

Marine Pollution

Indonesia commits to reduce waste by 30% and to manage waste properly by 70% of total waste generation in 2025, as stated in Presidential Regulation No. 97/ 2017. Waste reducing is done through waste prevention, waste recycling, and waste reusing including plastic bag restriction, community-based composting, and waste bank, and then improve Waste Handling. This in-land based approach aim to prevent litter's leakage to the ocean.

Indonesia declares National Plan of Action to combat marine debris 2018 to 2025 as stated in Presidential Regulation No. 83/2018, which involved 16 Ministries, Local Governments, Private Sectors, and NGOs with total planed budget USD 1 Billion.

Indonesia and 17 other countries under East Asia Summit would declare EAS Leader's Statement on combating Marine Plastic Debris and to reduce minimum 25% of inter boundaries marine debris.

Indonesia will use plastic debris which collected from the ocean to substitute the bitumen (Asphalt) 5%-7% for construction of road, starting 2018 to 2025. In addition, Indonesia will build infrastructure for landfill for waste processing.

Indonesia through Ministry of Environment, Local Governments, and Civil Society/NGO will promote 40 local government act by 2025 to stop using plastic bag in modern market.

Japan allocated USD 167 million to build a marine litter's monitoring technology and international cooperation with Asian countries.

Japan announced the allocation of USD 1.16 million for the launch of the WebGIS "MDA Situational Indication Linkages (MSIL)" in early 2019. MSIL is able to collect and share marine-related information for multipurpose including maritime environment conservation and maritime industry promotion.

The Netherlands announced USD 113,000 to support the embedding of best practice of the management of fishing gear in Indonesia through the Global Ghost Gear Initiative as a follow-up to the work done during the pilot project in 2017. By embedding and improving current management practices for gillnets, including gear marking, end-of-life net management, lost gear reporting and other best practices, the alliance expects to significantly reduce fishing gear being lost and abandoned by 2025 in a critical hotspot area and protect more than one million marine animals by 2018.

The Netherlands announced it makes USD 11.4 million available for the period 2018-2022 to promote innovations to reduce microplastic emissions from plastic

litter, car tyres, paint and clothing into the aquatic environment and for research into the effects of microplastics on human health.

The Netherlands announced it will promote circular design in production by training product developers of at least 10% of all producing companies in the Netherlands through workshops on circular design of products, packaging and business models by 2022.

The Netherlands announced that it will work towards a concrete international green deal promoting circular design with the Indonesian government and multinational companies in 2019. The objective is to reduce the amount of small single use plastic packaging brought to the Indonesian market during the period 2019-2025, thus reducing plastic pollution of the oceans substantially.

Chile's commits to eliminate the delivery of plastic bags by local commerce. In 2019 will enter into force the law that will prohibit all local commerce to deliver plastic bags, small and medium companies will have until 2020 for disposal. With this, the year 2020 Chile will be a country free of plastic bags from commerce. Chile is also implementing a campaign to end the use of plastic straws.

The European Union announced a project worth USD 10,2 million to reduce plastic waste and marine litter in South East Asia. The project is to support a transition to sustainable consumption and production of plastic and contribute to significantly reduce marine litter, including by supporting European approaches, policies and business models. The project will focus on China, Indonesia, Japan, the Philippines, Singapore, Thailand and Vietnam, but is also to support indirectly countries in the Mekong Region and in the rest of the Association of Southeast Asian Nations (ASEAN). As part of the recently launched plastics strategy, the EU is committed to working with partners around the world to come up with global solutions on marine pollution.

The European Union announced, as part of its plastics strategy 1) that it has initiated work on new rules on packaging to improve the recyclability of plastics and increase the demand for recycled plastic 2) new measures to curb plastic waste and littering, with a focus on single-use plastics and fishing gear (including a new legislative proposal published on 28 May 2018 and currently under discussion) and the use of micro-plastics on products 3) work to develop harmonised rules for the definition and labelling of for biodegradable and compostable plastics.

The European Union announced a new project that is to contribute to a clean, healthy and productive Mediterranean. The project, worth 18 million EUR, is to tackle marine pollution, including from plastics. Furthermore, 4 million of the project will be attributed to the UNEP/MAP Barcelona Convention to develop an integrated network of marine protected areas in the planet's largest inland sea, locked in between Europe and Africa and Asia.

The European Union announced the upgrade of its mobile application (Floating Macro Litter Monitoring Application) monitoring riverine ocean pollution. While in the past the app was mainly used by scientists, version 2.0 will be made accessible to the general public. Not much is known about the amount of marine pollution coming from rivers, but by extending the app to a broader user audience, this knowledge is to further improve.

The European Union announced to support a waste management programme for the Pacific region. The EU will provide 17 million EUR to support Pacific countries in addressing issues relating to health and well-being, marine litter and biodiversity conservation.

The European Commission, together with the United Nations Environment Programme and with the support of the Oceanographic Museum of Monaco, the European Union of Aquarium Curators, the World Association of Zoos & Aquariums, the US Aquarium Conservation Partnership and the Intergovernmental Oceanographic Commission of UNESCO, announced that they will coordinate a global coalition of 200 aquariums by 2019 to raise public awareness about plastic pollution. Aquariums will be engaged in permanent activities in their facilities and in communication actions via all possible channels. They will be invited to change their procurement policies, for example in canteens and shops, to eliminate all single use plastic items. They will also be encouraged to ally with all potential partners and multipliers, such as sponsors, funders and NGOs, to maximise impact by promoting best practices in behavioural change on a local, regional, national and global scale.

Thailand committed to encourage approximately 10,000 commercial fishing vessels in Thailand to collect marine debris from the fishing nets during their operation at least 1 kilogram/day/vessel for recycling and other purposes. It is targeted that in the year 2019, 350 tonnage of marine debris will be minimally eliminated.

UN Environment, the Coordinating Body on the Seas of East Asia (COBSEA) and Sweden/Sida commit to reducing marine litter from land based sources in East Asian Seas, by addressing management of the plastic value chain. USD 6.5M of new funding will be used towards identifying and scaling up market-based solutions and appropriate regulatory and fiscal incentives; strengthening the science-basis for decision making; outreach towards increased public awareness and consumer behavioural change; and regional networking, coordination and stakeholder engagement towards coherent and effective action. This implements key provisions of the COBSEA Regional Action Plan on Marine Litter, and directly delivers on Sustainable Development Goal 14 target 1 and Goal 12 target 5.

Norway is setting up a program to assist developing countries in combatting marine litter and micro-plastics. USD 11.5 M have been committed to the World Bank's fund PROBLUE in 2018. The funding includes support to sustainable

fisheries management. USD 38 M will be allocated in 2019, and for the period 2019-2022 the ambition is to reach a total of USD 153 M to assist this effort.

The European JPI Oceans is committing to new funding upwards of USD 9 M for cutting-edge international research into microplastics in the marine environment from 2020 onwards. The Research will focus on the major microplastic sources especially macroplastic fragmentation, on new analytic methodologies including for nano-sized particles, on effects on the marine environment as well on concepts to reduce inputs of plastics into the marine environment. By creating the necessary international knowledge base for action, this new research will thus contribute to SDG14 as well as the G7 and G20 Action Plans to Combat Marine Litter.

JAMSTEC will contribute to scientific understanding of marine pollution with thin and widely spread microplastics through “Development of Automated Microplastic Analysis Method with Hyperspectral Camera” project which will be completed in 2022 and the “Improvement of Plastic Debris Measurement Technology in Seafloor Sediment” project which will be completed in 2020. The project will spend USD 0.34 million.

JAMSTEC allocated USD 3.8 million to the “Deep-sea Debris Database” project in 2017-2018. This database provides marine debris data for public, and contributes to visual awaking that the marine pollution by human beings extends to the deep ocean. Data is collected from deep-sea videos and photos, taken during research surveys by submersible, “SHINKAI6500”, “HYPER-DOLPHIN”, etc., owned by JAMSTEC. Database provides lists of debris classified by shapes or materials, location of debris sunken to deep-sea, and also videos and photos of debris.

b) This database research were featured 180 times in the media within 28 countris and the page view was 0.34 million in FY 2017-18. (Marpol's note: it is already passed away's commitment)

The Global Environment Facility is committed to promoting a circular economy approach of closed loop production and consumption. The GEF will invest in public-private partnerships that work along the entire lifecycle of plastic by promoting alternative sustainable materials, rethinking product design toward circularity, raising consumer awareness to create market demand for sustainable products, using technology to improve collection and ensuring efficient recycling that feeds back into material needs. Based on this circular economy approach the GEF commits to reducing 50,000 tonnes of plastic from entering the ocean as part of our recently approved 4 year funding cycle from 2018-2022.

The Prince Albert II of Monaco Foundation and its partners Surfrider Europe Foundation, the Tara Expeditions Foundation, the Mava Foundation and the IUCN announced that they will invest USD 570.000 in 2019 for the development of the Beyond Plastic Med initiative which supports concrete projects to curb plastic pollution in the Mediterranean.

Circulate Capital and Ocean Conservancy announced of at least USD 150 million of investment capital for waste and recycling innovations, companies, and projects that prevent plastic waste from entering the ocean over a 10-year period for East Asian and Indian Countries.

The World Bank commits more than \$1 billion over the next seven years to advance the sustainable oceans and Blue Economy agenda in developing countries, including \$250 million to specifically address marine litter and pollution. The World Bank's commitment to address marine litter and pollution over the next six years in developing countries includes the following. \$150 million for pollution and watershed management in China, and \$100 million to Indonesia to improve solid waste management services for urban populations in selected cities. In China, the project will aim at reducing levels of nitrogen, phosphorus and pesticides in water. The funding to Indonesia includes World Bank co-financing to a \$1.1 billion program to improve solid waste management services for approximately 45 million Indonesian urban residents across 30 metropolitan, large, and medium cities. Considering that 80% of marine plastic pollution comes from land sources, this is a significant commitment for the Oceans Agenda. In participating cities, this program is expected to increase solid waste collection rates to 85% (from an estimated 65%), decrease marine plastic pollution by half, and increase waste reduction rates by 300%.

World Wide Fund announced: 'No More Plastics in our Ocean', a three year, USD 7.5 million global initiative, funded by the Norwegian Government. The initiative will help to advance a global governance solution to effectively address the scourge of marine plastic pollution. It will also spur public and private sector commitments towards this goal. The initiative targets the governance structure that needs to be put in place to secure widespread policy commitments at the national and global levels to reduce plastic use and leakage and aims to address the major players in the private sector to encourage widespread implementation of extended producer responsibility schemes, and create scalable change at the city level, through the establishment of a Plastic Pollution-Free Cities programme.

Ellen MacArthur Foundation through UNEPs and EMF's New Plastics Economy Commitment, 100+ companies representing 25%+ of the plastic packaging market commit to eliminate unnecessary or problematic plastics; move from single-use to reuse models; increase % recycled content; and design all packaging to be 100% reusable, recyclable, or compostable, all by 2025. Next to this minimum 15+ governments will sign up to create the enabling conditions through policy and legislation.

Lonely Whale, through Next Wave Project, commits to intercept and permanently integrate into company products a minimum of 25,000 tons of OBP. Increase demand for OBP by onboarding a minimum of twenty (20) additional companies including for 2018 IKEA, Amazon, Sonos, HP, DBS Bank and

Samsung Global. Eliminate across member companies a minimum of 50% of all non-essential plastics by 2025.

- 30 scaled ALDFG solutions projects operating in 15 amount of pilot countries by 2025. Through active preventative and removal action, the total amount of ghost gear entering our oceans is smaller than the total amount of ghost gear removed from the ocean so that we achieve a net reduction of ghost gear in our oceans on an annual basis by 2030.

Systemic's Project STOP partner, Borealis AG, commit to provide EUR 4 million initiative to accelerate waste management improvements in South-East Asia to be rolled out in 2018-2019 and then expanding the best practices from Project STOP in Muncar, East Java, to 2 (two) additional cities in Indonesia.

Oceana will launch a new campaign to reduce the production of single-use plastics at the source. With over 200 victories that stop overfishing, habitat destruction, pollution and killing of threatened species like turtles and sharks, Oceana's campaigns by 2020 will deliver results and promote effort beyond recycling.

Think Beyond Plastic will establish Innovation Centre to Create and Research over Plastic Reduction Program and Waste Management in Indonesia to reduce marine plastics leveraging innovation, entrepreneurship and impact investment with focus on circular materials, circular design and the social enterprise by 2019.

The Ocean Race commits to USD 2.5 million program for positive action on plastic pollution prevention and action plans that will help restore ocean health, from each of our future host cities as they sign agreements to be a stopover for The Ocean Race.

The Ocean Race will continue to promote ocean health, sustainable operations and ensure a minimal single-use plastic footprint at any of our race events taking place before the 2021/22 edition.

Food Industry Asia (FIA) is committed to reducing packaging waste and developing sustainable plastics initiatives by supporting and partnering governments and other stakeholders across Asia. In 2018, FIA invested US\$150,000 in commissioning a study to understand plastic waste leakage points in Indonesia, the Philippines, Vietnam and Thailand (which collectively account for a quarter of the annual global marine plastic debris) and assess the impact of current efforts to tackle marine litter. The findings are being used to inform policymakers and develop opportunities for reducing plastic and packaging waste on a large scale. FIA is working with regulators in these countries to develop, enhance and implement guidelines for packaging to be reusable, recyclable or compostable by 2025, in line with the commitments of its member companies.

Danone-Aqua announces pioneering commitments to address plastic waste, and invites all Indonesians to join the BijakBerplastik movement.

Danone-Aqua commits to recover more plastic waste collection from the Indonesian environment, in equivalent volume by 2025

Danone-Aqua commits to lead a nationwide campaign of recycling education, and to activate consumer awareness recycling programs in 20 major cities by 2020, reaching 5 million kids and 100 mio consumers by 2025

Danone-Aqua commits to make all plastic packaging 100% recyclable, and to increase the proportion of recycled plastic in our bottles to 50%, by 2025.

ADUPI and partners commits to process plastic waste up to 5.000.000 ton plastic wastes per year by 2025.

The Indonesia Plastic Bag Diet Movement together with Alliance for Zero Waste Indonesia pledge to prevent leakage of 3,000 tons of plastic bags, through plastic bag bans implemented in 5 cities by 2019. Work on 10 additional cities per year, preventing 11,000 tons of plastic per year from entering into the oceans, or up to 58,000 tons in total will be the next target in 2020-2025.

The Municipal Waste Recycling Program (MWRP), a five-year (2016-2021) USAID-funded initiative, is designed to reduce land-based sources of marine plastics pollution in Indonesia, the Philippines, Sri Lanka, and Vietnam. With proximity to two oceans, effective solid waste management in these countries is critical to reducing marine plastics waste. The Program provides grants and technical assistance for promising solid waste management and waste recycling efforts in urban areas, enhances their effectiveness, and makes recommendations for future investments in mitigating marine debris. The MWRP ensures its activities are responsive to gender considerations through evidence-based analysis, and that the assistance provided and the results achieved are beneficial to women and men. After two years of implementation, the MWRP – with the Development Innovations Group as its prime implementer – is prepared to share important gender-related best practices.

Nestlé announced its ambition to make 100% of its packaging recyclable or reusable by 2025. Our vision is that none of our packaging, including plastics, ends up in landfill or as litter. We believe that there is an urgent need to minimize the impact of packaging on the environment and tackling it requires a collective approach.

The Coca-Cola Company launched industry-first goal to help collect and recycle the equivalent of every bottle and can we sell globally by 2030 and called as World Without Waste. This program will contribute to a circular economy through a multi-year, multi-million dollar investment that includes ongoing work to make all our packaging 100% recyclable by the year 2025 and to include 50% recycled content across all our primary packaging globally by 2030.

Bye Bye Plastic Bags will expand the amount of businesses that will join the KOMITMEN campaign by One Island One Voice. One Island One Voice aims to gather 1000 Komitmen's by the end of 2018. In the long term, One Island One Voice plans to spread the Komitmen campaign to the 25 locations globally with Bye Bye Plastic Bags teams by 2020 and nationally across 3 locations by end of 2019.

Surfrider Foundation, Kauai Chapter funded in part by US NOAA grant committed to perform 4 Beach Cleanups, 50 Net Patrols and collecting 50 MT from over 40 km of coastline per year. The program will be completed in September 2021.

Gringo Trash Tch commits to build a waste network that helps reduce ocean plastic pollution by 25% by 2020 in South East Asia and increase recycling rates by 50% by 2022.

Gringo Trash Tch will create a platform for school recycling programs and marine pollution education in at least 5,000 schools across Indonesia.

Project AWARE announced its commitment to remove the next 1 (one) million plastic waste by the end of 2020. Project AWARE continues to mobilise a global community of citizen scientists – dive leaders and debris activists – and, by the end of 2020, aims to increase the number of Dive Against Debris® surveys submitted by 50%; and the number of dive sites monitored on a monthly basis by 30%. Project AWARE also announced the removal of all single-use plastics from its operations, products and supply chain with immediate effect by end of 2020.

4Oceans commit to pull 3 Million (MM) Kilograms from the Ocean by 2019.

Unilever announced its commitment to help transform global plastic packaging material flows by ensuring 100% of its plastic packaging is reusable, recyclable or compostable by 2025; Increasing its use of recycled plastic content in its packaging to at least 25% by 2025 (against a 2015 baseline), which means we reduce our usage of virgin plastic by 25%, Publishing the full “palette” of plastics materials used in its packaging by 2020 to help create a plastics protocol for the industry and helping tackle the industry-wide sachet waste issue, by investing in proving, and then sharing with industry, a technical solution to recycle multi-layered sachets - CreaSolv®.

Fourth Element pledges to engage Scuba Diving Manufacturers and Brands worldwide to join their quest to reduce plastic pollution by making a commitment to reduce their plastic packaging output. Fourth Element will create a digital platform that will highlight the brands joining the mission and to create a focal point to engage with and encourage all companies in the diving industry to take part and reduce their single use plastic waste. By World Oceans Day 2020, it will be targeted 60% of the major dive manufacturers participating in the initiative along with the objective of 1000 dive centres signed up to support

Mission 2020 and to reduce their single use plastic output. 300 Staff hours will be put to promoting and managing this commitment and USD 6500 value to cover the set up and running costs of the digital platform and supporting activities.

EvoWare commit to targeting replace 21.714 ton of plastic waste, and reduce 110.216 ton of CO2 from seaweed cultivation, and to increase 364 seaweed farmers income 2.1x and provides extra jobs for 728 people by 2020. The innovation will continuously to broaden the flexible packaging application, such as cooking oil, seasoning oil, margarine, polybag, and other single use plastic. Some innovation in semi-rigid disposable plastic, such as cup, bowl and straw will also be done.

The International Nitrogen Initiatives (INI) commits to support a global goal to halve nitrogen waste by 2030, offering a resource-saving of \$100 billion per year globally, by reducing pollution by 100 million tonnes per year, as a key to protecting Our Oceans with quantified co-benefits for water quality, air quality, biodiversity, climate resilience, food and livelihoods. INI makes this commitment by providing a global science-policy support process for better nitrogen management, the International Nitrogen Management System (INMS), working 2018-2022 in partnership with UN Environment and a global network of over 80 partners from science, governments, agencies and civil society. Over this period, the INMS partnership commits a US 60 million effort, including USD 6 million through the Global Environment Facility (GEF).

Wildlife Conservation Society announced to raising awareness and reducing plastics in New York City, USD 102 million over 5 years.

Algalita Marine Research and Education commits to directly and indirectly educating 80,000 young people about plastic pollution prevention through Plastic Ocean Pollution Solutions (POPS) Youth Education and Leadership Programs until the end 2019.

Plastic Recyclers Euro commits that its members would put on the EU market 10 million tonnes of recycled plastics each year by 2025 if certain conditions and legislative measures are put in place.

Misool Foundation through The Bank Sampah program is committed to intercepting and recycling 200 tons of ocean bound plastic from entering the waters of Raja Ampat in 2019. The program engages 7,000+ community members in recycling and brings USD 50,000 into the community in payments for recyclables.

Bawah Anambas Foundation (BAF) is committed to allocating USD 200,000 to help the management of plastic waste by supporting the Government of Indonesia and work directly with the community. We aim to reduce up to 8 tons of solid waste going into the ocean by the end of 2019 as well as collecting marine debris in the area of the Anambas.

