

# Sustainable Material Management

## Plastic Bags Reduction in Taipei City

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— 臺北市政府環境保護局 —

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# Outline

**1. Introduction of Taipei City**

**2. Purpose of Plastic Bags Reduction**

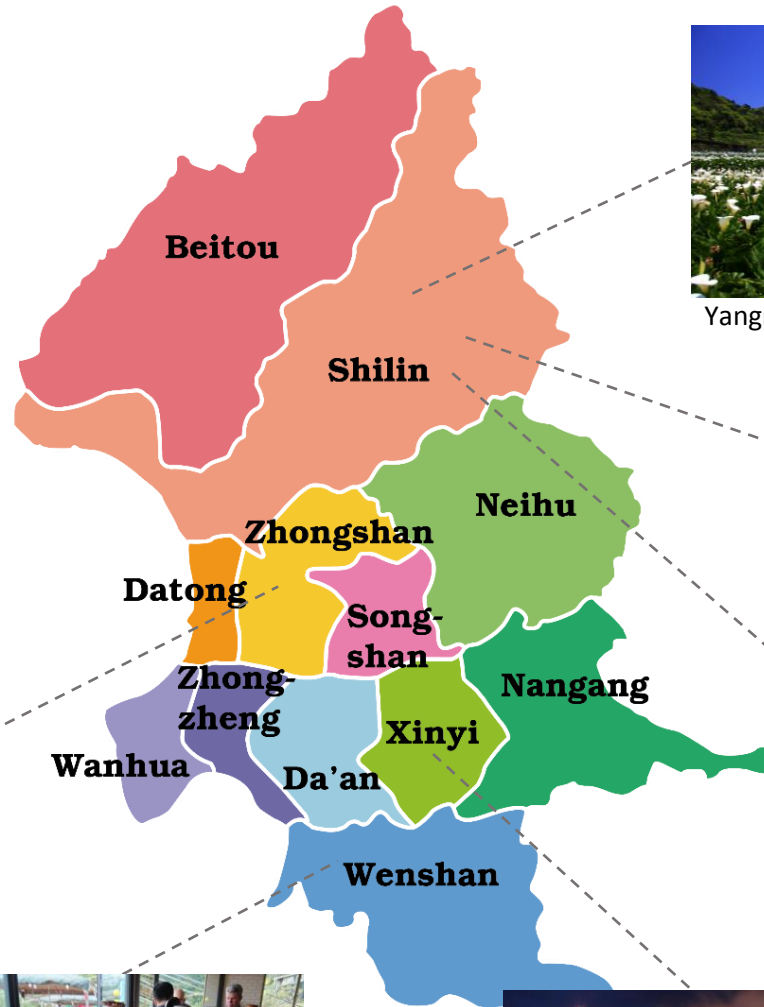
**3. Strategies**

**4. Timeline & Future Visions**

**5. Conclusion**

# Taipei City

Area	272 km <sup>2</sup>
Population	2.68 million
Pop. Density	9,860 inhabitant/km <sup>2</sup>
Buildings	231,500
GDP	22,677 USD/annum



Yangmingshan National Park



National Palace Museum



Shilin Night Market



Xingtian Temple



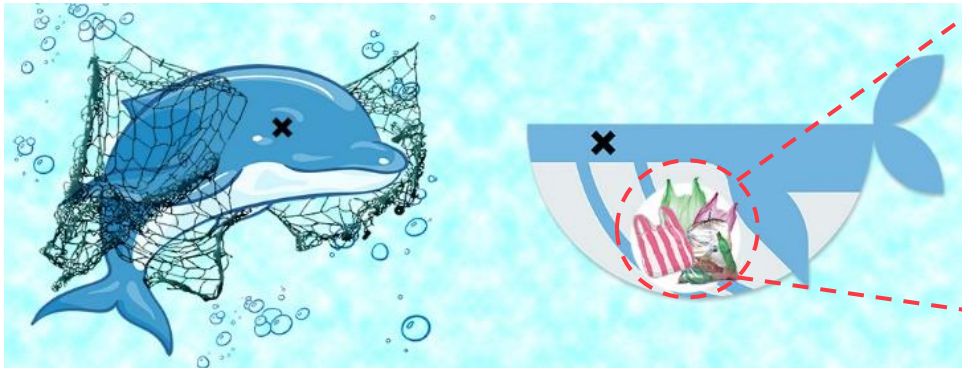
Maokong



Taipei 101



# Marine animals are suffering from starving to death by accidentally swallowing plastic bags....



Source: Marine Biology & Cetacean Research Center,  
National Cheng-Kung University

## Oct. 2016

A 23-ton weight giant sperm whale found dead outside Tainan.

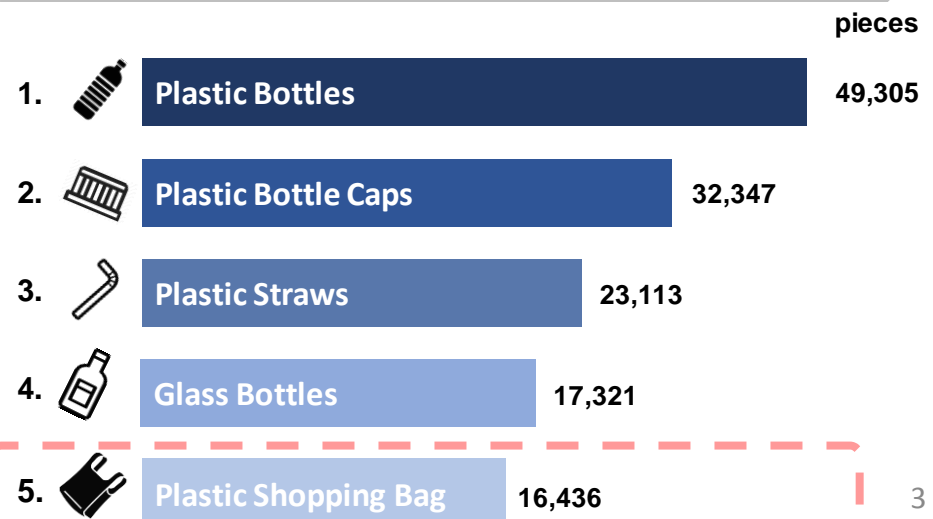
Its stomach was found filled with plastic bags and fishing nets.

## Mar. 2018

Whales were found dead in Kaohsiung Harbor.

The smallest one of those was found 18 plastic bags with 2-meter length bags in its stomach.

## 2017 Statistics on top 5 amount marine waste in Taiwan by International Coastal Cleanup(ICC)



## Ocean Waste Management Platform

### Source Reduction

- ✓ Strengthen regulations and guidelines
- ✓ Reinforce EPR
- ✓ Enhance education

### Prevention and Removal

- ✓ Remove hotspot wastes
- ✓ Prevent leakage into the ocean

### Research and Investigation

- ✓ Monitor and investigate coastal and marine pollution

### Collaboration and Partnership

- ✓ Expand and strengthen multi-party cooperation
- ✓ Engage public participation

***“Prevention”***  
*is better than Cure*

# Respond to Worldwide Campaigns



2018 **Earth Day**

“End Plastic Pollution”



2018 **Earth Hour**

“Make Oceans Plastic-Free”



2017 **World Oceans Day**

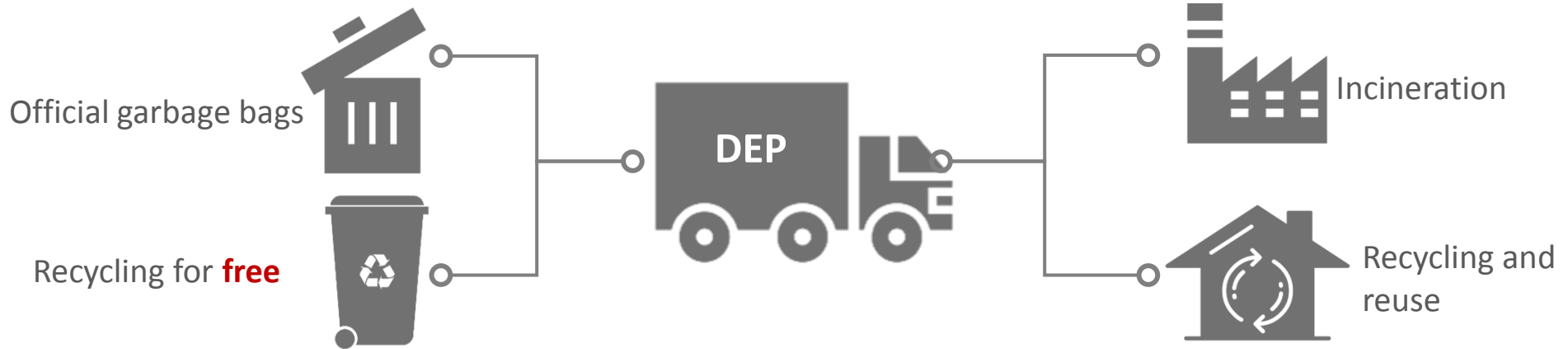
“Our Oceans, Our Future”

# Pay By The Bag Trash Collection System since 2000

Discharge

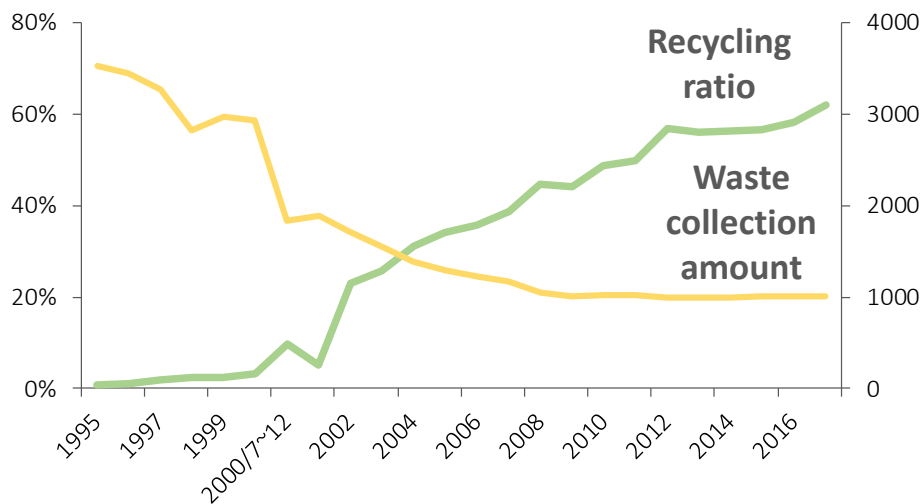
Collection

Disposal/Recycling



(Recycling ratio%)

(Amount, ton/d)



Waste collection amount which drops by **66%** compares to it is in 1999.

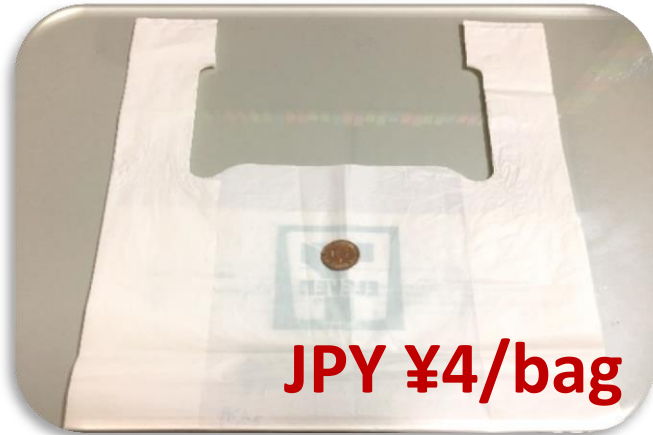
Recycling ratio reached **62%** in 2017.

# History of Plastic Reduction Policies





## Problems we face...



Problem

The price is too low (JPY ¥4/bag)  
to control the amount



Problem

Unnecessary bags are found in  
official garbage bags

# Strategy A

Expand the list of business - restricted to provide free plastic bag

Increased by 7 categories (From 7 → 14)

## In 2002

1. Public sector
2. Private school
3. Department store
4. Wholesale store
5. Supermarket
6. Convenience store
7. Fast food restaurant



## More categories in 2018

8. Pharmacy
9. Medical equipment store
10. Electronics retail store
11. Book store
12. Laundry
13. Beverage shop
14. Bakery



# Strategy B

## Bring Your Own Shopping Bags

### Bring Your Own Shopping Bags

Educate people to bring their own shopping bags when shopping.

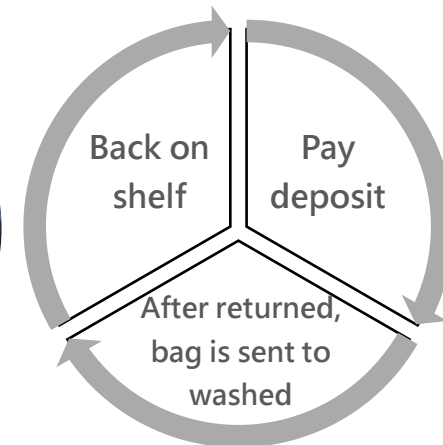



### Rental Deposit Shopping Bags

Customers can use the rental bags by putting a deposit of JPY ¥180.

Reusable  
& clean

Procedure



 --- *Cut down  
the need for plastic bag*

# Strategy C

## Dual-use Shopping Bags

In **2018**, convenience stores, supermarkets, and wholesale markets can only sell “**dual-use shopping bag**” instead of “**plastic shopping bags**”.



*Either ways can be adopted:*

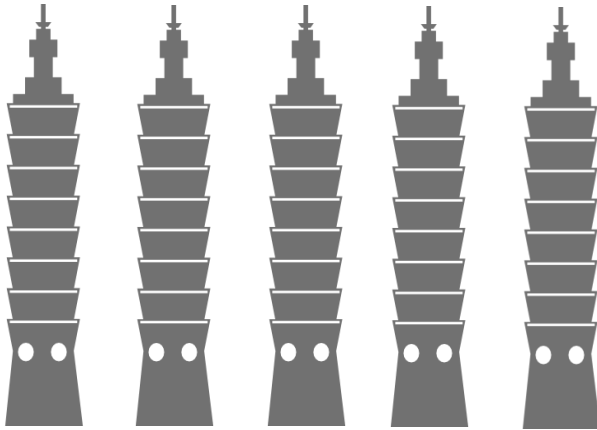
- ✓ **Commissioned** to sell dual-use shopping bag made by DEP
- ✓ Produce and sell its own dual-use shopping bag with **authorization charge** by DEP



## Expected Benefit...

Reducing plastic bag by **20 million** per year

Folded height



Equals to **5** times height of Taipei  
101

Carbon reduction



Equals to amount of carbon absorption  
by **17 million** trees



# Taiwan EPA Ban on Disposable Plastic Items

	2020	2025	2030
Plastic Shopping Bags	Expand coverage of stores under regulation	Implement comprehensive restriction by strengthening pricing mechanism	<b>Fully prohibit provision by stores</b>
Disposable Tableware	Prohibit dine-in use		
Plastic Straws	Prohibit dine-in use		
Single-use Takeaway beverage Cups	Enhance preferential measures of using own cups		

# *Toward a Sustainable **Green** Taipei City*



A nighttime photograph of the Taipei skyline. The Taipei 101 tower is the central focus, illuminated with green lights and a bright white spire. The city lights are visible in the background under a dark, cloudy sky.

**THANK YOU  
FOR YOUR ATTENTION**