



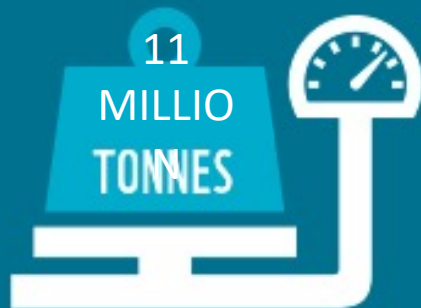
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The background image shows a large stack of colorful shipping containers (red, blue, yellow) in the foreground. In the background, a tall, lattice-structured tower with several solar panels or lights at the top is visible against a clear sky.

CLEAN PORTS, CLEAN OCEANS:

Improving Port Waste Management in the Philippines

Circular solutions to address plastic pollution in the maritime industry



11 MILLION TONNES

OF PLASTIC ENTERS
THE OCEAN EVERY
YEAR

860 MILLION TONNES

CO₂ EMISSIONS FROM
PLASTICS IN 2019
(ABOUT 2.3% OF TOTAL
GLOBAL EMISSIONS)



<60%

OF GLOBAL MARINE PLASTIC ENTERS
THE OCEAN FROM CHINA, INDONESIA,
MALAYSIA, THE PHILIPPINES,
THAILAND AND VIETNAM



800 SPECIES

ARE DIRECTLY
THREATENED BY MARINE
PLASTIC DEBRIS



+300%

PLASTIC WASTE
IS PROJECTED TO
QUADRUPLE BETWEEN
2010 AND 2050

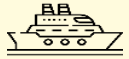


BY 2050, THERE MAY BE
MORE PLASTIC THAN FISH
IN THE SEA BY WEIGHT

FACTS



About 80% of plastic waste comes from land-based sources



Estimated of 1.75 billion plastic bottles are used onboard ships



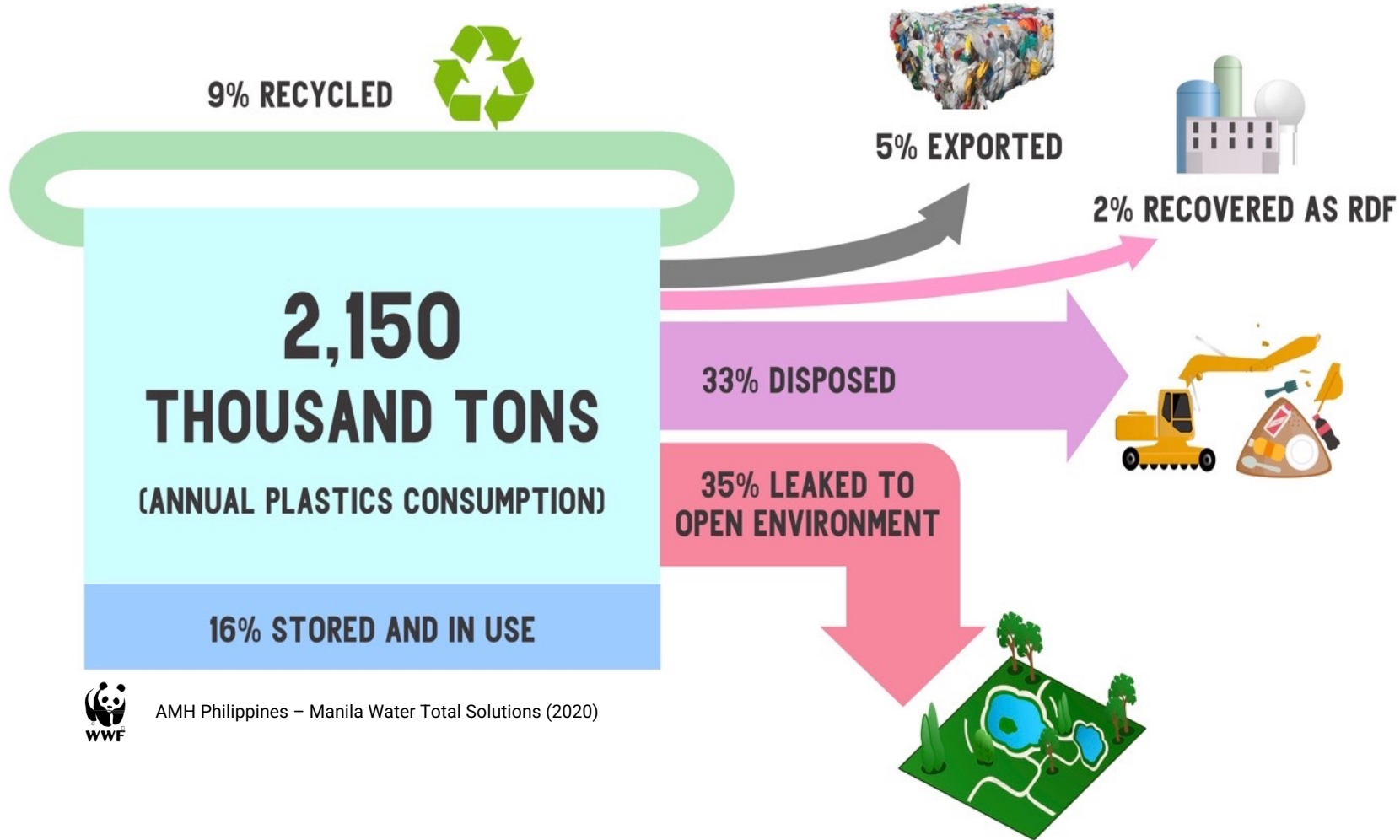
Berthing ships do not always know where the collected waste is taken in ports.



Majority of goods are transported by ships.



About 58,000 vessels and over 6,000 ports in the world

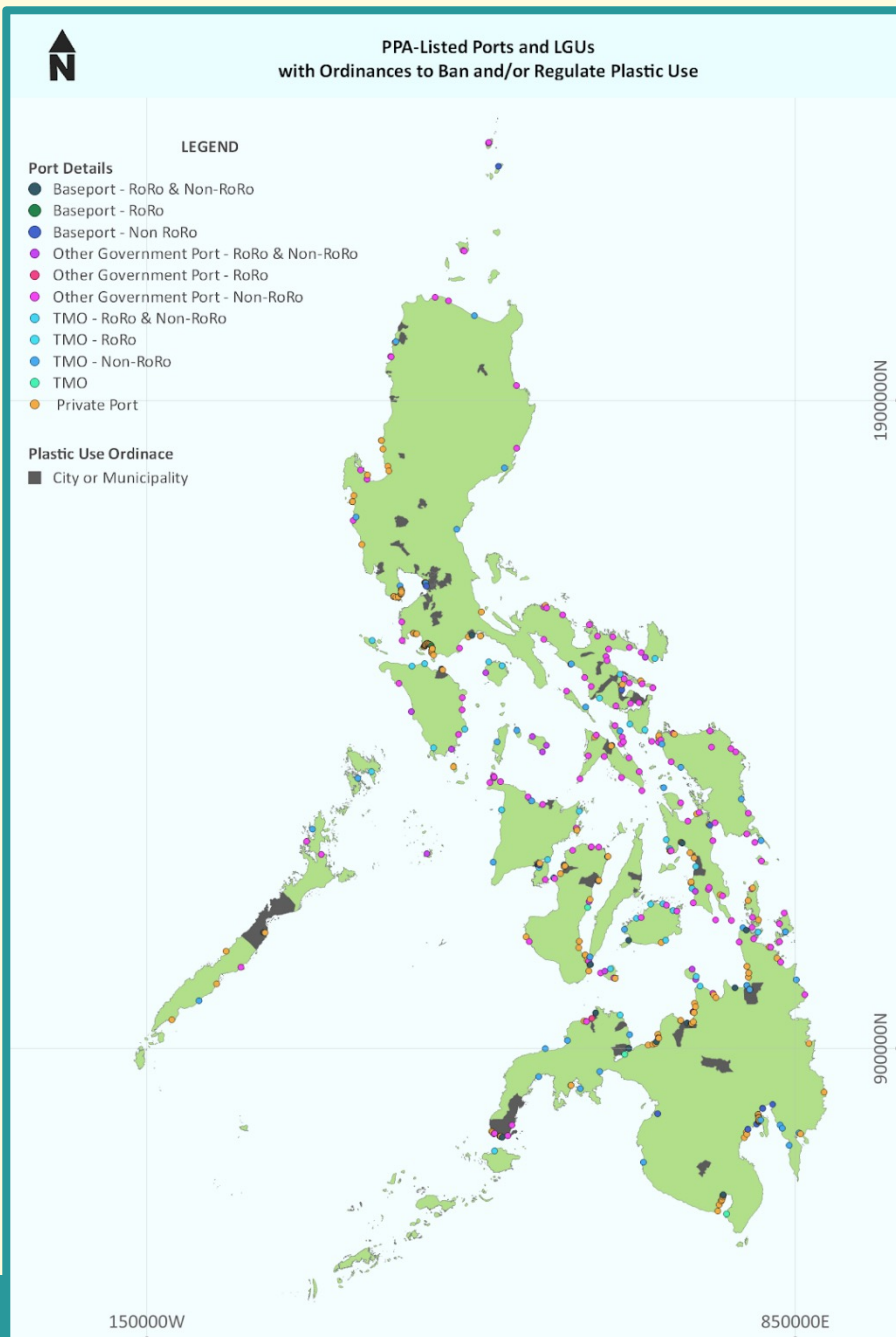


AMH Philippines – Manila Water Total Solutions (2020)

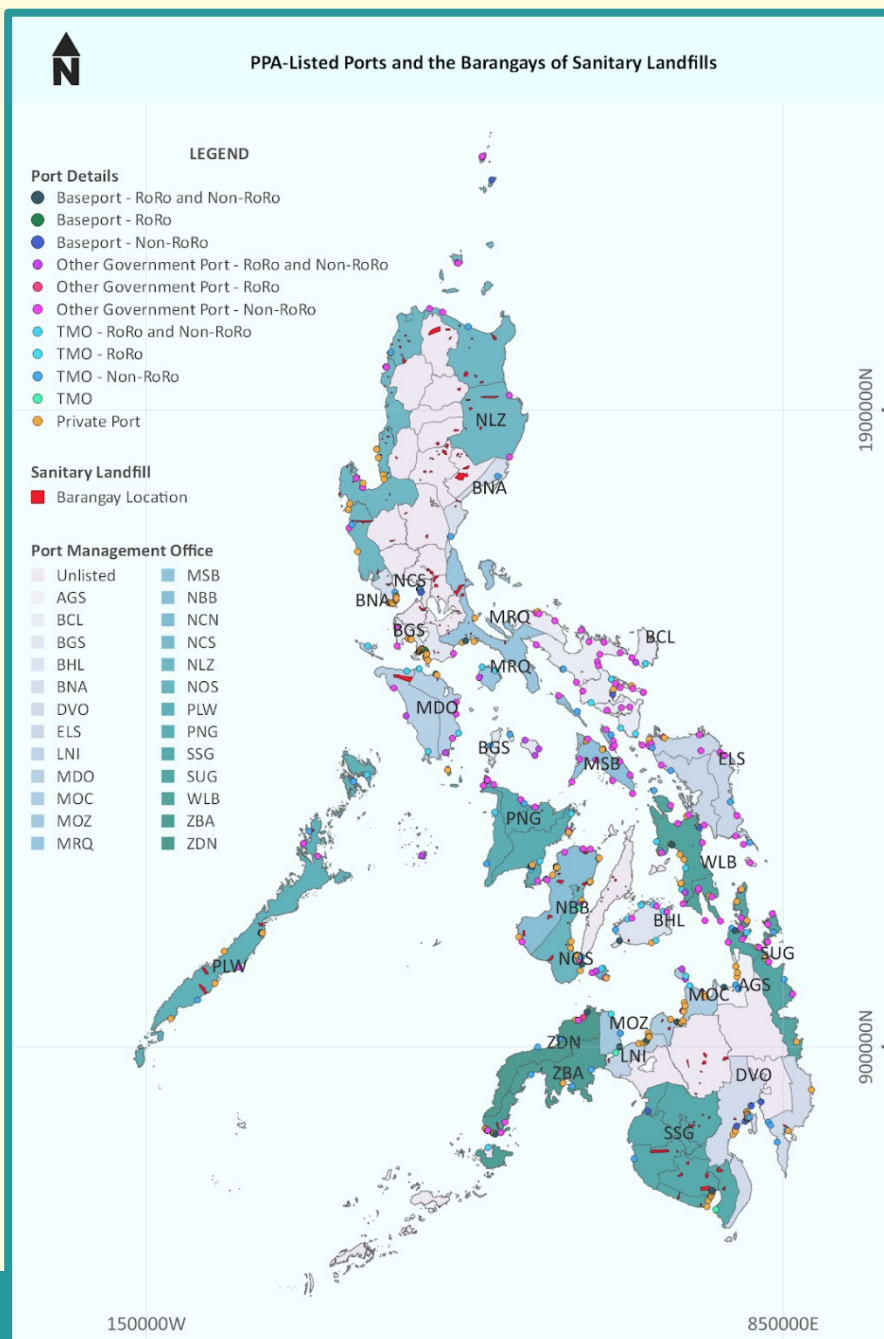
Limited separation of high-value recyclable packaging in household waste

Recycling capacities in the Philippines are insufficient for high-value recyclables.

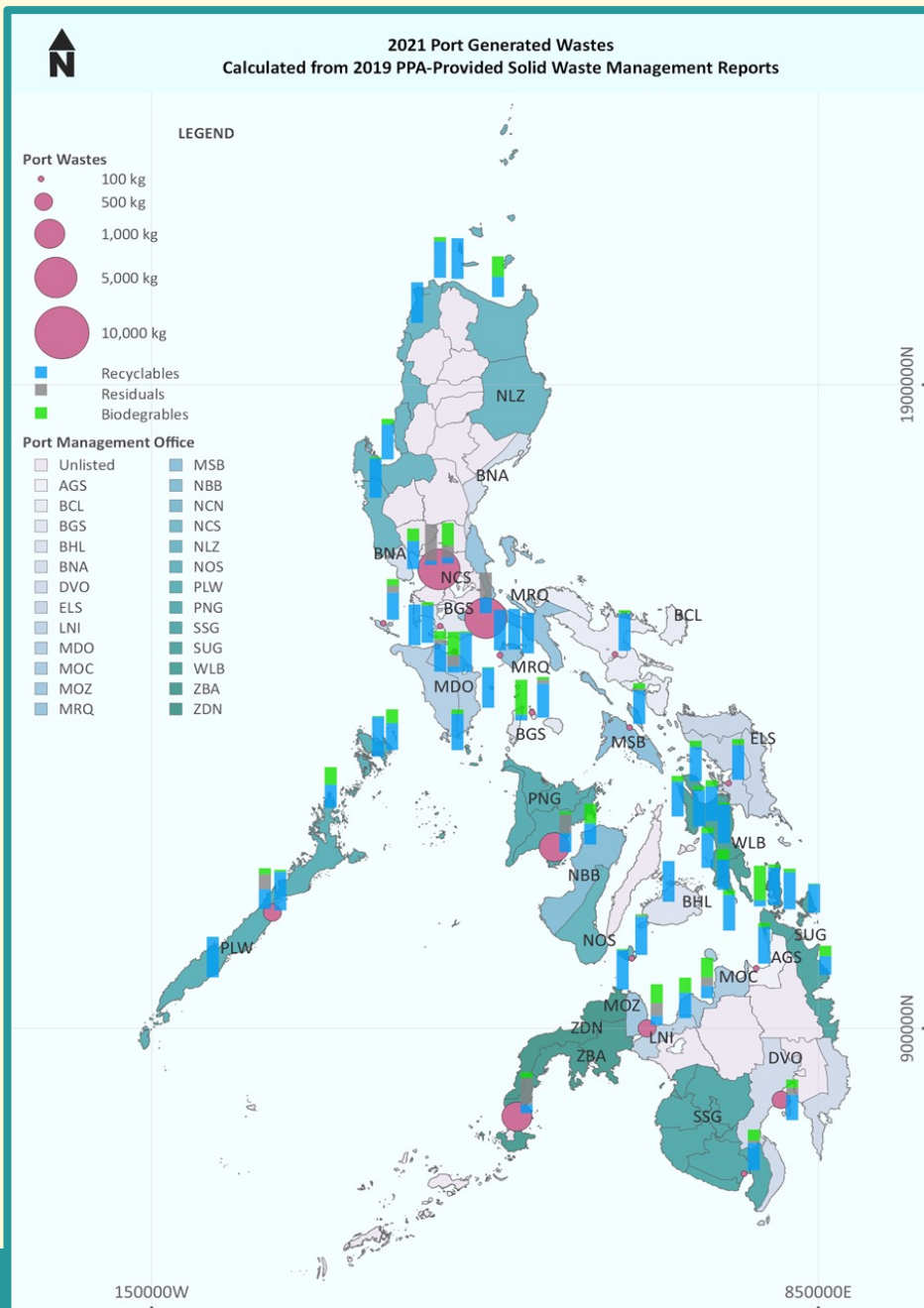
Low-value and non-recyclables (e.g. films, sachets, composites) are mostly disposed of and collected together with other residual wastes.



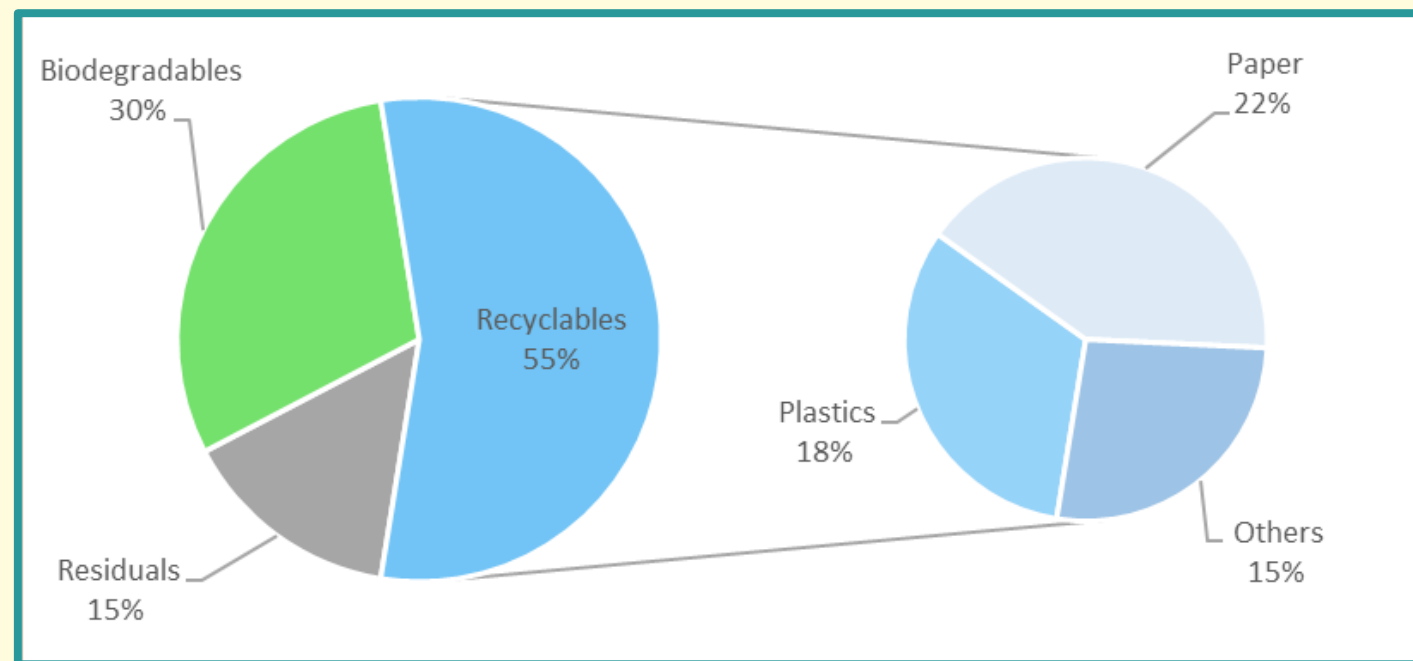
Local Government Units, from which some ports are located, **do not have a ban/regulation of unnecessary single-use plastics** which can complement the PPA MC no 11- 2021 (Ban on the use of unnecessary single-use plastic products)

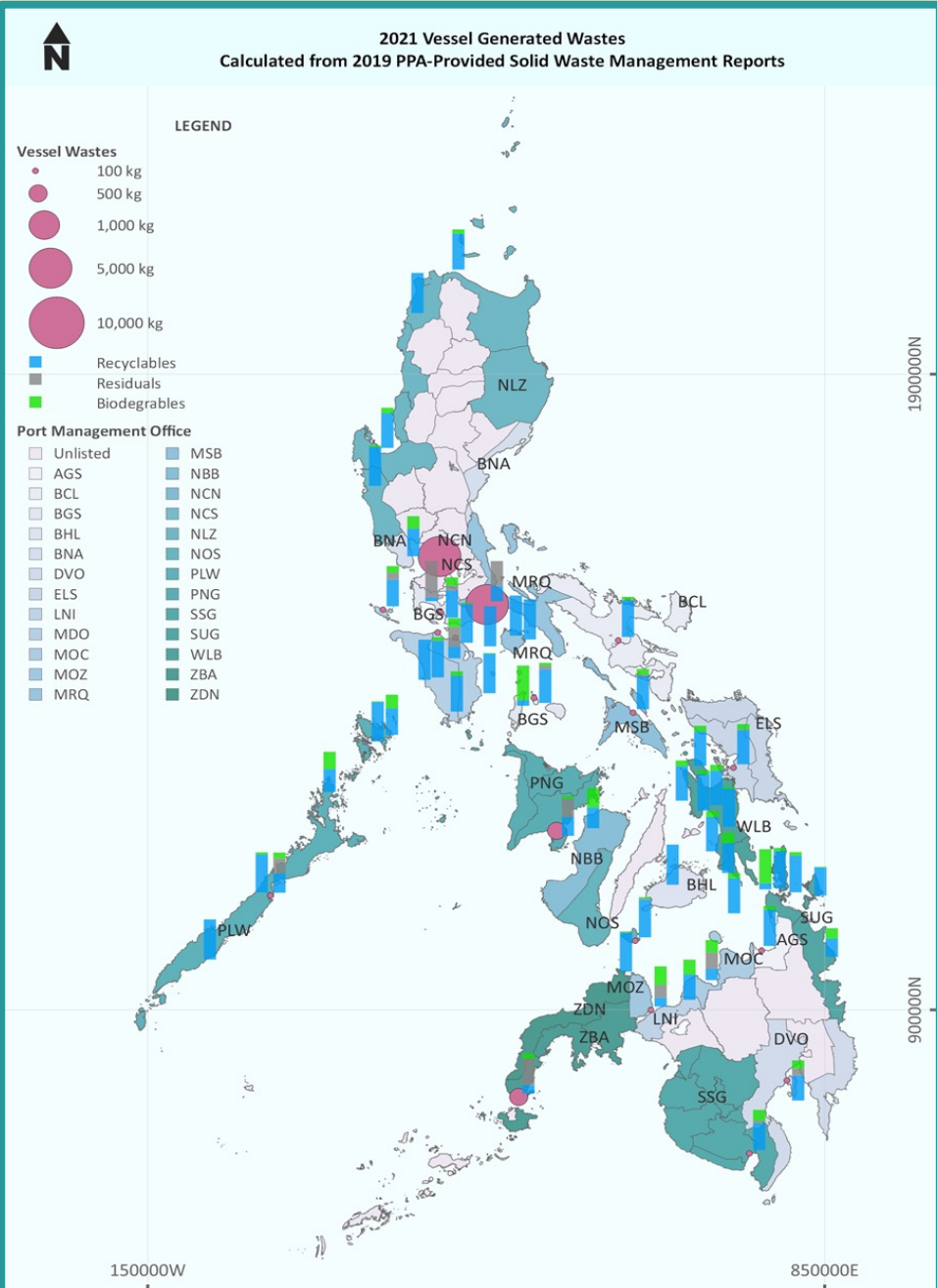


Only 191 Sanitary Landfills in the country – 11% of the total required number for the Philippines. (WWF's EPR study, 2020)

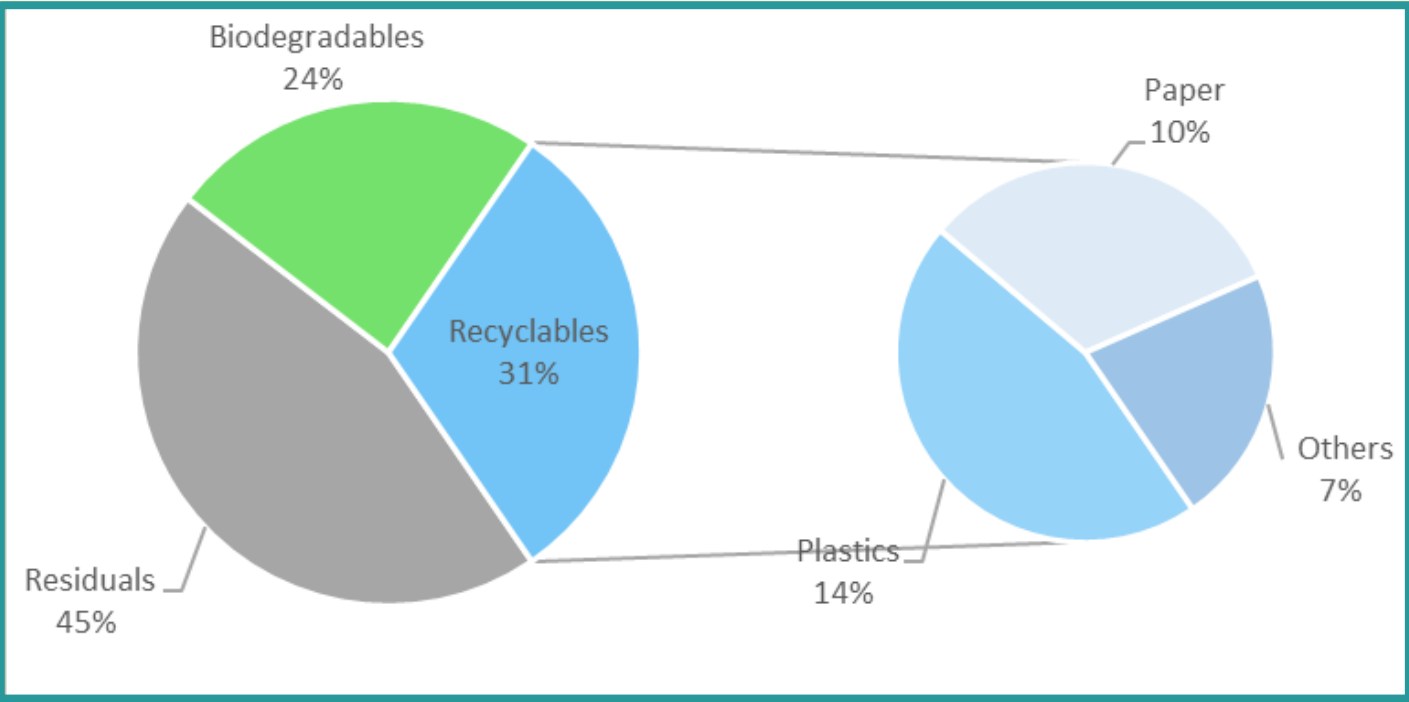


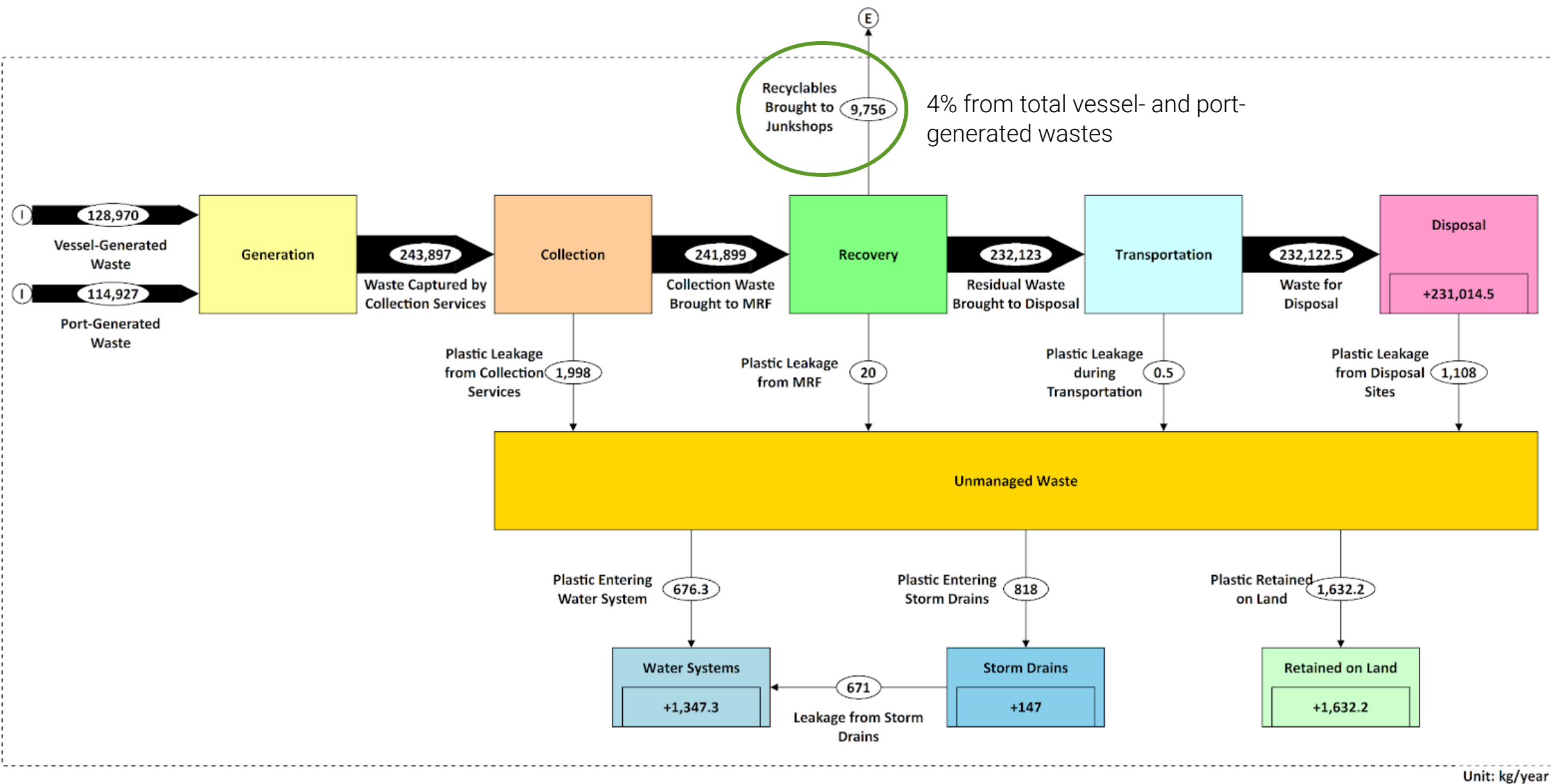
Waste Category	Weight
Recyclables	157,377.16
Plastics	38,511.53
Paper	70,929.11
Others	47,936.52
Residuals	138,776.68
Biodegradables	298,889.33
Total	595,043.17





Waste Category	Weight
Recyclables	105,450.73
Plastics	48,224.20
Paper	34,001.35
Others	23,225.18
Residuals	153,790.15
Biodegradables	82,584.09
Total	341,824.97







World Wide Fund for Nature (WWF), Grieg Group, and Grieg Foundation partner for a 3-year project to stop plastic pollution in ports.



Vessel-generated waste



Port-generated waste



Community-generated waste



We work to reduce at least 50% of plastic waste leakage in the following 3 ports – Manila North Port, Port of Batangas, and Port of Cagayan de Oro.



The project also aims to provide inputs to the implementation of the national plan of action on marine litter and enable scaling up of tested solutions in other ports in the Philippines and in the world.

Categorization	Solution	Environmental impact	Social impact	Economic impact	Scalability	Assessment type
Closing the tap	Banning and restricting single-use plastics	High	Low	Low	High	Snapshot
Closing the loop	Port of Brisbane: Target Zero Strategy; zero waste to landfill – recycle instead	High	Low	Low	Low	Snapshot
	Buyback programs for used fishing gear and litter	Medium	High	High	High	Snapshot
	Potential solution using pyrolysis to create oil products	Medium	Low	Low	Medium	Snapshot
	Port Esbjerg: Development of waste bins matching MARPOL	High	Low	Low	High	Case study
	Environmental Justice Foundation: Net Free Seas Project	High	High	High	High	Case study

Categorization	Solution	Environmental impact	Social impact	Economic impact	Scalability	Assessment type
Stopping plastic leakage	Systems for screening and evaluation of ports by maritime companies	High	Low	Low	High	Snapshot
	South Korea: Dedicated floating receptacles for marine litter	Medium	Low	Medium	High	Snapshot
	The Moana Taka Partnership (public-private partnership)	High	Low	Low	High	Case study
	Incentive system for the delivery of plastic waste for sea-going vessels in Port of Rotterdam and Amsterdam	High	Low	Low	High	Case study
Clean-up	Port of Houston: Clean-up initiatives	High	Low	Low	High	Snapshot
	Blue Port Project	High	High	Low	High	Case study
	Water Witch: Versi-Cat skimmer	High	Low	Low	High	Case study
	Port of Rotterdam waste management practices: Shoreliner pilot	High	Low	Low	High	Case study

Categorization	Solution	Environmental impact	Social impact	Economic impact	Scalability	Assessment type
Training, awareness, and R&D	Solomon Ports: 3R (Reduce-Reuse-Recycle) Campaign	High	High	Low	High	Snapshot
	Data collection system for ports	High	Low	High	High	Snapshot
	Training and raising awareness of employees in ports and aboard maritime vessels	High	High	Low	High	Snapshot

RECOMMENDATIONS

- 1 Stricter implementation and review of plans, programs, policies, and law
- 2 Better coordination and teamwork among stakeholders
- 3 Better data management framework
- 4 Installation of properly designed and fully functioning Materials Recovery Facilities
- 4 Installation of trash traps at drainage outfalls when necessary
- 5 Monitoring and utilization of plastic wastes
- 6 IEC Campaigns
- 7 Standardization of waste bin color – coding scheme
- 8

1 – REDUCING UNNECESSARY

Banning unnecessary plastics inside ports and promoting this on-board ships, and aligning with the city policies where the port is located

PLASTICS

June 18, 2021

PPA MEMORANDUM CIRCULAR
NO. 11 - 2021

TO : All Port Managers
Department Managers
Port Terminal Operators
Cargo Handling Operators
Service Providers
Others Concerned

SUBJECT : BAN ON THE USE OF UNNECESSARY SINGLE-USE PLASTIC PRODUCTS



I. LEGAL BASES

1. National Solid Waste Management Commission (NSWMC) Resolution No. 1363 s. 2020 dated February 12, 2020
2. PPA Board Executive Committee directive during its 344th Meeting held on June 22, 2021
3. Presidential Decree No. 857, as amended

II. COVERAGE

This Circular shall apply to all ports and port facilities under the jurisdiction of the Philippine Ports Authority (PPA), including all offices and establishments inside the ports.



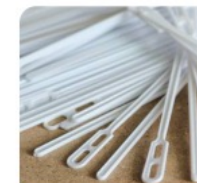
NO TO SINGLE USE PLASTICS



Plastic spoon,
fork and knife



Plastic cups
Lower than 0.2 mm
thickness



Plastic stirrer



Plastic straw



Plastic bag



Styropor
products

Single use plastics cause lasting harm. It's estimated that by 2050, there will be more plastic than fish in our oceans.

The ocean is not your waste bin.
AVOID USING SINGLE USE PLASTICS.



Philippine Ports Authority (PPA) MC No. 11-2021 regarding the Ban on the Use of Unnecessary Single-Use Plastic Products

<https://plasticoceans.org/the-facts/>

2 – FULL SWM SYSTEM

Looking at the entire SWM system from source segregation to segregated collection to recycling

APPROACH



3 – CONNECTING TO THE MARKET

The importance of ensuring that there are endpoints for circularity



4 – SOCIAL AND BEHAVIORAL CHANGE

An important factor in implementing solutions in the maritime industry



5 – INCENTIVES



Lessons learned

- Respecting mandates for governing agencies and push collaboration
- Working with adjacent communities on solid waste management
- Establishing any infrastructure with end markets in mind
- Providing a system for reducing single-use plastics
- Aligning solid waste management systems practiced on ships and in ports



For further information, clarifications, or questions, please

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Nature initiative

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Together Responsible, Together Po

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