

Session 1: KOREA-ASEAN cooperation to solving plastic problems (Aug 4, Thur 10:00-12:00)

Current efforts on plastic waste reduction and recycling in Thailand

Hello!

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Contents

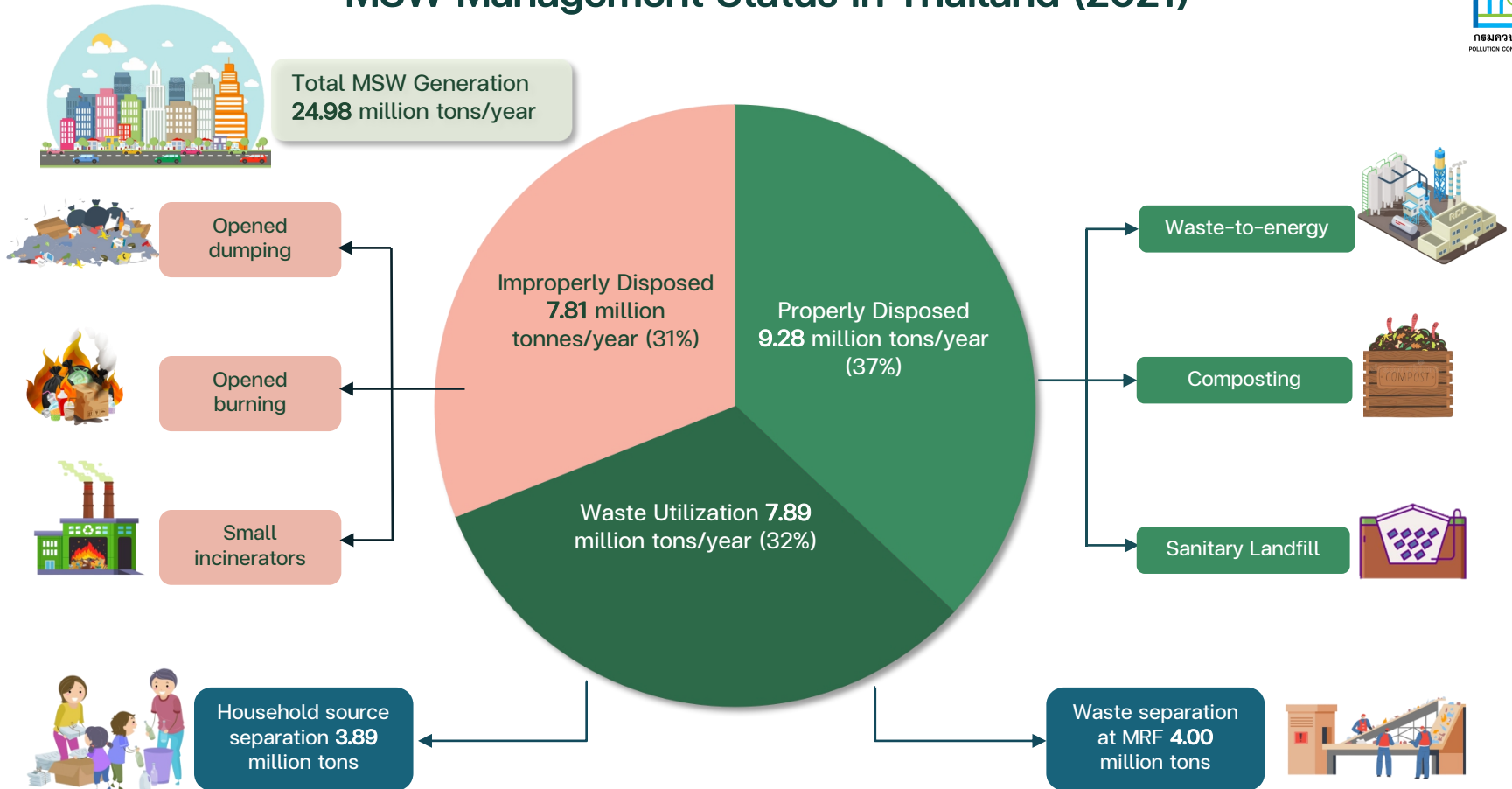
- Background information
- Plastic waste management in Thailand
- Best Practices: public private partnership, awareness raising, behavior changes
- Challenges and Opportunities
- Next step forward

1

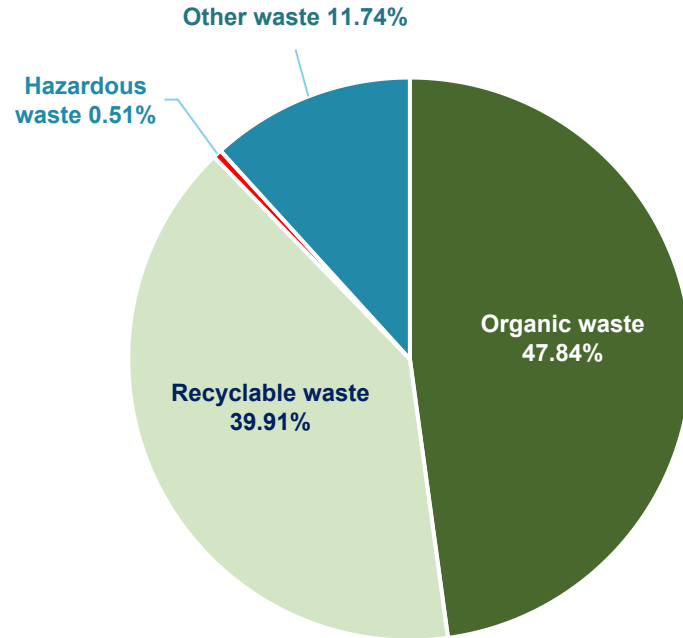
Background Information

- MSW Management Status
- Waste Composition
- MSW Management Timeline

MSW Management Status in Thailand (2021)



Waste Composition



Organic waste

- food waste 38.76%
- yard waste 9.08%

Recyclable waste

- glass 3.95%
- paper 6.27%
- plastic 28.13%
- metal & aluminium 1.56%

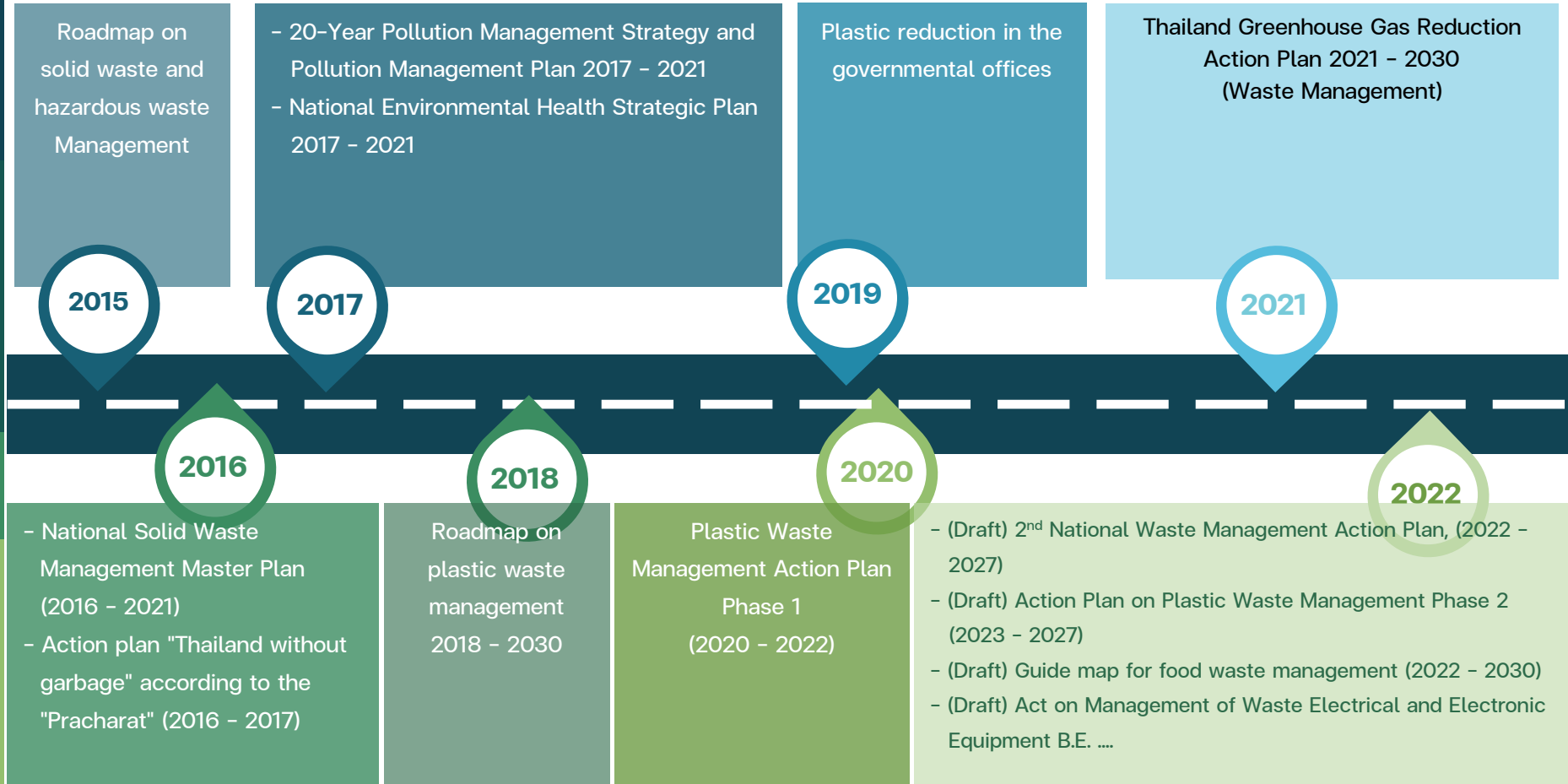
Hazardous waste

- household hazardous waste 0.23%
- E-waste 0.28%

Other waste

- textile 3.04%
- diaper 3.66%
- wood 1.19%
- tyre & leather 1.32%

MSW Management Timeline

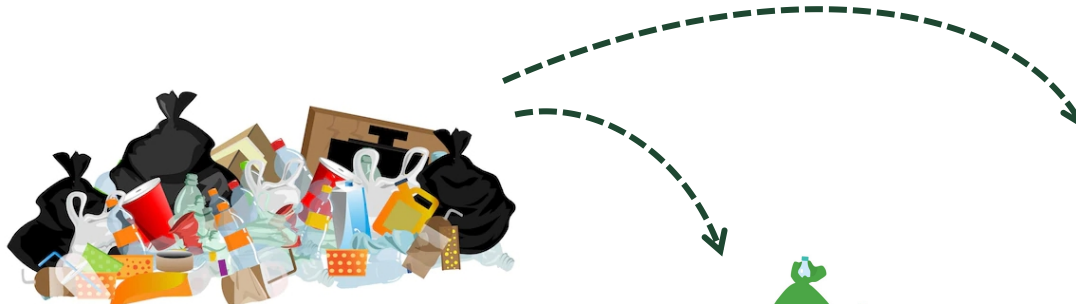


2

Plastic Waste Management in Thailand

- Status of plastic waste in Thailand
- Policies and plans on plastic waste management (Roadmap, Action plan)

Status of plastic waste management in Thailand



- Within 10 years, average plastic waste generated approximately 2 million tons/year



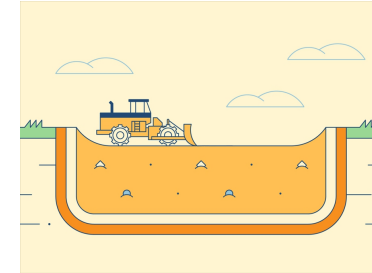
- Average plastic waste Recover 0.5 million tons/year



Material recycling



Energy recovery



- The rest of plastic waste 1.5 million tons/year are mostly single-use plastics (SUP), such as plastic bags, plastic cup, plastic straws, plastic boxes, polystyrene foam food-containers
- disposed of by sanitary landfill or incinerator
- partially accumulate in dumped sites

Thailand's Roadmap on Plastic Waste Management 2018 – 2030



Target

1. Reduce and stop using single-use plastic targets by replacing with environmental friendly products.
2. 100% of target plastic wastes to Circular Economy.

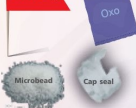
SDGs

- Summary of implementation in according to SDGs
- Continuously working to meet the target of Roadmap

Stop using in 2019

- Cap seal
- Oxo
- Microbead

Phase 1



2019

0.5 million tons Utilization

2 million tons or 12 % of the total waste generation

1.5 million tons Disposed by landfill or incinerator

Partially remain in Environment

2018

- Establish Subcommittee/ Working groups
- Develop Roadmap for Plastic Waste Management 2018 – 2030



2020

- Develop guidelines/ requirements/ standard for environmental friendly plastic products

Problems of Plastic Waste in Thailand



Phase 2

Stop using in 2022

- Plastic bag < 36 micron
- Foam food container
- Plastic cup < 100 micron
- Plastic straw

- Monitoring, evaluation and review Roadmap and Action Plan
- Develop recycling plastic waste system through circular economy

2022

2027

Phase 3 100% of target plastic wastes to Circular Economy



- Reducing and stop using other single-use plastics

2026

2030

Roadmap on Plastic waste management

Principle of the Roadmap

- Life Cycle Approach
- 3R Principle (Reduce Reuse Recycle)
- Public Private Partnership
- Concept of Circular Economy
- Responsible consumption and production

Timeline of the roadmap divided into three phases

- The first phase in 2019 is stop using cap seal, Oxo-degradable plastics and micro beads
- The second phase in 2022 is stop using foam food containers, plastic straws, plastic bags thicker than 36 micron and plastic cup thicker less than 100 micron
- The third phase focus mainly on recycling targeted plastic wastes by 100% by the year 2027 to serve circular economy concept

Action Plan on Plastic waste management Phase I (2020 – 2022)

Vision: Moving Towards Sustainable Plastic Management by Circular Economy

Target of the Action Plan

Target 1: Reduce and stop using 4 types of plastic targeted by replacement with environmentally friendly materials



plastic bags,
thickness <36
microns



thin plastic
cup
thickness
<100 micron



EPS foam food
container



plastic straws
(Except for use in
children, the
patient and the
elderly)

Target 2: Recycle 50% of 7 types of plastic waste by 2022



Thick plastic bags



plastic utensils



plastic bottle



Plastic box,
tray



plastic
film packaging



thick
plastic cup



Plastic lid

Measures:

1. Reduction of plastic waste at sources
 - Reducing single-use plastics, Eco-Design of packaging, use alternatives to replace single-use plastics
2. Reduction the use of single-use plastic at consumption process
 - Cooperate among stakeholders to reduce single-use plastics, set rules /regulations /procedures in preventing marine littering
3. Post-consumption plastic waste management
 - Issued rules and regulations for waste separation according to the 3R principle by the local government, Capacity building informal sector and waste buyer, Develop and promote the Circular Economy

Driven mechanism:

National Environmental Board, Sub-committee on Plastic Waste Management, Working Group of Stakeholders, Public Private Partnership

(Draft) Action Plan on Plastic waste management Phase II (2023 – 2027)

Target of the Action Plan

1. Reduce plastic waste to Landfill
2. Recycling targeted plastic waste by 100% by the year 2027
3. Reduce the amount of plastic waste in the sea at least 50% by the year 2027
4. Plastic waste management tools are introduced in the Action Plan
 - EPR scheme
 - plastic product standards
 - plastic database
 - standard and plastic scrap characteristics
 - post-consumer plastic pellet
 - digital platform of recycling
 - related guideline
 - etc.

Measures:

1. Producing Environmentally friendly Product
 - grouping and identifying plastic product considered by collection and recyclability rate
 - compulsory standard for plastic products
 - assign symbols for plastic products (recycling/ disposed of/ easier for people to sorting)
 - use post-consumer recycled (PCR) as raw material
 - promote incentives
 - applied EPR scheme on packaging
 - develop laws and regulations on Circular Economy
2. Reduction the use of single-use plastic at consumption process
 - Extend the campaign “Everyday say No to plastic bag” in supermarkets, department stores, convenience stores and local markets
 - Reduce plastic packaging in food delivery business
 - Promote reuse, refill, to reduce plastic waste
 - Promote Green Procurement
3. Post-consumption plastic waste management
 - Issue local ordinances on source separation
 - Determine waste types according to the final disposal (waste to energy, compostable, etc.)
 - Develop recycling hub, logistic for recycling
4. Sea-based management
 - Set collection system
 - Develop marking gear system

3

Best practices: public private partnership, awareness raising, behavior changes

- Cooperation among stakeholders
- Reduction of single-use plastic in food delivery
- Awareness and education programs

Cooperation among stakeholders

NO Plastic Bottle Cap Seal

The problem of Plastic Bottle Cap Seal

Plastic cap seal for drinking water
How many cap seals are we (Thailand) using per year?

2,600 million pieces, 520 tons by weight or 260,000 Km by length
6.5 times the circumference of the world

The problem of Plastic Bottle Cap Seal

- In Thailand, drinking water producers produce approximately 4,600 million plastic bottles per year by 85°C tap water only. 2,600 million bottles per year using plastic bottle cap seal.
- Plastic Bottle Cap Seal produces 2,600 million pieces of plastic garbage per year or 520 tons per year.
- This plastic bottle cap seal made from Polyvinyl Chloride (PVC) which is a drink film that can be wrapping and trapped to the bottle cap. It is printed a sign of cover for heat off and easy to take plastic bottle cap seal away. The plastic bottle cap seal is lightweight and easy to disperse into the environment. But, it is very difficult to collect or store and does not economy for recycling. Thus, plastic bottle cap seals nonbiodegradable to the environment on land and sea which takes very long time for degraded.
- This plastic bottle cap seal which is not collected for proper disposal will be the cause of illegal garbage problem. For some case of sea animal die, we found plastic bottle cap seal and another plastic waste Plastic Bottle Cap Seal is not used in many countries such as Malaysia, Indonesia, Singapore, China, Korea, Taiwan, Germany, France, Italy and England.

Time frame

- The first step, the major water producers including, Central, Chang Elephants, Seelie Pure Life and Carbon started the No Plastic Bottle Cap Seal campaign. Then they will stop to produce drinking water with no cap seal in the same location April 1, 2016. After that we won't probably see Plastic Bottle Cap Seal in next 6 months.
- The next step, we will extend the No Plastic Bottle Cap Seal campaign to the other members of Drinking Water Producers Association (small drinking water producers). It is expected to cover this campaign the end of year 2019.

Timeline:

- April 2016: Start the first phase of the campaign.
- December 2017: The extension of the campaign.
- December 2019: The extension of the campaign.



- Cooperate with five major drinking water producers to stop using plastic cap seal for drinking water bottles since 1st April 2018

- Food and Drug Administration issue the Notification of the Ministry of Public Health to prescribing the characteristics of cosmetics that prohibit to manufacture or import cosmetics containing plastic microbeads since 1st January 2020

1 มกราคม 2563
เป็นต้นไป

ห้างสรรพสินค้า ซูเปอร์มาร์เก็ต และร้านสะดวกซื้อ
งดให้ถุงพลาสติกหูหิ้ว

Everyday Say
NO
To Plastic Bags

- Cooperate with departments, supermarkets, convenience stores, to stop using plastic bag since 1st January 2020

Reduction of single-use plastic in food delivery

MOU on Reducing single-use plastic in food delivery platform



Awareness raising and Education Programs

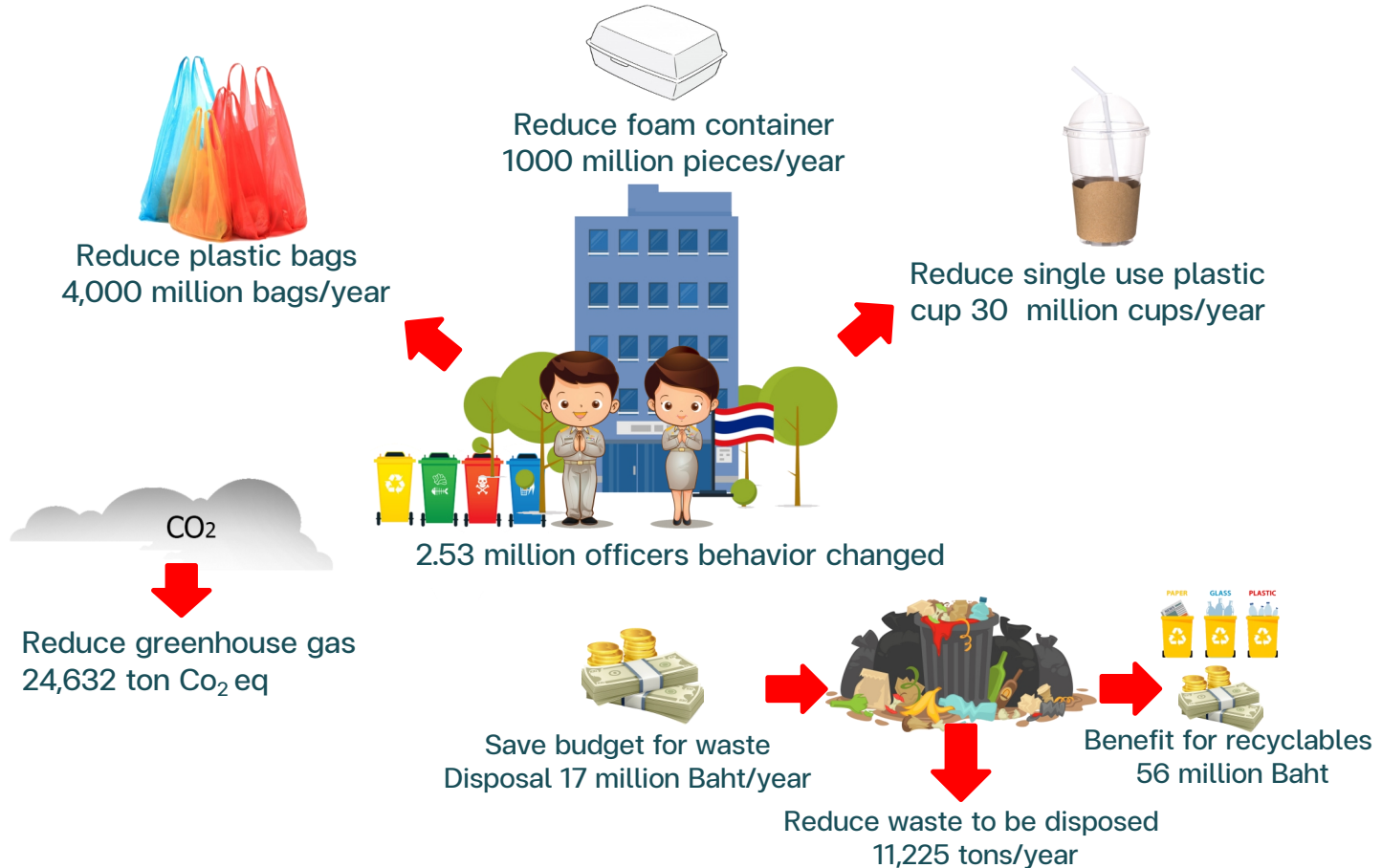


2.53 million officers behavior changed



- Reduce plastic bags and polystyrene foam food containers in the governmental offices and also develop the KPI to reducing SUP for policy makers
- Campaign the reduction of plastic bags in local markets/ supermarkets
- Ban plastic bags and polystyrene foam containers in National Parks/ Zoological Centers

Plastic reduction in the governmental offices



4

Challenges and Opportunities

Challenges

- **Government policy:** Strong framework of policy, strategy, regulatory to achieve ambition on plastic waste management.
- **Management:** Plastic waste mismanagement.
- **Incentives:** Economic incentives to promote positive behaviour. Disincentives to deter certain behaviour and includes practices such a charges for plastic bags or disposal taxes for certain items
- **People behavior:** Information and outreach need to educate people regarding the proper use of plastics and should be responsible to reduce and reuse plastic products, and to dispose of these properl.

Opportunities

- **Circular Economy Concept:** Shift country toward circular economy is opportunities for future investments to address plastic pollution and other related impacts.
- **Public Private Partnership (PPP):** Solution cannot be accessed in isolation. It must be considered in the context of whole plastic value chain.
- **Informal sector:** A vital role in waste management in Thailand. It should be integrate informal sector to the policy.
- **Global issues:** The new international legally binding instrument on plastic pollution.

Next Step Forward

5

Next step forward:

- Study and draft the laws and regulations on packaging waste management (CE, EPR)
- Put in place the EPR scheme on packaging waste management (voluntary and mandatory)
- Determine waste types according to the final disposal (emphasis the household source separation of waste)
- Setting environmentally friendly product standards/ guidelines (high, low recycling/ compostable/ post-consumer recycled, and related matter)
- Driving the measures under the Action Plan on Plastic Waste Management phase I and II
- Establish policies and plans according to the new international legally binding instrument on plastic pollution



Thank you very much
for your attention !!

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