



Co-funded by the European Union



german  
cooperation

DEUTSCHE ZUSAMMENARBEIT

Implemented by

**giz**

Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**EXPERTISE  
FRANCE**



# Plastic Waste Recycling Standards

Experiences from Europe and East- and Southeast Asia  
Documentation of the webinar on 10 September 2020





## INTRODUCTION

The worldwide production and consumption of plastics has rapidly increased over the last decades. At the same time, unmanaged plastic waste contributes more and more to the pollution of air, soils, waterways and oceans, if bottles and other plastics end up in the environment. Plastic waste that cannot be avoided should be collected, sorted and recycled. But which technical, environmental and social standards for plastic recycling need to be considered? What does “recyclability” even mean? And how can a good quality of recycled materials be achieved, and their market demand increased? The webinar organised by the ‘Rethinking Plastics – Circular Economy Solutions to Marine Litter’ project on 10 September 2020 discussed answers to these questions and shared insights from policy and practice with a focus on the European Union, the Philippines and Vietnam. This documentation summarizes the presentations and inputs given during the webinar.

‘Rethinking Plastics’ is funded by the European Union (EU) and the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by GIZ and Expertise France in seven countries in East and Southeast Asia. Overall, the project supports a transition towards a circular economy for plastics in the project countries to contribute to a significant reduction of marine litter. It works, amongst others, in the areas of plastic waste management, sustainable consumption and production of plastics as well as the reduction of litter from sea-based sources. For more information, please visit: <https://beatplasticpollution.eu/rethinking-plastics/>



“Questions around recycling and recyclability were on the table before the COVID-19 crisis but the crisis had also an impact for the recycling industry. For instance, the low price of oil has decreased the prices of virgin plastics and made it more difficult for recycled plastics to be competitive on the market. With this webinar, we hope to contribute to the ongoing discussion, to foster joint learning and to create a community of exchange on these topics. The work of the ‘Rethinking Plastics’ project will continue, and you are now part of this network.”

Ms Maria-Chiara Femiano, Programme Manager, Foreign Policy Instruments/ Regional Team for Asia & Pacific, Delegation of the European Union to Thailand

## The webinar's 10 key messages for enhancing plastic recycling

- 1. Plastic waste prevention and recycling are a cross-cutting issue between different policy realms and ministries as well as between the public and private sector.** A transition towards a Circular Economy has been addressed in framework policies such as the European Green Deal and the Circular Economy Action Plan, the Philippine Development Plan and the Philippine Action Plan for Sustainable Consumption and Production as well as Vietnam's National Waste Management Strategy and Vietnam's Action Plan on Sustainable Consumption and Production 2021-2030. Amongst others, these policies seek to align environmental protection objectives with economic development, job creation and market competitiveness. The willingness and need for cross-sectoral cooperation is also visible in more plastic specific strategies such as the European Plastics Strategy, Vietnam's National Action Plan on Marine Plastic Waste Management by 2030 or the Philippine National Plan of Action for the Prevention, Reduction and Management of Marine Litter. The EU has also recently adapted its legal framework, e.g. in form of its Directive on the reduction of the impact of certain plastic products, which includes bans of certain single-use plastic items and other policy instruments to be implemented by its Member States. That local regulations are also relevant is shown by the almost 500 local plastic ordinances in the Philippines.
- 2. Extended Producer Responsibility (EPR) systems can contribute to enhancing cooperation along plastic packaging value chains and generate additional financial resources.** EPR obliges companies that put packaging on the market to ensure its environmentally sound collection, sorting and recycling. However, existing EPR approaches from the EU and other regions need to be adapted to the respective contexts and country realities. In both Vietnam and the Philippines, dialogues between the public and private sector, academia and civil society on appropriate EPR for packaging systems have kicked off. Vietnam is considering EPR in its ongoing revision of the Law on Environmental Protection, whereas a draft law has been discussed in the Senate in the Philippines. In the EU, EPR systems for packaging will be mandatory for the Member States by December 2024, as stated in the EU Directive on Packaging and Packaging Waste.
- 3. Market demand for recycled plastics needs to be increased.** Low oil prices lead to cheap plastics from virgin materials and therefore are a serious threat for the demand for recycled materials, which can then be more expensive. The price challenge fuels the debate about minimum shares of recycled content in new products and packaging and whether such requirements should be voluntary or mandatory. The EU follows a double track approach: It has launched a voluntary Circular Plastic Alliance together with the industry and reviews essential requirements for packaging in the EU Directive on Packaging and Packaging Waste. The directive follows the objective to make all plastic packaging reusable and recyclable by 2030. In the Philippines, the application of recycled materials needs to be further increased besides products such as chairs, pipes and pallets. A current policy barrier in the Philippines consists however in the interdiction to use recycled plastics in food packaging and for personal care products.
- 4. The quality of recycled materials needs to be ensured.** The quality of plastics regarding their recyclability is varying and not always transparent. In order to obtain high quality materials, design for recycling should be promoted, paying attention to aspects such as additives, colour, printing, the size of attached labels and complex multilayer packaging like sachets. In Vietnam, plastic design standards to ensure high quality properties and durability

of plastics are still missing. Additives such as stone powder lead to cheaper plastics but also shorten their life cycle. Plastic recycling in Vietnam often takes place in craft villages with low technical and environmental standards, which reduces the competitiveness of investments for higher quality recycling. In the Philippines, mechanical plastic recycling processes mainly consist of manual sorting, grinding and pelletizing. Anyhow, a switch to more automatized processes is in discussion. Within the EU, the European Committee for Standardisation has defined voluntary standards for waste prevention, reuse and recycling.

- 5. Certification schemes for plastic recycling facilities can increase trust along the value chain.** The European Certification of Plastics Recycling (EuCertPlast) is an example for how recyclers, plastic converters and EPR stakeholders can jointly develop a certification scheme. It is a system of auditing criteria and control bodies focused on the traceability of recycled materials. Producers that use recycled materials have proof that quality and environmental standards were met and can use EuCertPlast certificates for environmental labels of their products such as the “Blue Angel”. Sorting plants can choose certified recycling factories so that they know what happens with their waste after sorting. EuCertPlast is mainly used by recyclers in Europe but also by individual recycling companies in Asia.
- 6. Recycling targets are an important policy instrument. Their definition, monitoring and regular update are however crucial.** The Philippine Ecological Solid Waste Management Act of 2000 for example had originally demanded municipalities to achieve a landfill diversion rate of 25% while today municipalities aspire a landfill diversion rate of 68%. In Vietnam, the National Strategy on Integrated Solid Waste Management by 2025 with a vision to 2050 sets the target that 100% of specific urban areas and 85% of remaining urban areas should have recycling facilities that enable waste separation in households. The EU has set packaging waste recycling targets for 2025 and 2030, which are for plastics e.g. 50% and 55% respectively and for paper and cardboard 75% and 85%.
- 7. High-quality recycling relies on good collection and segregation at source by households and businesses.** Recyclability not only depends on the material properties but also on the level of cleanliness and pre-sorting. Vietnam and the Philippines legally require the separation of recyclable materials. In the Philippines for instance, Material Recovery Facilities serve as central collection points for recyclable materials. The speakers agreed, that further public outreach to inform and encourage citizens to separate waste is needed.
- 8. Enhancing plastic recycling value chains requires the integration of informal workers and structures.** In the Philippines for instance, approaches consist in creating cooperatives and coordination with public agencies to improve operational procedures, income potentials, health and safety standards and access to welfare of informal waste sector workers. In Vietnam, the informal sector is structured differently in different urban areas. A better understanding of existing systems as well as engaging these stakeholders and connecting them to potential EPR systems is crucial for any further development.
- 9. The international trade of plastic waste attracts high public attention.** After China’s import ban in January 2018, plastic waste trade from the EU and other industrialised economies switched to Southeast Asian countries, including Vietnam and the Philippines. There, plastic waste partly accumulated in ports or contributed to environmental pollution. In addition, cheap plastic waste imports can have the effect that the collection and sorting of domestic plastic waste becomes less attractive and is therefore hindered. However, industry interests exist for accepting a certain quality level of recyclable materials. Procedures to

screen waste shipments and regulations about which types of waste materials are allowed for import and export are currently under review in the EU, Vietnam and the Philippines. They will take the plastic waste amendments to the Basel Convention of 2019 into account, which intend to increase the control of transboundary shipments of plastic waste from January 2021 on.

**10. International cooperation increases.** Countries, associations and organisations are active on national and multilateral level. The EU for example continues to advocate an international agreement on plastics and marine litter in the framework of the United Nations Environmental Assembly, whose next session is scheduled for June 2021. The EU also promotes a Global Alliance on Circular Economy and Resource Efficiency for exchange and partnerships. Projects such as ‘Rethinking Plastics – Circular Economy Solutions to Marine Litter’ can create bridges between Europe and Asia for continued dialogue, experience and best practices sharing.

**Webinar:**  
**Plastic Waste Recycling Standards – Experiences from Europe and East- and Southeast Asia**  
**Thursday, 10 September 2020, 14.00-16.30 (Hanoi/Bangkok), 15.00-17.30 (Manila)**

**14.00-14.10 Welcome and Introduction**

- Moderation: **Mr. Ittinat Seeboonruang**
- **Ms Maria-Chiara Femiano**, Programme Manager, EU Delegation to Thailand

**14.10-15.00 Policy Insights**

- **Ms Katarina GRGAS-BRUS**, International Relations Officer for Southeast Asia, DG Environment, European Commission
- **Ms Likha Malai C. Alcantara**, Solid Waste Management Division, Department of Environment and Natural Resources /DENR) - Environmental Management Bureau (EMB), Philippines
- **Mr. Nguyen Thanh Lam**, Department of Waste Management, Vietnam Environment Administration, Ministry of Natural Resources and Environment (MONRE)
- **Ms Tran Thu Hang**, Sustainable Consumption and Production Office, Energy Efficiency and Sustainable Development Department, Ministry of Industry and Trade (MOIT), Vietnam

**15.00-15.10 Questions and Answers (Q&A)**

**15.10-16.00 Practical Examples**

- **Ms Sabine Bartnik**, Managing Director of cyclos GmbH, Germany
- **Mr. Hoang Duc Vuong**, Chairman of Vietnam Regenerated Plastic Branch, Vietnam Plastic Association
- **Mr. Crispian Lao**, Private Sector Representative from the Recycling Industry in the National Solid Waste Management Commission, Philippines

**16.00-16.15 Q&A**

**16.15-16.30 Conclusion and Outlook**





## POLICY INSIGHTS

Plastic recycling is facing a difficult socio-economic context. The COVID-19 crisis has caused significant disruptions within the value chain of collection, sorting and recycling of plastic waste and historically low oil prices have decreased the market competitiveness of recycled plastic materials compared to virgin plastics. In addition, international plastic waste trade from industrialised countries to Southeast Asia has partly led to the unintended effect that recycling companies in Southeast Asia prefer cheaper imported plastic waste compared to domestic plastic waste. How do existing policies in the European Union, the Philippines and Vietnam play out in this context and how are these policies further evolving? What is needed to tackle these challenges in future?

The following overview summarises the status quo in Europe, Vietnam and the Philippines, as stated by the speakers.

### European Union policies and legislation on plastics

*As outlined in the presentation by Ms Katarina Grgas-Brus, International Relations Officer for Southeast Asia, European Commission – DG Environment*

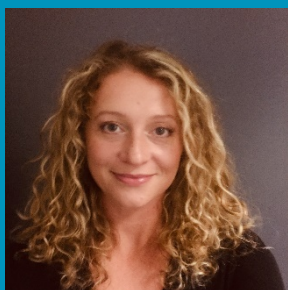
As reaction to the COVID-19 crisis, the EU has launched the recovery plan “Next Generation EU” with a budget of 750 billion Euro. One of its key elements is the **European Green Deal** of 2019. It aspires to achieve a climate neutral economy by the year 2050. Creating jobs, increasing competitiveness and enhancing innovation are intended to go hand in hand with achieving environmental targets. Under the European Green Deal, several strategies have been developed, amongst them a new Circular Economy Action Plan.

This **new Circular Economy Action Plan** was adopted in March 2020 to reduce waste generation and promote circular design. It combines voluntary and mandatory measures in several sectors such as plastics, textiles, electronics and construction. It builds upon the **European Plastics Strategy** published in 2018, which has envisaged an innovative and

sustainable plastics industry that further integrates the principles of reuse and recycling. A milestone legislation about plastics is also the **EU Directive on the reduction of the impact of certain plastic products** of 2019. It addresses about 70% of plastic marine litter found at European beaches as well as fishing gear. Amongst others, it regulates the prohibition of certain single-use plastic items and oxo-degradable plastics in the EU Member States effective from July 2021.

The **EU Directive on Packaging and Packaging Waste** covers all kinds of packaging in terms of sectors and materials with the goal to ensure a high level of environmental protection and the functioning of the internal EU market. Amongst others, it outlines packaging waste recycling targets for 2025 and 2030 (e.g. for plastics 50% and 55% respectively; for glass 70% and 75%; for paper and cardboard 75% and 85%; for aluminium 50% and 60%). First adopted in 1994, this Directive was extended with several amendments. It is currently under revision with regards to essential requirements in terms of reusability, recyclability and recycled content. Currently, these requirements of the Directive are met if packaging fulfils the standards (e.g. on prevention, reuse, recycling, energy recovery, biodegradation and composting) of the **European Committee for Standardization**, an association of national standardisation bodies of 34 European countries that defines voluntary standards at European level. The use of these standards is not mandatory as EU legislation does not allow mandatory standards.

To boost European market demand for recycled plastics to 10 million tons by 2025, the European Commission has launched the **Circular Plastic Alliance** together with stakeholders along the plastic value chain. About 175 organisations from industry, academia and public authorities have signed the joint declaration. The Alliance has developed a workplan on design for recycling and a research and development agenda for circular plastics. At **global level**, the European Union supports the development of a global agreement on plastics and marine litter and sees an opportunity to launch a respective process at the United Nations Environment Assembly in 2021. It also works on a Global Alliance on Circular Economy and Resource Efficiency. Furthermore, the European Union is reviewing its rules on shipments of waste and working on the implementation of the plastic amendments in the framework of the Basel Convention, which enters into effect in January 2021. To boost exchange between the EU and Southeast Asia on the trade of waste, the EU is currently preparing a dedicated project.



“The European Green Deal provides a roadmap with concrete actions to promote the efficient use of resources by moving towards a circular economy. It helps to restore biodiversity and decrease pollution and aims to also create jobs, increase competitiveness and boost innovation.”

Ms Katarina GRGAS-BRUS, International Relations Officer for Southeast Asia, DG Environment, European Commission

## Philippine policies on recycling and updates on the National Plan of Action on Marine Litter

*As outlined in the presentation by Ms Likha Malai C. Alcantara, Solid Waste Management Division, Environmental Management Bureau, Department of Environment and Natural Resources, Philippines*

Solid waste management in the Philippines is mainly regulated by the **Ecological Solid Waste Management Act of 2000**. It demands municipalities to divert at least 25% of municipal solid waste from landfill through reuse, recycling and composting. In fact, Philippine municipalities currently intend to achieve a 68% landfill diversion rate as pledged in their respective municipal solid waste management plans. The legal framework promotes mandatory segregation of waste, the establishment of Material Recovery Facilities as well as the development of markets for recycled materials. It encourages research as well as the involvement of businesses and industry.

To implement the Ecological Solid Waste Management Act, **several policy guiding frameworks, strategies and plans** have been developed during the last two decades. Recycling is also seen as a cross-cutting issue and was picked up e.g. in the Philippine Development Plan (PDP) 2017-2022 and the recent Philippine Action Plan for Sustainable Consumption and Production (PAP4SCP). In addition, the Philippine National Standard defines and certifies certain plastic products and recycling facilities to ensure quality standards and the Philippine Innovation Act of 2019 intends to empower small and medium enterprises, amongst others in a circular economy perspective. Furthermore, **almost 500 local government units have adopted local plastic ordinances**, regulating the use of plastics and the recycling of plastic waste. While some regulate the use of plastic bags and other ban them, the degree of success varies between municipalities and further evaluation is necessary.

A **National Plan of Action (NPOA) for the Prevention, Reduction and Management of Marine Litter** is currently in the making. It focuses on plastics and intends to reorganise the way of recycling to prevent marine plastic litter. A multi-stakeholder process with local governments, industry, academia and non-governmental organisations has identified several programmatic and supporting activities. They include establishing baseline information, mainstreaming circular economy and sustainable consumption and production, enhancing the recovery and recycling coverage, preventing leakage from collected and disposed waste, reducing sea-based sources of marine litter and managing litter in the riverine and marine environment.

“There is a growing concern on marine litter. So, we want to organise all the activities and reorganise the way we see recycling with the National Plan of Action on Marine Litter. Its development is a multi-stakeholder process.”

Ms Likha Malai C. Alcantara, Solid Waste Management Division, Department of Environment and Natural Resources (DENR) - Environmental Management Bureau (EMB), Philippines



## Vietnam's policies for plastic recycling and sustainable consumption and production

*As outlined in the presentations by Mr. Nguyen Thanh Lam, Department of Waste Management, Vietnam Environment Administration, Ministry of Natural Resources and Environment (MONRE) and Ms Tran Thu Hang, Sustainable Consumption and Production Office, Energy Efficiency and Sustainable Development Department, Ministry of Industry and Trade (MOIT), Vietnam*

While some valuable plastic waste is collected for recycling, other types of plastic waste with low market value are not collected separately in Vietnam. The latter go to landfills or incineration, causing secondary air pollution. Especially thin **single-use plastic bags** are a challenge. The Ministry of Natural Resources and Environment (MONRE) and other ministries have therefore elaborated regulation on plastic bags, leading to a Prime Minister Decision on non-biodegradable plastic bags in 2013. An environmental tax reform envisaged to incentivise the production and use of environmentally friendly bags. The **separation of recyclable plastic waste** is required by a government Decree of 2015 on waste and scrap management. The updated National Strategy on Solid Waste Management of 2018 sets specific targets for establishing recycling facilities for waste separation in households. Vietnam's National Strategy for Environmental Protection by 2020 with a vision to 2030 envisages to increase reuse and recycling and reduce the use of non-biodegradable bags and packaging.

In 2019, Vietnam adopted a new **National Action Plan on Marine Plastic Waste Management by 2030**. It intends to reduce marine and ocean plastic waste by 75%, achieve a 100% collection of fishing gear and reduce single-use plastic products and non-biodegradable plastic bags. A Directive of 2018 regulates the import of plastic waste and another Directive focuses on reuse, recycling and management of plastic waste. Other ministries also issued regulations on plastic waste, including the Ministry of Health and the Ministry of Industry and Trade (MOIT) in 2019. Furthermore, MONRE has elaborated technical regulations and standards related to solid waste management and involves the business sector in reducing plastic waste. MONRE currently works on further regulation such as the revision of the Environmental Protection Law, a tax on single-use plastic products and non-biodegradable plastic bags. Existing regulations covering sanctions and import of waste are under review.

“MONRE will continue to advise the government to develop policies, laws and regulations to reduce the impact of plastic on the environment, especially the management of marine plastic waste.”

Mr. Nguyen Thanh Lam, Department of Waste Management, Vietnam Environment Administration, Ministry of Natural Resources and Environment (MONRE)

Plastic pollution is also tackled by **Vietnam's Action Plan on Sustainable Consumption and Production 2021-2030** prepared by the Ministry of Industry and Trade (MOIT). It builds upon previous strategies and action plans and contributes to moving Vietnam towards a circular and green economy. Economic challenges with regards to plastics include the lack of high-quality recycled materials and products. The action plan uses a product life-cycle approach and includes the business community and consumers. Between 2021 and 2025, the action plan will focus on

promoting the production, distribution and consumption of eco-friendly products to replace single-use and non-degradable plastic items. It envisages that 85% of supermarkets, shopping malls and commercial centres use eco-friendly packaging by 2025 and 100% of them by 2030. Moreover, the plan intends to develop recycling as part of green industries by promoting quality standards and technology for recycling. Activities related to sustainable design, distribution, certification, marketing, procurement and waste management are priorities of the action plan. Further steps regarding plastic waste could include enhancing the exchange of information and experiences and capacity building as well as the set-up of a platform on sustainable consumption and production of plastics.



“We will pay more attention to sustainable design of plastic products. At the same time, we promote resource efficiency and cleaner production. We will strengthen the application of circular economy, connecting markets and environmental technologies.”

Ms Tran Thu Hang, Sustainable Consumption and Production Office, Energy Efficiency and Sustainable Development Department, Ministry of Industry and Trade (MOIT), Vietnam



## PRACTICAL EXPERIENCES

### European Certification of Plastics Recycling (EuCertPlast)

*As outlined in the presentation by Ms Sabine Bartnik, Managing Director of cyclos GmbH, Germany*

**The certification of plastic recycling companies fulfils different purposes along the value chain.** On the one side, plastic recycling companies can demonstrate to sorting plants that they comply with requirements of recycling targets. On the other side, recycling companies can show the quality of their recyclates to producers who buy recycled plastics to use them in new products. EuCertPlast serves these purposes. It was developed between 2009 and 2011 by a project co-financed by the EU and is in operation since 2012. The organisation is based in Belgium and members include the European Association of Plastics Recycling and Recovery Organisations (EPRO), Plastic Recyclers Europe (PRE), European Plastic Converters (EuPC) and Recovinyl, the European Rigid PVC Film Association (ERPA), as well as the Extended Producer Responsibility Alliance (EXPRA) and cyclos GmbH as affiliate members.

**EuCertPlast focuses on the traceability of plastic materials along the value chain** to ensure best practices and environmental standards in recycling factories. Users of recyclates receive proof that appropriate recyclate fractions are incorporated into their products. The quality of EuCertPlast is ensured through a steering board, a technical committee, an external accreditation body for auditors and an external quality controller for certificates. Auditors need to meet several professional requirements to be accredited by EuCertPlast. The certification **is not limited to the EU and can also be used in Asia.** Currently, about 150 plastic recycling factories are certified, most of them in the EU but some also in China and Malaysia. The certification with on-site inspection is valid for one year, based on evaluating ten different aspects such as licenses, the management team, the recycling process, controls on recycled outputs, environmental protection and sub-contracting. There are compulsory auditing criteria that need to be fulfilled and further criteria, which need to be achieved to a certain degree. In terms of traceability, the recycling



company needs to show appropriate documentation where the plastic waste comes from and how the recycling process takes place. The recycling company also has to calculate the share of recycled plastic materials in its final product as well as the share of post-consumer recyclates in the final product (as plastic waste can also come from industry and not only from households).

**EuCertPlast can also be used for ecolabels of plastic products** such as the German ecolabel 'Blue Angel'. According to the 'Blue Angel', plastic products need to contain at least 80% of post-consumer plastic recyclates from a certified source. Examples of such plastic products include office supplies, waste containers, plastic pots, seating groups for outside use, palisades and fences, composters and garbage bags. EuCertPlast can also be used for compliance schemes in the context of Extended Producer Responsibility such as the German Packaging Act or the Italian National Consortium for the Collection and Recycling of Plastic Packaging (COREPLA).



“What are the benefits of certifying plastic recycling plants? It can prove the compliance with certain standards and legal requirements, demonstrate eco-friendly recycling and enable comparability between different recycling plants. The certification can be used in waste stream verification, especially in the context of Extended Producer Responsibility where recycling targets have to be fulfilled. It can also prove the suitability of certain materials for recycling and that recyclates are used in new products.”

Ms Sabine Bartnik, Managing Director of cyclos GmbH, Germany

## Standards and challenges of plastic recycling in Vietnam

*As outlined in the presentation by Mr. Hoang Duc Vuong, Chairman of Vietnam Regenerated Plastic Branch, Vietnam Plastic Association*

At the moment, a lot of plastic products in Vietnam are of low quality and have very short life cycles as many small companies add additives such as stone powder to reduce costs. Plastics should however be durable with longer life cycles. In order to reduce unfair competition, **plastic and packaging design standards could be introduced**, e.g. for stretching, bending, aging, resistance to ultraviolet rays and the percentage of stone powder. As suitable regulation is still missing. For instance, plastic packaging does not indicate the type of plastic, which makes segregation difficult. Also, multilayer packaging, e.g. with aluminium coating, hinders recycling. Another challenge consists in oversized label design: a label wrapped all over a bottle reduces the quality of recycled plastics significantly as the label and the bottle are made of different types of plastics but are attached with glue to each other. In addition, shopping bags in Vietnam are too thin for reuse and do not encourage collection and recycling. An oversized print area further reduces the recyclability of plastic bags.

**Vietnam's plastic recycling industry faces additional challenges:** Investments in recycling companies with high environmental standards cannot compete with recycling craft villages with low standards. There is limited interest in collecting and recycling post-consumer plastic packaging, which mostly ends up in landfills. Low oil prices mean losses for plastic recyclers who cannot sell their recycled plastics. People working in collection and recycling might quit these jobs in the absence of appropriate policies.

The **Vietnam Plastic Association recommends strengthening communication and education on waste separation at source and to put an Extended Producer Responsibility (EPR) regulation in place**, so that producers pay for sustaining the plastic recycling industry. There should also be regulations on minimum recycled content in new plastic products, e.g. with a share of 30% of recycled materials. Support for the access to technology and low-interest loans would be welcome. Further ideas include building industrialised zones specialised on recycling or to establish a National Recycling Council for research and development and as a bridge to EPR, e.g. to determine the subsidy level for recyclers. Furthermore, an Institute for Plastic Recycling Management could be created.



“We are advising the government to introduce plastic standards similar to those of the European Union and other countries. If we want to protect the environment, the consumer plastic products have to be of high recycling value.”

Mr. Hoang Duc Vuong, Chairman of Vietnam Regenerated Plastic Branch, Vietnam Plastic Association

## Designing recyclable packaging and increasing market demand for recycled plastics in the Philippines

*As outlined in the presentation by Mr. Crispian Lao, President of the Philippine Alliance for Recycling and Material Sustainability (PARMS) and Private Sector Representative from the Recycling Industry in the National Solid Waste Management Commission, Philippines*

**The objective of the Philippine Alliance for Recycling and Material Sustainability (PARMS) is to bring all relevant stakeholders in the value chain together** to develop programmes for increasing resource recovery. PARMS includes consumer goods companies, industry associations, retail associations, Material Recycling Facilities and junkshops, civil society and academic organisations. Initiatives focus on recyclable packaging, increasing the share of recycled content in packaging and improving collection and recycling systems. PARMS also works on the redesign of multilayer packaging, the offtake of products with recycled content and investments into recycling facilities. It advocates evidence-based policymaking, including the development of locally applicable and inclusive Extended Producer Responsibility (EPR) systems and the use of life-cycle assessments. In January 2020, the members of PARMS made a joint declaration on “Ambition 2030: Zero Waste to Nature”. Sub-groups of PARMS address different types of packaging and items such as sachets, PET bottles, plastic bags, ultrathin food bags, plastic cups, cutleries, straws and stirrers.

PARMS envisions to develop a strategy, define enabling policies and elaborate a path to determine where products will go at the end of their lifecycle. It has therefore developed a systems map, seeking to avoid unmanaged waste and minimizing landfilling. In the current landscape of recycling, the informal sector is crucial. PARMS considers working on the basis of the existing system, which would be more efficient and also benefit the informal sector, especially waste pickers who can be better organised and get higher income.

Concerning the current **recycling landscape in the Philippines**, most of PET is still exported to China but the development of bottle-to-bottle recycling in the Philippines has been announced. Materials like PE, PP, PS and other hard plastics are also recyclable but there is a need to enhance applications to tables and chairs, pipes, bottles, pallets and crates. If flexible packaging, such as plastic bags and films, are collected in a suitable condition, they could also be recycled as the industry exists in the Philippines. The recycling process mainly consists of manual sorting, grinding and pelletizing as well as the final processing into new products. A question is whether sophisticated sorting facilities should be established or if the existing system should be maintained by enhancing segregation at source and therefor the cleanliness of collected recyclables. Polystyrene (PS) could be converted into blocks and insulation materials.

**For improving the market demand for recycled materials, the requirements of the packaging industry need to be aligned with the capabilities of the recycling industry.**

Approaches consist in avoiding colours, minimizing printing and including recycled content in packaging materials. Foul odour of recycled materials can be avoided through good segregation at source, which requires education of the public. The industry cannot do it alone but requires a collaborative effort with government, consumers and other stakeholders.



“The whole idea is to develop a pathway for all these materials so that we can reduce, reuse, recover and recycle these products. (...) At the end of the day, a product is only recyclable if we are able to collect and bring it to the recycling industry. And this is a big challenge for a country that has 7,641 islands. In the Philippines, we have a very strong recycling industry – we need to increase the demand for applications and improve the linkage between the packaging industry and the local recycling industry.”

Mr. Crispian Lao, President of the Philippine Alliance for Recycling and Material Sustainability (PARMS) and Private Sector Representative from the Recycling Industry in the National Solid Waste Management Commission, Philippines



# IMPRINT

This documentation was prepared by the project 'Rethinking Plastics – Circular Economy Solutions to Marine Litter', which is funded by the European Union and the German Federal Ministry for Economic Cooperation and Development (BMZ) and implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Expertise France. It is based on the webinar "Plastic Waste Recycling Standards" that took place on 10 September 2020. The contents of this publication are the sole responsibility of GIZ and Expertise France on the basis of the speaker's presentations and do not necessarily reflect the views of the project partners, the European Union or the German Federal Ministry for Economic Cooperation and Development (BMZ).

## **Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH**

*Registered offices*  
Bonn and Eschborn, Germany

*Address*  
Dag-Hammarskjöld-Weg 1-5  
65760 Eschborn, Germany  
T +49 61 96 79 – 0  
E [info@giz.de](mailto:info@giz.de)  
I [www.giz.de/en](http://www.giz.de/en)

## **Expertise France**

*Contacts*  
73, rue de Vaugiard  
75006 Paris  
0170 82 70 82

[accueil@expertisefrance.fr](mailto:accueil@expertisefrance.fr)  
[www.expertisefrance.fr](http://www.expertisefrance.fr)

### **Project:**

Rethinking Plastics – Circular Economy Solutions to Marine Litter  
Team Leader: Alvaro Zurita (GIZ)  
<https://beatplasticpollution.eu/rethinking-plastics/>

### **Editors:**

Pascal Renaud, Lena Kampe, Richard Caballero, Imporn Arbutra (all GIZ), Fanny Quertamp (Expertise France)

### **Design:**

Lena Kampe

### **Photo credits/sources:**

Title: GIZ/Werner Kossmann; GIZ / Pascal Renaud (Rayong Province, Thailand, p. 2; Halong Bay, Vietnam, p. 6; Bangkok, Thailand, p. 11); cyclos GmbH, p. 12

### **URL links**

Responsibility for the content of external websites linked in this publication always lies with their respective publishers. GIZ and Expertise France expressly dissociate themselves from such content.

As of October 2020

