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# **Single-use Plastics Management** in the Asia-pacific: **Regional Status and China's Practice Qingyin Dong 9 February 2023** School of Environment, Tsinghua University, China Basel Convention Regional Centre for Asia and the Pacific(BCRC China)

### **Basic Information of BCRC China**



14 Basel Convention Regional and coordination Centres 4 in Asia and Pacific Region

**16 Stockholm Convention Regional Centres** 5 in Asia and Pacific Region

South Africa

SCRC

**Russian Federation** 

Indonesia

More than **28** 

countries in

Asia-Pacific

services.

have received

BCRC China is established in 1997. In May 2009, BCRC China has been endorsed as one of the 16 Stockholm Convention Regional Centres for Capacity building and the Transfer of Technology.

At the joint COPs in 2015 and 2019, an overall performance assessment of 14 BCRCs and 16 SCRCs were conducted for the first and second time. BCRC China and SCRC-China each obtained the full scores (100%) and were assessed as "Excellent". This performance result tied for first place of all the BCRCs and SCRCs.

# Relevant projects implemented by BCRC China

Basel Convention Partnership on Plastic Waste (PWP)



- Assist the Ministry of Environment of Cambodia in analysing the impacts of the 'Plastic Waste Amendments' of the convention on the plastic waste recycling industry in Cambodia;
- Identify the changes needed to improve environmentally sound recycling and implementation of these amendments.

Small Grants Programme on Plastic Waste (SGP)

 Improve capacities of Cambodia, Myanmar and Sri Lanka for the environmentally sound management of SUP and its waste, with sharing of lessons learned for all Asia-pacific countries;



• Prevent & minimize the generation and adverse impact of plastic waste.



# Management of SUPs in the Asia-pacific Region

# Introduction

### **Single-use plastics (SUPs)**

**Single-use plastics**, also referred to as disposable plastics, are commonly used for plastic packaging and include items intended to be used only once or very short period of time before they are thrown away or recycled.





# Common observations on SUPs in the region

# Production

- Raw material supply relies on imported virgin resins and imported/locally produced recyclate.
- Large number of **manufacturers** are SMEs, difficult to monitor and supervise.
- Lack of product standards to safeguard the quality of SUP items and safety of use





### Application

- Plastic bags are versatile, can be used to contain both solid and liquid, function as a cheap alternative to rigid containers or cups, and also as an extra layer packaging.
- Plastic straws, stirrers, snack pouches etc. emerge with spread of western goods and lifestyle.





## Consumption

- Consumers are accustomed to the convenience and cheapness of using SUPs.
- Bags and containers are reused by people for a few times until worn out.
- Many goods are imported with plastic packaging.





# Plastic waste management

### **Collection and Disposal**

- Solid waste collection and transportation may be run by local government or private company. In some areas, especially rural settings, this service is not yet available.
- Collected plastic waste is mainly disposed by **landfilling, open dumping, open burning or incineration**.
- Uncollected plastic waste is usually **burnt or dumped** on land or into water with other waste.

### Recycling

In Asia-pacific countries,

plastic waste accounts

for around 8-15% of

the majority is SUP.

municipal solid waste,

- Some cities collect recyclable waste in a separate bin or build recycling centres, this facilitates recycling of plastic waste.
- Separation and collection of plastics mainly conducted by **waste pickers**.
- Mechanical recycling is the dominant recycling technic for plastic waste.
- Rigid plastic items, especially PET bottles, are often recycled to produce new pellets. Unlike most developed countries, some Asia-pacific countries also recycle plastic bags and other soft packaging thanks to manual separation.







# Policy in specific countries



### Ban on:

 Import, local production or use of <u>plastic carrying bags</u> of thickness ≤ 0.03 mm or with a base width ≤ 25 cm or 10 inches.

### Fee on:

• <u>Plastic bag</u> requested by customers at supermarket and commercial centres.



### Ban on:

- PET and PVC for <u>agrochemical packaging;</u>
- PE <u>food wrappers and products</u> of thickness ≤ 20 µm;
- HDPE grocery bags;
- Plastic <u>sachets</u> of net volume  $\leq$  20ml or net weight  $\leq$  20g;
- EPS food containers, plates, cups and spoons;
- <u>Cotton buds</u> with plastic stems.

# India

### Ban on:

- <u>Plastic bag</u> of thickness < 120  $\mu$ m;
- <u>Plastic sticks</u> for cotton buds, balloons, candy, ice-cream;
- Plastic plates, cups, cutlery, straws and trays;
- Plastic banners of thickness < 100  $\mu$ m;
- Wrapping/packing films;
- Cigarette packets.

### **EPR scheme:**

• <u>Producers, importers and brand owners</u> are responsible for recycling, disposal and/or reuse of <u>plastic packaging</u>, including: rigid packaging, flexible.





# Management of SUPs in China

# Legal framework

### **Overarching Law:**

### Circular Economy Promotion Law

### Solid Waste Pollution Prevention and Control Law

- Set goals and strategies to promote circular economy and sound management of waste.
- Prescribe responsibilities of authorities and other actors in optimization of production, consumption and waste management.

### Principles of Action:

### Opinions on Further Strengthening the Control of Plastic Pollution

• Set timeline to establish basic management system for plastics covering production, distribution, consumption, collection and disposal.

### **Policy/Action Plan:**

**Standard System:** 

### Action Plan for Plastic Pollution Mitigation in the 14th Five-Year

 Set objectives, methods and competent authorities to implement reduction of SUP consumption, optimization of products and management/recycling of their waste.

Requirement to restrict overpackaging of goods

Standards for recycled plastics

Technical specification for pollution control of plastic waste •••

# Systemic actions: production and consumption

• Food: EPS food containers

Ban

- **Shopping:** Thin plastic bags
- Agriculture: Thin plastic mulching film
- In some provinces/cities : non-biodegradable food containers and bags



### Restrictions



- **Food:** Add option of "no cutlery" for consumers to choose when order takeaway meals online.
- **Shopping:** Mandatory fee on plastic carrier bags
- **Travel:** Hotels only provide toothbrush and miniature toiletries to customers who ask for (not to offer them in hotel room by default)

### **Substitutes**

- Food: PP/biodegradable/paper food containers and straws
- **Shopping:** Encourage consumers to bring reusable bags
- **Travel:** Encourage refillable toiletries in large bottles
- Agriculture: Thick plastic/biodegradable mulching film
- In some provinces/cities : Mandatory use of biodegradable food containers and bags



### Optimization

- Packaging: Prohibit overpackaging for food and cosmetics.
- **Delivery service:** Promote narrow sealing tape, tape-free boxes and air pillows (as filler)
- **Food:** Hotels only provide toothbrush and miniature toiletries to customers who ask for (not to offer them in hotel room by default)

# Systemic actions: recycling and disposal

### Separation

- Solid waste is separated at source into 4 categories: kitchen waste, recyclable, harmful waste & other waste.
- Plastic bottles and rigid containers are recyclable.
- Soft plastic packaging belongs to "other waste" in most cities.



### Recycling

- Recyclable plastics is mainly processed by mechanical recycling, a small proportion undergoes chemical recycling.
- Domestic mechanical recycling rate: over 30%
- In rural areas, non-biodegradable mulching films are collected for recycling.





- Non-recyclable plastic waste is disposed by incineration or landfilling.
- Incineration (energy recovery) rate: over 50%
- Overall ESM rate: 99.8%

CARBON NEUTRAL 软头荧光管

**Recycled product** 





# Thanks!

Basel Convention Regional Centre for Asia and the Pacific Stockholm Convention Regional Centre for Capacity-building and the Transfer of Technology in Asia and the Pacific

Address: School of Environment, Tsinghua University Tel: +86 10 62794351 Fax: +86 10 62772048 Website: <u>http://www.bcrc.cn/en/</u> Email: bccc@tsinghua.edu.cn

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