

ASEAN ON POINT

17 / 06 / 2021

HOW POLICIES CAN SUPPORT THE PRIVATE SECTOR IN COMBATTING MARINE PLASTIC DEBRIS

ASEAN ON POINT PUBLIC FORUM SERIES

In response to the global coronavirus pandemic, the ASEAN Secretariat (ASEC) and the Economic Research Institute for ASEAN and East Asia (ERIA), will co-host a series of public forums – 'ASEAN on Point' - to address issues of importance to the advancement of ASEAN. The forums will provide a platform to bring together representatives of diverse stakeholders to share knowledge on the latest research and insights on relevant topics on post-pandemic recovery in order to inform the policy discourse. It is hoped that the insights and recommendations from the forums can contribute to different sectoral work in ASEAN towards recovery. The vision of these Forums is to 'Build Back Better' so that the region's recovery policies result in a more resilient, inclusive, and sustainable region.

Panelist:

- Supatchaya Techachoochert, Co-Founder, Refill Station, Thailand
- Tommy Tjiptadjaja, Co-Founder and CEO, Greenhope, Indonesia
- Kentaro Inukai, President, Pana-Chemical, Japan
- Iris Chang, Regional Head of Marketing (Strategic Projects) & Sustainability, Grab Singapore

Moderator:

- Dwight Jason Ronan, Senior Officer, The ASEAN Secretariat
- Michikazu Kojima, Research Fellow, Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD), ERIA

AGENDA

TIME	AGENDA
10:00-10:15AM	MC: Dwight Jason Ronan, Senior Officer, The ASEAN Secretariat Opening Remarks: • H.E. Kung Phoak, Deputy Secretary-General (DSG) of ASEAN for ASEAN Socio-Cultural Community (ASCC), The ASEAN Secretariat • Koji Hachiyama, Chief Operating Officer, ERIA
10:15-10:45AM	 Moderator: Dwight Jason Ronan, Senior Officer, The ASEAN Secretariat Michikazu Kojima, Research Fellow, Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD), ERIA Panelists: Supatchaya Techachoochert, Co-Founder, Refill Station, Thailand Tommy Tjiptadjaja, Co-Founder and CEO, Greenhope, Indonesia Kentaro Inukai, President, Pana-Chemical, Japan Iris Chang, Regional Head of Marketing (Strategic Projects) & Sustainability, Grab Singapore Each panelist will deliver a 5-minute presentation on the selected topic
10:45-11:30AM	Open Discussion with Q & A
	Closing Remarks Michikazu Kojima, Research Fellow, RKC-MPD, ERIA

PANELISTS AND MODERATOR



Supatchaya Techachoochert (Ann) Co-Founder, Refill Station, Thailand

Supatchaya Techachoochert is a biologist and science communicator. She has been the environmental manager at Mae Fah Luang Foundation working on ecological service in community forest and value chain of plastic waste at Doi Tung area, the royal development project.

Besides, she is a co-founder "Refill Station", a social enterprise and the first bulk store in Thailand to promote zero-waste lifestyle. Refill Station has been inspiring other entrepreneurs to set up similar bulk stores in Thailand and also in ASEAN countries.



Tommy Tjiptadjaja Co-Founder and CEO, Greenhope, Indonesia

Tommy Tjiptadjaja is the co-founder and CEO of Greenhope. After finishing his study in the U.S, Mr. Tjiptadjaja worked in several big companies in the Europe and the U.S. 10 years later, he decided to go back to Indonesia and reach his vision to build the country by establishing Green hope.

Greenhope is a global green technology social enterprise based in Indonesia with the mission of addressing plastic waste pollution, combining credible biodegradable technologies from locally abundant bio-source with contextualized social innovations. It developed, patented (in US, Singapore, Indonesia), and produces its own tapioca-based compostable Naturloop and Ecoplas as well as oxobiodegradable additive Oxium. Greenhope has partnered with major brands in Indonesia as well as exports to >12 countries around the world, including UK, USA, Central America, Europe, Southeast Asia.

Greenhope and its co-founders have received many recognitions and is part of many key platforms, including Schwab Social Entrepreneurs at the World Economic Forum, 50 Most Impactful Social Innovators, Top 100 Visionary Leaders by Real Leaders magazine, Asia Tatler Most Impactful 2020, The Incubation Network, Fashion For Good, etc.



Kentaro Inukai President, Pana Chemical, Japan

Mr. Kentaro Inukai is the president of Pana Chemical, a leading EPS (or Styrofoam) recycling company with more than 80% of share in Japan. The company was founded 45 years ago by his father, and today 2000 Japanese companies have adopted Pana Chemical's J-EPS technology to recycle Styrofoam.

Mr Inukai is also the Representative Director of Resource Plastic Association, whose main objective is to draw a clear line between "waste plastic" and what they promote to be the "resource plastic". Resource plastics are high-quality, sorted and immediately recyclable material. By building an ethical standards and providing Resource Plastic Certifications to plastic recycling establishments which went through the Association's reviewing process, he is striving to make sure that plastic recycling business is perceived as positive advocate contributing to the circularity of plastics both within and outside Japan.



Iris Chang

Regional Head of Sustainability, Grab, Singapore

Iris Chang is the Regional Head of Sustainability (ESG) of Grab. Ms Chang is an experienced consumer marketing professional having spent almost a decade in the telecommunications and tech sector, with her last 5-F years having multiple roles at Grab (including past 2 years in social impact).

Ms. Chang actively leads the environmental sustainability efforts across the 8 operating markets, including decarbonization and waste pollution management.



Dwight Jason Ronan Senior Officer, The ASEAN Secretariat

Dwight Jason Ronan currently serves as Senior Officer (Environment Division) for the ASEAN Secretariat. Over the last decade, he has worked with different development organizations in Southeast Asia providing program management, capacity building, and communication expertise on various sustainable development initiatives. He has been involved in managing and implementing regional projects on environmental management, sustainable agriculture, marine governance, peace building, and post-disaster livelihood recovery, among others. He holds a master's degree in regional and rural development planning and a bachelor's degree in development communication.



Michikazu Kojima Research Fellow, Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD), ERIA

Michikazu Kojima is an economist specialising in environmental policies, especially, waste management and recycling in Asian countries. Prior to joining ERIA in March 2018, he was a chief senior researcher at Institute of Developing Economies (IDE) in Japan from 2015. He has also contributed in the field of international cooperation, as a member of Expert Working Group of Environmentally Sound Management under the Basel Convention, a member of Technical Expert Committee for Green Industry Platform by UNIDO and the course leader on JICA training courses on recycling policy. He holds Master of Science on Agricultural and Resource Economics from University of California, Berkeley.

EVENT OVERVIEW

As a result of rapid economic growth coupled with the lack of solid waste management infrastructure, East and Southeast Asian regions are recognized today as the biggest contributors of marine plastic pollution. Plastic is a material that is versatile, resistant, lightweight, and inexpensive to produce, which makes it ubiquitous in our everyday lives. However, the amount of plastic waste released in our environment and its negative effects on our marine ecosystem have attracted increasing scientific concern in recent years. In 2019, alarmed by this situation, the ASEAN Member States (AMS) welcomed the ASEAN Framework of Action on Marine Debris and adopted the Bangkok Declaration on Combating Marine Debris in ASEAN Region. Although much is still left to be studied, particularly the long-term impacts of plastics on our marine ecosystem, and its potential harm to human health through the food chain, there is a wide international consensus to take urgent preventative actions before further damage is done. Echoing these concerns, The Economic Research Institute for ASEAN and East Asia (ERIA) established the Regional Knowledge Centre for Marine Plastic Debris (RKC-MPD) in 2019 to provide ASEAN+3 Member States with support in addressing emerging challenges associated with marine plastic debris.

Given the multitude of roles plastic plays in our society, responses to marine plastic pollution will need to involve a wide array of stakeholders, from governmental and non-governmental organizations, research institutions, international actors, the business sector, to the general public. The need to collectively investigate integrated solutions that move away from linear take-make-dispose economy, into a more circular and sustainable one has never been greater.

This ASEAN on Point Forum was held by the ASEAN Secretariat (ASEC) and ERIA to focus on the important role played by the private sector, especially in tackling plastic waste from upstream production. Indeed, some of the leading private companies in ASEAN+3 region have paved the way for the development of products, technologies, and services that reduce plastic waste generation significantly and by consequence, preventing those plastics from leaking into the marine environment. One of the important missions of ERIA and ASEC is to acknowledge efforts undertaken by businesses and shine a light on their accomplishments in the hope of further promoting this positive shift. The Forum was an occasion for the participants not only to learn about innovative business practices conducive to plastic waste mitigation, but also provide policy recommendations that will be shared with policymakers across the region. The Forum was also an occasion for ERIA to present the RKC-MPD and its activities. The goals of the RKC-MPD are to (a) create a regional network and raise awareness regarding marine plastic debris, (b) promote innovative actions in each member country, and (c) facilitate national and regional cooperation. Capacity development and information sharing are the two chief pillars that underpin the RKC-MPD's work. Partnering with the private sector to promote good practices implemented is one of the important on-going activities. On this front, an online platform to support private sector initiatives to reduce plastic waste and marine plastic debris was launched in 2021 (https://rkcmpd-eria.org/story). The platform collects and disseminates private companies' business activities that are conducive to marine plastics mitigation. Inspired by the private companies' representatives invited at this occasion, it is hoped that the Forum would attract a larger number of private companies to take part in this initiative and join forces in the fight against marine plastics.

WELCOMING REMARKS

Deputy Secretary-General of the ASEAN Socio-cultural Community, H.E. Kung Phoak, delivered his Welcoming Remarks and emphasized the urgency for all stakeholders to address the regional problem of marine plastic pollution. Exponential population growth over the last decades combined with rapid coastal development across ASEAN has increased the threat of marine plastic debris. Tackling the matter requires multi-stakeholder participation and action, particularly, from the private sector, civil society, local communities, and governments.

Businesses of all sizes play an especially integral role in addressing marine litter in Southeast Asia's oceans and coasts. H.E. Phoak explained how the COVID-19 pandemic boosted the demand and use of plastics as the public turned to online delivery services for their wide-ranging needs. The pandemic has also resulted in increased waste generation in the health sector, particularly face shields, face masks, and hand gloves. Citing a study released in February 2021, H.E. Phoak shared that nearly 3.4 billion single-use face masks and shields are discarded daily. Furthermore, an extra 1.6 million tons of plastic wastes are generated globally every day since the start of the pandemic. Such trends are not limited to one specific country, but have occurred regionally thus, as highlighted in H.E. Phoak's speech, "marine plastic pollution is a transboundary problem and, thus, requires transboundary solutions."

The ASEAN Framework of Action on Marine Debris, adopted in 2019, was ASEAN's commitment to combatting marine pollution. In recognizing the urgency and importance of the issue, the ASEAN Regional Action Plan (RAP) on Combating Marine Debris in AMS was recently launched, as part of a cooperation with the World Bank's PROBLUE initiative. ASEAN is poised to implement the 14 strategic regional actions stipulated in the RAP within the next five years to protect the region's vital marine resources and to change Southeast Asia's course on the plastic waste battle. ERIA established the RKC-MPD in 2019 which expanded the partnerships among the ASEAN+3 Member States. ERIA also launched an online platform in early 2021 intending to enhance private sector engagement on reducing plastic waste regionally. H.E. Phoak concluded his Welcoming Remarks by calling for a "shared vision and joint efforts" to ensure "cleaner and healthier oceans and coasts in the ASEAN region."

Chief Operating Officer of ERIA, Mr. Koji Hachiyama shared his Welcoming Remarks underscoring the importance of the private sector in addressing challenges associated with marine plastics. Similar to H.E. Phoak's speech, Mr. Hachiyama highlighted how East and Southeast Asia's growing populations and economies combined with insufficient waste management have made the region one of the biggest contributors to marine plastic pollution. ERIA's RKC-MPD online platform aims to have the private sector share initiatives with the potential to reduce plastic waste regionally, support intra-regional information exchange, and expand businesses that are making a difference to the planet. Mr. Hachiyama ended his speech by calling on the importance of reflecting on how we use our resources and assessing whether there are more sustainable and responsible alternatives to adopt.

PANEL DISCUSSIONS

ERIA invited four guest speakers from ASEAN+3's private sector to share their initiatives and experiences on how their companies are working towards the reduction of plastic waste. The discussants were representatives of enterprises that vary in size, nationalities, and history, thus offered viewers a diverse and enriching insight that reflects the challenges as well as opportunities of collaboration to reduce marine plastic debris. The panel discussion featured a 'Flash Question' session led by Mr. Dwight Jason Ronan, ASEC Senior Officer (Environment Division), who shared several facts regarding ASEAN's plastic pollution reality. One of the facts mentioned during the session included a study published in 2021, which revealed that AMS make up an estimated 55% of the global plastic leakage from rivers to the oceans.

Ms. Supatchaya Techachoochert, Co-Founder of Refill Station, spearheads Thailand's first bulk store where customers can purchase cleaning or personal care products by using or bringing their own containers. As a biologist, Ms. Techachoochert turned her passion for environmental conservation into a business venture with packaging-free purchasing methods and the goal of addressing plastic pollution in Thailand's cities. In keeping with the remaining three speakers, Ms. Techachoochert believes that running a company is more than about profits thus Refill Station additionally provides education to Thai society about environmental problems to uplift the country's zero-waste communities. Throughout her five-year experience at the helm of Refill Station, Ms. Techachoochert has witnessed improvements in the public awareness of plastic pollution among Thailand's society compared to half a decade ago, where such understanding was dominated by the expat community.

Mr. Tommy Tjiptadjaja, Co-Founder and CEO of Greenhope, leads an Indonesian green tech social enterprise that researches, develops, patents, and manufactures its own alternative materials to plastic. As part of his research, Mr. Tjiptadjaja discovered that the world uses 300-400 million tonnes of plastic annually, which amounts to ~25 million containers! However, only 9-10% of the plastic waste is recycled, while at least 8-10 million tons leak to nature every year. The disproportionately small percentage of recycled plastic waste underscores the seriousness of finding an environmentally friendly approach to reducing plastic pollution. The battle with plastic waste is complex and there is no single solution that will be a silver bullet, thus, all stakeholders must work together to find the right/appropriate set of solutions as well as the roadmap towards achieving them. Moreover, the sheer scale of the global plastic problem is enormous and behavioral changes will also be needed to establish a better waste management process. Mr. Tjiptadjaja reaffirmed his confidence in entrepreneurs and innovators to develop new methods and technologies to handle plastic pollution. However, governments must work in adjunct to provide a holistic and contextual policy framework as well as a roadmap that has been adapted to the stakeholders' inputs, incentives, and disincentives. The government can also stimulate innovation by facilitating rapid prototyping or minipilots to assess what types of initiatives work best in reducing plastic debris. In this

fight, Mr. Tjiptadjaja stressed that there is only one enemy, which is "conventional plastic being used in a conventional way" so his proposition is to either "change the way we use and dispose, and/or change the material."

Mr. Kentaro Inukai, President of Pana Chemical, leads a Japanese company known for its unique styrofoam recycling system, which takes discarded expanded polystyrene (EPS), which used to overwhelm one of the biggest fish markets of the world located in Tokyo and turns it into ingot blocks. Pana Chemical has recycled around 1 billion EPS ingots over the span of 40 years and in Japan, the ingots are used to produce other plastic products demonstrating its potential in the circular economy. Mr. Inukai explained that to strengthen the awareness of plastic pollution, the company provides education and information on plastic and recycling, offers certification programs, and works with universities and other manufacturers. To strengthen pro-sustainability businesses, Mr. Inukai finds significance in a human network, safety, trust, and sustainability.

Ms. Iris Chang, Regional Head of Sustainability at Grab, offered her in-depth insights from working for one of Southeast Asia's largest online service provider. Grab's food delivery services have become a significant contributor to single-use plastic consumption, particularly during the COVID-19 pandemic, which saw more food and beverage (F&B) vendors registered as Grab merchants due to the greater popularity of home delivery services. The demand for Grab's services has not hindered the company's overarching goal of tackling the problem of plastic.

Ms. Chang shared that the company is working to replace plastic food containers with more sustainable materials such as paper which degrade more rapidly. However, the transition has proven to be challenging. Four key aspects make it difficult for F&B merchants to adopt more eco-friendly packaging: (a) price, where merchant partners are sensitive to costs and sustainable containers can cost four to five times more than plastic packaging; (b) design, where most Asian cuisines are unsuitable for the design of food delivery boxes; (c) greenwashing risk such that many restaurant owners are not aware of what is good and bad for the environment; and (d) absence of regulatory requirements, which diminishes the motivational needs of restaurant owners to switch their packaging type.

Ms. Chang underlined that giving the public the option to voluntarily adopt more environmentally friendly ways is insufficient and there must be incentives for the public and merchants to do more. On policies, Ms. Chang believes that encouraging circularity is vital while also maintaining a pragmatic approach on the costs and implications to all parties involved including the consumer, the restaurant owners, and platforms like Grab. She reiterated three factors to assess: (a) collaboration, where the complex nature of sustainability in the F&B sector requires a unique approach, thus, other initiatives can be explored and tested to determine what can work best; (b) sustainability of stakeholders, especially sustainable methods that can be adopted by F&B merchants that will not jeopardize livelihoods; (c) investment, particularly investing in the research and development of newer technologies, models, and materials would enhance sustainability measures.

SUMMARY OF QUESTIONS & ANSWERS

What policies are related to your business and how can policies support your business? How can policies become obstacles to your business?

Ms. Techachoochert explained how most of Refill Station's stores in Southeast Asia are forbidden to sell cleaning products and liquid detergents without packaging due to strict regulations imposed by the food and drug regulating agencies in each respective ASEAN countries. As such, many of these stores instead sell food products, which is different than Refill Station's Thailand stores that offer various refillable cleaning products. Changing such policies would create a better environment for green businesses, especially considering how food poses a higher risk of contamination than liquid detergents though the regulations do not reflect such realities.

Mr. Inukai believes that because plastics disposal is costly in Japan and failure to comply with regulations results in costly penalties, Japanese businesses are motivated to invest in adequate machinery for their recycling systems, which can minimize the cost for plastic waste disposal. To encourage companies to purchase recycling machinery, governments could offer incentives, such as a subsidy for the acquisition of such equipment.

Mr. Tjiptadjaja underscored the significance of establishing an ASEAN standard for the certification of sustainable materials and products to replace plastic. The measure is feasible given that countries like Indonesia, the Philippines, and Japan have numerous experts who can assist in creating a uniform standard. ASEAN must work towards defining its own standards on matters such as composters and landfills as its geographical location entails a wide range of different needs than those in western countries, while having much more commonalities among ASEAN countries. Moreover, policies to support green enterprises must focus on price considering the massive difference in cost between conventional plastic and bioplastics.

Southeast Asia's high humidity and heat, as well as year-round sunshine, sets it apart from subtropical or northern countries like those in Europe or the United States. The geographical location and condition play a substantial role

in biodegradation, hence, as Mr. Tjiptadjaja stated, "We need to work with our environment, not against it."

New technologies possessed by companies like Greenhope explore possibilities to take advantage of the biodegradation and the composting conditions specific to Southeast Asia, when developing alternative materials. The high level of moisture, oxygen, and other gases in the region's landfills is unavoidable, but by investing and utilizing technologies that can create biodegradable products or spur biodegradation of waste, governments can prevent a pile-up in landfills, hence, making it safer for the planet and the people.

Mr. Tjiptadjaja suggested the introduction of a levy on conventional plastic would encourage innovative solutions as there are no or less negative externalities on greenplastic compare to conventional plastic. Mr. Tjiptadjaja reaffirmed that a market-based approach would be more suitable than a blanket ban approach to plastics because "people will find a workaround anyway." Hence, he encourages adjustments from the economic angle to have the public participate in plastic circularity.

How can governments play a bigger role in building a green economy?

Based on Grab's experience, there will always be restaurants that will need singleuse containers though they can be of sustainable material. However, Ms. Chang supports the introduction of a levy on conventional plastic. Although a renowned platform like Grab has attempted to convert its F&B merchants to adopting sustainable containers, the price of the products cannot compete against the price of conventional plastic. As such, governments could offer tax cuts for companies that implement sustainable initiatives or invest in businesses that innovate and offer newer technologies, models, and materials to support a greener economy.

Governments can additionally invest in pilot projects that focus on scalability to widen the outreach of programs, such as information dissemination on proper recycling and waste collection systems. Greater transparency on the logistics of waste collection can also be pursued so that consumers and the public have greater awareness of where their waste goes and how it is treated. Ms. Chang shared that governments could work with Grab on its returnable container initiative through measures, such as establishing a government-approved cleaning center or determining safety protocols on the hygiene and cleaning process of reusable containers.

Mr. Inukai suggested that governments enhance information dissemination programs to better educate youths and the next generations on recycling, plastics, and plastic packaging labels. In his experience, Mr. Inukai finds that knowledge on plastic information, specifically plastic packaging labels, is lacking.

What is the greatest motivation for private sector companies to tackle the marine plastic problem? Can sustainability be a profitable venture for business enterprises?

Mr. Tjiptadjaja believes that "true businesses are the ones who really solve problems" and that the planetary-sized problems of plastics waste mean there is an opportunity. To solve the global waste problem, businesses will need to look beyond financial returns and also add 'planet returns' or indexes that measure how well a business has positively contributed to the environment annually. The advantage that today's entrepreneurs have is that the newer generation of consumers is more socially aware of environmental damage and climate change thus giving hope for new business models as well as companies that are financially motivated and environmentally friendly.

What specific message do you want to tell your national or local governments and ASEAN for us to provide more sustainable solutions to marine plastic problems?

Ms. Techachoochert suggests that governments should worry less about backlash from voters or the private sector due to the extreme urgency in resolving environmental problems. The amount of plastic waste increases daily and although there is a regional roadmap available, there has yet to be any effective regulation that tackles the root of the plastic problem.

Mr. Tjiptadjaja called for a more stringent punishment and discipline to change the behavior of people and how the public deals with waste. The issue of plastic waste cannot be resolved by simply changing the material, but it must also be in the mindset and behavior of the consumers. Mr. Tjiptadjaja encouraged governments to implement numerous trials and pilot projects on sustainability and to ultimately "be the enabler of all the innovators and work together, measure them, and transparently reporting them."

Through her interaction with governments in Southeast Asia, Ms. Chang found that many lack focus because different types of sectors have different problems hence, she believes that "there's not a one-size-fits-all for everybody." As such, governments can turn to the private sector to pilot and focus on two or three solutions on sustainability instead of having to implement hundreds of initiatives for different sectors which might be less impactful and will be slow to take effect.

POLICY RECOMMENDATIONS

Issue: Stronger Government and Private Sector Collaboration

Recommendation: Forge stronger collaborations between governments of AMS and the private sector to find effective and swift solutions.

Rationale: The regional problem of plastic pollution is of utmost urgency with limited time to protect Southeast Asia's coasts and oceans. The private sector can offer industry input and suggestions, thus, narrowing the policy options that governments must make on sustainability alternatives.

Furthermore, numerous private sector players have launched their respective sustainability projects, which AMS can invest in via pilot projects or rapid prototyping to select the most effective eco-friendly solutions. Governments can additionally support the private sector through educational initiatives on recycling, identifying safety protocols, or establishing a government-approved reused plastic containers cleaning center offered to business owners

Issue: Increase the Price of Conventional Plastic

Recommendation: Introduce a levy on conventional plastics to discourage businesses and society from using single-use plastics.

Rationale: Sustainable food packaging is four to five times more expensive than plastic packaging deterring restaurant owners from opting for eco-friendly options. The high costs accrued are less appealing for the private sector to adopt as it could jeopardize their livelihoods in the long term.

Moreover, a blanket ban on conventional plastics has proven ineffective in ASEAN as people generally find a workaround of the restrictions, and mass awareness on the dangers of single-use plastics falls short. Price is sensitive for many businesses as it affects their bottom line, therefore, AMS must be pragmatic in its approach to

sustainability for industries and society. The conventional plastic is much cheaper because it excludes the cost of the negative externalities (e.g., aesthetic damage, impacts on marine lives, hazardous emissions of plastic incineration). To increase its price, such externalities shall be taken into account.

Issue: Incentivize the Private Sector to Adopt Sustainable Measures

Recommendations: Governments shall offer subsidies or other incentives to the private sector who have already implemented sustainable measures or intend to participate in such activities.

Rationale: Environmentally friendly measures remain too expensive for many private businesses to fully embrace, as demonstrated in the stark price difference between sustainable containers and conventional plastic. To motivate the private sector to play a bigger role in the circular economy, governments can offer incentives, such as subsidizing the costs of recycling machinery or programs that promote sustainability.

Issue: Mandatory Regulation to Utilise Sustainable Packaging for the F&B Sector

Recommendations: Governments must make it mandatory for restaurant owners to use sustainable food packaging as a means of discouraging single-use plastics and conventional plastic bags.

Rationale: Restaurant owners are less inclined to invest in sustainable packaging if it is not mandated by the government. The significant price difference between sustainable and plastic food packaging and utensils further discourages these merchants from adopting eco-friendly alternatives in their daily operations. A compulsory regulation by the government would leave less room for F&B players to continue any environmentally damaging practices hence greatly reducing the amount of plastic waste generated from food deliveries.

Issue: Identify an ASEAN Standard for Biodegradable Products

Recommendation: Define a regional standard of biodegradable products to ensure uniformity in the collective fight against mounting waste.

Rationale: Southeast Asia's geographical location makes its waste collection process and biodegradation conditions unique, thus, AMS must work with the environment and not against it. AMS have many experts who can assist in determining a regional standard for sustainability matters such as biodegradable products and composting.

Green technologies offer ASEAN new knowledge and insights on how to tackle the plastic waste problem. Such technologies also make it possible to produce eco-friendly materials that can be used to reduce the pile-ups of Southeast Asia's landfills which in the past have proven to be deadly. Without setting scientific standards, greenwashed products can circulate on the market, and uncertainties surrounding the sustainability of so-called green products can undermine the genuine on-going efforts.

Issue: Lower the Price of Eco-Friendly Products

Recommendation: Make eco-friendly products affordable to motivate private sector players to participate in the green economy and encourage individuals to play a bigger role.

Rationale: Environmentally friendly goods are generally deemed expensive to the public, thus, limiting the potential and scale of the plastic pollution battle. If there is a bigger demand for sustainable products, then a cost reduction will follow. Consumers often think of environmentally friendly activities as expensive and require a lot of effort and time even though they can significantly contribute to plastic circularity.

Offering a wider array of affordable sustainable options provides the private sector with more choices to implement environmentally friendly business practices and manage their bottom line better. Having the private sector onboard programs and campaigns on plastic waste is one part of the fight because behavioral changes from consumers are also necessary to fully tackle ASEAN's marine plastic debris problem.

Issue: Adjust National Regulations for the Sale of Packaging-Free Products

Recommendation: Adjust national regulations for the sale of packaging-free goods issued by the food and drug regulating agency in every AMS.

Rationale: Policies issued by the food and drug regulating agency of each ASEAN country generally forbid the sale of packaging-free household products, such as liquid detergents but permits the sale of food products without any packaging. To widen the scope of products that can be sold free of packaging and, therefore, to reduce the amount of marine plastic debris, adjusting policies would create a more conducive environment. The availability of more packaging-free household items would additionally give more power to consumers in their shopping choices.

Issue: Introduce Stringent Punishment for Environmentally-Unfriendly Habits

Recommendation: AMS introduce a hefty penalty for violators or members of society who cause harm to the environment as an initial step to change public behavior.

Rationale: ASEAN lacks any significant penalties for individuals who practice bad habits for the environment such as littering or throwing trash in the rivers. Stringent punishment could encourage Southeast Asian society's behaviors to change, thus, improving their approach in protecting their environment in addition to reducing the trend of marine plastic pollution.

Issue: Educate Business Owners and the Public on Recycling and Plastic Packaging Labels

Recommendation: Raise public awareness on recycling, sustainability, waste sorting, and plastic packaging labels.

Rationale: Business owners in ASEAN lack awareness on waste sorting, sustainability, and recycling in their daily operations, hence, putting them at risk of greenwashing and does not optimize the biodegradation process of waste. It also creates a low takeup of environmentally friendly alternatives in the private sector where owners view sustainable options as complicated. On the other hand, the public is not fully aware of plastic packaging labels of purchased goods which highlights one of the many complex problems behind ASEAN's marine plastic debris.



BIOLOGICAL STUDY















THAILAND'S FIRST BULK STORE























Please borrow our utensils to buy street food from neighbour. Foam & Plastic packaging are not allowed. inside the Better Moon cafe or guesthouse area


































Cambodia Laos Vietnam





7,000+ bottles has been reused

100+ students

15,000+ visiters

83,000+ following us on social media

10+ bulk store In our community





LITTLE THINGS MAKE GREAT CHANGE.

















THAILAND'S 20-YEAR ROADMAP

PPP Plastic's Goal: To reduce plastic marine debris by at least 50% by 2027

Goals	Baseline	2018	2019	2020	2021	2022	2027
 Waste plastics return into the manufacturing system – circular economy 	21%	22%	25%	30%	40%	50%	100%
 Reduce the usage of seven plastic packaging targets: 							
2.1 Plastic microbead2.2 Cap seal2.3 OXO bag			100%				
2.4 <36 micron shopping bag2.5 Styrofoam food packaging2.6 Single-use plastic cup2.7 Straw			25%	50%	75%	100%	

















TOGETHER DOING WELL BY DOING GOOD

Greenhope, a global green technology social enterprise based in Indonesia with the mission of addressing plastic waste pollution, combining credible relevant technologies with locally-contextualised innovations

We are in the biggest plastic transition stage: many trials and errors needed to arrive at the suitable solution(s)



- Plastic waste crisis and marine debris
- New emerging technologies
- New emerging business models
- Conventional plastics under disruption

- Uncertainties, fears, emotions, ego
- Misinformations and hoaxes
- Collisions of institutions, eg industry vs activist
- Policies trial and error with unintended consequences

There is NO SINGLE SILVER BULLET

All innovations have strengths as well as limitations



Important to deeply understand the **local context, geographical complexity, cultural and behavioral aspects, economic viability,** to craft the optimal, holistic, sustainable solutions





Mission

To bring innovative and useful sustainable products and services to the communities through collaboration with various parties

Solution

Greenhope is the innovator and producer of three patented sustainable packaging technology to replace conventional plastic packaging, including **bio-based compostable (Naturloop®)**, **bio-based biodegradable (Ecoplas®)**, and oxo-biodegradable (Oxium®).

Our biodegradable techs address the hard-to-recycle items, the ones that are too small, thin, unevenly distributed, contaminated, those that are not economically viable or functional to reuse or recycle, the ones that are destined to the end-of-life.

We believe **technology innovations need to be properly applied to the right specific plastic types within the right social innovations** (updated and contextualized process, habits, and measurements.







Greenhope is a material **and** social innovator **for sustainable consumption and production in replacing conventional plastics**





<u>Proven solutions and presence in >12 countries, working with 40-50 factories producing various sustainable green finished products</u>



ecoplase

Cassava-based Biodegradable Bioplastic U.S. Patent, 100% Indonesian Technology

Oxo-biodegradable additive U.S. Patent, 100% Indonesian Technology

Three Economically-Viable Technologies with proven track record and diverse applications







Ecoplas[®]: Holistic approach to ensure sustainable adoption and impact





Oxium[®]: Affordable oxidation-biodegradation tech for low/no value flexible packaging

- Designed to biodegrade in landfills (Indonesia's current end-of-life design) to prevent dangerous plastic waste accumulation
- Ready to measure and quantify the impact in landfill





We partner with strong brands in the Region and beyond Selected brands examples



Greenhope is part of and actively learning and co-create with various system change platforms



Less ego, more eco









The Incubation

Network's Global

novation Challenge

FUTURE of

FLEXIBLES



unreasonablegoals



INNOVATION

Fashion for good Is a platform for Sustainable

Our key learnings:

- 1. Entrepreneurs and innovators develop new methods and technologies to deal with plastic pollution. They can provide alternatives that have worked elsewhere, the lessons learned from our experience and scientific knowledge
- 1. Governments can provide holistic and contextual framework and roadmap based on stakeholders inputs, incentives and disincentives, relevant standards and certifications, to stimulate transition towards the sustainable world. Governments can also become the "baseload customers" through green procurements
 - a. Governments can stimulate innovation by facilitating many "mini pilots, rapid prototyping, etc." to try, measure, and compare various solutions across their geographics/situations no need to pick specific winners just yet
- **1. NGOs and Consumer Brands** can help inform, mobilize and affect behavioural changes in public, "vote with their wallet"

Entrepreneurs/innovators, governments, NGOs, local waste managers to work together combining technology innovation + social innovation



Let's Collaborate

www.greenhope.co | info@greenhope.co

ASEAN on Point Challenges of Plastic Packaging Waste

Presented by: Iris Chang, Director of Sustainability









Food delivery services add tonnes of plastic to Thailand's landfills during COVID-19 crisis



BANGKOK: Since the COVID-19 pandemic emerged, having food delivered at one's doorstep has become a new normal for many people in Thailand.

GrabFood is available in 7 countries across South East Asia

Singapore, Indonesia, Malaysia, Thailand, Vietnam, The Philippines and Myanmar

When COVID-19 hit, foot traffic dropped at F&B restaurants due to lockdown and many people lost their income/jobs.

GrabFood helped digitalize businesses and supported livelihoods;

- 78,000 new merchant-partners onboarded
- 21% increase in online revenue observed by small F&B businesses
- 115,000 new driver- and delivery-partners joined
- Contactless delivery & cashless payment to minimize transmission risks

Some governments became increasingly concerned about overall plastic waste.



No Single-Use Plastic Cutlery

Started late-2019, available in all countries

• 95 million sets of plastic cutleries saved in just 6 months

Challenges & Progress:

- Restaurants struggle with providing good experience due to poor training, employee turnover, among others.
- Improved over time especially with increased eco awareness and realized cost savings

We're saying no to single-use plastic

Grab ForGood



Food Packaging



Replace plastic with more sustainable material (MY, TH, VN, SG) such as paper, bagasse, etc

- Very low take up due to <u>expensive</u> packaging (min. 4-5X more expensive vs plastic)
- <u>Design</u> Not suitable for many South East Asian cuisine
- <u>Greenwashing Risk</u> Unsure which material is eco-friendly (e.g. PLA vs plastic-lined paper box vs bagasse)
- No regulatory requirement (e.g. SG hawkers still serve in styrofoam)

Think Green, Act Green.



Reusable Containers (>100 outlets available now)

- <u>Hassle</u> for consumer book, rinse, return to certain restaurants/driver
- <u>Hassle</u> for restaurant storage, cleaning, staff training, no reason to switch (for most)
- <u>Design</u> Not suitable for many South East Asian cuisine
- COVID-19 raised concern for <u>hygiene</u>

Grab () muuse bare Pack

There is no silver bullet as there's high variability and complexity in food delivery industry (merchant type, affordability, cuisine type, available packaging designs/materials, quality, etc.)

- 1. Giving public the option to voluntarily adopt is NOT enough.
 - a. There are no incentives for merchant partners nor consumers to 'pay more, do more' for eco-friendly packaging
- 2. Policies should encourage circularity, pragmatic to cost implications to all parties involved and adopt a collaborative approach;
 - a. Collaboration important to test and learn approach, as well as be aware of implications, instead of setting blanket policies.
 - b. Need to ensure sustainability of all stakeholders involved policies will impact MSMEs' livelihood
 - c. Invest in research to develop new technologies and models, platforms like Grab can be partners to co-solve/develop and test different solutions



Email: iris.chang@grab.com

PRE-EVENT QUESTIONS AND COMMENTS ANALYSIS

In total, there were 148 participants that raised questions before the forum (collected from the registration site) and during the forum. Most of them came from academia (57%), followed by government officials (15%), international organizations (12%), and private sector (9%). Meanwhile, only 3% and 2% questions were raised by consultants and citizen/community respectively. The percentage of participants that raised questions before and during the event can be observed in Figure 1 below.



Figure 1. Percentage of participants that raised questions before and during the forum

The questions were classified based on their stage of contribution, ranging from downstream issue related questions to upstream issue related questions. They were then cross-analyzed with the relevant stakeholder in charge of the issue, in this case, government, private sector, academia, and citizen.

More than half of the questions and comments were raised by the members of the academia, testifying their strong interest in the solutions proposed by the private sector

in marine plastic issue. It might be worthy to explore in the future, how academia can engage more actively with the private sector on this issue.

Most questions were directed to the government, requiring collaborations with private sector and citizen. Close collaboration between government and private sector shall tackle a wide range of issues from upstream to downstream, with more priority on upstream issues, including preventing use of plastic and plastic products, feasibility of alternative materials, adoption of ban/levy, as well as education and awareness raising campaign.

Furthermore, citizens shall be more engaged in upstream issues through involvement in decision-making process, policy socialization, public behavior change, and littering prevention through law enforcement. As mentioned by H.E. Phoak, this transboundary problem shall be tackled through transboundary solutions, therefore, this engagement will highly accelerate the global effort.

More effective and affordable implementation of policies is required from the government to address the complex issue of marine plastic debris.

POST-EVENT QUESTIONS AND COMMENTS ANALYSIS

Respondents: 73

Question 1: Having attended the webinar, in what way do you think policy can help the private sector efforts to combat (marine) plastic wastes in your country?

Some respondents mistook this question as "what can individuals and private sectors do to combat (marine) plastic waste in your country" or "what should the government do?", hence the replies like "doing recycle", "consuming single-use plastic", "proactive policymaking", etc. Meanwhile, the rest generally said providing incentives, law enforcement, supports, and guidelines for private sectors would be helpful.

The detailed summary are as follows:

- Providing and coordinating alternatives to new plastic economy.
- Providing guidelines, framework, road map, mitigation efforts.
- Ensuring law enforcement/implementation
- Ensuring sustainability
- Ascertain private sector's roles in combatting plastic wastes, i.e. through EPR policy.
- Providing supports (including legal basis) for private sector, particularly in terms of packaging, logistics, designs, materials used, disposal, etc.
- Increasing public awareness and education; greater collaboration and awareness campaign related to plastic wastes.
- Incentive and sanction, i.e. incentivize the use of papers or other biodegradable materials which are alternatives for plastics, imposing plastic taxes to discourage plastic usage.
- Implementing regional/international policy with local context, i.e. taxing and levying instead of outright ban in the Philippines.
- Giving motivation to private sector, making them more involved.
- Making green technologies more competitive to conventional.

- Supporting innovations by private sectors, directing private sectors to come up with creative ways to deal with plastic waste pollution.
- Establishing courses of action to address this pressing problem which require immediate but long-term solutions.
- Relevant policies can result in greater awareness, participation, collaboration, encourage sustainability among stakeholders, and research towards combatting plastic wastes. These can also compel food manufacturers to consider reducing their use of plastic packaging.
- Policies outline the standardized acceptable practices. This engenders compliance.
- Information dissemination
- Initiating similar programs within the public sector agencies in line with environmental protection.

Question 2: Which part of the webinar left the strongest impression on you and why?

A number of participants is impressed with the presentations by Grab and Greenhope, particularly on their initiatives. Many said that all speakers give excellent insights into public and private sectors activities from several countries in combatting plastic waste, and that the Q&A session was very informative and lively. Some respondents seem to be very shocked with the data of uncollected waste in the oceans and the rivers. But generally, they are very positive and optimistic, saying that saving the environment can actually be a reality as long as everyone is involved and influenced, and that they see the benefits of it in their lives.

The detailed summary is as follows:

- The Grab company's strategy
- We need to balance between survival and environment
- The Q&A session was very informative and candid. Really enjoyed the speakers' answers to questions regarding practicality, incentives, etc,
- The presentation by Greenhope was very interesting: while working on behavioural change, we also need to look at the practical aspects of actually treating the existing plastic waste.
- All of the topics are good (more than 2 people said this) since it is already a proven practice/ technology. I would be happy if this would be replicated here in the Philippines.
- Reusable and recyclable materials.
- Strong commitment of private sector to contribute for a better environment.
- The sharing of the private sector on the actions they take made me realize that these efforts must be supported by the government.
- They are equally important as I can use the information for my classes.

- The presentation of the panelists showcased the best practices of their companies/organization for us to be able to benchmark.
- There is no single formula in addressing marine plastics. It is usually composed of various strategies and methodologies. Partnerships and collaborations among stakeholders are also crucial. This is very difficult endeavour, but we need to start somewhere.
- The different technology producing alternatives to non-degradable plastics
- The efforts exerted by the private companies towards plastic disposal
- About recycling Styrofoam because it is new to me.
- Ms. Ann's project and promotion on refillable and reusable products. Similar projects can be implemented in other localities to get rid of single-use plastics.
- The sharing from the Japanese representative made the strongest impression for me because I have seen first-hand their efforts in addressing waste challenges when I visited Japan before.
- Discussion on greenwashing
- Private sector efforts in Thailand, esp. one practice in Thailand of reusing containers when buying products like soap or cooking oil. Thais use a lot of plastics, it was not easy to convince them to be involved in this kind of initiative.
 So, I would consider the initiative a a success. Refill station because plastic containers can be used for several times. Refill Station is highly applicable and realistic for the Philippine setting. It is easier to establish and imitate as a model.
- How ASEAN countries combat plastic wastes
- Green mindset should be encompassing to all stakeholders. Cleaning the earth is much expensive than what we think so we should do something to save it.
- The session on recycling Styrofoam made me think of developing a substitute for Styrofoam used as packaging for seafood/fresh produce.
- The amount of plastic we produced that end up in the marine ecosystem
- The use of economic mechanisms to create a parity between the use of conventional plastics and the eco-friendly alternatives thru the imposition of levy on the cost of the conventional plastics so that negative external costs will be considered.
- Nothing specific. Just the fact that policies can reinforce private sector in combatting plastic wastes.
- Recycling of polystyrene. Because styrene, the monomer, can be converted in the body to styrene–7,8–oxide, a compound listed in the Report on Carcinogens as potential human carcinogen.

Question 3: Do you want to attend another webinar on the subject of (marine) plastic wastes? If so, which topics interest you the most (you can choose more than one).

This is a multiple-choice question. More than half of the respondents are interested in attending other webinars on marine plastic and efforts on upstream and downstream level, the impact on marine ecosystem and human health, as well as a webinar on marine plastic and innovation solutions/approaches in the world. Cumulatively, the topic of the next webinar that received most answers is "a webinar on marine plastic and innovation solutions/approaches in the world."

30 respondents: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level), A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level), A webinar on marine plastics and its impact on marine ecosystem (animal and plants) and human health. A webinar on marine plastics and innovative solutions/approaches in the world.

- One with additional comment: alternative new plastic economy
- One with additional comment: How Japanese technic and innovation will contribute for reducing plastic waste in ASEAN.

11 respondents: A webinar on marine plastics and innovative solutions/approaches in the world.

5 respondents: A webinar on marine plastics and its impact on marine ecosystem (animal and plants) and human health. A webinar on marine plastics and innovative solutions/approaches in the world.

4 respondents: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level), A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level), A webinar on marine plastics and its impact on marine ecosystem (animal and plants) and human health.

3 respondents: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level), A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level), A webinar on marine plastics and innovative solutions/approaches in the world.

- One with additional comment: A webinar on how to recycle marine plastic waste in a community level (rural areas).

3 respondents: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level), A webinar on marine plastics and innovative solutions/approaches in the world.

3 respondents: A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level), A webinar on marine plastics and innovative solutions/approaches in the world.

3 respondents: A webinar on marine plastics and its impact on marine ecosystem (animal and plants) and human health.

2 respondents: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level), A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level).

1 respondent: A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level), A webinar on marine plastics and its impact on marine ecosystem (animal and plants) and human health, A webinar on marine plastics and innovative solutions/approaches in the world.

1 respondent: Another webinar on marine plastics and the private sector efforts in plastic production and consumption (upstream level)

1 respondent: A webinar on marine plastics and efforts undertaken in collection and waste management (downstream level)

The summary of expected webinar topics on marine plastic wastes can be observed in Table 1.

Cumulative positive	Торіс
answers	
43	Another webinar on marine plastics and the private
	sector efforts in plastic production and consumption
	(upstream level)
44	A webinar on marine plastics and efforts undertaken in
	collection and waste management (downstream level)
43	A webinar on marine plastics and its impact on marine
	ecosystem (animal and plants) and human health
53	A webinar on marine plastics and innovative solutions/
	approaches in the world

Table 1. Summary of Expected Webinar Topics on Marine Plastic Wastes

FULL SPEECHES

Speech from H.E. Kung Phoak, the Deputy Secretary-General of ASEAN for ASEAN Socio-Cultural Community

Mr. Koji Hachiyama, Chief Operating Officer of ERIA,

Distinguished panellists and development partners,

Ladies and gentlemen,

Good morning from the ASEAN Secretariat. I am delighted to welcome you all today to the ASEAN on Point Public Forum on Marine Plastic Debris. I am deeply honoured to take part in this very timely and interesting conversation, which hopes to shed light on how we can better shape policies as we work to reverse the tide of marine plastic debris.

I would like to thank the Economic Research Institute for ASEAN and East Asia or ERIA for partnering with us to address some of the most important and pressing development issues facing our region. The ASEAN on Point Public Forum provides us a platform to exchange views and openly discuss issues of regional importance and interest to ASEAN and beyond. Previous forums have already covered topics on enhancing agricultural sustainability and battling fake news. Today, we are gathered to hear the insights of our esteemed panellists on the role of the private sector in combatting marine plastic pollution.

Ladies and gentlemen,

Due to rapid coastal development and exponential population growth over the last decades, ASEAN faces the looming threat of marine plastic debris. The responsibility to address this problem does not only lie on national and local governments. Multi-stakeholder participation and action is essential, especially the valuable contributions of the private sector, civil society, and local communities.

The business sector plays a crucial role in addressing marine litter in our oceans and coasts. As key drivers of regional and local economies, different actors across the different stages in the value chain—from production, processing, distribution, up to consumption—can offer different perspectives and points for intervention. Specifically, the business sector, covering large corporations as well as small and medium enterprises, can look into enhancing producer responsibility, promoting sustainable consumption and production, popularising single use plastics, and reducing litter from different sources.

However, promoting greener technologies and practices requires sustained investments and strong commitments from both the public and private sectors. Mainstreaming more eco-friendly solutions also requires stronger enabling policies and access to incentives or other financial support. We have seen that enhancing the adoption of sustainable environmental practices and promoting good governance translate to good business.

Ladies and gentlemen,

Marine plastic pollution is a transboundary problem and, thus, requires transboundary solutions. Aside from existing international commitments to which many ASEAN Member States are a part of, several regional initiatives in recent years have bolstered our commitment to address the problem on marine pollution.

Under the leadership of Thailand, the Bangkok Declaration on Combating Marine Debris in the ASEAN Region along with the ASEAN Framework of Action on Marine Debris was adopted in 2019 to reaffirm the region's pledge and targets to combat marine pollution.

Subsequently, the ASEAN Regional Action Plan on Combating Marine Debris in ASEAN Member States was launched a few weeks ago, in cooperation with the World Bank's PROBLUE initiative. This RAP will play an important role in helping ASEAN turn the tide in the battle with plastic waste and protect the region's vital marine resources. Specifically, this Plan identified 14 strategic regional actions that are set to be implemented within the next five years aiming to reduce inputs into the system, enhance collection and minimise leakages, and create value for waste reuse. These actions seek to cover four key areas of concerns, including: policy support and planning; research, innovation, and capacity building; private sector engagement; and public awareness, education, and outreach.

All these renewed commitments clearly recognise the private sector's essential contributions in protecting our seas from marine litter both at the upstream level, through improved plastic production and consumption, and downstream level, via better waste collection and management. The recently launched ASEAN RAP provides specific interventions on how to further engage the private sector to adopt greener practices and provide sustained investments.

Ladies and gentlemen,

The current pandemic has further exacerbated ASEAN's problem on plastics. To address this, ASEAN has worked closely with various development partners to promote circular economy, especially as part of its post-COVID response and recovery efforts.
Due to the lockdown measures imposed around the region, more and more people rely on the online delivery of basic necessities, such as food, as well as other non-essential items due to the rising popularity of many e-commerce platforms. This, unfortunately, also created a demand and expanded the use of plastics across sectors. Aside from the indiscriminate use of plastics in online deliveries, the ongoing global health crisis also resulted to increased waste generation in the health sector—the most obvious of which is the increase use and disposal of personal protective equipment, including face masks, face shields, and hand gloves. A study released in February indicated that about 3.4 billion single-use face masks and shields are thrown away daily. In total, about 1.6 million tonnes of plastic wastes are generated globally every single day since the pandemic started.

Ladies and gentlemen,

As part of our efforts in further promoting circular economy, ASEAN and ERIA established the Regional Knowledge Centre for Marine Plastic Debris in 2019 to further expand the partnerships among ASEAN+3 Member States. We wish to commend the continuous support of our partners in this endeavour, including the assistance of the Government of Japan.

This year, ERIA also launched an online platform to further strengthen private sector engagement on reducing plastic wastes in the region. We hope that more companies and organisations in ASEAN will be part of this platform and share their best practices on rethinking the use of plastics.

I strongly encourage ERIA to continue creating more opportunities to bring together different actors from the public and private sectors to discuss and bring about shared solutions on marine plastic debris. I hope today's forum would stir engaging discussions on how we can better promote public-private partnerships in the field of marine governance in ASEAN.

I look forward to a successful forum today. I am confident that through our shared vision and joint efforts, we can continue to make waves and work together towards a cleaner and healthier oceans and coasts.

Thank you.

Speech from Mr. Koji Hachiyama, Chief Operating Officer of ERIA.

It is a pleasure for me to be with you today at the occasion of the 4th installment of the ASEAN on Point webinar series that ERIA has been co-hosting with the ASEAN Secretariat since last year.

Indeed, it was in response to the worldwide pandemic, that the two institutions have decided to address issues of significance to the ASEAN region, to think of the ways to move forward and to build back better in the post-pandemic recovery.

For this, I would like to extend my deep gratitude to His Excellency Mister Kung Phoak, Deputy Secretary-General of ASEAN for ASEAN Socio-Cultural Community for his opening remarks and for his commitment to addressing the issue of marine plastic debris.

We welcome the recent publication of the "ASEAN Regional Action Plan for Combating Marine Debris in the ASEAN Member States" and would like to reiterate ERIA's support for the efforts undertaken by ASEAN.

Unfortunately, East and Southeast Asia are considered the biggest contributors of marine plastic pollution due to their growing populations and economies, coupled with insufficient waste management. ERIA has established the Regional Knowledge Centre for Marine Plastic Debris or 'RKC-MPD' in 2019, to provide ASEAN+3 Member States with support in addressing challenges associated with marine plastics.

Partnering with the private sector to promote good practices is one of the important ongoing activities of the RKC-MPD. To this end, an online platform was launched this year to collect and disseminate business activities that are conducive to reducing plastic wastes, and by consequence preventing those plastics from leaking into the oceans. By gathering all such positive initiatives on one platform, we can reduce fragmentation of information and track positive commitments made by the private sector. We also believe that this can lead to intra-regional information exchange and expansion of such businesses.

I am very pleased to learn that 4 inspiring private companies' representatives have agreed to talk about their business activities, why they decided to tackle the challenge of plastic waste, what kind of challenges they have faced along the way, and what policies they believe can facilitate businesses like theirs to thrive in the future.

To end my brief statement, I would like to thank again our co-host, our guest speakers, and all those who are attending the webinar today, and hope that this can be an occasion for all of us to take a hard look at the way we have been using and consuming our resources, and hopefully change it to a more sustainable and responsible one.

