SEA circular
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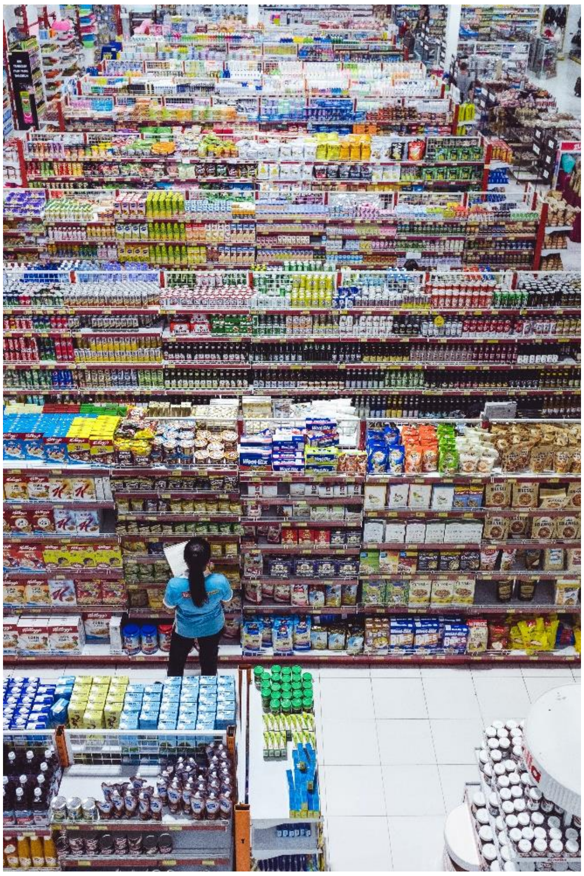
Perceptions on PLASTIC WASTE

Insights, interventions and incentives to action from businesses and consumers in South-East Asia



PERCEPTIONS ON PLASTIC WASTE:

Insights, interventions and incentives to action from businesses and consumers in South-East Asia

This report was conducted by the SEA circular project and Food Industry Asia (FIA) in collaboration with AlphaBeta.

SEA circular is an initiative of UN Environment Programme and the Coordinating Body on the Seas of East Asia (COBSEA), supported by the Government of Sweden to inspire market-based solutions and encourage enabling policies to prevent marine plastic pollution.

This report outlines the findings from surveys targeting consumers and food and beverage businesses, conducted from January to April 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam. Two thousand consumers and four hundred food and beverage businesses were surveyed across the five countries. Consumer surveys translated into national languages were disseminated using online channels and quotas were used to ensure the sample matched the demographics of the countries (e.g. gender, age, income). At least 50 businesses per country were surveyed through local partners such as business associations, ensuring that the sample covered a wide range of companies across the value chain, company ownership structure, company size and locations within the countries. A similar survey will be conducted in 2022 to gauge changes in perceptions.

Commissioned by:

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Contents

Executive Summary

Tackling plastic waste in South-East Asia requires a real understanding of the challenges faced by stakeholders, including robust data on awareness and opinions that promote or prevent effective action.

Based on surveys conducted between January and April 2020, this report identifies how consumers and food and beverage businesses perceive plastic waste issues in five South-East Asian countries estimated to be major contributors of marine plastic litter: Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. A similar survey will be conducted in 2022.

The purpose of these surveys is to understand business and consumer attitudes towards plastic waste, how they are currently tackling plastic waste issues as well as perspectives on how to best tackle plastic waste. This can inform efforts across stakeholder groups, including by businesses and in the public sector.

KEY FINDINGS:

Consumer insights

91% of consumers state that they are concerned about plastic waste issues.

Less than 50% of consumers are less likely to buy a product from non-recycled material.

While only **54%** of consumers are recycling and converting their plastic waste into useful products, **38%** have indicated their interest to do so in the next 12 to 18 months.

47% of consumers feel that the governments should mandate source segregation for household waste while **46%** indicate that enhancing waste collection systems is crucial in ensuring significant plastic waste reduction.

88% of consumers consider social media as the most effective communication channel, which is more than traditional media such as newspapers (**45%**) and radio (**45%**).

76% of consumers indicate that such campaigns should prioritise informing the public about the 3R (Reduce, Reuse, Recycle) concept.

Business insights

72% of businesses in the five countries indicate that governments are actively tackling plastic waste.

While **82%** of businesses are extremely concerned about plastic waste issues, **less than half** feel that current efforts are sufficient.

Less than **45%** of companies in the five countries are focusing on recycling and reuse actions currently. Fortunately, **most businesses** are open to adopting such measures in the next 12 to 18 months.

80% of businesses have targets to address plastic waste but of those companies with a target, less than one-third communicate it externally.

Out of the companies' targets to reduce plastic waste, **74%** are quantitative but only **59%** have indicated deadlines.

Over half of businesses (**51%**) in the five countries are not part of any group tackling plastic waste issues.

CONSUMER INSIGHTS

The consumer surveys included 400 online respondents in each of the five countries and were available in both English and local languages. Each country survey was designed to ensure the sample matched the demographics of the country (e.g. gender, age, income).[1] Some of the main findings include:

- **Consumers are concerned about plastic waste, but are not changing habits.** While 91 percent of consumers state that they are concerned about plastic waste issues, fewer than half are less likely to buy a product from non-recycled material.

- **There are important differences across the five countries.** While consumers in the five countries share many similarities in terms of their perceptions of plastic waste and their current behaviours, there are important differences. For example, 25 percent of Indonesian households claim that their household waste is never collected by a waste collection organisation, versus just 1 percent of Vietnamese households. In addition, only 37 percent of Indonesian consumers believe that businesses are concerned about plastic waste issues, versus 70 percent in Thailand.

- **Consumers feel that their governments should focus more on mandating actions.** Consumers highlight mandatory waste segregation among their priorities for government action – i.e. actions requiring certain behaviour changes in producers and consumers. Another priority for government actions from consumers is enabling actions – i.e. actions supporting the waste ecosystem, through training, financing, infrastructure and technology support – to reduce plastic waste. For example, 47 percent of consumers feel that the governments should mandate source segregation for household waste, while 46 percent indicate that enhancing waste collection systems is crucial in ensuring plastic waste reduction.

- **Social media is a crucial channel for consumer engagement.** Social media is perceived as the most effective platform for consumers to learn more about and be encouraged to take action on plastic waste issues. 88 percent of consumers consider social media as the most effective communication channel, which is more than traditional media such as newspapers (45 percent) and radio (45 percent). When asked about the prioritisation of plastic waste issues in consumer awareness campaigns, 76 percent of consumers indicate that such campaigns should prioritise informing the public about the 3R (Reduce, Reuse, Recycle) concept. Other popular topics perceived to be important are "Impact of plastic pollution on the environment" (67 percent) and "Segregation of plastics" (62 percent).

[1] For more details, refer to Appendix A.

BUSINESS INSIGHTS

The business surveys, conducted through local partners in each of the five countries, analysed about 400 responses from food and beverage companies across the selected markets.[2] Efforts were taken to ensure that the sample covered a wide range of companies across the value chain, company ownership structure, company size and locations within the countries. Some of the main findings include:

- **Businesses understand that their current efforts are not sufficient.** While 82 percent of businesses are extremely concerned about plastic waste issues, less than half feel their current efforts are sufficient to address the problem.

- **Targets by businesses on plastic waste need strengthening.** 80 percent of businesses have targets to address plastic waste but of those companies with a target, less than one-third communicate it externally. Among business targets to reduce plastic waste, 74 percent are quantitative but only 59 percent have indicated deadlines.

- **Businesses are aligned with consumers in seeking further priority actions from governments.** Businesses believe that actions such as mandatory waste segregation are crucial, as do consumers. In addition, businesses highlight the importance of actions such as developing clear packaging labels – with information related to recycling, biodegradability, etc. – and mandatory reporting of waste by businesses.

- **Many businesses are not yet engaged in industry collaborations to tackle plastic waste issues.** Over half of businesses (51 percent) in the five countries are not part of any group tackling plastic waste issues. This ranges from 76 percent in Viet Nam to 24 percent in Thailand.

[2] For more details, refer to Appendix A.

OPPORTUNITY TO ACT

The surveys in 2020 reveal an expectation that more efforts can and should be made by governments, businesses and consumers to tackle plastic waste and marine litter. Potential opportunities emerging from this research include:

1. **Consumers.** There is a large gap between reported consumer concern with plastic waste and action taken in terms of purchasing decisions and recycling / reuse habits. Behavioural change programs coupled with initiatives around improving information for consumers (e.g. consistent labelling regarding product recyclability, waste segregation approaches) could be useful. As highlighted in this survey, using social media is key to engaging consumers.

2. **Food and beverage businesses.** Businesses agree that they need to do more to tackle plastic waste and prioritise recycling efforts. Encouraging companies to adopt public, quantified targets with clear timelines and supporting greater mobilisation of businesses on these issues through relevant local, regional or international initiatives can help scale actions and build capabilities.

3. **Governments.** Consumers as well as businesses recognise that their governments are concerned with plastic waste. Key areas where consumers and businesses believe there are opportunities for governments to take further action include mandating waste segregation, enhancing collection systems, ensuring consistent labelling on product recycling, and imposing littering fines and charges.

Introduction

The development of plastics over the last eighty years has led to a revolution in packaging and consumer goods and enhanced convenience for billions of people. Yet a massive amount of plastics has leaked into our environment, with an estimated 8 million metric tonnes of plastics entering the oceans of the world annually.[3] In less than ten years, there could be 250 million tonnes of plastics in the oceans.[4] Once in the marine environment, plastics harm marine animals; ingestion has been shown to inhibit growth, making them more prone to tumor development, less successful in reproduction, and less able to detect and evade predators.[5]

South-East Asia is at the heart of this marine plastic pollution challenge. Six of the top 20 estimated sources of plastic marine debris are from South-East Asian countries.[6] If South-East Asia were thought of as one country, it would represent the single biggest source of mismanaged plastic waste globally.

Increasingly, governments, businesses and other organisations in the region have demonstrated their determination to tackle current marine waste issues through a range of measures including raising consumer awareness, introducing financing mechanisms, pursuing capacity building as well as developing product bans and limits. These measures focus both on land-based and sea-based solutions to tackle plastic waste issues and marine ocean plastics.

While these measures are crucial, an underlying challenge for reducing plastic pollution in South-East Asia is the limited awareness of consumers and businesses on the issue, and a lack of understanding of the highest potential intervention points to move consumers and businesses into action.

Without information on how consumers and businesses are thinking, policymakers and decision-makers could be limited in developing more targeted programmes. Furthermore, a lack of understanding of consumer and business awareness could hinder the effective evaluation of the many programmes currently in the region.

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[3] Jenna Jambeck et al. (2015), "Plastic waste inputs from land into the ocean". Science, 13 Feb 2015: Vol. 347, Issue 6223, pp. 768-771. Available at: https://science.sciencemag.org/content/347/6223/768

[4] Ocean Conservancy (2017), *The Next Wave: Investment Strategies for Plastic Free Seas*. Available at: https://oceanconservancy.org/wp-content/uploads/2017/05/the-next-wave.pdf

[5] Food Industry Asia (2018), *Sustainable packaging: Tackling plastic waste in Asia*. Available at: https://foodindustry.asia/documentdownload.axd?documentresourceid=30711

[6] Jenna Jambeck et al. (2015), "Plastic waste inputs from land into the ocean". Science, 13 Feb 2015: Vol. 347, Issue 6223, pp. 768-771. Available at: https://science.sciencemag.org/content/347/6223/768

Issues include a lack of understanding of how to properly segregate waste, and businesses working to become eco-friendly - but shifting to alternative products which ultimately become more problematic in terms of their environmental footprint.[7]

In response to this challenge, SEA circular, an initiative of the United Nations Environment Programme (UNEP) and the Coordinating Body on the Seas of East Asia (COBSEA), together with Food Industry Asia (FIA) commissioned multi-country surveys on perspectives concerning plastic waste. The food and beverage industry is one of the crucial players in the plastics value chain. Many organisations within the food and beverage industry are actively pursuing initiatives to address plastic waste in the ocean. Measures such as driving packaging innovation, supporting recycling efforts and co-developing Extended Producer Responsibility (EPR) schemes with governments are all key to tackling post-consumer plastic waste.

These surveys covered Indonesia, Malaysia, the Philippines, Thailand and Viet Nam (estimated to be among the major contributors to marine plastic debris globally).[8] The surveys involved 400 respondents in each country in 2020, in order to understand business and consumer attitudes and to determine how best to tackle plastic waste issues (see Appendix A and B for the survey method).

This report highlights the findings of this first comprehensive survey of the region in terms of consumer awareness and business incentives, and will provide important insights into the motivations, incentives, challenges and gaps faced by consumers and businesses in reducing plastic use and waste. The report provides insights into how governments, businesses and consumers can collaborate to tackle the issue of plastic waste in South-East Asia and highlights key intervention points within the plastic value chain.

These surveys are scheduled to be repeated in 2022 for comparison, and to indicate trends in plastic waste consumer awareness and business incentives.

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[7] European Union and ASEAN Secretariat (2019), *Circular economy and plastics: A gap analysis in ASEAN Member States*. Available at: https://www.iges.or.jp/en/pub/ce-plastics/en

[8] Jenna Jambeck et al. (2015), "Plastic waste inputs from land into the ocean". Science, 13 Feb 2015: Vol. 347, Issue 6223, pp. 768-771. Available at: https://science.sciencemag.org/content/347/6223/768

1. Consumer Insights

There are more than 576 million people in Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. These consumers must play a large role in efforts to reduce marine ocean plastics. For instance, even if there are recycling bins and laws to mandate source segregation, the intended outcome (of more recyclables collected) might not be achieved if there is low consumer awareness of these plastic waste issues.

Consumer surveys, with 400 respondents from each country, were conducted in the five countries to understand:

1. Perspectives on current awareness and concerns regarding plastic waste issues
2. Perspectives on current and potential set of actions to tackle plastic waste issues
3. Perspectives on potential opportunities to scale up action

KEY FINDINGS

Perspectives on current awareness and concerns regarding plastic waste issues

Most consumers feel that governments are active in tackling plastic waste issues and businesses should be doing more (Exhibit 1). 71 percent of consumers in Indonesia, Malaysia, the Philippines, Thailand and Viet Nam agree or strongly agree that their governments are actively tackling plastic waste through policies and regulations. Similarly, over 50 percent of the consumers feel that the frequency and quality of the waste collection systems in their neighbourhoods are adequate. This is supported by the fact that waste from 89 percent of households in the five countries is collected at least on a weekly basis (Exhibit 2). On a country level, over 90 percent of consumers in Malaysia, the Philippines, Thailand and Viet Nam indicate that there is frequent weekly collection of waste compared to only 64 percent in Indonesia. However, it is important to note that a quarter of consumers in Indonesia indicate that their household waste is never collected. This finding is consistent across both urban and rural consumers in Indonesia (see Box 1 for more details).

Regarding businesses, consumers feel that private sector companies should be doing more to tackle plastic waste issues. Only 58 percent of consumers think that businesses are concerned about plastic waste issues and only 45 percent of consumers indicate that businesses are doing enough to tackle plastic waste issues (Exhibit 1). This insight is also consistent with the business surveys revealing that most businesses feel that they are generally aware of plastic waste issues, but they could also be doing more to tackle these issues (Exhibit 13).

EXHIBIT 1

Most consumers feel that governments are active in tackling plastic waste issues and businesses should be doing more

Consumer sentiments toward governments and businesses regarding plastic waste issues

Percent of survey respondents who agree or strongly agree to the statement, %

		5 countries	Indonesia	Malaysia	Philippines	Thailand	Viet Nam
Sentiments toward governments	The government is actively tackling plastic waste through policies and regulations	71	64	80	66	70	73
	The frequency of the waste collection system in my neighbourhood is adequate	57	41	69	62	65	51
	The quality of the waste collection system in my neighbourhood is adequate	51	36	64	54	56	46
Sentiments toward businesses	Businesses are concerned about plastic waste issues	58	37	62	53	70	69
	Businesses are doing enough to tackle plastic waste issues	45	37	40	42	66	38

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

EXHIBIT 2

Waste from 89% of households in Indonesia, Malaysia, Philippines, Thailand and Viet Nam is collected at least on a weekly basis

How often is your household waste collected by a waste collection organisation?

Percent of survey respondents[1], %

	Daily	Weekly or less (but not daily)	Monthly (including less often than weekly)	Never
5 countries	36	53	4	7
Indonesia	23	41	10	25
Malaysia	29	64	3	4
Philippines	25	69	3	3
Thailand	35	60	3	2
Viet Nam	65	32	2	1

1 May not add up to 100% due to rounding. Consumers that indicate "Don't know" to this question are removed for the analysis. There are about 1 percent of all consumers who have indicated this response.

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000 (400 in each country)

EXHIBIT 3

There is a disconnect between consumers' concern with plastic waste issues and their purchasing decisions

Sentiments toward consumer patterns regarding plastic waste issues

Survey respondents who agree or strongly agree to the statement, %

	5 countries	Indonesia	Malaysia	Philippines	Thailand	Viet Nam
People should be more educated about plastics and the effect on the environment	91	91	93	94	91	89
I am extremely concerned about the extent of plastic waste issues	91	92	92	94	89	89
I am actively pursuing efforts to tackle plastic waste	84	76	87	83	90	85
I know how to properly segregate my household waste for recycling	84	71	87	92	91	82
I have a good understanding of what products can be recycled	79	69	80	90	85	72
I always segregate my household waste for recycling	76	64	79	82	85	71
I regularly look at products to understand if the material has been recycled before I buy them	66	55	69	63	75	69
If a product is made from non-recycled material, I am less likely to buy it	49	40	46	49	58	55

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

Consumers feel that there should be more consumer education about plastics but most think that they are already practicing good habits (Exhibit 3). About 91 percent of consumers feel that people should be more educated about plastics and the effect on the environment. When asked to review their own consumption patterns, most consumers indicate that they are already practicing good habits to tackle plastic waste issues. 91 percent of consumers respond that they are extremely concerned about the extent of plastic waste issues. This is consistent across the five countries. Regarding specific areas, consumers seem to fare better with regards to awareness related to downstream actions such as source segregation and recycling rather than upstream actions such as selective purchases to reduce plastic waste. 84 percent of respondents indicate that they are actively pursuing efforts and know how to properly segregate household waste for recycling. 76 percent of consumers indicate that they always segregate household waste for recycling. There could be a potential bias for this insight if compared to other sources regarding household source segregation rates. For instance, in Malaysia, 79 percent of consumers indicate that they always segregate their household waste (79 percent in urban areas and 81 percent in rural areas). While other estimates are difficult to obtain, one existing study done in Iskandar Malaysia (defined as an urban area) reported a household segregation rate of 49 percent using direct face-to-face interview surveys.[9] Comparisons to actual waste segregation rates across countries could be

[9] Sujitra Vassanadumrongdee and Suthirat Kittipongvises (2017), "Factors influencing source separation intention and willingness to pay for improving waste management in Bangkok, Thailand" *Sustainable Environment Research*. Available at: https://www.sciencedirect.com/science/article/pii/S2468203917301875?via%3Dihub#bib35 and Azilah M. Akil, Foziah J and C.S Ho (2014), "The Effects of Socio-Economic Influences on Households Recycling Behaviour in Iskandar Malaysia" *Procedia Social and Behavioural Sciences 202 (2015)*. Available at: https://www.sciencedirect.com/science/article/pii/S1877042815048636

useful to gather in the future to understand the extent of the mismatch between reporting and actual waste segregation.

However, there is a disconnect between consumers' concerns with plastic waste issues and their purchasing decisions. With regards to their shopping habits, a much smaller share of consumers state that they are likely to reduce their purchases if their desired products are made from non-recycled materials (49 percent). Only 66 percent of consumers regularly look at products to understand if the materials have been recycled before they buy them.

It is also useful to consider the impact of urbanisation on plastic waste awareness (see Box 1 for more details). Based on the consumer surveys, there seem to be no major differences in the perspectives towards plastic waste issues from consumers in urban or rural areas (Exhibit 4). While the perspectives of urban versus rural consumers are generally similar, rural residents report less frequency of waste collection and have generally lower understanding of recycling options. For example, 61 percent of urban consumers feel that the frequency of the waste collection system is adequate, compared to only 53 percent of rural consumers. Regarding the understanding of what products can be recycled, 82 percent of urban residents indicate that they have a good understanding. This is relatively high compared to the 76 percent of rural residents who feel the same way.

There are also some differences comparing the responses from urban and rural areas on the country level. For instance, when consumers are asked whether they have a good understanding of what products can be recycled, a higher percentage of consumers in the urban areas, relative to the consumers in the rural areas, agree. In Viet Nam, 77 percent of consumers in the urban areas agree with this statement compared to 68 percent of consumers in rural areas. Likewise, in Indonesia, the national figure is 69 percent; urban and rural estimates are 76 percent and 62 percent respectively. However, the other findings are generally similar from insights by consumers in both the urban and rural areas.[10] Possible reasons for the generally similar results could include the widespread use of the internet and social media to communicate information (Exhibit 9); increasing focus by governments and multilateral institutions on raising awareness of plastic waste issues in rural areas; and the presence of city-level networks such as the ASEAN Smart Cities Network (ASCN) which increase the exposure of smaller cities to programmes.[11]

[10] The urbanisation rates in each country were used to structure the sampling share from urban versus rural residents.

[11] ASEAN Secretariat (2018), "ASEAN Smart Cities Network:". Available at: https://asean.org/asean/asean-smart-cities-network/ and ASEAN Secretariat (2018), ASEAN Sustainable Urbanisation Strategy. Available at: http://aadcp2.org/wp-content/uploads/ASEAN-Sustainable-Urbanisation-Strategy-ASUS_2018.pdf

EXHIBIT 4

While the perspectives of urban versus rural consumers are generally similar, rural residents report less frequent waste collection and lower understanding of recycling options

Sentiments toward governments, businesses and consumer patterns regarding plastic waste issues

Survey respondents who agree or strongly agree to the statement, %

		Total (n=2,000)	Urban (n=1,104)	Rural (n=896)
Sentiments toward governments	The government is actively tackling plastic waste through policies and regulations	71	69	72
	The frequency of the waste collection system in my neighbourhood is adequate	57	61	53
	The quality of the waste collection system in my neighbourhood is adequate	51	53	49
Sentiments toward businesses	Businesses are concerned about plastic waste issues	58	60	56
	Businesses are doing enough to tackle plastic waste issues	45	46	43
Sentiments toward consumers	People should be more educated about plastics and the effect on the environment	91	92	91
	I am extremely concerned about the extent of plastic waste issues	91	92	89
	I am actively pursuing efforts to tackle plastic waste	84	86	82
	I know how to properly segregate my household waste for recycling	84	86	82
	I have a good understanding of what products can be recycled	79	82	76
	I always segregate my household waste for recycling	76	79	73
	I regularly look at products to understand if the material has been recycled before I buy them	66	69	63
	If a product is made from non-recycled material, I am less likely to buy it	49	51	47

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

Box 1. Potential differences in perspectives on plastic waste issues due to consumers' locations

Based on existing landscape studies in South-East Asia, most initiatives to tackle plastic waste issues are usually concentrated in a few regions, typically the national capitals.[12] Possible reasons include the ease of implementing projects and the higher volume of waste in these areas. For instance, in the Philippines, most programmes and activities are in the National Capital Region. As a result, there might be concerns that only consumers in the urban areas are benefitting from consumer awareness campaigns and programmes.

In the consumer surveys used in this study, to obtain indicative insights on the impact of urbanisation on plastic waste awareness, responses from Tier 1 cities were considered as urban while responses from other cities were considered as rural.[13] Analyses were conducted to explore any perceived differences in perspectives.

Perspectives on current and potential set of actions to tackle plastic waste issues

This section explores the current and potential set of 3R (Reduce, Reuse and Recycle) actions taken by consumers regarding tackling plastic waste issues.[14] Currently, consumers are focusing their actions mostly on two of the 3Rs, reducing and reusing, with a lack of emphasis on recycling (Exhibit 5). While consumers report that they are trying to reduce their use of disposable plastic products and to reuse items (such as waste bottles and grocery bags), far fewer report efforts around trying to increase recycling. In fact, there are no recycling actions in the top five 3R actions indicated by consumers in the five countries.

[12] Studies include Food Industry Asia (2018), *Sustainable Packaging: Tackling Plastic Waste in Asia*. Available at: https://foodindustry.asia/documentdownload.axd?documentresourceid=30711

[13] To obtain indicative insights on the impact of urbanisation on plastic waste awareness, responses from Tier 1 cities were considered as urban while responses from other cities were considered as rural (in-line with similar studies). Tier 1 cities, compared to other cities, are larger, denser, and more developed. For instance, in Indonesia, the regional breakdown was as follows – Greater Jakarta (Urban) vs. Rest of Indonesia (Rural). See Appendix A for more details.

[14] Respondents could select from 16 actions in four categories: "Reduce", "Reuse", "Recycle" and "Others (related to 3Rs)". They indicate which actions they are currently doing and which actions they would consider doing in the future (next 12 to 18 months).

EXHIBIT 5

Consumers are focusing their actions on two of the “3Rs” (Reduce and Reuse) and most consumers do not prioritise recycling habits

Which of the following 3R (Reduce, Reuse and Recycle) actions are you currently doing?

Reduce | Recycle | Reuse | Others (related to 3Rs)

Top 5 Ranking	5 countries					
1	Reduce my use of disposable plastic products	Reduce my use of disposable plastic products	Reduce my use of disposable plastic products	Use reusable water bottles, reusable grocery bags and plastic alternatives	Reduce my use of disposable plastic products	Reduce my use of disposable plastic products
2	Use reusable water bottles, reusable grocery bags and plastic alternatives	Use reusable water bottles, reusable grocery bags and plastic alternatives	Buy and use only what I need	Buy and use only what I need	Use reusable water bottles, reusable grocery bags and plastic alternatives	Buy and use only what I need
3	Buy and use only what I need	Dispose of my litter, including plastics, in the appropriate bins	Use reusable water bottles, reusable grocery bags and plastic alternatives	Reuse disposable products	Reuse disposable products	Dispose of my litter, including plastics, in the appropriate bins
4	Dispose of my litter, including plastics, in the appropriate bins	Buy and use only what I need	Reuse disposable products	Reduce my use of disposable plastic products	Dispose of my litter, including plastics, in the appropriate bins	Use reusable water bottles, reusable grocery bags and plastic alternatives
5	Reuse disposable products	Reuse disposable products	Dispose of my litter, including plastics, in the appropriate bins	Dispose of my litter, including plastics, in the appropriate bins	Buy and use only what I need	Reuse disposable products

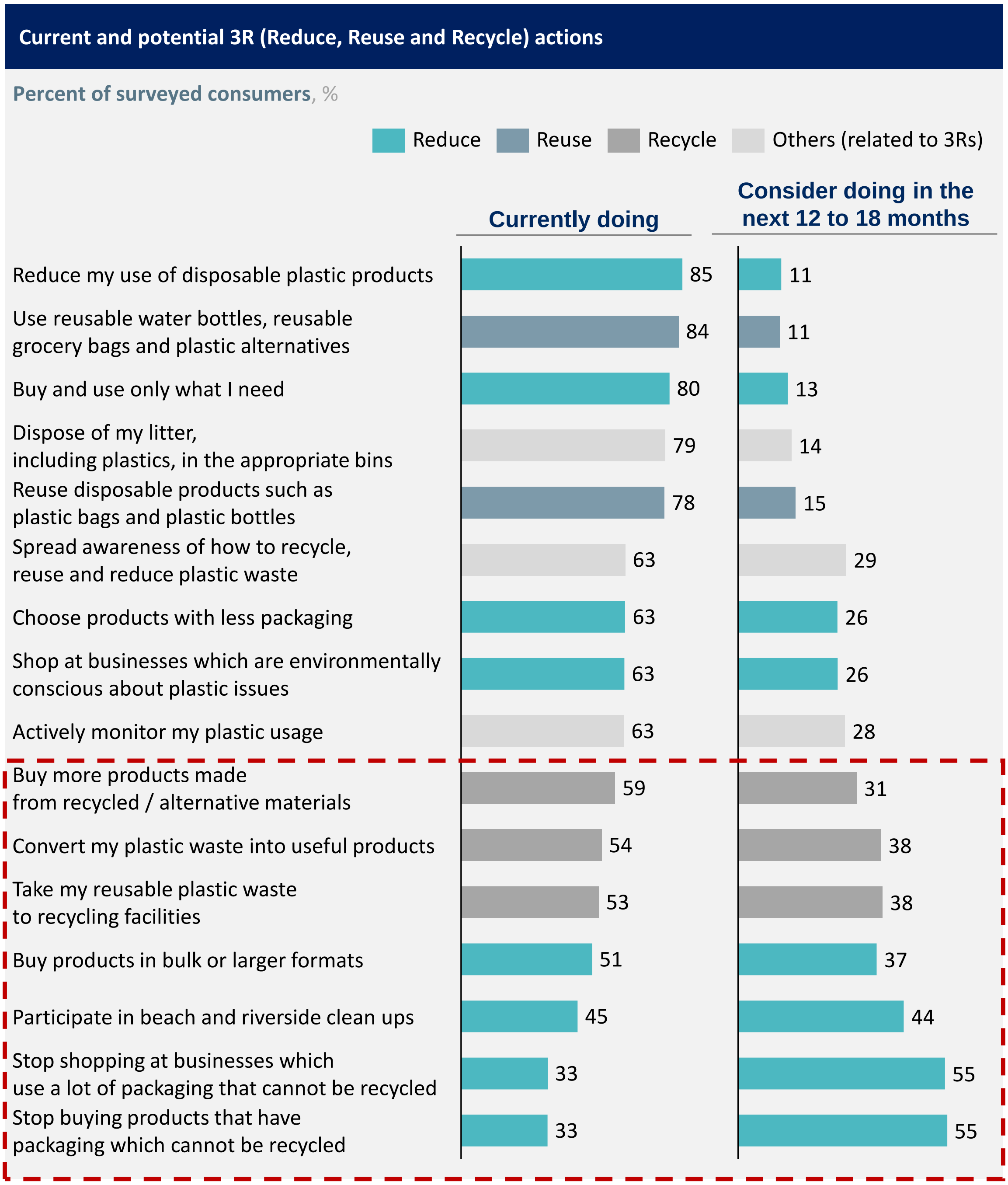
SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

Consumers also indicate other actions not specified in the surveys. These include following the news on plastic waste issues; reporting waste issues and sharing suggestions to related parties such as the local authorities; joining and donating to no-plastics petitions and advocacy groups to raise awareness; ensuring that there are multiple bins in the household; as well as establishing ground-up activities such as garbage collection.

Across the five countries, consumers could do more to reduce and recycle plastic waste and the good news is that consumers are considering broadening their current efforts to tackle plastic waste in the next 12 to 18 months (Exhibit 6). For instance, while only 54 percent of consumers are currently recycling and converting their plastic waste into useful products, 38 percent have indicated their interest to do so in the future. Similarly, while only 33 percent of respondents are currently deciding to stop shopping at businesses which use a lot of packaging that cannot be recycled, 55 percent of consumers are considering doing so in the future.

EXHIBIT 6

Consumers appear open to broadening their current efforts to tackle plastic waste



SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

While consumers should start prioritising recycling and reviewing their shopping habits, it is important to also ensure that the right infrastructure and waste systems are in place (e.g. recycling bins, frequent collection of recyclables, measures to ensure non-contamination) and the availability of more sustainable alternative products (factoring in income levels and suitable price points). The relevant authorities and stakeholders could focus on these crucial enablers in the next 12 to 18 months to increase impact.

Perspectives on potential opportunities to scale up action

Government actions to tackle plastic waste issues can be classified into five main categories:

- Informing covers actions seeking to increase information on waste flows, as well as raise business and consumer awareness. For instance, "Businesses must report how much plastic packaging they use to the government" and "Providing information to consumers, including on how to separate their waste to support recycling".
- Financing covers actions seeking to identify sustainable financing approaches to the waste system. For instance, "Producers are required to pay consumers who recycle their packaging and products".
- Incentivising covers actions incentivising change in consumer and business behaviour (beyond financing approaches above). For example, "Littering fines and consumer charges".
- Mandating covers actions requiring certain behaviour changes in producers and consumers. For example, "Products have to be biodegradable or recyclable".
- Enabling covers actions supporting the waste ecosystem, through training, financing, infrastructure and technology support. One example is "Encourage different groups to work together".

Generally, consumers feel that useful government actions could focus more on pursuing mandating and enabling actions to reduce plastic waste (Exhibit 7).[15] 47 percent of consumers feel that the governments should mandate source segregation for household waste while 46 percent indicate that enhancing waste collection systems is crucial in ensuring plastic waste reduction.

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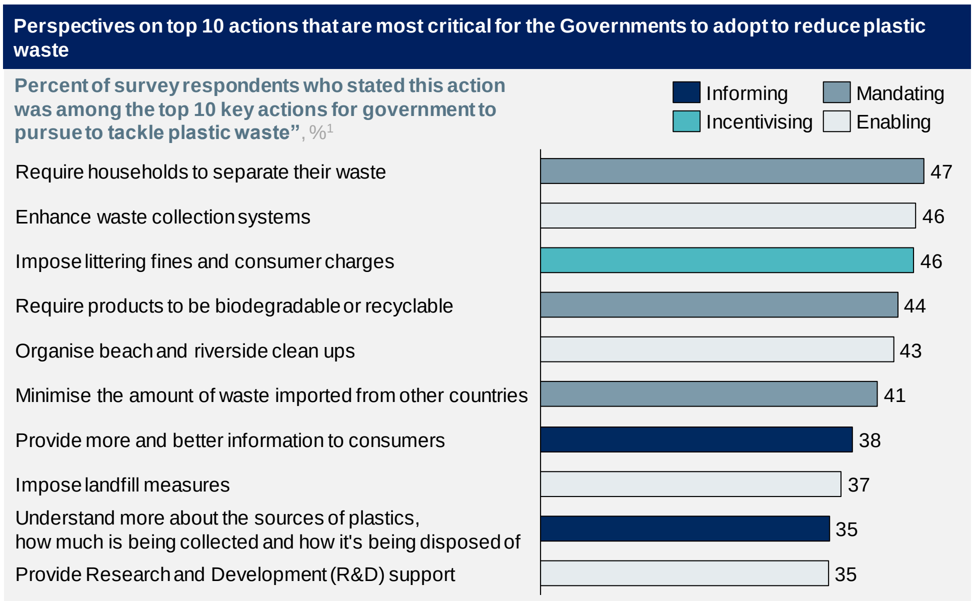
[15] Consumers could select up to ten actions that they feel are most critical for their governments to pursue to reduce plastic waste. They are allowed to select out of 27 options covering the five categories.

EXHIBIT 7

Consumers feel that their governments should focus more on mandating and enabling actions to reduce plastic waste



1 Respondents could choose up to 10 key actions out of 27 options.
SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

However, there is some variation in consumer perspectives on appropriate government actions by country (Exhibit 8). For example, a financing action of making businesses and consumers pay more if they produce more waste (known as "Pay-as-your-throw" schemes) is highlighted in the top 10 actions indicated by consumers in Indonesia. In countries like the Philippines and Thailand, consumers prioritised enabling actions such as developing waterway infrastructure.

EXHIBIT 8

Consumer perspectives on priority government actions vary by country

Perspectives on top 10 actions that are most critical for the Governments to adopt to reduce plastic waste

- Informing
- Financing
- Incentivising
- Mandating
- Enabling

Ranking	5 countries				
1	Require households to separate their waste	Impose littering fines / consumer charges	Require households to separate their waste	Require products to be biodegradable / recyclable	Enhance waste collection systems	Impose littering fines / consumer charges
2	Enhance waste collection systems	Organise beach and riverside clean ups	Impose littering fines / consumer charges	Enhance waste collection systems	Require households to separate their waste	Require households to separate their waste
3	Impose littering fines / consumer charges	Require households to separate their waste	Impose landfill measures	Require households to separate their waste	Minimise the amount of waste imported	Organise beach and riverside clean ups
4	Require products to be biodegradable / recyclable	Minimise the amount of waste imported	Enhance waste collection systems	Impose littering fines / consumer charges	Require products to be biodegradable / recyclable	Enhance waste collection systems
5	Organise beach and riverside clean ups	Require products to be biodegradable / recyclable	Introduce labels	Ban single-use plastics	Provide more and better information	Minimise the amount of waste imported
6	Minimise the amount of waste imported	Enhance waste collection systems	Require products to be biodegradable / recyclable	Impose landfill measures	Understand more about plastics	Require products to be biodegradable / recyclable
7	Provide more and better information	Ban single-use plastics	Organise beach and riverside clean ups	Provide more and better information	Organise beach and riverside clean ups	Provide R&D support
8	Impose landfill measures	Provide more and better information	Provide more and better information	Minimise the amount of waste imported	Develop waterway infrastructure	Improve waste transportation system
9	Understand more about plastics	Make producers / consumers pay more if they produce more waste	Train the informal waste sector	Develop waterway infrastructure	Introduce Labels	Provide more and better information
10	Provide R&D support	Encourage collaboration	Minimise the amount of waste imported	Organise beach and riverside clean ups	Impose landfill measures	Understand more about plastics

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000

Leveraging the appropriate communication channels to raise consumer awareness is also critical for success. According to consumers in the five selected countries, social media (such as Facebook, Twitter, Instagram) is perceived as the most effective platform for consumers to learn more about and be encouraged to act on plastic waste issues (Exhibit 9). 88 percent of consumers consider social media as the most effective communication channel, which is more than traditional media such as newspapers (45 percent) and radio (45 percent). This finding is consistent with other reports about the increasing internet penetration, smartphone adoption and social media usage in developing countries.[16] For instance, the share of adults who use online social networking sites in Viet Nam has increased from 34 percent in 2014 to 53 percent in 2017 (at a 16 percent compound annual growth rate). While it is important for governments, businesses and civil society to leverage social media to raise consumer awareness, it is necessary to also develop measures to manage possible issues associated with social media such as fake news.

EXHIBIT 9

Social media is the most effective platform, except in Viet Nam, to learn more about and be encouraged to take action on plastic waste issues

Perspectives on the most effective ways for consumers to learn more and be encouraged to take action on plastic waste issues

Percent of survey respondents, %

		5 countries					
New media	Social media	88	92	88	92	88	83
Traditional media	Television	87	91	86	91	85	84
	Community	70	76	63	77	71	61
	Door-to-door campaigns	49	41	45	49	50	59
	Newspapers	45	38	59	41	31	58
	Radio	45	34	63	49	29	52
Others[1]	Others	2	2	2	3	1	1

1 Includes using billboards, fines, incentives and education curriculum.
SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000 (400 in each country)

At the country level, Indonesia and Thailand have the same order of prioritisation of communication channels. In Malaysia, "Radio" is ranked third instead of "Community" while in Viet Nam, "Television" is still dominant (84 percent) followed very closely by social media (83 percent).[17]

Consumers have also indicated other communication ideas including campaigns of local politicians, school and environmental excursions, changes in the education curriculum, fines and incentives, as well as signages around the community. Furthermore, respondents have pointed out

[16] Pew Research Centre (2018), "Social Media Use Continues to Rise in Developing Countries but Plateaus Across Developed Ones". Available at: https://www.pewresearch.org/global/2018/06/19/social-media-use-continues-to-rise-in-developing-countries-but-plateaus-across-developed-ones/ and Smart Insights (2019), "Global social media research summary 2019". Available at: https://www.smartinsights.com/social-media-marketing/social-media-strategy/new-global-social-media-research/

[17] In Malaysia, 63.3 percent of consumers choose "Radio" while 62.8 percent of consumers indicate "Community".

specific areas to focus awareness raising efforts such as places of worship, commercial establishments and educational institutions.

When asked about the prioritisation of plastic waste issues in consumer awareness campaigns, 76 percent of consumers indicate that such campaigns should prioritise informing the public about the 3R (Reduce, Reuse, Recycle) concept (Exhibit 10). Other popular topics perceived to be important are "Impact of plastic pollution on the environment" (67 percent) and "Segregation of plastics" (62 percent).

EXHIBIT 10

Consumers indicate that awareness campaigns should prioritise the 3R concept

Perspectives on prioritisation of plastic waste issues in consumer awareness programmes

Percent of survey respondents, %

	5 countries					
3R concept	76	83	81	83	71	62
Impact of plastic pollution on the environment	67	70	65	66	67	66
Segregation of plastics	62	58	50	69	68	63
Disposal of plastics	59	54	51	66	58	66
Practical 3R tips	49	47	50	46	46	57
Collection of plastics	49	49	41	52	41	60
Production of plastics	35	38	37	37	37	28
Others[1]	0.5	0.3	1	1	0.3	0

1 Includes topics such as "impact on future generations" and "incentives to take actions".
SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000 (400 in each country)

On a country level, there are slight differences in perspectives. For instance, in the Philippines, consumers prioritised "Disposal of plastics" instead of "Impact of plastic pollution on the environment" while in Viet Nam, consumers deprioritise the "3R (Reduce, Reuse, Recycle) concept" topic.[18]

Finally, survey results across the five selected countries indicate strong potential for incorporating international best practices, scaling up initiatives, and improving coordination in plastic waste reduction efforts (Exhibit 11). 26 percent of consumers feel that there is potential to scale up successful pilot programmes while 25 percent think that stakeholders can incorporate international

[18] In the Philippines, 66.3 percent of consumers prioritised "Disposal of plastics" while 66.0 percent prioritised "Impact of plastic pollution on the environment".

best practices into their programmes. At a country level, there are slight variations in the perspectives. For example, in Indonesia, more consumers see potential in incorporating international best practices (37 percent) than scaling up pilot programmes (25 percent).

EXHIBIT 11

Survey results indicate strong potential for scaling up initiatives, incorporating international best practices and improving coordination

Percent of respondents who indicate potential for improvement in area[1]

	5 countries					
Scaling up successful pilot initiatives	26%	25%	26%	35%	19%	24%
Incorporating international best practices	25%	37%	18%	35%	16%	19%
Coordinating with government initiatives	20%	21%	16%	28%	15%	21%
Coordinating with other initiatives	19%	19%	17%	28%	14%	20%
Focusing on the root causes of issues	19%	19%	14%	29%	11%	22%
Forming partnerships with range of different stakeholders	17%	20%	15%	20%	11%	21%

1 Based on 2,000 respondents in the five countries.

SOURCE: Consumer surveys

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The multi-country consumer surveys in 2020 reveal some promising trends, but also that more needs to be done.

Encouragingly, consumers are concerned about plastic waste issues and report that they are taking active efforts to reduce the impact of plastic waste. However, there are still many gaps in achieving this. These include the failure of concern with plastic waste to translate into consumer purchasing decisions on non-recycled materials; lower understanding of recycling in rural areas; and generally lower focus on recycling (as compared to actions related to reduction and reuse).

Consumers also believe that governments can play a strong role in tackling plastic waste through actions such as mandatory waste segregation and are keen to learn more about key concepts such as the 3Rs (Reduce, Reuse, Recycle), particularly through social media.

2. Business Insights

While country-specific information is currently limited, food and beverage packaging has been estimated to account for about 14 percent of the total waste generated globally.[19] Other major sources of waste include non-food packaging, textiles, building and construction, and increasingly e-waste. This reinforces the point that the food and beverage industry alone is a necessary, but not sufficient, player for driving overall change in waste management. Nevertheless, the food and beverage industry can play an important role in developing solutions to tackle plastic waste issues and marine ocean plastics.[20] In Indonesia, Malaysia, the Philippines, Thailand and Viet Nam, it is estimated that there are about 3.5 million food and beverage companies.[21]

Therefore, business surveys, targeting the food and beverage companies across the value chain, were conducted in each of the five countries to understand:

1. Perspectives on current awareness and concerns regarding plastic waste issues
2. Perspectives on current and potential set of actions to tackle plastic waste issues
3. Perspectives on potential opportunities to scale up action

KEY FINDINGS

Perspectives on current awareness and concerns regarding plastic waste issues

Most businesses feel that governments and consumers are active in tackling plastic waste issues. (Exhibit 12). Overall, 72 percent of businesses in the five countries indicate that governments are actively tackling plastic waste. More than half (56 percent) of businesses feel that consumers are concerned about plastic waste issues.

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19 As country-specific plastic waste information is limited, AlphaBeta makes use of global statistics for this analysis. Global estimates of sector waste (including packaging which is estimated to account for 47 percent of total waste generated) are provided by Roland Geyer, Jenna R. Jambeck, and Kara Lavender Law (2017), "Production, use, and fate of all plastics ever made". *Science Advances*. Available at: http://advances.sciencemag.org/content/3/7/e1700782. The share of packaging waste that is related to flexible food packaging is estimated to be 30 percent by Gone Adventurin (2017), *Toward Circularity of Post-consumer Flexible Packaging in Asia*. Available at: http://www.goneadventurin.com/portfolio_page/towards-circularity-of-flexible-packaging-asia/

20 Food Navigator Asia (2019), "China's plastic waste ban: How are Asia's food firms and governments coping 18 months on?" Available at: https://www.foodnavigator-asia.com/Article/2019/07/15/China-s-plastic-waste-ban-How-are-Asia-s-food-firms-and-governments-coping-18-months-on and Food Industry Asia (2018), *Sustainable Packaging: Tackling Plastic Waste in Asia*. Available at: https://foodindustry.asia/documentdownload.axd?documentresourceid=30711

21 AlphaBeta estimates based on a literature review.

EXHIBIT 12

Most businesses feel that government and consumers are active in tackling plastic waste issues

PRELIMINARY

Business sentiments toward governments, industry, civil society and consumers regarding plastic waste issues

Percent of survey respondents who agree or strongly agree to the statement, %

		5 countries					
General sentiments	Current efforts by government, industry and civil society are sufficient to tackle plastic waste	44	13	67	22	59	67
Sentiments toward governments	The government is actively tackling plastic waste through policies and regulations	72	46	88	64	87	75
Sentiments toward consumers	Consumers are concerned about plastic waste issues	56	27	52	59	75	70

SOURCE: Business surveys conducted in 2020 in Indonesia n = 71, Malaysia n = 73, Philippines n = 85, Thailand n = 75 and Viet Nam n = 63; total n = 367

EXHIBIT 13

Most businesses feel that they are generally aware of plastic waste issues but they could also be doing more to tackle these issues

PRELIMINARY

Sentiments toward companies' practices regarding plastic waste issues

Percent of survey respondents who agree or strongly agree to the statement, %

	5 countries					
My company is extremely concerned about plastic waste issues	82	77	77	85	91	78
My company is actively monitoring its plastic usage	73	62	75	66	88	76
My company is actively pursuing efforts to tackle plastic waste	80	77	73	79	89	79
My company has a dedicated individual / team looking into plastic usage and reduction efforts	55	52	48	60	76	35
The current efforts of our company to tackle plastic waste are sufficient	48	55	51	44	59	30

SOURCE: Business surveys conducted in 2020 in Indonesia n = 71, Malaysia n = 73, Philippines n = 85, Thailand n = 75 and Viet Nam n = 63; total n = 367

Most businesses feel that they are generally aware of plastic waste issues, but they could also be doing more to tackle these issues (Exhibit 13). While 82 percent of businesses are extremely concerned about plastic waste issues, less than half (48 percent) feel that current efforts are sufficient. This is consistent with the consumer surveys, highlighted in the previous chapter, which reveal that consumers think that businesses should be doing more to tackle plastic waste issues (Exhibit 1).

Perspectives on current and potential set of actions to tackle plastic waste issues

Businesses can consider actions in four broad categories to tackle plastic waste issues:

- Target setting. Examples include establishing "Target to reduce plastic waste" or "Target to educate a certain number of consumers through events and campaigns".
- Packaging reduction. Examples include working on "Reduction of single-use plastics" or "Light-weighting of primary and secondary packaging of products".
- Stakeholder engagement. Examples include facilitating "Engagement with policymakers" or "Informal waste picker support programmes".
- Recycling / reuse. Examples include focusing on "Engaging in research and development (R&D) related to recycling / reuse" or "Waste exchange programmes".

The survey reveals that businesses feel they could do more in stakeholder engagement as well as recycling and reuse (Exhibit 14).[22] Less than 45 percent of companies in the five countries are focusing on recycling and reuse actions currently. Fortunately, most businesses are open to adopting such measures in the next 12 to 18 months. Other initiatives related to plastic waste mitigation undertaken by the businesses include recycling plastic waste into asphalt and other useful products.

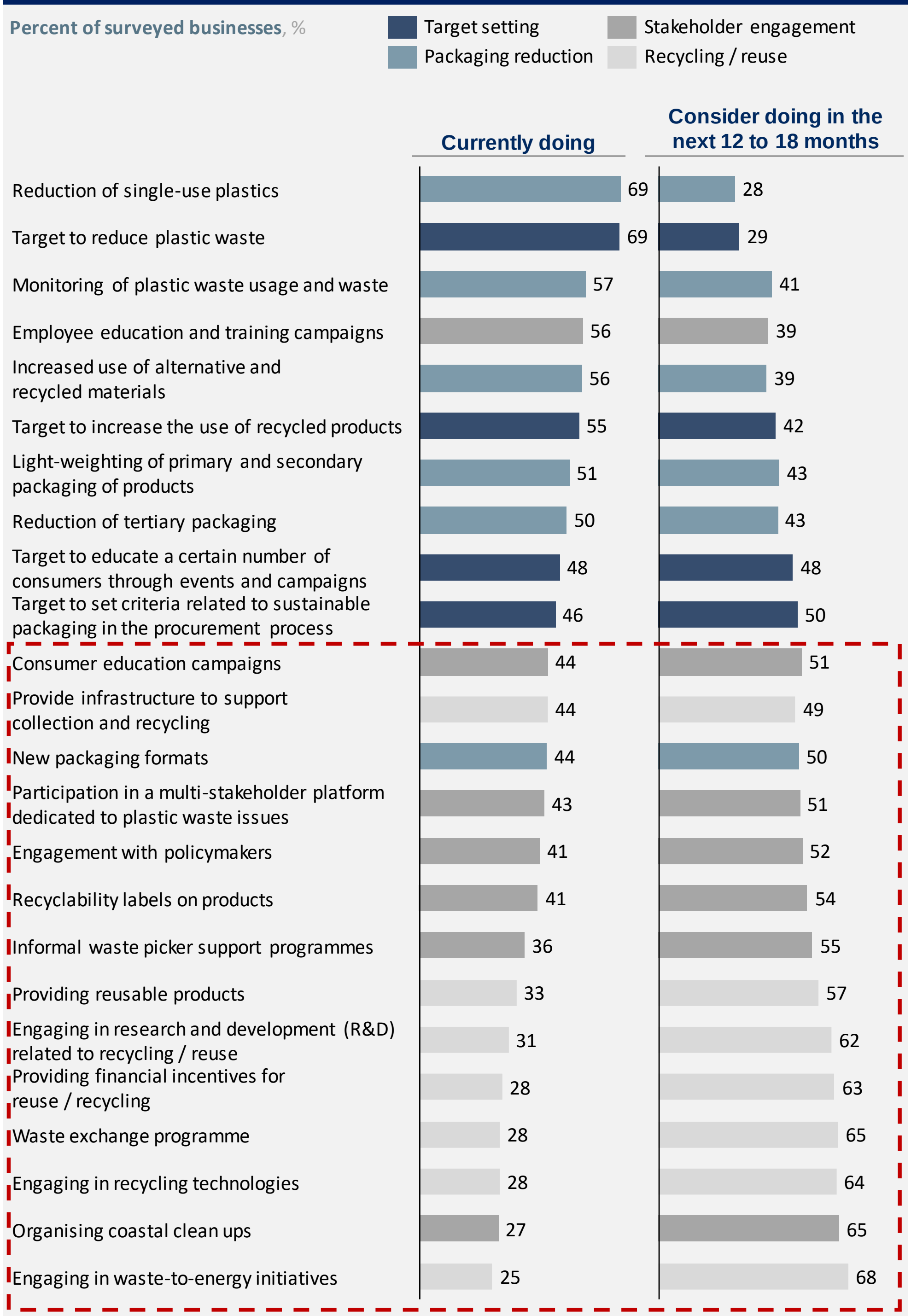
[22] Respondents could choose what actions they are currently implementing and what actions they are potentially interested in implementing in the future (12 to 18 months) from a list of 24 options.

EXHIBIT 14

Businesses could do more in stakeholder engagement as well as recycling and reuse

PRELIMINARY

Which of the following actions does your company currently focus on; or are potentially interested in focusing on in the future?



SOURCE: Business surveys conducted in 2020 in Indonesia n = 59, Malaysia n = 63, Philippines n = 74, Thailand n = 71 and VietNam n = 60; total n = 327

Many businesses globally have been announcing targets to reduce plastic waste.[23] There are over 450 organisations, the majority being consumer goods companies, which have signed the New Plastics Economy Global Commitment (launched in 2018 by UNEP and the Ellen MacArthur Foundation).[24]

The surveys reveal that despite many businesses having targets related to plastic waste, there are a number of gaps. For example, based on the business surveys in the five selected countries, 80 percent of businesses have targets to address plastic waste but of those companies with a target, less than one-third communicate it externally (Exhibit 15).

EXHIBIT 15

80% of businesses have targets to address plastic waste but out of these companies, less than one-third communicate it externally

PRELIMINARY

Does your company have a target to address plastic waste?

Percent of survey respondents¹, %

	5 countries					
No	20	18	45	17	5	21
Yes	80	83	55	83	95	79

For your target, is it communicated internally or externally?

Percent of survey respondents who indicated that their companies have targets¹, %

		5 countries					
Yes	Only communicated internally	68	76	87	76	49	61
	Communicated internally and externally	32	24	13	24	51	39

1 Might not add up to 100 percent due to rounding.

SOURCE: Business surveys conducted in 2020 in Indonesia n = 51, Malaysia n = 56, Philippines n = 65, Thailand n = 66 and Viet Nam n = 58; total n = 296

Out of the companies' targets to reduce plastic waste, 74 percent are quantitative but only 59 percent have indicated deadlines. Quantitative and time-bound targets include examples such as "25 percent reduction of plastic waste within 2 years" and "Full adoption of sustainable packaging by 2030" (Exhibit 16).

[23] National Geographic (2019), "A running list of action on plastic pollution". Available at: https://www.nationalgeographic.com/environment/2018/07/ocean-plastic-pollution-solutions/

[24] EMF (2019), "Global Commitment". Available at: https://www.ellenmacarthurfoundation.org/our-work/activities/new-plastics-economy/global-commitment and New Plastics Economy (2020), "Global Commitment". Available at: https://www.newplasticseconomy.org/assets/doc/Global-Commitment-Signatories_List_Document-to-download-on-website_Feb-2020-V2.pdf

EXHIBIT 16

Out of the companies' targets to reduce plastic waste, 74% are quantitative but only 59% have indicated deadlines

PRELIMINARY

1 Might not add up to 100 percent due to rounding. 236 businesses in the five countries indicated that they have targets but only 231 businesses answered these questions.

SOURCE: Business surveys conducted in 2020 in Indonesia n = 42, Malaysia n = 31, Philippines n = 52, Thailand n = 60 and Viet Nam n = 46; total n = 231

There are several groups dedicated to addressing plastic waste issues at the country, regional and global levels. National initiatives across South-East Asia include the Packaging and Recycling Association for Indonesia Sustainable Environment (PRAISE) in Indonesia and the Philippine Alliance for Recycling and Materials Sustainability (PARMS). These multi-stakeholder coalitions facilitate the sharing of best practices and help to implement projects locally. There is at least one such group in each of the five countries.[25] On a global front, there are organisations such as the Global Plastic Action Partnership (GPAP), launched by the World Economic Forum, and the New Plastics Economy, led by the Ellen MacArthur Foundation. Given the finite resources of any given business, it is important for companies to be connected to such groups to learn and contribute to plastic waste reduction efforts. Therefore, it is alarming that over half of businesses (51 percent) in the five countries are not part of any group tackling plastic waste issues (Exhibit 17). This ranges from 76 percent of companies in Viet Nam to 24 percent of companies in Thailand.

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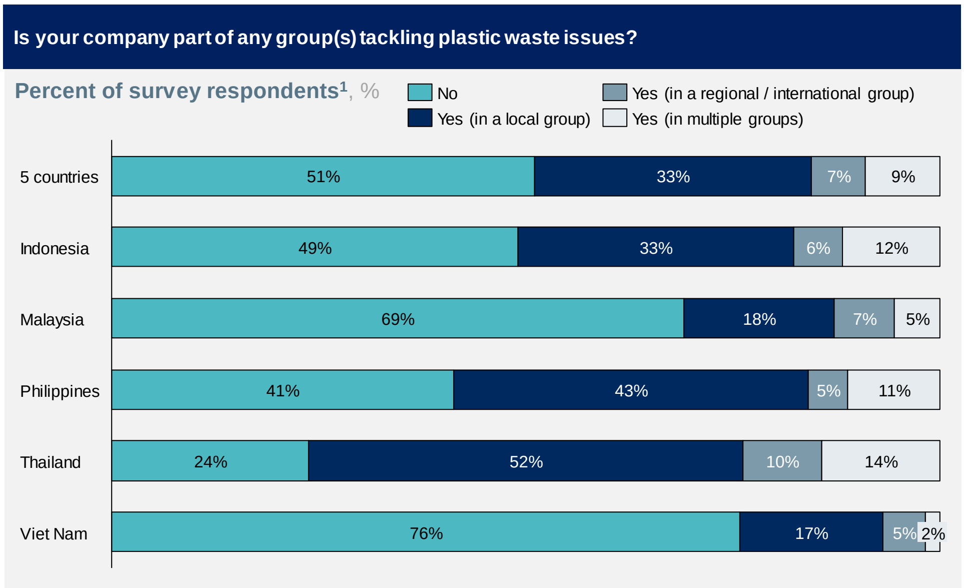
[25] There is at least one dedicated local group in each of the five countries – Indonesia with PRAISE, Malaysia with the Malaysia Plastics Pact, Philippines with PARMS, Thailand with Thailand PPP Plastics and Viet Nam with Packaging Recycling Organisation Viet Nam (PRO Viet Nam).

EXHIBIT 17

Over half of businesses in the five countries are not part of any group tackling plastic waste issues

PRELIMINARY



1 Might not add up to 100 percent due to rounding.
SOURCE: Business surveys conducted in 2020 in Indonesia n = 51, Malaysia n = 55, Philippines n = 63, Thailand n = 63 and Viet Nam n = 58; total n = 290

Perspectives on potential opportunities to scale up action

Government actions to tackle plastic waste issues can be classified into five main categories (as highlighted in Chapter 1):

- **Informing** covers actions seeking to increase information on waste flows, as well as raise business and consumer awareness. For instance, "Mandatory reporting on business waste" and "Sharing of approaches among businesses for tackling waste".
- **Financing** covers actions seeking to identify sustainable financing approaches to the waste system. For instance, "Extended Producer Responsibility (EPR) scheme where producers pay a fee to support the collection and recycling of product packaging".
- **Incentivising** covers actions incentivising change in consumer and business behaviour (beyond financing approaches above). For example, "Government procurement requirements".
- **Mandating** covers actions requiring certain behaviour changes in producers and consumers. For example, "Limitations on plastic waste imports".
- **Enabling** covers actions supporting the waste ecosystem, through training, financing, infrastructure and technology support. One example is "Training for the informal waste sector which refers to people who collect recyclable materials and are not part of any organisation".

Businesses feel that their governments could focus more on informing, mandating and incentivising actions to reduce plastic waste (Exhibit 18).[26] In all countries except the Philippines, businesses feel that the top action by the governments should be to provide information to consumers, including on waste segregation.

Businesses in the five countries also suggest other actions for the governments to consider, including providing credible government commitments (with strong enforcement mechanisms of announced regulations), developing clear plastic waste-related regulations, and increasing investment for related infrastructure such as waste treatment plants.

[26] Businesses could select up to ten actions that they feel are most critical for their governments to pursue to reduce plastic waste. They are allowed to select out of 27 options covering the five categories.

EXHIBIT 18

Businesses feel that their governments should focus more on informing, mandating and incentivising actions

PRELIMINARY

Perspectives on top 10 actions that are most critical for their governments to adopt to reduce plastic waste

Informing | Mandating | Financing | Enabling | Incentivising

Ranking	5 countries					
1	Provide information to consumers	Provide information to consumers	Provide information to consumers	Mandate consumer waste segregation	Provide information to consumers	Provide information to consumers
2	Mandate consumer waste segregation	Mandate consumer waste segregation	Impose littering fines and consumer charges	Map out waste flows	Develop labels	Mandate consumer waste segregation
3	Develop labels	Enhance collection systems	Provide incentives to ensure sales	Provide information to consumers	Mandate consumer waste segregation	Impose littering fines and consumer charges
4	Share approaches among businesses	Share approaches among businesses	Develop labels	Share approaches among businesses	Mandate reporting on business waste	Share approaches among businesses
5	Impose littering fines and consumer charges	Impose littering fines and consumer charges	Limit plastic waste imports	Enhance collection systems	Enhance collection systems	Limit plastic waste imports
6	Map out waste flows	Map out waste flows	Mandate reporting on business waste	Develop labels	Share approaches among businesses	Develop labels
7	Limit plastic waste imports	Develop labels	Map out waste flows	Limit plastic waste imports	Impose Pay-as-you-throw (PAYT) for businesses and consumers	Ban single-use plastics
8	Enhance collection systems	Facilitate coastal clean ups	Share approaches among businesses	Provide training for the informal sector	Promote multi-stakeholder partnerships	Mandate reporting on business waste
9	Mandate reporting on business waste	Provide training for the informal sector	Impose Pay-as-you-throw (PAYT) for businesses and consumers	Provide incentives to ensure sales	Map out waste flows	Provide incentives to ensure sales
10	Provide incentives to ensure sales	Promote multi-stakeholder partnerships	Mandate consumer waste segregation	Determine product specifications	Develop Extended Producer Responsibility (EPR) schemes	Enhance collection systems

SOURCE: Business surveys conducted in 2020 in Indonesia n = 47, Malaysia n = 54, Philippines n = 57, Thailand n = 58 and VietNam n = 55; total n = 271

Businesses indicate there is strong potential for incorporating international best practices in existing plastic waste initiatives and improving coordination among stakeholders (Exhibit 19). 34 percent of businesses believe that their countries could work towards incorporating international best practices. 34 percent and 33 percent of businesses indicate that there could be greater coordination of plastic waste-related programmes with government initiatives and other initiatives, respectively.

On a country level, only 4 percent of businesses in Thailand feel there is potential in forming greater partnerships with a range of different stakeholders (compared to over 20 percent in the other countries). This is consistent with "Business key finding 6" which indicates that partnerships are a key focus among businesses in Thailand and most businesses (76 percent) in Thailand already belong to a dedicated group tackling plastic waste issues (Exhibit 17). One example of these groups is the Thailand Public Private Partnership for Plastic and Waste Management (Thailand PPP Plastics). This group includes representatives from production through to retail including the Federation of Thai Industries (FTI), Thailand Business Council for Sustainable Development (TBCSD), and Thai Plastic Industries Association. It also includes civil society and international organisations: Thailand Environment Institute Foundation, Thai Creation Society, and International Union for Conservation of Nature (IUCN).

EXHIBIT 19

There is strong potential for incorporating international best practices in existing plastic waste initiatives and improving coordination

Percent of respondents who indicate potential for improvement in area

	5 countries					
Incorporating international best practices	34%	56%	13%	56%	14%	33%
Coordinating with government initiatives	34%	40%	26%	56%	21%	26%
Coordinating with other initiatives	33%	38%	31%	62%	16%	20%
Scaling up successful pilot initiatives	32%	36%	31%	64%	14%	15%
Focusing on the root causes of issues	30%	47%	20%	55%	11%	19%
Forming partnerships with range of different stakeholders	25%	36%	24%	42%	4%	24%

SOURCE: Business surveys conducted in 2020 in Indonesia n = 45, Malaysia n = 54, Philippines n = 55, Thailand n = 56 and VietNam n = 54; total n = 264

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The multi-country business surveys in 2020 reveal that more efforts could be done by governments, food and beverage companies as well as consumers to tackle marine ocean plastics and plastic waste issues.

Though there are clear gaps in the current efforts by businesses including the lack of focus on stakeholder engagement as well as recycling and reuse, it is promising that these businesses are broadening their focus in the near future.

While businesses in the food and beverage industry are currently disrupted by the current COVID-19 situation, and sustainability efforts might be deprioritised in the short-term, it is crucial that these businesses also focus on the long-term implications of plastic waste issues and unsustainable packaging.

3. Conclusions

The consumer and business surveys revealed many areas of similarities in perspectives. For example, consumers and businesses show clear concern with plastic waste issues and a realisation that current efforts are insufficient and need to be augmented. Consumers and businesses also agree on some of the key government priorities (Exhibit 20), including the necessity of actions such as mandating consumer waste segregation and improving information for consumers (in areas such as labelling and recycling).

EXHIBIT 20

Comparing the perspectives of consumers and businesses regarding critical government actions reveal similarities and differences

PRELIMINARY

Consumers' and businesses' perspectives on the top 10 actions that are most critical for their governments to adopt to reduce plastic waste[1]

Informing | Mandating | Incentivising | Financing | Enabling

Ranking	Consumers in the 5 countries	F&B businesses in the 5 countries
1	Mandate consumer waste segregation	Provide information to consumers
2	Enhance collection systems	Mandate consumer waste segregation
3	Impose littering fines and consumer charges	Develop labels
4	Determine product specifications	Share approaches among businesses
5	Facilitate coastal clean ups	Impose littering fines and consumer charges
6	Limit plastic waste imports	Map out waste flows
7	Provide information to consumers	Limit plastic waste imports
8	Impose landfill measures	Enhance collection systems
9	Map out waste flows	Mandate reporting on business waste
10	Provide R&D support	Provide incentives to ensure sales

1 Respondents could choose up to 10 key actions out of 27 options. Some of the terms used in the consumer surveys have been edited to allow comparisons with the business surveys. For instance, "Require households to separate their waste" has been changed to "Mandate consumer waste segregation".

SOURCE: Consumer surveys conducted in 2020 in Indonesia, Malaysia, Philippines, Thailand and Viet Nam; n = 2,000. Business surveys conducted in 2020 in Indonesia n = 47, Malaysia n = 54, Philippines n = 57, Thailand n = 58 and Viet Nam n = 55; total n = 271

What could this mean in terms of future actions to tackle marine debris? Many actions are required to tackle the plastic waste challenge and providing an exhaustive analysis of these actions is beyond the scope of this research. However, this research does highlight some interesting potential opportunities for each stakeholder group to drive positive change, including:

1. Consumers. There is a large gap between consumer concern with plastic waste to this translating into action in terms of purchasing decisions and recycling / reuse habits. Behavioural change programs coupled with initiatives around improving information (e.g. consistent labelling regarding the ability of a product to be recycled, waste segregation approaches) could be useful areas to explore, particularly in rural areas. As highlighted in this survey, using social media to engage consumers will be a key channel for conducting these activities.

2. Food and beverage businesses. Businesses agree that they need to do more to tackle plastic waste issues and prioritise recycling efforts. A starting point could be to ensure that all companies have public, quantified targets, with clear timelines. Encouraging greater mobilisation of businesses on these issues by joining relevant local, regional, or international efforts could also be crucial to building their capabilities and helping drive scale in their actions.

3. Governments. It is clear that both consumers and businesses think that their governments are concerned with plastic waste issues and are trying to take action. Some of the key areas where consumers and businesses believe government action could be most critical include mandating waste segregation, enhancing collection systems, ensuring consistent labelling on product recycling, and imposing littering fines and charges.

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Tackling the plastics challenge is feasible. Focused action could see dramatic improvements in a relatively short time.

Making this change happen will require a multi-stakeholder approach. UNEP and the FIA will be monitoring progress with follow-up surveys scheduled for 2022.

Appendix A: Approach

CONSUMER SURVEY

This report used online consumer surveys (available in both English and local languages) in Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. Quotas were added to ensure the sample matched the demographics of the country (e.g. gender, age, income). For statistical significance, a minimum sample size of 400 respondents in each country was analysed. To obtain indicative insights on the impact of urbanisation on plastic waste awareness, responses from Tier 1 cities were considered as urban while responses from other cities were considered as rural (in-line with similar studies).

The regional breakdown was as follows:

- **Indonesia** – Greater Jakarta (Urban) vs. Rest of Indonesia (Rural)
- **Malaysia** – Three Market Centres (Klang Valley, Johor, Penang) (Urban) vs. Rest of Malaysia (Rural)
- **Philippines** – Greater Manila (Urban) vs. Rest of Philippines (Rural)
- **Thailand** – Greater Bangkok (Urban) vs. Rest of Thailand (Rural)
- **Viet Nam** – Ha Noi / Ho Chi Minh (Urban) vs. Rest of Viet Nam (Rural)

BUSINESS SURVEY

A minimum sample size of 50 companies in each country was surveyed through business associations, food and beverage associations, universities, research organisations and government agencies. The business surveys were available in both English and local languages.

The total number of companies who responded to the surveys was 399:

- **Indonesia** – 78
- **Malaysia** – 81
- **Philippines** – 95
- **Thailand** – 82
- **Viet Nam** – 63

The local partners were:

- **Indonesia** – Gabungan Pengusaha Makanan dan Minuman Seluruh Indonesia (GAPMMI)
- **Malaysia** – International Islamic University Malaysia (IIUM) and the Federation of Malaysian Manufacturers Malaysian Food Manufacturing Group (FMM MAFMAG)
- **Philippines** – Philippine Chamber of Food Manufacturers, Inc. (PCFMI)
- **Thailand** – Department of Environmental Quality Promotion (DEQP), Ministry of Natural Resources and Environment
- **Viet Nam** – Academy of Policy and Development, Ministry of Planning and Investment (MPI)

Efforts were taken to ensure that the sample covers a wide range of companies across the value chain, company ownership structure, company size and locations within the countries. These ensured that the results are not skewed to a particular business type (e.g. foreign subsidiaries which might have a higher level of awareness of plastic waste issues).

Appendix B: Questionnaires

EXAMPLE OF A COUNTRY CONSUMER SURVEY (ENGLISH)

Consumer awareness survey of plastic waste issues in the Philippines 2020

Introduction

Food Industry Asia (FIA) and the United Nations Environment Programme (UNEP) have commissioned a consumer awareness survey to understand the level of understanding of plastic waste issues. A similar survey will be conducted in 2022 for comparison. This survey will cover Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. The purpose of this survey is to understand consumer attitudes towards plastic waste and your perspectives on how to best tackle plastic waste.

This survey will take approximately 10 minutes to complete. The information you provide will be anonymised. The overall findings will be published in a public report.

Thank you for participating in our survey. Your feedback is important, and your time is very much appreciated.

Section 1: Basic Information

Q1: What is your gender?

- Male
- Female

Q2: What is your age?

- 17 or younger
- 18 – 20
- 21 – 29
- 30 – 39
- 40 – 49
- 50 – 59
- 60 or older

Q3: What is your approximate average monthly household income?

- Less than PHP 8,000
- PHP 8,000 to PHP 15,999
- PHP 16,000 to PHP 31,999
- PHP 32,000 to PHP 78,999

- PHP 79,000 to PHP 119,999
- PHP 120,000 to PHP 159,999
- PH 160,000 and more

Q4: What is your educational level?

- No studies
- Elementary school
- Junior high school
- Senior high school
- University
- Post graduate qualification
- Others: _ _ _ _ _ _ _ _ _ _ _ _ _

Q5: Where do you currently live in?

- Greater Manila
- Davao city
- Cebu city
- Zamboanga City
- Antipolo
- Cagayan de Oro
- Dasmariñas
- Bacoor
- General Santos
- San Jose del Monte
- Other, please specify: _ _ _

Q6: How do you describe your neighbourhood?

- Urban
- Suburban
- Rural

Section 2: Perspectives on current awareness and concerns regarding plastic waste issues in the Philippines

Q7: Please indicate how much you agree / disagree with the following statements?

(NA = Don't Know; 1= Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly Agree)

(please tick only one answer per statement)

In the Philippines …						
The government is actively tackling plastic waste through policies and regulations	NA	1	2	3	4	5
The frequency of the waste collection system in my neighbourhood is adequate	NA	1	2	3	4	5
The quality of the waste collection system in my neighbourhood is adequate	NA	1	2	3	4	5
Businesses are concerned about plastic waste issues	NA	1	2	3	4	5
Businesses are doing enough to tackle plastic waste issues	NA	1	2	3	4	5
People should be more educated about plastics and the effect on the environment	NA	1	2	3	4	5
I am extremely concerned about the extent of plastic waste issues	NA	1	2	3	4	5
I am actively pursuing efforts to tackle plastic waste	NA	1	2	3	4	5
I know how to properly segregate my household waste for recycling	NA	1	2	3	4	5
I always segregate my household waste for recycling	NA	1	2	3	4	5
I regularly look at products to understand if the material has been recycled before I buy them	NA	1	2	3	4	5
If a product is made from non-recycled material, I am less likely to buy it	NA	1	2	3	4	5
I have a good understanding of what products can be recycled	NA	1	2	3	4	5

Q8: How often is your household waste collected by a waste collection organisation?

- Never
- Daily
- 1 time per week
- 2 times per week
- 1 time per month
- Other (please specify)

- Don't know

Section 3: Perspectives on current and potential set of actions to tackle plastic waste issues in the Philippines

Q9: Which of the following 3R (Reduce, Reuse and Recycle) actions are you currently doing or would consider doing in the future?

(please tick all actions that apply)

3R approach	Action	Currently doing	Would consider doing in the future (next 12 to 18 months)
Reduce	Reduce my use of disposable plastic products		
	Buy and use only what I need		
	Choose products with less packaging		
	Stop shopping at businesses which use a lot of packaging that cannot be recycled		
	Stop buying products that have packaging which cannot be recycled		
	Shop at businesses which are environmentally conscious about plastic issues		
	Participate in beach and riverside clean ups		
	Buy products in bulk or larger formats		
Reuse	Use reusable water bottles, reusable grocery bags and plastic alternatives when you can		
	Reuse disposable products such as plastic bags and plastic bottles (e.g. as containers to store non-beverage items)		
Recycle	Buy more products made from recycled / alternative materials		
	Take my reusable plastic waste to recycling facilities (e.g. waste banks)		

	Convert my plastic waste into useful products (e.g. using used plastic bottles to make decorative items and eco-bricks)		
Others (related to 3Rs)	Dispose of my litter, including plastics, in the appropriate bins		
	Spread awareness of how to recycle, reuse and reduce plastic waste to my friends, family and community		
	Actively monitor my plastic usage		

Q10: Are you currently or thinking about pursuing any other action not mentioned above? (max. 300 words)

(open text)

Section 4: Perspectives on potential opportunities to scale up action in the Philippines

Q11: Please indicate the top actions (up to ten) that are the most critical for the Filipino government to pursue to reduce plastic waste.

(please only indicate up to ten choices)

Government actions	Your top choices (please only indicate up to ten choices)
Businesses must report how much plastic packaging they use to the government	
Providing information to consumers, including on how to separate their waste to support recycling	
Labels (e.g. Recyclability labels to help consumers know what is recyclable)	
Government should understand more about the sources of plastics, how much is being collected and how it's being disposed of	
Businesses which have successfully managed to improve the amount of waste they produce can show other businesses how to do it	
Producers are required to pay consumers who recycle their packaging and products	
Businesses and consumers have to pay more if they produce more waste	
Littering fines and consumer charges	
Government procurement requirements (e.g. government offices can only buy recycled materials or products from businesses)	
Incentives to ensure the sale of products (e.g. offering long-term contracts for energy supply from waste-to-energy sources)	
Households are required to separate their waste	
Minimising the amount of waste imported to the Philippines from other countries	
Bans of single-use plastics	
Products have to be biodegradable or recyclable	
Businesses have to use a certain amount of recycled materials in their products	
Businesses allowed to use recycled plastic in food packaging and other bans removed	
Training for people who collect recyclable materials from streets and dumps, but are not part of any formal organisation	

Beach and riverside clean ups	
Collection systems (e.g. more public rubbish bins and recycling centres)	
Waterway infrastructure (e.g. placing metal traps over drains to collect waste materials)	
Landfill measures (e.g. new sanitary landfills where waste is buried in layers and covered with linings to prevent contamination, shifting hazardously placed landfills such as those around water bodies)	
Improving waste transportation system (e.g. installing sensors on waste trucks to prevent illegal dumping)	
Actions to reduce policy risk and increase participation (e.g. allowing local governments to introduce localised laws)	
Financing support, including blended finance which is a mix of government and private sector funding	
Research and Development (R&D) support (e.g. more funding available for studying plastic waste treatment)	
City-level training support	
Encourage different groups to work together (e.g. forming partnerships among government agencies, businesses and schools)	

Q12: What are the most effective ways for consumers to learn more about and be encouraged to take action on plastic waste issues? (please tick all that apply)

- Television
- Radio
- Newspapers
- Social media (e.g. Facebook, Twitter, Instagram)
- Door-to-door campaigns
- Community (e.g. friends, neighbours, family)
- Others (please specify)

Q13: Which plastic waste issues should be prioritised in consumer awareness programmes? (please tick all that apply)

- 3R (Reduce, Reuse, Recycle) concept
- Practical 3R tips
- Production of plastics
- Segregation of plastics
- Collection of plastics
- Disposal of plastics
- Impact of plastic pollution on the environment

- Others (please specify)

Q14: Please indicate how much you agree / disagree with the following statements?
(NA = Don't Know; 1= Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly Agree)
(please tick only one answer per statement)

Existing plastic waste initiatives in the Philippines…						
… incorporate international best practice	NA	1	2	3	4	5
… form collaborations between a range of different organisations, businesses and partners	NA	1	2	3	4	5
… are focused on the root causes of issues	NA	1	2	3	4	5
… are based on scaling up successful small-scale pilot tests / experiments	NA	1	2	3	4	5
… are closely coordinated with government initiatives	NA	1	2	3	4	5
… are coordinated with each other (e.g. share best practices, do not overlap)	NA	1	2	3	4	5

Q15: If you could recommend one specific action that the government could do in the Philippines to significantly reduce plastic waste, what would it be? (max. 300 words)
(open text)

EXAMPLE OF A COUNTRY BUSINESS SURVEY (ENGLISH)

Business awareness survey of plastic waste issues in Asia: Philippines 2020

Introduction

Food Industry Asia (FIA) and the United Nations Environment Programme (UNEP) have commissioned a business awareness survey to understand the level of awareness of plastic waste issues amongst food and beverage companies. A similar survey will be conducted in 2022 for comparison. This survey will cover Indonesia, Malaysia, the Philippines, Thailand and Viet Nam. The purpose of the survey is to understand how businesses are currently tackling plastic waste issues and identify the opportunities for a multi-stakeholder partnership to scale up current efforts.

This survey will take approximately 10 minutes to complete. Your individual responses will be completely anonymous and only the aggregated results will be shared with participating companies, as well as UNEP and FIA. The overall findings will be published in a public report.

If you have any questions about this survey, please contact Cheng Wei Swee <chengwei.swee@alphabeta.com>.

We thank you for your participation.

The survey is split into four main sections:

1. Basic information about your company
2. Perspectives on current awareness and concerns regarding plastic waste issues in the Philippines
3. Perspectives on current and potential set of actions to tackle plastic waste issues in the Philippines
4. Perspectives on potential opportunities to scale up action in the Philippines

<u>Before proceeding further in this survey, please ensure that you are representing **a food and beverage company operating in the Philippines.**</u>

Section 1: Basic Information

Q1: What term(s) best describe(s) your organisation? (select all that apply)

- Retailer
- Brand owner
- Manufacturer
- Importer
- Distributor
- Other (please specify)

Q2: What term best describes your company ownership structure?

- 100% Filipino owned
- Joint venture with a foreign company
- Foreign subsidiary
- Other (please specify)

Q3: What is the total number of permanent employees in your company in the Philippines?

- 1 – 19
- 20 – 49
- 50 – 99
- 100 – 249
- 250 – 499
- 500 – 999
- 1,000 – 2,500
- Over 2,500

Q4: Which cities in the Philippines do your company operate in? (please select all that apply)

- Greater Manila
- Davao city
- Cebu city
- Zamboanga City
- Antipolo
- Cagayan de Oro
- Dasmariñas
- Bacoor
- General Santos
- San Jose del Monte
- Other: _ _ _ _ _ _ _ _

Section 2: Perspectives on current awareness and concerns regarding plastic waste issues in the Philippines

Q5: Please indicate how much you agree / disagree with the following statements?

(NA = Don't Know; 1= Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly Agree)

(please tick only one answer per statement)

In the Philippines …						
The government is actively tackling plastic waste through policies and regulations	NA	1	2	3	4	5
Current efforts by government, industry and civil society are sufficient to tackle plastic waste	NA	1	2	3	4	5
Consumers are concerned about plastic waste issues	NA	1	2	3	4	5
My company is extremely concerned about plastic waste issues	NA	1	2	3	4	5
My company is actively monitoring its plastic usage	NA	1	2	3	4	5
My company is actively pursuing efforts to tackle plastic waste (including reduction, reuse and recycling)	NA	1	2	3	4	5
My company has a dedicated individual / team looking into plastic usage and reduction efforts	NA	1	2	3	4	5
The current efforts of our company to tackle plastic waste are sufficient	NA	1	2	3	4	5

Section 3: Perspectives on current and potential set of actions to tackle plastic waste issues in the Philippines

Q6: Which of the following actions does your company currently focus on; or are potentially interested in focusing on in the future?

(please select all that apply)

Approach	Action	Currently implementing	Potentially interested in implementing in the future (next 12-18 months)
Target setting	Target to reduce plastic waste		
	Target to increase the use of recycled products		
	Target to educate a certain number of consumers through events and campaigns		
	Target to set criteria related to sustainable packaging in the procurement process (e.g. avoiding products with microbeads or only purchasing from suppliers with track records in reducing plastic waste)		
Packaging reduction	Monitoring of plastic waste usage and waste		
	Reduction of single-use plastics (e.g. plastic bags, straws)		
	Light-weighting of primary and secondary packaging of products		
	New packaging formats (e.g. package-free concept or transition from small-format plastic packaging to larger packs)		
	Increased use of alternative and recycled materials		

	Reduction of tertiary packaging (i.e. involved in the transport of goods)		
Stakeholder engagement	Recyclability labels on products		
	Consumer education campaigns		
	Employee education and training campaigns		
	Organising coastal clean ups		
	Engagement with policymakers		
	Informal waste picker support programmes		
	Participation in a multi-stakeholder platform dedicated to plastic waste issues		
Recycling / reuse	Providing financial incentives for reuse / recycling (e.g. container deposits, discounts for use of reusable containers, low value plastic subsidy)		
	Provide infrastructure to support collection and recycling (e.g. refuse bins)		
	Waste exchange programme (e.g. taking part in operating platforms that link and match companies to ensure waste from one company can be used in another company)		
	Engaging in waste-to-energy initiatives		
	Engaging in recycling technologies (e.g. MRF)		
	Engaging in research and development (R&D) related to recycling / reuse		

	Providing reusable products (e.g. products are returned by consumers and directly used again after cleaning)		

Q7: Is your company undertaking any other initiatives related to plastic waste which are not covered above? If so, please describe them below. (max. 300 words)
(open text)

Q8: Can you share information on an initiative that your company is involved in related to plastic waste which you are excited about? (max. 300 words)
(open text)

Q9: Does your company have a target to address plastic waste?

- No
- Yes (but only communicated internally)
- Yes (and communicated internally and publicly)

Q10: Is the target quantitative (e.g. reduce plastic waste by 25%)?

- No
- Yes

Q11: Does the target indicate a time for when it will be achieved (e.g. by 2025)?

- No
- Yes

Q12: If your company has a target for addressing plastic waste, can you please share what it is? (max. 300 words)
(open text)

Q13: Is your company part of any group(s) tackling plastic waste issues in the Philippines?

- No
- Yes (in a local group)
- Yes (in a regional / international group)
- Yes (in multiple groups)

Section 4: Perspectives on potential opportunities to scale up action in the Philippines

Q14: Please indicate the top actions (up to ten) that are the most critical for the Filipino government to pursue to help address plastic waste.

(please only indicate up to ten choices)

Area	Description	Actions	Your top choices (please only indicate up to ten choices)
Informing	Seeking to increase information on waste flows, as well as raise business and consumer awareness	Mandatory reporting on business waste (i.e. businesses must report how much plastic packaging they use to the government)	
		Providing information to consumers, including on waste segregation	
		Labels (e.g. Recyclability labels to help consumers know what is recyclable)	
		Mapping of waste flows (e.g. the government should understand the sources of plastics as well as how much is being collected and disposed of)	
		Sharing of approaches among businesses for tackling waste (i.e. businesses which have successfully managed to improve the amount of waste they produce can show other businesses how to do it)	
Financing	Seeking to identify sustainable financing approaches to the waste system	Extended Producer Responsibility (EPR) scheme where producers pay a fee to support the collection and recycling of product packaging (e.g. in some countries, producers are made to pay consumers who recycle their bottles)	
		Pay-as-you-throw (PAYT) approaches for businesses and consumers (e.g. businesses and	

		consumers have to pay more if they produce more waste)	
Incentivising	Incentivising change in consumer and business behaviour (beyond financing approaches above)	Littering fines and consumer charges	
		Government procurement requirements (e.g. government offices can only buy recycled materials or products from businesses)	
		Incentives to ensure the sale of products (e.g. offering long-term contracts for energy supply from waste-to-energy sources)	
Mandating	Requiring certain behaviour changes in producers and consumers	Mandated consumer waste segregation (i.e. households must separate their waste)	
		Limitations on plastic waste imports (e.g. reducing the amount of plastic waste from other countries into the Philippines to a certain volume)	
		Bans of single-use plastics	
		Product specifications (e.g. products to be biodegradable or to have the ability to be recycled)	
		Recycled content standards (i.e. businesses must ensure a certain amount of recycled materials in their products)	
Enabling	Supporting the waste ecosystem, through training, financing, infrastructure and technology support	Regulatory changes (e.g. removing bans and allowing businesses to use recycled plastic in food products)	
		Training for the informal waste sector which refers to people who collect recyclable materials and are not part of any organisation	
		Coastal clean ups (e.g. beach and riverside clean ups)	
		Collection systems (e.g. more public rubbish bins and recycling centres)	

		Waterway infrastructure (e.g. placing metal traps over drains to collect waste materials)	
		Landfill measures (e.g. new sanitary landfills where waste is buried in layers and covered with linings to prevent contamination, shifting hazardously placed landfills such as those around water bodies)	
		Improving waste transportation system (e.g. installing sensors on waste trucks to prevent illegal dumping)	
		Actions to reduce policy risk and increase participation (e.g. allowing local governments to introduce localised laws)	
		Financing support, including blended finance which is a mix of government and private sector funding	
		Research and Development (R&D) support (e.g. funding studies to find new plastic waste treatment methods)	
		City-level training support	
		Multi-stakeholder partnerships (e.g. encourage different groups such as government agencies, businesses and schools to work together)	

Q15: Please indicate how much you agree / disagree with the following statements?
(NA = Don't Know; 1= Strongly Disagree; 2= Disagree; 3= Neither agree nor disagree; 4= Agree; 5= Strongly Agree)
(please tick only one answer per statement)

Existing plastic waste initiatives in the Philippines…						
… incorporate international best practice	NA	1	2	3	4	5
… form partnerships between a range of different stakeholders	NA	1	2	3	4	5
… are focused on the root causes of issues	NA	1	2	3	4	5
… are based on scaling up successful pilot initiatives	NA	1	2	3	4	5
… are closely coordinated with government initiatives	NA	1	2	3	4	5
… are coordinated with each other (e.g. share best practices, do not overlap)	NA	1	2	3	4	5

Q16: If you could recommend one specific action that the government could do in the Philippines to significantly reduce plastic waste, what would it be? (max. 300 words)
(open text)

Section 5: FINAL Comments
Q17: Do you have any additional comments or feedback on this survey? (max. 300 words)
(open text)

Section 6: Contact Details (optional)
Q18: Full name
Q19: Company
Q20: Job title
Q21: Email address
Q22: Phone number
Q23: Please tick here if you're happy to be contacted for further information or a follow-up call.

- Yes
- No

Acknowledgements

SEA circular: solving plastic pollution at source

SEA circular is an initiative of UN Environment Programme and the Coordinating Body on the Seas of East Asia (COBSEA) to inspire market-based solutions and encourage enabling policies to prevent marine plastic pollution in South-East Asia.

https://www.sea-circular.org/

United Nations Environment Programme (UNEP)

UNEP is the leading global voice on the environment. It provides leadership and encourages partnership in caring for the environment by inspiring, informing and enabling nations and peoples to improve their quality of life without compromising that of future generations.

https://www.unenvironment.org/regions/asia-and-pacific

Coordinating Body on the Seas of East Asia (COBSEA)

COBSEA oversees the implementation of the East Asian Seas Action Plan, adopted in 1981 and revised in 1994. The East Asian Seas Action Plan brings together nine countries - Cambodia, People's Republic of China, Indonesia, Republic of Korea, Malaysia, the Philippines, Thailand, Singapore and Vietnam - in development and protection of the marine environment and coastal areas of the region, for the health and wellbeing of present and future generations.

https://www.unenvironment.org/cobsea/

The Swedish International Development Cooperation Agency (Sida)

Sida is a government agency working on behalf of the Swedish parliament and government, with the mission to reduce poverty in the world. Through its work and in cooperation with others, Sida contributes to implementing Sweden's Policy for Global Development (PGU). Sida carries out enhanced development cooperation with a total of 35 countries in Africa, Asia, Europe and Latin America.

https://www.sida.se/English/

Food Industry Asia (FIA)

FIA was founded in July 2010 by a group of leading food and beverage companies. From our base in Singapore, we seek to enhance the industry's role as a trusted partner in the development of science-based policy in the region. FIA provides an important hub for advocacy and debate. We bring together the food industry's most senior business leaders to champion initiatives that promote sustainable growth and support regional policies that deliver harmonised results.

https://foodindustry.asia/

AlphaBeta

AlphaBeta is a strategy and economic advisory business serving clients across Asia from our headquarters in Singapore. Our team of advisors are experts in both strategy and economics who partner with clients from the private, public, and not-for-profit sectors to identify the forces shaping their markets and develop practical plans to create prosperity and wellbeing.

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SEA circular
solving plastic pollution at source

UN environment programme

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