism Organization
US	United States
$	United States dollar
VAT	Value-added Tax
VCCI	Vietnam Chamber of Commerce and Industry
VND	Vietnamese dong

All dollar amounts are US dollars unless otherwise indicated.

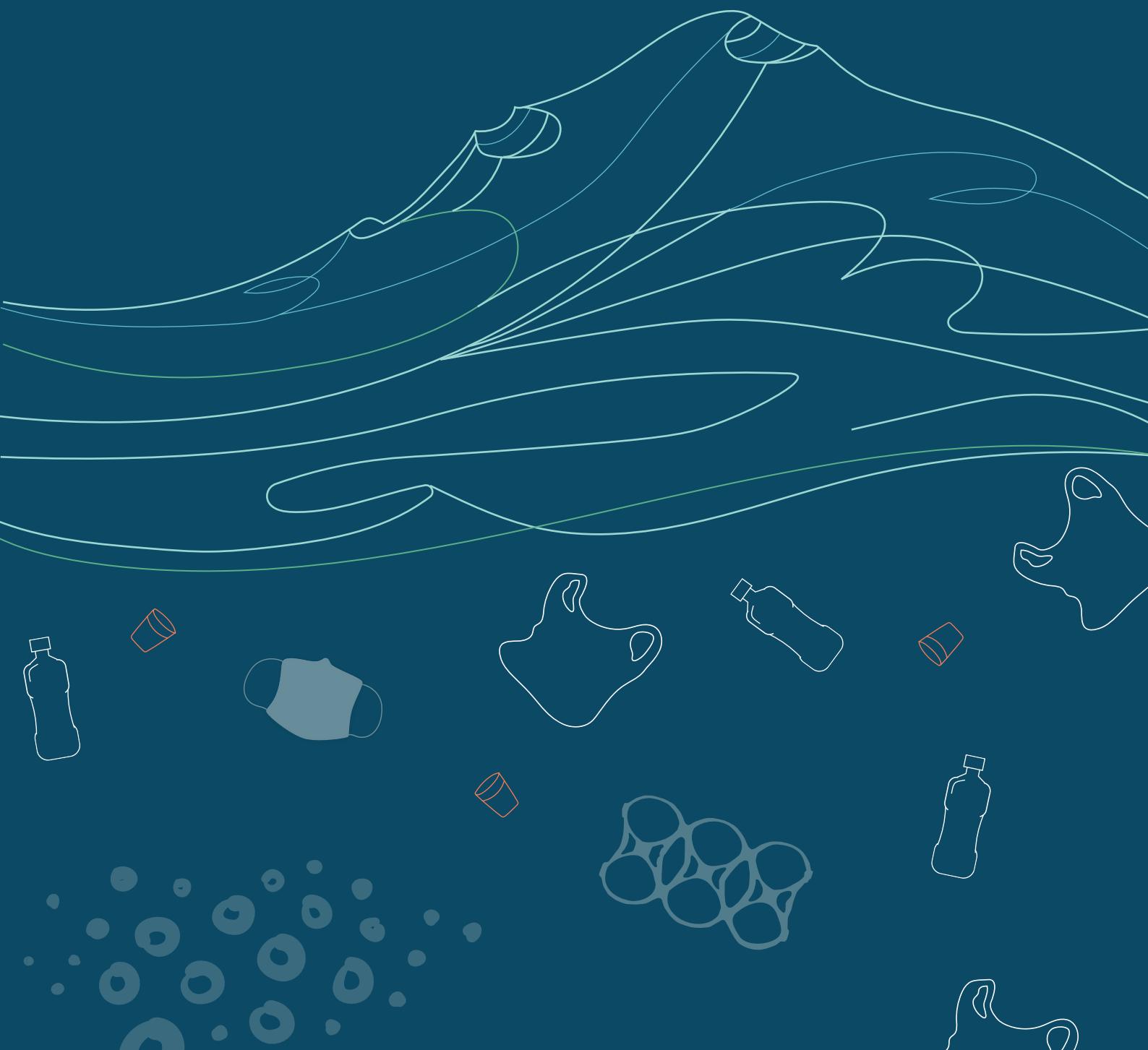
CONTENTS

BOXES

FIGURES

TABLES

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

Plastic Pollution is a Prevalent Challenge in Vietnam

Globally, plastic litter is a widespread problem. Of the more than 8 million metric tons of plastic waste dumped in the world's oceans, annually, an estimated 90 percent comes from just 10 rivers, eight of which are in Asia. In Vietnam, the estimated annual discharge of plastic waste into the ocean is between 0.28 to 0.73 million tons. Also in Vietnam, between 2.8 to 3.1 million tons of plastic waste are discharged on land every year (Jambeck et al. 2015), which makes the country one of the world's major sources of plastic litter. The government of Vietnam is aware of the environmental threat posed by plastic litter, and the urgent need to take action to reduce plastic pollution.

To explore the extent of pollution in Vietnam's environment, a World Bank study was conducted between July 2020 and April 2021 on the different types of plastic waste that leak into rivers and the ocean, and the products on the market that could serve as suitable alternatives (World Bank 2022). The study, which included field surveys of riverbank and coastal sites, found that plastic waste accounted for most of the waste collected, of which single-use plastic (SUP) items comprised 62 percent of the total plastic waste (in number). **Plastic bags and their fragments, Styrofoam food containers, and straws were identified as the most abundant SUPs** in the environment, accounting for up to 38 percent of the plastic waste leakage at the surveyed locations.

Government of Vietnam Targets for Reducing Marine Plastic Litter

The government of Vietnam has set ambitious targets for reducing marine plastic litter. In its National Action Plan for Management of Marine Plastic Litter by 2030, Vietnam's government committed to cutting marine plastic litter by 50 and 75 percent, respectively, by 2025 and 2030. To reach these targets, the government recently introduced a number of laws, circulars, and decrees to tackle SUPs, which are a major source plastic litter. Most recently, Decree 8/2022, which concerns the implementation of a selection of articles in the Law on Environmental Protection 2020, set targets for January 1, 2026 to stop the production for domestic consumption, as well as imports of non-biodegradable plastic bags that are smaller than 50cm x 50cm, and have a thickness of less than 50 µm. This decree also requires gradual reduction of the production and importing of other SUPs, until all are banned in 2031. In addition, the decree directs Provincial People's Committees (PPCs) to restrict the distribution and use of SUPs in commercial centers, supermarkets, hotels, and tourism areas, starting in 2025.

While these are important steps toward reducing plastic pollution in Vietnam, the rising tide of single-use plastic waste requires developing and implementing a roadmap of policy options to guide the country toward gradually phasing out SUPs, while also minimizing the negative impact on producers and consumers. This roadmap should help to ensure that the policies and, eventually, the bans can be implemented and enforced. Prior to conducting an analysis of potential policy options, a background study was carried out by the World Bank to compare the current policy framework for plastic waste management in Vietnam with international good practices, including those from the European Union, China, and countries in the Association of Southeast Asian Nations (ASEAN).

Reducing plastics pollution requires a three-pillar pathway that aligns with the 2021 ASEAN Regional Action Plan for Combatting Marine Debris in the ASEAN Member States (2021–2025). *Pillar 1: Reduce Inputs into the System* focuses on upstream measures such as reducing the use of single-use, low-value plastics. *Pillar 2: Enhance Collection and Minimize Leakage* focuses on improving solid waste management systems and putting extended producer responsibility (EPR) policy reforms in place. *Pillar 3: Create Value for Waste Reuse* focuses on the development of markets for plastics recycling and reuse.

This report specifically focuses on *Pillar 1: Reduce Inputs in the System*, and provides policy options for how to reduce SUPs. However, significant progress on all three pillars is needed to achieve the ambitious commitments in Vietnam's National Action Plan for Management of Marine Plastic Litter by 2030. Policies for Pillars 2 and 3 do not tackle reducing SUP consumption, directly; instead, they focus more on sustainable alternatives and waste management. Relevant analysis and recommendations for these two pillars are presented in the publication, *Market Study for Vietnam: Plastic Circularity Opportunities and Barriers* (World Bank Group 2021), or they have been supported by other development partners.

The SUP items for which the policy recommendations in this report were developed, are the top items that were identified in the field surveys, which the World Bank carried out in Vietnam in 2020 and 2021. These were the criteria used to determine which SUPs to target with policies presented in this report:

1. **Does the SUP have a significant environmental presence in Vietnam?**
2. **Does the SUP have reasonably priced alternatives, and have these alternatives been successfully used?**
3. **Can the SUP be effectively addressed by reduction policies?**

The three most common SUPs that are targeted in this report's proposed roadmap are non-degradable plastic bags, expanded polystyrene (EPS) food containers, and plastic straws. The other SUPs in the roadmap are those used in food take-away, catering, and tourism businesses. In summary, these SUPs were chosen based on international good practices, and the availability of single-use or multi-use alternatives at a reasonable cost.

Recommendations to Support the Reduction of Single-use Plastic Leakage in Vietnam's Environment

The objective of this report is to present short-term policy options for Vietnam's government to consider implementing over the next five years (2022–2026) to achieve significant reduction in the use of single-use plastics. These policy options are meant to improve Vietnam's readiness to implement the SUP bans that are listed in Decree 08/2022, and they are based on international good practices, they are applicable in Vietnam's context, and they target the most prevalent SUPs in Vietnam's environment.

This report summarizes a broad range of policies for eliminating SUPs that include restricting the distribution of SUPs, charging fees when SUPs are used, and banning certain SUPs, and it includes a roadmap for how to implement the proposed policies. In order avoid disruptive economic impacts, the roadmap recommends reducing SUPs in phases, which begin with restrictions and fees, and then gradually progress toward total bans.

Restrictions and fees are intended to promote the adoption of environmentally friendly consumer behavior, and stimulate the market for environmentally friendly alternatives, while a ban ensures that, ultimately, the target SUPs are removed from circulation. This report identifies the policies needed to complement SUP management within the wider scope of a circular economy. These include EPR, eco-friendly design and labeling schemes, and green (eco-friendly) public procurement, but in line with *Pillar 1 - Reduce Inputs into the System*, the policies proposed in the report primarily target directly reducing the use of SUPs.

In addition to an effective phased approach, the roadmap recommends effective coordination among the key stakeholders, including (i) the authorities responsible for developing and adopting the policies; (ii) the stakeholders responsible for implementation and enforcement; and (iii) the other affected stakeholders such as the groups that are impacted by, or contribute to, enforcement measures.

The policy recommendations that are described in detail in Chapter 5 of this report, are as follows:

1. Restrictions

Restrictions are usually used in transitioning toward stricter bans, as restrictions are a gentler way of implementing the reduction policy. While production, imports, and sales are still allowed, distribution at the point of sale is restricted, unless customers request the item. The policies proposed here are:

- Restrictions on the distribution of SUP straws and drink stirrers
- Restrictions on the use of certain SUPs for onsite consumption in food establishments
- Restrictions (through voluntary agreement) on the use of plastic disposable cutlery by online food delivery providers
- Restrictions on the distribution of SUP toiletry products in hotels
- Restrictions on the use of certain SUPs in tourist establishments and/or areas

2. Pricing Policies

A pricing instrument such as charging fees aims to raise consumers' awareness about the impact that a plastic item has on the environment and deter usage through economic means. This approach differs from taxing producers, which has less impact on reducing consumption, as the cost of the tax is included in the price that consumers pay for products, so they may not be aware of the policy, and why they should not request plastic products. The policies proposed here are:

- Fees charged to consumers when they purchase non-degradable plastic bags
- Fees charged to consumers when they purchase coffee-to-go cups

Preliminary economic analysis shows that fees such as a charge on plastic bags could generate significant environmental benefits and have a benefit-to-cost ratio greater than one.

3. Bans

Several types of bans can be applied. A national ban comprises banning the sale and distribution of certain SUPs, and banning their placement in the market, but not banning production and exports. A full ban on production, imports, sales, and distribution of SUPs is the strongest type of legislation, and should eliminate the targeted SUPs, completely. The policies proposed here are:

- A market ban (through a ban on sales or production and imports) of plastic straws and drink stirrers
- A market ban (through a ban on sales or production and imports) of non-degradable plastic bags
- A market ban (through a ban on sales or production and imports) of EPS food containers

A roadmap of policy options, which are designed to achieve sustainability, and limit economic disruptions to producers and consumers, is presented below in Table E1. This report aims to promote a phased approach to the bans and other measures to reduce SUPs that are listed in Decree 08/2022/ND-CP and in the commitments made in Vietnam's National Action Plan for Management of Marine Plastic Litter by 2030. **The draft National Plastic Action Partnership (NPAP) Action Roadmap for "Radically Reducing Plastic Leakage in Viet Nam" estimates that by 2030, the reduction and substitution of plastics through elimination, reuse, and new delivery models, as well as the substitution of plastics with suitable alternatives would lead to the replacement of 1.66 million tons of plastics. Based on 2018 levels, this would be a 22 percent reduction of plastic leaking into Vietnam's waterways. If implemented, the policy options recommended in this report should contribute significantly to reaching this goal.**

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The roadmap of policy options presented in this report is based on the principle that a smooth, gradual transition is required for Vietnam to achieve (or even bring forward) the 2031 ban on SUPs that is delineated in Decree 08/2022. The policy options proposed here, and the timeline for their implementation are designed to gradually mobilize administrative capacity, and increase funding for monitoring and enforcement so that the relevant authorities are prepared to implement the upcoming ban. Table E1 lists the proposed measures in chronological order, starting with the measures that will have the least impact on consumers, retailers, and other stakeholders, and ending with the fees and bans that will impact all of the market players.

A ban on SUPs is the strictest policy measure to implement, but Vietnam currently has no examples of banning any plastic product, entirely. All of the policy options proposed in this report require comparatively less administrative effort than the enforcement of a total ban. This reflects the prioritization of measures that can be easily implemented, and all would be more easily implemented than a total ban. Without such a gradual transition over time to relatively more stringent measures, the obligated retailers and establishments would also not be pre-identified, and the ban would be very difficult to implement. Where relevant, each of the policy options recommended in this report should be implemented gradually, which could include initially targeting larger establishments, initially excluding street vendors, and also conducting pilots in selected provinces, and especially in those provinces that have substantial tourism revenue. Such approaches should help increase the technical know-how of those implementing the policies, and promote public awareness before the measures are scaled up.

Table E.1. **PROPOSED ROADMAP OF POLICY OPTIONS**

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Restrict the distribution of plastic straws	Organize stakeholder meeting(s) with the targeted actors	MONRE	MOIT	Restaurants and similar establishments	2022
	Formulate and adopt the legislation, identify exemptions, define the transition period for street vendors, and appoint local authorities to carry out inspections and impose fines				2022
					2022
	Prepare a guidance document to inform businesses (e.g., restaurants) about the regulation, exemptions from the regulation, and the penalties for failure to comply	MOIT – Department of Energy Efficiency and Sustainable Development	MONRE, PPC/CPC, and their supporting unit (DOIT)		2022
	Allocate a budget for regular, random inspections by the appointed authority Implement a mechanism for inspections, and impose fines	PPC/CPC and their supporting unit (DOIT)	-		2023
	Include street vendors and unlicensed actors	MOIT	-	Street vendors and unlicensed activities	2023

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Restrict the use of certain SUPs for consumption in restaurants, cafeterias, etc.	Organize stakeholder meeting(s) with the targeted actors	MONRE	MOIT	Full-service, big and medium-sized restaurants	2022
	Formulate and adopt the legislation, identify exemptions, define the transition period for smaller restaurants, and appoint local authorities to carry out inspections, and impose and collect fines				2022
	Prepare a guidance document to inform businesses (e.g., restaurants) about the regulation, exemptions from the regulation, and the penalties for failure to comply	MOIT – Department of Energy Efficiency and Sustainable Development	MONRE, PPC/CPC, and DOIT		2022
	Allocate of a budget for regular, random inspections by the appointed authority, implement a mechanism for inspections (e.g., a registry of operating restaurants), and for imposing and collecting fines	PPC/CPC and DOIT			2023
	Include all licensed restaurants	MONRE	-	All licensed, full-service restaurants	2023
Restrict the provision of plastic cutlery with food deliveries (voluntary agreement)	Seek a voluntary agreement with online food platforms Formulate a document to be signed and endorsed by the platforms, including the type of commitment to be implemented (opt-in or opt-out option)	MONRE	MOIT	Online food platforms Restaurants and similar establishments	2022
	Self-monitor the adoption of the agreement, and voluntarily report the results	DOIT	PPC/CPC	Online food platforms	2023

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Restrict hotels' distribution of detergent and toiletry products in SUP bottles	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the required legislation and regulations Identify the hotels that are subject to the regulation (e.g., based on their size)	MONRE	Ministry of Culture, Sports, and Tourism	4 and 5 star hotels	2022
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	Ministry of Culture, Sports, and Tourism	PPC/CPC, and the Department of Tourism, Culture, and Sport		2022
	Allocate a budget for inspections by the appointed authority Implement a mechanism for regular, random inspections, and imposing and collecting fines	PPC/CPC Department of Tourism, Culture, and Sport			2023
	Include all hotels	Ministry of Culture, Sports, and Tourism		Remaining hotels	2023
Restrict the use of certain SUPs in tourist zones	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the required legislation and regulations Identify the tourist areas that are subject to the regulations	MONRE	Ministry of Culture, Sports, and Tourism	Tourist areas	2023
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	Ministry of Culture, Sports, and Tourism	PPC/CPC – Department of Tourism, Culture, and Sport		2023
	Allocate a budget for inspections by the appointed authority Implement a mechanism for regular, random inspections, and imposing and collecting fines	PPC/CPC Department of Tourism, Culture, and Sport	Vietnam Forest Rangers		2024

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Charge a fee for each plastic bag	Organize at least two meetings with stakeholders in the retail sector Formulate and adopt amendments to the respective legislation	MOF	MONRE	Retailers	2022-2023
	Make announcements in newspapers, radio, TV, and social media about the fee, and how it will be implemented	MOF	Ministry of Industry and Trade, Department of Domestic Markets		2022-2023
	Publish the regulations on application of the fee				2022-2023
	The system for charging and monitoring the fees: List the establishments that are required to impose the fee Identify a system for charging consumers fees, and the penalties for failure to collect the fees Ensure cooperation and agreement among the authorities responsible for inspections and collecting the fees	Ministry of Finance, General Department of Taxation	PPC/CPC, DOF, and the Department of Domestic Markets		2023
	Organize awareness-raising campaigns about alternatives to SUP plastic bags	PPC/CPC	Department of Domestic Markets		2023-2025

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Charge fee for each plastic coffee cup	Organize at least two stakeholder meetings with the restaurant/ cafeteria sector Formulate and adopt amendments to the respective legislation Announce the fee and how it will be implemented Publish the regulations on application of the fee	MOF	MONRE	Restaurants, Coffee Shops	2025
	Identify the system for monitoring collection of the fee Identify the establishments required to collect the fee	MOF, General Department of Taxation	DOF, PPC/ CPC, Department of Domestic Markets		2026
	Identify the system for collection of the fees and imposing penalties Identify the establishments required to impose the fee				2026
Market ban of plastic straws (through a ban on sales or production and imports)	Organize of at least two stakeholder meetings with the targeted actors	MONRE	MOIT	Retailers, Restaurants	2024
	Formulate and adopt the legislation and exemptions Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MOIT, MONRE	PPC/CPC		2024
	Identify retailers and other establishments that provide plastic straws Organize market surveillance Allocate a budget for inspections and collecting fines	MOIT/DOIT	PPC/CPC		2025

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Market ban of plastic bags (through a ban on sales or production and imports)	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the legislation and exemptions	MONRE	MOIT	Retailers	2025
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MOIT, MONRE	PPC/CPC		2025
	Implement a system for monitoring and collection of fines: Identify producers/ importers, retailers, and other establishments that provide plastic bags Organize market surveillance, inspections, and collection of fines	MOIT, MONRE	PPC/CPC, DOIT	Retailers	2026
Market ban of EPS food containers (through a ban on sales or production and imports)	Organize at least two stakeholder meetings with the targeted actors • Formulate and adopt the legislation and exemptions • Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MONRE	MOIT	Restaurants, Retailers	2026
	Implement a system for monitoring and collection of fines: • Identify producers/ importers, retailers, and other establishments that use EPS food containers (business-to-business) • Organize market surveillance, inspections, and the collection of fines	MOIT, MONRE	PPC/CPC, DOIT		2026

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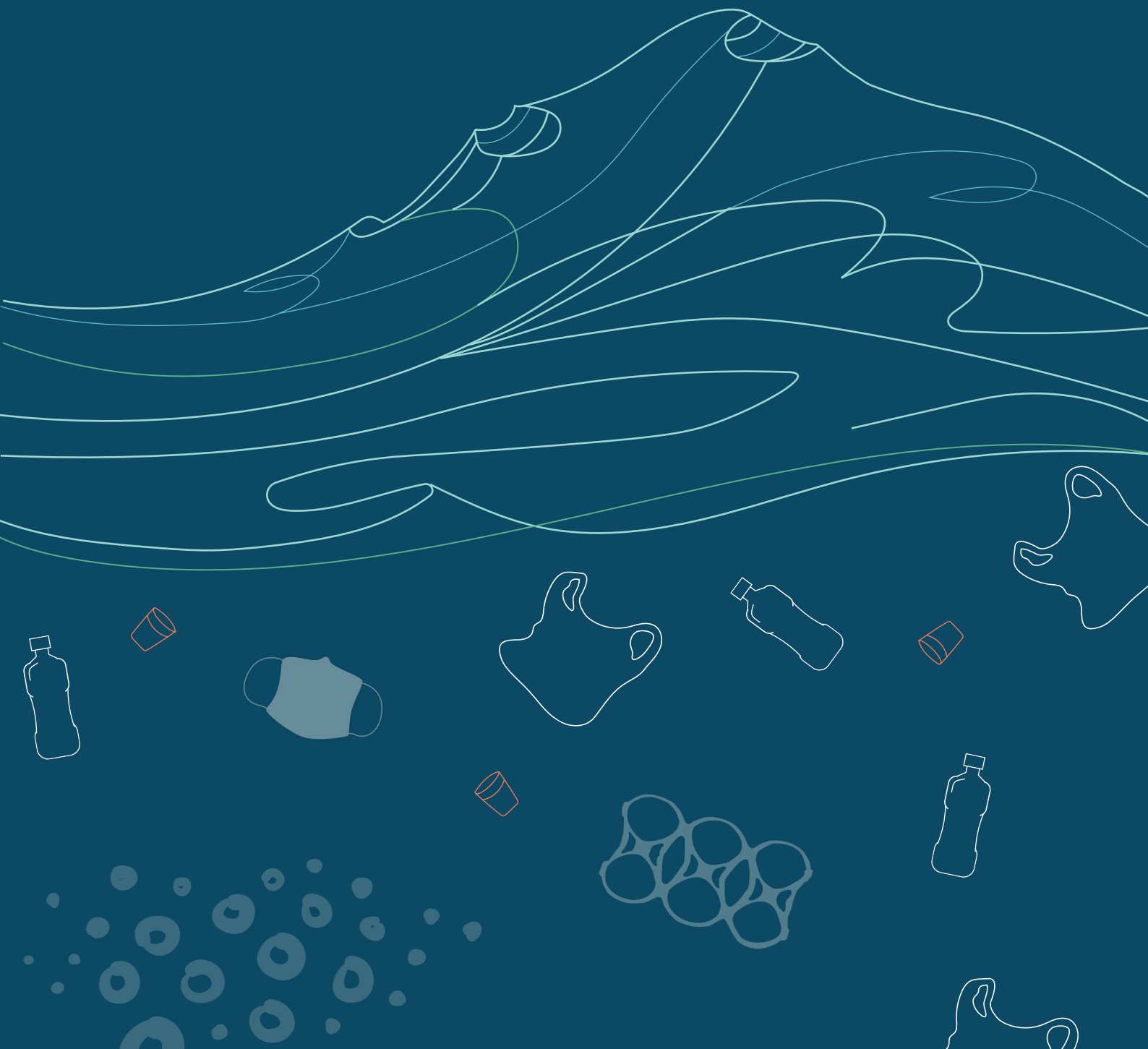
1. INTRODUCTION



1. INTRODUCTION

Globally, plastics are widespread, mismanaged, and pollute the air, land, and water. More than 8 million metric tons of plastic are dumped in the world's oceans every year, and about 90 percent of global marine plastic pollution comes from just 10 rivers, eight of which are in Asia. Plastics-related pollution can cause negative health impacts such as cancer; neurotoxicity; and reproductive, immune, and genetic disorders.

Vietnam is one of the major polluters of the world's oceans. Annually, approximately 2.8 to 3.1 million tons of plastic waste are discharged on land in Vietnam, which makes the country a major plastic polluter. As a result of annually discharging an estimated 0.28 to 0.73 million tons of plastic waste into the ocean, Vietnam ranks as one of the world's top five ocean polluters (Jambeck et al. 2015). Across Vietnam, local governments are struggling to collect, transport, treat, and dispose of their growing waste streams (van den Berg et al. 2018). This situation is expected to worsen as urbanization, together with strong economic and population growth, results in rapidly increasing volumes of domestic waste. By 2030, after fewer than 15 years, Vietnam's waste generation is expected to double from 27 million to 54 million tons.

The rapid rise of plastic imports, production, and use in Vietnam, as well as mismanaged waste, has resulted in a country-wide crisis of plastic pollution—something that 55 percent of consumers consider to be a serious problem (Quach and Milne 2019). The annual use of plastics has increased from 3.8 kg/capita in 1990, to 33 kg/capita in 2010, 41 kg/capita in 2015 (MONRE 2020), and 81 kg/capita in 2019 (IUCN 2020). Since China enacted its "National Sword" policy in 2018, which banned imports of most waste plastics and other materials that developed countries were shipping to China for disposal, these wastes have been redirected to less-regulated countries in Southeast Asia, including Vietnam. After China announced its plan to stop waste imports in July 2017, by November 2017, plastic waste imports in Vietnam had surged from around 40,000 tons per month to a peak of 100,000 tons per month (Greenpeace 2019). In 2020, only 20 percent of plastic materials for industrial use (including primary and recycled materials) were locally produced in Vietnam, and the rest (80 percent of input materials for manufacturing [a total of 8 million tons]) were imported (IUCN 2020).

Vietnam is committed to addressing its solid and plastic waste pollution challenges. Through the 2019 Bangkok Declaration on Combatting Marine Debris, ASEAN member states, including Vietnam, committed to reducing their high levels of marine plastic pollution. ASEAN members also stressed their common aspiration to conserve and sustainably use the oceans and seas, and their marine resources. Through Vietnam's revised National Strategy on Solid Waste Management, the country has committed to collecting, transporting, and treating 100 percent of non-household waste by 2025, and 85 percent of urban household waste by 2025. This strategy also prioritizes developing large-scale treatment facilities that use modern technologies, with a substantial focus on recycling and upgrading landfills to

prevent negative environmental and health impacts (van den Berg et al. 2018). In October 2018, the 8th Plenary Session of Vietnam's Party Central Committee (12th tenure) adopted Resolution No. 36-NQ/TW (October 22, 2018), The Strategy for Sustainable Development of Vietnam's Marine Economy to 2030, with a vision to 2045. This set the goals of "preventing, controlling, and significantly reducing pollution of the marine environment", and "becoming a regional leader in minimizing ocean plastic waste." On December 4, 2019, Vietnam's Prime Minister approved Decision No. 1746/QD-TTg, which promulgated the National Action Plan for Management of Marine Plastic Litter by 2030. This plan set targets for reducing marine plastic waste by 50 percent by 2025, and by 75 percent by 2030, as well as eliminating single-use plastics (SUPs) from coastal tourism destinations and marine protected areas by 2030. In response, Vietnam's Ministry of Natural Resources and Environment (MONRE) is seeking to improve staff knowledge about plastic waste problems so that the ministry can formulate plastic management policies. In addition, the Law on Environmental Protection 2020, which became effective on January 1, 2022, has introduced "pay as you throw" policies; it requires the segregation of wastes; and it sets out the legal basis for extended producer responsibility (EPR) schemes.

Vietnam has also set targets for phasing-out SUPs. Decree 8/2022 guides the implementation of a selection of articles in the Law on Environmental Protection 2020, and sets targets for banning SUPs. On January 1, 2026, production (for domestic consumption), as well as imports of non-biodegradable plastic bags[1] will be banned. The decree also requires gradually reducing the production and importing of other SUPs,[2] until their ban begins in 2031. In addition, the decree directs Provincial People's Committees (PPCs) to restrict the distribution and use of SUPs in shopping centers, supermarkets, hotels, and tourism areas, starting in 2025. While these are important steps toward reducing plastic waste pollution in Vietnam, a phased-in policy roadmap is needed to ensure that these targets can be achieved, while at the same time, minimizing potential negative consequences for producers and consumers. This will help ensure that the policies, and, eventually, the bans, are implementable and enforceable.

In response to a request from the government of Vietnam for help in addressing the country's plastic waste problems, the World Bank Group has been providing advisory services and analytics to improve knowledge about plastic pollution and value chains, as well as identify policies, and potential public and private sector investments. This advisory services and analytics (ASA) engagement is funded by PROBLUE, a World Bank multi-donor trust fund, and conducted in close collaboration with the Vietnam Administration of Seas and Islands (VASI) and the Vietnam Environment Administration (VEA), both of which are under MONRE, and with the relevant provincial authorities. This ASA engagement comprises three components: (1) supporting diagnostics on plastic waste; (2) identifying priority solid waste management and plastic pollution policies and investments; and (3) conducting value chain diagnostics for plastics in Vietnam. This report falls under Component 2.

Reducing plastics pollution requires a three-pillar pathway consistent with the 2021 ASEAN Regional Action Plan for Combatting Marine Debris in the ASEAN Member States (2021–2025). Pillar 1 is *Reduce Inputs into the System*, which comprises upstream measures such as reducing single-use, low-value plastics. Pillar 2 is *Enhance Collection and Minimize Leakage*, which comprises improvement of solid waste management systems and putting in place extended producer responsibility (EPR) policy reforms. Pillar 3 is *Create Value for Waste Reuse*, which comprises the development of markets for plastics recycling and reuse. **This report specifically focuses on the policy options concern reducing single-use plastics in Vietnam under Pillar 1. However, significant progress on all three pillars is needed to achieve the ambitious commitments in Vietnam's National Action Plan for Management of Marine Plastic Litter by 2030.**

1 Those with dimensions smaller than 50cm x 50cm, and a thickness of less than 50 µm.

2 The decree defines single-use plastic products as trays, food containers, bowls, chopsticks, glasses, cups, knives, spoons, forks, straws, and other eating utensils with plastic components that are designed and marketed with the intention of a single use before they are discarded. While these items do constitute a large portion of the SUPs used in Vietnam, as will be discussed in this report, other common SUPs are not covered by the decree.

The plastic items prioritized in this report's policy recommendations are the top SUP items that were identified in the Vietnam field surveys, which the World Bank supported in 2020 and 2021, and a survey of the alternative products that are available in the Vietnamese market (World Bank 2022).

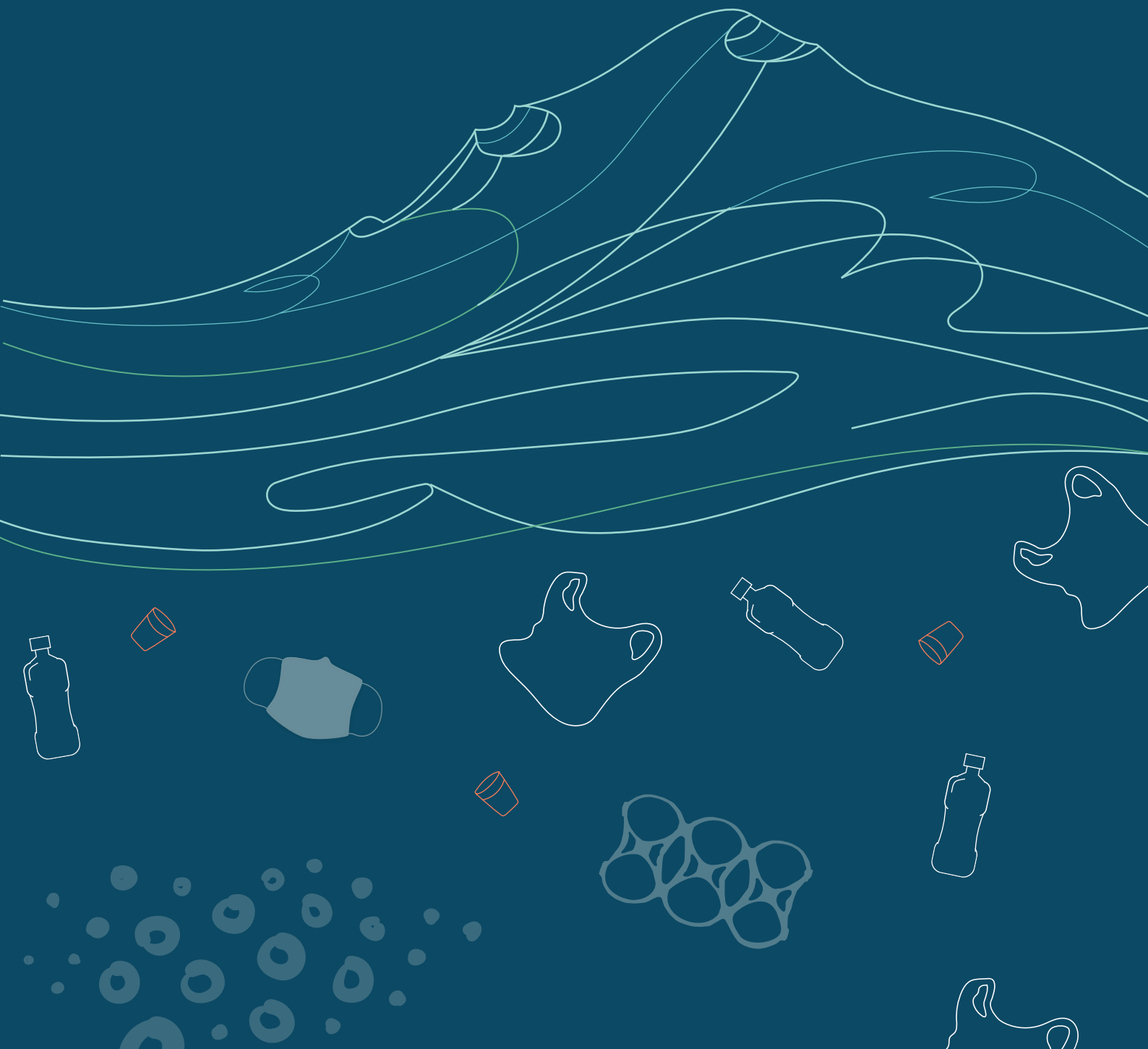
A range of policy instruments, which were assessed for this report, address plastics waste reduction issues. Along with summarizing the results of this assessment, this report provides a roadmap of policy actions that details the policy implementation process. Ultimately, this work aims to implement the measures listed in Decree 8/2022, which concerns the application of selected articles in Vietnam's Law on Environmental Protection 2020, as well as the commitments in Vietnam's National Action Plan for Management of Marine Plastic Litter by 2030. In particular, this report is expected to guide MONRE in its preparation of the Circulars and guidance documents required to implement Decree 8/2022.

This report should also guide provinces and cities in piloting the proposed SUP reduction measures prior to their implementation at the national level. The goal of the pilots would be to determine whether the proposed reduction measures will be successful in achieving the bans put in place by Decree 8/22. The draft National Plastics Action Partnership (NPAP) Action Roadmap for "Radically Reducing Plastic Leakage in Viet Nam" estimates that by 2030, the reduction and substitution of plastics through elimination, reuse, and new delivery models, as well as substitution with suitable alternatives would replace approximately 1.66 million tons of waste plastic (or a 22 percent reduction in 2018-level of plastic leakage into waterways). The policies recommended in this report, if implemented, are expected to contribute significantly to this goal.

The roadmap of policy options provided in this report is based on the principle that a gradual transition is required for Vietnam to achieve (or even bring forward) the 2031 ban on SUPs that is required in Decree 08/2022. The policy options proposed and the timeline for their implementation are designed to gradually develop administrative capacity and increase the funding for monitoring and enforcement so that the authorities are adequately prepared to implement the upcoming ban. In Table 5.2, the proposed measures are listed in chronological order, starting with the measures that will have the least negative impact on consumers, retailers, and other stakeholders, and ending with fees and bans that will impact all market players.

A ban on SUPs is the strictest policy measure to implement, and, currently, in Vietnam there are no examples of a total bans for any plastic products or items. All of the policy options proposed in this report require less government administrative effort than would be required to enforce a total ban. This reflects the prioritization of measures that should be easier to implement than total bans. Without such a gradation of policy options, over time, toward relatively more stringent measures, the retailers and other establishments concerned would likely not agree to implementing the measures, and bans would be very difficult to enforce. Where relevant, each of the policy options recommended in this report should be implemented gradually, which could include initially targeting larger establishments, initially excluding street vendors, and also conducting pilots in selected provinces, and especially in those provinces that have substantial tourism revenue. Such approaches should help increase the technical know-how of those implementing the policies, and promote public awareness before the measures are scaled up.

2. OBJECTIVES



2. OBJECTIVES

The objective of this report is to present short-term policy options that are implementable in Vietnam over the next five years (2022–2026), and should lead to a significant reduction of the single-use plastics polluting the environment in Vietnam. These policy options are based on international good practices, they should be applicable in Vietnam's context, and they target the single-use plastic items that are most prevalent in polluting Vietnam's environment.

This report proposes a roadmap of policy actions to progressively phase out priority SUP items in Vietnam and, therefore, significantly reduce land-based, marine plastic pollution in Vietnam. The proposed roadmap builds on several World Bank-supported, Vietnam-specific analyses that comprised: (i) plastic pollution diagnostics, which aimed to identify the predominant plastic waste items in Vietnam's environment; and (ii) a review and gap analysis of the legal and policy framework for plastic waste management. The diagnostic work described in the next section serves as a guide for the roadmap of recommendations, which is presented later in this report. The contents covered in the rest of this report are as follows:

- Section 3: Identification and analysis of different SUPs and their suitability for different policy options. This section summarizes the:
    - results of the field surveys that were conducted in 2020 and 2021 to identify the most abundant SUPs in Vietnam's environment.
    - results of a legislative and institutional framework review and gap analysis that was conducted in 2021 to highlight the need for certain plastic reduction policies.
- Section 4: A summary of SUP reduction laws and regulations enacted in other countries, and a selection of the ones that could suit Vietnam's context, including factors contributing to success or failure, and expected impact.
- Section 5: Recommendations for policy options suited to the types of SUPs used in Vietnam; plastic waste types and sectors where phasing out SUPs would be feasible; the relevant institutional frameworks necessary for achieving positive outcomes; and a roadmap of actions for implementing the proposed policy options.
- Annexes that present the criteria used in choosing which SUPs to reduce in Vietnam; an analysis of the SUP alternatives available in Vietnam; a review of Vietnam's legal, policy, and institutional framework that concerns eliminating SUPs; and the process for implementing these policies, and enforcing them in Vietnam.

3. PLASTIC POLLUTION IN VIETNAM AND THE CURRENT REGULATORY FRAMEWORK

3. PLASTIC POLLUTION IN VIETNAM AND THE CURRENT REGULATORY FRAMEWORK

3.1. Analysis of the Top 10 Plastic Waste Items Identified in Plastic Pollution Diagnostics

The World Bank (2022) supported surveys carried out between July 2020 to April 2021 to deepen knowledge about the different plastic waste types leaking into rivers and the ocean in Vietnam, and identify potential alternatives available in the market in Vietnam (see Figure 3.1). This included field surveys on riverbanks, and at coastal sites to determine the extent of plastic pollution, and the top 10 polluting items; remote sensing and net trawl surveys that monitored plastic waste in, and alongside, waterways that flow into the ocean; and a preliminary analysis of alternatives to Vietnam's most-polluting plastic items.

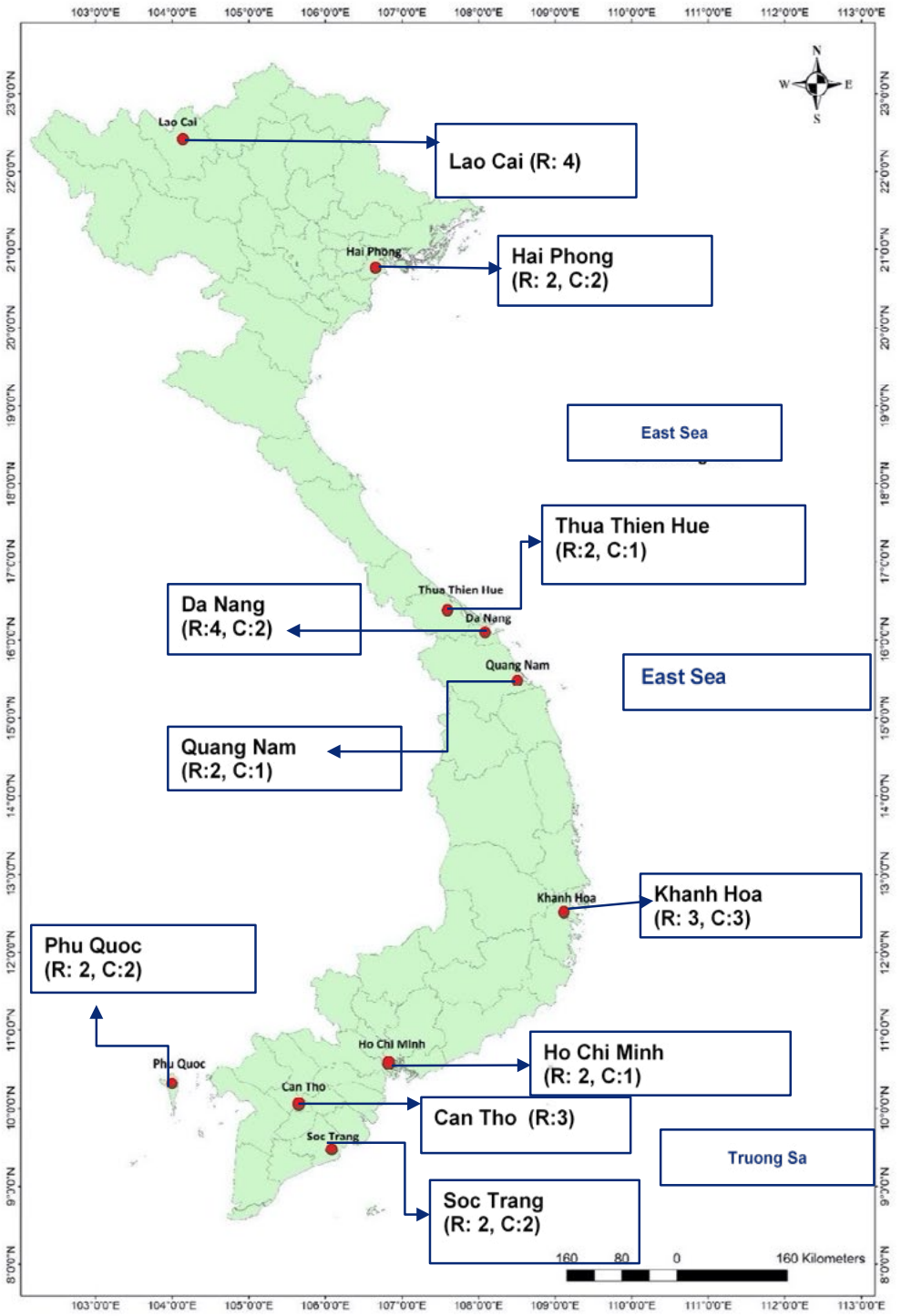
Plastic waste was by far the most abundant type of waste collected in the field surveys (around 94 percent of the total number of items of waste, and around 71 percent of the waste by weight). Take-away food packaging was the most abundant source of plastic waste found in the field surveys (44 percent of the total number of items), followed by fisheries-related waste[3] (33 percent of the total number), and household-related waste (22 percent of the total number). The Clean Coast Index (CCI) measurement, which is a tool to assess relative coastal cleanliness, showed that 71 percent of the coastal sites surveyed in the field studies were *extremely dirty* (a CCI of more than 20), and 86 percent were *extremely dirty* or *dirty* (a CCI of more than 10).

In number, the top 10 common plastic items accounted for over 81 percent of all the plastic items collected in river sites, and over 84 percent of the items found in coastal sites. The top five common plastic items accounted for over 50 percent, in number, at both river and coastal sites. SUP items accounted for 62 percent (in number) of the total plastic waste identified in the field surveys. Plastic bags and their fragments (around 26 percent of the items) were the most common single-use items in the survey locations. When both categories of waste were combined, they were the most prevalent in river locations, and the second most prevalent in coastal locations. Styrofoam food containers were among the top five items in both river and coastal locations. Fishing gear was very prevalent, too, accounting for around 30 percent of plastic waste (in number).

3 Note that while fisheries-related plastic waste was very abundant in the surveys, proposed policy recommendations for this type of waste were not presented in this report as a separate analysis of fisheries-related waste is being conducted to inform the proposed World Bank Sustainable Fisheries Development Project.

The top 10 plastic waste items, which the field surveys identified at 38 river and coastal sites in Vietnam, are presented in Figure 3.2. These included SUPs, as well as other plastic items. Of the SUPs identified by the surveys, the most abundant were plastic bags and their fragments, Styrofoam food containers, and straws. Together, these accounted for up to 38 percent of the plastic waste leakage in the surveyed locations. Figure 3.3 shows these findings separately for the river and coastal sites.

Figure 3.1. **LOCATIONS OF THE 38 SITES WHERE FIELD SURVEYS WERE CONDUCTED IN VIETNAM**
R = RIVER SITES; C = COASTAL SITES



Source: World Bank 2022

Figure 3.2. **TOP 10 PLASTIC ITEMS, OVERALL – BY NUMBER (WORLD BANK 2022)**

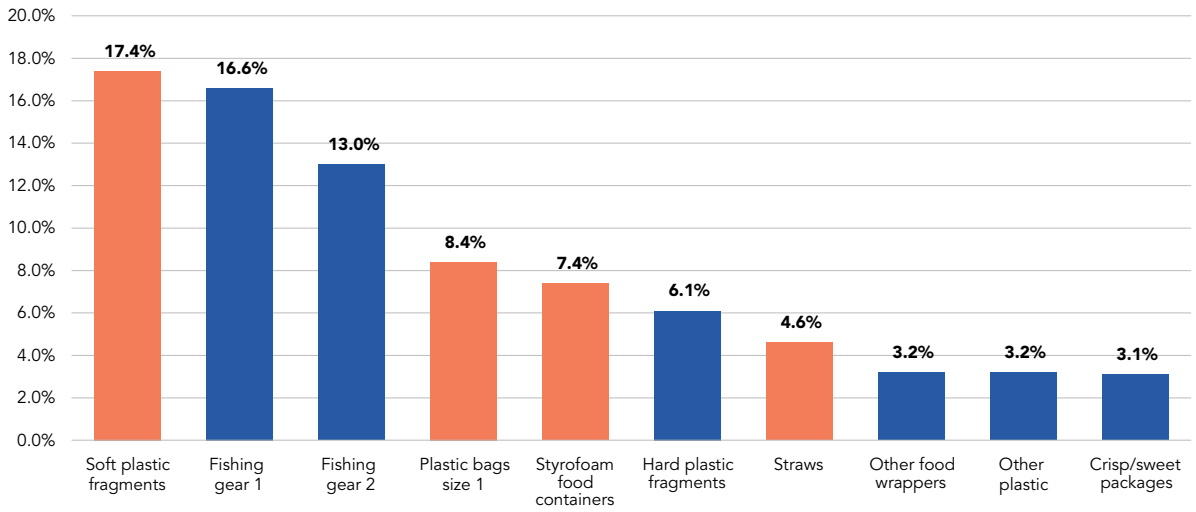
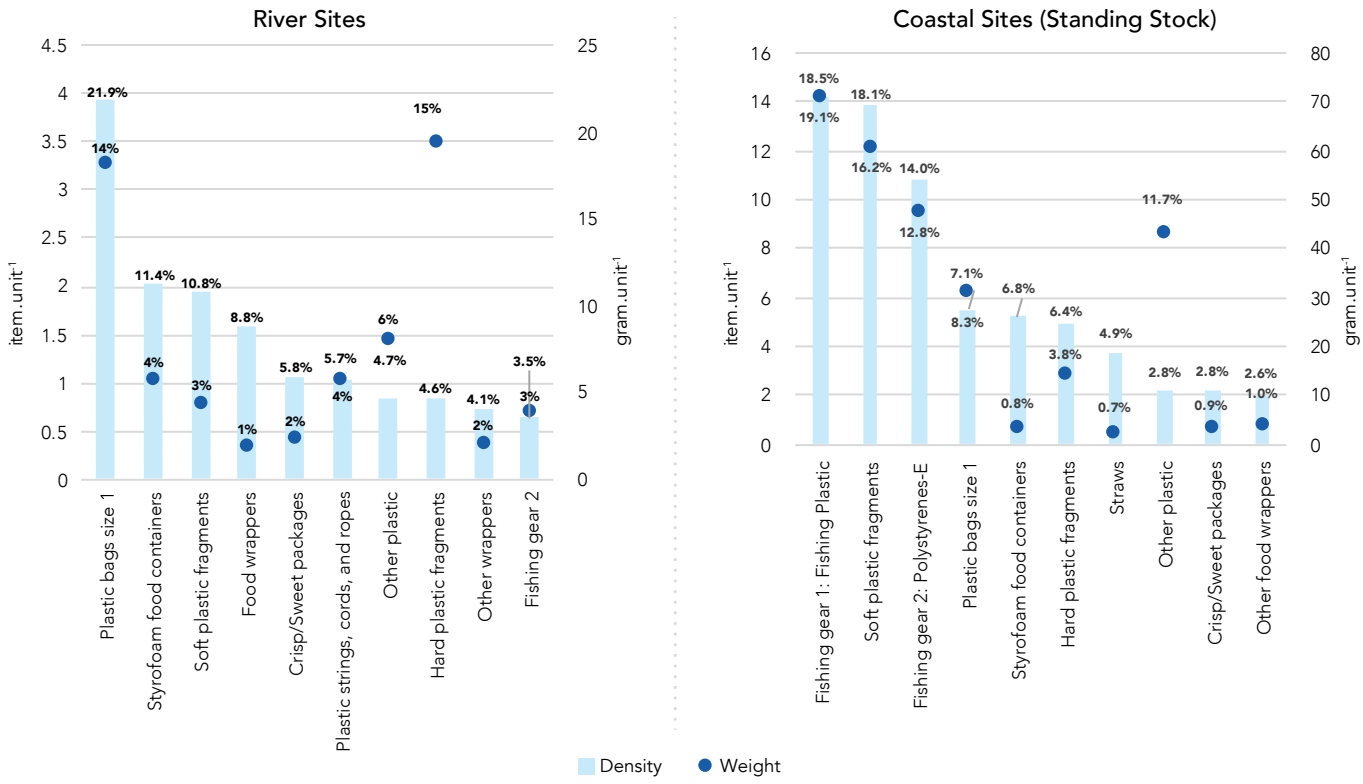


Figure 3.3. **TOP 10 PLASTIC ITEMS AT RIVER AND COASTAL SITES – STANDING STOCK (WORLD BANK 2022)**



In addition to the field surveys, drone surveys were carried out in three locations—Hai Phong (five sites), Hai Duong (two sites), and Sa Pa (2 sites). The results from the drone surveys indicated that most of the plastic waste leakage comprised a small group of take-away packaging items, many of which were single-use and of low-value. These were:

- Polystyrene, including food containers (40 percent)
- Cup lids, caps, and small plastic items such as plastic cutlery and drink stirrers (19 percent)
- Low-density polyethylene (LDPE) bags and wrappers, and polyethylene terephthalate (PET) bottles (18 percent)

The types of plastic waste found through the field and drone surveys are presented in Figure 3.4.

Although the drone surveys were limited to three locations, and their results should be generalized with caution, their findings reflect some emerging patterns. For example, take-away SUP waste items were predominant in the environment, and should be prioritized for policy measures.

The results of the preliminary analysis of alternative products showed that for most of the identified priority SUPs, alternative products are readily available in the Vietnamese market. These alternatives are primarily for plastic bags and take-away food containers. However, when designing policy measures to replace the priority SUPs, along with considering the availability of viable alternatives, their cost and their potential environmental impact should be considered too. Therefore, to inform potential policies, along with presenting information on the availability suitable alternatives, this report presents information on alternatives' costs and environmental impact.

Figure 3.4. **TYPES OF PLASTIC WASTE FOUND THROUGH THE FIELD AND DRONE SURVEYS**

Soft plastic fragments

Fishing gear 1

Fishing gear 2

Plastic bags (0-5kg)

Styrofoam food containers

Straws

Other food wrappers

Other plastic

Hard plastic fragments

Crisp/sweet packages

Source: World Bank 2022

3.2. Benefits of Phasing Out SUPs

Overall, international examples show that the shift away from SUPs toward reusable items has more benefits than costs. A 2018 report by the European Commission on the expected economic impact of the European Union (EU) SUP Directive found that switching to multi-use items led to savings for consumers as they spent less on single-use items, and this was the case even when the additional cost of washing reusable items was taken into account (European Commission 2018). If these savings are spent elsewhere in the economy, they should offset the losses incurred by SUP producers. However, the potential losses that would be incurred by the producers of single-use items highlight the need for a phased transition to mitigate the potential impacts of SUP reduction policies. The 2018 European Commission report also presents the overall costs and benefits, and shows that the benefits of SUP management policies were larger than the associated costs (See Table 3.1.)

Efforts to raise consumers' awareness about the reasons why they should use alternatives to single-use plastic bags and other SUP items, and promoting the use of reusable alternatives can achieve a substantial reduction in the use of SUPs. Policies that support identifying and promoting environmentally sound alternatives to SUPs should be considered, too, including adopting certifications and standards, and investing in, or providing financing for, the production of alternatives. While these are not the focus of this report, they are referenced (where relevant) in the recommended policy options that directly support the reduction of SUPs. .

Table 3.1. **SUMMARY OF THE BENEFITS AND COSTS OF REDUCING MARINE PLASTIC LITTER**

Direct Benefits	**Reduction in litter removal costs for land and sea (including externalities)**	**€11.1 billion**
	Increased savings for consumers through reduced expenditure on single-use items, and the switch to multi-use items	**€6.5 billion**
Costs	Fall in SUP producers' turnover	€3.2 billion
	Awareness-raising campaign costs	€0.6 billion
	Business compliance, commercial washing, and refill scheme costs	€1.4 billion
	Increase in waste management costs due to the introduction of EPR	€0.5 billion
Overall		**+€11.9 billion**

Source: European Commission 2018

3.3. Summary of the Legal, Policy, and Institutional Framework Review and Gap Analysis

To inform this report, an inventory and gap analysis was carried out to examine Vietnam's legal, policy, and institutional framework for plastic waste management. This review highlighted Vietnam's commitment to address its solid and plastic waste management challenges through the adoption of national strategies and action plans. These include the:

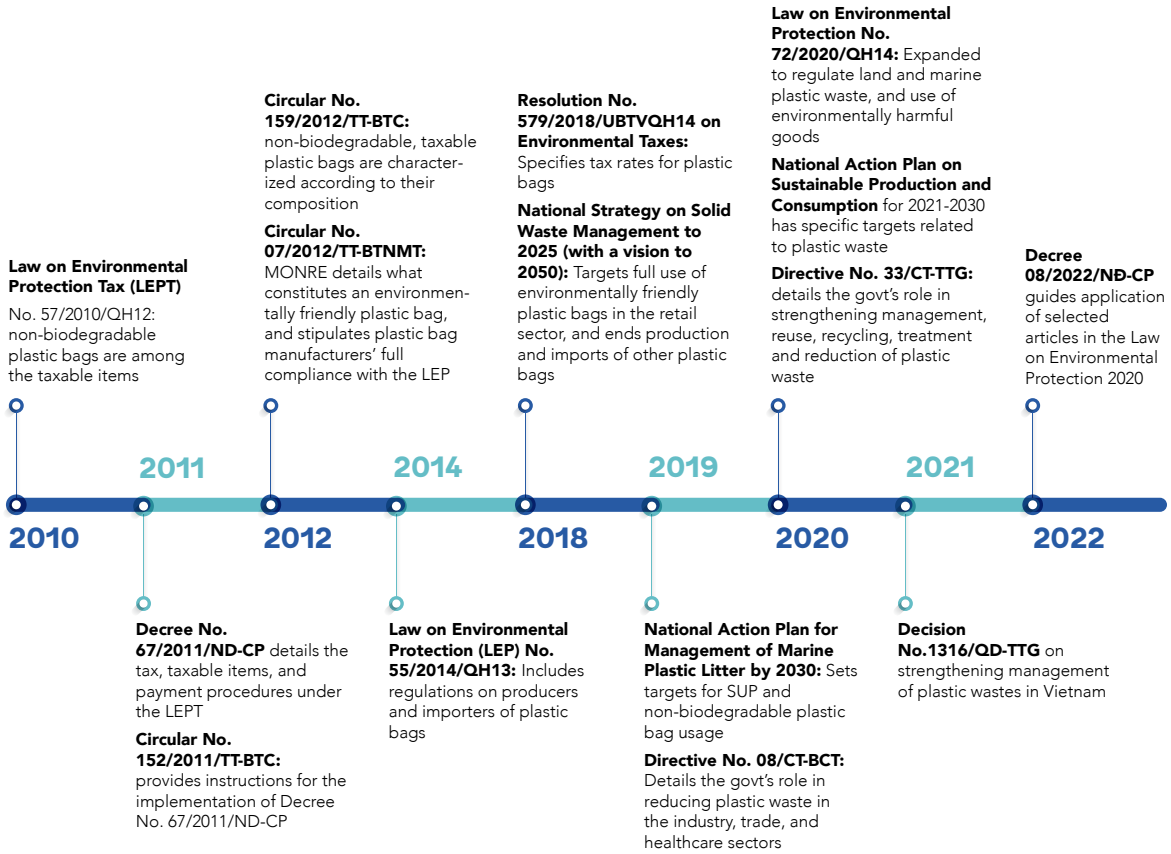
- National Strategy on Solid Waste Management to 2025, with a Vision towards 2050 (Decision No. 491/QD-TTg, dated May 7, 2018).
- National Action Plan for Management of Marine Plastic Litter by 2030 (Decision N° 1746/QD-TTg, dated December 2019).
- National Action Plan on Sustainable Production and Consumption for the Period 2021–2030 (Decision No. 889/QD-TTg, dated June 24, 2020).

These government strategies and action plans stress the urgent need to tackle Vietnam's plastic pollution problem. They set specific targets to address waste management, plastics pollution, and marine littering, including wastes from specific sectors such as retail and tourism. They also set targets to address the need for additional plastic-related policies that will foster reduction, and, as summarized in Annex 3 of this report, better design of plastic and plastic products, as well as eco-friendly designs. This review found that Vietnam has already adopted several regulations that aim to address these challenges, including:

- Taxing of the producers of non-biodegradable plastic bags (Law on Environmental Protection Tax No. 57/2010/QH12, dated November 15, 2010);
- Introduction of extended producer responsibility (EPR) instruments for producers of plastic packaging; a mandate to prepare a roadmap for reducing the production and importing of SUPs, and other non-biodegradable plastic packaging and products (Law on Environmental Protection 2020; and Decree 8/2022, which guides the implementation of selected articles in the Law on Environmental Protection 2020);
- The obligation for MONRE to prepare a roadmap that addresses reducing the consumption of certain SUPs and banning them (Directive No. 33/CT-TTg, dated August 20, 2020 on Strengthening the Management, Reuse, Recycling, Treatment, and Reduction of Plastic Waste);
- Distribution of the responsibility to address the plastic waste problem across different ministries (Directive No. 08/CT-BCT, dated July 15, 2019, on strengthening measures to reduce plastic waste in the industry and trade sectors; Directive No. 08/CT-BYT, dated July 29, 2019, on reducing plastic waste in the health sector; Decision No. 2395/QD-BTNMT, dated October 28, 2020, on reducing plastic waste in the natural resources and environmental sector; and Decision No 687/QDD-BNN-TCTS, dated February 5, 2021, on the National Action Plan for Marine Plastic Litter from the Fisheries Sector, which was adopted by the Ministry of Agriculture and Rural Development).

The secondary legal and policy framework is being prepared to support the implementation and enforcement of the primary legislation. This includes Decree 8/2022, which guides the implementation of selected articles in the Law on Environmental Protection 2020, including Articles on EPR implementation, and phasing out the production, importing, and consumption of SUPs. On July 22, 2021, the Prime Minister approved Decision 1316/QD-TTg on Strengthening Plastic Waste Management in Vietnam. The main objectives of this Decision are to strengthen the management of plastic waste by shifting it from the central to the local level, and contribute to building a circular economy in Vietnam, with the goal of reducing the use of SUP products. A timeline for the policies the government has adopted to help stem the use of SUPs is shown in Figure 3.5.

Figure 3.5. **POLICY AND REGULATORY LANDSCAPE ON SUPS**



As indicated in Annex 3, the government has set ambitious targets for addressing plastic pollution. This includes: specific targets to reduce marine littering (75 percent by 2030); collect fishing gear waste (100 percent by 2030); prevent the use of SUPs and non-biodegradable plastic bags; clean up-campaigns; monitoring the country's marine plastic debris, especially in tourist areas (100 percent of tourism locations are to be plastic-free by 2030); and implementing Decree 8/2022, which guides the application of selected articles in the Law on Environmental Protection 2020, which, starting on January 1, 2026, will ban the production of non-biodegradable plastic bags for domestic consumption, as well as their imports.[4] This decree also directs the Provincial People's Committees to restrict the distribution and use of SUPs in commercial centers, supermarkets, hotels, and tourism areas after 2025; and it prescribes gradual reduction of the production and importing of other SUPs, until their eventual ban starts in 2031.

With regard to the institutional set-up for plastic waste management, the Ministry of Natural Resources and Environment (MONRE) has been appointed as the principal state management agency. This is to ensure unified management of solid waste, in general, and plastic waste, in particular. Also, Directive No. 33 of the Prime Minister clearly identified the units in each ministry/branch, and each locality that are to serve as the focal points for plastic waste management. Municipal waste management and recycling are to be carried out at the provincial and city level, with the People's Committees at each level playing the central role in implementing waste management activities.

This study analyzed the regulatory framework for plastic waste management in Vietnam and benchmarked this against international good practices, including those of the European Union, China, and some countries in ASEAN. A plastic policy gap analysis was also conducted, which was based on a framework of potential plastic policies for Vietnam that align with the three pillars in the 2021 ASEAN Regional Action Plan for Combatting Marine Debris in the ASEAN Member States (2021–2025):

4 With dimensions smaller than 50cm x 50cm, and a thickness of less than 50 µm.

- Pillar 1 (Reduce Inputs into the System) focuses on policies that support the reduction of plastic usage, including bans and restrictions on the sale of selected priority plastic and SUPs, and imposing fees and taxes on producers and importers. Given the targeting of SUPs in Pillar 1, this report focuses on policy options that address gaps in this policy area (see Table 3.2).
- Pillar 2 (Enhance Collection and Minimize Leakage) typically includes extended producer responsibility (EPR) schemes, and waste management optimization measures.
- Pillar 3 (Create Value for Waste Reuse) includes measures such as eco-design, standards, and labelling. These do not reduce the consumption of SUPs, directly, but they do support transitions away from SUPs—for example, through the adoption of more sustainable alternatives. While these measures will not be investigated in-depth in this report, they are examined within the broader policy landscape as measures that support reduction policies.

Table 3.2. **SUMMARY OF THE MAIN GAPS AND RECOMMENDATIONS FROM THE INVENTORY AND GAP ANALYSIS OF VIETNAM'S PLASTIC POLICIES THAT ALIGN WITH PILLAR 1 IN THE ASEAN REGIONAL ACTION PLAN (REDUCE INPUTS INTO THE SYSTEM)**

Main gaps	Recommendations to address gaps
While Decree 8/2022 identified and defined SUPs within the legal framework, some of the polluting SUPs that are found in the environment were not identified as needing reduction (for example, SUP toiletry products).	Consider generalizing the definition of SUPs in the next update of Decree 8/2022 to be more closely linked to good international practices (for example, in the EU) that define SUPs by their purpose rather than by product or type. This would then allow for the inclusion of items to target in the Circular to support implementation of the Decree.
Other than the bans included in Decree 8/2022, policy instruments to reduce SUP consumption and facilitate achievement of the bans have not been identified and included, yet, in any legislation.	Develop a roadmap to progressively phase out SUPs, and consider policies that facilitate the reduction of consumption, and especially consumption in the hospitality, tourism, and retail sectors, where most of the identified SUPs are consumed.
On its own, the tax levied on the producers of non-degradable plastic bags seems to be ineffective in reducing plastic bag consumption (see Section 4).	Charge fees to the consumers of certain SUPs, such as non-degradable plastic bags.

Relevant analysis and recommendations for Pillars 2 and 3 are either included in the World Bank Group's publication *Market Study for Vietnam: Plastic Circularity Opportunities and Barriers* (World Bank Group 2021) or they have been supported, directly, by other development partners (such as those for extended producer responsibility schemes). An EPR regulation is included as part of Decree 8/2022, which guides the implementation of selected articles in the Law on Environmental Protection 2020. The proposed policies in this report will support and reinforce implementation of the EPR regulation in phasing-out certain SUPs that have been identified as unsuitable for recycling; and they should help to pressure producers to move toward alternatives. As already noted, the focus of this roadmap report is on Pillar 1, which directly deals with reducing the consumption of SUPs. A more detailed gap analysis, and recommendations for all three of the pillars was prepared for this report (see Annex 3).

To determine the appropriate SUPs to target for the most positive impact on the environment, three selection criteria were used (See Annex 1). These were:

1. Does the SUP have a significant environmental presence in Vietnam?
2. Does the SUP have reasonably priced alternatives, and have these alternatives been successfully used? [5]
3. Can the SUP be effectively addressed by reduction policies?

Given these considerations, the three most common SUPs that should be targeted, immediately, through reduction policies, are non-degradable plastic bags, EPS food containers, and plastic straws. As highlighted in the results of the field surveys, these items were responsible for up to 38 percent of all waste leaking into rivers and the ocean, and were consistently the Top three SUPs in most survey locations. While these field surveys can only provide a snapshot, the relevance of addressing these particular items was notable, and targeting these items would significantly reduce pollution in Vietnam's environment. Fishing gear, which was also prevalent in the field surveys, is not included in this report on plastic pollution, because fishing gear is largely not single-use, and a forthcoming World Bank report will provide a detailed discussion on measures to address fisheries' sector plastic pollution.

Some SUPs did not appear among the top 10 plastic items in the field surveys, but they could still contribute to marine litter. Some of these include plastic cutlery, plastic cups and lids, and plastic drink stirrers. These SUPs often have available alternatives, and in some other countries, these have been successfully replaced by reasonably priced alternatives. The tourism sector, and especially hotels and other accommodation providers, should also be considered for phasing out SUPs, and using alternatives, as the SUP toiletry bottles and other products provided to guests comprise a considerable amount of the SUPs that are polluting the environment in Vietnam's tourist areas (Hendrickx and Bajzelj 2021).

To sum up, the roadmap developed in subsequent sections of this report focuses primarily on the top three SUPs (non-degradable plastic bags, EPS food containers, and plastic straws), but it also considers other SUPs that could be addressed with reduction policies that are based on international good practices (see Table 3.3).

Table 3.3. **THE SUPS TARGETED FOR REDUCTION IN THIS REPORT**

Rationale	SUPs targeted
SUPs identified in the field surveys as the top polluting items	• EPS food containers • Straws • Non-degradable plastic bags
SUPs that could be considered for reduction policies, based on international good practices; that have readily available single-use or multi-use alternatives; and that are not deemed to be essential items.	• Plastic cutlery • Plastic cups • Drink stirrers • Toiletry bottles (hotel consumption)

5 See Annex 2: Alternatives to the target SUPs, and their availability for sustainable use.

4. POLICIES TO REDUCE AND PHASE OUT THE CONSUMPTION OF CERTAIN SUPS

4. POLICIES TO REDUCE AND PHASE OUT THE CONSUMPTION OF CERTAIN SUPS

This section identifies potential policy options, and analyzes these within the context of the existing legislative framework in Vietnam. This is intended to help Vietnam formulate policies, prepare a roadmap of actions for their adoption, and increase the effectiveness of policies once they have been implemented.

As mentioned in Section 3.3., the proposed policies focus on Pillar 1 (Reduce Inputs into the System). These options includes bans, restrictions, or fees charged to the producers, importers, or users of certain SUPs. These measures have proven to be highly effective in achieving quick results, and especially so, when conditions are in place to support the transition, such as having readily available alternatives (Excell et al. 2020).

The recommendations for SUP reduction policies focus on a phased approach, which means that measures are phased in to avoid having a negative impact on groups that may not have a voice in policy decision-making, or people who would lose their jobs as a result of policy changes. This approach requires developing policies that promote employment and business opportunities related to the alternatives to SUP products, supporting those whose livelihoods are highly dependent on SUP products, and including representatives from diverse sectors and backgrounds in the policymaking process (Excell et al. 2020).

To date, regulations on SUPs have been introduced at the national level in more than 60 countries (Excell et al. 2020), and many more countries are following suit. A common targeted item is plastic bags. As of 2021, 127 out of 192 countries (66 percent) had adopted legislation to regulate plastic bags. The most common regulation is a ban on retailers' free distribution of bags. At the 2022 United Nations Environment Assembly in Nairobi, 175 nations endorsed a resolution to forge an international legally binding agreement by 2024 that will end plastic pollution (See Box 4.1 for details). A key strategy to achieve significant plastic reduction by 2030 was minimizing the use of, and phasing out SUPs, including those other than bags and Styrofoam. By the end of 2021, 27 countries had enacted some form of legislation on the use of SUPs such as plastic plates, cups, and straws, although none had totally banned the use of these SUPs, which would have included banning their production, imports, sales, and distribution (Hendrickx and Bajzelj 2021).

BOX 4.1.

AN INTERNATIONAL LEGALLY BINDING AGREEMENT TO END PLASTIC POLLUTION

In the past few years, marine litter and plastic pollution have attracted a great deal of attention and commitments from both governments and the private sector. During the 5th United Nations Environment Assembly, the adoption of a resolution to establish an intergovernmental negotiating committee to create a legally binding global agreement by 2024 to end plastic pollution in the world's rivers, oceans, and on land is a reflection of, and driver for, greater awareness and action on the issue, and this is backed by the private sector.

The resolution addresses the full lifecycle of plastic, including its production, design, and disposal. The global instrument is expected to promote action at the national, regional, and global levels, and enable countries to develop implementation policies that suit their national circumstances, and apply a circular approach to plastics. The 2024 agreement to end plastic pollution is expected to make provisions for the development, implementation, and promotion of national action plans on the prevention, reduction, and elimination of plastic pollution. The agreement could also identify the need for standards as well as measurable goals; strengthen the monitoring of plastic pollution, including marine plastic pollution; and assess the impacts in all environments. This would enable the adjustment of measures, both at the national and regional levels.

Vietnam could get a head start on this agreement by implementing the country's existing plastic regulations, and formulating additional regulations and policies as recommend in this report's policy roadmap, and developing a system for monitoring the implementation and effectiveness of these measures.

Sources: European Commission 2022; UNEA 2022; UNEP 2022a; and UNEP 2022b.

SUP bans, restrictions, and fees are applied through legislative requirements, which typically distinguish between:

1. **Restrictions on the distribution of certain SUPs**: This is a milder way of implementing the reduction policy. While production, imports, and sales are still allowed, distribution at the point of sale is restricted, unless customers request the items. This policy is usually used to transition toward stricter bans.

2. **Fees for certain SUPs:** Reducing consumption could be influenced by economic instruments in the form of taxes[6] paid by the producers and importers of SUPs, or fees (also called pricing/financial contributions) that are paid by the consumers of SUPs (such as plastic bags), instead giving them SUPs for free. Taxes paid by producers have less of an impact on consumption as the amount paid in taxes can be included in the price of the product, so consumers may not be aware of the charge, and, consequently, business models and consumer preferences will not shift toward more sustainable alternatives. However, if consumers are charged a fee at the point sale for plastic items such cups, cutlery and bags, they will be encouraged not to request these. For example, if customers must pay for grocery bags, instead of getting these for free, they will be encouraged to bring their own bags.

3. **Bans:** Several types of bans can be applied in order to reduce the consumption of SUPs. In the case of a ban on the sales and distribution of certain SUPs, putting the SUP item on the market (business-to-business or business-to-consumers) is prohibited, but production and exports are still allowed. This is commonly referred to as a "national ban" on the sales. A (total) ban on the production, importing, sale, and distribution of certain SUPs is the most stringent form of legislation, and should achieve a 100 percent reduction in SUPs. While Decree 8/2022, which guides implementation of selected articles of the Law on Environmental Protection 2020, does not include bans on the sales of SUP products, it does include bans on importing and producing SUPs for domestic use, which will make it difficult to legally put the banned SUPs on the market in Vietnam.

6 If the revenue is raised for an environmental protection fund, and earmarked for environmental protection activities, the payment that producers make is considered a fee. However, taxes generate revenue that becomes part of the national budget, and can be spent for other purposes.

Currently, not enough information is available to draw robust conclusions about the environmental gains achieved by fees and bans on plastic bags. In about 50 percent of cases, worldwide, there is no information on the impact of the bans. This is due both to the lack of monitoring and reporting systems, and because many of the measures have been implemented very recently. Therefore, there is no robust data on impacts. However, within one year of a national ban or levy coming into force, approximately 30 percent of these efforts have reported dramatic drops in plastic pollution, and in the consumption of plastic bags. The remaining 20 percent of countries reporting results have found little to no impact (Excell et al. 2020).

These findings imply that certain factors play a key role in determining the success or failure of policies. In countries that reported little to no impact from their national ban on plastic bags, the key issues were lack of enforcement, lack of appropriate pricing, and lack of affordable alternatives. The latter has led to cases of smuggling, and the development of black markets for plastic bags, or to shifts toward the use of thicker plastic bags, which are not regulated. This latter change has, in some cases, worsened environmental problems.

To prevent problems, a phased approach is necessary. This approach starts with fees and restrictions, and progresses gradually toward stricter bans. Fees and restrictions are good "first steps" to initiate environmentally friendly consumer behavior, and stimulate the market for alternatives, especially in sectors that are more amenable to change. Sectors that do not have the capacity to transition, or those that will be heavily affected by the policy, can be exempted from the regulation, initially, and instead be given a transition period. Once the first round of policies has shown progress in reducing plastic waste, and increasing the availability of alternatives, stricter bans on imports or sales can be introduced. Penalties for defaulters should also be introduced, and imposed by the monitoring and enforcing authority.

This report identifies the need for other policies to complement SUP management, but such policies are not proposed as separate policy options. This is because plastic products and plastic-containing products are only a small part of the products that fall within the scope of policies such as EPR, eco-design, and labeling schemes, and green (eco-friendly) public procurement. This report was not meant to encompass all waste management and circular economy issues, but rather to make a specific contribution toward addressing SUPs.

In the following subsections, each of the policy types identified above will be explored through examples of how each policy was implemented in other countries. These examples were analyzed to highlight the key functioning mechanisms of implementation, crucial factors for success (or failure), and the impact of the policy (where data is available). Finally, the applicability and the feasibility of implementing the proposed policies in Vietnam is discussed.

4.1. Restrictions on the distribution and use of SUPs

Placing restrictions on SUPs entails strongly discourages their use and free giveaways to consumers. Restrictive policies are typically used as a transitional measure to prepare stakeholders for the implementation of stricter bans. In countries where restrictive policies have been implemented, restrictions have varied from voluntary ones, such as large international retailers, hotels, and restaurants choosing to reduce plastic usage in their premises, to mandatory ones enforced by government. Currently, in Vietnam, there are no specific restrictions on the use of SUPs, other than recommendations in cities such as Hanoi[7] and Ho Chi Minh City[8] to stop using SUPs in homes, businesses, and government offices (Vietnam News 2020).

Restrictions can be applied to target specific sectors, and over time these policies can be applied in stages to the whole economy. Starting with sectors where alternatives are readily available will help to improve the adoption of policies. For example, compared to the retail sector, the restaurant and the hotel sectors are more suitable for beginning the initial application of restrictions, as a smaller segment of society will be impacted.

One place where restricting SUPs should be considered is onsite consumption in full-service restaurants. These include restaurants, cafeterias, and food shops that offer dine-in services. The restrictions could tackle the use of SUP utensils, containers, cups, straws, stirrers,

7 Decision 232/KH-UBND of the Ha Noi People's Committee, dated October 25, 2019, promulgating the plan for the prevention of plastic waste and plastic bags in Ha Noi city by 2020, with a vision to 2025.

8 Decision 1905/QĐ-UBND of the Ho Chi Minh City People's Committee, dated May 24, 2021, promulgating the plan to increase plastic waste management, reuse, recycling, treatment, and waste minimization in HCMC.

drinking bottles, and other SUP items. Switching to multi-use alternatives or high-value recyclables (such as using ceramic, aluminum, metal, and glass containers for food, beverages, and cutlery) can be made for a low or reasonable cost if the facility has a kitchen where multi-use alternatives can be washed, or if post-consumer packaging has a high scrap value and can be easily collected, sorted, and recycled.

Restrictions on the use of certain SUPs can also be considered for take-away and delivery food. Restrictions can be rolled out to reduce or prohibit the free provision of certain SUPs by businesses that provide take-away and delivery food, as most of them use SUPs. Thus, there is a need to explore multi-use alternatives such as food containers and boxes, or refillable mugs that can be used and returned by consumers. Currently, some businesses are exploring these options through subscription systems or deposit-refund systems. These efforts should be piloted and then launched on a larger scale. In the meantime, it is still possible to reduce the unnecessary distribution of some SUPs. One prominent example is that of plastic straws and drink stirrers, which are now restricted in many countries. In Vietnam, an initial regulation could require not making straws available at the point of sale, and only providing them if customers ask. Thus, the use of straws would be discouraged. Another interesting approach concerns providing plastic cutlery with online food orders, which could be tackled by having an opt-in or opt-out option at the time of ordering, or requiring payment for the cutlery. In the latter case, cutlery is not provided by default, and instead customers have the option to add cutlery to their order for a fee (also see Section 4.2). This opt-in/opt-out measure has been applied, voluntarily, by major online food delivery platforms in many countries, including in Vietnam. Also, many countries ban the use of plastic straws (see Section 4.1.1).

Tourist areas are hotspots for the generation of SUP waste, and especially so during the peak tourist season (Hendrickx and Bajzelj 2021). Parks and nature reserves can be even more impacted by SUPs, since they might be home to protected and endangered biodiversity, and waste collection can be more problematic than in resort areas. Also, parks and nature sites have an intrinsic value associated with cleanliness that attracts visitors. Islands may particularly struggle with waste management due to their lack of space for waste treatment, and potentially having to pay to ship the waste to the mainland.

Restrictions on the use of SUPs can be adjusted to specifically target tourist areas. First, the use of SUPs can be regulated in hotels and accommodation sites. Suitable measures include the substitution of single-use bottles with refillable dispensers for toiletries (such as shampoo or shower gel) and for the drinking water provided in common areas. Other measures include the use of multi-use fabric bags, rather than plastic bags for laundry service, and only providing personal care products such as toothbrushes, shower caps, and combs if guests request these. Second, for restaurants and cafeterias, measures include replacing the SUP food containers used for juices, spreads, salt, pepper, and so on, with refillable containers. Lastly, is a ban on the use of SUPs in parks and nature reserves. This policy aims to reduce SUP consumption to protect sensitive areas, and at the same time, maintain cleanliness. This measure can also stimulate the market for non-plastic alternatives.

4.1.1. International case studies and lessons learned

Legislative restrictions on the use of certain SUPs

Restrictions on the use of SUPs for onsite consumption and take-away food have been implemented in several countries. In several states in the United States (US), including California and Oregon, ordinances ban automatically giving customers SUP straws. The city of Berkeley, in California, officially restricts the use of SUP containers, cutlery, and other SUPs for onsite consumption. The United Kingdom (UK) has a "hybrid" policy that restricts the use of straws in retailers (see Box 4.2 for more details). Other countries such as Thailand and Peru (for Machu Picchu),[9] have recently begun to restrict tourists from using certain SUPs in parks. However, there are still uncertainties about how to implement these policies in parks because retailers and vendors within the area may continue providing SUPs. In the hotel sector, in California,[10] as well as in New York State,[11] after a transitional period, the use of shampoo bottles and other single-use amenities for guests will be banned, starting in 2023.

9 Decreto Supremo que aprueba la reducción del plástico de un solo uso y promueve el consumo responsable del plástico en las entidades del Poder Ejecutivo DecReto SupRemo N° 013-2018-mINAm.

10 Chapter 6.1 of Part 3 of Division 30 of the Public Resources Code of California.

11 Senate Bill S543: Prohibits hotels from providing guests with small plastic bottles containing personal care products.

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BOX 4.2.
INTERNATIONAL CASE STUDIES ON REDUCING THE DISTRIBUTION AND USE OF CERTAIN SUPS

This box presents some international examples of reducing the distribution and use of certain SUPs, including the implementation mechanisms and impact. Restrictions are intermediate measures that are usually seen in high-income countries, and, as such, the examples in this box are primarily from these countries. Middle-income countries tend to start directly with national bans and fees/taxes, which can be too jarring, and leave little opportunity for stakeholders to transition to alternatives.

Restrictions on the distribution of plastic straws in the State of California (2019)[12]

Since 2019, a law in the State of California in the US restricts full-service restaurants (dine-in and takeaway) from giving out SUP straws unless customers request these. However, the law does not apply to fast food restaurants, convenience stores, or street vendors. Full-service restaurants can still automatically give paper or metal straws to customers. Violators face a fine of $25 per day after two warnings, up to an annual total of $300 for fines. Since this law was implemented in 2019, there is little evidence of its effectiveness. It is generally believed that the regulation cuts down on some plastic straw waste, but on its own, the regulation is insufficient because requiring consumers to request a straw is not going to change their behavior. Critics argue that the penalty is too low, too many facilities are exempt, and many of these are the largest contributors to plastic pollution. Since the law covers only a small percentage of food facilities, critics question the effectiveness of the law.

Restrictions on the distribution of plastic straws in the State of Oregon (2020)[13]

In January 2020, the State of Oregon implemented a law that prohibits food and beverage providers, as well as convenience stores from giving out SUP straws, unless consumers request these. However, the law exempts some businesses. Violators face a $25 fine per day after two warnings, up to an annual total of $300. The legislation appears to have minimal financial impact on the state or local governments. Because this regulation was recently implemented, there was no evidence in early 2022 about whether this has reduced the consumption of plastic straws.

Restrictions on single-use food ware to reduce litter in Berkeley, California[14]

This ordinance, which was implemented in Berkeley, California, in 2019, requires restaurants to provide reusable/multi-use food ware for dine-in guests, and to charge guests for each single-use cup or non-reusable food container they request. Dine-in guests can only get disposable food ware if they request it for a take away order or food leftover from their meal, or they take it from a self-service counter. All disposable food ware items must be certified as compostable, apart from paper napkins or wooden items (such as chop sticks, toothpicks, and stirrers). These restrictions in Berkeley have been implemented in phases to give businesses enough time and flexibility to successfully make the transition. Several studies conducted to assess the impact of the city's restrictions have found that, overall, businesses have saved money (ReThink Disposable 2021).

Prohibition of plastic straws, cotton buds, and drink stirrers in the United Kingdom (2020)[15]

The United Kingdom prohibits supplying SUP straws, cotton buds, and drink stirrers to end-users, nation-wide. The ban, which began on September 21, 2020, applies to all the businesses that supply these products, including manufacturers and retailers. Straws, cotton buds, and drink stirrers made from degradable materials, or which are reusable, can be provided. The exceptions to the prohibition include catering establishments (restaurants, canteens, clubs, public houses, and similar establishments, as well as food trucks and street stalls). These can still supply SUP straws for immediate consumption. However, operators must keep straws hidden, and only give them out on request. The other exceptions include pharmacies, care homes, and schools. Following a transition period that allowed businesses to use up their supply of SUP straws, penalties have been applied. Because the regulation only became effective in 2020, there is no evidence yet about its impact.

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12 Assembly Bill No. 188 4 CHAPTER 576. An act to add Chapter 5.2 (commencing with Section 42270) to Part 3 of Division 30 of the Public Resources Code of California relating to food facilities. [Approved by the Governor on September 20, 2018, and filed with the Secretary of State on September 20, 2018].

13 Senate Bill 90 AN ACT: Relates to a restriction on restaurants providing single-use plastic straws to consumers – Oregon Legislative Assembly, 2019.

14 Berkeley Single Use Foodware and Litter Reduction Ordinance – City of Berkeley, California.

15 Guidance from the UK Department for Environment, Food & Rural Affairs: Straws, cotton buds, and drink stirrers ban: rules for businesses in England.

Thailand's national park plastic restriction (2019)

As part of a plan to tackle the problem of plastic waste in Thailand, the Department of National Parks has been conducting a campaign that asks tourists not to bring plastic containers, food packaging, plastic cutlery, water bottles with plastic caps, plastic straws, and plastic stirrers to national parks (Srisathit 2019). The campaign is being conducted in 154 national parks across the country, but it is unclear how restrictions on tourists' use of SUPs will be implemented, and stores in the targeted areas still supply them. Thus, clarity about enforcing the restrictions is needed.

SUP restrictions in Machu Picchu and other protected heritage sites and parks in Peru (2018)[16]

The use of SUPs of any kind have been prohibited since the end of 2018 in the Inca Sanctuary of Machu Picchu, the Paracas National Reserve, Manu National Park, and other protected biodiverse areas in Peru. A transitional period of 30 days was granted before the restriction came into force. Administrators and park rangers in the specified sites are empowered to ensure compliance with the ban. Every Machu Picchu entry ticket is printed with the message, "Carry drinks only in flasks or canteens." Tour operators have been asked to refrain from providing lunches packed in disposable plastic. However, in June 2019, reports indicated that the regulation banning SUPs was not being enforced.

Prohibition of single-use personal care products by New York accommodation providers (2021)[17]

A bill was introduced in January 2021 that requires hotels in the State of New York in the US to switch to refillable dispensers or environmentally friendly containers for all of the body wash and hair products they provide to guests. The bill identifies the types of bottles that need to be restricted and the types of accommodation providers that need to obey the restrictions (hotels, motels, apartment hotels, and other accommodation providers). Starting in 2024, after a one-year transition period, the bill will be enforced with larger hotels, and in 2025 with hotels with fewer than 50 rooms. After the first warning, a subsequent violation carries a $250 fine, and then a $500 fine is applied for each subsequent violation in the same year. The money collected from the fines will be deposited in the Environmental Protection Fund. An estimate shows that the state's ban of hotel toiletry SUPs would cut the use of 27.4 million SUP bottles, per year.

Miniature bathroom amenity bottle ban in California (2019)[18]

In October 2019, a bill was issued in California banning hotels from providing shampoo, hair conditioner, and bath soap in plastic bottles that are non-reusable, and have less than a six-ounce capacity. However, this legislation, which goes into effect in 2023, allows hotels to provide small, plastic amenity bottles to guests at no cost if they request this. Lodging establishments are encouraged, instead, to use bulk dispensers for personal care products. A local agency with the authority to inspect bedrooms in lodging establishments may issue a citation for a violation of the ban. Upon a second, or subsequent violation, the local agency may impose a penalty of $500, rising to a maximum of $2,000, annually. The California Hotel and Lodging Association estimated that switching to multi-use dispensers would cost about $70 for each of 500,000 hotel rooms in the state, but it would help to reduce an estimated 200 million tons of solid waste generated every year by the hospitality industry, of which a substantial portion comprises toiletry bottles (Hauser 2019).

Voluntary initiatives to restrict and phase out the use of SUPs and their distribution by retailers

Several case studies have been published on how restrictions on the distribution of SUPs can be applied in a voluntary fashion by retailers, restaurants, and fast-food chains. These examples are particularly relevant since they show the willingness of the private sector to do more to tackle SUPs than what is legally required. Many of these initiatives, which have been implemented, worldwide, by online food delivery services, fast-food restaurants, and hotel chains, show promising results in terms of impact and applicability.

Several fast-food chains have committed to reducing plastic waste. In 2018, Starbucks announced that in 2020 it would begin phasing out plastic straws, globally, in its more than 28,000 coffee shops (Starbucks 2018; Goodwin 2020). Straws would be replaced with new recyclable strawless lids and alternative options for

16 Decreto Supremo que aprueba la reducción del plástico de un solo uso y promueve el consumo responsable del plástico en las entidades del Poder Ejecutivo DecReto SupRemo N° 013-2018-mINAm.

17 Senate Bill S543 Prohibits hotels from providing guests with small plastic bottles containing personal care products.

18 Chapter 6.1 of Part 3 of Division 30 of the Public Resources Code, California.

straws, which the company would develop with its $10 million commitment to create a fully recyclable and compostable cup for worldwide use. Similarly, with the aim to eliminate about 400 tons of waste per year, McDonald´s China is implementing a company-wide policy to phase out plastic straws in nearly 1,000 restaurants across the country. McDonalds also has a global target to source 100 percent of its packaging from renewable, recycled, or certified sources, and to recycle packaging in all of its restaurants by 2025 (CGTN 2020).

In the online food delivery sector, there have been several voluntary initiatives as well. In Southeast Asia, for example, since 2018, the online food delivery platform, Foodpanda, has given customers the choice to "opt out" of receiving plastic cutlery with their orders. As a result, Foodpanda has seen an 85 percent reduction in the number of customers who request plastic cutlery with their orders (Tun-atiruj 2018). In 2019, the three major food delivery platforms in Singapore—Deliveroo, Foodpanda, and Grab—signed the PACT food delivery pledge that requires customers to opt-in if they want cutlery with their order. This change has reduced the use of approximately one million pieces of cutlery per week in Singapore (Beitien 2020). In the UK, Deliveroo has also implemented an opt-out option for cutlery, and has started a complementary program to use environmentally friendly packaging (Deliveroo 2018). The opt-out option has resulted in a 90 percent reduction in the amount of plastic cutlery used with UK Deliveroo orders. Indonesia's largest online food delivery service, Go-Food (Gojek), has introduced a fee for disposable cutlery. Through this, the company seeks to raise awareness about sustainable practices, and appeal to eco-conscious customers (Kong 2019). On a smaller scale, a Lebanese NGO started a pilot project with a local restaurant in Beirut to use a verbal prompt during the ordering process, which gives customers the option to opt-out of getting plastic cutlery with their order (Nudge 2019). This led to a 77.9 percent reduction in customers' demand for cutlery.

In the hotel sector, the Akaryn Hotel Group in Thailand has banned the use of SUP products in their hotels by providing alternatives such as multi-use products, refillable water and toiletry product dispensers, and biodegradable bin bags (Akaryn Hotel Group 2018). As part of this initiative, the hotel group also offers alternative straws upon request. According to the hotel chain's managers, the largest problem has been getting suppliers to stop using plastic when they deliver items. According to the Akaryn Hotel Group's chief executive officer, the measures have proven popular with guests, and do not compromise the chain's luxury ambiance. The initiative has, in fact, created another revenue stream by attracting eco-conscious travelers, which proves that SUPs can be eliminated, while still offering guests a luxurious and personalized experience. Both the Hilton (Mest 2018) and Marriott hotel chains have recently adopted similar approaches. As of 2021, about 1,000 of Marriott's hotels across the world had made the switch, and received positive feedback from guests (Marriott International 2019). In July 2019, Marriot International met its worldwide goal of diverting one billion plastic straws from landfills. When fully implemented across the globe, Marriott's expanded toiletry program is expected to prevent about 500 million tiny bottles from going into landfills, annually, which amounts to 1.7 million pounds of plastic, and a 30 percent annual reduction in the company's plastic amenity usage. Marriot is one of the five key players in Vietnam's hotel sector.

In the hotel sector in Vietnam, some of the world's largest hospitality companies have partnered with local companies and brands to provide environmentally friendly alternatives to SUPs, which can be introduced quickly. These brands include Cong Ty TNHH Lon Nuoc Giai Khat TBC-Ball Viet Nam and beWater, and the alternatives they promote have been quickly taken up by Vietnam's hospitality industry, including Hyatt Hotels, and the Accor Hotel Group, InterContinental Hotel Group, Meliá Hotel Group, and Sailing Club Leisure Group.

These initiatives, which are summarized in Table 4.1, highlight the key mechanisms of implementation, the factors contributing to their success (or failure), and their impact (if data on impact were available).

Table 4.1. **TARGETED ITEMS, KEY APPLICATION MECHANISMS, FACTORS CONTRIBUTING TO SUCCESS OR FAILURE, AND EXTENT OF IMPACT**

	Take-away, online delivery, and onsite food consumption	Hotel sector	Tourist areas (nature reserves, parks, etc.)
Targeted items	• SUP plastic straws and drink stirrers (for take away) • Plastic cutlery (for online delivery) • SUP plastic straws, drink stirrers, cutlery, and chopsticks, expanded polystyrene (EPS) food containers, cups, and glasses (for onsite consumption)	• SUPs for food consumption in hotel restaurants and cafeterias • Single-use bottles for toiletry products such as shampoo and soap • Single-use amenities (toothbrushes, combs, shower caps, and so on) • Plastic water bottles, and bags for laundry	• SUP packaging, including plastic food containers, plastic plates, plastic bags, and water bottles
How the policy is generally applied	The policy imposes restrictions on SUPs, depending on the type of service (take-away, onsite consumption, and online delivery).	This policy imposes restrictions on hotels and other accommodation providers that offer guests toiletry products in disposable plastic bottles.	The policy restricts/ bans bringing SUPs to tourist destinations such as nature reserves and parks, heritage sites, museums, and other protected areas, as well as resorts.

	Take-away, online delivery, and onsite food consumption	Hotel sector	Tourist areas (nature reserves, parks, etc.)
Factors contributing to success or failure	• Enforcement of the restrictions includes monitoring application of the law through inspections by the designated authorities. • Penalties for infringement to increase adherence rates. • A transition period can be granted for adapting to the change, but it should be relatively short (one year). • In some cases, the regulation sets the requirements for alternative products, such as compostable items. It also provides labels and color codes to support the business with appropriate identification and marking on SUPs that recognize businesses' compliance with the legislation.	• Enforcement is carried out by a local agency with the authority to inspect sleeping accommodation. • Warnings are given and penalties are imposed for violations. • The restrictions should be paired with other measures, such as providing multi-use bottles and refillable dispensers for toiletries, using biodegradable bin bags, offering reusable shopping bags, installing self-service drinking water dispensers, stopping the use of plastic straws, and offering beverages without straws. The legislation may also allow hotels to continue to provide small, plastic amenity bottles upon request. • To ensure successful implementation, it is crucial to have backing from the hotel, hospitality, and tourism association (as is the case in New York State and California). • To make sure that the transition is smooth, a period of adjustment starts with hotels above a certain size (for example, based on the number of rooms).	• Guidance and supervision is carried out by park authorities, and other personnel such as park rangers, and staff in local administrations, NGOs, and religious institutions, as well as entrepreneurs (for example, tour operators and guides) and traditional community leaders. • The experiences of Thailand and Peru show that changing the behavior of tourists cannot be achieved at once, and a period of adaptation to the new rules is needed. • Implementation measures include information campaigns, as well as administrative sanctions.

	Take-away, online delivery, and onsite food consumption	Hotel sector	Tourist areas (nature reserves, parks, etc.)
Impact	Voluntary initiatives have shown substantial reduction in the use of SUPs, as seen with the plastic cutlery policy for online food delivery, and the elimination of plastic straws. Overall, the results also show that prompting food delivery customers to make active choices helps to greatly reduce the amount of cutlery dispensed. This, coupled with customers' strong approval and support for the initiative, demonstrates that in certain contexts, encouraging individuals to make active choices can overcome poorly designed initiatives—especially, when people agree with the proposed changes. The example from Oregon shows that the negative fiscal impact of restricting the use of straws is minimal.	As the law will not be applied in New York until 2024, no data are available on the impact. However, when the ban was proposed in New York, it was estimated that it would save 27.4 million SUP bottles, per year. Voluntary adoption by the Akaryn Hotel Group in Thailand highlights that the SUP-free goal is achievable, particularly in luxury hotels. Hilton Hotels' efforts show that removing plastic straws from all 650 of their hotels led to eliminating 35 million straws, annually. Marriott International's expanded SUP toiletry reduction program is expected to achieve a 30 percent annual cut in its amenity plastic usage. Regarding costs, the California Hotel & Lodging Association estimates that equipping hotel rooms with refillable dispensers will cost about $70 per hotel room.	Since these policies have only recently been implemented, there is no evidence yet about their impact. Implementation difficulties have been reported in Peru and Thailand, including the lack of information provided to tourists who end up confused about the requirements, and an insufficiently long adaptation period.

4.1.2. Applicability in Vietnam

Restrictions on the distribution of plastic straws (such as at the point of sale)

Before introducing a total ban on plastic straws to reduce marine plastic pollution, as an initial step, restrict their distribution. When they were surveyed in Hanoi 2021 (Liu et al. 2021), a significant percentage respondents opposed or strongly opposed complete bans of plastic bags (21 percent) and plastic takeout containers (17 percent). This indicates that there may be some resistance to the complete removal of plastic products from daily life, including straws. As plastic straws are a relatively small fraction of urban solid waste (compared to other contributors), banning them may encounter some resistance at the beginning.

Based on the case studies above, restrictions on the distribution of SUPs seems to be the preferred option for plastic straws. Also, single-use and multi-use alternatives to plastic straws are readily available in Vietnam. In Vietnam, the distribution of straws could be reduced by not displaying them at the point of sale. Instead, plastic straws would only be provided if requested, or the users are people in need such as hospital patients and care home residents. For the policy to be effective in Vietnam, some success factors need to be assured:

- So that all restaurants and similar establishments, including fast food chains, cooperate, they should take part in, and be informed about the results of discussions and decision-making, regardless of whether restrictions will be introduced for them at the very beginning, or during a subsequent phase.
- Given that street food vendors and small restaurants are often part of the informal economy in Vietnam, grassroots efforts will be needed to help ensure their support and readiness for implementation.
- The cooperation of employees in restaurants and similar establishments should be assured.
- Alternatives to SUP straws (metal, bamboo, paper, and so on) should be available, market ready, and affordable.
- Consumers must be receptive to changing their behavior and using alternatives to SUP straws, so this should be promoted through education and awareness campaigns.
- Inspections should take place to verify the proper application of the law in restaurants and similar establishments.

In Vietnam, alternatives to plastic straws are well established, and sold in volumes which, although smaller, are comparable to the volume of plastic straws. This is due to customer acceptance, the availability of affordable raw materials for alternatives, and a large number of producers of substitute products (World Bank 2022). The alternatives include straws made of rice, grass, bamboo, or paper, which are single-use and, therefore, may be more suitable for take-away consumption. About 680 million pieces are being supplied, annually, in Vietnam, for costs that range from VND200 to VND1,000 per unit, depending on the material. Other alternatives include multi-use solutions such as glass and metal straws. These are more expensive than their single-use counterparts (between VND4,000 and VND15,000 per unit), and they might be more suitable for onsite consumption where they can be washed and reused by food establishments. Bamboo straws are particularly interesting since they have a high ratio of price to durability (VND600 to VND1,000/unit) and can be used for three to six months, making the end price 10 times less than that of polypropylene (PP) straws.[19] However, materials such as bamboo and paper can be a problem in a country with high humidity and, thus, it might be worth considering more suitable alternatives, such as rice and vegetable straws. Alternatives, and especially those for onsite consumption, are affordable. It is also important to note that any alternative products that are promoted through legislation should first undergo a thorough impact assessment to determine their potential environmental impact.

When considering the expected environmental impact of the policy, restrictions on the distribution, sale, or giving away of SUP straws at the point of sale (unless requested by the consumer) might not achieve a 100 percent reduction in the number of SUP straws produced and used in Vietnam. The European Union impact assessment for the development of the SUP

19 This was calculated by assuming that the minimum usage of a bamboo straw is once per day, for a minimum of three months, which would be the equivalent of saving 60 polypropylene straws, worth VND200 each, and total VND12,000.

Directive (European Commission 2018) estimated that restrictions on plastic straws could achieve reduction rates of up to 25 percent. By applying this 25 percent rate to the 2.76 billion SUP straws that are put on the market in Vietnam each year for immediate consumption (which excludes the U-shaped straws for consuming dairy products), a restrictive policy could prevent about 690 million plastic straws from becoming waste each year.

This measure would affect fast-food restaurants. According to a 2018 study, 36 percent of out-of-home food consumption in three major cities in Vietnam (Hanoi, Danang, and Ho Chi Minh City) happens in quick service or fast-food restaurants (Decision Lab 2018). These are the major distributors of plastic straws, which are usually intended for consuming beverages on-the-go. As seen in the examples above, some major international fast-food chains (including some that are operating in Vietnam) have already embraced the effort to phase out plastic straws, which indicates that a certain momentum exists to phase out SUP straws in favor of alternatives. However, it is important to note that street food vendors and small restaurants, which are often part of the informal economy, could be negatively impacted if they are included in the regulations.

While these restrictions would be beneficial, they would likely be insufficient. In order to target the remaining 2,560 million U-shaped SUP straws (the ones that are attached to beverage containers for chocolate milk, juice, and so on), Vietnam should consider a ban on the sale of these plastic straws. These straws account for nearly half of the total number of straws that are on the market in Vietnam.

A restriction policy should be regarded as a transition toward a ban of plastic straws, and it is needed to prepare the market and end-of-sale points to increase their capacity to supply alternative products. This would also prepare consumers to change their consumption.

The state's budget costs for implementing this legislation are low. They include, for example, the costs for the appointed authorities to perform inspections. To limit the budget impact, the same authorities who carry out safety and hygiene inspections could carry out these inspections, too. Other costs include information campaigns for consumers to discourage their use of SUP straws. However, the implementation strategy should also consider the financial impact on businesses, and especially the impact on micro and small businesses. Thus, a phased approach should be used that begins with targeting the businesses that have the capacity to adopt the new rules without a significant impact on their revenues.

Additionally, banning drink stirrers could be considered for inclusion in this policy, as was the case with some of the examples presented above.

Restrictions on the use of SUPs for onsite consumption in food establishments (restaurants, cafeterias, and so on)

To assess the applicability of this policy measure in Vietnam, the food culture in Vietnam must be considered. The out-of-home consumption of food and beverages in Vietnam was examined in a market study that was conducted in Hanoi, Ho Chi Minh City, and Da Nang in 2018[20] (Decision Lab 2018). The study found that the main sectors for out-of-home food consumption were:

- Full-service restaurants (traditional sit-down restaurants for both fine dining and casual eating) (36 percent of total expenditure)
- Quick service/fast-food restaurants (36 percent of total expenditure)
- Street food (11 percent of total expenditure)
- Convenience stores, canteens, bars, and clubs (17 percent of total expenditure)

The 2018 study also found that full-service restaurants have become more popular in recent years, especially with younger people, and white-collar workers, and at the time of the study, this was the largest food service type in Vietnam. This underlines the importance of engaging with full-service restaurants to promote the benefits of using multi-use or non-plastic single-use alternatives.

This policy can be regarded as a good "transition policy" toward the complete ban of certain SUPs (food containers, plastic straws, plastic cutlery, plastic cups, drink stirrers, and so on), and it would help to reduce SUP usage for out-of-home consumption.

20 As the survey focused on three large cities, the results should be taken as representative of large cities, rather than non-urban and remote areas.

This transition policy would serve to stimulate the business sector to produce alternatives, and also help the restaurant sector to gradually adapt to change, including finding the most suitable and economically feasible alternatives. In addition, consumers would be eased into using the alternatives.

The majority of the costs would be borne by full-service restaurants, as they would need to adapt to the regulations. These costs include buying multi-use alternatives and equipping the restaurant kitchen to wash the multi-use alternatives. However, these costs would be amortized over the long term by the cost savings resulting from no longer buying SUPs. No costs would be directly allocated to consumers. The government would incur inspection costs, but these could be kept low by allocating responsibility for the inspections to an authority that is already carrying out inspections in restaurants—for example, the provincial or city Department of Industry and Trade.

Restrictions on the use of plastic cutlery by online food delivery and take-away businesses

Although Vietnam's food delivery market is still new, a number of these businesses have emerged in recent years. According to the market research firm, Kantar TNS, Vietnam's online food delivery market will grow to about $449 million by 2023 (Kohli et al. 2021). This estimate is based on the pre-COVID-19 situation. Since the pandemic began, the amount of e-commerce, worldwide, has significantly increased—rising from 14 percent in 2019 to 17 percent in 2020 (Sirimanne 2021).

E-commerce is growing in Vietnam. According to Vietnam Credit (2020), the country's main food delivery platforms are:

- *Foody.vn*: Data show that the Foody.vn platform had revenues of about VND441 billion in 2018 (about $19.2 million)
- *Now.vn*: In mid-2017, the Chief Executive Officer of Foody stated that Now.vn had nearly 10,000 orders per day.
- *Grabfood:* In the first half of 2019, GrabFood saw a 400 percent increase in transactions, and recorded an average of 300,000 of transactions per day.
- *Gojek Vietnam*: A subsidiary of the Indonesian platform, GoJek, which has stated that it connects more than 80,000 food merchants to millions of customers in Vietnam).

Data in the case studies above suggest that adding an opt-in/opt-out option for getting cutlery with an online food order has great potential to reduce plastic waste. The impact can be estimated by applying the reduction rates seen in the case studies (a 77 to 90 percent reduction). Assuming that a minimum of one piece of plastic cutlery (for example, one spoon) is sent with every food delivery, the adoption of an opt in/opt out policy by one delivery company could prevent the consumption of between 80 and 100 million plastic spoons in Vietnam.

Some online food platforms in Vietnam have already started implementing the opt-in/opt-out option for cutlery, including GrabFood and ShopeeFood, as this measure is highly feasible to implement. GrabFood currently uses an automatic opt-out for cutlery so that it is not delivered by default, while ShopeeFood requires customers to opt-out if they do not need cutlery. The impact would be much larger if all online food platforms in Vietnam would adopt this policy. Even with these options, the delivery of the cutlery still depends on the restaurants, and on the delivery drivers, both of which sometimes provide unwanted cutlery. Awareness campaigns and environmental education will play a key role in informing restaurants, delivery drivers, and consumers about the opt-in/opt-out option, and its environmental significance. Moving forward, this could also be applied to SUP packaging.

The main actors that would be affected by this measure are the food delivery platforms, restaurants, SUP cutlery producers, and consumers:

- Food delivery platforms would have to add the opt-in/opt-out option on their app or website where customers place their orders. Other costs could arise from developing media to disseminate information to customers about this change, and its environmental importance. No other economic consequences are expected if food delivery platforms adopt this policy.
- Restaurants would have to educate their employees to stop automatically providing cutlery with take away orders. This could have a positive financial impact on restaurants since their cost for purchasing disposable cutlery would likely be less.

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- Consumers would not be affected, financially, by the opt-in/opt-out option. They could still receive the cutlery with their online delivery.
- Unless they could switch to producing alternatives, SUP cutlery producers would be affected, financially, by the decline in the consumption of SUP cutlery.

Since there are not many food delivery platforms in Vietnam, it should be possible to contact all of them, and seek their agreement to stop automatically supplying cutlery. As discussed, below, in Section 4.1.1 on voluntary initiatives to phase out the purchase and distribution of SUPs by retailers, this has occurred in Indonesia.

BOX 4.3.

THE TOURISM SECTOR AND PLASTIC POLICIES IN VIETNAM

The United Nations World Tourism Organization (UNWTO) ranked Vietnam as the third fastest-growing tourist destination in the world (MarketLine 2020). Between 2015 and 2019, Vietnam's travel and tourism industry had an annual growth rate of

10.1 percent, and in 2019, the total revenue was $29 billion. Hotels and motels were the industry's most lucrative segment in 2019, with total revenues of $9.2 billion (31.9 percent of the industry's overall value).

The hotel industry is still developing in Vietnam, and the majority of hotels are either independent or part of Vietnamese chains. Also, luxury hotels are on the rise. The five key domestic and international hotels chains in Vietnam are Vinpearl, Muong Thanh Hospitality, Accor Hotels, InterContinental Hotels Group, and Marriott International (Mordor Intelligence 2020). According to official government data, as of 2015, there were 82,325 three-to-five-star tourist accommodation rooms in Vietnam (MOCST 2019).

The number of local and international tourists has risen, substantially, in Vietnam. Between 2008 and 2018, the number of domestic tourists grew from 20.5 million to 80 million. In 2018, Vietnam had 95.5 million tourists, and 15.5 million of these were international tourists (Mordor Intelligence 2020). However, the COVID-19 pandemic has had a severe impact on tourist flows in Vietnam (Euromonitor International 2020).

The tourism sector is important when considering how to tackle plastic waste generation, as tourism not only generates a large part of plastic waste, but tourist destinations are negatively affected by plastic waste. More tourists generate more waste, and especially so during the high season. In certain popular tourist destinations in the European Union, for example, waste generation increases by up to 400 percent in the high season. This puts pressure on local waste management systems and may cause an increase in littering. The growth of waste in the environment can have a detrimental impact on tourism. For example, following a period of heavy rainfall on Geoje Island in South Korea, in July 2011, a large volume of marine debris was deposited on the island's beaches. Consequently, visitor numbers fell by 63 percent, which resulted in a loss of revenue ranging from $29 million to $37 million (Hendrickx and Bajzelj 2021).

With the tourism sector working to recover from the impact of COVID-19, this is a good time to adopt policies that promote sustainable practices. While voluntary initiatives within the travel and tourism sector tend to focus on the prohibition of SUP straws and SUP amenities such as shampoo bottles, improving consumer behavior also needs to be considered in any business strategy.

A worldwide analysis of hotel operations (Hendrickx and Bajzelj 2021), showed that the breakdown of SUPs by weight was as follows: 32 percent was water bottles; 31 percent was toiletries; 15 percent was plastic bags and liners; 9 percent was food packaging; 3 percent was cups; 4 percent was cling film; 3 percent was other miscellaneous packaging; 1 percent was cutlery, stirrers, and straws; and 1 percent was small food products. This list indicates which SUPs should be eliminated, first, to reduce the largest amount of waste.

Vietnam has recognized the importance of tackling plastic waste in the tourism sector. In the 2019 National Action Plan for Management of Marine Plastic Litter by 2030, targets were set to:

- Prevent the use of SUPs and non-biodegradable plastic bags by 100 percent in tourist areas by 2030
- Ensure that marine protected areas are 80 percent free of plastic litter by 2025, and 100 percent free of plastic litter by 2030

However, the instruments that should be used to achieve these targets have not been specified. Moreover, the targets are ambitious and require transitional measures before implementing the policies that are needed to achieve 100 percent reduction. Decision No: 1316/QD-TTg, which was signed by the Prime Minister in July 2021, mandates government to:

- Develop a plan to stop the use of SUP and non-biodegradable plastic bags, and apply it to tourist resorts, accommodation, and service establishments throughout the country, and especially those in coastal areas.
- Authorize the Ministry of Culture, Sports, and Tourism (MOCST) to oversee the implementation of, and adherence to, the policy in tourist accommodations, and at cultural, sport, and tourist events, nationwide.

Restrictions on the distribution of small SUP toiletry bottles in hotels

As the tourism sector begins its road to recovery, this is the time to consider improving hotels' environmental sustainability. Starting, immediately, with a ban on the use of SUP items might be too disruptive in Vietnam. Instead, the initial measures should be limited to reducing specific items, and/or to specific locations, and to hotels that meet specific criteria such as the number of rooms, the hotels' "star" ranking, and other criteria that stakeholders would find acceptable.

Based on implementation in other countries, the initial measures should focus on encouraging the voluntary adoption of alternatives to SUPs. This could be achieved through green (eco-friendly) tourism campaigns, through which more item-specific, or destination-specific policies could be promoted. Examples from some international hotel chains, some of which are operating in Vietnam, show that voluntary initiatives to reduce SUP usage are possible. To ensure successful adoption, it crucial that Vietnam's hotel, hospitality, and tourism associations support this policy.

Following a transition period to allow businesses, tourists, and other end-users to acclimatize to voluntary reductions of the use of certain SUPs, greater restriction of some SUPs should be imposed in specific types of tourist establishments and destinations. The People's Committees of provinces and centrally run cities, which are already authorized to carry out activities related to reducing plastic waste (Directive No. 33/CT-TTg, dated August 20, 2020), as well as local administrations with the authority to inspect sleeping accommodations, could be empowered to enforce the bans, starting with a warning for the first violation, and penalties after that.

The impact of this potential policy can be estimated based on the voluntary measures already undertaken by some large hotel chains. If each tourist uses one small toiletry bottle,[21] this measure could prevent the use of about 100 million small toiletry bottles per year. With regard to cost, if the cost of providing each room in three-to-five-star hotels with refillable dispensers is about $70,[22] the cost of providing dispensers for 82,325 rooms would be $5.76 million, though this would likely be an overestimate for Vietnam.

Restrictions on carrying certain SUPs to protected areas, natural parks, and tourist sites

In Vietnam, there are about 209 protected areas, comprising 7.58 percent, and 0.56 percent of the country's land and marine area, respectively (UNEP-WCMC and IUCN 2021). About 70 percent of Vietnam's rapid tourism growth is occurring in coastal areas, which have high and easily damaged biodiversity. In 2017, Vietnam's national parks and nature reserves had more than two million visitors, which was a 178 percent increase over visitor numbers in 2016. The revenues generated from these visitors was VND114 billion (Vietnam News 2018).

Information campaigns by Vietnam's Ministry of Culture, Sports, and Tourism to promote green tourism, and impose restrictions for environmental protection began in 2019. As the first step toward partial or full bans of SUP items, information campaigns could include adding information to the tickets for tourist attractions, which would explain the importance of plastic reduction, and ask tourists for their cooperation.

Hotel, hospitality, and tourism associations in Vietnam should be involved in efforts to educate tourism businesses such as travel agencies and tour operators, as well as tourists, about the restrictions on certain SUPs in parks (plastic bags, Styrofoam containers, and SUP drink bottles, including polyethylene terephthalate bottles). This is especially important so that tourists know in advance to use alternatives for the food and beverages they bring to parks and other tourist attractions. Travel agencies and tour operators could coordinate with hotels to provide guests with multi-use alternatives such as lunch boxes, cloth bags, and refillable bottles, which would be returned to the hotel. Further, global online travel agencies, such as Tui, Expedia, Travelocity, Booking.com, and Hotel.com are increasingly educating consumers and requiring hotels and resorts to meet specific sustainability requirements before listing them on their platforms. This focuses on in-room amenities such as SUP plastic water bottles and toiletry products.

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21 This is based on a conservative estimate of one bottle per tourist, regardless of the length of their stay. However, many hotels provide multiple bottles for liquids (such as shampoo, shower gel, body lotion, and hair conditioner), and these bottles are replaced, daily. Hence, the number of bottles may be higher than this estimate.

22 See the example above on the restriction of miniature toiletry bottles instituted in California.

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It should be noted that while the restrictions on most SUPs would not cause much inconvenience, restrictions on plastic bottles could be problematic as drinking water might not be accessible. Furthermore, street food vendors operating in tourist areas might sell drinks in plastic bottles or other SUPs. In Thailand, this contradiction confused tourists.[23] Therefore, starting with SUP bags, the sale of SUPs, other than plastic bottles, might be easier to prohibit in parks and other tourist sites, and this would align with national targets.

The impact of these measures is difficult to estimate as data from international examples are not available, yet. However, if properly implemented, such restrictions could contribute toward the achievement of Vietnam's national target of having 80 percent of marine protected areas free of litter by 2025. To achieve this, vendors inside these protected areas must observe the restrictions, which would ban the sale of SUP items in these areas, rather than in the whole country.

Inspection should be implemented to increase adherence to the ban. This could be done by the security guards who check people's tickets at the entrance to a nature reserve. Inspection measures could include asking tourists to declare the SUPs they are carrying, checking their bags, and having the right to confiscate SUP items. Inspections should also be undertaken in parks to check if street vendors are supplying SUPs. The Management Boards of National Parks that currently manage and protect parks should be in charge of ensuring that no SUP violations occur within parks.

4.2. Fees charged to consumers for certain SUPs

When consumers are charged a fee for SUP items such as plastic bags, measurable impact has been shown after only a short period. Charging fees helps to reduce the number of SUPs purchased, and, consequently, reduces the generation of waste and littering. Charging consumers a fee has proven to be a suitable measure when alternatives to SUPs are not readily available, and, hence, SUPs cannot be easily banned. This measure is also a good transitional one as it can stimulate the market for alternative products, and encourage the actors involved to produce or source alternatives. Box 4.4 details the cost-benefit analysis, which was conducted in Vietnam to consider whether or not to charge consumers a fee for using plastic bags.

23 See the example for Thailand's national parks' plastic restriction in Section 3.1.1.

BOX 4.4.

COST-BENEFIT ANALYSIS FOR IMPLEMENTING A CHARGE ON PLASTIC BAGS IN VIETNAM

The World Bank conducted a preliminary analysis in Vietnam to evaluate the benefits and costs of imposing a charge on plastic bags (World Bank Vietnam CEA 2021). These calculations assumed a $0.03 charge per bag, and based on experience in China, the potential reduction in bags was 49 percent.

The results, below, show the net benefits that the policy could achieve over a one-year and a five-year period, and demonstrate a greater benefit-to-cost ratio (BCR) for the five-year period. The fiscal benefits would be a reduction in the cost of environmental damage, and savings on the cost of bag production, while the cost would be a loss of consumer surplus. The revenue from the charges would also result in a fiscal gain. The expected net benefits from the policy are shown below:

Item	Units	Amount in Yr. 1	Amount over Yrs. 1–5
Benefits			
Reduction in environmental costs	$ million	109.8	532.8
Savings on bag production	$ million	132.4	573.4
Total	$ million	242.2	1,106.2
Costs			
Loss of consumer surplus	$ million	220.7	501.1.
Other			
Revenue from charges	$ million	459.5	2,230.2
Net Benefits and BCR			
Net benefit at a 5 percent discount rate	$ million	21.5	605.4
Benefit-to-cost ratio		1.1	2.2

This revenue from the charge could help finance environmental clean-ups, as well as information and education programs, which would multiply the expected environmental benefits. With respect to the social impact of the charge, the amount involved is quite small for most of the population. If the average reduction is calculated, the consumption of bags would decline from 307 bags per year, per capita, to 157 bags. For a household of 3.63 people (the national average), this would mean a payment of $17 per year, or 4.68 cents per day (VND1,077/day). According to the government poverty line for 2021–2025, the monthly per capita income of a poor household in a rural area is VND1.5 million ($65.2), or less; and in an urban area, it is VND2 million ($87), or less. If the income per day is $2.2 for a rural household living at the rural poverty line, and $2.9 for an urban household living at the urban poverty line, the charge would be about 2 percent of a rural poor household's income, and 1.6 percent of an urban poor household's income. Therefore this would necessitate education efforts to support the reduction of plastic bag usage among these populations.

This preliminary analysis indicates that a charge on plastic bags of the type proposed, could generate significant environmental benefits, and have a benefit-to-cost ratio greater than one.

A fee could be applied to a plastic item at the point of sale, which would prohibit the free distribution of plastic items. If this measure is implemented, voluntarily, the commercial entities (retailers, restaurants, and so on) that collect the fees would get the revenue. The process could also be implemented by the government through legislation that imposes a mandatory fee (at the local level), and establishes a fee collection mechanism. The revenue from the collection of the fee could then be used for administrative purposes such as improving the waste collection system, organizing awareness-raising campaigns, and providing education to targeted stakeholders and operators in the sector (see Box 4.5). There are international examples of the revenue remaining with the retailers (for example, in Cambodia), but there are no examples of the revenue going into the general budget, and being spent for purposes other than waste management. The impact of the fee in reducing the use of SUPs depends on the amount of the fee collected per item. This fee should not be too low as it would not deter consumers (especially, those with middle to high incomes), but the fee should not be too high as this could cause retailers and consumers to resist.

It is important to avoid creating inequality among retailers, restaurants, and other stakeholders by requiring some, and not others, to charge fees. If applied for a long period, this could lead to unfair competition, however small vendors will likely need time to adapt before they, too, must charge the fee.

4.2.1. International case studies and lessons learned

There are numerous examples, both globally and regionally, of consumers being charged fees if they are provided with single-use plastic products, and this is especially the case with plastic bags. However, applying such fees has had differing rates of success. Examples of less-than-ideal results include Hong Kong (EPD Hong Kong 2020), various cities in Indonesia (BBC News Australia 2016), and Cambodia (UNDP 2019). In these cases, the reduction of plastic bags in the market has been below 50 percent because retailers have been unwilling to enforce the regulations. Conversely, in Ireland, in the European Union, the introduction of a fee cut plastic bag use by 90 percent. The city of Berkeley, in California, has also successfully introduced a fee for coffee-to-go cups (Brunhuber 2019). Other SUPs such as EPS and straws have been targeted, too. Some of these example are discussed in more detail in Box 4.5.

BOX 4.5.

INTERNATIONAL EXAMPLES – FEES CHARGED TO CONSUMERS

Ireland (plastic bags): A levy on consumers who request plastic bags when they shop was implemented in Ireland, in 2002. Initially, the charge per bag was €0.15, and this increased to €0.22 per bag in 2007 (Revenue, Irish Tax, and Customs 2021). The retailers who supply plastic bags apply the charge at the point of sale. Results show that the application of this regulation has largely been successful; between 2002 to 2008, plastic bag consumption in Ireland declined by about 90 percent, and the cost of implementing the levy was low.

Success factors include publicity campaigns to inform the public, and increase acceptance of the policy; earmarking the revenues for government so that retailers are not blamed for trying to increase their profits by charging the levy; ensuring that retailers' implementation costs are kept low; systematic collection of the levy from retailers; and ensuring that retailers' reporting on the amount they collect for levy is integrated into their reporting on value-added tax (VAT). The revenue from the levy goes into the Irish government's Environmental Fund, which was created in 2002 to fund environmental initiatives in the country, and it also covers the cost of administering the levy. Thus far (2021), the revenue has been used to: finance environmental organizations and projects such as ones to prevent, reduce, or recover waste; research and development to improve waste management, and produce, distribute, and sell products deemed to be less harmful to the environment; implementation of waste management plans; projects conducted in collaboration with local authorities to improve the quality of the environment; public awareness campaigns; education and training to achieve campaign objectives; and initiatives by community groups and others to protect the environment.

China (plastic bags): In 2008, the Chinese government introduced a fee[24] for the provision of plastic bags. This policy requires all of the supermarkets and retailers across the county to charge consumers a fee for each plastic bag provided to them. A study in 2012 found that this policy had cut the use of plastic bags by 49 percent; that the charge was applied primarily in supermarkets, and less so in wet markets; the average use of new plastic bags per week, per person, had declined from 21 to 11; and the frequency of reusing plastic bags increased from 0.7 to 1.3 (He 2012).

Cambodia (plastic bags): In 2019, Cambodia implemented a fee for plastic bags. Across the country, all supermarkets and commercial centers are required to charge consumers Cambodian riel 400 ($0.10) per plastic bag. Although the overall impact of the measure is unknown, interviews conducted with some supermarkets showed that two-thirds of them were implementing the measure, and the number of plastic bags they provided had declined by 50 percent. Problems in applying the policy included no reporting, no place for supermarkets to keep the fees they collect, and no requirement to record and provide information about implementation of the fee. Consumers were also not informed about the change in policy, and many were surprised when they were asked to pay a fee. There was no strong government enforcement, either, to ensure that the fee was being charged (UNDP 2019).

Berkeley, California (coffee cups): 25 Berkeley's policy on coffee cups is part of a larger package of policies (see Berkeley Single Use Foodware and Litter Reduction Ordinance). With regard to coffee cups, prepared food vendors are required to charge $0.25 for every disposable beverage cup they provide. This charge must be identified separately on the sales receipt provided to the customer, and the charge must be clearly identified on menus, ordering platforms, and menu boards. All records must be made available for inspection by the City Manager's Office, which is responsible for enforcing all of the city's rules and regulations. Prepared food vendors may obtain full or partial waivers for up to two years, if they are able to demonstrate their inability to comply due to space constraints, undue financial hardship, and/or other extraordinary, insurmountable circumstances (Department of Public Works, City of Berkeley 2019).

Analysis of the case studies above, which was based on the information available, highlights the key mechanisms of implementation, success (or failure) factors, and impact (where data were available). See Table 4.2 for more details.

24 Ministry of Commerce, Development, and Reform Commission, State Administration for Industry and Commerce Order No. 8 (2008) "Administrative Measures for the Compensated Use of Plastic Shopping Bags in Retail Places."

25 Ordinance No. 7,639-N.S. Adding Chapter 11.64 to the Berkeley Municipal Code to Adopt a Single-use Foodware and Litter Reduction Ordinance.

Table 4.2. **KEY IMPLEMENTATION MECHANISMS, SUCCESS (OR FAILURE) FACTORS, AND IMPACT**

How the policy is applied	A fee charged for the provision of the SUP is applied at the point of sale, and the SUP cannot be provided for free. Non-degradable plastic bags are the most commonly targeted SUP item.
Success factors for implementation	• **The levy should be decided on by government, charged and accounted for by retailers, and public authorities should collect the money.** If revenue from the levy is reported by retailers, and this is collected by public authorities (as in Ireland), rather than leaving it to retailers to submit the fees to government (as in China and Cambodia), the price paid by consumers will remain standard, and fair competition among retailers will be guaranteed. Also, the entire system will be better supervised and controlled. • **Fees should be shown on the invoice** (as in Ireland and China). This acts as a financial record, raises customers' awareness, and contributes to a significant reduction in plastic bag consumption. • **All retailers, which are required to charge the levy, must be registered, and they are required to report regularly on how much they collect.** This allows the authorities to track every retailer to ensure that the fees they collect are paid to the authorities. This is an essential surveillance and control mechanism (as in Ireland). • **The responsibilities of the authorities must be clearly defined.** In China, authorities' responsibilities are clearly defined, but there are no functional mechanisms to ensure that the authorities perform their duty. In Cambodia, there is no monitoring mechanism to check on progress. Conversely, Ireland has a mechanism in place for monitoring whether retailers collect the required fee. • **Earmarking revenues for use toward environmental programs is important.** As Ireland's experience shows, earmarking revenues for environmental programs helps to increase acceptability, and it also allays retailers' concern that they will be criticized for charging a fee for plastic bags (as is the case in China) • **Organizing information campaigns is crucial for winning public support.** Awareness-raising campaigns should be conducted for consumers and retailers on the importance of preventing the generation of SUP waste, the consequences of littering, the availability of environmentally sound alternatives, and use of the fees to fund environmental programs.
Impact	• Analysis of the case studies shows that, depending on which approach is taken, implementing consumer fees on plastic bags **could lead to significant results in plastic bag reduction** (up to 90 percent, as was the case in Ireland), **or it could be ineffective** (as in China's example). Controlling enforcement of the policy is a crucial factor to ensure that it is correctly implemented, and that all retailers comply.

4.2.2. Applicability in Vietnam

In Vietnam, consumers currently pay no fee for SUPs. As stipulated in the Law on Environmental Protection, Tax No. 57/2010/QH12, producers and importers currently pay a tax for non-degradable plastic bags that are sold on the market. However, evidence from the World Bank field surveys in 2020 and 2021 suggests that plastic bags are still among the top polluting items in Vietnam's environment. Furthermore, the revenue received from the tax does not match the amount of plastic produced and imported, which suggests that the tax is not strictly enforced, and that producers and importers are not fully applying the tax on their goods. Taxes on the production of non-degradable plastic bags are hard to collect and enforce, as many production facilities are in craft villages.

This suggests that the tax has not been as effective, as planned, and it highlights the necessity for additional policies to reduce the consumption of plastic bags. The results of taxing producers and importers of plastic bags suggests that stronger enforcement and monitoring might increase the effectiveness of these economic instruments. Applying fees to consumers, as well, would contribute to achieving the ambitious plastic bag reduction targets set out in Vietnam's national strategies and legal documents.

While the principle behind taxing and charging consumers a fee is the same (reducing the use of plastic bags and their negative impact on the environment), the mechanisms for implementation are different. A tax would be collected and managed at the national level through the taxation system, and a fee would be managed at the local level. The pros and cons of each approach are summarized in Table 4.3, below.

Table 4.3. **PROS AND CONS OF TAXES VERSUS FEES PAID BY CONSUMERS**

Tax paid by consumers	Fee paid by consumers
Pros	
• **Level playing field.** The amount of tax is fixed through national legislation, and it is the same in all provinces and cities. • **Environmental impacts.** Retail customers are charged a tax per bag, which leads to a reduction in the number of bags used, and the amount of non-degradable plastic waste and litter in the environment.	• **Influence on consumer behavior.** Using a fee can influence consumer behavior, significantly, and reduce consumption by more than 90 percent (as in the example of Ireland) • **Environmental impacts.** Retail customers are directly charged a fee **per bag**, which leads to a reduction in the number of bags used, and the amount of non-degradable plastic waste and litter in the environment. • **Revenue spending.** Experience in Ireland shows that it is feasible to collect the fee, locally, and deposit the money in a dedicated Environmental Protection Fund. However, in Vietnam, fully earmarking such revenue for waste management or environmental protection activities is not possible. Provincial/local authorities cannot be obliged to spend all of the revenue gained from the fee for such purposes, and some of the revenue could be used in other ways. Nevertheless, some of the funds could be earmarked for waste management and environmental protection activities.

Tax paid by consumers	Fee paid by consumers
Cons	

• **Feasibility (Implementability)**. The success of implementing the tax depends on the effectiveness of controlling retailers' sales to the end-users. The tax cannot be implemented by compulsory measures, only. Stakeholders and consumers must accept the tax, and be willing to participate.
• **Cross-departmental collaboration is difficult**. Implementation requires ensuring that various arms of government collaborate, and also involve provincial/local authorities.
• **Difficulty in changing the tax rate**. As tax rates are not set to cover specific services, any change in the tax rate requires strong justification and the amendment of primary legislation. On the other hand, taxes should be increased, periodically, to reflect rising prices, and create stronger behavioral incentives.
• **Revenue spending**. Earmarking of the tax's revenue for waste management or environmental protection activities is not possible as tax is levied for public expenditures that benefit the country, with no reference to any specific services rendered by the state, or any specific benefits to be conferred on taxpayers. Thus, revenue from the tax cannot be earmarked for waste management or any other specific purpose.
• **Influence on consumer behavior.** Compared to charging consumers fees, the impact that the tax could have on changing consumers' behavior may be less. In Denmark, the introduction of a tax on SUP bags contributed to reducing their consumption by about 50 percent.[26] Implementation of this tax varied, depending on the type of establishment. The tax had a remarkable effect on the use of re-usable plastic carrier bags in supermarkets if plastic carrier bags were available for customers to buy. In clothing and other retail shops, however, plastic carrier bags were offered for free to customers, who paid the tax themselves. In the latter case, the combined effect on consumption was halved. If the tax on consumers in Denmark is compared to the fee consumers pay in Ireland, it appears that Ireland's better results in changing consumers' behavior and reducing consumption, were due to:
  ° Lack of a flexible mechanism for indexing the tax rate in Denmark
  ° All retailers in Ireland are obliged to charge consumers if they want plastic bags
  ° There is no doubt in Ireland that the real purpose of the fee is to protect the environment, and not to provide revenue for government.
	• **Feasibility (Implementability)**. As controlling numerous stakeholders (retailers) is very difficult, ensuring stakeholders' and consumers' acceptance and willingness to participate requires extensive consultation with stakeholders.
	• **Cross-departmental collaboration is difficult**. Implementation requires ensuring that the various concerned arms of government collaborate and involve provincial/local authorities, too.
	• **Unequal playing field**. The amount charged for fees in Vietnam is determined by provincial and local authorities. Potentially, this could result in lowering the amount of the fee due to competition between provinces to attract investment by reducing investors' tax burden. A lower fee would also have less impact on reducing consumption, solid waste generation, and littering.

26 The experience of implementing a tax on carrier bags in Denmark shows that after the introduction of the tax, the total use of plastic to make carrier bags fell from just under 18,750 tons in 1993, to around 7,750 tons in 1999. By 2009, use had crept back up to around 8,950 tons (BIO Intelligence Service 2011).

Based on the lessons learned from other countries that have been summarized in this report, and the current framework conditions in Vietnam, a fee charged for plastic bags might be preferable to a tax. This fee could be implemented in the following manner:

- The fee for plastic bags provided to consumers could be charged at the point of sale. According to Decision No: 1316 /QD-TTg, Provincial People's Committees could oversee the introduction of the fee for plastic bags. The collection of revenues from the fee would then be managed by the Department of Finance of the People's Committee. Eventually the revenues could be earmarked and re-invested in environmental projects. Under the same Decision, the People's Committee would monitor retailers to ensure that they abide by the policy.
- While the People's Committee would implement the fee at the local level, national coordination would be under the Ministry of Finance, and regulated by a policy from the Prime Minister. Ideally, the policy would also set the minimum amount of the fee.
- The Department of Domestic Markets, under the Ministry of Industry and Trade (MOIT), would be responsible for preparing a plan to ensure the reduction of non-biodegradable plastic bags in markets, supermarkets, and shopping centers; and the Ministry of Culture, Sports and Tourism (MOCST) would supervise plastic bag reduction in businesses, accommodation providers, and service establishments in tourist areas. The Department of Natural Resources and Environment (DONRE), or the Department of Industry and Trade (DOIT) would take the lead at the provincial level, with the participation of the Provincial People's Committee. The fees could be collected and kept at the local level for environmental purposes (for example, through VAT tax collection). The management of the fee at the local level would give local authorities more regulatory oversight over the retailers/shops.

Prior to introducing the fee, an effective communications campaign must explain the rationale behind the fee and potential alternatives for plastic bags. Retailers in Vietnam have requested alternatives for SUPs at an acceptable price,[27] so educating them about appropriate alternatives will help to achieve a smooth transition. An appropriate amount for the fee should also be determined. The experience gained from implementing the tax on the production and importing of non-biodegradable plastic bags could be used to determine the right amount for the consumer fee; to make sure that the amount is affordable; and that fee will not lead to an excessive price increase, while also maintaining its effectiveness in reducing consumption. The amount of the fee should be flexible so that the government can raise or lower the fee to adapt to changing economic conditions.

The analysis of existing alternatives suggests that a variety of alternatives to SUP bags are available in the market in Vietnam, including multi-use plastic bags, and that these alternatives should be promoted when applying the fee to consumers. However, implementation of the fee might be difficult in some contexts, such in wet markets. Thus, a phased approach would be useful, which would initially target supermarkets, retailers, and shopping malls, to normalize the use of alternatives. Alternatively, the fee could be applied, first, in some locations (such as tourist areas) through pilot projects that would provide an initial view of the impact of this mechanism, and then the fee could be applied country wide.

Concerning the potential impact of the policy, a well-designed approach for implementing the consumer fee could lead to significant results in cutting plastic bag consumption—up to as much as 90 percent, as was the case in Ireland. The costs for consumers and retailers are expected to be lower (as was shown in the EU example above) when single-use plastic bags are replaced by reusable bags, rather than by more expensive, non-plastic, single-use alternatives. The administrative costs of enforcing the ban could be minimized if the existing tax authorities and local authorities are involved in collecting the fees, as well as supervision and enforcement.

27 Discussions with retailers during the consultation workshop for establishing the Retailer Alliance to Reduce SUP Consumption, which was held on March 31, 2021.

Finally, concerns might arise if two financial instruments are used (a tax on producers and importers, as well as a fee charged to consumers). In general, international experience has shown that a tax on producers might be less effective in achieving a reduction in plastic bag consumption, but it might stimulate producers to shift to making alternatives. However, when the tax paid by producers and importers is added to the price that consumers pay for goods, consumers might not notice the slight increase in price, and they may not shift away from using SUP bags. A tax on producers and importers has hardly any effect on the behavior of consumers. To ensure that enough single-use and multi-use alternatives are available on the market by end of 2025, when non-biodegradable plastic bags will be phased out,[28] transitional measures are needed. In order to provide a smooth transition toward the ban, a fee paid by consumers would have a significant impact on plastic bag consumption, and it could be paired with the existing tax on producers and importers. The tax and the fee could reinforce each other, and increase the likelihood of success in reducing plastic bag consumption.

Adding fees to SUPs, other than plastic bags, such as coffee-to-go cups, might be considered for Vietnam in the mid-term. However, due to the current lack of robust and reliable data on the consumption of these cups in Vietnam, it is difficult to estimate the potential impact of a fee. Thus, further investigation is warranted as the consumer trend to consume coffee-to-go might quickly increase the use of this SUP.

4.3. Bans on the sale, importing, and production of SUPs

Bans are typically imposed by legislation to prohibit the sale, production, importing, and exporting of certain products. This is a suitable measure where alternatives are readily available, and a ban on the SUP will not have disruptive effects. Typically, banned products are single-use, non-degradable plastic bags, plastic straws, and EPS foam food containers. As indicated below, some countries in Southeast Asia such as Indonesia, the Philippines, and Thailand are moving forward with bans on the sale of some of these plastic items. To avoid producers migrating from these countries to Vietnam, coherent action and regional cooperation are needed.

4.3.1. International case studies and lessons learned

Concerning the ban on the sale of certain SUPs, several states and cities in the US have started to ban EPS for packaging products (Valinsky 2019; Mezzofiore 2019), while in China there are plans to ban plastic bags that are below 25 microns in thickness (Mathur 2020). Thailand imposed a ban on SUP bags in major stores, starting in 2021, as well as other types of plastic bags, straws, glasses, and foam food containers (Reuters 2020). On the island of Bali, in Indonesia, a ban on SUPs began on June 23, 2019, and now Styrofoam, plastic bags, and plastic straws are officially prohibited, island-wide (The Honeycombers 2019). In the Philippines, plastic bags are banned in many of the local government units in Metropolitan Manila, and similar bans are in effect in many other locations in the country. Both China and the European Union target several SUPs by progressively banning their placement on the market. Starting in 2020, the United Kingdom banned plastic straws, drink stirrers, and cotton buds (DEFRA 2020). See Box 4.6 for more examples.

28 Decree 8/2022.

BOX 4.6.
INTERNATIONAL EXAMPLES – BANS ON SUPS

Ban on EPS food containers in the US state of Maine[29]

Starting on July 1, 2021, food establishments in the state of Maine in the United States were prohibited from processing, preparing, selling, or providing food and beverages in, or on, a disposable food service container that is made entirely, or in part, with polystyrene foam (for example, bowls, plates, trays, cartons, cups, lids, sleeves, stirrers, and other items designed to be used to contain, transport, serve, or consume prepared foods). Fines for violators cannot exceed $100. The use of foam packaging is still allowed, such as for processing or shipping seafood, or for carrying "raw proteins" such as meat and eggs (especially, in response to the COVID-19 emergency).

Ban on the sale, supply, and distribution of different SUPs, including expanded polystyrene takeaway food and beverage containers in the Australian Capital Territory

On July 1, 2021, as the first step of implementation, the Australian Capital Territory (ACT) prohibited the sale, supply, or distribution of a number of SUP items, including expanded polystyrene takeaway food and beverage containers. Ideally, this will encourage businesses to avoid these single-use items, entirely, by using reusable alternatives. If this is not possible, the items can be replaced with acceptable single-use alternatives. In the second and third phases in 2022 and 2023, respectively, more plastic items will be banned, including SUP straws, fruit and vegetable carrier bags, and coffee cups and lids. Authorities have been appointed to enforce the ban under specific provisions of the Fair Trading Unit, and the public health office. In 2019, prior to adopting the regulation, the ACT government surveyed over 3,000 people as part of the consultation process to phase out SUPs, and over 90 percent of respondents rated the policy as "very important" or "important" (Library of Congress 2021).

Ban on the sale, manufacturing, and importing of plastic bags in Rwanda

In 2008, Rwanda implemented a strict ban on the use, manufacturing, and importing of plastic bags, with penalties of fines, or imprisonment up to one year. Strict legal instruments were chosen over other alternative (stimulative) policy options:

- Rwandan law states that citizens who are physically able to do so, must participate in community service tasks such as cleaning the streets. Since the entry into force of the ban, community service has focused on the elimination of plastic bags. Citizens' participation is mandatory.
- The national police require citizens to make a report whenever they see someone importing or selling plastic bags.
- Fines are used as economic instruments.
- Along with fines, penalties include imprisonment for up to one year.
- A few years after the ban was implemented, the information campaign focused more on penalties rather than raising awareness.
- In recent years, implementation has focused more on inspection. Reports indicate that manufacturers have been raided, and travelers' plastic bags have been seized at the airport when they are entering the country.

Imposition of the law has been accompanied by information campaigns, and the promotion of alternatives to plastic bags, such as paper bags, as well as tax incentives for companies that are willing to invest in plastic recycling equipment, or in the manufacture of environmentally friendly bags. Despite these good intentions, investments in recycling technologies are still lacking, as are effective and low priced alternatives. As a result, people started smuggling in plastic bags from neighbouring countries, and a lucrative black market emerged. Thus, this approach may not be generalizable to all contexts, and requires more types of stimulation to encourage all actors to abide by the restrictions (Danielsson 2017).

Bans on the sale of EPS in the cities of New York and San Francisco in the United States

New York City (NYC) first tried to ban food services' use of EPS in 2013. The ban was delayed, however, as the court ruled that the city first had to prove that it was not feasible to recycle EPS. The ban was finally implemented in 2019, but NYC did not promote alternatives. Many street vendors started to use aluminum containers with polypropylene tops. These containers take more resources to produce, and it is not clear if they are being recycled because food scraps in the containers make recycling difficult.

San Francisco banned EPS food containers in 2017, and due to the city-wide composting program, single-use food containers had to be compostable. This approach fostered successful program implementation and sustainability. By promoting alternative products, and having a citywide composting system in place, San Francisco developed an efficient and effective way to reduce waste in its food service

29 Maine Statutes, Title 38, Chapter 15-A: DISPOSABLE FOOD SERVICE CONTAINERS (maine.gov).

industry. The main factors that contributed San Francisco's success over that of New York City were:

- San Francisco required a specific type of alternative, while NYC did not.
- San Francisco had a successful composting program to manage the required alternatives, while NYC did not have any system for managing the alternatives.

In a study on the effects of New York City's EPS ban, for every $1 spent on EPS containers, businesses had to spend at least $1.94 for any of the alternative materials that were available (Kahoe 2013).

Plastic bag ban at the retail level in Los Angeles, in the United States

Both the city and county of Los Angeles, California, have enacted plastic bag bans at the retail level (Bruch et al. 2016). The ban applied, initially, to large stores, and later was extended to convenience stores and other small stores. The City of Los Angeles adopted a SUP carry-out bag ban in June 2013, with a $0.10 fee per recyclable paper bag. This was required by large supermarkets in January 2014, and expanded to drug stores, convenience stores, and smaller food markets in July 2014. After Los Angeles County enacted an ordinance to ban bags, the county achieved a 95 percent reduction of all single-use bags, and a 30 percent reduction of single-use paper bags.

The ordinance had a minimal financial impact on local businesses. An economic analysis completed prior to the county's ban, estimated that the average cost per unincorporated resident would be $5.72/year (48 cents/month). However, the actual impact appears to be less. After the ordinance went into effect, the State Board of Equalization decided that paper bags sold to customers would not be taxable items. By combining the effects of fewer paper bags used, and no sales tax being charged on paper bags, the estimated impact was less than $4.00 per resident, per year.

Ban on placing SUP straws and drink stirrers on the market in the European Union

In 2019, the European Union Council adopted measures proposed by the European Commission, which were designed to tackle the waste caused by SUPs (European Commission 2018). The SUP Directive stated that by July 2021, EU member states would be required to ban disposable plastic straws and other products like plastic cotton buds, plastic stirrers, and SUP cutlery and plates. During the development of the SUP Directive, the European Commission prepared an impact assessment titled, *The Commission Staff Working Document Impact Assessment on Reducing Marine Litter: Action on Single Use Plastics and Fishing Gear* (European Commission 2018). Based on this 2018 study, where multi-use alternatives were available, and could be adopted by the whole market, it was expected that the bans would lead to a 100 percent reduction in the consumption of SUP items. The fiscal impact of the Directive is unknown, however, as implementation by EU member states is still underway. However, during the development of the German "Ordinance banning the placing on the market of certain SUP products and products of oxo-degradable plastic," a financial impact assessment was carried out,[30] and additional household expenses were not expected. It was assumed, however, that for administration of the ban, an additional annual compliance cost would arise for the implementation of controls, as well as for the processing of offenses. Significant impact on individual prices, on the price level, and particularly on consumer price levels, was not expected. However, for items for which no reusable solutions are available, the replacement of plastic by other materials is needed, and this could result in higher production costs. In the European Commission's impact assessment study (European Commission 2018), it was estimated that the impact on plastic straw producers' turnover would be medium.

Ban on plastic bags, polystyrene, and plastic straws in Bali, Indonesia[31]

In late 2018, the Balinese Governor announced a ban on plastic bags, polystyrene (Styrofoam), and plastic straws. The adaptation period for the new regulation was six months. Producers, distributors and suppliers are prohibited from producing, distributing, and supplying SUPs (plastic bags, Styrofoam, and plastic straws), and, at the same time, they are obliged to produce, distribute, and supply substitutes for SUP products. The public companies, as well as other economic operators and traditional villages/Pakraman Villages are prohibited from using SUPs. The Governor provided guidance and supervision on implementation of the ban and established a Monitoring and Evaluation Team that assesses implementation of the ban in Bali's regencies/cities. Traditional villages/Pakraman Villages that have successfully implemented the ban get an award from the local government in the form of support for facilities and infrastructure, and funds for assistance. A successful awareness campaign, "Bye-bye Plastic Bags",[32] was organized that involved local markets and volunteers who distribute reusable bags to people shopping in local markets. Due to the success of this initiative, it has been piloted in more markets on the island.

30 Verordnung über das Verbot des Inverkehrbringens von bestimmten Einwegkunststoffprodukten und von Produkten aus oxo-abbaubarem Kunststoff.

31 Governor's Regulation (Pergub) No. 97/2018.

32 "Bye Bye Plastic Bags" is a public awareness initiative driven by youth to encourage people to say "No" to plastic bags.

Based the information available in the case studies above, the key implementation mechanisms, success (or failure) factors, and impact, have been summarized in Table 4.4.

Table 4.4. **BANS ON THE PRODUCTION, IMPORTING, AND SALE OF CERTAIN SUPS**

Targeted SUPs	EPS food containers, straws, drink stirrers, and plastic bags
How the policies work	For all of the targeted SUPs, the ban could cover manufacturing and importing, or just the sale of SUPs. • For EPS food containers, the ban could extend to the whole value chain that processes and prepares food, and even to manufacturing, selling, giving away, or otherwise providing polystyrene takeaway boxes. Exemptions could be granted for some food safety purposes after conducting a detailed comparative analysis of the economic, environmental, and human health impacts of the different EPS products, and of the alternatives that are available in the market in Vietnam. • Plastic straw bans could either be implemented by banning the distribution of plastic straws (see Section 4.1 on restrictions) or by banning their placement on the market (as in EU). However exceptions might need to be granted (for example, for persons with disabilities). • It is common to ban plastic bags, and many countries have also taken the necessary steps to ban their production and importing. For all of the targeted SUPs, bans on their sale seem to be more accepted and more successful, than bans on imports and production.
Success factors for implementation	• Information campaigns on the regulations are important. Communicating the regulations is necessary to decrease the risk of non-compliance, confusion, or protests. • Regulations released in tandem with environmental or anti-plastic waste/pollution campaigns are potentially more successful. • Ensuring the availability of alternative products is crucial for success, and especially so for EPS. The impact of alternative products (compostable, or reusable such as aluminum) should be considered. Without measures to gradually increase the availability of sustainable alternatives, implementing a plastic bag ban could fail completely. • Introducing monitoring mechanisms and assisting retailers to comply with the requirements will help to increase proper implementation. • Engaging existing authorities for inspections because they already visit the stores affected, will help to reduce implementation costs. • Providing a transition period before bringing the regulations into force can be crucial to ensure success.
Impact	Bans should be able to achieve a 100 percent reduction of the targeted item, but this depends on how the policy is implemented and enforced. In the European Union, for example, it is expected that plastic straws will be completely eliminated from the market. • There should be no additional costs for consumers, and the administrative costs are likely to be low, however, the impact on plastic straw producers will be high. • As discussed above, for the consumption of all single-use plastic bags, the reduction rate of 95 percent achieved in Los Angeles County is the highest rate achieved from implementing a ban. As shown in the county's quarterly reports, the plastic bag bans have had a minimal fiscal impact on local businesses and consumers. • For EPS, data on the success of the ban is not known, yet. Financially, the ban might almost double the costs that consumers have to pay for alternatives (as is the case in New York City).

4.3.2. Applicability to Vietnam

As the analysis of the case studies highlights, bans on production, importing, and sales are primarily applied to EPS food containers, straws, drink stirrers, and plastic bags.

Market ban (through a ban on sales or production and imports) of EPS food containers

The analysis of the volume of EPS food containers produced and imported into Vietnam demonstrates that approximately 10 billion EPS food containers and trays are put on the market every year (see Annex 2). Alternatives to EPS are available in Vietnam and, in some cases, with comparable prices (leaf and bagasse trays), but the amounts produced each year cannot satisfy the current market demand. Vietnam is also an exporter of EPS containers, and neighboring countries produce many EPS items, too.

An immediate ban on the production and importing of EPS would hurt small businesses and poor communities, whereas a ban in the mid-term, could provide time for the market to adapt. Small markets such as fast food and street vendors, and other micro and small enterprises might even be exempted from the ban in the mid-term, or granted an additional transition period. Implementation of the ban should be supported through a series of transitional measures—for example, starting with restrictions on the use of EPS in certain places, such as tourist areas, or in full-service restaurants. This would allow more time for alternatives to enter the market and become competitive.

Concerning impact, whereas a ban on the production and importing of EPS would ideally prevent 10 billion pieces/year of EPS boxes and trays from being generated, becoming waste, and potentially becoming litter, if 100 percent effectiveness is expected, this measure might be too ambitious to succeed in the short term, and fail, as it has in other countries where the right pre-conditions were missing.

The case studies analyzed for this report provide little quantitative information on the effectiveness of bans on the sale of EPS. In general, the policies seem to have gained interest only in recent times, and, therefore, not much information is available on their impact. Even though bans on the sale of EPS are not a widespread practice, these items cause significant damage in the environment as they are lightweight, float, and can be easily blown by the wind. Also, due to their wide dispersal in the environment, they are expensive to collect for recycling. The availability of alternatives on the market makes EPS products suitable for the application of a ban, and banning the sale of EPS might also achieve a substantial reduction rate, but that depends on how the ban is applied, and the extent of resistance by the actors involved.

Giving businesses sufficient time to adapt, and for market prices to become competitive, will be crucial for the success of an EPS ban, but some people might not be able to afford reusable alternatives. The market for alternatives shows that some alternative food containers such as leaf or bagasse trays can compete with the price of EPS containers, which could further benefit producers if restrictions are imposed on EPS. Restricting full-service restaurants and takeaways in high tourist areas from using EPS could pave the way for future bans on sales.

Another aspect to consider is that if the market develops for alternative single-use solutions, the waste management system should be capable of responding to this. Bagasse and plant leaves, for example, are particularly easy to compost (Lu Zhang 2016). However, there is currently little industrial composting capacity in Vietnam, which means, therefore, that this poses a significant a risk of having to collect and send this biowaste to landfills, which would increase greenhouse gas (GHG) emissions.[33]

33 These results are based on lifecycle assessments (LCAs) conducted by the University of California, Berkeley, on four baseline EPS products and 17 alternative products. The LCAs identified the life-cycle GHG emissions associated with the extraction of raw materials, manufacturing, end-of-life treatment, and transportation for 21 types of food containers.

Market ban (through a ban on sales or production and imports) of straws and drink stirrers

This study's analysis of the use of plastic straws in Vietnam highlights that straws are a major polluting item, which would be advisable to ban through a phased approach. The market for straws in Vietnam is already responding with alternatives that are both single and multi-use. This means that a ban on straws would be particularly promising.

Whereas a ban could potentially prevent 5.322 billion SUP straws from becoming waste (100 percent of the amount placed on the market [World Bank 2022]), plastic straws are required in some places such as hospitals and nursing homes, and a complete ban would cause significant challenges for them.

A market ban (on sales or production and imports) of plastic straws would be more realistic, and especially so in the mid-term. In this case it will be important to:

- Clearly specify to whom the measure applies (for example, retailers, restaurants, and take-away food stalls)
- Clearly specify the exemptions (for example, nursing homes and hospitals) and which businesses can still produce and sell plastic straws (such as allowing business-to-business sales)

A success factor for the policy would be the availability of affordable alternatives. In Vietnam, the data on alternatives to plastic straws suggest that there is some capacity to produce competitively priced, alternative-material straws, and especially single-use, degradable alternatives such as paper, grass, and bamboo straws. The current capacity to produce alternatives (with paper straws being the most prevalent) is about 1.580 billion pieces per year, and this could meet the entire demand for polypropylene (PP) straws.

For drink stirrers, this study found international examples, which show that these can be easily included in policies to eliminate plastic straws. Vietnam could also explore this option when implementing a ban on plastic straws.

Heavy plastic-consuming businesses that use straws, such as dairy product producers, should also be required to use straws made of alternative materials. Alternatives for dairy product straws are readily available, and especially alternatives made of paper; these account for 680 million pieces/year. The prices for these straws are competitive, too, when compared to U-shaped plastic straws (VND400/unit versus VND100–300/unit). Alternatives could include eco-design requirements for the straws attached to dairy product packaging.

This indicates that a ban on the sale of plastic straws would be a feasible measure for Vietnam. This ban has already been implemented in Hanoi, where supermarkets are banned from selling SUP items such as plastic straws and cutlery. Implementing a ban on plastic straws, nationwide, would be especially feasible if the restrictions were introduced gradually (for example, starting with barring the distribution and use of straws in tourist areas). Announcing the ban at least one year prior to its enforcement, and leading up to it with progressive restrictions, would help shift consumers' preferences toward single-use and multi-use alternatives; allow businesses enough time to find suitable and adequate supplies of alternatives; and suppliers would have enough time to meet greater demand.

During the implementation phase, this policy measure would benefit from using the already-established institutional set-ups for market surveillance (the same institutions that are responsible for taxing the production of plastic bags). Businesses should be fined, too, which would vary depending on the violation. In addition, significant fines should be imposed on the producers and importers that do not comply with the ban.

Market ban (through a ban on sales or production and imports) of non-degradable plastic bags

Vietnam has already put measures in place that target non-degradable plastic bags, and the following can serve as transitional measures toward the adoption of stricter bans:

- Non-biodegradable plastic bags are targeted in several national strategies, and are taxable according to the Law on Environmental Protection Tax No. 57/2010/QH12. Voluntary instruments, such as the Vietnam Green Label scheme have been implemented as well (see Box 4.7 for more details). These measures have increased the availability of suitable alternatives, and prepared businesses and consumers for stricter measures such as a ban. The government is also investing in research to create environmentally friendly materials to replace single-use, non-degradable plastic bags, and providing training, public communications campaigns, and engaging in international cooperation to improve the country's plastic waste management.
- Step-by-step introduction of bans on plastic bags have been implemented in important geographic locations such as Cu Lao Cham in the city of Hoi An,[34] where non-degradable plastic bags have been prohibited since the end of 2021. This aligns with meeting the ambitious target set by the National Action Plan for Management of Marine Plastic Litter by 2030, which is to impose a 100 percent ban on disposable plastic products and non-biodegradable plastic bags in coastal areas, tourist attractions, tourist accommodations, and other establishments serving tourists (Tuoi Tre News 2021).
- An appropriate institutional set-up has been established through the Department of Domestic Markets (under the Ministry of Industry and Trade), which is responsible for ensuring the reduction of non-biodegradable plastic bags in markets, supermarkets, and shopping centers. In tourist areas, the Ministry of Culture, Sports, and Tourism (MOCST) is supervising the reduction of plastic bag use by businesses, tourist accommodations, and service providers; and People's Committees are carrying out campaigns to mobilize communities and individuals to limit, or entirely stop using disposable plastic products (including non-biodegradable plastic bags).

34 Directive No. 1CT/TU on strengthening control and minimizing the use of single-use plastic products and non-degradable plastic bags, and continuing to implement the policy of classifying waste at source for environmental protection of the city. Issued by the Hoi An City People's Committee.

BOX 4.7.

CRITERIA AND GUIDELINES FOR BIODEGRADABLE/ENVIRONMENTALLY FRIENDLY PLASTIC ALTERNATIVES

While not the focus of this report, to support and encourage the use of environmentally friendly and approved alternatives to SUPs, sufficiently clear standards for these need to be in place. In particular, a policy is needed to clearly distinguish between biodegradable, bio-based, compostable and oxo-degradable plastics. For example, currently, "eco-friendly" plastic bags are awarded with a "Vietnam Green Label" and a "Certificate of Eco-friendly Plastic Bags" (in accordance with Circular No. 07/2012/TT-BTNMT, dated July 4, 2012). However, the label does not explicitly inform the consumer that the plastic bags are biodegradable, and the label only covers biodegradability, and not compostability. The recent Decree 08/2022 (Chapter X, Articles 145–260) provides detailed guidance for updating the "Vietnam Green Label". Namely, the Vietnam Environment Administration (VEA) has been assigned to develop technical guidelines and a replacement for Circular No. 07/2012/TT-BTNMT that will provide clear criteria for oxo-degradable plastics, bio-based plastics, and their thickness and size. The Decree also notes that the following are required to inform the update (i) adoption of internationally recognized standards; (ii) an independent body to evaluate the proposals of organizations and individuals applying for registration and recognition of environmentally friendly or biodegradable plastics products; (iii) definition of testing methods and pass/fail criteria; (iv) accreditation of laboratories; and (v) a quality assurance system.

Due to the lack of monitoring mechanisms, the results achieved in plastic bag reduction in Vietnam are unknown, and no information is available on whether there has been an increase in the availability of sustainable alternatives, or if any changes have occurred in people's behavior. Based on the field surveys conducted in 2020 and 2021, plastic bags (0 to 5 kg), and their fragments are the most polluting SUP item in Vietnam, and this calls for immediate action. Based on extrapolation from the field survey findings, phasing out plastic bags in Vietnam would reduce the volume of SUP items found in the environment by 8 to 30 percent.

This report's analysis proposes a market ban (through a ban of the sale or production and imports) of non-biodegradable plastic bags in 2026. This is broadly in line with Decree 8/2022, which, in Article 64, requires a ban, starting in 2026, on the production and imports of non-biodegradable plastic bags with a size smaller than 50cm x 50cm, and a thickness of less than 50 µm (micrometer). Although the decree does not include a ban on sales, this could potentially be added in a future revision of the decree. The Article also includes the following policy targets relevant to plastic bags:

- Organizations and individuals that manufacture and import single-use plastic products and non-biodegradable plastic packaging must be responsible for their recycling and handling.
- Provincial People's Committees (PPCs) are to promulgate the regulations, organize the implementation of plastic waste management activities, and ensure that after 2025, single-use plastic products, non-biodegradable plastic packaging (including non-biodegradable plastic bags, Styrofoam packaging boxes, and food containers) are not circulated by, or used in commercial centers, supermarkets, hotels, tourist resorts, with the exception of products and goods with difficult-to-biodegrade plastic packaging. The PPCs are also required to organize the inspection and examination of units producing single-use plastic products and non-biodegradable plastic packaging in their locality.

For the successful implementation of a ban on plastic bags, more efforts are needed to gradually implement stricter measures such as:

- Stronger enforcement of the tax on producers that is required by the Law on the Environmental Protection Tax. However, due to the minimal impact of this tax on the pollution associated with plastic bags, a review should be conducted, and especially a review of the mechanisms for implementation of the decree.
- Introduction of restrictions in specific sectors (such as hotels) and geographic locations (such as tourist destinations and coastal cities) to create plastic free zones.
- Introduction of a fee paid by consumers who purchase non-degradable plastic bags as an intermediate measure before the implementing the ban.

Currently, single-use and multi-use alternatives exist for non-degradable plastic bags, but they are, in general, significantly more expensive than non-degradable plastic bags. Once sufficient alternatives are readily available in the market, in Vietnam, and the attitude of businesses and consumers is positive, efforts should then focus on establishing surveillance and monitoring mechanisms, as well as setting up adequate penalties to assure the enforcement of a national ban.

Judging by the results achieved in the previously described international examples of good practices, if it ban is implemented well, it could lead to reducing the consumption of plastic bags by over 95 percent. At the same time, a slight increase in the costs for consumers and retailers might initially be expected because alternatives are more expensive. However, costs would decrease over time if consumers use their reusable bags multiple times. This should offset the initial higher costs of the bags in comparison with purchasing multiple SUP bags. The administrative costs of enforcing the ban could be minimized if the government staff already conducting inspections for other purposes are involved in control and monitoring related to the ban.

4.4. Integration of the proposed policies in Vietnam's current legal and policy framework

To get a more comprehensive picture of the envisaged legislative framework, it is important to consider the proposed policies in comparison with Vietnam's existing policies. It is important to identify how the proposed policies can support and accelerate the implementation of Vietnam's existing policies and strategies for plastic waste management. This includes developing a roadmap to phase out SUPs in the context of Vietnam's current regulations, which would include taking into account the current tax on the producers and importers of non-degradable plastic bags, as well as the national strategies for addressing marine littering.

Table 4.5 provides an overview of the existing legal requirements, how the proposed policies would support their implementation, and how the proposed policies would fit into Vietnam's current or proposed legal framework.

Shutterstock: Lithiumphoto

Table 4.5. **HOW THE PROPOSED POLICIES FIT INTO VIETNAM'S CURRENT LEGAL AND POLICY FRAMEWORK, JANUARY 2022**

Policy areas for addressing SUP items	Current and foreseen actions in the legal and policy framework in Vietnam	Specific policy options	How the proposed policy supports actions in the current or foreseen legal and policy framework
Restriction of non-biodegradable bags	Increase the environmental tax on the production and importing of non-degradable plastic bags and apply an environmental tax on SUP products.[35] Propose a roadmap to increase the environmental protection tax for non-degradable plastic bags; an additional environmental protection tax for SUP products for domestic purposes; and a roadmap to limit the production and imports of SUP products, and difficult-to-biodegrade plastic packaging.[36]	A fee charged to consumers who request a plastic bag	The proposed policy can be seen as reinforcing the environmental tax, which also puts the responsibility on consumers (so polluters pay). This would help reduce the use of non-degradable plastic bags since these are currently the most polluting SUP item in the environment, despite the existing tax on producers.
Restriction of the top polluting SUPs	Gradually reduce the production and imports of single-use plastic products, non-biodegradable plastic packaging, and products and goods containing microplastics.[37]	Bans and restrictions on EPS, straws, and non-degradable plastic bags	The proposed policies target restricting the distribution, use, and sale of the top polluting SUPs.
Restriction of the supply of plastic bags in the retail sector	From January 1, 2026, stop the manufacturing and imports of non-biodegradable plastic bags with dimensions smaller than 50cm x 50cm and a thickness of less than 50 µm.[38] Propose a roadmap to limit the production and importing of difficult-to-biodegrade plastic packaging and products, and oversee the collection of the environmental protection tax on the production and consumption SUP bags. The Ministry of Industry and Trade (MOIT) would plan how to transition retailers away from using non-degradable plastic bags. The Provincial/City People's Committees would oversee and enforce limits on the use, and the eventual ban, of non-degradable plastic bags in commercial centers, supermarkets, and wet markets, and ask these businesses to publicly list the price of a plastic bag.[39]	A fee on the distribution of plastic bags A ban on the sale or production/imports of plastic bags	The fee on plastic bags, and the subsequent ban on their sale, are good "fair transition" policies. The recommendation is broadly in line with Decree 8/2022's ban on the importing and manufacturing of plastic bags. This recommendation included the option of also banning the sales.

35 Directive No. 33/CT-TTg, dated August 20, 2020, on strengthening the management, reuse, recycling, treatment, and reduction of plastic waste, assigned this task to the Ministry of Finance.

36 Decision 1316 QD-TTg on Approving the Scheme for Strengthening Plastic Waste Management in Vietnam from July 22, 2021.

37 Decree 8/2022 guiding the implementation of selected articles in the Law on Environmental Protection 2020.

38 Ibid.

39 Decision 1316 QD-TTg on Approving the Scheme for Strengthening Plastic Waste Management in Vietnam from July 22, 2021.

Policy areas for addressing SUP items	Current and foreseen actions in the legal and policy framework in Vietnam	Specific policy options	How the proposed policy supports actions in the current or foreseen legal and policy framework
Ban on placing non-degradable plastic bags and SUPs on the market	From January 1, 2026, stop the manufacturing and importing of non-biodegradable plastic bags with dimensions smaller than 50cm x 50cm and a thickness of less than 50 µm).[40]	A ban on the sale or production/imports of plastic bags	This recommendation is broadly in line with Decree 8/2022's ban on the importing and manufacturing of plastic bags. This recommendation included the option of also banning the sales.
	By 2030, restrict and stop the production and importing of SUP products, non-biodegradable plastic packaging, and products and goods containing microplastics.[41] Provincial People's Committees will develop a plan and roadmap to limit, and eventually ban, the use of non-degradable plastic bags in shopping centers, supermarkets, and wet markets.[42]	Bans, and restrictions on EPS, straws, and non-degradable plastic bags	Despite microplastics not being the focus of this roadmap, the policies to phase out certain SUPs will contribute indirectly to decreasing microplastics.
Restriction on the use of certain SUPs in food services and in tourist destinations	Provincial People's Committees will ensure that after 2025, SUP products and non-biodegradable plastic packaging will not be used in commercial centers, supermarkets, hotels, and tourist areas, and the PPCs help organize inspections.[43] Provincial People's Committees will promulgate regulations and organize the implementation of plastic waste management activities; and ensure that after 2025, single-use plastic products, non-biodegradable plastic packaging (including non-biodegradable plastic bags, Styrofoam packaging boxes, and food containers) does not circulate and is not used in commercial centers, supermarkets, hotels, and tourist resorts.[44]	Restrictions on the use of certain SUPs for onsite consumption in food establishments (restaurants, cafeterias, and so on) Restrictions on the use of certain SUPs in tourist establishments or areas in plastic-free areas Restrictions (a voluntary agreement) on the distribution of disposable plastic cutlery with online food orders	Restrictions on the use of certain SUPs in food services, and in tourist establishments or areas (plastic-free areas) are transitional policies for achieving the gradual transition to nation-wide bans.
	The Ha Long Bay Management Unit has issued a document (No. 598/ BQLVHL-NVNC in 17/7/2019) that encourages the restriction of SUPs in tourist activities.		

40 Decree 8/2022 guiding the implementation of selected articles in the Law on Environmental Protection 2020.

41 Ibid.

42 Decision 1316 QD-TTg on Approving the Scheme for Strengthening Plastic Waste Management in Vietnam from July 22, 2021.

43 ibid.

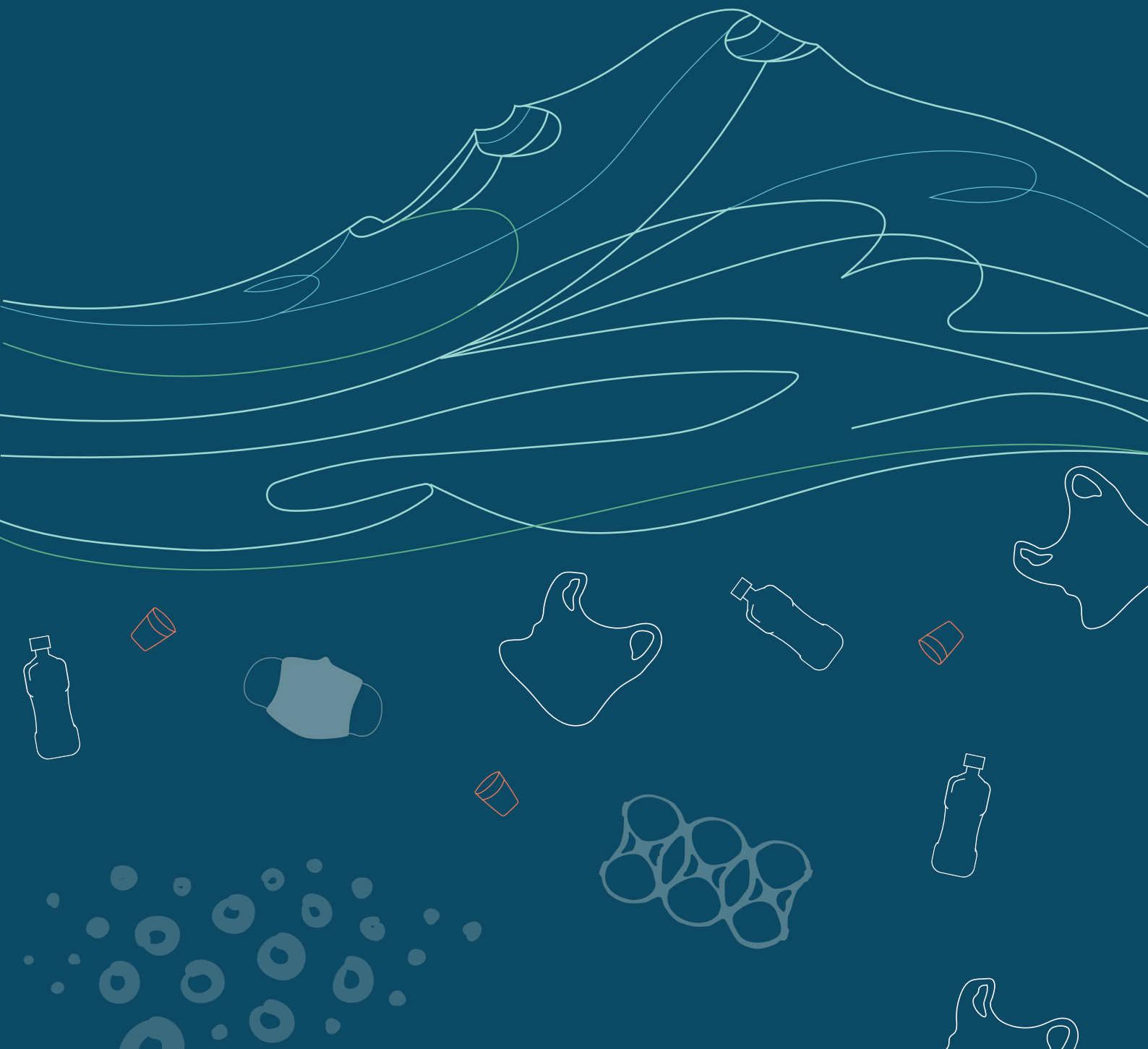
44 Decree 8/2022 guiding the implementation of selected articles in the Law on Environmental Protection 2020.

Policy areas for addressing SUP items	Current and foreseen actions in the legal and policy framework in Vietnam	Specific policy options	How the proposed policy supports actions in the current or foreseen legal and policy framework
Other policies for addressing SUPs	Before being supplied, according to the provisions in Decree No. 43/2017/ND-CP, dated April 14, 2017, products and goods that have non-biodegradable plastic packaging, and that contain microplastics, must be labeled clearly in Vietnamese, stating that the plastic packaging is difficult to decompose and contains microplastics.	Not directly addressed by the proposed policies (under Pillar 3)	Microplastic is outside the scope of this roadmap.
	Alternative products and packaging that replace SUPs will be granted the right to use eco-labelling.[45]	Not directly addressed by the proposed policies (under Pillar 3)	The proposed policies focus on a priority selection of plastic products and SUPs, namely plastic bags, EPS, and plastic straws. This provides the opportunity to develop an integrated plastic policy framework that is not just focused on reduction policies for the selected items (Pillar 1), but also focuses on creating value for waste reuse (under Pillar 3).
	Suppliers and producers of alternative products and packaging that replace SUP will be given incentives.[46]	Not directly addressed by the proposed policies (under Pillar 3)	The proposed policies will help to narrow the selection of plastic products and selected SUPs—namely plastic bags, EPS, and plastic straws. This provides the opportunity to develop an integrated plastic policy framework that also includes the promotion of alternative products.
	Develop regulations and pilot deposit and refund mechanisms for the single-use packaging, plastic bottles, and SUPs used in the food and beverage sectors.	Not directly addressed by the proposed policies (under Pillar 2)	Deposit-refund systems are not considered in this report since they belong under Pillar 2 "Enhance Waste Collection and Minimize Leakage" (under EPR).
EPR implementation	Charge a fee for the treatment of certain SUP waste, including EPS and foam containers, and straws.	Not directly addressed by the proposed policies (under Pillar 2)	The proposed bans and fees will reinforce the phasing-out of those SUPs that are difficult to collect and recycle, in comparison with foam containers and straws.

45 Decree 8/2022 guiding the implementation of selected articles in the Law on Environmental Protection 2020.

46 Decision 1316 QD-TTg on Approving the Scheme for Strengthening Plastic Waste Management in Vietnam from July 22, 2021 (Chapter II, Article 1, item b, third bullet point).

5. POLICY OPTIONS FOR VIETNAM



5. POLICY OPTIONS FOR VIETNAM

In the sections above, the steps already taken in Vietnam to address the problem of plastic waste have been explained. To achieve the goals set out in Vietnam's strategic documents and national legislation, the government should consider implementing additional measures to reduce the use of the SUP products that are discussed in this section.

To contribute to significant SUP reduction, and in some cases eliminate the consumption of certain SUP items, it is necessary to implement measures that introduce new business models, and also change consumers' attitudes so that they prefer more sustainable alternatives. Both of these can be achieved through awareness raising campaigns; voluntary actions by producers, distributors and retailers; and policy measures that require legislation. However, the current measures such as quality standards, extended produce responsibility (EPR) and labelling schemes, "Green" public procurement, eco-design regulations, and eco-label award schemes do not specifically target SUPs.

The roadmap presented in Table 5.2 in this section recommends policy options that are specifically focused on SUP management, and it focuses on the most polluting items that were identified in the World Bank field surveys, which were conducted in Vietnam in 2020 and 2021. Measures to restrict sales in certain sectors or geographic areas, consumption levies, and bans on sales are described in detail below.

The feasibility of implementing each measure depends on: whether it is essential, it will be convenient for consumers, and single-use and multi-use alternatives are available; the desired reduction impact (the ambitiousness of the targets); and the availability and effectiveness of downstream instruments such as extended producer responsibility (EPR) and municipal waste management systems (Figure A.1.1). For example, bans are suitable for straws and stirrers, as suitable alternatives are readily available, but not for the increasingly popular coffee-to-go cups that have no suitable alternatives.

The roadmap of policy options is rooted in the principle that a smooth transition is required for Vietnam to achieve (or even bring forward) the forthcoming ban of SUPs. The policy options proposed in this report, and the timeline for their implementation are designed to gradually mobilize administrative capacity and increase funding for monitoring and enforcement so that authorities are ready to implement the ban. In Table 5.2, the proposed measures are listed in chronological order, starting with the measures that will have the least impact on consumers, retailers, and other stakeholders, and ending with fees and bans that concern all market players. A ban on SUPs is the strictest policy measure to implement and, currently, Vietnam has no examples of complete bans of any plastic product or item.

All of the policy options proposed in this report require less administrative effort by government than would be the case with enforcement of a ban. This reflects the prioritization of measures based on their of "ease of implementation", and all of the measures proposed here are more easily implemented than a ban. Without such a gradual shift to relatively more stringent measures over time, the obligated retailers and establishments would not be fully identified for control purposes, and the ban would be very difficult to implement.

Each policy option has a different effect in reducing SUP consumption. Bans and the fees paid by consumers can achieve a 90 to 100 percent reduction, or even the elimination of the SUP item's consumption. However, these instruments require an abrupt shift to the use of SUP alternatives, which may lead to strong resistance by end-users and businesses, and complete failure in implementing the measure. Bans must always be preceded by transitional measures that achieve gradual change in consumption patterns, and allow enough time for consumers to adapt to using alternatives, and for businesses to adopt new business models. Examples of transitional measures are restrictions, which are not complete bans, but are prohibitions that limit the sale or use of SUP items in certain sectors (such as hotels) or certain areas (such as tourist destinations); and legally binding requirements such as the obligation to provide consumers with environmentally friendly alternatives. Transitional measures, as well as long-term policy options for addressing SUP consumption, are presented below.

Within each of the policy options, where relevant, this report recommends phased implementation, including by potentially targeting larger establishments first, and initially excluding street vendors, or by carrying out pilots and demonstration projects in selected provinces, and especially those with high tourism revenue. This will help increase the confidence and technical know-how of the designated government staff, and promote public awareness before scaling up.

5.1. Restriction policies

5.1.1. Restrictions on the distribution of SUP straws

Restrictions on distribution is applicable to SUP straws, as well as other items such as plastic drink stirrers. To reduce the adverse impact of such SUP products in the environment, Vietnam could restrict the unprompted give-away, distribution, and sale of SUP straws, as well as the provision of straws in selected establishments such as restaurants and similar businesses (for example, cafeterias and fast-food restaurants). A transitional period (for example, six months) could be granted for businesses to adapt to the new regulation.

Certain types of restaurants/catering businesses might be excluded from the policy, such as:

- Street vendors/unlicensed actors (with an exemption phase of at least one year before their inclusion, and a recommended roadmap for including them)
- SUP straws for medical facilities and care homes
- Provision only if the straw is explicitly requested by the customer

The following implementation and enforcement measures will be needed:

- Adoption of the legislation, including:
  - Appointment of local authorities (for example, the Department of Industry and Trade of the Provincial People´s Committee) to conduct inspections and apply penalties in cases of infringement of the law
  - Allocation of a budget for control and inspection
  - Promotion of the adoption of alternative materials for SUP straws (for example, straws made of paper, bamboo, grass, or rice)
- Informing restaurants and similar establishments not to give away or sell SUP straws

Other desirable measures might include:

- Educating employees of restaurants and shops not to give away or sell SUP straws
- Informing consumers about the policy, raising their awareness about the policy's relevance in preserving Vietnam's natural environment, and discouraging them from requesting SUP straws

For the successful implementation of this policy option, broader consultation and prior agreement with food establishments is needed, as well as encouraging the cooperation of their employees. The availability of single-use and multi-use alternatives will enable starting to implement this measure in the short term, as soon as a decision is made on its implementation (for example, starting in 2023).

The implementation of this policy is an important transition measure toward a proposed ban on sales (as recommended in this roadmap), which, according to Decree 8/2022's ban on the production and import of straws (along with SUPs) is supposed to start in 2031. To progressively roll out this policy, coastal cities and provinces with high tourism revenue could be targeted first, such as Quang Ninh, Da Nang, Quang Nam, Khanh Hoa, and Ba-Ria-Vung Tau, as well as marine protected areas. Given the pressures already faced by the tourism industry, pilots or demonstration projects could be carried out to increase the confidence and technical know-how of the appointed government staff so that they understand how to implement the measures before the measures are scaled up, nationwide.

5.1.2. Restriction of the use of certain SUPs for onsite consumption in food establishments (restaurants and cafeterias)

The government of Vietnam should consider adopting a legal measure to restrict the use of certain SUP items for onsite consumption in full-service restaurants. This policy would target EPS food containers, straws, and other items such as plastic bottles, cups, glasses, and cutlery, and promote the adoption of multi-use alternatives (such as metal, ceramic, or glass). Non-plastic, single-use alternatives (such as wood or bamboo) should be allowed with no restriction.

A transitional period could be granted in the following manner:

- Transitional period (one year): The regulation would apply to all large- and medium-sized, full-service restaurants
- After one year, the regulation would be extended to small full-service restaurants

In order not to burden small traders, and to ensure the smooth introduction of the regulation, the following exemption could be implemented over a transitional period:

- Full-service restaurants would be able to give out SUPs when they provide take-away service and food delivery. However, for onsite consumption, full-service restaurants would have to stop using SUPs
- Quick-service/fast food restaurants would be excluded, initially
- Food vendors in streets and markets who do not have a fixed location would be excluded
- Non-plastic, washable items would have to be used when food and beverages are consumed at a table

The following implementation and enforcement measures would be needed:

- Adoption of the legislation
- Appointment of local authorities (the Provincial/City People´s Committee) to conduct inspections, and apply penalties when the law is broken
- Allocation of a budget for conducting inspections
- Provision of Information to restaurants and similar establishments on the new regulation, and how to comply with it

Providing full-service restaurants and their employees with training so that they understand the regulation and agree to apply it, is of the utmost importance. Following the adoption of the required legislation in 2022, the restriction of SUPs in full-service restaurants could start in 2023, because multi-use tableware and cutlery is already widely used by these establishments.

Similar to the previous policy option, this policy could be progressively rolled out with pilots and demonstration projects, beginning in coastal cities and provinces with high tourism revenue, as well as in marine protected areas.

5.1.3. Restrictions (voluntary agreement) on the provision of disposable plastic cutlery with online food orders

To implement restriction of the provision of disposable plastic cutlery by online food delivery platforms, voluntary agreement is needed between the government and the major online platforms so that these platforms introduce an opt-in/opt-out option for plastic cutlery on their ordering pages. Opt-out options should be given priority as they are more effective in reducing the use of SUPs.

The policy to restrict disposable cutlery is considered highly achievable in Vietnam, and should be implemented with the following steps:

- Hold dialogues with the major online food delivery platforms so that they voluntarily agree to implement an opt-out option as the default on their menus.
- Design and implement awareness-raising campaigns such as banners on the opening webpage of a platform that informs consumers about the "no cutlery" option and its environmental benefits. Environmental education is also needed to inform platform business partners (restaurants and similar establishments, and their delivery drivers), about the option, as well as consumers.
- Explore potential incentives to encourage customers to "opt out".
- Monitor restaurants' adherence to the policy. Restaurants will have to enforce the policy by not including cutlery in deliveries unless customers request it. Consumers could play a key role in monitoring by notifying the restaurant if the opt-out option is not properly observed.

The following enabling conditions and transitional measures would be needed to ensure successful implementation of the policy:

- Cooperation of online food delivery platforms
- Cooperation of individual restaurants and their employees
- Encouraging consumers to change their behavior with regard to the new approach
- New business approaches and innovations to introduce alternatives (eco-friendly materials for producing disposable cutlery, or cutlery reuse schemes)

The following stakeholders should be engaged in the decision-making and implementation of the measure:

- Online food delivery platforms.
- Participating restaurants and their employees

The availability of multi-use alternatives for food consumption in households indicates that this measure could be implemented in the near term, as soon as a decision is made on its implementation (for example, in 2023).

In the future, this voluntary agreement could be expanded to include SUP packaging. These online food platforms are, in fact, well positioned to implement sustainable policies within a relatively short time. They can negotiate with manufacturers of sustainable packaging materials on behalf of their business partners (restaurants and similar establishments), which could drastically decrease the cost of procuring sustainable packaging materials. Online platforms could also provide incentives to encourage restaurants to use sustainable packaging materials, and devise an innovative operational framework that would lead to the hygienic reuse of multi-use food containers within their restaurant network.

5.1.4. Restrictions on the distribution of SUP toiletry products in hotels

Restrictions on the use of small plastic bottles containing personal care products such as shampoo and hair conditioner could be applied in accommodation facilities. This policy option proposes prohibiting hotels and other accommodation establishments from offering personal care products in disposable plastic bottles. The measure would target large hotels first (for example, based on the hotel's size, or a specified number of rooms). A transition period of one year would be provided for smaller hotels. As these SUP toiletry products are not currently defined as "single-use plastics" in Decree 8/2022, they could be included in the next revision of the Decree (Note: Table 3.2 recommends generalizing the definition of SUPs which would facilitate their inclusion).

The following implementation and enforcement measures would be needed:

- Adoption of legislation and penalties
- Identification of the types of accommodation facilities where the restriction would be enforced
- Provision of exemptions, transitional measures, information and education campaigns, and warnings for violations
- Allocation of a budget for control and inspection
- Designation of the government authorities who would be responsible for control (such as the local authorities who issue retail permits to hotels and other accommodation providers)
- Undertaking inspections to issue warnings and impose penalties

Managers of hotels and other accommodation establishments should be engaged in decision-making about the measure, as well as its implementation. Implementation of restrictions on the distribution of single-use toiletries in hotels could start in the short term, in 2023 (after adoption of the legislation in 2022), because the practice of providing multi-use toiletry dispensers is already underway in many hotels.

This policy option could also be implemented in a phased approach, starting with four- and five-star hotels, and then moving on to the rest of Vietnam's accommodation providers. As already discussed, another approach would be to target the coastal provinces and cities that have the highest tourism revenue. These could conduct pilots and demonstration projects before scaling up the restriction across the rest of the country.

5.1.5. Restrictions on the use of SUPs in tourist establishments and areas (SUP-free areas)

Restrictions in tourist establishments and tourist areas could be applied to all SUP items such as non-degradable plastic bags, EPS plastic food containers, straws, and other items such as SUP packaging, and plastic plates and cups. To implement this measure, legislation would bar people from entering selected tourist destinations if they are carrying, selling, or providing SUPs.

The following implementation and enforcement measures would be needed:

- Adoption of legislation and penalties
- Identification of the tourist areas where the restriction would be enforced
- Provision of exemptions, transitional measures, information and education campaigns, and warnings for violations
- Allocation of a budget for control and inspection
- Designation of government authorities (for example, park rangers, and the local authorities who issue retail permits to hotels, restaurants, cafeterias, travel agencies, and tour guides)
- Undertaking market surveillance and inspections

Prior consent and willingness to participate should be obtained from the operators of tourist establishments, distributors, suppliers, and retailers, as the establishment of SUP-free zones could make services less convenient for tourists. Also, as the tourism sector is important for the economy, longer preparatory work and implementation of transitional measures would be needed before introducing these restrictions in tourist areas. Thus, it should be feasible to implement this measure in 2024 if the required legislation is adopted in 2023.

Similar to some of the policy options above, this could initially target coastal provinces and cities with the high tourism revenue. These could carry out pilots or demonstration projects before application of the measure is scaled up across the whole country.

5.2. Pricing policies

5.2.1. Fee charged to consumers who purchase non-degradable plastic bags

A fee could be applied to non-biodegradable plastic bags, with the exception of the lightweight bags of less than 15 microns that are required for hygienic reasons (primarily as packaging for loose food, which helps to prevent food waste). Another exception would be reusable plastic bags that are thicker than 50 microns.

This policy option proposes that vendors charge customers for every non-biodegradable plastic bag that is provided to them. This should begin with a one-year transition period, when vendors would charge the fee voluntarily, after which charging the fee would become mandatory.

The following implementation and enforcement measures would be needed:

- Determine which establishments would be required to apply the fee, the amount of the fee, penalties for not charging the fee, and the interest to be charged if the fee is not paid to the government authorities responsible for collecting the money
- Undertake information campaigns to educate manufacturers, retailers, and other establishments
- Allocate a budget for monitoring and inspection
- Appoint the government authorities who will be responsible for collecting the fees from businesses
- Implement market surveillance and inspections, including checks of accounting records. Retailers will be required to report the amount of fees they collect to the local authority (such as the Department of Finance of the Provincial/City People´s Committee), which will verify that retailers' invoices and the amount of fees they have collected are the same
- Use a phased approach that introduces the fee in selected areas first, such as tourist areas

The following actors would have obligations under this policy option, so their consent and participation is important:

- Retailers
- Businesses that sell plastic bags to end users such as food producers (places where food products are manufactured, processed, packed, and sold), eating establishments, and markets
- Organizations that promote the protection of consumers' rights, and other non-government organizations

Charging consumers a fee for each plastic bag they use is a transitional mechanism intended to strengthen the impact of the existing environmental tax. To be effective, the fee should be applied for a few years, and, thus, it should be introduced as soon as possible (for example, in 2023, after a year of preparatory work, and the adoption of legislation).

5.2.2. Fee charged to consumers who purchase coffee in disposable cups

As disposable cups for coffee that can be consumed on or off vendors' premises are very convenient for consumers, banning them would likely meet strong resistance. Thus, economic instruments are a more suitable way for vendors to reduce consumption. This means charging customers for every disposable beverage cup they get.

The following implementation and enforcement measures would be needed:

- Determine which establishments would be required to apply the fee, the amount of the fee, penalties for not charging the fee, and the interest to be charged if the fee is not paid to the government authorities responsible for collecting the money
- Develop and conduct information campaigns to educate manufacturers, retailers, and other relevant establishments
- Allocate a budget for control and inspection
- Appoint the authorities responsible for collecting the fees
- Implement market surveillance and inspections, including checking vendors' accounting records

For the successful implementation of this measure, the following stakeholders must understand the policy and cooperate:

- Bakeries, cafeterias, drive-ins, food product stores, food service establishments, drugstores, theaters, bars, and similar establishments that sell prepared food that is consumed on or off the vendor's premises

Coffee-to-go cups are highly convenient for consumers, and the implementation of this measure should start after other transitional measures have been applied, such as restriction of onsite consumption, and SUP-free zones. The fee should be introduced as a long-term measure in 2026, after one year of preparatory work, and adoption of the legislation.

5.3. Ban policies

5.3.1. Market ban (through a ban on sales or production and imports) of plastic straws

Due to the availability of single-use and multi-use alternatives, plastic straws (apart from those needed by people with disabilities, hospital patients, and care facility residents) are suitable for regulation that prohibits their sale to end users.

The following implementation and enforcement measures would be needed:

- Consultations that identify the people who would be exempted from the ban on straws (such as people with disabilities, hospital patients, and care home residents)
- Identification of the requirements for the raw materials to be used in the manufacture of alternative straws (for example, whether the materials should be biodegradable)
- Adoption of legislation and penalties, including the technical standards to be used to define the requirements for alternative materials (for example, defining "biodegradable")
- Identification of producers, importers, retailers, and other establishments that provide EPS items
- Provision of information campaigns to educate manufacturers, retailers, and other relevant establishments
- Allocation of a budget for control and inspection
- Appointment and involvement of the authorities responsible for control (for example, customs authorities and those who issue retailers' permits)
- Undertaking market surveillance and inspections

The following actors should be targeted through this measure:

- Retailers
- Producers and importers of plastic straws (those who put plastic straws on the market in Vietnam; however, producers of plastic straws for export should be excluded)
- Businesses that sell plastic straws to end users such as food producers (manufacturers, processors, and packagers), eating establishments, and markets.
- Persons who provide plastic straws to end users (for example, at temples, fairs, and community events)

Single-use and multi-use alternatives to plastic straws are already widely available, and one year after implementing transitional measures to restrict distribution in the selected establishments, it should be possible to proceed with a ban on the sale of SUP straws (for example, in 2025). This is also in line with the requirement in Decree 8/2022 that PPCs promulgate regulations to ensure that single-use plastic products are not sold at commercial centers, supermarkets, hotels, and tourist resorts after 2025.

Similar to the restriction policy on plastics straws, this could first be targeted at coastal provinces and cities with the highest tourism revenue, which could carry out pilots and demonstration projects before the restriction is scaled up across the rest of the country.

5.3.2. Market ban (through a ban on sales or production and imports) of non-degradable plastic bags

This measure proposes to introduce a ban on the sale/provision or production and import of non-biodegradable plastic bags to end-users. As Decree 8/2022 already includes a ban on the production and import of plastic bags, this ban could start without any need of further legislation, other than guidelines to support the implementation and monitoring of the ban. This report recommends considering more exemptions than those currently listed in the decree, including exemptions for very lightweight bags (of less than 15 microns), which are required for hygienic purposes such as the packaging of loose food to help prevent food waste. The Decree currently includes an exemption for plastic bags that are more than 50 microns in thickness, as these are considered reusable plastic bags. While additional legislation may not be needed to implement a ban on production and imports, if a ban on sales or other amendments are proposed, they would need to be added in the next revision of the Decree.

The following implementation and enforcement measures would be needed:

- Adoption of legislation and penalties (if needed, as discussed above)
- Identification of producers/importers, distributors, and retailers
- Provision of information campaigns to educate manufacturers, retailers, and other establishments
- Allocation of a budget for control and inspection
- Appointment and involvement of local control authorities (such as customs officers, and the authorities who issue retail permits)
- Undertaking market surveillance and inspections

Before the ban is implemented, involvement of following stakeholders is crucial so that they understand why they must comply with the ban:

- The business-to-consumers (B2C) sector, including retailers, shops, food establishments, and markets
- Businesses that sell plastic bags to end users such as food producers (where food products are manufactured, processed, packed, and sold), eating establishments, and markets
- Entities that provide plastic bags to end users (for example, at temples, fairs, and community events)
- Organizations that protect consumers' rights and other NGOs

The reduction of plastic bags is currently targeted through an environmental tax on producers, and a new transitional measure is recommended, which would charge consumers a fee for each plastic bag they take. A ban on the production/imports or sales of plastic bags could start after a few years of transitional measures that would lead to a reduction in plastic bag consumption.

5.3.3. Market ban (through a ban on sales or production and imports) of EPS food containers

Banning the sales or production/imports of the following items made from EPS is a suitable approach:

- Single-use food containers made of EPS
- Single-use beverage containers made of EPS
- Beverage cups made of EPS

Decree 8/2022 already requires PPCs to promulgate regulations to ensure that EPS food containers are not circulated or used in commercial centers, supermarkets, hotels, and tourist resorts after 2026. The Decree also bans the production and import of EPS food containers by 2031. As a transition measure until the 2031 ban becomes effective, this report recommends expanding the 2026 regulation to other retailers and establishments. To implement this proposed measure, it would have to be included in a future revision of the legislation. To sum up, this would comprise prohibition of all importing, producing, selling, or otherwise providing EPS food containers to end-users.

The following implementation and enforcement measures would be needed:

- Adoption of the legislation and penalties
- Identification of producers/importers, retailers, and other establishments that provide EPS items
- Information campaigns to educate manufacturers, retailers, and other establishments
- Allocation of a budget for control and inspection
- Appointment and involvement of government authorities (such as customs officers and the authorities who issue retail permits)
- Undertaking market surveillance and inspections

For implementation of the ban, the following actors should be targeted:

- Producers or importers of EPS items that place them in the Vietnamese market (excluding producers for export)
- Businesses that sell EPS items to end users such as food establishments (where food products are manufactured, processed, or packed), eating establishments, and markets

EPS food containers are currently widely used, and the demand for these is high. Thus, these bans should only start after transitional measures have been implemented, such as restrictions in food service establishments and tourist areas. It should be feasible to introduce full-scale bans on the sale of EPS containers in the long term (by 2026). In the near-term, this could be piloted in coastal cities with high tourism revenues as well as other large cities including Hanoi and Ho Chi Minh City.

5.4. Stakeholder engagement, institutional set-up, and monitoring mechanisms for SUP policies

A structured stakeholder engagement plan for each of the policy options should be developed and implemented that would include (i) consultations with representatives from relevant ministries and local government; and (ii) consultations with businesses in the key sectors that could be impacted by the policies (both individual companies and sector representatives). Broader public-private sector consultations could be implemented, too, through the National Plastics Action Partnership (NPAP),[47] which is a recently-launched public-private platform coordinated by MONRE and the World Economic Forum. NPAP could serve as an important forum for policy dialogue with the private sector as it includes both the Vietnam Plastics Association and the Packaging Association, which would help to bring in the views of producers, aggregators, and recyclers, as well as the informal sector. Also, it is important to consult with the Packaging Recycling Organization Vietnam (PRO Vietnam), which is a new recycling partnership formed by nine major consumer goods and packaging companies in Vietnam.[48]

For policies that require cross-sectoral coordination, cross-ministerial consultations are regular practice in Vietnam. To ensure ownership and successful upstream dialogue on these policy options, early consultation is important, and especially for those options that cover multiple sectors. For each specific policy, Table 5.1 provides both the ministries with designated authority for the policy, as well as the ministries and authorities that support implementation. Annex 4.3 provides details on the recommended stakeholder engagement process for different target groups, and Annex 4.4 includes relevant information for the targeted sectors, including the stakeholders that need to be invited to any discussions on these policies.

Moving forward, while waiting for a package of priority policy options for reducing SUPs to be approved by the government, a monitoring program should be developed to track and assess progress, which would become part of the broader monitoring conducted for the National Action Plan for Management of Marine Plastic Litter by 2030. This would comprise the designation of SUP-specific SMART[49] indicators, the frequency of data collection, data and information collection methodology and plan with sampling strategies and protocols, and the strategic analysis of data, consultations, and procedures for communication, reviewing data, and reporting concerns. Ideally, this would also include institutional mechanisms to track and assess implementation as indicated in the proposed monitoring program and a budget for data collection and analysis.

47 NPAP is chaired by MONRE and brings together: relevant ministries, including the Ministry of Foreign Affairs (MOFA), Ministry of Planning and Investment (MPI), Ministry of Finance (MOF), Ministry of Industry and Trade (MOIT), Ministry of Science and Technology (MOST), Ministry of Education and Training (MOET), Ministry of Information and Communication (MIC), Ministry of Culture, Sports, and Tourism (MOCST), and Ministry of Agriculture and Rural Development (MARD); relevant departments within MONRE; representatives of relevant associations, including the Vietnam Plastics Association, Vietnam Packaging Association, and Vietnam Chamber of Commerce and Industry (VCCI); and representatives of research organizations, NGOs, diplomatic missions, and development partners.

48 This currently includes Coca-Cola Vietnam, Friesland Campina, La Vie, Nestlé Vietnam, Nuti Food, Suntory PepsiCo Vietnam, Tetra Pak Vietnam, TH Group, and URC Vietnam.

49 SMART indicators are Specific, Measurable, Achievable, Relevant, and Time-bound.

Table 5.1. **INSTITUTIONAL SET-UP FOR THE PROPOSED PLASTIC POLICIES**[50]

Policy measure	Ministry with the designated authority	Implementing authorities	Inspection and collection of penalties and fees
Restrictions on the distribution of SUP straws Restrictions on the use of certain SUPs for onsite consumption in food establishments (restaurants, cafeterias, and so on) Restrictions (voluntary agreement) on the distribution of plastic disposable cutlery by online food delivery businesses Market ban (through a ban on sales or production and imports) of plastic straws Market ban (through a ban on sales or production and imports) of non-degradable plastic bags Market ban (through a ban on sales or production and imports) of EPS food containers	**MONRE** should have the overall responsibility for plastic policies, and propose, develop, and issue the legal document. In the legal document, the roles and responsibilities of each ministry should be defined and specified (common for all policies)	One of the authorities responsible for implementation is **MOIT**, and, in particular, its **Sustainable Consumption and Production Office (SCPO).** This is the focal point for implementing the national program on sustainable production and consumption. The Department of Domestic Markets in MOIT should be responsible for implementation of the ban on the sale of non-degradable bags in retail chains. The implementing authorities will carry out tasks such as: budget allocation for control and inspection, identification of relevant establishments, reporting of results, and communication with the local inspection authorities.	**The Provincial People's Committee and its supporting unit (the provincial Department of Industry and Trade)** should control establishments such as restaurants, other food providers, and retailers. The provincial Department of Industry and Trade communicates with the Department of Energy Efficiency and Sustainable Development, and the Department of Domestic Markets (the implementing authority). DONRE should be responsible for monitoring and reporting on the implementation of the measures because DONRE is the focal organization to implement the plastic reduction program at the provincial level.
Restrictions on the distribution of SUP toiletry products in hotels		**The Ministry of Culture, Sports, and Tourism** should be involved as it is the ministry responsible for hotels and similar establishments (according to Directive No. 33/CT-TTg, dated August 20, 2020, on strengthening the management, reuse, recycling, treatment, and reduction of plastic waste).	**The Department of Tourism, Culture, and Sport of the Provincial People's Committee** should support the inspection of hotels and other accommodation providers.
Restrictions on the use of SUPs in tourist establishments or tourist areas (SUP-free areas)			**The Department of Tourism, Culture, and Sport of the Provincial People's Committee** should support the inspection and collection of fines for non-compliance in the selected tourist areas. **Via a Provincial People's Committee-level decision, the Management Board of National Parks** should support the inspection and collection of fines for non-compliance in nature parks and reserves.

50 Alternatively, for restriction policies and the ban on the sale of EPS food containers, these could be implemented at the provincial/city level in lieu of a policy at the national level (as per Decree 8/2022).

Policy measure	Ministry with the designated authority	Implementing authorities	Inspection and collection of penalties and fees
Fee charged to consumers who purchase a non-degradable plastic bag Fee charged to consumers who purchase a SUP coffee cup	**MONRE** will define the goals and the results that should be achieved, and propose the legal documents or strategy for the fee(s). **The Ministry of Finance** should approve the fee and include it in the legislation, such as by initiating the government proposal to amend the primary legislation to introduce fees charged to consumers.	The Provincial People's Committees should oversee the introduction of pricing on plastic bags. The collection of the revenues from the fee would then be managed by the Department of Finance at the People's Committee. The revenues should be earmarked for re-investment in environmental activities. The Provincial People's Committees should also monitor and ensure that retailers abide by the policy. **The Ministry of Industry and Trade's Department of Domestic Markets** should provide support for implementing a plan to reduce non-biodegradable plastic bags and SUP products in supermarkets, and shopping centers. The department should also prepare a plan for how to target the SUPs in retailers and supermarkets. In addition, the Department of Domestic Markets should support the promotion of alternatives, raise awareness about these, and develop the implementation plan for the elimination of SUPs in supermarkets and shopping centers.	Retailers should report to the local authority (for example, the **Department of Finance/ DOIT at the Provincial People´s Committee**) so the authority can verify whether retailers' invoices and the amount they have collected from customers are the same.

5.5. Roadmap of policy options to phase out SUPs in Vietnam

The policy options elaborated in this report have been summarized in a roadmap to phase out the use SUPs in Vietnam (see Table 5.2 below). To minimize the impact on the economy, the implementation of these policies could begin with the short- to medium-term measures that are easy to implement, such as restriction policies and fees charged to consumers. This would provide the time needed for an adequate market for alternatives to develop. As highlighted in previous sections, these measures would be good gradual transitions toward stricter measures, such as complete bans, which have been proposed in order to achieve greater impact through the reduction of SUP consumption.

Table 5.2. **PROPOSED ROADMAP OF POLICY OPTIONS**[51]

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Restrict the distribution of plastic straws	Organize stakeholder meeting(s) with the targeted actors	MONRE	MOIT	Restaurants and similar establishments	2022
	Formulate and adopt the legislation, identify exemptions, define the transition period for street vendors, and appoint local authorities to carry out inspections and impose fines				2022
					2022
	Prepare a guidance document to inform businesses (e.g., restaurants) about the regulation, exemptions from the regulation, and the penalties for failure to comply	MOIT – Department of Energy Efficiency and Sustainable Development	MONRE, PPC/CPC, and their supporting unit (DOIT)		2022
	Allocate a budget for regular, random inspections by the appointed authority Implement a mechanism for inspections, and impose fines	PPC/CPC and their supporting unit (DOIT)	-		2023
	Include street vendors and unlicensed actors	MOIT	-	Street vendors and unlicensed activities	2023
Restrict the use of certain SUPs for consumption in restaurants, cafeterias, etc.	Organize stakeholder meeting(s) with the targeted actors	MONRE	MOIT	Full-service, big and medium-sized restaurants	2022
	Formulate and adopt the legislation, identify exemptions, define the transition period for smaller restaurants, and appoint local authorities to carry out inspections, and impose and collect fines				2022
	Prepare a guidance document to inform businesses (e.g., restaurants) about the regulation, exemptions from the regulation, and the penalties for failure to comply	MOIT – Department of Energy Efficiency and Sustainable Development	MONRE, PPC/CPC, and DOIT		2022
	Allocate of a budget for regular, random inspections by the appointed authority, implement a mechanism for inspections (e.g., a registry of operating restaurants), and for imposing and collecting fines	PPC/CPC and DOIT			2023
	Include all licensed restaurants	MONRE	-	All licensed, full-service restaurants	2023

51 Alternatively, for restriction policies and the market bans on EPS food containers, these could be implemented at the provincial/city level in lieu of a policy at the national level (as per Decree 8/2022)

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Restrict the provision of plastic cutlery with food deliveries (voluntary agreement)	Seek a voluntary agreement with online food platforms Formulate a document to be signed and endorsed by the platforms, including the type of commitment to be implemented (opt-in or opt-out option)	MONRE	MOIT	Online food platforms Restaurants and similar establishments	2022
	Self-monitor the adoption of the agreement, and voluntarily report the results	DOIT	PPC/CPC	Online food platforms	2023
Restrict hotels' distribution of detergent and toiletry products in SUP bottles	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the required legislation and regulations Identify the hotels that are subject to the regulation (e.g., based on their size)	MONRE	Ministry of Culture, Sports, and Tourism	4 and 5 star hotels	2022
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	Ministry of Culture, Sports, and Tourism	PPC/CPC, and the Department of Tourism, Culture, and Sport		2022
	Allocate a budget for inspections by the appointed authority Implement a mechanism for regular, random inspections, and imposing and collecting fines	PPC/CPC Department of Tourism, Culture, and Sport			2023
	Include all hotels	Ministry of Culture, Sports, and Tourism		Remaining hotels	2023
Restrict the use of certain SUPs in tourist zones	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the required legislation and regulations Identify the tourist areas that are subject to the regulations	MONRE	Ministry of Culture, Sports, and Tourism	Tourist areas	2023
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	Ministry of Culture, Sports, and Tourism	PPC/CPC – Department of Tourism, Culture, and Sport		2023
	Allocate a budget for inspections by the appointed authority Implement a mechanism for regular, random inspections, and imposing and collecting fines	PPC/CPC Department of Tourism, Culture, and Sport	Vietnam Forest Rangers		2024

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Charge a fee for each plastic bag	Organize at least two meetings with stakeholders in the retail sector Formulate and adopt amendments to the respective legislation	MOF	MONRE	Retailers	2022-2023
	Make announcements in newspapers, radio, TV, and social media about the fee, and how it will be implemented	MOF	Ministry of Industry and Trade, Department of Domestic Markets		2022-2023
	Publish the regulations on application of the fee				2022-2023
	The system for charging and monitoring the fees: List the establishments that are required to impose the fee Identify a system for charging consumers fees, and the penalties for failure to collect the fees Ensure cooperation and agreement among the authorities responsible for inspections and collecting the fees	Ministry of Finance, General Department of Taxation	PPC/CPC, DOF, and the Department of Domestic Markets		2023
	Organize awareness-raising campaigns about alternatives to SUP plastic bags	PPC/CPC	Department of Domestic Markets		2023-2025
Charge fee for each plastic coffee cup	Organize at least two stakeholder meetings with the restaurant/ cafeteria sector Formulate and adopt amendments to the respective legislation Announce the fee and how it will be implemented Publish the regulations on application of the fee	MOF	MONRE	Restaurants, Coffee Shops	2025
	Identify the system for monitoring collection of the fee Identify the establishments required to collect the fee	MOF, General Department of Taxation	DOF, PPC/ CPC, Department of Domestic Markets		2026
	Identify the system for collection of the fees and imposing penalties Identify the establishments required to impose the fee				2026

Policy	Policy development steps	Responsible Authority	Supporting Authorities	Targeted sector	Year
Market ban of plastic straws (through a ban on sales or production and imports)	Organize of at least two stakeholder meetings with the targeted actors	MONRE	MOIT	Retailers, Restaurants	2024
	Formulate and adopt the legislation and exemptions Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MOIT, MONRE	PPC/CPC		2024
	Identify retailers and other establishments that provide plastic straws Organize market surveillance Allocate a budget for inspections and collecting fines	MOIT/DOIT	PPC/CPC		2025
Market ban of plastic bags (through a ban on sales or production and imports)	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the legislation and exemptions	MONRE	MOIT	Retailers	2025
	Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MOIT, MONRE	PPC/CPC		2025
	Implement a system for monitoring and collection of fines: Identify producers/importers, retailers, and other establishments that provide plastic bags Organize market surveillance, inspections, and collection of fines	MOIT, MONRE	PPC/CPC, DOIT	Retailers	2026
Market ban of EPS food containers (through a ban on sales or production and imports)	Organize at least two stakeholder meetings with the targeted actors Formulate and adopt the legislation and exemptions Prepare a guidance document for the businesses that must apply the regulation, which includes the exemptions, and the penalties for failure to comply	MONRE	MOIT	Restaurants, Retailers	2026
	Implement a system for monitoring and collection of fines: Identify producers/importers, retailers, and other establishments that use EPS food containers (business-to-business) Organize market surveillance, inspections, and the collection of fines	MOIT, MONRE	PPC/CPC, DOIT		2026

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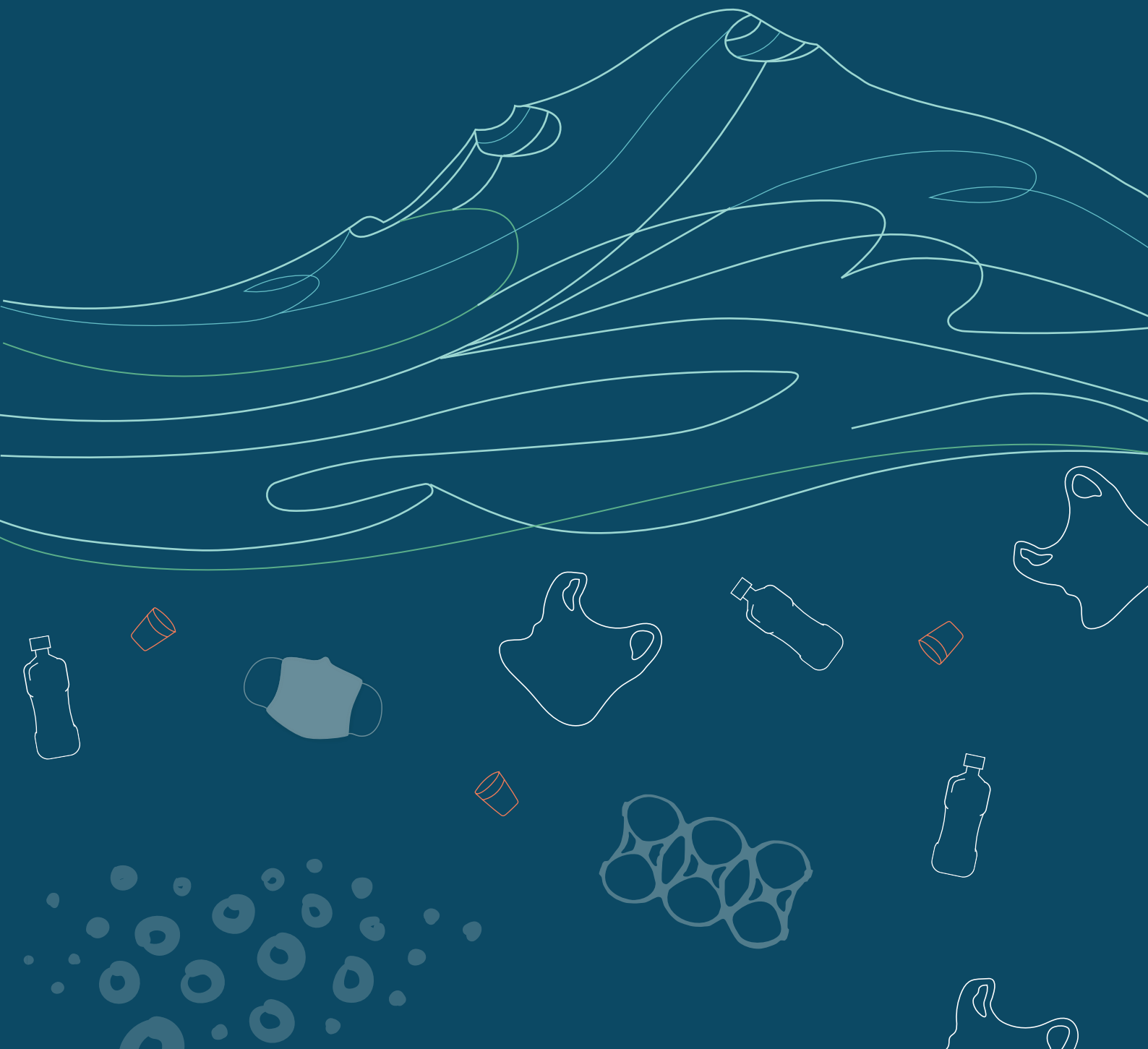

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ANNEX 1:

CRITERIA USED TO DETERMINE THE SUITABILITY OF SUPS FOR REDUCTION POLICIES

Globally, SUPs are being increasingly phased-out because more environmentally friendly and affordable alternatives have emerged. However, while considering alternatives, environmental and economic cost-benefit analyses need to be carried out to ensure that the solution to the affordability problem does not create environmental, economic, or socially more significant problems. Therefore, given the significant contribution of SUPs to littering in Vietnam, to recommend appropriate policy instruments, a deeper analysis characterizing the SUPs, the frequency of their consumption and distribution, the collection process, and recycling approaches, is required, together with recommendations for potential alternatives. The following section uses three selection criteria to identify appropriate SUPs to achieve the most positive impact for the environment.

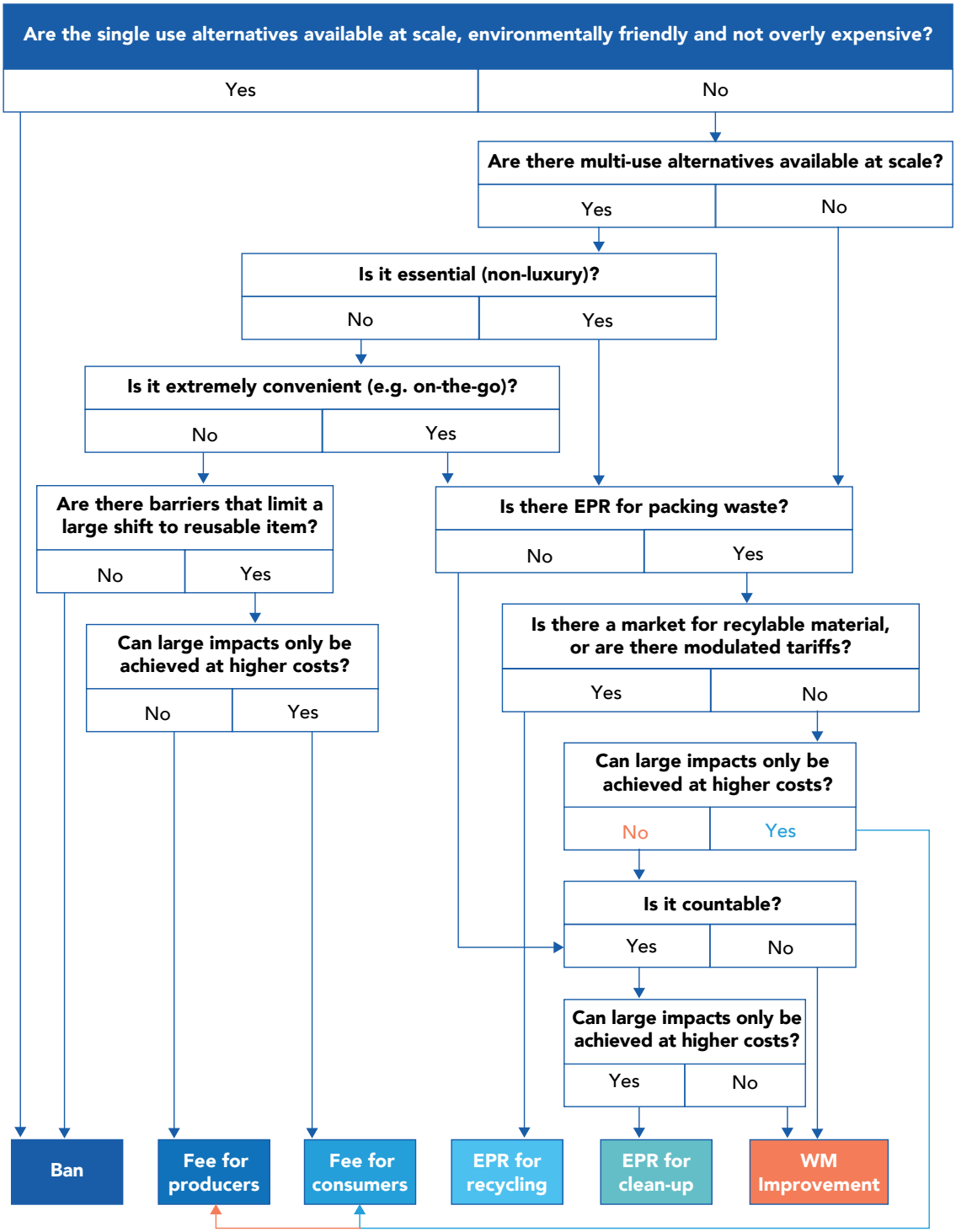
The first selection criterion considers the most polluting SUPs, based on the top items identified in the plastics pollution diagnostic surveys conducted in Vietnam. As revealed by the field surveys (World Bank 2022), certain SUPs are frequently used as food take-away items (44 percent of all plastic items and SUPs in the environment). These include expanded polystyrene (EPS) and other polystyrene (PS) food containers, take-away utensils, SUP straws, and plastic bags, and their fragments. The prevalence of these items in the environment is further exacerbated by unsustainable consumption habits and trends, lack of waste collection and recycling, and lack of viable alternatives.

The second criterion considers whether the SUP has available alternatives that have been successfully used at a reasonable cost, and are based on international good practices. This will include considering alternatives to prioritize in developing policies for the other SUPs used in the take-away food consumption industry, including plastic cutlery, cups, drink stirrers, and food wraps. Given consumption habits, and consumer's increasing preferences for take-away food, the waste generated by these items will only continue to grow if left unchecked. Therefore, the second criterion is crucial to mitigate the impact from increasing consumption, and the use of SUPs in the take-away and online food ordering industry.

The third criterion focuses on SUPs that can be effectively addressed by reduction policies (Pillar 1) such as bans, restrictions, or fees. Such reduction policies are practical and convenient where alternatives are available, affordable, and sustainably and competitively priced in the market. For some items, in the absence of alternatives, a ban is not considered a feasible option (Excell et al. 2020). Examples of these items include food packaging where manufacturers have not yet scaled up alternatives, as is the case with crisps and sweet packaging, and other types of food wrappers. However, where bans are not feasible, other

instruments such as extended producer responsibility (EPR) are preferable alternatives. Improving solid waste management, including collection, is also important for addressing these waste items. Charging consumers fees might not be applicable in some cases (for example, charging consumers a fee for buying crisps packaging). In such cases, the insignificant extra cost would likely not be noticed by consumers. The suitability of reduction policy options (bans and fees for consumers or producers) depend on the specific conditions, such as if the item is essential or if alternatives exist. A decision tree (A.1.1) was developed and followed for each item to inform this roadmap.

Figure A.1.1. **DECISION TREE FOR THE SUITABILITY OF SUP REDUCTION POLICIES**[52]



52 Modulated tariffs are fees paid by the producers fulfilling their EPR obligation, and differentiated according to the product's environmental impact.

Table A.1.1. summarizes potential priority SUPs for reduction. This table is based on the decision tree and the top polluting items identified in the field surveys.

Table A.1.1. **PRIORITY PLASTIC ITEMS FROM THE FIELD SURVEYS IN VIETNAM THAT ARE SUITABLE FOR REDUCTION POLICIES**

Top 10 plastic items	% (by number)	Suitability as SUP (Y/N)	Suitability for reduction policies such as consumer levies	SUP/Product Type Categories for Alternatives' Analysis
Fishing gear 1: rope, net pieces, lures, lines, and hard plastic floats (PE & PP)	16.9	N	N	-
Soft plastic fragments (LDPE)	17.4	Yes – mostly from plastic bags	Y	Non-degradable plastic bags
Fishing gear 2: Polystyrenes-ESP, buoys, floats (PS & EPS)	13.0	N	N	-
Plastic bags size 1 (0-5kg)	8.5	Y	Y	Non-degradable plastic bags
Styrofoam food containers (PS)	7.2	Y	Y	Styrofoam food containers
Hard plastic fragments (HDPE)	6.2	No (mostly unidentified objects)	No	-
Straws (mainly PP)	4.7	Y	Y	Straws
Other food wrappers	3.1	N	No – More suitable for EPR[53]	-
Crisp/Sweet packages (PP & PS)	3.1	N		-
Other plastic (plastic slippers, diapers, etc.)	3.0	N		-

53 For these plastic items, there are no available alternatives, and, therefore, bans would not be implementable, and fees would only increase the burden on consumers, without meaningful reduction of consumption. Due to these reasons, EPR would be the most suitable policy so that producers are incentivized to redesign their products.

Given the considerations presented in Table A.1.1, the three most common SUPs to target as soon as possible through reduction policies, are non-degradable plastic bags, EPS food containers, and plastic straws. As highlighted in the results of the survey, targeting these items could reduce up to 38 percent of the top 10 plastic items in Vietnam's environment.

There are SUPs that did not appear among the top 10 items in the field surveys, but they could still contribute to marine litter. Some of these include plastic cutlery, plastic cups and cup lids, and plastic drink stirrers. These SUPs often have available, reasonably priced alternatives, and have been successfully replaced by these alternatives in some other countries. Given that the tourism sector, and especially hotels and other accommodation providers, contributes to the consumption of a considerable amount and variety of SUPs, the sector should be targeted for phasing out SUPs, and using alternatives (Hendrickx and Bajzelj 2021).

Therefore, the roadmap presented in subsequent sections of this report focuses primarily on the top three SUPs (non-degradable plastic bags, EPS food containers, and plastic straws), but the roadmap also considers other SUPs that could be addressed with reduction policies that are based on international good practices.

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ANNEX 2:

ALTERNATIVES TO THE TARGET SUPS AND THEIR AVAILABILITY FOR SUSTAINABLE USE

Alternatives for SUPs, and the extent of their availability, are an important concern for achieving a sustainable transition. Therefore, it is important to compare SUP items with their alternatives, both with regard to price and affordability. Based on findings in the Vietnam plastic pollution diagnostic report (World Bank 2022), extensive information on consumption and alternatives is available for non-degradable plastic bags, straws, and EPS containers. This includes information on production, imports, and consumption in Vietnam, materials' recyclability, and suitable alternatives. A summary of alternative materials for EPS food containers, straws, and non-degradable plastic bags, and their availability, is presented in Table A.2.1, Table A.2.2, and Table A.2.3.

Although the waste generated from SUP littering is harmful to the environment, caution must be taken while adopting alternatives. Given that alternatives can be single-use materials, they can also become problematic in the environment if they are not properly collected and treated. For example, if biodegradable and compostable items are not properly collected, and then become mixed with plastic, they can hamper the efficiency and quality of the recycling process. Alternatives are made from materials with differing characteristics, which although biodegradable under industrial conditions, may not degrade in the natural environment. Thus, alternatives could significantly contribute to littering if they are not properly collected. Biodegradable alternatives such as paper and other natural materials (leaves from bananas or other trees, grass, rice, and so on), if not properly separated, can end up in landfills and contribute to the generation of greenhouse gas emissions[54] (Ravishankara et al. 2021). A functioning waste management system is, therefore, pivotal to avoid an unwanted waste burden from the choice of alternatives. Also, if compostable and biodegradable alternatives are preferred, then waste treatment infrastructure should be planned accordingly—for example, through investments in composting plants and greater composting capacity. Finally, people's perception that biodegradable and compostable products are "environmentally friendly" is also a concern if this results in people paying less attention to their waste consumption and/or littering (Kershaw 2015).

The environmental costs of alternatives from the beginning to end of their lifecycle, including their production, must be considered as well. The production of paper bags, for example, might be environmentally worse than the production of plastic bags. The paper industry is more water and energy-intensive and, overall, paper bags end up having a larger environmental footprint than their plastic counterparts. The same applies to fabric bags, which require more material during production to increase their durability. For these bags to have a lower carbon footprint than plastic bags, they must be used at least five times before they are discarded (Berners-Lee 2010).

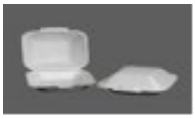
54 US EPA has identified landfills as the single largest source of methane emissions in the US, and the decomposition of paper is the largest contributor to the methane being generated.

Table A.2.1. **EPS FOOD CONTAINERS AND THEIR ALTERNATIVES IN VIETNAM**

Styrofoam (EPS, PS) food containers (World Bank 2022)

Production, imports, and consumption in Vietnam

Highly economical and convenient, EPS food containers are used for food consumption at home, on the go, and in establishments, but as indicated in the field surveys, they are among the top 10 most polluting items in Vietnam (7.4 percent by quantity). They come in a variety of sizes, and are produced and imported by several companies, which often do not source alternative products. Around 10.5 billion EPS food containers are sold in Vietnam per year, half of which include trays (pictured below, on the right) that cost between VND470 and 550 per unit, and half of which are food and sticky-rice boxes (pictured below, on the left) that cost between VND150 and 500 per unit.



Material and recyclability

EPS and PS items are highly harmful to the environment as they blow in the wind and float in water, they are costly to collect and transport due to their low density, and they are difficult to recycle. Also, they quickly fragment into small pieces that are almost impossible to collect.

Suitable alternatives in Vietnam

- Single-use alternatives made of more recyclable plastics (such as polypropylene [PP]), plant-based materials (such as bagasse boxes and trays, and leaf trays), or biodegradable plastics (such as polylactide [PLA] trays) are starting to be introduced in Vietnam. Approximately 100 million food containers made from alternative materials are put on the market, yearly, which is about 1 percent of the total for EPS food containers (10.5 billion pieces). Bagasse box and leaf trays comprise the largest share of this market. However, single-use bagasse boxes cost, on average, 10 times more than the EPS boxes (about VND3,000 per unit for bagasse boxes, versus VND150 to 500 per unit for small sticky rice boxes). Leaf and bagasse trays have comparable prices to EPS trays (around VND1,000 to 2,000 per unit).
- Multi-use (MU) alternatives such as aluminum, glass, or stainless trays exist. These have a smaller market share and cost more than single-use boxes. However, since they are multi-use, fewer quantities are needed. For example, crockery is a clear MU alternative for eating food in restaurants and cafeterias, and reusable containers (washable tiffins [lunchboxes] or multi-compartment trays), are alternatives for food take-away.

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Table A.2.2. **SUP STRAWS AND THEIR ALTERNATIVES IN VIETNAM**

Straws (World Bank 2022)	
Production, imports and consumption in Vietnam Plastic straws are non-essential items, except in situations such as hospitals and care facilities. Yet, they ranked among the top 10 most polluting items in Vietnam (4.6 percent by quantity), and were especially common in coastal tourism areas. Around 5.3 billion straws are put on the market per year in Vietnam. Half of these are straight (VND200 to 1,000 per unit) or corrugated PP straws (VND1,200 to 1,500 per unit), and the other half are U-shaped straws for dairy products that cost about VND200 to 1,500 per unit. 	*Material and recyclability* Straws are made of either polypropylene (PP) or polystyrene (PS), but PP has become more popular. Stirrers, on the other hand, are made of PS. Both materials are difficult to recycle, but PS requires more energy to recycle than PP. *Suitable alternatives in Vietnam* Many alternatives for plastic straws exist, and are being supplied in Vietnam. Several producers and importers have already shifted their focus to alternatives such as bamboo, paper, grass, and rice straws (See Table A.4.4 on stakeholders in Vietnam). • Single-use alternatives, such as paper straws are common and available, with prices that are equal or less than plastic straws (VND200 to 500 per unit). Rice and vegetable straws (VND300 to 800 per unit) are also a cheap, and readily available solution. The current capacity for alternatives is estimated to be 1.58 billion pieces per year (of which most are paper straws). This is more than the number of PP straight straws that are put on the market each year. • Reusable alternatives made from bamboo, wood, glass, or metal are also available. Bamboo straws have a high ratio of price to durability (VND600 to 1,000 per unit), and they can be used for three to six months. • Alternatives to straws for dairy products also exist (mostly made from paper), with a yearly output of 680 million pieces. The price of alternatives such as paper straws in Vietnam is comparable to that of PP straws. This alternative would be affordable, even for street vendors. However, the market analysis on alternatives highlighted that straws made of paper and bamboo have issues with moisture and humidity. Local climatic conditions exacerbate this, and these straws are reported to be a problem, as they tend to collapse once they are wet. Furthermore, paper or other straws made from biodegradable materials could be environmentally problematic in the medium and long term, as highlighted previously. Rice and vegetable straws are a better solution, and their price is comparable to straight PP straws.

Table A.2.3. **NON-DEGRADABLE PLASTIC BAGS AND THEIR ALTERNATIVES IN VIETNAM**

Non-degradable plastic bags of various size (World Bank 2022)	
Production, imports and consumption in Vietnam SUP bags are used to carry goods and are distributed in supermarkets, wet markets, and other retailers. In Vietnam, about 800,000 tons of plastic bags are used, annually. PE and HDPE plastic bags of various sizes account for about 80 percent of the plastic bags put on the market each year, and cost between VND30,000 and 48,000 per kilogram. The remaining 20 percent of plastic bags are smaller plastic bags such as those for fruits and fresh food, and milk teacup-bags. After fishing gear, plastic bags (and especially those with a carrying capacity of 0 to 5 kg) were the most polluting items identified in the field surveys (25.8 percent, by quantity).	*Material and recyclability* SUP bags are usually made of HDPE (which is highly recyclable), while reusable plastics are made of LDPE or PP. They can also be made of bio-based materials (biodegradable or non-biodegradable like polylactic acid [PLA]). In Vietnam, the rate of sorting waste at the source is very low. Plastic bag wastes are either collected by waste trucks or disposed of directly in the environment. As these plastic bags are small and difficult to collect, most are burned, or buried in a landfill. *Alternatives in Vietnam* There are several producers of alternatives to plastic bags in Vietnam, including paper, canvas, nonwoven bags, and alternative products such as plastic baskets. However, these alternatives, while largely known, are unpopular and rarely used. Firstly, current production levels are very low. Producers currently supply only about 1,438 tons of single or multi-use alternatives. These include compostable plastic bags, PP-woven multi-use bags, and ivory paper bags. Secondly, prices are significantly higher than the SUP non-degradable bags. For instance, single-use compostable bags cost about four times more than non-degradable plastic bags (VND160,000 per kg versus VND30,000 to 40,000 per kg). Multi-use alternatives cost significantly more (VND8,000 to 30,000 per piece for non-woven bags and VND19,000 to 25,000 per piece for PP woven bags), however, these multi-use alternatives have longer life spans (1–3 years compared to 1–3 times for the single-use bags). The low price and high availability of plastic bags makes it unfeasible to fully replace plastic bags with compostable and biodegradable bags, immediately. There are also environmental concerns regarding the lack of capacity for composting in Vietnam. The market capacity for alternatives needs to be strengthened before bans can be implemented.

ANNEX 3:

LEGAL, POLICY, AND INSTITUTIONAL FRAMEWORK REVIEW AND GAP ANALYSIS

The Government of Vietnam has set targets for plastic policies that foster reduction, and the better design of plastic, and plastic products, as well as eco-design. These are summarized in Table A.3.1. below.

Table A.3.1. **TARGETS IN NATIONAL STRATEGIES AND ACTION PLANS ON PLASTIC WASTE AND PLASTIC POLLUTION IN VIETNAM**

Legislative Document	Targets
Decision No. 491/ QD-TTg, dated May 7, 2018, approving adjustment to the National Strategy for integrated solid waste management to 2025, with a vision towards 2050.	Waste management targets: • By 2025, collect, transport, and treat 100 percent of non-household hazardous waste, and 90 percent of domestic solid waste in urban areas Targets to minimize the use of non-biodegradable plastic bags: • From 2026, limit, and proceed to end, importing, manufacturing, and supplying of non-environmentally friendly plastic bags The 2025 targets for the collection, treatment, and recycling of solid and hazardous waste are set in this document as well.

Legislative Document	Targets
Decision No. 1746/ QD-TTg of the Prime Minister, dated December 2019, on the National Action Plan for the Management of Marine Plastic Litter by 2030	The following measures relevant to plastic waste were introduced: Targets: • Reduce marine plastic litter by 50 percent (by 2025), and 75 percent (by 2030) • Collect 50 percent (by 2025), and 100 percent (by 2030) of abandoned, lost, or discarded fishing gear • Prevent the use of SUPs and non-biodegradable plastic bags in tourism areas by 80 percent (by 2025), and 100 percent (by 2030) • Ensure that 80 percent (by 2025), and 100 percent (by 2030) of marine protected areas are free of plastic litter • Ensure that nationwide beach cleanup campaigns are carried out at least twice a year • Monitor marine plastic litter, annually, and assess marine plastic litter every five years at several estuaries in major drainage basins (five by 2025, and 11 by 2030) Key tasks: • Educate and change people's behavior pertaining to plastics and marine plastic litter • Collect, segregate, store, transfer, and process plastic waste from coastal and ocean-based activities • Control plastic litter at the source • Promote international cooperation, scientific research, and the application, development, and transfer of marine plastic litter processing technologies • Conduct consistent and effective investigations, surveys, reviews, research, and the formulation of mechanisms for marine plastic litter management This also defines the responsibilities of different ministries to undertake the specified tasks.
Decision No. 889/ QD-TTg, dated June 24, 2020, approving the National Action Plan on Sustainable Production and Consumption for the Period 2021–2030	Specific targets for the 2021–2025 period related to plastic waste: • Target is 85 percent (by 2025), and 100 percent (by 2030) of the retail sector replaces single-use, non-biodegradable plastic packaging Develop legal policies on sustainable production and consumption including: • Regulations and technical standards on eco-design • Technical regulations and standards on eco-labels • Standards for sustainable tourism • Standards for environmentally friendly materials and products, and for recycled products • Minimum of 10 technical guides on sustainable production and consumption • Policies to promote the production, distribution, and consumption of eco-friendly packaging products to replace non-biodegradable, SUP products; and develop regulations on "green" public procurement.

Legislative Document	Targets
Decision 1316/ QD-TTg on Approving the Scheme for Strengthening Plastic Waste Management in Vietnam	Specific targets by 2025: • Use 100 percent environmentally friendly packaging bags in trade centers and supermarkets catering to domestic needs • Ensure the collection, reuse, recycling, and treatment of 85 percent of the generated plastic waste • Reduce 50 percent of the plastic waste in Vietnam's seas and oceans • 100 percent of tourist resorts, tourist hotels, and other accommodation providers stop using non-degradable plastic bags and SUP products • Gradually reduce the production and use of non-degradable plastic bags and disposable plastic products in daily life Develop legal policies on sustainable production and consumption to: • promote the development of a circular economy for producers and consumers of plastic products • propose a roadmap to limit the production and imports of SUP products, difficult-to-biodegrade plastic packaging and products, and goods containing microplastics • incentivize and support the production of environmentally friendly products, and substitutes for disposable plastic products and non-degradable plastic bags • propose a roadmap to increase the environmental protection tax for non-degradable plastic bags, and an additional environmental protection tax for SUP products used for domestic purposes • authorize the local authority to undertake inspections and supervise the collection of the environmental protection tax, and ensure the correct collection of the environmental protection tax • develop a plan and implement campaigns and other activities to stop the use non-biodegradable plastic bags and SUP products in tourist resorts, hotels, and other tourist accommodation • develop a plan and roadmap to limit, and eventually ban, the use of non-degradable plastic bags in commercial centers, supermarkets, and other markets • ask supermarkets, trade centers, and convenience stores to prominently list the selling price of the plastic bags provided to customers • institute measures to monitor and stop commercial centers, supermarkets, and convenience stores from providing free plastic bags to customers

Legislative Document	Targets
Decree 8/2022 guiding application of selected articles of the Law on Environmental Protection 2020	• From January 1, 2026, stop manufacturing and importing non-biodegradable plastic bags with dimensions smaller than 50cm x 50cm and a film thickness of less than 50 µm, except for production for export • Provincial People's Committees promulgate regulations and organize the implementation of plastic waste management activities; ensure that after 2025, single-use plastic products, non-biodegradable plastic packaging (including non-biodegradable plastic bags, Styrofoam packaging boxes, and food containers) are not circulated or used at commercial centers, supermarkets, hotels, tourist resorts, except for products and goods with difficult-to-biodegradable plastic packaging; organize the inspection and examination of units producing single-use plastic products and non-biodegradable plastic packaging in the locality • After December 31, 2030, stop the production and import of single-use plastic products (except for products certified with Vietnam's eco-label), non-biodegradable plastic packaging (including non-biodegradable plastic bags). biodegradable plastic containers, Styrofoam plastic containers for packaging and food storage) and products and goods containing microplastics, except for the case of production for export and the production and import of difficult-to-biodegradable plastic packaging for packaging products, goods sold to the market

By comparing Vietnam's regulatory framework for plastic waste management against international good practices, including those from the European Union, China, and other countries in the Association of Southeast Asian Nations, the following gap analysis and recommendations were formulated (see Table A.3.2).

Table A.3.2. **THE MAIN GAPS AND RECOMMENDATIONS FROM THE INVENTORY AND GAP ANALYSIS OF VIETNAM'S PLASTIC POLICIES THAT ALIGN WITH PILLAR 1 IN THE ASEAN REGIONAL ACTION PLAN (REDUCE INPUTS INTO THE SYSTEM)**

Main gaps	Recommendations to address gaps
Reducing inputs	
SUPs are recognized in national strategies as highly polluting items for which reduction policies are needed. While Decree 8/2022 has identified and defined SUPs within the legal framework, there are some polluting SUPs found in the environment that are not included (for example, SUP toiletry products).	Consider generalizing the definition of SUPs in the next update of Decree 8/2022 to more closely align with good international practices (for example, in the EU) that define SUPs by their purpose rather than by product or type. This would then allow for the inclusion of items to target in the Circular to support implementation of the Decree.
Other than the bans included in Decree 8/2022, policy instruments to reduce SUP consumption to facilitate the bans' achievement have not been identified and included in legislation yet.	Develop a roadmap to progressively phase out SUPs, and consider policies that facilitate the reduction of consumption, and especially consumption in the hospitality, tourism, and retail sectors, where most of the identified SUPs are consumed.

Main gaps	Recommendations to address gaps
On its own, the tax levied on the producers of non-degradable plastic bags seems to be ineffective (see Section 4).	Charge fees to the consumers of certain SUPs, such as non-degradable plastic bags.
Enhancing collection, recycling of plastic, and minimizing its leakage	
There is a lack of an effective mechanism for regular monitoring/ verification of recycling performance (such as monthly inspections).	Consider mechanisms to monitor recycling performance to support implementation of extended producer responsibility (EPR) in Decree 8/2022 and any subsequent regulatory Circular.
Mechanisms for controlling "free riders" in EPR schemes are missing.	Consider how to tackle free-riders and put penalties in to support implementation of extended producer responsibility (EPR) in Decree 8/2022 and any subsequent regulatory Circular.
The obligations imposed for the collection of fishing gear are not backed-up by primary legislation; fishing gear is not included in EPR.	Consider including fishing gear in the items covered by EPR (in the next phase).
EPR for clean-up of littering has not been considered. These mechanisms should ensure that the producers finance the collection and treatment of non-recyclable products (such as cigarette butts and wet wipes).	Consider including clean-up of littering in EPR (in the next phase).
Creating value for waste reuse	
Marking obligations for plastic packaging to enhance separation and proper disposal are not adopted in Vietnam in a mandatory fashion	Introduce mandatory requirements such as recycling codes for plastic packaging.
Items to be prioritized for eco-design have not been identified yet.	Prioritize plastic items for eco-design (such as plastic bottles, and their minimum recycling content).
Eco-design is regulated under Circular 41/2013/ TT-BTNMT, but no specific eco-design requirements are specified in the legislation.	Develop a roadmap for implementing eco-design measures, including priority items and their requirements.

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ANNEX 4:

THE POLICY IMPLEMENTATION AND ENFORCEMENT PROCESS IN VIETNAM

The different steps necessary for the adoption and enforcement of policy measures are described below.

A.4.1. Political decision-making for the implementation of policy measures

In the initial phase of the process, political decisions must be made by the initiating authority, which include: the selection of the specific measure to be implemented; identification and selection of the plastic items to be covered; identification of the target groups that will be affected; and selection of the institutions that will be responsible, and will have roles in implementing the policy measure. In parallel, stakeholder consultations must be initiated with the interested parties, including the different ministries where responsibilities will be allocated (for example, MONRE, MOIT, MOCST, and MOF). This will be crucial to ensure the success and effectiveness of the policy measure. MONRE is responsible for plastic waste management, and will take the lead in dialogues on the policy measures, in collaboration with line ministries, provincial authorities, and other stakeholders. The relevant institutional set-up for plastic waste management in Vietnam, and the main responsibilities of each assigned ministry or unit are summarized in Table A.4.1.

Table A.4.1. **INSTITUTIONAL SET-UP IN VIETNAM FOR PLASTIC WASTE MANAGEMENT**

Responsible institutions	Main roles and responsibilities in plastic waste management
Ministry of Natural Resources and Environment	The Ministry of Natural Resources and Environment is the government agency responsible for the management of functions in the environmental field, including waste management and plastic. Through *Directive No. 33/CT-TTg, dated August 20, 2020,* MONRE is the focal point for the management of plastic and waste, and takes the lead in implementing, conducting research on, and monitoring adherence to policies, and their impact.
Ministry of Finance	Through *Directive No. 33/CT-TTg, dated August 20, 2020, t*he Ministry of Finance is assigned to be the focal point in amending and supplementing the Law on Environmental Protection Tax, and directs the increase in taxable objects, increases the tax rate on plastic bags, and ensures support for environmentally friendly plastic bags, and overseeing the collection of the tax.

Responsible institutions	Main roles and responsibilities in plastic waste management
Ministry of Industry and Trade	Through *Directive No. 33/CT-TTg,* dated August 20, 2020, the Ministry of Industry and Trade is assigned to be the focal point for the implementation of activities related to plastic waste in the sector. The ministry oversees the production and consumption of sustainable alternatives to SUPs by encouraging their production, and helping to develop consumers' demand for these alternatives.
Department of Energy Efficiency and Sustainable Development	The department and the Sustainable Consumption and Production Office (SCPO), in particular, is the focal point for implementing the national program on sustainable production and consumption.
Department of Domestic Markets	This department is the focal point in implementing the reduction of non-biodegradable plastic bags and SUP products in markets, supermarkets, and shopping centers.
Ministry of Agriculture & Rural Development	Through *Directive No. 33/CT-TTg, dated August 20, 2020,* the ministry is assigned to be the focal point in rural areas for the implementation of activities related to plastic waste in the agriculture and the fisheries sectors.
Ministry of Health	Through *Directive No. 33/CT-TTg, dated August 20, 2020,* the ministry is assigned to be the focal point for the implementation of activities related to plastic waste in the healthcare sector, such as considering the health impacts of waste; regulating the quality of recycled plastics; and implementing procedures to reduce, reuse, and recycle at medical facilities, and pharmaceutical production facilities.
Ministry of Education and Training	The Ministry of Education and Training develops and implements plans for waste classification and plastic waste reduction in schools, educational institutions, and training establishments.
Ministry of Science and Technology	The Ministry of Science and Technology promotes innovation, creativity, research, and the transfer of technologies to produce environmentally friendly materials to replace plastics in production and businesses.
Ministry of Culture, Sports and Tourism	The Ministry of Culture, Sports, and Tourism promotes standards to reduce the use of disposable plastic products and non-degradable plastic bags in businesses, tourist accommodation, and service establishments, as well as in cultural, sports, and tourist events.
Ministry of Information and Communications	The Ministry of Information and Communications, Vietnam Television, Voice of Vietnam Radio, and the Vietnam News Agency have prime responsibility for coordinating with the agencies, organizations, and individuals involved in developing information campaigns to raise awareness about the impacts of SUPs and about the regulations; and to disseminate information on plastic waste reduction, sorting, collection, and recycling, as well as the treatment of plastic waste.

Responsible institutions	Main roles and responsibilities in plastic waste management
People's Committees of provinces and centrally run cities:	To protect the environment, the Provincial/City People's Committees: raise community awareness about plastic waste minimization; and mobilize people and communities to limit, or not use disposable plastic products (including non-degradable plastic bags; Styrofoam containers; and plastic food packages, bottles, straws, cups, and tableware). At the provincial level, line departments such as the Department of Natural Resources and Environment (DONRE), Department of Industry and Trade (DOIT), Department of Agriculture and Rural Development (DARD), and Department of Culture, Sports, and Tourism are the operational organizations supporting the Provincial/City People's Committees in different sectors. For all the departments at the central level (for example, at the ministry level), a local unit has been established at the level of the People´s Committee, which is then in charge of operationalizing initiatives at the local level.

Vietnam follows a specific process for the development and enforcement of legislation, including wide stakeholder consultations, legislative improvement, and peer review by the Ministry of Justice. The table below (Table A.4.2) summarizes the legislative development process for the adoption of regulations, and the responsibilities allocated to Vietnam's different ministries .

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Table A.4.2. **STAGES FOR THE ADOPTION OF REGULATIONS ON PLASTIC WASTE MANAGEMENT IN VIETNAM**

Policy development stages	Responsibility
Legislation development	Assigned line ministries (MONRE, MOIT)
Consultation with a wide range of stakeholders	Representatives from the business sector, NGOs, universities, and so on
Legislation improvement/finalization	Assigned line ministries (MONRE, MOIT)
Peer review	Ministry of Justice
Legislation finalization	Assigned line ministries (MONRE, MOIT)
Promulgation	By nominated government bodies
Implementation	By nominated government bodies

A.4.2. Formulation of the legislative provision

For a proposed policy measure, a regulation needs to be formulated, refined, and finally adopted. The legal provisions must be presented, discussed, and agreed to during stakeholder consultations, as described below. The legal provisions should include:

- Clear definition of the plastic items to be covered
- Identification of target groups and exclusions for business activities that are affected by the measure
- Transition periods for enforcement of the law with the targeted business activities
- Specification of the roles of different institutions, where relevant (for example, for the collection of fees and revenue, for monitoring and enforcement, and so on)
- Promotion of the adoption of SUP alternatives
- Specification of administrative sanctions, penalties, and fines

Another major decision concerns the selection of a suitable policy document to adopt the regulations. Vietnamese legislation on plastic includes primary and secondary legislation. An overview is provided in Table A.4.3.

Table A.4.3. **OVERVIEW OF LEGISLATIVE DOCUMENTS RELEVANT TO PLASTIC POLICIES**

Legislative document	Relevance to plastic waste management
Primary legislation	
Law on Environmental Protection No. 55/2014/QH13, and its reviewed version (passed by the national assembly in 2020 and became effective on January 1, 2022)	This document regulates the management of wastes and other pollutants; the reduction, reuse, recycling, and treatment of plastic waste; the prevention and control of marine plastic litter and pollution (Art 73); and EPR schemes (Articles 54 and 55).
Law on environmental protection tax No. 57/2010/QH12 with updated tariffs in Resolution No. 579/2018/Ubtvqh14	This identifies non-biodegradable plastic bags as taxable items (Article 3).
Decrees and Circulars supporting the primary law	
Decree No. 67/2011/ND-CP, dated August 8, 2011	This details and guides the implementation of several articles in the Law on Environmental Protection Tax, it lists the items that are subject to tax (including plastic bags), and the procedures for tax declarations, payments, and refunds.
Circular 159/2012/ TT-BTC, dated September 28, 2012, amending and supplementing Circular 152/2011/TT-BTC, dated November 11, 2011, and guiding the implementation of Decree 67/2011/ND-CP	This identifies non-biodegradable, taxable plastic bags according to their type of plastic (HDPE, LDPE, and LLDPE), and it requires producers and importers to pay a tax of VND50,000 per kilo.
Circular No. 07/2012/TT-BTNMT, dated July 4, 2012, by MONRE	This provides the criteria and procedures for the recognition of environmentally friendly plastic bags; and it requires plastic bag manufacturers to fully comply with the provisions of the law on environmental protection.
Decree No.8/2022/ND-CP, dated January 10, 2022	This includes articles to guide implementation of extended producer responsibility (EPR), and restricting the importing, production, and use of SUPs.
Decisions	
Decision No. 491/QD-TTG, dated May 7, 2018, on approving adjustment to the National Strategy for Integrated Solid Waste Management, to 2025, with a Vision Towards 2050.	This set targets, including using 100 percent environmentally friendly plastic bags in the retail sector (shopping malls, supermarkets, shops, and so on), and it limits, and ends the importing, manufacturing, and supplying of non-environmentally friendly plastic bags by 2026.

Legislative document	Relevance to plastic waste management
Decision No. 1746/QD-TTG by the Prime Minister on the National Action Plan for Management of Marine Plastic Litter by 2030	This sets the targets for reducing marine plastic litter by 50 percent (by 2025), and 75 percent (by 2030); preventing the use of SUPs and non-biodegradable plastic bags in tourism areas by 80 percent (by 2025), and 100 percent (by 2030); and making marine protected areas free of plastic litter by 80 percent (by 2025), and 100 percent (by 2030). It also defines the responsibilities of the specific ministries to undertake these tasks.
Decision No. 889/QD-TTG, dated June 24, 2020, Approving the National Action Plan on Sustainable Production and Consumption, for the Period 2021–2030	This sets specific targets for the 2021–2025 period related to plastic waste, including the retail sector, for replacing single-use, non-biodegradable plastic packaging by 85 percent (by 2025), and 100 percent (by 2030); and developing legal policies on sustainable production and consumption, including standards on eco-design, eco-labels, and standards for sustainable tourism.
Decision No. 2395/QD-BTNMT, dated October 28, 2020	This assigns MONRE and specific units to carry out tasks to implement the National Action Plan for Management of Marine Plastic Litter by 2030.
Decision No.1316/QD-TTG, dated July 22, 2021, on approving the scheme to strengthen plastic waste management in Vietnam	This aims to support the implementation of the National Strategy for Integrated Solid Waste Management to 2025, with a vision towards 2050.
Directives	
Directive No. 08/CT-BCT, dated July 15, 2019, on strengthening measures to reduce plastic waste in the industry and trade sectors	This defines the responsibilities of the units in MOIT to reduce plastic waste in the industry and trade sectors.
Directive No. 08/CT-BYT, dated July 29, 2019, on reducing plastic waste in the health sector	This assigns the Departments of Health in centrally run provinces and cities to push for the implementation of plastic waste reduction in the health sector.
Directive No. 33/CT-TTG, dated August 20, 2020, on strengthening the management, reuse, recycling, treatment, and reduction of plastic waste	This assigns roles and responsibilities to different ministries and departments to manage and reduce plastic waste, and collaborate with the People's Committees of centrally run provinces and cities in carrying out activities related to locally reducing plastic waste.

The choice of which legislative documents to adapt with new regulations depends on the type of policy proposed. The two main laws regulating plastic in Vietnam are the Law on Environmental Protection 2020, and the Environmental Taxation Law. The first law regulates the prevention, recycling, and collection of plastic waste, and the second law applies a tax to non-degradable plastic bags. The introduction of regulations for the reduction of plastic inputs could build on these two primary laws. For example, charging consumers a fee for plastic bags could build on the Environmental Taxation Law and its implementing directives. Policies for the reduction of consumption might be included in separate implementing Circulars under Decree 8 or be adopted at the provincial/city level. The main provisions adopted in the primary legislation should remain unchanged for the long term. This comprises the assignment of competent authorities, and the obligations of retailers, while the provisions that require frequent changes should remain in secondary legislation so that the implementing authorities have the flexibility to quickly adapt the legislation if implementation reveals the need for corrective measures.

A.4.3. The stakeholder consultation process for different target groups and the identification of key institutions

Relevant stakeholders need to be involved in the design and implementation of the policy measure to ensure its success and effectiveness. Therefore, a stakeholder consultation process needs to be initiated at the very beginning of policy development.

First, the different groups of stakeholders that need to be involved are:

- National ministers and local authorities: These will steer the process and make political decisions, and formulate, and adopt the legislative amendments, and carry out monitoring.
- The target groups: These are representatives from the different sectors (for example, restaurants, hotels, and retailers) that will be directly affected by the policy or responsible for implementing it.
- Other stakeholder groups: These will be directly or indirectly affected by the policy measure or might contribute to its implementation, and they include trade associations, civil society organizations, non-governmental organizations, consumer organizations, researchers, and academics.
- **The stakeholder consultation process should occur before legislative amendments are adopted.** All relevant national and local authorities, and stakeholders/target groups should participate in stakeholder consultations to discuss and agree on the proposed legislative amendments. The consultations could begin with one or more roundtable meetings with all the relevant authorities, and then several stakeholder meetings should be organized.

The first stakeholders' consultation meeting would provide information on the policy options, and get stakeholders' feedback on the different options. These meetings would stress the importance of measures to fight plastic pollution to prevent and reverse damage to the environment, and discuss the points that are relevant for formulating the legislation, including the polluting items to be covered, the types of hotels, restaurants, and other businesses to be included in the bans and restrictions, the exemptions, the type and price of penalties, and the implementation period.

In this regard, a dialogue with the target groups should enhance their willingness and cooperation to enforce the proposed measures, test target groups' level of acceptance of the policy, and allow further dialogue and adjustment of the measures so that these can be effectively implemented. After the first meeting, further meetings should be organized to discuss the legislative draft, and negotiate the terms until preparation of the final proposed legislation. The resulting agreed on points need to be inserted in the legislative text. A final meeting with the stakeholders should also be organized to: present the updated legislative proposal to the target groups, and have them validate the final draft of the legislative proposal before its approval and adoption in the legislation.

The new policy should also be officially announced shortly before its approval and adoption as a legislative amendment. This announcement should occur through press conferences with national and local newspapers, radio, and television, and be publicized on social media. This must achieve broad outreach, and inform all consumers about the adopted change, how they will be affected by it, and what they will need to do.

A.4.4. Targeted sectors and stakeholders

The sectors that will be targeted by the reduction policies proposed in this document include:

- The restaurant sector, including fast-food, cafeterias, and similar establishments for onsite and take-away consumption
- The tourist sector, including the hotel sector
- The retail sector, including shops and shopping malls
- Consumers

The producers of plastic products must also be indirectly targeted by these measures, as they will need to respond to the phasing-out of certain SUPs, and adopt alternative materials or products. The producers must comply with the regulations adopted for extended producer responsibility (EPR). This is required by the Law on Environmental Protection 2020, and its upcoming implementing policies, which cover a large number of SUP items, including cigarettes; products and packaging that use plastic as a raw material, including plastic cutlery (knives, forks, and spoons), chopsticks, cups, boxes, single-use food wrap, and straws; as well as balloons, diapers, tampons, and single-use wet towels. The proposed policies in this report will promote EPR schemes, as they will encourage the producers and importers of certain SUPs to start rethinking their business model, and switch to alternative products and materials. This will facilitate the transition toward more ambitious mid- or long-term policies to completely ban the sale of certain SUPs.

To facilitate fruitful discussions, representatives from the targeted sectors must be invited to take part in stakeholder consultations, along with representatives from NGOs, academia, and civil society. The stakeholder groups that should be included in policy discussion are listed in Table A.4.4.

Table A.4.4. **RELEVANT STAKEHOLDERS FOR VIETNAM'S PLASTIC POLICIES**

Sector	Name
Trade associations, and especially those in the restaurant sector, and the tourist/hotel sectors	Vietnam Tourism Association, Viet Nam Hotel Association
Trade associations in the retail sector	Vietnam Retail Association, Supermarket Associations,
Businesses	Vietnam Chamber of Commerce and Industry (VCCI), PRO Vietnam
NGOs	WWF Vietnam, IUCN Viet Nam, Green Hub, Vietnam Zero Waste Alliance
Platforms for public and private actors	Viet Nam National Plastic Action Partnership (NPAP), Alliance of Retailers to Reduce Single-use Plastic Bags
Recycling companies	Tetra Pak, Thanh Cong Plastic Company, Hop Thanh Company

Sector	Name
Local and international SUP producers	DNP Viet Nam, Tan Phu Plastics Company Viet Phuoc Ltd., An Minh Polymer Company, **SUP food container producers:** KKP Foam Trays, Dong Sai Gon plastic Co. Ltd., Vinam Pack, Doanh Thuong Phat, Song Minh Packaging Trading, Hapobe Packaging, An Phat Holdings **Plastic bag producers:** Bing Minh Packaging Production Trading Service, Giang Thanh Industry, Hoang Thinh Packaging Company, Khang Loi Packaging Company, Nam Khanh Packaging, Nhat Viet Paper and Plastic Packaging One Member Co., Quoc Thai Service Trading Production Company, Ltd., Thanh Cong Vina Trading Investment and Production, JSC **EPS producers:** Bac Viet Eps Plastic Trading Production Co. Ltd., EPS Vietnam Packaging Investment JSC, Minh Phu Plastics, Tan Huy Hoang, Tin Thanh EPS **Food packaging producers:** Pham Gia Packaging, Binh Minh Packaging Joint Stock Company, Hanoi Packaging Production and Import-Export Company, Hoai Anh Plastic, Hop Phat Metal Packaging Joint Stock Company, Phat Thanh Plastic Packaging, Royal Packing Solution Joint Stock Company, Tan Gia, Phu Paper Packaging Production Trading Private Enterprise, Tan Hiep Loi Packaging Production Trading Joint Stock Company, Vinapackink Co. Ltd. **Drinking straw producers:** An Phat Holdings, Hoa Viet Uc Co. Ltd, Ningbo Changya Plastic Vietnam Co. Ltd., Ongtre Vietnam Co. Ltd., Sao Khue Production & Commercial Co. Ltd., STD JSC plastic food, Thien Minh Production and Trading Technology
Consumer associations	Vietnam Standards and Consumers Association
Plastic substitute product manufacturers and importers	Hop Phat Metal Packaging Joint Stock Company, An Phat Holdings (with Aneco brands), Hanoi Packaging Production and Import-Export Company, Ltd. **Plastic bag alternatives producers and importers:** • An Phat Holdings JSC (Aneco Branch) for compostable plastic bags • Phuoc Thinh Production Investment Co. Ltd. for canvas bags • Bao Tin Dat One Member Co. Ltd. for canvas bags • CMYK Manufacturing-Trading-Services Ltd. for canvas bags • Canavi Investment and Production JSC for nonwoven bags • Song Long Plastic for plastic baskets • Producers/importers of alternatives to plastic food containers: • Daily Care Import & Export Trading Co. Ltd. • Queen Pack Co. Ltd. • Hapobe Packaging Co. Ltd. • Joy Food and Beverage, Ltd. • RVC Co. Ltd **Producers/importers of alternatives to Styrofoam:** • Importers: • Vinafishing Store • Docauonline.com • Cuong KL fishing tackle store • Vietnam Fishing • Producers: • Phat Thanh Industry and Production Co. Ltd. • Hoang Phong Development and Investment Co. Ltd.

A.4.5. Public awareness, education, and citizen engagement

As the policy options require changing consumers´ behavior, and an increase in prices, the changes should be explained to consumers to increase their acceptance and willingness to cooperate. The awareness-raising campaign should be focused on:

- The benefits resulting from the policy measure such as the prevention of street littering, and the reduction of marine litter containing plastic, as well as the general reduction of the negative environmental impact caused by SUPs
- Informing the public about the future availability of re-usable alternatives and re-use systems, the waste management options that will be provided, and the bad disposal practices that will stop
- Monthly or weekly clean-up campaigns in city parks and/or bi-annual clean-ups at beaches and waterways

All stakeholders affected by the proposed policy, including NGOs, and the public should be informed about it. The awareness-raising measures should promote public support for the planned legislation, and counter the expected resistance of SUP producers/importers, retailers, and consumers, which will be due to their new obligations. Information campaigns would allow decision-makers to receive feedback, not only from the stakeholders involved in the process, but also from the general public, and monitor reactions so that corrective measures can be taken.

A.4.6. Enforcement and monitoring

The proposed policy options and legislative amendments need to be properly enforced and monitored to ensure their success. The ministry responsible for coordinating and monitoring enforcement of the amendments to the legislation on plastic waste is the Ministry of Natural Resources and Environment (MONRE).

Enforcement and monitoring mechanisms will vary, depending on the policy instrument. For bans, restrictions, and fees charged to consumers, it is important to inspect and monitor restaurants and retailers to check if they are following the regulations. The respective People´s Committee should oversee inspections and monitoring of policies' implementation.

Monitoring can involve novel approaches such as use of the internet, social media, and smartphones to report on infringements of the law. This would apply to retailers, restaurants, and hotels where customers can see illegal behavior, and report on it. Line departments at the provincial/city level (such as DOIT and DOCST) should oversee monitoring in the targeted sectors.

An information campaign to inform citizens should be initiated. It is important that influential NGOs support the awareness-raising process, and encourage people to cooperate in reporting bad practices. This approach should help to mitigate any budgetary constraints that result from monitoring.

Concerning fees, to increase their credibility and acceptance, it is crucial to establish a mechanism for their collection that ensures that the revenue will be used for environmental purposes. With help from the line departments, the Department of Finance should oversee collecting the fees, and then submit the revenue to the state/provincial budget. The funds in the budget would then be spent only on waste management and collection activities. Ideally, the entity responsible for collecting the fees should be specified in the law, and the fees should be earmarked as only for environmental protection activities, including waste management.

Finally, to discourage non-compliant behavior, monitoring must be complemented by penalties. The amount of the penalty should be enough to discourage bad practices, but at the same time, it should be comparable to the infringement. It should be clear to everyone that the penalty is not intended to raise funds, or to harm businesses; rather it is intended to stop bad practices. In addition, the penalty should be implemented in a way that does not incentivize corruption. All of these aspects must be raised, and get agreement from stakeholders during the consultation process.

Considerations in designing penalties include:

- Establishing the appropriate penalty level, including variations for different stakeholders (for example, one that is based on the size of the business).
- The progressive increase of the penalty (for example, after the third infringement the business's license will be revoked).

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