

A photograph of a person surfing a wave in a polluted ocean. The water is a vibrant turquoise color, and the wave is breaking with white foam. The water is filled with various pieces of plastic litter, including bottles, bags, and other debris. The person is in the foreground, riding the wave. The background shows a coastline with trees and a clear sky.

# SWAT & REDUCING MARINE LITTER

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SWAT: Dr. Panate Manomaiwibool & Burin Tangsilpaolarn



# WHO IS SWAT?

Established: August 2015

SWAT was established by a group of people who realise that there are a lot of challenges and opportunities in waste management in Thailand.

## OBJECTIVES:

- Develop and support activities related to waste management
- Enhance standards and ethics among waste-related organisations to prevent impacts on environment and human health
- Coordinate, cooperate, create good relationship and share knowledge among public, academic, private and government sectors
- Promote awareness and disseminate knowledge and information to the general public
- Support charitable activities

Panel discussion Thai Metal recycling 4.0



Participate in Regional Solution to combat plastic  
Pollution: Consultation on Packaging Industry  
Regulation & Standards for Design, Labelling, Recovery  
& Recycling in ASEAN



E-Waste Academy- Manager Edition (EWAM)



ASEAN Waste Management Forum 2016-2017

# ACTIVITIES





**SWAT**  
**ACTIVITIES**  
**TIMELINE**

**Forum #1**

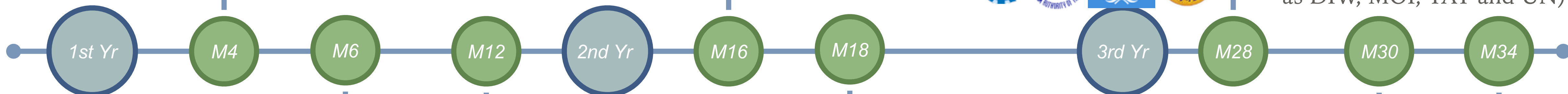
- Introduction to Marine Litter & Circular Economy
- Best Practice of sorting, collection, recycling of Key sectors and Plastic waste type speaker (EU, Japan, ASEAN)
- 1<sup>st</sup> Thai volunteer Companies of target sector to increase recycling rate/less landfill dump/key player with circular economy policy

**Forum #2**

- ❖ Present the result of 1<sup>st</sup> Volunteer result
- ❖ Update Best Practice in the world/
- ❖ Share practice of ASEAN member
- ❖ 2<sup>nd</sup> Thai volunteer companies of next target sector
- ❖ Circular Economy Award Announcement (support by Government agencies such as DIW, MOI, TAT and UN)

**Forum #3**

- ❖ Present the result of 1<sup>st</sup> & 2<sup>nd</sup> Volunteer result
- ❖ Update Best Practice in the world
- ❖ Share ASEAN member practices
- ❖ Circular Economy Award Announcement (support by Government agencies such as DIW, MOI, TAT and UN)



- ❖ Setup common SWAT and UN criteria and evaluation method
- ❖ Status survey, set baseline and committed goal of 1<sup>st</sup> Thai volunteers of each group (A, B and C)
- ❖ Training, coaching, & supporting

**Activity 1**

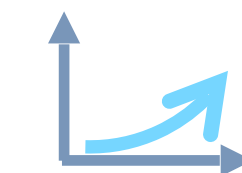
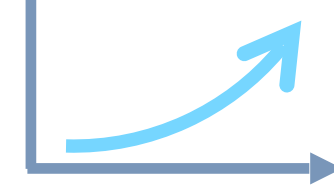
- ❖ Progress follow up
- ❖ Site visit
- ❖ Coaching SWAT & partners

**Activity 2**



- ❖ Improve SWAT and UN criteria and evaluation method
- ❖ Status survey, set baseline and committed goal of 2<sup>nd</sup> Thai volunteers of each sector
- ❖ Next level commitment of 1<sup>st</sup> Thai volunteers
- ❖ Training, coaching, & supporting

**Activity 3**



**Activity 4**

- ❖ Progress follow up
- ❖ Site visit
- ❖ Coaching SWAT & partners

**Activity 5**

- Final Conclusion and Report
- Recommend Policy to Thai Government

# VOLUNTEER TARGET GROUPS

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Volunteer model of each group (Baseline and evaluation of recycling rate and giving Circular Economy certificate)

## Group A : Waste Generator

Focus on source **segregation** improvement.

Targets: communities, hotels, offices, department stores, other waste generating entities

## Group B: Waste Collector

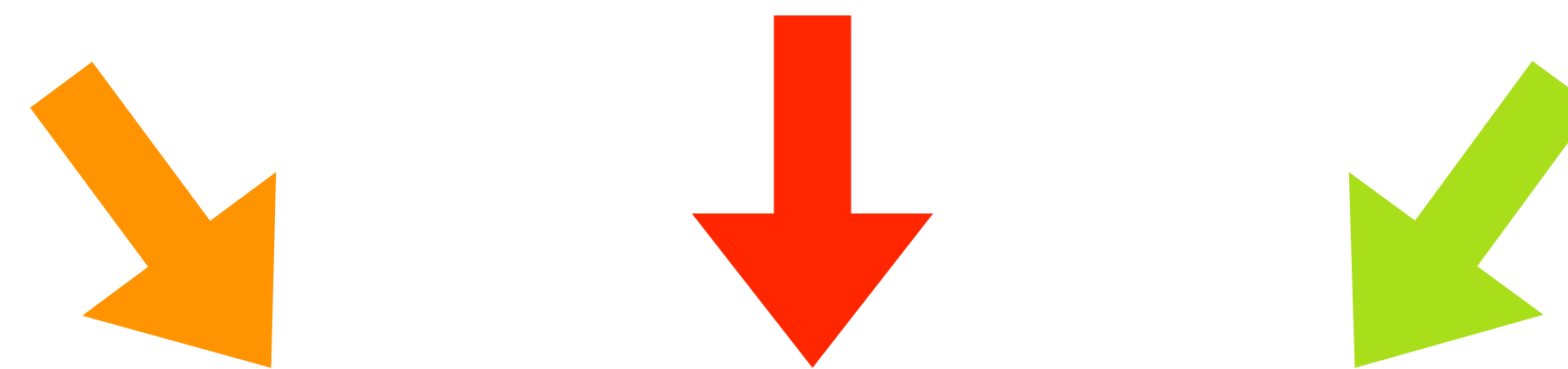
Focus on **collection** improvement.

Targets: municipalities /Recyclable waste trader/ professional waste collector/ transporters

## Group C: Waste treatment & Disposer

Focus on **up-cycling, recycling** and **treatment** improvement.

Targets: up-cycling & recycling factories, waste to energy facilities and landfill operators



Group G: Government

# SITUATION OF PLASTIC WASTE MANAGEMENT IN THAILAND

**A** ➤ Awareness of its impact: Significant improvement of plastic waste Awareness but still need  
**B** to boost up and collaboration.  
**C**  
**G**



@Trashhero facebook



# SITUATION OF PLASTIC WASTE MANAGEMENT IN THAILAND

**A** ➤ Understanding of recyclable plastic: Type and how to do better sorting, collection to meet  
**B** recycling requirements and friendly to environment.  
**C**  
**G**

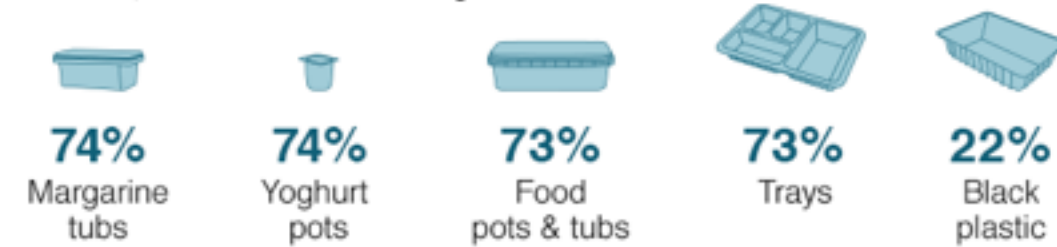
## Which types of plastic packaging can be collected from your doorstep?

Percentage of households where packaging is collected

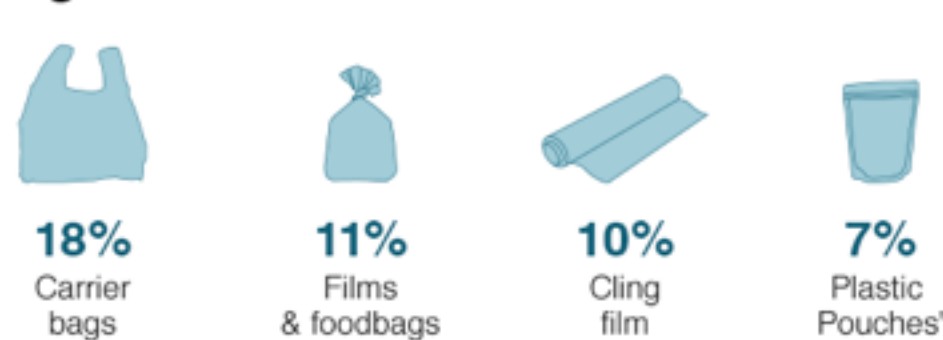
### Bottles



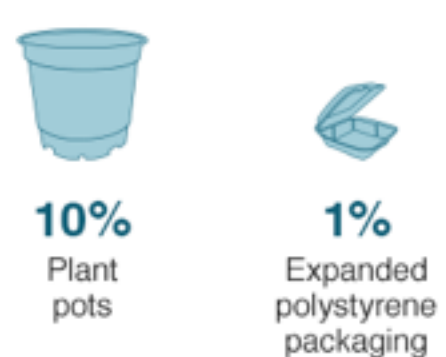
### Pots, tubs and trays



### Bags and film



### Other



## Plastic packaging is made from seven different types and some are recycled more often than others

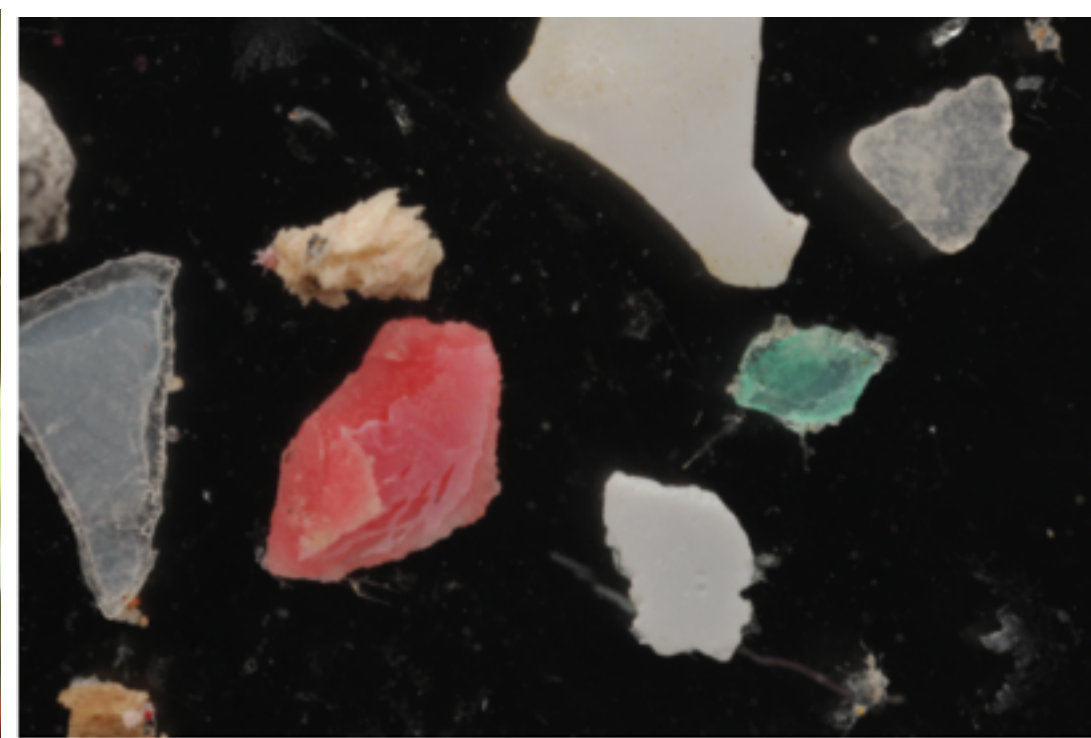


## Contamination is a common problem



# SITUATION OF PLASTIC WASTE MANAGEMENT IN THAILAND

- G** ➤ **Imported Plastic:** 500,000 tpa Plastic scrap import quota license issued to Chinese and Hongkong Shipping companies without their own recycling capacity in Thailand.
- G** ➤ **Misalignment with Regulation and Investment promotion:** Thai Government & MONRE announce to increase recycling rate while factory permit, emission regulation and proper investment support still not update or align with.
- C** ➤ **Improper plastic waste stream:** Increasing significantly, recyclable plastic is transforming to RDF and feed to WTE (high FiT) and low grade pyrolysis Oil—>Increase CO<sub>2</sub> emission.
- C** ➤ **Consequence of non-compliance plastic recycling and up-cycling**—>more micro plastic, hazardous cleaning chemical (caustic Soda:NaOH) release to canal, river and ocean.



Micro-plastic fragments collected from Mediterranean sea – © Christian Sardet / Tara Expeditions Foundation





# SITUATION OF PLASTIC WASTE MANAGEMENT IN THAILAND

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- B** ➤ **Red Ocean:** in PET bottle, cleaned plastic film from Packaging and D.C., HDPE milk containers.
  - B** ➤ **Own Economic return:** Many Municipality looks at plastic waste management with only their own Economic return from Electricity (WTE)/Oil (Pyrolysis)&Money than suitable solution and overall benefits.
  - A** ➤ **Recycling, Circular Economy vs CSR:** Many Private Sectors still think and use it as another new CSR tools.
  - A** ➤ **Perception in price PCR vs Virgin:** Lower than virgin as substitute / expect low treatment cost
  - A** ➤ **Packaging Label:** Many plastic packaging still no label of plastic type which support proper sorting for recycling.
  - A** ➤ **New problem from Biodegradable:** Mixing of bio-based and fossil-based plastic waste will increase the difficulty of sorting and recycling.
- B**  
**C**  
**G**

# SWAT ACTION PLANS MEET UNEP & COBSEA OUTPUT

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- **3. Outreach:** raise awareness on marine litter as well as needs of better plastic value chain management to promote behavioural change among consumers and in the industry, and create an enabling space for policy development.
- **4. Regional networking:** establishing the necessary regional mechanisms for technical advice and exchange, facilitating dialogue and networking; and providing targeted capacity building and technical support, especially in relation to the regional policy dimension. Where relevant, this will entail engagement and collaboration with ASEAN as a regional intergovernmental mechanism for economic, political and socio-cultural integration.