# Philippines





#### **UN-Habitat 10<sup>th</sup> Environmental Technology Expert Group Meeting**

29 October 2019 Fukuoka, Japan



- The Philippines is an archipelago with more than 7,000 islands of which 2,000 are inhabited. 国内7,000ある島のうち 2,000が有人島
  Bays and coastal waters cover an
- Bays and coastal waters cover an area of 266,000 km², while oceanic waters cover 1,934,000 km². The total length of the coastline is 36,289 km.
- Manila Bay, a sheltered harbour, is the country's busiest commercial hub. 海岸線の総延長は36,289キロ
- About 60 percent of Philippine municipalities and cities are coastal, with 10 of the largest cities located along the coast. These coastal cities and municipalities are inhabited by about 60 percent of the total population. フィリピンの自治体の60%は臨海都市、10大都市も臨海都市





 The Philippines is the world's third-largest ocean polluter despite a waste management act coming into effect 18 years ago. The Philippines generates 2.7 million tonnes of plastic waste annually and 20 per cent (half a million tonnes) of that leaks into the oceans (2015 report on plastic pollution by the Ocean Conservancy charity and the McKinsey Centre for Business and Environment)

Rank	Country	Waste Generation Rate	% of Waste that Is Plastic	% Mismanaged Waste	Plastic Waste	% Mismanaged Plastic Waste	Marine Debris
		[kg/ppd]			[MMT/yr]		[MMT/yr]
1	China	1.10	11	76	8.82	27.7	1.32-3.53
2	Indonesia	0.52	11	83	3.22	10.1	0.48-1.29
3	Philippines	0.5	15	83	1.88	5.9	0.28-0.75
4	Vietnam	0.79	13	88	1.83	5.8	0.28-0.73
5	Sri Lanka	5.1	7	84	1.59	5.0	0.24-0.64
6	Thailand	1.2	12	75	1.03	3.2	0.15-0.41
7	Egypt	1.37	13	69	0.97	3.0	0.15-0.39
8	Malaysia	1.52	13	57	0.94	2.9	0.14-0.37
9	Nigeria	0.79	13	83	0.85	2.7	0.13-0.34
10	Bangladesh	0.43	8	89	0.79	2.5	0.12-0.31
11	South Africa	2.0	12	56	0.63	2.0	0.09-0.2
12	India	0.34	3	87	0.60	1.9	0.09-0.24

フィリピンは世界3位の 海洋ごみ排出国。廃棄 物管理の法律はすで に18年前に制定されて いる。 フィリピンが排出する 270万トンのプラごみの うち20%(50万トン)が 海に排出されている。



#### Strong law, weak implementation 法規制は厳格だが、実施は乏しい

Philippines has quite a strong law addressing solid waste. Republic Act 9003, also known as the Ecological Solid Waste Management Act of 2000, mandates that all open dumpsites must be converted into sanitary landfills by 2004, four years after the law was passed.

• In 2018, only 139 operational sanitary landfills servicing just 308 of the country's 1,634 LGUs, and at least 425 illegal dumpsites still operate across the country. 2000年、2004年までにすべてのオープンダンプ(野積み)を衛生埋め立てに改善すると

に対象が制定されたが、2018年時点で衛生埋め立ては139、残り425は不法野積み RA 9003 also mandates that every village or cluster of villages must set up a materials recovery facility (MRF) where biodegradable waste is converted into fertilizer, recyclable material is recycled or sold to junk shops, and residual waste is collected for transport to sanitary landfills.

 In 2017, government data show that only 24 percent of the country's 42,036 villages had operational MRFs.

国内すべての村でマテリアルリカバリーが義務化され、有機ゴミの堆肥化やリサイクルも義務化されたが、2017年時点でリカバリー施設を有しているのは国内4万2千ある村の24%のみ。



 Currently, there are no accurate and updated waste data covering all cities and municipalities in the country, owing to the difficulty and complexity of conducting waste generation data and assessment. Even the National Solid Waste Management Commission (NSWMC) uses consolidated information from selected waste analysis and characterization study (WACS) data sets dating back to 2010.

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- National waste generation per capita at 0.40 kg.1日1人あたりゴミは0.4キロ
- 0.10 kg per person per day in municipalities outside Metro Manila
- 0.79 kg per person per day in Metro Manila and highly-urbanized cities. マニラ首都圏では0.79キロ、その他は0.1キロ)
- From 37,427.46 tons per day in 2012, the country's waste generation steadily increased to 40,087.45 tons in 2016

年間排出量は2012年の日37,427トンから2016年40,087トンに確実に増加

 Life-cycle assessment is not currently carried out due to underfunding at the NSWMC, which is tasked by RA 9003 with identifying and phasing out non-environmentally acceptable products and packaging materials

予算不足を理由に環境に負荷を与える製品や梱包素材を調査するための廃棄物のライフサイクルアセスメントが行われていない



# How Waste Assessments and Brand Audits are Helping Philippine Cities Fight Plastic Pollution

2019

#### **Current State**

Highlights of Waste Assessment and Band Audit Results:

- Organic waste comprise more than 60% of household waste in the Philippines. This confirms that organic waste management is an important strategy that will create substantial waste reduction for local governments. 家庭ごみの60%は有機ゴミ
- Almost 164 million pieces of sachets are used in the Philippines daily, which equates to around 59.8 billion pieces of sachets yearly. 1日に1億6千万の小袋が使用される
- More than 50% of all unrecyclable residual waste analyzed is branded waste.









- More than 15 years after the passage of RA 9003, enforcement and compliance with the law remains a daunting task due to technical, political and financial limitations of concerned agencies and local governments 廃棄物に関する法が制定されて15年経過したが、関係省庁や自治体の政治的・財政的な理由によって実施には遠い状況
- As of September 2017, 1,460 solid waste management (SWM) plans have been submitted to the NSWMC Secretariat. Only 318 SWM plans have been approved.
  2017年9月現在、1460の廃棄物管理計画が提出されているが、承認されたのは318
- Jurisdiction between city governments, barangays/villages and other actors and stakeholders, such as waste collection companies, recycling companies and waste pickers, are often not clear.
  - 市などの地方政府・村・廃棄物収集会社・リサイクル業者・ウエストピッカーなど関係者間の管轄・責任が不明瞭
- Lack of waste related data collection system at the local level and aggregation system at the national level.
  - 国・地方の両方での廃棄物に関するデータを収集する仕組みがない

件にとどまる





- RA 9003 does not mandate **producers** to be responsible for the products and packaging that they are bringing to the market.
- 現行法では、製造者の製品・梱包への責任を問いていない
- Absence of garbage collection services in secondary cities and many of the country's smaller islands is largely to blame for the overwhelming amount of marine plastic coming from the country (Philippines branch of the Global Alliance for Incinerator Alternatives)
  - フィリピン国内の小さい島の中小都市には島外から漂着する膨大な量の海プラごみを回収するシステムがない
- Even though the Philippines has among the highest trash collection rates in Southeast Asia, it has become the world's third largest source of plastic leaking into the ocean. Based on reports by WWF-Philippines, the country's National Solid Waste Management Commission, and the World Bank, 74 per cent of plastic leakage comes from waste that has actually been collected. Leakages are mainly because three factors: lack of secondary collection and transport from transfer stations, illegal dumping by garbage-hauling companies, and open dump sites located near waterways.

海に排出されるプラごみの74%は一旦回収されたゴミから漏れたものといわれる。 原因は回収・中間施設の不備や水路近くの不法投棄など。



#### Significant Measures Taken

#### Philippine Report 2019:

解決に向けた取り組み

- Republic Act No. 9003 or the Ecological Solid Waste Management Act of 2000 Program, Manila Bay Coastal Strategy 2017–2022, Boracay Rehabilitation and SWM projects for local government units (LGUs) to reduce the quantity of municipal solid waste generated.
- To encourage private sector participation, programs such as Philippine Environment Partnership Program (PEPP), Environmental Compliance Assistance Center (ECAC) and Sustainable Clean Cities & Eco-friendly Schools.
- Waste-to-Energy facility for highly urbanized cities and highly urban municipalities
- Started eco-labelling of products to promote greening of the value chain. The Government has extended its support to two eco-industrial parks
- To promote the use of agricultural biomass waste, adopted energy adaptor (NEA) that could convert gas-fed generator into a methane or biogas generator; energy facilitated adopter (EFA) that could convert a gas-fed generator into a liquefied petroleum gas (LPG) generator (Department of Science and Technology gadget)
- 27 cities have issued a ban on use of single use plastics from all departmental stores.
- This year, a Draft Policy on Waste Electrical and Electronic Management and Environmentally Sound Management of Waste Electronic and Electrical Equipment is adopted to deal with the issues of e-waste.
- The local government units/municipalities have integrated the waste scavengers into the recycling chain to formalize the informal sector.

ゴミの削減、民間企業参入、エコ商品の推進、バイオマスの推進、使い捨てプラスチックの禁止、ウエストピッカーの人材活用など、

9th Regional 3R Forum in Asia and the Pacific; 04-06 March 2019; Bangkok, the Kingdom of

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## Significant Measures Taken 解決に向けた取り組み

- Many local governments have passed ordinances to **regulate use of plastic** that covers items such as shopping bags and secondary packaging materials 多くの自治体でレジ袋や包装に使うプラスチックの規制を図る条例を制定
- Several lawmakers also have filed bills to mandate a nationwide prohibition of non-biodegradable straws and stirrers, ban the use of single-use plastic, and regulate the production, import, sale, use and disposal of plastic bags 生物分解しないストローやマドラー、使い捨てプラスチックの製造、輸入、販売、使用、廃棄を規制する法案が提出
- Active IEC campaign to inform the public about the gravity of the problem, and hopefully encourage them to change their consumption habits 一般市民への啓発・教育活動を通じて、問題の深刻さを理解し、行動や習慣を変える きっかけに
- Coastal clean-ups with various partners to reduce the amount of marine debris ending up in the ocean 多様な団体による海岸清掃活動の実施
- Active **CSO work** like #Breakfreefromplastic with member organizations in the Philippines, namely GAIA Asia Pacific, Mother Earth Foundation, Greenpeace Philippines, Ecowaste Coalition, and Healthcare Without Harm Asia 様々な公共・環境団体による積極的な活動



## Significant Measures Taken 解決に向けた取り組み

To push erring local leaders to reform, complaints over violations of RA 9003 filed with the national ombudsman's office against 50 LGUs involving 600 mayors, vice mayors and councilors. Charges are being prepared against 100 additional LGUs, including village officials. If found guilty, local officials can be disqualified from seeking public office, besides the usual fines.

この廃棄物エコ管理法を遵守せず改善に 取りくまないとされる50の自治体の600名の 市長・副市長をはじめ地方議員・行政職員 が全国オンブズマン組織より訴えられる





## Potential Areas for Collaboration

 Encourage companies to adhere more closely to an "extended producer responsibility (EPR)" strategy.

#### 企業の製造者責任をより拡大するべき

Compulsory extended producer responsibility (EPR) mechanism into policy could help end the blame game that currently impedes action: producers blame the general public for littering, the general public blame the government for inadequate waste systems, and government blames produces for manufacturing plastic packaging. An EPR scheme would see government giving clear responsibilities to business, and ensuring that producers fund collection and reprocessing schemes to properly manage the waste from the products they sell in the Philippines. That would in turn incentivise producers to use more easily recyclable packaging, as the costs of managing this material would be lower

 Technical innovation for promoting the uses of biomass plastics, biodegradable plastics or alternative materials for single-use plastics 生分解性のプラスチックや使い捨て容器には代替材料の使用を可能にする 技術革新が必要



# Community Action 地域による活動















### Thank You!

ありがとうございました

# Maraming Salamat

For more information:

www.unhabitat.org and www.unhabitat.org.ph

